

Combinatorial Games: Selected Bibliography with a Succinct Gourmet Introduction

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1 What are Combinatorial Games?

Roughly speaking, the family of *combinatorial games* consists of two-player games with perfect information (no hidden information as in some card games), no chance moves (no dice) and outcome restricted to (lose, win), (tie, tie) and (draw, draw) for the two players who move alternately. Tie is an end position such as in tic-tac-toe, where no player wins, whereas draw is a dynamic tie: any position from which a player has a nonlosing move, but cannot force a win. Both the easy game of Nim and the seemingly difficult chess are examples of combinatorial games. And so is go. The shorter terminology *game*, *games* is used below to designate combinatorial games.

2 Why are Games Intriguing and Tempting?

Amusing oneself with games may sound like a frivolous occupation. But the fact is that the bulk of interesting and natural mathematical problems that are hardest in complexity classes beyond NP , such as $Pspace$, $Exptime$ and $Expspace$, are two-player games; occasionally even one-player games (puzzles) or even zero-player games (Conway's "Life"). Some of the reasons for the high complexity of two-player games are outlined in the next section. Before that we note that in addition to a natural appeal of the subject, there are applications or connections to various areas, including complexity, logic, graph and matroid theory, networks, error-correcting codes, surreal numbers, on-line algorithms, biology — and analysis and design of mathematical and commercial games!

But when the chips are down, it is this “natural appeal” that lures both amateurs and professionals to become addicted to the subject. What is the essence of this appeal? Perhaps the urge to play games is rooted in our primal beastly instincts; the desire to corner, torture, or at least dominate our peers. A common expression of these vile cravings is found in the passions roused by local, national and international tournaments. An intellectually refined version of these dark desires, well hidden beneath the façade of scientific research, is the consuming drive “to beat them all”, to be more clever than the most clever, in short — to create the tools to *Math*ter them all in hot *combinatorial combat*! Reaching this goal is particularly satisfying and sweet in the context of combinatorial games, in view of their inherent high complexity.

With a slant towards artificial intelligence, Pearl wrote that games “offer a perfect laboratory for studying complex problem-solving methodologies. With a few parsimonious rules, one can create complex situations that require no less insight, creativity, and expertise than problems actually encountered in areas such as business, government, scientific, legal, and others. Moreover, unlike these applied areas, games offer an arena in which computerized decisions can be evaluated by absolute standards of performance and in which proven human experts are both available and willing to work towards the goal of seeing their expertise emulated by a machine. Last, but not least, games possess addictive entertaining qualities of a very general appeal. That helps maintain a steady influx of research talents into the field and renders games a convenient media for communicating powerful ideas about general methods of strategic planning.”

To further explore the nature of games, we consider, informally, two subclasses.

- (i) Games People Play (*playgames*): games that are challenging to the point that people will purchase them and play them.
- (ii) Games Mathematicians Play (*mathgames*): games that are challenging to mathematicians or other scientists to play with and ponder about, but not necessarily to “the man in the street”.

Examples of playgames are chess, go, hex, reversi; of mathgames: Nim-type games, Wythoff games, annihilation games, octal games.

Some “rule of thumb” properties, which seem to hold for the majority of playgames and mathgames are listed below.

- I. **Complexity.** Both playgames and mathgames tend to be computationally intractable. There are a few tractable mathgames, such as Nim, but most games still live in *Wonderland*: we are wondering about their as yet unknown complexity. Roughly speaking, however, NP-hardness is a necessary but not a sufficient condition for being a playgame! (Some games on Boolean formulas are Exptime-complete, yet none of them seems to have the potential of commercial marketability.)

II. **Boardfeel.** None of us may know an exact strategy from a midgame position of chess, but even a novice, merely by looking at the board, gets some feel who of the two players is in a stronger position – even what a strong or weak next move is. This is what we loosely call *boardfeel*. Our informal definition of playgames and mathgames suggests that the former do have a boardfeel, whereas the latter don't. For many mathgames, such as Nim, a player without prior knowledge of the strategy has no inkling whether any given position is “strong” or “weak” for a player. Even when defeat is imminent, only one or two moves away, the player sustaining it may be in the dark about the outcome, which will stump him. The player has no boardfeel. (Even many mathgames, including Nim-type games, can be played, equivalently, on a board.)

Thus, in the boardfeel sense, simple games are complex and complex games are simple! This paradoxical property also doesn't seem to have an analog in the realm of decision problems. The boardfeel is the main ingredient which makes PlayGames interesting to play.

III. **Math Appeal.** Playgames, in addition to being interesting to play, also have considerable mathematical appeal. This has been exposed recently by the theory of partizan games established by Conway and applied to endgames of go by Berlekamp, students and associates. On the other hand, mathgames have their own special combinatorial appeal, of a somewhat different flavor. They appeal to and are created by mathematicians of various disciplines, who find special intellectual challenges in analyzing them. As Peter Winkler called a subset of them: “games people don't play”. We might also call them, in a more positive vein, “games mathematicians play”. Both classes of games have applications to areas outside game theory. Examples: surreal numbers (playgames), error correcting codes (mathgames). Both provide enlightenment through bewilderment, as David Wolfe and Tom Rodgers put it.

IV. **Existence.** There are relatively few successful playgames around. It seems to be hard to invent a playgame that catches the masses. In contrast, mathgames abound. They appeal to a large subclass of mathematicians and other scientists, who cherish producing them and pondering about them. The large proportion of mathgames-papers in the games bibliography below reflects this phenomenon.

We conclude, *inter alia*, that for playgames, high complexity is desirable. Whereas in all respectable walks of life we strive towards solutions or at least approximate solutions which are polynomial, there are two less respectable human activities in which high complexity is appreciated. These are cryptography (covert warfare) and games (overt warfare). The desirability of high complexity in cryptography — at least for the encryptor! — is clear. We claim that it is also desirable for playgames.

It's no accident that games and cryptography team up: in both there are adversaries, who pit their wits against each other! But games are, in general, considerably harder than cryptography. For the latter, the problem whether the designer of a cryptosystem has a safe system can be expressed with two quantifiers only: \exists a cryptosystem such that \forall attacks on it, the cryptosystem remains unbroken? In contrast, the decision problem whether White can win if White moves first in a chess game, has the form: " $\exists\forall\exists\forall\cdots$ move: White wins?", expressing the question whether White has an opening winning move — with an unbounded number of alternating quantifiers. This makes games the more challenging and fascinating of the two, besides being fun! See also the next section.

Thus, it's no surprise that the skill of playing games, such as checkers, chess, or go has long been regarded as a distinctive mark of human intelligence.

3 Why are Combinatorial Games Hard?

Existential decision problems, such as graph hamiltonicity and Traveling Salesperson (Is there a round tour through specified cities of cost $\leq C$?), involve a single existential quantifier ("Is there...?"). In mathematical terms an existential problem boils down to finding a path—sometimes even just verifying its existence—in a large "decision-tree" of all possibilities, that satisfies specified properties. The above two problems, as well as thousands of other interesting and important combinatorial-type problems are NP-*complete*. This means that they are *conditionally intractable*, i.e., the best way to solve them seems to require traversal of most if not all of the decision tree, whose size is exponential in the input size of the problem. No essentially better method is known to date at any rate, and, roughly speaking, if an efficient solution will ever be found for any NP-complete problem, then all NP-complete problems will be solvable efficiently.

The decision problem whether White can win if White moves first in a chess game, on the other hand, has the form: Is there a move of White such that for *every* move of Black there is a move of White such that for *every* move of Black there is a move of White ... such that White can win? Here we have a large number of alternating existential and universal quantifiers rather than a single existential one. We are looking for an entire subtree rather than just a path in the decision tree. Because of this, most nonpolynomial games are at least Pspace-hard. The problem for generalized chess on an $n \times n$ board, and even for a number of seemingly simpler mathgames, is, in fact, Exptime-complete, which is a *provable intractability*.

Put in simple language, in analyzing an instance of Traveling Salesperson, the problem itself is passive: it does not resist your attempt to attack it, yet it is difficult. In a game, in contrast, there is your opponent, who, at every step, attempts to foil your effort to win. It's similar to the difference between an autopsy and surgery. Einstein, contemplating the nature of physics said, "Der

Allmächtige ist nicht boshaft; Er ist raffiniert” (The Almighty is not mean; He is sophisticated). NP-complete existential problems are perhaps sophisticated. But your opponent in a game can be very mean!

Another manifestation of the high complexity of games is associated with a most basic tool of a game : its *game-graph*. It is a directed graph G whose vertices are the positions of the game, and (u, v) is an edge if and only if there is a move from position u to position v . Since every combination of tokens in the given game is a *single* vertex in G , the latter has normally exponential size. This holds, in particular, for both Nim and chess. Analyzing a game means reasoning about its game-graph. We are thus faced with a problem that is *a priori* exponential, quite unlike many present-day interesting existential problems.

A fundamental notion is the *sum* (disjunctive compound) of games. A sum is a finite collection of disjoint games; often very basic, simple games. Each of the two players, at every turn, selects one of the games and makes a move in it. If the outcome is not a draw, the sum-game ends when there is no move left in any of the component games. If the outcome is not a tie either, then in *normal* play, the player first unable to move loses and the opponent wins. The outcome is reversed in *misère* play.

If a game decomposes into a *disjoint* sum of its components, either from the beginning (Nim) or after a while (domineering), the potential for its tractability increases despite the exponential size of the game graph. As Elwyn Berlekamp remarked, the situation is similar to that in other scientific endeavors, where we often attempt to decompose a given system into its functional components. This approach may yield improved insights into hardware, software or biological systems, human organizations, and abstract mathematical objects such as groups.

If a game doesn't decompose into a sum of disjoint components, it is more likely to be intractable (Geography or Poset Games). Intermediate cases happen when the components are not quite fixed (which explains why misère play of sums of games is much harder than normal play) or not quite disjoint (Welter). Thane Plambeck has recently made progress with misère play, and we will be hearing more about this shortly.

The hardness of games is eased somewhat by the efficient freeware package “Combinatorial Game Suite”, courtesy of Aaron Siegel.

4 Breaking the Rules

As the experts know, some of the most exciting games are obtained by breaking some of the rules for combinatorial games, such as permitting a player to pass a bounded or unbounded number of times, i.e., relaxing the requirement that players play alternately; or permitting a number of players other than two.

But permitting a payoff function other than $(0,1)$ for the outcome (lose, win) and a payoff of $(\frac{1}{2}, \frac{1}{2})$ for either (tie, tie) or (draw, draw) usually, but not

always, leads to games that are not considered to be combinatorial games; or to borderline cases.

5 Why Is the Bibliography Vast?

In the realm of existential problems, such as sorting or Traveling Salesperson, most present-day interesting decision problems can be classified into tractable, conditionally intractable, and provably intractable ones. There are exceptions, to be sure, such as graph isomorphism, whose complexity is still unknown. But the exceptions are few. In contrast, most games are still in Wonderland, as pointed out in §2(I) above. Only a few games have been classified into the complexity classes they belong to. Despite recent impressive progress, the tools for reducing Wonderland are still few and inadequate.

To give an example, many interesting games have a very succinct input size, so a polynomial strategy is often more difficult to come by (Richard Guy and Cedric Smith's octal games; Grundy's game). Succinctness and non-disjointness of games in a sum may be present simultaneously (Poset games). In general, the alternating quantifiers, and, to a smaller measure, "breaking the rules", add to the volume of Wonderland. We suspect that the large size of Wonderland, a fact of independent interest, is the main contributing factor to the bulk of the bibliography on games.

6 Why Isn't it Larger?

The bibliography below is a *partial* list of books and articles on combinatorial games and related material. It is partial not only because I constantly learn of additional relevant material I did not know about previously, but also because of certain self-imposed restrictions. The most important of these is that only papers with some original and nontrivial mathematical content are considered. This excludes most historical reviews of games and most, but not all, of the work on heuristic or artificial intelligence approaches to games, especially the large literature concerning computer chess. I have, however, included the compendium Levy [1988], which, with its 50 articles and extensive bibliography, can serve as a first guide to this world. Also some papers on chess-endgames and clever exhaustive computer searches of some games have been included.

On the other hand, papers on games that break some of the rules of combinatorial games are included liberally, as long as they are interesting and retain a combinatorial flavor. These are vague and hard to define criteria, yet combinatorialists usually recognize a combinatorial game when they see it. Besides, it is interesting to break also this rule sometimes! We have included some references to one-player games, e.g., towers of Hanoi, n -queen problems, 15-puzzle and peg-solitaire, but only few zero-player games (such as Life and games on "sand piles"). We have also included papers on various applications of games,

especially when the connection to games is substantial or the application is interesting or important.

High-class meetings on combinatorial games, such as in Columbus, OH (1990), at MSRI (1994, 2000), at BIRS (2005) resulted in books, or a special issue of a journal – for the Dagstuhl seminar (2002). During 1990–2001, *Theoretical Computer Science* ran a special Mathematical Games Section whose main purpose was to publish papers on combinatorial games. TCS still solicits papers on games. In 2002, *Integers—Electronic J. of Combinatorial Number Theory* began publishing a Combinatorial Games Section. The combinatorial games community is growing in quantity and quality!

7 The Dynamics of the Literature

The game bibliography below is very dynamic in nature. Previous versions have been circulated to colleagues, intermittently, since the early 1980's. Prior to every mailing updates were prepared, and usually also afterwards, as a result of the comments received from several correspondents. The listing can never be “complete”. Thus also the present form of the bibliography is by no means complete.

Because of its dynamic nature, it is natural that the bibliography became a “Dynamic Survey” in the Dynamic Surveys (DS) section of the *Electronic Journal of Combinatorics* (EJJC) and *The World Combinatorics Exchange* (WCE). The EJJC and WCE are on the World Wide Web (WWW), and the DS can be accessed at

<http://www.combinatorics.org/>

(click on “Surveys”). The EJJC has mirrors at various locations. Furthermore, the European Mathematical Information Service (EMIS) mirrors this Journal, as do all of its mirror sites (currently over forty of them). See

<http://www.emis.de/tech/mirrors.html>

8 An Appeal

I ask readers to continue sending to me corrections and comments; and inform me of significant omissions, remembering, however, that it is a *selected* bibliography. I prefer to get reprints, preprints or URLs, rather than only titles — whenever possible.

Material on games is mushrooming on the Web. The URLs can be located using a standard search engine, such as Google.

9 Idiosyncrasies

Most of the bibliographic entries refer to items written in English, though there is a sprinkling of Danish, Dutch, French, German, Japanese, Slovakian and

Russian, as well as some English translations from Russian. The predominance of English may be due to certain prejudices, but it also reflects the fact that nowadays the *lingua franca* of science is English. In any case, I'm soliciting also papers in languages other than English, especially if accompanied by an abstract in English.

On the administrative side, Technical Reports, submitted papers and unpublished theses have normally been excluded; but some exceptions have been made. Abbreviations of book series and journal names usually follow the *Math Reviews* conventions. Another convention is that de Bruijn appears under D, not B; von Neumann under V, not N, McIntyre under M not I, etc.

Earlier versions of this bibliography have appeared, under the title "Selected bibliography on combinatorial games and some related material", as the master bibliography for the book *Combinatorial Games*, AMS Short Course Lecture Notes, Summer 1990, Ohio State University, Columbus, OH, *Proc. Symp. Appl. Math.* **43** (R. K. Guy, ed.), AMS 1991, pp. 191–226 with 400 items, and in the *Dynamic Surveys* section of the *Electronic J. of Combinatorics* in November 1994 with 542 items (updated there at odd times). It also appeared as the master bibliography in *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA (R. J. Nowakowski, ed.), MSRI Publ. Vol. 29, Cambridge University Press, Cambridge, 1996, pp. 493–537, under the present title, containing 666 items. The version published in the palindromic year 2002 contained the palindromic number 919 of references. It constituted a growth of 38%. It appeared in *ELJC* and as the master bibliography in *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 2000, Berkeley, CA (R. J. Nowakowski, ed.), MSRI Publ. Vol. 42, Cambridge University Press, Cambridge, pp. 475–535. The current update (mid-2003), in *ELJC*, contains 1001 items, another palindrome.

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anonymous helpers who assisted with the initial T_EX file, to Silvio Levy, who has edited and transformed it into L^AT_EX2e in 1996, and to Wolfgang Slany, who has transformed it into a BIB_TE_X file at the end of the previous millenium, and solved a “new millenium” problem encountered when the bibliography grew beyond 999 items. Keen users of the bibliography will notice that there is a beginning of MR references, due to Richard Guy’s suggestion, facilitated by his student Alex Fink.

11 The Bibliography

1. S. Abbasi and N. Sheikh [2007], Some hardness results for question/answer games, *Integers, Electr. J of Combinat. Number Theory* **7**, #G08, 29 pp., MR2342186.
<http://www.integers-ejcnt.org/vol7.html>
2. B. Abramson and M. Yung [1989], Divide and conquer under global constraints: a solution to the n -queens problem, *J. Parallel Distrib. Comput.* **6**, 649–662.
3. A. Adachi, S. Iwata and T. Kasai [1981], Low level complexity for combinatorial games, *Proc. 13th Ann. ACM Symp. Theory of Computing (Milwaukee, WI, 1981)*, Assoc. Comput. Mach., New York, NY, pp. 228–237.
4. A. Adachi, S. Iwata and T. Kasai [1984], Some combinatorial game problems require $\Omega(n^k)$ time, *J. Assoc. Comput. Mach.* **31**, 361–376.
5. H. Adachi, H. Kamekawa and S. Iwata [1987], Shogi on $n \times n$ board is complete in exponential time, *Trans. IEICE* **J70-D**, 1843–1852 (in Japanese).
6. E. W. Adams and D. C. Benson [1956], Nim-Type Games, *Technical Report No. 31*, Department of Mathematics, Pittsburgh, PA.
7. W. Ahrens [1910], *Mathematische Unterhaltungen und Spiele*, Vol. I, Teubner, Leipzig, Zweite vermehrte und verbesserte Auflage. (There are further editions and related game-books of Ahrens).
8. O. Aichholzer, D. Bremmer, E. D. Demaine, F. Hurtado, E. Kranakis, H. Krasser, S. Ramaswami, S. Sethia and J. Urrutia [2005], Games on triangulations, *Theoret. Comput. Sci.* **259**, 42–71, special issue: Game Theory Meets Theoretical Computer Science, MR2168844 (2006d:91037).
9. S. Aida, M. Crasmaru, K. Regan and O. Watanabe [2004], Games with uniqueness properties, *Theory Comput. Syst.* **37**, 29–47, Symposium on Theoretical Aspects of Computer Science (Antibes-Juan les Pins, 2002), MR2038401 (2004m:68055).
10. M. Aigner [1995], Ulams Millionenspiel, *Math. Semesterber.* **42**, 71–80.
11. M. Aigner [1996], Searching with lies, *J. Combin. Theory (Ser. A)* **74**, 43–56.
12. M. Aigner and M. Fromme [1984], A game of cops and robbers, *Discrete Appl. Math.* **8**, 1–11, MR739593 (85f:90124).

13. M. Ajtai, L. Csirmaz and Z. Nagy [1979], On a generalization of the game Go-Moku I, *Studia Sci. Math. Hungar.* **14**, 209–226.
14. E. Akin and M. Davis [1985], Bulgarian solitaire, *Amer. Math. Monthly* **92**, 237–250, MR786523 (86m:05014).
15. M. H. Albert, R. E. L. Aldred, M. D. Atkinson, C. C. Handley, D. A. Holton, D. J. McCaughan and B. E. Sagan [2008], Monotonic sequence games, in: *Games of No Chance III*, Proc. BIRS Workshop on Combinatorial Games, July, 2005, Banff, Alberta, Canada, MSRI Publ. (M. H. Albert and R. J. Nowakowski, eds.), Cambridge University Press, Cambridge.
16. M. H. Albert, J. P. Grossman, R. J. Nowakowski and D. Wolfe [2005], An introduction to Clobber, *Integers, Electr. J of Combinat. Number Theory* **5(2)**, #A01, 12 pp., MR2192079.
[http://www.integers-ejcnt.org/vol5\(2\).html](http://www.integers-ejcnt.org/vol5(2).html)
17. M. H. Albert and R. J. Nowakowski [2001], The game of End-Nim, *Electr. J. Combin.* **8(2)**, #R1, 12 pp., Volume in honor of Aviezri S. Fraenkel, MR1853252 (2002g:91044).
<http://www.combinatorics.org/>
18. M. H. Albert and R. J. Nowakowski [2004], Nim restrictions, *Integers, Electr. J of Combinat. Number Theory* **4**, #G1, 10 pp., Comb. Games Sect., MR2056015.
<http://www.integers-ejcnt.org/vol4.html>
19. M. Albert, R. J. Nowakowski and D. Wolfe [2007], *Lessons in Play: An Introduction to Combinatorial Game Theory*, A K Peters.
20. R. E. Allardice and A. Y. Fraser [1884], La tour d'Hanoï, *Proc. Edinburgh Math. Soc.* **2**, 50–53.
21. D. T. Allemang [1984], Machine computation with finite games, M.Sc. Thesis, Cambridge University.
22. D. T. Allemang [2001], Generalized genus sequences for misère octal games, *Intern. J. Game Theory*, **30**, 539–556, MR1907264 (2003h:91003).
23. J. D. Allen [1989], A note on the computer solution of Connect-Four, *Heuristic Programming in Artificial Intelligence 1: The First Computer Olympiad* (D. N. L. Levy and D. F. Beal, eds.), Ellis Horwood, Chichester, England, pp. 134–135.
24. M. R. Allen [2007], On the periodicity of genus sequences of quaternary games, *Integers, Electr. J. of Combinat. Number Theory* **7**, #G04, 11 pp., MR2299810 (2007k:91050).
<http://www.integers-ejcnt.org/vol7.html>
25. N. L. Alling [1985], Conway's field of surreal numbers, *Trans. Amer. Math. Soc.* **287**, 365–386.
26. N. L. Alling [1987], *Foundations of Analysis Over Surreal Number Fields*, North-Holland, Amsterdam.
27. N. L. Alling [1989], Fundamentals of analysis over surreal number fields, *Rocky Mountain J. Math.* **19**, 565–573.

28. N. L. Alling and P. Ehrlich [1986], An abstract characterization of a full class of surreal numbers, *C. R. Math. Rep. Acad. Sci.* **8**, 303–308.
29. N. L. Alling and P. Ehrlich [1986], An alternative construction of Conway's surreal numbers, *C. R. Math. Rep. Acad. Sci.* **8**, 241–246.
30. L. V. Allis [1994], Searching for solutions in games and artificial intelligence, Ph.D. Thesis, University of Limburg.
<ftp://ftp.cs.vu.nl/pub/victor/PhDthesis/thesis.ps.Z>
31. L. V. Allis and P. N. A. Schoo [1992], Qubic solved again, *Heuristic Programming in Artificial Intelligence 3: The Third Computer Olympiad* (H. J. van den Herik and L. V. Allis, eds.), Ellis Horwood, New York, pp. 192–204.
32. L. V. Allis, H. J. van den Herik and M. P. H. Huntjens [1993], Go-Moku solved by new search techniques, *Proc. 1993 AAAI Fall Symp. on Games: Planning and Learning*, AAAI Press Tech. Report FS93-02, Menlo Park, CA, pp. 1–9.
33. J.-P. Allouche, D. Astoorian, J. Randall and J. Shallit [1994], Morphisms, squarefree strings, and the tower of Hanoi puzzle, *Amer. Math. Monthly* **101**, 651–658, MR1289274 (95g:68090).
34. J.-P. Allouche and A. Sapir [2005], Restricted towers of Hanoi and morphisms, in: *Developments in Language Theory*, Vol. 3572 of *Lecture Notes in Comput. Sci.*, Springer, Berlin, pp. 1–10, MR2187246 (2006g:68266).
35. N. Alon, J. Balogh, B. Bollobás and T. Szabó [2002], Game domination number, *Discrete Math.* **256**, 23–33, MR1927054 (2003f:05086).
36. N. Alon, M. Krivelevich, J. Spencer and T. Szabó [2005], Discrepancy games, *Electr. J. Combin.* **12(1)**, #R51, 9 pp., MR2176527.
<http://www.combinatorics.org/>
37. N. Alon and Z. Tuza [1995], The acyclic orientation game on random graphs, *Random Structures Algorithms* **6**, 261–268.
38. S. Alpern and A. Beck [1991], Hex games and twist maps on the annulus, *Amer. Math. Monthly* **98**, 803–811.
39. I. Althöfer [1988], Nim games with arbitrary periodic moving orders, *Internat. J. Game Theory* **17**, 165–175.
40. I. Althöfer [1988], On the complexity of searching game trees and other recursion trees, *J. Algorithms* **9**, 538–567.
41. I. Althöfer [1989], Generalized minimax algorithms are no better error correctors than minimax is itself, in: *Advances in Computer Chess* (D. F. Beal, ed.), Vol. 5, Elsevier, Amsterdam, pp. 265–282.
42. I. Althöfer and J. Bühlmann [1995], Superlinear period lengths in some subtraction games, *Theoret. Comput. Sci. (Math Games)* **148**, 111–119.
43. G. Ambrus and J. Barát [2006], A contribution to queens graphs: a substitution method, *Discrete Math.* **306(12)**, 1105–1114, MR2245636 (2007b:05174).
44. M. Anderson and T. Feil [1998], Turning lights out with linear algebra, *Math. Mag.* **71**, 300–303.

45. M. Anderson and F. Harary [1987], Achievement and avoidance games for generating abelian groups, *Internat. J. Game Theory* **16**, 321–325.
46. R. Anderson, L. Lovász, P. Shor, J. Spencer, E. Tardós and S. Winograd [1989], Disks, balls and walls: analysis of a combinatorial game, *Amer. Math. Monthly* **96**, 481–493.
47. T. Andreae [1984], Note on a pursuit game played on graphs, *Discrete Appl. Math.* **9**, 111–115.
48. T. Andreae [1986], On a pursuit game played on graphs for which a minor is excluded, *J. Combin. Theory (Ser. B)* **41**, 37–47.
49. T. Andreae, F. Hartenstein and A. Wolter [1999], A two-person game on graphs where each player tries to encircle his opponent's men, *Theoret. Comput. Sci. (Math Games)* **215**, 305–323.
50. S. D. Andres [2003], The game chromatic index of forests of maximum degree 5, in: *2nd Cologne-Twente Workshop on Graphs and Combinatorial Optimization*, Vol. 13 of *Electron. Notes Discrete Math.*, Elsevier, Amsterdam, p. 4 pp. (electronic), MR2153344.
51. S. D. Andres [2006], Game-perfect graphs with clique number 2, in: *CTW2006—Cologne-Twente Workshop on Graphs and Combinatorial Optimization*, Vol. 25 of *Electron. Notes Discrete Math.*, Elsevier, Amsterdam, pp. 13–16 (electronic), MR2301125 (2008a:05080).
52. S. D. Andres [2006], The game chromatic index of forests of maximum degree $\Delta \geq 5$, *Discrete Appl. Math.* **154**, 1317–1323, MR2221551.
53. V. V. Anshelevich [2000], The Game of Hex: an automatic theorem proving approach to game programming, *Proc. 17-th National Conference on Artificial Intelligence (AAAI-2000)*, AAAI Press, Menlo Park, CA, pp. 189–194, MR1973011 (2004b:91039).
54. V. V. Anshelevich [2002], The game of Hex: the hierarchical approach, in: *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 2000, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 42, Cambridge University Press, Cambridge, pp. 151–165.
55. R. P. Anstee and M. Farber [1988], On bridged graphs and cop-win graphs, *J. Combin. Theory (Ser. B)* **44**, 22–28.
56. A. Apartsin, E. Ferapontova and V. Gurvich [1998], A circular graph—counterexample to the Duchet kernel conjecture, *Discrete Math.* **178**, 229–231, MR1483752 (98f:05122).
57. D. Applegate, G. Jacobson and D. Sleator [1999], Computer analysis of Sprouts, in: *The Mathemagician and Pied Puzzler*, honoring Martin Gardner; E. Berlekamp and T. Rodgers, eds., A K Peters, Natick, MA, pp. 199–201.
58. A. A. Arakelyan [1982], D -products and compositions of Nim games, *Akad. Nauk Armyan. SSR Dokl.* **74**, 3–6, (Russian).
59. A. F. Archer [1999], A modern treatment of the 15 puzzle, *Amer. Math. Monthly* **106**, 793–799.
60. P. Arnold, ed. [1993], *The Book of Games*, Hamlyn, Chancellor Press.

61. A. A. Arratia-Quesada and I. A. Stewart [1997], Generalized Hex and logical characterizations of polynomial space, *Inform. Process. Lett.* **63**, 147–152.
62. A. A. Arratia and I. A. Stewart [2003], A note on first-order projections and games, *Theoret. Comput. Sci.* **290**, 2085–2093, MR1937766 (2003i:68034).
63. M. Ascher [1987], Mu Torere: An analysis of a Maori game, *Math. Mag.* **60**, 90–100.
64. I. M. Asel'derova [1974], On a certain discrete pursuit game on graphs, *Cybernetics* **10**, 859–864, trans. of *Kibernetika* **10** (1974) 102–105.
65. J. A. Aslam and A. Dhagat [1993], On-line algorithms for 2-coloring hypergraphs via chip games, *Theoret. Comput. Sci. (Math Games)* **112**, 355–369.
66. M. D. Atkinson [1981], The cyclic towers of Hanoi, *Inform. Process. Lett.* **13**, 118–119.
67. J. M. Auger [1991], An infiltration game on k arcs, *Naval Res. Logistics* **38**, 511–529.
68. V. Auletta, A. Negro and G. Parlati [1992], Some results on searching with lies, *Proc. 4th Italian Conf. on Theoretical Computer Science*, L'Aquila, Italy, pp. 24–37.
69. J. Auslander, A. T. Benjamin and D. S. Wilkerson [1993], Optimal leapfrogging, *Math. Mag.* **66**, 14–19.
70. R. Austin [1976], Impartial and partisan games, M.Sc. Thesis, Univ. of Calgary.
71. J. O. A. Ayeni and H. O. D. Longe [1985], Game people play: Ayo, *Internat. J. Game Theory* **14**, 207–218.
72. D. Azriel and D. Berend [2006], On a question of Leiss regarding the Hanoi Tower problem, *Theoret. Comput. Sci.* **369**(1-3), 377–383, MR2277583 (2007h:68226).
73. L. Babai [1985], Trading group theory for randomness, *Proc. 17th Ann. ACM Symp. Theory of Computing*, Assoc. Comput. Mach., New York, NY, pp. 421 – 429.
74. L. Babai and S. Moran [1988], Arthur–Merlin games: a randomized proof system, and a hierarchy of complexity classes, *J. Comput. System Sci.* **36**, 254–276.
75. R. J. R. Back and J. von Wright [1995], Games and winning strategies, *Inform. Process. Lett.* **53**, 165–172.
76. R. Backhouse and D. Michaelis [2004], Fixed-point characterisation of winning strategies in impartial games in: *Relational and Kleene-Algebraic Methods in Computer Science*, Vol. 3051/2004, Lecture Notes in Computer Science, Springer Berlin, Heidelberg, pp. 34–47.
77. C. K. Bailey and M. E. Kidwell [1985], A king's tour of the chessboard, *Math. Mag.* **58**, 285–286.

78. W. W. R. Ball and H. S. M. Coxeter [1987], *Mathematical Recreations and Essays*, Dover, New York, NY, 13th edn.
79. B. A. Balof and J. J. Watkins [1996], Knight's tours and magic squares, *Congr. Numer.* **120**, 23–32, Proc. 27th Southeastern Internat. Conf. on Combinatorics, Graph Theory and Computing (Baton Rouge, LA, 1996), MR1431952.
80. B. Banaschewski and A. Pultr [1990/91], Tarski's fixpoint lemma and combinatorial games, *Order* **7**, 375–386.
81. R. B. Banerji [1971], Similarities in games and their use in strategy construction, *Proc. Symp. Computers and Automata* (J. Fox, ed.), Polytechnic Press, Brooklyn, NY, pp. 337–357.
82. R. B. Banerji [1980], *Artificial Intelligence, A Theoretical Approach*, Elsevier, North-Holland, New York, NY.
83. R. B. Banerji and C. A. Dunning [1992], On misere games, *Cybernetics and Systems* **23**, 221–228.
84. R. B. Banerji and G. W. Ernst [1972], Strategy construction using homomorphisms between games, *Artificial Intelligence* **3**, 223–249.
85. R. Bar Yehuda, T. Etzion and S. Moran [1993], Rotating-table games and derivatives of words, *Theoret. Comput. Sci. (Math Games)* **108**, 311–329.
86. A. Barabash, A. S. Fraenkel and B. Weiss [1992/93], Iterated Beatty functions, *Random Comput. Dynam.* **1**, 333–348, MR1214102 (94g:11010).
87. I. Bárány [1979], On a class of balancing games, *J. Combin. Theory (Ser. A)* **26**, 115–126.
88. J. G. Baron [1974], The game of nim — a heuristic approach, *Math. Mag.* **47**, 23–28.
89. T. Bartnicki, B. Brešar, J. Grytczuk, M. Kovše, Z. Miechowicz and I. Peterinz [2008], Game chromatic number of Cartesian product graphs, *Electr. J. Combin.* **15(1)**, #R72, 13 pp., **MR pending.
<http://www.combinatorics.org/>
90. T. Bartnicki, J. A. Grytczuk and H. A. Kierstead [2008], The game of arboricity, *Discrete Math.* **308**, 1388–1393, MR2392056.
91. T. Bartnicki, J. Grytczuk, H. A. Kierstead and X. Zhu [2007], The map-coloring game, *Amer. Math. Monthly* **114**, 793–803, MR2360907.
92. R. Barua and S. Ramakrishnan [1996], σ -game, σ^+ -game and two-dimensional additive cellular automata, *Theoret. Comput. Sci. (Math Games)* **154**, 349–366.
93. V. J. D. Baston and F. A. Bostock [1985], A game locating a needle in a circular haystack, *J. Optimization Theory and Applications* **47**, 383–391.
94. V. J. D. Baston and F. A. Bostock [1986], A game locating a needle in a square haystack, *J. Optimization Theory and Applications* **51**, 405–419.
95. V. J. D. Baston and F. A. Bostock [1987], Discrete hamstrung squad car games, *Internat. J. Game Theory* **16**, 253–261.
96. V. J. D. Baston and F. A. Bostock [1988], A simple cover-up game, *Amer. Math. Monthly* **95**, 850–854.

97. V. J. D. Baston and F. A. Bostock [1989], A one-dimensional helicopter-submarine game, *Naval Res. Logistics* **36**, 479–490.
98. V. J. D. Baston and F. A. Bostock [1993], Infinite deterministic graphical games, *SIAM J. Control Optim.* **31**, 1623–1629.
99. J. Baumgartner, F. Galvin, R. Laver and R. McKenzie [1975], Game theoretic versions of partition relations, in: *Colloquia Mathematica Societatis János Bolyai* **10**, *Proc. Internat. Colloq. on Infinite and Finite Sets*, Vol. 1, Keszthely, Hungary, 1973 (A. Hajnal, R. Rado and V. T. Sós, eds.), North-Holland, pp. 131–135.
100. J. D. Beasley [1985], *The Ins & Outs of Peg Solitaire*, Oxford University Press, Oxford.
101. J. D. Beasley [1989], *The Mathematics of Games*, Oxford University Press, Oxford.
102. P. Beaver [1995], *Victorian Parlour Games*, Magna Books.
103. A. Beck [1969], Games, in: *Excursions into Mathematics* (A. Beck, M. N. Bleicher and D. W. Crowe, eds.), A K Peters, Natick, MA, millennium edn., Chap. 5, pp. 317–387, With a foreword by Martin Gardner; first appeared in 1969, Worth Publ., MR1744676 (2000k:00002).
104. J. Beck [1981], On positional games, *J. Combin. Theory* (Ser. A) **30**, 117–133.
105. J. Beck [1981], Van der Waerden and Ramsey type games, *Combinatorica* **1**, 103–116.
106. J. Beck [1982], On a generalization of Kaplansky's game, *Discrete Math.* **42**, 27–35.
107. J. Beck [1982], Remarks on positional games, I, *Acta Math. Acad. Sci. Hungar.* **40**(1–2), 65–71.
108. J. Beck [1983], Biased Ramsey type games, *Studia Sci. Math. Hung.* **18**, 287–292.
109. J. Beck [1985], Random graphs and positional games on the complete graph, *Ann. Discrete Math.* **28**, 7–13.
110. J. Beck [1993], Achievement games and the probabilistic method, in: *Combinatorics, Paul Erdős is Eighty*, Vol. 1, Bolyai Soc. Math. Stud., János Bolyai Math. Soc., Budapest, pp. 51–78.
111. J. Beck [1994], Deterministic graph games and a probabilistic intuition, *Combin. Probab. Comput.* **3**, 13–26.
112. J. Beck [1996], Foundations of positional games, *Random Structures Algorithms* **9**, 15–47, appeared first in: Proc. Seventh International Conference on Random Structures and Algorithms, Atlanta, GA, 1995.
113. J. Beck [1997], Games, randomness and algorithms, in: *The Mathematics of Paul Erdős* (R. L. Graham and J. Nešetřil, eds.), Vol. I, Springer, pp. 280–310.
114. J. Beck [1997], Graph games, *Proc. Int. Coll. Extremal Graph Theory*, Balatonlelle, Hungary.

115. J. Beck [2002], Positional games and the second moment method, *Combinatorica* **22**, 169–216, special issue: Paul Erdős and his mathematics, MR1909083 (2003i:91027).
116. J. Beck [2002], Ramsey games, *Discrete Math.* **249**, 3–30, MR1898254 (2003e:05084).
117. J. Beck [2002], The Erdős-Selfridge theorem in positional game theory, *Bolyai Soc. Math. Stud.* **11**, 33–77, Paul Erdős and his mathematics, II, János Bolyai Math. Soc., Budapest, MR1954724 (2004a:91028).
118. J. Beck [2002], Tic-Tac-Toe, *Bolyai Soc. Math. Stud.* **10**, 93–137, János Bolyai Math. Soc., Budapest, MR1919569 (2003e:05137).
119. J. Beck [2005], Positional games, *Combin. Probab. Comput.* **14**(5-6), 649–696, MR2174650 (2006f:91030).
120. J. Beck [2008], *Tic-Tac-Toe Theory*, Cambridge University Press, Cambridge.
121. J. Beck and L. Csirmaz [1982], Variations on a game, *J. Combin. Theory* (Ser. A) **33**, 297–315.
122. R. Beigel and W. I. Gasarch [1991], The mapmaker’s dilemma, *Discrete Appl. Math.* **34**, 37–48.
123. L. W. Beineke, I. Broereand and M. A. Henning [1999], Queens graphs, *Discrete Math.* **206**, 63–75, Combinatorics and number theory (Tiruchirappalli, 1996), MR1665386 (2000f:05066).
124. A. Bekmetjev, G. Brightwell, A. Czygrinow and G. Hurlbert [2003], Thresholds for families of multisets, with an application to graph pebbling, *Discrete Math.* **269**, 21–34, MR1989450 (2004i:05152).
125. G. I. Bell [2007], A fresh look at peg solitaire, *Math. Mag.* **80**(1), 16–28, MR2286485.
126. G. I. Bell [2007], Diagonal peg solitaire, *Integers, Electr. J. of Combinat. Number Theory* **7**, #G01, 20 pp., MR2282183 (2007j:05018).
<http://www.integers-ejcnt.org/vol7.html>
127. G. I. Bell, D. S. Hirschberg and P. Guerrero-García [2007], The minimum size required of a solitaire army, *Integers, Electr. J. of Combinat. Number Theory* **7**, #G07, 22 pp., MR2342185.
<http://www.integers-ejcnt.org/vol7.html>
128. R. C. Bell [1960, 1969], *Board and Table Games from Many Civilisations*, Vol. I & II, Oxford University Press, revised in 1979, Dover.
129. R. Bell and M. Cornelius [1988], *Board Games Round the World: A Resource Book for Mathematical Investigations*, Cambridge University Press, Cambridge, reprinted 1990.
130. A. J. Benjamin, M. T. Fluet and M. L. Huber [2001], Optimal Token Allocations in Solitaire Knock ’m Down, *Electr. J. Combin.* **8**(2), #R2, 8 pp., Volume in honor of Aviezri S. Fraenkel, MR1853253 (2002g:91048).
<http://www.combinatorics.org/>
131. S. J. Benkoski, M. G. Monticino and J. R. Weisinger [1991], A survey of the search theory literature, *Naval Res. Logistics* **38**, 469–494.

132. G. Bennett [1994], Double dipping: the case of the missing binomial coefficient identities, *Theoret. Comput. Sci. (Math Games)* **123**, 351–375.
133. H.-J. Bentz [1987], Proof of the Bulgarian Solitaire conjectures, *Ars Combin.* **23**, 151–170, MR886950 (88k:05018).
134. E. Berkove, J. Van Sickle, B. Hummon and J. Kogut [2008], An analysis of the (colored cubes)³ puzzle, *Discrete Math.* **308**(7), 1033–1045, MR2382343.
135. D. Berend and A. Sapir [2006], The cyclic multi-peg tower of Hanoi, *ACM Trans. Algorithms* **2**, 297–317, MR2253783.
136. D. Berend and A. Sapir [2006], The diameter of Hanoi graphs, *Inform. Process. Lett.* **98**, 79–85, MR2207581 (2006m:68187).
137. D. Berengut [1981], A random hopscotch problem or how to make Johnny read more, in: *The Mathematical Gardner* (D. A. Klarner, ed.), Wadsworth Internat., Belmont, CA, pp. 51–59.
138. B. Berezovskiy and A. Gnedin [1984], The best choice problem, *Akad. Nauk, USSR, Moscow* (in Russian) .
139. C. Berge [1956], La fonction de Grundy d'un graphe infini, *C. R. Acad. Sci. Paris* **242**, 1404–1407, MR0089115 (19,621d).
140. C. Berge [1957], *Théorie générale des jeux à n personnes*, Mémor. Sci. Math., no. 138, Gauthier-Villars, Paris, MR0099259 (20 #5700).
141. C. Berge [1976], Sur les jeux positionnels, *Cahiers du Centre Études Rech. Opér.* **18**, 91–107.
142. C. Berge [1977], Vers une théorie générale des jeux positionnels, in: *Mathematical Economics and Game Theory, Essays in Honor of Oskar Morgenstern*, Lecture Notes in Economics (R. Henn and O. Moeschlin, eds.), Vol. 141, Springer Verlag, Berlin, pp. 13–24.
143. C. Berge [1981], Some remarks about a Hex problem, in: *The Mathematical Gardner* (D. A. Klarner, ed.), Wadsworth Internat., Belmont, CA, pp. 25–27.
144. C. Berge [1982], Les jeux combinatoires, *Cahiers Centre Études Rech. Opér.* **24**, 89–105, MR687875 (84d:90112).
145. C. Berge [1985], *Graphs*, North-Holland, Amsterdam, Chap. 14.
146. C. Berge [1989], *Hypergraphs*, Elsevier (French: Gauthier Villars 1988), Chap. 4.
147. C. Berge [1992], Les jeux sur un graphe, *Cahiers Centre Études Rech. Opér.* **34**, 95–101, MR1226531 (94h:05089).
148. C. Berge [1996], Combinatorial games on a graph, *Discrete Math.* **151**, 59–65.
149. C. Berge and P. Duchet [1988], Perfect graphs and kernels, *Bull. Inst. Math. Acad. Sinica* **16**, 263–274.
150. C. Berge and P. Duchet [1990], Recent problems and results about kernels in directed graphs, *Discrete Math.* **86**, 27–31, appeared first under the same title in *Applications of Discrete Mathematics* (Clemson, SC, 1986), 200–204, SIAM, Philadelphia, PA, 1988.

151. C. Berge and M. Las Vergnas [1976], Un nouveau jeu positionnel, le “Match-It”, ou une construction dialectique des couplages parfaits, *Cahiers du Centre Études Rech. Opér.* **18**, 83–89.
152. C. Berge and M. P. Schützenberger [1956], Jeux de Nim et solutions, *Acad. Sci. Paris* **242**, 1672–1674, (French).
153. E. R. Berlekamp [1972], Some recent results on the combinatorial game called Welter’s Nim, *Proc. 6th Ann. Princeton Conf. Information Science and Systems*, pp. 203–204.
154. E. R. Berlekamp [1974], The Hackenbush number system for compression of numerical data, *Inform. and Control* **26**, 134–140.
155. E. R. Berlekamp [1988], Blockbusting and domineering, *J. Combin. Theory* (Ser. A) **49**, 67–116, an earlier version, entitled Introduction to blockbusting and domineering, appeared in: *The Lighter Side of Mathematics*, Proc. E. Strens Memorial Conf. on Recr. Math. and its History, Calgary, 1986, Spectrum Series (R. K. Guy and R. E. Woodrow, eds.), Math. Assoc. of America, Washington, DC, 1994, pp. 137–148.
156. E. Berlekamp [1990], Two-person, perfect-information games, in: *The Legacy of John von Neumann* (Hempstead NY, 1988), *Proc. Sympos. Pure Math.*, Vol. 50, Amer. Math. Soc., Providence, RI, pp. 275–287.
157. E. R. Berlekamp [1991], Introductory overview of mathematical Go endgames, in: *Combinatorial Games*, Proc. Symp. Appl. Math. (R. K. Guy, ed.), Vol. 43, Amer. Math. Soc., Providence, RI, pp. 73–100.
158. E. R. Berlekamp [1996], The economist’s view of combinatorial games, in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, pp. 365–405.
159. E. R. Berlekamp [2000], Sums of $N \times 2$ Amazons, in: *Institute of Mathematical Statistics Lecture Notes–Monograph Series* (F.T. Bruss and L.M. Le Cam, eds.), Vol. 35, Beechwood, Ohio: Institute of Mathematical Statistics, pp. 1–34, Papers in honor of Thomas S. Ferguson, MR1833848 (2002e:91033).
160. E. R. Berlekamp [2000], *The Dots-and-Boxes Game: Sophisticated Child’s Play*, A K Peters, Natick, MA, MR1780088 (2001i:00005).
161. E. R. Berlekamp [2002], Four games for Gardner, in: *Puzzler’s Tribute: a Feast for the Mind*, pp. 383–386, honoring Martin Gardner (D. Wolfe and T. Rodgers, eds.), A K Peters, Natick, MA.
162. E. R. Berlekamp [2002], Idempotents among partisan games, in: *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 2000, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 42, Cambridge University Press, Cambridge, pp. 3–23.
163. E. R. Berlekamp [2002], The 4G4G4G4G4 problems and solutions, in: *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 2000, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 42, Cambridge University Press, Cambridge, pp. 231–241.

164. E. R. Berlekamp [2008], Yellow brown Hackenbush, in: *Games of No Chance III*, Proc. BIRS Workshop on Combinatorial Games, July, 2005, Banff, Alberta, Canada, MSRI Publ. (M. H. Albert and R. J. Nowakowski, eds.), Cambridge University Press, Cambridge.
165. E. R. Berlekamp, J. H. Conway and R. K. Guy [2001-2004], *Winning Ways for your Mathematical Plays*, Vol. 1-4, A K Peters, Wellesley, MA, 2nd edition: vol. 1 (2001), vols. 2, 3 (2003), vol. 4 (2004); translation of 1st edition (1982) into German: *Gewinnen, Strategien für Mathematische Spiele* by G. Seiffert, Foreword by K. Jacobs, M. Reményi and Seiffert, Friedr. Vieweg & Sohn, Braunschweig (four volumes), 1985.
166. E. R. Berlekamp and Y. Kim [1996], Where is the “Thousand-Dollar Ko?”, in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, pp. 203–226.
167. E. Berlekamp and T. Rodgers, eds. [1999], *The Mathematician and Pied Puzzler*, A K Peters, Natick, MA, A collection in tribute to Martin Gardner. Papers from the Gathering for Gardner Meeting (G4G1) held in Atlanta, GA, January 1993.
168. E. Berlekamp and K. Scott [2002], Forcing your opponent to stay in control of a loony dots-and-boxes endgame, in: *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 2000, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 42, Cambridge University Press, Cambridge, pp. 317–330, MR1973020.
169. E. Berlekamp and D. Wolfe [1994], *Mathematical Go — Chilling Gets the Last Point*, A K Peters, Natick, MA.
170. P. Berloquin [1976], *100 Jeux de Table*, Flammarion, Paris.
171. P. Berloquin [1995], *100 Games of Logic*, Barnes & Noble.
172. P. Berloquin and D. Dugas (Illustrator) [1999], *100 Perceptual Puzzles*, Barnes & Noble.
173. T. C. Biedl, E. D. Demaine, M. L. Demaine, R. Fleischer, L. Jacobsen and I. Munro [2002], The complexity of Clickomania, in: *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 2000, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 42, Cambridge University Press, Cambridge, pp. 389–404, MR1973107 (2004b:91041).
174. N. L. Biggs [1999], Chip-firing and the critical group of a graph, *J. Algebr. Comb.* **9**, 25–45.
175. K. Binmore [1992], *Fun and Games: a Text on Game Theory*, D.C. Heath, Lexington.
176. J. Bitar and E. Goles [1992], Parallel chip firing games on graphs, *Theoret. Comput. Sci.* **92**, 291–300.
177. A. Björner and L. Lovász [1992], Chip-firing games on directed graphs, *J. Algebraic Combin.* **1**, 305–328.
178. A. Björner, L. Lovász and P. Chor [1991], Chip-firing games on graphs, *European J. Combin.* **12**, 283–291.

179. Y. Björnsson, R. Hayward, M. Johanson and J. van Rijswijck [2007], Dead cell analysis in Hex and the Shannon game, in: *Graph theory in Paris*, Trends Math., Birkhäuser, Basel, pp. 45–59, MR2279166 (2007j:91023).
180. N. M. Blachman and D. M. Kilgour [2001], Elusive optimality in the box problem, *Math. Mag.* **74**(3), 171–181, MR2104911.
181. D. Blackwell and M. A. Girshick [1954], *Theory of Games and Statistical Decisions*, Wiley, New York, NY.
182. L. Blanc, E. Duchêne and S. Gravier [2006], A deletion game on graphs: le pic arête, *Integers, Electr. J. of Combinat. Number Theory* **6**, #G02, 10 pp., Comb. Games Sect., MR2215359.
<http://www.integers-ejcnt.org/vol5.html>
183. U. Blass and A. S. Fraenkel [1990], The Sprague-Grundy function for Wythoff's game, *Theoret. Comput. Sci.* **75**(3), 311–333, MR1080539 (92a:90101).
184. U. Blass, A. S. Fraenkel and R. Guelman [1998], How far can Nim in disguise be stretched?, *J. Combin. Theory (Ser. A)* **84**, 145–156, MR1652900 (2000d:91029).
185. M. Blidia [1986], A parity digraph has a kernel, *Combinatorica* **6**, 23–27.
186. M. Blidia, P. Duchet, H. Jacob, F. Maffray and H. Meyniel [1999], Some operations preserving the existence of kernels, *Discrete Math.* **205**, 211–216.
187. M. Blidia, P. Duchet and F. Maffray [1993], On kernels in perfect graphs, *Combinatorica* **13**, 231–233.
188. J.-P. Bode and H. Harborth [1998], Achievement games on Platonic solids, *Bull. Inst. Combin. Appl.* **23**, 23–32, MR1621748 (99d:05020).
189. J.-P. Bode and H. Harborth [2000], Hexagonal polyomino achievement, *Discrete Math.* **212**, 5–18, MR1748669 (2000k:05082).
190. J.-P. Bode and H. Harborth [2000], Independent chess pieces on Euclidean boards, *J. Combin. Math. Combin. Comput.* **33**, 209–223, MR1772763 (2001c:05105).
191. J.-P. Bode and H. Harborth [2000], Triangular mosaic polyomino achievement, *Congr. Numer.* **144**, 143–152, Proc. 31st Southeastern Internat. Conf. on Combinatorics, Graph Theory and Computing (Boca Raton, FL, 2000), MR1817929 (2001m:05082).
192. J.-P. Bode and H. Harborth [2001], Triangle polyomino set achievement, *Congr. Numer.* **148**, 97–101, Proc. 32nd Southeastern Internat. Conf. on Combinatorics, Graph Theory and Computing (Boca Raton, FL, 2002), MR1887377 (2002k:05057).
193. J.-P. Bode and H. Harborth [2002], Triangle and hexagon gameboard Ramsey numbers, *Congr. Numer.* **158**, 93–98, Proc. 33rd Southeastern Internat. Conf. on Combinatorics, Graph Theory and Computing (Boca Raton, FL, 2002), MR1985149 (2004d:05129).
194. J.-P. Bode and H. Harborth [2003], Independence for knights on hexagon and triangle boards, *Discrete Math.* **272**, 27–35, MR2019197

- (2004i:05115).
195. J.-P. Bode, H. Harborth and M. Harborth [2003], King independence on triangle boards, *Discrete Math.* **266**, 101–107, Presented at 18th British Combinatorial Conference (Brighton, 2001), MR1991709 (2004f:05129).
 196. J.-P. Bode, H. Harborth and M. Harborth [2004], King graph Ramsey numbers, *J. Combin. Math. Combin. Comput.* **50**, 47–55, MR2075855.
 197. J.-P. Bode, H. Harborth and H. Weiss [1999], Independent knights on hexagon boards, *Congr. Numer.* **141**, 31–35, Proc. 30th Southeastern Internat. Conf. on Combinatorics, Graph Theory, and Computing (Boca Raton, FL, 1999), MR1745222 (2000k:05201).
 198. J.-P. Bode and A. M. Hinz [1999], Results and open problems on the Tower of Hanoi, *Congr. Numer.* **139**, 113–122, Proc.30th Southeastern Internat. Conf. on Combinatorics, Graph Theory, and Computing (Boca Raton, FL, 1999).
 199. H. L. Bodlaender [1991], On the complexity of some coloring games, *Internat. J. Found. Comput. Sci.* **2**, 133–147, MR1143920 (92j:68042).
 200. H. L. Bodlaender [1993], Complexity of path forming games, *Theoret. Comput. Sci. (Math Games)* **110**, 215–245.
 201. H. L. Bodlaender [1993], Kayles on special classes of graphs—an application of Sprague-Grundy theory, in: *Graph-Theoretic Concepts in Computer Science* (Wiesbaden-Naurod, 1992), Lecture Notes in Comput. Sci., Vol. 657, Springer, Berlin, pp. 90–102, MR1244129 (94i:90189).
 202. H. L. Bodlaender and D. Kratsch [1992], The complexity of coloring games on perfect graphs, *Theoret. Comput. Sci. (Math Games)* **106**, 309–326.
 203. H. L. Bodlaender and D. Kratsch [2002], Kayles and nimbers, *J. Algorithms* **43**, 106–119, MR1900711 (2003d:05201).
 204. T. Bohman, R. Holzman and D. Kleitman [2001], Six Lonely Runners, *Electr. J. Combin.* **8(2)**, #R3, 49 pp., Volume in honor of Aviezri S. Fraenkel, MR1853254 (2002g:11095).
<http://www.combinatorics.org/>
 205. K. D. Boklan [1984], The n -number game, *Fibonacci Quart.* **22**, 152–155.
 206. B. Bollobás and I. Leader [2005], The devil and the angel in three dimensions, *J. Combin. Theory (Ser. A)* to appear.
 207. B. Bollobás and T. Szabó [1998], The oriented cycle game, *Discrete Math.* **186**, 55–67.
 208. D. L. Book [1998, Sept. 9-th], What the Hex, *The Washington Post* p. H02.
 209. E. Borel [1921], La théorie du jeu et les équations integrales à noyau symétrique gauche, *C. R. Acad. Sci. Paris* **173**, 1304–1308.
 210. E. Boros and V. Gurvich [1996], Perfect graphs are kernel solvable, *Discrete Math.* **159**, 35–55.
 211. E. Boros and V. Gurvich [1998], A corrected version of the Duchet kernel conjecture, *Discrete Math.* **179**, 231–233.

212. E. Boros and V. Gurvich [2006], Perfect graphs, kernels, and cores of cooperative games, *Discrete Math.* **306**(19-20), 2336–2354, MR2261906 (2007g:05069).
213. M. Borowiecki, S. Jendrol', D. Král and J. Miškuf [2006], List coloring of Cartesian products of graphs, *Discrete Math.* **306**, 1955–1958, MR2251575 (2007b:05067).
214. M. Borowiecki and E. Sidorowicz [2007], Generalised game colouring of graphs, *Discrete Math.* **307**(11-12), 1225–1231, MR2311092.
215. M. Borowiecki, E. Sidorowicz and Z. Tuza [2007], Game list colouring of graphs, *Electron. J. Combin.* **14**(1), #R26, 11 pp., MR2302533.
216. E. Boudreau, B. Hartnell, K. Schmeisser and J. Whiteley [2004], A game based on vertex-magic total labelings, *Australas. J. Combin.* **29**, 67–73, MR2037334 (2004k:91059).
217. C. L. Bouton [1902], Nim, a game with a complete mathematical theory, *Ann. of Math.* **3**(2), 35–39.
218. B. H. Bowditch [2007], The angel game in the plane, *Combin. Probab. Comput.* **16**, 345–362, MR2312431 (2008a:91036).
219. J. Boyce [1981], A Kriegspiel endgame, in: *The Mathematical Gardner* (D. A. Klarner, ed.), Wadsworth Internat., Belmont, CA, pp. 28–36.
220. S. J. Brams and D. M. Kilgour [1995], The box problem: to switch or not to switch, *Math. Mag.* **68**(1), 27–34.
221. G. Brandreth [1981], *The Bumper Book of Indoor Games*, Victorrama, Chancellor Press.
222. D. M. Breuker, J. W. H. M. Uiterwijk and H. J. van den Herik [2000], Solving 8×8 Domineering, *Theoret. Comput. Sci. (Math Games)* **230**, 195–206, MR1725637 (2001i:68148).
223. D. M. Broline and D. E. Loeb [1995], The combinatorics of Mancala-type games: Ayo, Tchoukaillon, and $1/\pi$, *UMAP J.* **16**(1), 21–36.
224. A. Brousseau [1976], Tower of Hanoi with more pegs, *J. Recr. Math.* **8**, 169–176.
225. A. E. Brouwer, G. Horváth, I. Molnár-Sáska and C. Szabó [2005], On three-rowed chomp, *Integers, Electr. J. of Combinat. Number Theory* **5**, #G07, 11 pp., Comb. Games Sect., MR2192255 (2006g:11051).
<http://www.integers-ejcnt.org/vol5.html>
226. C. Browne [2000], *HEX Strategy: Making the Right Connections*, A K Peters, Natick, MA.
227. C. Browne [2005], *Connection Games: Variations on a Theme*, A K Peters, Natick, MA.
228. C. Browne [2006], Fractal board games., *Computers & Graphics* **30**(1), 126–133.
229. R. A. Brualdi and V. S. Pless [1993], Greedy codes, *J. Combin. Theory (Ser. A)* **64**, 10–30.
230. A. A. Bruen and R. Dixon [1975], The n -queen problem, *Discrete Math.* **12**, 393–395.

231. J. Bruno and L. Weinberg [1970], A constructive graph-theoretic solution of the Shannon switching game, *IEEE Trans. Circuit Theory* **CT-17**, 74–81.
232. G. P. Bucan and L. P. Varvak [1966], On the question of games on a graph, in: *Algebra and Math. Logic: Studies in Algebra (Russian)*, Izdat. Kiev. Univ., Kiev, pp. 122–138, MR0207584 (34 #7399).
233. B. Bukh [2006], Maximum pebbling number of graphs of diameter three, *J. Graph Theory* **52**, 353–357, MR2242834 (2007i:05090).
234. P. Buneman and L. Levy [1980], The towers of Hanoi problem, *Inform. Process. Lett.* **10**, 243–244.
235. A. P. Burger, E. J. Cockayne and C. M. Mynhardt [1997], Domination and irredundance in the queen’s graph, *Discrete Math.* **163**, 47–66, MR1428557 (97m:05130).
236. A. P. Burger and C. M. Mynhardt [1999], Queens on hexagonal boards, *J. Combin. Math. Combin. Comput.* **31**, 97–111, paper in honour of Stephen T. Hedetniemi, MR1726950 (2000h:05158).
237. A. P. Burger and C. M. Mynhardt [2000], Properties of dominating sets of the queens graph Q_{4k+3} , *Util. Math.* **57**, 237–253, MR1760187 (2000m:05166).
238. A. P. Burger and C. M. Mynhardt [2000], Small irredundance numbers for queens graphs, *J. Combin. Math. Combin. Comput.* **33**, 33–43, paper in honour of Ernest J. Cockayne, MR1772752 (2001c:05106).
239. A. P. Burger and C. M. Mynhardt [2000], Symmetry and domination in queens graphs, *Bull. Inst. Combin. Appl.* **29**, 11–24.
240. A. P. Burger and C. M. Mynhardt [2002], An upper bound for the minimum number of queens covering the $n \times n$ chessboard, *Discrete Appl. Math.* **121**, 51–60.
241. A. P. Burger and C. M. Mynhardt [2003], An improved upper bound for queens domination numbers, *Discrete Math.* **266**, 119–131.
242. A. P. Burger, C. M. Mynhardt and E. J. Cockayne [1994], Domination numbers for the queen’s graph, *Bull. Inst. Combin. Appl.* **10**, 73–82.
243. A. P. Burger, C. M. Mynhardt and E. J. Cockayne [2001], Queens graphs for chessboards on the torus, *Australas. J. Combin.* **24**, 231–246.
244. M. Buro [2001], Simple Amazon endgames and their connection to Hamilton circuits in cubic subgrid graphs, *Proc. 2nd Intern. Conference on Computers and Games CG’2000* (T. Marsland and I. Frank, eds.), Vol. 2063, Hamamatsu, Japan, Oct. 2000, Lecture Notes in Computer Science, Springer, pp. 251–261, MR1909614.
245. D. W. Bushaw [1967], On the name and history of Nim, *Washington Math.* **11**, Oct. 1966. Reprinted in: *NY State Math. Teachers J.*, **17**, pp. 52–55.
246. P. J. Byrne and R. Hesse [1996], A Markov chain analysis of jai alai, *Math. Mag.* **69**, 279–283.
247. S. Byrnes [2003], Poset game periodicity, *Integers, Electr. J. of Combi-*

- nat. Number Theory* **3**, #G3, 16 pp., Comb. Games Sect., MR2036487 (2005c:91031).
<http://www.integers-ejcnt.org/vol3.html>
248. J.-Y. Cai, A. Condon and R. J. Lipton [1992], On games of incomplete information, *Theoret. Comput. Sci.* **103**, 25–38.
249. L. Cai and X. Zhu [2001], Game chromatic index of k -degenerate graphs, *J. Graph Theory* **36**, 144–155, MR1814531 (2002b:05058).
250. G. Cairns [2002], Pillow chess, *Math. Mag.* **75**, 173–186, MR2075210 (2005b:91011).
251. D. Calistrate [1996], The reduced canonical form of a game, in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, pp. 409–416, MR1427979 (97m:90122).
252. D. Calistrate, M. Paulhus and D. Wolfe [2002], On the lattice structure of finite games, in: *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 2000, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 42, Cambridge University Press, Cambridge, pp. 25–30, MR1973001.
253. G. Campbell [2004], On optimal play in the game of Hex, *Integers, Electr. J. of Combinat. Number Theory* **4**, #G2, 23 pp., Comb. Games Sect., MR2056016 (2005c:91032).
<http://www.integers-ejcnt.org/vol4.html>
254. C. Cannings and J. Haigh [1992], Montreal solitaire, *J. Combin. Theory* (Ser. A) **60**, 50–66.
255. J. Carlson and D. Stolarski [2004], The correct solution to Berlekamp’s switching game, *Discrete Math.* **287**, 145–150, MR2094708 (2005d:05005).
256. T.-H. Chan [1989], A statistical analysis of the towers of Hanoi problem, *Intern. J. Computer Math.* **28**, 57–65.
257. M. Chan and A. P. Godbole [2008], Improved pebbling bounds, *Discrete Math.* **308**, 2301–2306, MR2404560.
258. A. Chan and A. Tsai [2002], $1 \times n$ Konane: a summary of results, in: *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 2000, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 42, Cambridge University Press, Cambridge, pp. 331–339, MR1973021.
259. A. K. Chandra, D. C. Kozen and L. J. Stockmeyer [1981], Alternation, *J. Assoc. Comput. Mach.* **28**, 114–133.
260. A. K. Chandra and L. J. Stockmeyer [1976], Alternation, *Proc. 17th Ann. Symp. Foundations of Computer Science* (Houston, TX, Oct. 1976), IEEE Computer Soc., Long Beach, CA, pp. 98–108.
261. H. Chang and X. Zhu [2006], The d -relaxed game chromatic index of k -degenerated graphs, *Australas. J. Combin.* **36**, 73–82, MR2262608.
262. G. Chartrand, F. Harary, M. Schultz and D. W. VanderJagt [1995], Achievement and avoidance of a strong orientation of a graph, *Congr. Numer.* **108**, 193–203.

263. S. M. Chase [1972], An implemented graph algorithm for winning Shannon switching games, *Commun. Assoc. Comput. Mach.* **15**, 253–256.
264. M. Chastand, F. Laviolette and N. Polat [2000], On constructible graphs, infinite bridged graphs and weakly cop-win graphs, *Discrete Math.* **224**, 61–78, MR1781285 (2002g:05152).
265. G. Chen, R. H. Schelp and W. E. Shreve [1997], A new game chromatic number, *European J. Combin.* **18**, 1–9.
266. V. Chepoi [1997], Bridged graphs are cop-win graphs: an algorithmic proof, *J. Combin. Theory (Ser. B)* **69**, 97–100.
267. B. S. Chlebus [1986], Domino-tiling games, *J. Comput. System Sci.* **32**, 374–392.
268. C.-Y. Chou, W. Wang and X. Zhu [2003], Relaxed game chromatic number of graphs, *Discrete Math.* **262**, 89–98, MR1951379 (2003m:05062).
269. J. D. Christensen and M. Tilford [1997], Unsolved Problems: David Gale’s subset take-away game, *Amer. Math. Monthly* **104**, 762–766, Unsolved Problems Section.
270. F. R. K. Chung [1989], Pebbling in hypercubes, *SIAM J. Disc. Math.* **2**, 467–472.
271. F. R. K. Chung, J. E. Cohen and R. L. Graham [1988], Pursuit-evasion games on graphs, *J. Graph Theory* **12**, 159–167.
272. F. Chung and R. B. Ellis [2002], A chip-firing game and Dirichlet eigenvalues, *Discrete Math.* **257**, 341–355, MR1935732 (2003i:05087).
273. F. Chung, R. Graham, J. Morrison and A. Odlyzko [1995], Pebbling a chessboard, *Amer. Math. Monthly* **102**, 113–123.
274. V. Chvátal [1973], On the computational complexity of finding a kernel, Report No. CRM-300, Centre de Recherches Mathématiques, Université de Montréal.
275. V. Chvátal [1981], Cheap, middling or dear, in: *The Mathematical Gardner* (D. A. Klarner, ed.), Wadsworth Internat., Belmont, CA, pp. 44–50.
276. V. Chvátal [1983], Mastermind, *Combinatorica* **3**, 325–329.
277. V. Chvátal and P. Erdős [1978], Biased positional games, *Ann. Discrete Math.* **2**, 221–229, Algorithmic Aspects of Combinatorics, (B. Alspach, P. Hell and D. J. Miller, eds.), Qualicum Beach, BC, Canada, 1976, North-Holland.
278. F. Cicalese and C. Deppe [2003], Quasi-perfect minimally adaptive q -ary search with unreliable tests, in: *Algorithms and Computation*, Vol. 2906 of *Lecture Notes in Comput. Sci.*, Springer, Berlin, pp. 527–536, MR2088232 (2005d:68101).
279. F. Cicalese, C. Deppe and D. Mundici [2004], Q -ary Ulam-Rényi game with weighted constrained lies, in: *Computing and Combinatorics*, Vol. 3106 of *Lecture Notes in Comput. Sci.*, Springer, Berlin, pp. 82–91, MR2162023 (2006c:68037).
280. F. Cicalese and D. Mundici [1999], Optimal binary search with two unreliable tests and minimum adaptiveness, in: *Algorithms—ESA ’99 (Prague)*,

- Vol. 1643 of *Lecture Notes in Comput. Sci.*, Springer, Berlin, pp. 257–266, MR1729129 (2000i:68035).
281. F. Cicalese, D. Mundici and U. Vaccaro [2000], Least adaptive optimal search with unreliable tests, in: *Algorithm Theory—SWAT 2000 (Bergen)*, Vol. 1851 of *Lecture Notes in Comput. Sci.*, Springer, Berlin, pp. 549–562, MR1793099 (2001k:91005).
282. F. Cicalese, D. Mundici and U. Vaccaro [2002], Least adaptive optimal search with unreliable tests, *Theoret. Comput. Sci. (Math Games)* **270**, 877–893, MR1871101 (2003g:94052).
283. F. Cicalese and U. Vaccaro [2000], An improved heuristic for the “Ulam-Rényi game”, *Inform. Process. Lett.* **73**, 119–124, MR1741817 (2000m:91026).
284. F. Cicalese and U. Vaccaro [2000], Optimal strategies against a liar, *Theoret. Comput. Sci.* **230**, 167–193, MR1725636 (2001g:91040).
285. F. Cicalese and U. Vaccaro [2003], Binary search with delayed and missing answers, *Inform. Process. Lett.* **85**, 239–247, MR1952901 (2003m:68031).
286. A. Cincotti [2005], Three-player partizan games, *Theoret. Comput. Sci.* **332**, 367–389, MR2122510 (2005j:91018).
287. A. Cincotti [2008], The game of Cutblock, *Integers, Electr. J. of Combinat. Number Theory* **8**, #G06, 12 pp., Comb. Games Sect., **MR pending.
<http://www.integers-ejcnt.org/vol8.html>
288. C. Clark [1996], On achieving channels in a bipolar game, in: *African Americans in Mathematics* (Piscataway, NJ, 1996), DIMACS Ser. Discrete Math. Theoret. Comput. Sci., Vol. 34, Amer. Math. Soc., Providence, RI, pp. 23–27.
289. D. S. Clark [1986], Fibonacci numbers as expected values in a game of chance, *Fibonacci Quart.* **24**, 263–267.
290. N. E. Clarke and R. J. Nowakowski [2000], Cops, robber, and photo radar, *Ars Combin.* **56**, 97–103, MR1768605 (2001e:91040).
291. N. E. Clarke and R. J. Nowakowski [2001], Cops, robber and traps, *Util. Math.* **60**, 91–98, MR1863432 (2002i:91014).
292. N. E. Clarke and R. J. Nowakowski [2005], Tandem-win graphs, *Discrete Math.* **299**, 56–64, MR2168695.
293. T. A. Clarke, R. A. Hochberg and G. H. Hurlbert [1997], Pebbling in diameter two graphs and products of paths, *J. Graph Theory* **25**, 119–128.
294. N. Claus (=E. Lucas) [1884], La tour d’Hanoi, jeu de calcul, *Science et Nature* **1**, 127–128.
295. A. Clausing [2001], Das Trisentis Spiel (The Trisentis game), *Math. Semesterberichte* **48**, 49–66, MR1950212 (2003k:91045).
296. E. J. Cockayne [1990], Chessboard domination problems, *Discrete Math.* **86**, 13–20.

297. E. J. Cockayne and S. T. Hedetniemi [1986], On the diagonal queens domination problem, *J. Combin. Theory* (Ser. A) **42**, 137–139.
298. E. J. Cockayne and C. M. Mynhardt [2001], Properties of queens graphs and the irredundance number of Q_7 , *Australas. J. Combin.* **23**, 285–299, MR1815019 (2002a:05189).
299. A. J. Cole and A. J. T. Davie [1969], A game based on the Euclidean algorithm and a winning strategy for it, *Math. Gaz.* **53**, 354–357.
300. D. B. Coleman [1978], Stretch: a geoboard game, *Math. Mag.* **51**, 49–54.
301. D. Collins [2005], Variations on a theme of Euclid, *Integers, Electr. J. of Combinat. Number Theory* **5**, #G3, 12 pp., Comb. Games Sect., MR2139166 (2005k:91080).
<http://www.integers-ejcnt.org/vol5.html>
302. D. Collins and T. Lengyel [2008], The game of 3-Euclid, *Discrete Math.* **308**, 1130–1136, MR2382351.
303. A. Condon [1989], *Computational Models of Games*, ACM Distinguished Dissertation, MIT Press, Cambridge, MA.
304. A. Condon [1991], Space-bounded probabilistic game automata, *J. Assoc. Comput. Mach.* **38**, 472–494.
305. A. Condon [1992], The complexity of Stochastic games, *Information and Computation* **96**, 203–224.
306. A. Condon [1993], On algorithms for simple stochastic games, in: *Advances in Computational Complexity Theory* (New Brunswick, NJ, 1990), DIMACS Ser. Discrete Math. Theoret. Comput. Sci., Vol. 13, Amer. Math. Soc., Providence, RI, pp. 51–71.
307. A. Condon, J. Feigenbaum, C. Lund and P. Shor [1993], Probabilistically checkable debate systems and approximation algorithms for PSPACE-hard functions, *Proc. 25th Ann. ACM Symp. Theory of Computing*, Assoc. Comput. Mach., New York, NY, pp. 305–314.
308. A. Condon and R. E. Ladner [1988], Probabilistic game automata, *J. Comput. System Sci.* **36**, 452–489, preliminary version in: Proc. Structure in complexity theory (Berkeley, CA, 1986), Lecture Notes in Comput. Sci., Vol. 223, Springer, Berlin, pp. 144–162.
309. I. G. Connell [1959], A generalization of Wythoff’s game, *Canad. Math. Bull.* **2**, 181–190, MR0109092 (21 #7804).
310. I. G. Connell [1959], Some properties of Beatty sequences I, *Canad. Math. Bull.* **2**, 190–197, MR0109093 (21 #7805).
311. J. H. Conway [1972], All numbers great and small, Res. Paper No. 149, Univ. of Calgary Math. Dept.
312. J. H. Conway [1977], All games bright and beautiful, *Amer. Math. Monthly* **84**, 417–434.
313. J. H. Conway [1978], A gamut of game theories, *Math. Mag.* **51**, 5–12.
314. J. H. Conway [1978], Loopy Games, *Ann. Discrete Math.* **3**, 55–74, Proc. Symp. Advances in Graph Theory, Cambridge Combinatorial Conf. (B. Bollobás, ed.), Cambridge, May 1977.

315. J. H. Conway [1990], Integral lexicographic codes, *Discrete Math.* **83**, 219–235.
316. J. H. Conway [1991], More ways of combining games, in: *Combinatorial Games*, Proc. Symp. Appl. Math. (R. K. Guy, ed.), Vol. 43, Amer. Math. Soc., Providence, RI, pp. 57–71.
317. J. H. Conway [1991], Numbers and games, in: *Combinatorial Games*, Proc. Symp. Appl. Math. (R. K. Guy, ed.), Vol. 43, Amer. Math. Soc., Providence, RI, pp. 23–34.
318. J. H. Conway [1994], The surreals and the reals. Real numbers, generalizations of the reals, and theories of continua, in: *Synthese Lib.*, Vol. 242, Kluwer Acad. Publ., Dordrecht, pp. 93–103.
319. J. H. Conway [1996], The angel problem, in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, pp. 3–12.
320. J. H. Conway [1997], M_{13} , in: *Surveys in combinatorics*, London Math. Soc., Lecture Note Ser. 241, Cambridge Univ. Press, Cambridge, pp. 1–11.
321. J. H. Conway [2001], *On Numbers and Games*, A K Peters, Natick, MA, 2nd edition; translation of 1st edition (1976) into German: *Über Zahlen und Spiele* by Brigitte Kunisch, Friedr. Vieweg & Sohn, Braunschweig, 1983.
322. J. H. Conway [2002], More infinite games, in: *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 2000, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 42, Cambridge University Press, Cambridge, pp. 31–36, MR1973002.
323. J. H. Conway [2003], Integral lexicographic codes, in: *MASS selecta* (S. Katok and S. Tabachnikov, eds.), Amer. Math. Soc., pp. 185–189, MR2027176.
324. J. H. Conway and H. S. M. Coxeter [1973], Triangulated polygons and frieze patterns, *Math. Gaz.* **57**, 87–94; 175–183.
325. J. H. Conway and N. J. A. Sloane [1986], Lexicographic codes: error-correcting codes from game theory, *IEEE Trans. Inform. Theory* **IT-32**, 337–348.
326. M. L. Cook and L. E. Shader [1979], A strategy for the Ramsey game “TRITIP”, *Congr. Numer.* **23**, 315–324, Utilitas Math., Proc. 10th South-eastern Conf. on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1979), MR561058 (83e:90167).
327. M. Copper [1993], Graph theory and the game of sprouts, *Amer. Math. Monthly* **100**, 478–482.
328. M. Cornelius and A. Parr [1991], *What’s Your Game?*, Cambridge University Press, Cambridge.
329. T. Cover [1987], Pick the largest number, *Open Problems in Communication and Computation* (T. M. Cover and B. Gopinath, eds.), Springer-Verlag, New York, p. 152.

330. H. S. M. Coxeter [1953], The golden section, phyllotaxis and Wythoff's game, *Scripta Math.* **19**, 135–143.
331. M. Crășmaru [2001], On the complexity of Tsume-Go, *Proc. Intern. Conference on Computers and Games CG'1998, Tsukuba, Japan, Nov. 1998* (H. J. van den Herik, ed.), Vol. LNCS 1558, Lecture Notes in Computer Science, Springer, pp. 222–231.
332. M. Crășmaru and J. Tromp [2001], Ladders are PSPACE-complete, *Proc. 2nd Intern. Conference on Computers and Games CG'2000* (T. Marsland and I. Frank, eds.), Vol. 2063, Hamamatsu, Japan, Oct. 2000, Lecture Notes in Computer Science, Springer, pp. 241–249, MR1909613.
333. J. W. Creely [1987], The length of a two-number game, *Fibonacci Quart.* **25**, 174–179.
334. J. W. Creely [1988], The length of a three-number game, *Fibonacci Quart.* **26**, 141–143.
335. H. T. Croft [1964], 'Lion and man': a postscript, *J. London Math. Soc.* **39**, 385–390.
336. D. W. Crowe [1956], The n -dimensional cube and the tower of Hanoi, *Amer. Math. Monthly* **63**, 29–30.
337. B. Crull, T. Cundiff, P. Feltman, G. H. Hurlbert, L. Pudwell, Z. Szaniszló and Z. Tuza [2005], The cover pebbling number of graphs, *Discrete Math.* **296**, 15–23, MR2148478.
338. L. Csirmaz [1980], On a combinatorial game with an application to Go-Moku, *Discrete Math.* **29**, 19–23.
339. L. Csirmaz [2002], Connected graph game, *Studia Sci. Math. Hungar.* **39**, 129–136, MR1909151 (2003d:91028).
340. L. Csirmaz and Z. Nagy [1979], On a generalization of the game Go-Moku II, *Studia Sci. Math. Hung.* **14**, 461–469.
341. P. Csorba [2005], On the biased n -in-a-row game, *Discrete Math.* **503**, 100–111.
342. J. Culberson [1999], Sokoban is PSPACE complete, in: *Fun With Algorithms*, Vol. 4 of *Proceedings in Informatics*, Carleton Scientific, University of Waterloo, Waterloo, Ont., pp. 65–76, Conference took place on the island of Elba, June 1998.
343. P. Cull and E. F. Ecklund, Jr. [1982], On the towers of Hanoi and generalized towers of Hanoi problems, *Congr. Numer.* **35**, 229–238.
344. P. Cull and E. F. Ecklund, Jr. [1985], Towers of Hanoi and analysis of algorithms, *Amer. Math. Monthly* **92**, 407–420.
345. P. Cull and C. Gerety [1985], Is towers of Hanoi really hard?, *Congr. Numer.* **47**, 237–242.
346. P. Cull and I. Nelson [1999], Error-correcting codes on the towers of Hanoi graphs, *Discrete Math.* **208/209**, 157–175.
347. P. Cull and I. Nelson [1999], Perfect codes, NP-completeness, and towers of Hanoi graphs, *Bull. Inst. Combin. Appl.* **26**, 13–38.

348. A. Czygrinow, N. Eaton, G. Hurlbert and P. M. Kayll [2002], On pebbling threshold functions for graph sequences, *Discrete Math.* **247**, 93–105, MR1877652 (2002m:05058).
349. A. Czygrinow and G. Hurlbert [2003], Pebbling in dense graphs, *Australas. J. Combin.* **28**, 201–208.
350. A. Czygrinow, G. Hurlbert, H. A. Kierstead and W. T. Trotter [2002], A note on graph pebbling, *Graphs Combin.* **18**, 219–225, MR1913664 (2004d:05170).
351. J. Czyzowicz, K. B. Lakshmanan and A. Pelc [1991], Searching with a forbidden lie pattern in responses, *Inform. Process. Lett.* **37**, 127–132, MR1095694 (92e:68027).
352. J. Czyzowicz, K. B. Lakshmanan and A. Pelc [1994], Searching with local constraints on error patterns, *European J. Combin.* **15**, 217–222, MR1273940 (95a:05005).
353. J. Czyzowicz, D. Mundici and A. Pelc [1989], Ulam’s searching game with lies, *J. Combin. Theory Ser. A* **52**, 62–76, MR1008160 (90k:94026).
354. J. Czyzowicz, A. Pelc and D. Mundici [1988], Solution of Ulam’s problem on binary search with two lies, *J. Combin. Theory Ser. A* **49**, 384–388, MR964397 (90k:94025).
355. G. Danaraj and V. Klee [1977], The connectedness game and the c -complexity of certain graphs, *SIAM J. Appl. Math.* **32**, 431–442.
356. C. Darby and R. Laver [1998], Countable length Ramsey games, *Set Theory: Techniques and Applications*. Proc. of the conferences, Curacao, Netherlands Antilles, June 26–30, 1995 and Barcelona, Spain, June 10–14, 1996 (C. A. Di Prisco et al., eds.), Kluwer, Dordrecht, pp. 41–46.
357. A. L. Davies [1970], Rotating the fifteen puzzle, *Math. Gaz.* **54**, 237–240.
358. M. Davis [1963], Infinite games of perfect information, *Ann. of Math. Stud., Princeton* **52**, 85–101.
359. R. W. Dawes [1992], Some pursuit-evasion problems on grids, *Inform. Process. Lett.* **43**, 241–247.
360. T. R. Dawson [1934], Problem 1603, *Fairy Chess Review* p. 94, Dec.
361. T. R. Dawson [1935], Caissa’s Wild Roses, reprinted in: *Five Classics of Fairy Chess*, Dover, 1973.
362. N. G. de Bruijn [1972], A solitaire game and its relation to a finite field, *J. Recr. Math.* **5**, 133–137.
363. N. G. de Bruijn [1981], Pretzel Solitaire as a pastime for the lonely mathematician, in: *The Mathematical Gardner* (D. A. Klarner, ed.), Wadsworth Internat., Belmont, CA, pp. 16–24.
364. F. de Carteblanche [1970], The princess and the roses, *J. Recr. Math.* **3**, 238–239.
365. F. de Carte Blanche [1974], The roses and the princes, *J. Recr. Math.* **7**, 295–298.
366. A. P. DeLoach [1971], Some investigations into the game of SIM, *J. Recr. Math.* **4**, 36–41.

367. E. D. Demaine [2001], Playing games with algorithms: algorithmic combinatorial game theory, *Mathematical Foundations of Computer Science* (J. Sgall, A. Pultr and P. Kolman, eds.), Vol. 2136 of *Lecture Notes in Comput. Sci.*, Springer, Berlin, pp. 18–32, MR1906998 (2003d:68076).
368. E. D. Demaine, M. L. Demaine and D. Eppstein [2002], Phutball Endgames are Hard, in: *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 2000, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 42, Cambridge University Press, Cambridge, pp. 351–360, MR1973023 (2004b:91042).
369. E. D. Demaine, M. L. Demaine and R. Fleischer [2004], Solitaire clobber, *Theoret. Comp. Sci.* **313**, 325–338, special issue of Dagstuhl Seminar “Algorithmic Combinatorial Game Theory”, Feb. 2002, MR2056930.
370. E. D. Demaine, M. L. Demaine, R. Fleischer, R. A. Hearn and T. von Oertzen [2008], The complexity of Dyson telescopes, in: *Games of No Chance III*, Proc. BIRS Workshop on Combinatorial Games, July, 2005, Banff, Alberta, Canada, MSRI Publ. (M. H. Albert and R. J. Nowakowski, eds.), Cambridge University Press, Cambridge.
371. E. Demaine, M. L. Demaine and J. O’Rourke [2000], PushPush and Push-1 are NP-hard in 2D, *Proc. 12th Annual Canadian Conf. on Computational Geometry*, Fredericton, New Brunswick, Canada, pp. 17–20.
372. E. D. Demaine, M. L. Demaine and H. A. Verrill [2002], Coin-moving puzzles, in: *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 2000, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 42, Cambridge University Press, Cambridge, pp. 405–431, MR1973108 (2004b:91043).
373. E. D. Demaine, R. Fleischer, A. S. Fraenkel and R. J. Nowakowski [2004], Open problems at the 2002 Dagstuhl Seminar on algorithmic combinatorial game theory, *Theoret. Comp. Sci.* **313**, 539–543, special issue of Dagstuhl Seminar “Algorithmic Combinatorial Game Theory” (Appendix B), Feb. 2002, MR2056945.
374. E. Demaine and R. A. Hearn [2008], Constraint Logic: A Uniform Framework for Modeling Computation as Games, *Proc. 23rd Annual IEEE Conf. on Computational Complexity*, Univ. of Maryland, College Park, to appear.
375. E. D. Demaine and R. A. Hearn [2008], Playing games with algorithms: algorithmic combinatorial game theory, in: *Games of No Chance III*, Proc. BIRS Workshop on Combinatorial Games, July, 2005, Banff, Alberta, Canada, MSRI Publ. (M. H. Albert and R. J. Nowakowski, eds.), Cambridge University Press, Cambridge.
376. E. D. Demaine, R. A. Hearn and M. Hoffmann [2002], Push-2-f is PSPACE-Complete, *Proc. 14th Canad. Conf. Computational Geometry*, Lethbridge, Alberta, Canada, pp. 31–35.
377. J. DeMaio [2007], Which chessboards have a closed knight’s tour within the cube?, *Electr. J. Combin.* **14**, #R32, 9 pp.
<http://www.combinatorics.org/>

378. H. de Parville [1884], La tour d'Hanoi et la question du Tonkin, *La Nature* **12**, 285–286.
379. C. Deppe [2000], Solution of Ulam's searching game with three lies or an optimal adaptive strategy for binary three-error-correcting codes, *Discrete Math.* **224**, 79–98, MR1781286 (2001j:94054).
380. C. Deppe [2004], Strategies for the Renyi-Ulam game with fixed number of lies, *Theoret. Comput. Sci.* **314**, 45–55, MR2033744 (2004k:05012).
381. B. Descartes [1953], Why are series musical?, *Eureka* **16**, 18–20, reprinted *ibid.* **27** (1964) 29–31.
382. W. Deuber and S. Thomassé [1996], Grundy Sets of Partial Orders, *Technical Report No. 96-123*, Diskrete Strukturen in der Mathematik, Universität Bielefeld.
383. A. K. Dewdney [1984 – 1991], Computer Recreations, a column in Scientific American (May, 1984 – September 1991).
384. A. K. Dewdney [1988], *The Armchair Universe: An Exploration of Computer Worlds*, W. H. Freeman and Company, New York.
385. A. K. Dewdney [1989], *The Turing Omnibus: 61 Excursions in Computer Science*, Computer Science Press, Rockville, MD.
386. A. K. Dewdney [1993], *The (new) Turing Omnibus: 66 Excursions in Computer Science*, Computer Science Press, New York.
387. A. Dhagat, P. Gács and P. Winkler [1992], On playing "twenty questions" with a liar, *Proc. Third Annual ACM-SIAM Sympos. on Discrete Algorithms*, (Orlando, FL, 1992), ACM, New York, pp. 16–22.
388. C. S. Dibley and W. D. Wallis [1981], The effect of starting position in jai-alai, *Congr. Numer.* **32**, 253–259, Proc. 12-th Southeastern Conf. on Combinatorics, Graph Theory and Computing, Vol. I (Baton Rouge, LA, 1981).
389. C. G. Diderich [1995], Bibliography on minimax game theory, sequential and parallel algorithms.
<http://diwww.epfl.ch/~diderich/bibliographies.html>
390. R. Diestel and I. Leader [1994], Domination games on infinite graphs, *Theoret. Comput. Sci. (Math Games)* **132**, 337–345.
391. T. Dinski and X. Zhu [1999], A bound for the game chromatic number of graphs, *Discrete Math.* **196**(1-3), 109–115, MR1664506 (99k:05077).
392. Y. Dodis and P. Winkler [2001], Universal configurations in light-flipping games, *Proc. 12th Annual ACM-SIAM Sympos. on Discrete Algorithms*, (Washington, DC, 2001), ACM, New York, pp. 926–927.
393. B. Doerr [2001], Vector balancing games with aging, *J. Combin. Theory Ser. A* **95**, 219–233, MR2154483.
394. A. P. Domoryad [1964], *Mathematical Games and Pastimes*, Pergamon Press, Oxford, translated by H. Moss.
395. D. Dor and U. Zwick [1999], SOKOBAN and other motion planning problems, *Comput. Geom.* **13**, 215–228.

396. P. Dorbec, E. Duchêne and S. Gravier [2008], Solitaire clobber played on Hamming graphs, *Integers, Electr. J. of Combinat. Number Theory* **8**, #G03, 21 pp., Comb. Games Sect., **MR pending.
<http://www.integers-ejcnt.org/vol5.html>
397. C. P. dos Santos and J. N. Silva [2008], Konane has infinite Nim-dimension, *Integers, Electr. J. of Combinat. Number Theory* **8**, #G02, 6 pp., Comb. Games Sect., **MR pending.
<http://www.integers-ejcnt.org/vol5.html>
398. M. Dresher [1951], Games of strategy, *Math. Mag.* **25**, 93–99.
399. A. Dress, A. Flammenkamp and N. Pink [1999], Additive periodicity of the Sprague-Grundy function of certain Nim games, *Adv. in Appl. Math.* **22**, 249–270.
400. G. C. Drummond-Cole [2005], Positions of value *2 in generalized domineering and chess, *Integers, Electr. J. of Combinat. Number Theory* **5**, #G6, 13 pp., Comb. Games Sect., MR2192254.
<http://www.integers-ejcnt.org/vol5.html>
401. E. Duchêne and S. Gravier [2008], Geometrical extensions of Wythoff’s game, *Discrete Math.* to appear.
402. E. Duchêne and M. Rigo [2008], A morphic approach to combinatorial games: the Tribonacci case, *Theor. Inform. Appl.* **42**, 375–393, MR2401268.
403. P. Duchet [1980], Graphes noyau-parfaits, *Ann. Discrete Math.* **9**, 93–101.
404. P. Duchet [1987], A sufficient condition for a digraph to be kernel-perfect, *J. Graph Theory* **11**, 81–85.
405. P. Duchet [1987], Parity graphs are kernel-M-solvable, *J. Combin. Theory (Ser. B)* **43**, 121–126.
406. P. Duchet and H. Meyniel [1981], A note on kernel-critical graphs, *Discrete Math.* **33**, 103–105.
407. P. Duchet and H. Meyniel [1983], Une généralisation du théorème de Richardson sur l’existence de noyaux dans le graphes orientés, *Discrete Math.* **43**, 21–27.
408. P. Duchet and H. Meyniel [1993], Kernels in directed graphs: a poison game, *Discrete Math.* **115**, 273–276.
409. H. E. Dudeney [1958], *The Canterbury Puzzles and Other Curious Problems*, Dover, Mineola, NY, 4th edn., 1st edn: W. Heinemann, 1907.
410. H. E. Dudeney [1970], *Amusements in Mathematics*, Dover, Mineola, NY, 1st edn: Dover, 1917, reprinted by Dover in 1959.
411. A. Duffy, G. Kolpin and D. Wolfe [2008], Ordinal partizan End Nim, in: *Games of No Chance III*, Proc. BIRS Workshop on Combinatorial Games, July, 2005, Banff, Alberta, Canada, MSRI Publ. (M. H. Albert and R. J. Nowakowski, eds.), Cambridge University Press, Cambridge.
412. I. Dumitriu and J. Spencer [2004], A halfiar’s game, *Theoret. Comp. Sci.* **313**, 353–369, special issue of Dagstuhl Seminar “Algorithmic Combinatorial Game Theory”, Feb. 2002, MR2056932.

413. I. Dumitriu and J. Spencer [2005], The liar game over an arbitrary channel, *Combinatorica* **25**(5), 537–559, MR2176424 (2006m:91003).
414. I. Dumitriu and J. Spencer [2005], The two-batch liar game over an arbitrary channel, *SIAM J. Discrete Math.* **19**(4), 1056–1064 (electronic), MR2206379 (2006m:91037).
415. C. Dunn [2007], The relaxed game chromatic index of k -degenerate graphs, *Discrete Math.* **307**(14), 1767–1775, MR2316815 (2007m:05085).
416. C. Dunn and H. A. Kierstead [2004], A simple competitive graph coloring algorithm. II, *J. Combin. Theory Ser. B* **90**(1), 93–106, Dedicated to Adrian Bondy and U. S. R. Murty, MR2041319 (2005h:05072).
417. C. Dunn and H. A. Kierstead [2004], A simple competitive graph coloring algorithm. III, *J. Combin. Theory Ser. B* **92**(1), 137–150, MR2078498 (2007b:05069).
418. C. Dunn and H. A. Kierstead [2004], The relaxed game chromatic number of outerplanar graphs, *J. Graph Theory* **46**(1), 69–78, MR2051470 (2004m:05097).
419. N. Duvdevani and A. S. Fraenkel [1989], Properties of k -Welter’s game, *Discrete Math.* **76**, 197–221.
420. J. Edmonds [1965], Lehman’s switching game and a theorem of Tutte and Nash–Williams, *J. Res. Nat. Bur. Standards* **69B**, 73–77.
421. R. Ehrenborg and E. Steingrímsson [1996], Playing Nim on a simplicial complex, *Electr. J. Combin.* **3**(1), #R9, 33 pp.
<http://www.combinatorics.org/>
422. A. Ehrenfeucht and J. Mycielski [1979], Positional strategies for mean payoff games, *Internat. J. Game Theory* **8**, 109–113.
423. N. D. Elkies [1996], On numbers and endgames: combinatorial game theory in chess endgames, in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, pp. 135–150, MR1427963.
424. N. D. Elkies [2002], Higher nimbers in pawn endgames on large chessboards, in: *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 2000, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 42, Cambridge University Press, Cambridge, pp. 61–78, MR1973005 (2004c:91029).
425. R. B. Ellis, V. Ponomarenko and C. H. Yan [2005], The Rényi-Ulam pathological liar game with a fixed number of lies, *J. Combin. Theory Ser. A* **112**, 328–336, MR2177490 (2006g:91040).
426. R. B. Ellis and C. H. Yan [2004], Ulam’s pathological liar game with one half-lie, *Int. J. Math. Math. Sci.* pp. 1523–1532, MR2085073 (2005c:91033).
427. J. W. Emert, R. B. Nelson and F. W. Owens [2007], Multiple towers of Hanoi with a path transition graph, *Congr. Numer.* **188**, 59–64, Proc. 38-th Southeastern Intern. Conf. on Combinatorics, Graph Theory and

- Computing (Boca Raton, FL, 2007).
428. D. Engel [1972], DIM: three-dimensional Sim, *J. Recr. Math.* **5**, 274–275.
 429. M. R. Engelhardt [2007], A group-based search for solutions of the n -queens problem, *Discrete Math.* **307**, 2535–2551, MR2359600 (2008g:05204).
 430. B. Engels and T. Kamphans [2006], Randolph’s robot game is NP-hard!, in: *CTW2006—Cologne-Twente Workshop on Graphs and Combinatorial Optimization*, Vol. 25 of *Electron. Notes Discrete Math.*, Elsevier, Amsterdam, pp. 49–53 (electronic), MR2301136.
 431. R. J. Epp and T. S. Ferguson [1980], A note on take-away games, *Fibonacci Quart.* **18**, 300–303.
 432. D. Eppstein [2002], Searching for spaceships, in: *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 2000, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 42, Cambridge University Press, Cambridge, pp. 433–453.
 433. R. A. Epstein [1977], *Theory of Gambling and Statistical Logic*, Academic Press, New York, NY.
 434. M. C. Er [1982], A representation approach to the tower of Hanoi problem, *Comput. J.* **25**, 442–447.
 435. M. C. Er [1983], An analysis of the generalized towers of Hanoi problem, *BIT* **23**, 429–435.
 436. M. C. Er [1983], An iterative solution to the generalized towers of Hanoi problem, *BIT* **23**, 295–302.
 437. M. C. Er [1984], A generalization of the cyclic towers of Hanoi, *Intern. J. Comput. Math.* **15**, 129–140.
 438. M. C. Er [1984], The colour towers of Hanoi: a generalization, *Comput. J.* **27**, 80–82.
 439. M. C. Er [1984], The cyclic towers of Hanoi: a representation approach, *Comput. J.* **27**, 171–175.
 440. M. C. Er [1984], The generalized colour towers of Hanoi: an iterative algorithm, *Comput. J.* **27**, 278–282.
 441. M. C. Er [1984], The generalized towers of Hanoi problem, *J. Inform. Optim. Sci.* **5**, 89–94.
 442. M. C. Er [1985], The complexity of the generalized cyclic towers of Hanoi problem, *J. Algorithms* **6**, 351–358.
 443. M. C. Er [1987], A general algorithm for finding a shortest path between two n -configurations, *Information Sciences* **42**, 137–141.
 444. M. C. Er [1987], A time and space efficient algorithm for the cyclic Towers of Hanoi problem, *J. Inform. Process.* **9**, 163–165.
 445. M. C. Er [1988], A minimal space algorithm for solving the towers of Hanoi problem, *J. Inform. Optim. Sci.* **9**, 183–191.
 446. M. C. Er [1989], A linear space algorithm for solving the Towers of Hanoi problem by using a virtual disc., *Inform. Sci.* **47**, 47–52.

447. C. Erbas, S. Sarkeshik and M. M. Tanik [1992], Different perspectives of the N -queens problem, *Proc. ACM Computer Science Conf.*, Kansas City, MO, pp. 99–108.
448. C. Erbas and M. M. Tanik [1994], Parallel memory allocation and data alignment in SIMD machines, *Parallel Algorithms and Applications* **4**, 139–151, preliminary version appeared under the title: Storage schemes for parallel memory systems and the N -queens problem, in: Proc. 15th Ann. Energy Tech. Conf., Houston, TX, Amer. Soc. Mech. Eng., Vol. 43, 1992, pp. 115–120.
449. C. Erbas, M. M. Tanik and Z. Aliyazicioglu [1992], Linear congruence equations for the solutions of the N -queens problem, *Inform. Process. Lett.* **41**, 301–306.
450. P. L. Erdős, U. Faigle, W. Hochstättler and W. Kern [2004], Note on the game chromatic index of trees, *Theoret. Comp. Sci.* **313**, 371–376, special issue of Dagstuhl Seminar “Algorithmic Combinatorial Game Theory”, Feb. 2002, MR2056933.
451. P. Erdős, W. R. Hare, S. T. Hedetniemi and R. C. Laskar [1987], On the equality of the Grundy and chromatic numbers of a graph, *J. Graph Theory* **11**, 157–159.
452. P. Erdős, S. T. Hedetniemi, R. C. Laskar and G. C. E. Prins [2003], On the equality of the partial Grundy and upper chromatic numbers of graphs, *Discrete Math.* **272**, 53–64, MR2019200 (2004i:05048).
453. P. Erdős and J. L. Selfridge [1973], On a combinatorial game, *J. Combin. Theory (Ser. A)* **14**, 298–301.
454. J. Erickson [1996], New toads and frogs results, in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, pp. 299–310.
455. J. Erickson [1996], Sowing games, in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, pp. 287–297.
456. M. Erickson and F. Harary [1983], Picasso animal achievement games, *Bull. Malaysian Math. Soc.* **6**, 37–44.
457. N. Eriksen, H. Eriksson and K. Eriksson [2000], Diagonal checker-jumping and Eulerian numbers for color-signed permutations, *Electr. J. Combin.* **7**, #R3, 11 pp.
<http://www.combinatorics.org/>
458. H. Eriksson [1995], Pebblings, *Electr. J. Combin.* **2**, #R7, 18 pp.
<http://www.combinatorics.org/>
459. H. Eriksson, K. Eriksson, J. Karlander, L. Svensson and J. Wästlund [2001], Sorting a bridge hand, *Discrete Math.* **241**, 289–300, Selected papers in honor of Helge Tverberg.
460. H. Eriksson, K. Eriksson and J. Sjöstrand [2001], Note on the lamp light-

- ing problem, *Adv. in Appl. Math.* **27**, 357–366, Special issue in honor of Dominique Foata’s 65th birthday (Philadelphia, PA, 2000), MR1868970 (2002i:68082).
461. H. Eriksson and B. Lindström [1995], Twin jumping checkers in \mathbb{Z}^d , *European J. Combin.* **16**, 153–157.
462. K. Eriksson [1991], No polynomial bound for the chip firing game on directed graphs, *Proc. Amer. Math. Soc.* **112**, 1203–1205.
463. K. Eriksson [1992], Convergence of Mozes’ game of numbers, *Linear Algebra Appl.* **166**, 151–165.
464. K. Eriksson [1994], Node firing games on graphs, *Contemp. Math.* **178**, 117–127.
465. K. Eriksson [1994], Reachability is decidable in the numbers game, *Theoret. Comput. Sci. (Math Games)* **131**, 431–439.
466. K. Eriksson [1995], The numbers game and Coxeter groups, *Discrete Math.* **139**, 155–166.
467. K. Eriksson [1996], Chip-firing games on mutating graphs, *SIAM J. Discrete Math.* **9**, 118–128.
468. K. Eriksson [1996], Strong convergence and a game of numbers, *European J. Combin.* **17**, 379–390.
469. K. Eriksson [1996], Strong convergence and the polygon property of 1-player games, *Discrete Math.* **153**, 105–122, Proc. 5th Conf. on Formal Power Series and Algebraic Combinatorics (Florence 1993).
470. M. D. Ernst [1995], Playing Konane mathematically: a combinatorial game-theoretic analysis, *UMAP J.* **16**(2), 95–121, MR1439041.
471. G. Etienne [1991], Tableaux de Young et solitaire bulgare, *J. Combin. Theory (Ser. A)* **58**, 181–197, MR1129115 (93a:05134).
472. J. M. Ettinger [2000], A metric for positional games, *Theoret. Comput. Sci. (Math Games)* **230**, 207–219, MR1725638 (2001g:91041).
473. M. Euwe [1929], Mengentheoretische Betrachtungen über das Schachspiel, *Proc. Konin. Akad. Wetenschappen* **32**, 633–642.
474. R. J. Evans [1974], A winning opening in reverse Hex, *J. Recr. Math.* **7**, 189–192.
475. R. J. Evans [1975–76], Some variants of Hex, *J. Recr. Math.* **8**, 120–122.
476. R. J. Evans [1979], Silverman’s game on intervals, *Amer. Math. Monthly* **86**, 277–281.
477. R. J. Evans and G. A. Heuer [1992], Silverman’s game on discrete sets, *Linear Algebra Appl.* **166**, 217–235.
478. S. Even and R. E. Tarjan [1976], A combinatorial problem which is complete in polynomial space, *J. Assoc. Comput. Mach.* **23**, 710–719, also appeared in Proc. 7th Ann. ACM Symp. Theory of Computing (Albuquerque, NM, 1975), Assoc. Comput. Mach., New York, NY, 1975, pp. 66–71.
479. G. Exoo [1980–81], A new way to play Ramsey games, *J. Recr. Math.* **13**(2), 111–113.

480. U. Faigle, W. Kern, H. Kierstead and W. T. Trotter [1993], On the game chromatic number of some classes of graphs, *Ars Combin.* **35**, 143–150.
481. U. Faigle, W. Kern and J. Kuipers [1998], Computing the nucleolus of min-cost spanning tree games is NP-hard, *Internat. J. Game Theory* **27**, 443–450.
482. E. Falkener [1961], *Games Ancient and Oriental and How to Play Them*, Dover, New York, NY. (Published previously by Longmans Green, 1892.).
483. B.-J. Falkowski and L. Schmitz [1986], A note on the queens' problem, *Inform. Process. Lett.* **23**, 39–46.
484. G. E. Farr [2003], The Go polynomials of a graph, *Theoret. Comp. Sci.* **306**, 1–18, MR2000162 (2004e:05074).
485. J. Farrell, M. Gardner and T. Rodgers [2005], Configuration games, in: *Tribute to a Mathematician*, honoring Martin Gardner (B. Cipra, E. D. Demaine, M. L. Demaine and T. Rodgers, eds.), A K Peters, Wellesley, MA, pp. 93–99.
486. T. Feder [1990], Toetjes, *Amer. Math. Monthly* **97**, 785–794.
487. T. Feder and C. Subi [2005], Disks on a tree: analysis of a combinatorial game, *SIAM J. Discrete Math.* **19**, 543–552 (electronic), MR2191279 (2006i:05022).
488. S. P. Fekete, R. Fleischer, A. S. Fraenkel and M. Schmitt [2004], Traveling salesmen in the presence of competition, *Theoret. Comp. Sci.* **313**, 377–392, special issue of Dagstuhl Seminar “Algorithmic Combinatorial Game Theory”, Feb. 2002, MR2056934 (2005a:90168).
489. T. S. Ferguson [1974], On sums of graph games with last player losing, *Internat. J. Game Theory* **3**, 159–167.
490. T. S. Ferguson [1984], Misère annihilation games, *J. Combin. Theory (Ser. A)* **37**, 205–230.
491. T. S. Ferguson [1989], Who solved the secretary problem?, *Statistical Science* **4**, 282–296.
492. T. S. Ferguson [1992], Mate with bishop and knight in kriegspiel, *Theoret. Comput. Sci. (Math Games)* **96**, 389–403.
493. T. S. Ferguson [1998], Some chip transfer games, *Theoret. Comp. Sci. (Math Games)* **191**, 157–171.
494. T. S. Ferguson [2001], Another form of matrix Nim, *Electr. J. Combin.* **8(2)**, #R9, 9 pp., Volume in honor of Aviezri S. Fraenkel, MR1853260 (2002g:91046).
<http://www.combinatorics.org/>
495. A. S. Finbow and B. L. Hartnell [1983], A game related to covering by stars, *Ars Combinatoria* **16-A**, 189–198.
496. A. Fink and R. Guy [2007], The Number-pad Game, *Coll. Math. J.* **38**, 260–264, MR2340919.
497. M. J. Fischer and R. N. Wright [1993], An application of game-theoretic techniques to cryptography, *Advances in Computational Complexity Theory* (New Brunswick, NJ, 1990), DIMACS Ser. Discrete Math. Theoret.

- Comput. Sci., Vol. 13, pp. 99–118.
498. P. C. Fishburn and N. J. A. Sloane [1989], The solution to Berlekamp’s switching game, *Discrete Math.* **74**, 263–290.
 499. D. C. Fisher and J. Ryan [1992], Optimal strategies for a generalized “scissors, paper, and stone” game, *Amer. Math. Monthly* **99**, 935–942.
 500. D. C. Fisher and J. Ryan [1995], Probabilities within optimal strategies for tournament games, *Discrete Appl. Math.* **56**, 87–91.
 501. D. C. Fisher and J. Ryan [1995], Tournament games and positive tournaments, *J. Graph Theory* **19**, 217–236.
 502. S. L. Fitzpatrick and R. J. Nowakowski [2001], Copnumber of graphs with strong isometric dimension two, *Ars Combin.* **59**, 65–73, MR1832198 (2002b:05053).
 503. G. W. Flake and E. B. Baum [2002], *Rush Hour* is PSPACE-complete, or “Why you should generously tip parking lot attendants”, *Theoret. Comput. Sci. (Math Games)* **270**, 895–911, MR1871102 (2002h:68068).
 504. A. Flammenkamp [1996], Lange Perioden in Subtraktions-Spielen, Ph.D. Thesis, University of Bielefeld.
 505. A. Flammenkamp, A. Holshouser and H. Reiter [2003], Dynamic one-pile blocking Nim, *Electr. J. Combinatorics* **10**, #N4, 6 pp., MR1975777 (2004b:05027).
<http://www.combinatorics.org/>
 506. J. A. Flanigan [1978], Generalized two-pile Fibonacci nim, *Fibonacci Quart.* **16**, 459–469.
 507. J. A. Flanigan [1981], On the distribution of winning moves in random game trees, *Bull. Austr. Math. Soc.* **24**, 227–237.
 508. J. A. Flanigan [1981], Selective sums of loopy partizan graph games, *Internat. J. Game Theory* **10**, 1–10.
 509. J. A. Flanigan [1982], A complete analysis of black-white Hackendot, *Internat. J. Game Theory* **11**, 21–25.
 510. J. A. Flanigan [1982], One-pile time and size dependent take-away games, *Fibonacci Quart.* **20**, 51–59.
 511. J. A. Flanigan [1983], Slow joins of loopy games, *J. Combin. Theory (Ser. A)* **34**, 46–59.
 512. R. Fleischer and G. Trippen [2006], Kayles on the way to the stars, *Proc. 4th Intern. Conference on Computers and Games CG’2004* (H. J. van den Herik, Y. Björnsson and N. S. Netanyahu, eds.), Bar-Ilan University, Ramat-Gan, Israel, July 2004, Lecture Notes in Computer Science Vol. 3846, Springer, pp. 232–245.
 513. J. O. Flynn [1973], Lion and man: the boundary constraint, *SIAM J. Control* **11**, 397–411.
 514. J. O. Flynn [1974], Lion and man: the general case, *SIAM J. Control* **12**, 581–597.
 515. J. O. Flynn [1974], Some results on max-min pursuit, *SIAM J. Control* **12**, 53–69.

516. F. V. Fomin [1998], Helicopter search problems, bandwidth and path-width, *Discrete Appl. Math.* **85**, 59–70.
517. F. V. Fomin [1999], Note on a helicopter search problem on graphs, *Discrete Appl. Math.* **95**, 241–249, Proc. Conf. on Optimal Discrete Structures and Algorithms — ODSA '97 (Rostock).
518. F. V. Fomin and N. N. Petrov [1996], Pursuit-evasion and search problems on graphs, *Congr. Numer.* **122**, 47–58, Proc. 27-th Southeastern Intern. Conf. on Combinatorics, Graph Theory and Computing (Baton Rouge, LA, 1996).
519. L. R. Foulds and D. G. Johnson [1984], An application of graph theory and integer programming: chessboard non-attacking puzzles, *Math. Mag.* **57**, 95–104.
520. A. S. Fraenkel [1974], Combinatorial games with an annihilation rule, in: *The Influence of Computing on Mathematical Research and Education*, Missoula MT, August 1973, Proc. Symp. Appl. Math., (J. P. LaSalle, ed.), Vol. 20, Amer. Math. Soc., Providence, RI, pp. 87–91.
521. A. S. Fraenkel [1977], The particles and antiparticles game, *Comput. Math. Appl.* **3**, 327–328.
522. A. S. Fraenkel [1980], From Nim to Go, *Ann. Discrete Math.* **6**, 137–156, Proc. Symp. on Combinatorial Mathematics, Combinatorial Designs and Their Applications (J. Srivastava, ed.), Colorado State Univ., Fort Collins, CO, June 1978.
523. A. S. Fraenkel [1981], Planar kernel and Grundy with $d \leq 3$, $d_{out} \leq 2$, $d_{in} \leq 2$ are NP-complete, *Discrete Appl. Math.* **3**, 257–262.
524. A. S. Fraenkel [1982], How to beat your Wythoff games' opponent on three fronts, *Amer. Math. Monthly* **89**, 353–361.
525. A. S. Fraenkel [1983], 15 Research problems on games, *Discrete Math.* in "Research Problems" section, Vols. **43-46**.
526. A. S. Fraenkel [1984], Wythoff games, continued fractions, cedar trees and Fibonacci searches, *Theoret. Comput. Sci.* **29**, 49–73, an earlier version appeared in Proc. 10th Internat. Colloq. on Automata, Languages and Programming (J. Diaz, ed.), Vol. 154, Barcelona, July 1983, Lecture Notes in Computer Science, Springer Verlag, Berlin, 1983, pp. 203–225.
527. A. S. Fraenkel [1988], The complexity of chess, Letter to the Editor, *J. Recr. Math.* **20**, 13–14.
528. A. S. Fraenkel [1991], Complexity of games, in: *Combinatorial Games*, Proc. Symp. Appl. Math. (R. K. Guy, ed.), Vol. 43, Amer. Math. Soc., Providence, RI, pp. 111–153.
529. A. S. Fraenkel [1994], Even kernels, *Electr. J. Combinatorics* **1**, #R5, 13 pp.
<http://www.combinatorics.org/>
530. A. S. Fraenkel [1994], Iterated floor function, algebraic numbers, discrete chaos, Beatty subsequences, semigroups, *Trans. Amer. Math. Soc.* **341**, 639–664, MR1138949 (94d:11011).

531. A. S. Fraenkel [1994], Recreation and depth in combinatorial games, in: *The Lighter Side of Mathematics*, Proc. E. Strens Memorial Conf. on Recr. Math. and its History, Calgary, 1986, Spectrum Series (R. K. Guy and R. E. Woodrow, eds.), Math. Assoc. of America, Washington, DC, pp. 176–194.
532. A. S. Fraenkel [1996], Error-correcting codes derived from combinatorial games, in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, pp. 417–431.
533. A. S. Fraenkel [1996], Scenic trails ascending from sea-level Nim to alpine chess, in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, pp. 13–42.
534. A. S. Fraenkel [1997], Combinatorial game theory foundations applied to digraph kernels, *Electr. J. Combinatorics* **4**(2), #R10, 17 pp., Volume in honor of Herbert Wilf.
<http://www.combinatorics.org/>
535. A. S. Fraenkel [1998], Heap games, numeration systems and sequences, *Ann. Comb.* **2**, 197–210, an earlier version appeared in: *Fun With Algorithms*, Vol. 4 of *Proceedings in Informatics* (E. Lodi, L. Pagli and N. Santoro, eds.), Carleton Scientific, University of Waterloo, Waterloo, Ont., pp. 99–113, 1999. Conference took place on the island of Elba, June 1998., MR1681514 (2000b:91001).
536. A. S. Fraenkel [1998], Multivision: an intractable impartial game with a linear winning strategy, *Amer. Math. Monthly* **105**, 923–928.
537. A. S. Fraenkel [2000], Recent results and questions in combinatorial game complexities, *Theoret. Comput. Sci.* **249**, 265–288, Conference version in: Proc. AWOCA98 — Ninth Australasian Workshop on Combinatorial Algorithms, C.S. Iliopoulos, ed., Perth, Western Australia, 27–30 July, 1998, special AWOCA98 issue, pp. 124–146, MR1798313 (2001j:91033).
538. A. S. Fraenkel [2001], Virus versus mankind, *Proc. 2nd Intern. Conference on Computers and Games CG'2000* (T. Marsland and I. Frank, eds.), Vol. 2063, Hamamatsu, Japan, Oct. 2000, Lecture Notes in Computer Science, Springer, pp. 204–213.
539. A. S. Fraenkel [2002], Arrays, numeration systems and Frankenstein games, *Theoret. Comput. Sci.* **282**, 271–284, special“ Fun With Algorithms” issue, MR1909052 (2003h:91036).
540. A. S. Fraenkel [2002], Mathematical chats between two physicists, in: *Puzzler's Tribute: a Feast for the Mind*, honoring Martin Gardner (D. Wolfe and T. Rodgers, eds.), A K Peters, Natick, MA, pp. 383–386.
541. A. S. Fraenkel [2002], Two-player games on cellular automata, in: *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 2000, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 42, Cambridge University Press, Cambridge, pp. 279–306, MR1973018 (2004b:91004).

542. A. S. Fraenkel [2004], Complexity, appeal and challenges of combinatorial games, *Theoret. Comp. Sci.* **313**, 393–415, Expanded version of a keynote address at Dagstuhl Seminar “Algorithmic Combinatorial Game Theory”, Feb. 2002, special issue on Algorithmic Combinatorial Game Theory, MR2056935.
543. A. S. Fraenkel [2004], New games related to old and new sequences, *Integers, Electr. J of Combinat. Number Theory* **4**, #G6, 18 pp., Comb. Games Sect., 1st version in Proc.10-th Advances in Computer Games (ACG-10 Conf.), H. J. van den Herik, H. Iida and E. A. Heinz eds., Graz, Austria, Nov. 2003, Kluwer, pp. 367-382, MR2042724.
<http://www.integers-ejcnt.org/vol4.html>
544. A. S. Fraenkel [2005], Euclid and Wythoff games, *Discrete Math.* **304**, 65–68, MR2184445 (2006f:91006).
545. A. S. Fraenkel [2006], Nim is easy, chess is hard — but why?!, *J. Internat. Computer Games Assoc.* **29**(4), 203–206, earlier version appeared in Plus Mag. (electronic), pluschat section,
<http://plus.maths.org/issue40/editorial/index.html>.
546. A. S. Fraenkel [2007], *The Raleigh game*, in: Combinatorial Number Theory, de Gruyter, pp. 199–208, Proc. Integers Conference, Carrollton, Georgia, October 27-30,2005, in celebration of the 70th birthday of Ronald Graham. B. Landman, M. Nathanson, J. Nešetřil, R. Nowakowski, C. Pomerance eds., also appeared in *Integers, Electr. J. of Combinat. Number Theory* **7**(2), special volume in honor of Ron Graham, #A13, 11 pp., MR2337047 (2008e:91021).
[http://www.integers-ejcnt.org/vol7\(2\).html](http://www.integers-ejcnt.org/vol7(2).html)
547. A. S. Fraenkel [2007], Why are games exciting and stimulating?, *Math Horizons* pp. 5–7; 32–33, special issue: “Games, Gambling, and Magic” February. German translation by Niek Neuwahl, poster-displayed at traveling exhibition “Games & Science, Science & Games”, opened in Göttingen July 17 – Aug 21, 2005.
548. A. S. Fraenkel [2008], Games played by Boole and Galois, *Discrete Appl. Math.* **156**, 420–427, **MR pending.
549. A. S. Fraenkel [2009], *The cyclic Butler University game*, in: Mathematical Wizardry for a Gardner, Volume honoring Martin Gardner, A K Peters, Natick, MA, E. Pegg Jr, A. H. Schoen, and T. Rodgers, eds., to appear.
550. A. S. Fraenkel and I. Borosh [1973], A generalization of Wythoff’s game, *J. Combin. Theory* (Ser. A) **15**, 175–191.
551. A. S. Fraenkel, M. R. Garey, D. S. Johnson, T. Schaefer and Y. Yesha [1978], The complexity of checkers on an $n \times n$ board — preliminary report, *Proc. 19th Ann. Symp. Foundations of Computer Science* (Ann Arbor, MI, Oct. 1978), IEEE Computer Soc., Long Beach, CA, pp. 55–64.
552. A. S. Fraenkel and E. Goldschmidt [1987], Pspace-hardness of some combinatorial games, *J. Combin. Theory* (Ser. A) **46**, 21–38.

553. A. S. Fraenkel and F. Harary [1989], Geodetic contraction games on graphs, *Internat. J. Game Theory* **18**, 327–338.
554. A. S. Fraenkel and H. Herda [1980], Never rush to be first in playing Nimbi, *Math. Mag.* **53**, 21–26.
555. A. S. Fraenkel, A. Jaffray, A. Kotzig and G. Sabidussi [1995], Modular Nim, *Theoret. Comput. Sci. (Math Games)* **143**, 319–333.
556. A. S. Fraenkel and C. Kimberling [1994], Generalized Wythoff arrays, shuffles and interspersions, *Discrete Math.* **126**, 137–149, MR1264482 (95c:11028).
557. A. S. Fraenkel and A. Kontorovich [2007], *The Sierpiński sieve of Nim-varieties and binomial coefficients*, in: Combinatorial Number Theory, de Gruyter, pp. 209–227, Proc. Integers Conference, Carrollton, Georgia, October 27–30, 2005, in celebration of the 70th birthday of Ronald Graham. B. Landman, M. Nathanson, J. Nešetřil, R. Nowakowski, C. Pomerance eds., appeared also in *Integers, Electr. J. of Combinat. Number Theory* **7(2)**, special volume in honor of Ron Graham, A14, 19 pp., MR2337048. [http://www.integers-ejcnt.org/vol7\(2\).html](http://www.integers-ejcnt.org/vol7(2).html)
558. A. S. Fraenkel and A. Kotzig [1987], Partizan octal games: partizan subtraction games, *Internat. J. Game Theory* **16**, 145–154.
559. A. S. Fraenkel and D. Krieger [2004], The structure of complementary sets of integers: a 3-shift theorem, *Internat. J. Pure and Appl. Math.* **10**, 1–49, MR2020683 (2004h:05012).
560. A. S. Fraenkel and D. Lichtenstein [1981], Computing a perfect strategy for $n \times n$ chess requires time exponential in n , *J. Combin. Theory (Ser. A)* **31**, 199–214, preliminary version in Proc. 8th Internat. Colloq. Automata, Languages and Programming (S. Even and O. Kariv, eds.), Vol. 115, Acre, Israel, 1981, Lecture Notes in Computer Science, Springer Verlag, Berlin, pp. 278–293, MR629595 (83b:68044).
561. A. S. Fraenkel, M. Loeb and J. Nešetřil [1988], Epidemiography II. Games with a dozing yet winning player, *J. Combin. Theory (Ser. A)* **49**, 129–144.
562. A. S. Fraenkel and M. Lorberbom [1989], Epidemiography with various growth functions, *Discrete Appl. Math.* **25**, 53–71, special issue on Combinatorics and Complexity.
563. A. S. Fraenkel and M. Lorberbom [1991], Nimhoff games, *J. Combin. Theory (Ser. A)* **58**, 1–25.
564. A. S. Fraenkel and J. Nešetřil [1985], Epidemiography, *Pacific J. Math.* **118**, 369–381.
565. A. S. Fraenkel and M. Ozery [1998], Adjoining to Wythoff’s game its P -positions as moves, *Theoret. Comput. Sci.* **205**, 283–296.
566. A. S. Fraenkel and Y. Perl [1975], Constructions in combinatorial games with cycles, *Coll. Math. Soc. János Bolyai* **10**, 667–699, Proc. Internat. Colloq. on Infinite and Finite Sets, Vol. 2 (A. Hajnal, R. Rado and V. T. Sós, eds.) Keszthely, Hungary, 1973, North-Holland.

567. A. S. Fraenkel and O. Rahat [2001], Infinite cyclic impartial games, *Theoret. Comput. Sci.* **252**, 13–22, special "Computers and Games" issue; first version appeared in Proc. 1st Intern. Conf. on Computer Games CG'98, Tsukuba, Japan, Nov. 1998, *Lecture Notes in Computer Science*, Vol. 1558, Springer, pp. 212–221, 1999., MR1715689 (2000m:91028).
568. A. S. Fraenkel and O. Rahat [2003], Complexity of error-correcting codes derived from combinatorial games, *Proc. Intern. Conference on Computers and Games CG'2002, Edmonton, Alberta, Canada, July 2002*, (Y. Björnsson, M. Müller and J. Schaeffer, eds.), Vol. LNCS 2883, Lecture Notes in Computer Science, Springer, pp. 201–21.
569. A. S. Fraenkel and E. Reisner [2008], The game of End-Wythoff, in: *Games of No Chance III*, Proc. BIRS Workshop on Combinatorial Games, July, 2005, Banff, Alberta, Canada, MSRI Publ. (M. H. Albert and R. J. Nowakowski, eds.), Cambridge University Press, Cambridge.
570. A. S. Fraenkel and E. R. Scheinerman [1991], A deletion game on hypergraphs, *Discrete Appl. Math.* **30**, 155–162.
571. A. S. Fraenkel, E. R. Scheinerman and D. Ullman [1993], Undirected edge geography, *Theoret. Comput. Sci. (Math Games)* **112**, 371–381.
572. A. S. Fraenkel and S. Simonson [1993], Geography, *Theoret. Comput. Sci. (Math Games)* **110**, 197–214.
573. A. S. Fraenkel and U. Tassa [1975], Strategy for a class of games with dynamic ties, *Comput. Math. Appl.* **1**, 237–254.
574. A. S. Fraenkel and U. Tassa [1982], Strategies for compounds of partizan games, *Math. Proc. Camb. Phil. Soc.* **92**, 193–204.
575. A. S. Fraenkel, U. Tassa and Y. Yesha [1978], Three annihilation games, *Math. Mag.* **51**, 13–17, special issue on Recreational Math.
576. A. S. Fraenkel and Y. Yesha [1976], Theory of annihilation games, *Bull. Amer. Math. Soc.* **82**, 775–777.
577. A. S. Fraenkel and Y. Yesha [1979], Complexity of problems in games, graphs and algebraic equations, *Discrete Appl. Math.* **1**, 15–30.
578. A. S. Fraenkel and Y. Yesha [1982], Theory of annihilation games — I, *J. Combin. Theory (Ser. B)* **33**, 60–86.
579. A. S. Fraenkel and Y. Yesha [1986], The generalized Sprague–Grundy function and its invariance under certain mappings, *J. Combin. Theory (Ser. A)* **43**, 165–177.
580. A. S. Fraenkel and D. Zusman [2001], A new heap game, *Theoret. Comput. Sci.* **252**, 5–12, special "Computers and Games" issue; first version appeared in Proc. 1st Intern. Conf. on Computer Games CG'98, Tsukuba, Japan, Nov. 1998, *Lecture Notes in Computer Science*, Vol. 1558, Springer, pp. 205–211, 1999., MR1715688 (2000m:91027).
581. C. N. Frangakis [1981], A backtracking algorithm to generate all kernels of a directed graph, *Intern. J. Comput. Math.* **10**, 35–41.
582. P. Frankl [1987], Cops and robbers in graphs with large girth and Cayley graphs, *Discrete Appl. Math.* **17**, 301–305.

583. P. Frankl [1987], On a pursuit game on Cayley graphs, *Combinatorica* **7**, 67–70.
584. P. Frankl and N. Tokushige [2003], The game of n -times nim, *Discrete Math.* **260**, 205–209, MR1948387 (2003m:05017).
585. W. Fraser, S. Hirshberg and D. Wolfe [2005], The structure of the distributive lattice of games born by day n , *Integers, Electr. J of Combinat. Number Theory* **5(2)**, #A06, 11 pp., MR2192084 (2006g:91041).
[http://www.integers-ejcnt.org/vol5\(2\).html](http://www.integers-ejcnt.org/vol5(2).html)
586. D. Fremlin [1973], Well-founded games, *Eureka* **36**, 33–37.
587. G. H. Fricke, S. M. Hedetniemi, S. T. Hedetniemi, A. A. McRae, C. K. Wallis, M. S. Jacobson, H. W. Martin and W. D. Weakley [1995], Combinatorial problems on chessboards: a brief survey, in: *Graph Theory, Combinatorics, and Algorithms: Proc. 7th Quadrennial Internat. Conf. on the Theory and Applications of Graphs* (Y. Alavi and A. Schwenk, eds.), Vol. 1, Wiley, pp. 507–528.
588. E. J. Friedman and A. S. Landsberg [2007], Nonlinear dynamics in combinatorial games: renormalizing Chomp, *Chaos* **17(2)**, 023117 1–14, MR2340612.
589. E. J. Friedman and A. S. Landsberg [2008], On the geometry of combinatorial games: a renormalization approach, in: *Games of No Chance III*, Proc. BIRS Workshop on Combinatorial Games, July, 2005, Banff, Alberta, Canada, MSRI Publ. (M. H. Albert and R. J. Nowakowski, eds.), Cambridge University Press, Cambridge.
590. A. Frieze, M. Krivelevich, O. Pikhurko and T. Szabó [2005], The game of JumbleG, *Combin. Probab. Comput.* **14**, 783–793, MR2174656 (2006k:05207).
591. M. Fukuyama [2003], A Nim game played on graphs, *Theoret. Comput. Sci.* **304**, 387–399, MR1992342 (2004f:91041).
592. M. Fukuyama [2003], A Nim game played on graphs II, *Theoret. Comput. Sci.* **304**, 401–419, MR1992343 (2004g:91036).
593. W. W. Funkenbusch [1971], SIM as a game of chance, *J. Recr. Math.* **4(4)**, 297–298.
594. Z. Füredi and Á. Seress [1994], Maximal triangle-free graphs with restrictions on the degrees, *J. Graph Theory* **18**, 11–24.
595. H. N. Gabow and H. H. Westermann [1992], Forests, frames, and games: algorithms for matroid sums and applications, *Algorithmica* **7**, 465–497.
596. D. Gale [1974], A curious Nim-type game, *Amer. Math. Monthly* **81**, 876–879.
597. D. Gale [1979], The game of Hex and the Brouwer fixed-point theorem, *Amer. Math. Monthly* **86**, 818–827.
598. D. Gale [1986], Problem 1237 (line-drawing game), *Math. Mag.* **59**, 111, solution by J. Hutchinson and S. Wagon, *ibid.* **60** (1987) 116.
599. D. Gale [1991 – 1996], Mathematical Entertainments, *Math. Intelligencer* **13 - 18**, column on mathematical games and gems, Winter 1991 – Fall

- 1996.
600. D. Gale [1998], *Tracking the Automatic Ant and Other Mathematical Explorations*, Springer-Verlag, New York, A collection of Mathematical Entertainments columns from The Mathematical Intelligencer.
 601. D. Gale and A. Neyman [1982], Nim-type games, *Internat. J. Game Theory* **11**, 17–20.
 602. D. Gale, J. Propp, S. Sutherland and S. Troubetzkoy [1995], Further travels with my ant, *Math. Intelligencer* **17** issue 3, 48–56.
 603. D. Gale and F. M. Stewart [1953], Infinite games with perfect information, *Ann. of Math. Stud.* (Contributions to the Theory of Games), Princeton **2**(28), 245–266.
 604. H. Galeana-Sánchez [1982], A counterexample to a conjecture of Meyniel on kernel-perfect graphs, *Discrete Math.* **41**, 105–107.
 605. H. Galeana-Sánchez [1986], A theorem about a conjecture of Meyniel on kernel-perfect graphs, *Discrete Math.* **59**, 35–41.
 606. H. Galeana-Sánchez [1988], A new method to extend kernel-perfect graphs to kernel-perfect critical graphs, *Discrete Math.* **69**, 207–209, MR937787 (89d:05086).
 607. H. Galeana-Sánchez [1990], On the existence of (k, l) -kernels in digraphs, *Discrete Math.* **85**, 99–102, MR1078316 (91h:05056).
 608. H. Galeana-Sánchez [1992], On the existence of kernels and h -kernels in directed graphs, *Discrete Math.* **110**, 251–255.
 609. H. Galeana-Sánchez [1995], B_1 and B_2 -orientable graphs in kernel theory, *Discrete Math.* **143**, 269–274.
 610. H. Galeana-Sánchez [1996], On claw-free M -oriented critical kernel-imperfect digraphs, *J. Graph Theory* **21**, 33–39, MR1363686 (96h:05089).
 611. H. Galeana-Sánchez [1998], Kernels in edge-colored digraphs, *Discrete Math.* **184**, 87–99, MR1609359 (99a:05055).
 612. H. Galeana-Sánchez [2000], Semikernels modulo F and kernels in digraphs, *Discrete Math.* **218**, 61–71, MR1754327 (2001d:05068).
 613. H. Galeana-Sánchez [2002], Kernels in digraphs with covering number at most 3, *Discrete Math.* **259**, 121–135, MR1948776 (2003m:05090).
 614. H. Galeana-Sánchez [2004], Some sufficient conditions on odd directed cycles of bounded length for the existence of a kernel, *Discuss. Math. Graph Theory* **24**, 171–182, MR2120561 (2005m:05104).
 615. H. Galeana-Sánchez [2006], Kernels and perfectness in arc-local tournament digraphs, *Discrete Math.* **306**(19-20), 2473–2480, special issue: Creation and Recreation: A Tribute to the Memory of Claude Berge, MR2261913 (2007g:05071).
 616. H. Galeana-Sánchez [2008], Kernels in edge-coloured orientations of nearly complete graphs, *Discrete Math.* **308**, 4599–4607, **MR pending.
 617. H. Galeana-Sánchez and J. de J. García-Ruvalcaba [2000], Kernels in the closure of coloured digraphs, *Discuss. Math. Graph Theory* **20**, 243–254, MR1817495 (2001m:05123).

618. H. Galeana-Sánchez and J. d. J. García-Ruvalcaba [2001], On graphs all of whose $\{C_3, T_3\}$ -free arc colorations are kernel-perfect, *Discuss. Math. Graph Theory* **21**(1), 77–93, MR1867488 (2002j:05075).
619. H. Galeana-Sánchez and M.-k. Guevara [2007], Kernel perfect and critical kernel imperfect digraphs structure, in: *6th Czech-Slovak International Symposium on Combinatorics, Graph Theory, Algorithms and Applications*, Vol. 28 of *Electron. Notes Discrete Math.*, Elsevier, Amsterdam, pp. 401–408, MR2324045.
620. H. Galeana-Sánchez and X. Li [1998], Kernels in a special class of digraphs, *Discrete Math.* **178**, 73–80, MR1483740 (98f:05073).
621. H. Galeana-Sánchez and X. Li [1998], Semikernels and (k, l) -kernels in digraphs, *SIAM J. Discrete Math.* **11**, 340–346 (electronic), MR1617163 (99c:05078).
622. H. Galeana-Sánchez and V. Neumann-Lara [1984], On kernels and semikernels of digraphs, *Discrete Math.* **48**, 67–76.
623. H. Galeana-Sánchez and V. Neumann Lara [1986], On kernel-perfect critical digraphs, *Discrete Math.* **59**, 257–265, MR842278 (88b:05069).
624. H. Galeana-Sánchez and V. Neumann-Lara [1991], Extending kernel perfect digraphs to kernel perfect critical digraphs, *Discrete Math.* **94**, 181–187.
625. H. Galeana-Sánchez and V. Neumann Lara [1991], Orientations of graphs in kernel theory, *Discrete Math.* **87**, 271–280, MR1095472 (92d:05134).
626. H. Galeana-Sánchez and V. Neumann-Lara [1994], New extensions of kernel perfect digraphs to kernel imperfect critical digraphs, *Graphs Combin.* **10**, 329–336.
627. H. Galeana-Sánchez and V. Neumann-Lara [1998], New classes of critical kernel-imperfect digraphs, *Discuss. Math. Graph Theory* **18**, 85–89, MR1646233 (99g:05087).
628. H. Galeana-Sánchez and V. Neumann-Lara [1998], On the dichromatic number in kernel theory, *Math. Slovaca* **48**, 213–219, MR1647678 (99k:05080).
629. H. Galeana-Sánchez and L. Pastrana Ramírez [1998], Kernels in edge coloured line digraph, *Discuss. Math. Graph Theory* **18**, 91–98, MR1646234 (99g:05088).
630. H. Galeana-Sánchez, L. Pastrana Ramírez and H. A. Rincón-Mejía [1991], Semikernels, quasi kernels, and Grundy functions in the line digraph, *SIAM J. Discrete Math.* **4**, 80–83, MR1090291 (92c:05068).
631. H. Galeana-Sánchez, L. P. Ramírez and H. A. Rincón Mejía [2005], Kernels in monochromatic path digraphs, *Discuss. Math. Graph Theory* **25**, 407–417, MR2233005.
632. H. Galeana-Sánchez and H. A. Rincón-Mejía [1998], A sufficient condition for the existence of k -kernels in digraphs, *Discuss. Math. Graph Theory* **18**, 197–204, MR1687843 (2000c:05074).
633. H. Galeana-Sánchez and R. Rojas-Monroy [2004], Kernels in pretransitive

- digraphs, *Discrete Math.* **275**, 129–136, MR2026280 (2004j:05059).
634. H. Galeana-Sánchez and R. Rojas-Monroy [2006], Kernels in quasi-transitive digraphs, *Discrete Math.* **306**(16), 1969–1974, MR2251578 (2007b:05092).
635. H. Galeana-Sánchez and R. Rojas-Monroy [2007], Extensions and kernels in digraphs and in edge-coloured digraphs, *WSEAS Trans. Math.* **6**(2), 334–341, MR2273872.
636. H. Galeana-Sánchez and R. Rojas-Monroy [2007], Kernels in orientations of pretransitive orientable graphs, in: *Graph theory in Paris*, Trends Math., Birkhäuser, Basel, pp. 197–208, MR2279176.
637. R. P. Gallant, G. Gunther, B. L. Hartnell and D. F. Rall [2006], A game of edge removal on graphs, *J. Combin. Math. Combin. Comput.* **57**, 75–82, MR2226684 (2006m:05245).
638. F. Galvin [1978], Indeterminacy of point-open games, *Bull. de l'Academie Polonaise des Sciences* (Math. astr. et phys.) **26**, 445–449.
639. F. Galvin [1985], Stationary strategies in topological games, *Proc. Conf. on Infinitistic Mathematics* (Lyon, 1984), Publ. Dép. Math. Nouvelle Sér. B, 85–2, Univ. Claude-Bernard, Lyon, pp. 41–43.
640. F. Galvin [1990], Hypergraph games and the chromatic number, in: *A Tribute to Paul Erdős*, Cambridge Univ Press, Cambridge, pp. 201–206.
641. F. Galvin, T. Jech and M. Magidor [1978], An ideal game, *J. Symbolic Logic* **43**, 284–292.
642. F. Galvin and M. Scheepers [1992], A Ramseyan theorem and an infinite game, *J. Combin. Theory* (Ser. A) **59**, 125–129.
643. F. Galvin and R. Telgársky [1986], Stationary strategies in topological games, *Topology Appl.* **22**, 51–69.
644. B. B. Gan and Y. N. Yeh [1995], A nim-like game and dynamic recurrence relations, *Stud. Appl. Math.* **95**, 213–228.
645. A. Gangolli and T. Plambeck [1989], A note on periodicity in some octal games, *Internat. J. Game Theory* **18**, 311–320.
646. T. E. Gantner [1988], The game of Quatrainment, *Math. Mag.* **61**, 29–34.
647. M. Gardner [1956], *Mathematics, Magic and Mystery*, Dover, New York, NY.
648. M. Gardner [Jan. 1957–Dec. 1981], Mathematical Games, a column in *Scientific American*; all 15 volumes of the column are on 1 CD-ROM, available from MAA.
649. M. Gardner [1959], *Fads and Fallacies in the Name of Science*, Dover, NY.
650. M. Gardner [1959], *Logic Machines and Diagrams*, McGraw-Hill, NY.
651. M. Gardner [1959], *Mathematical Puzzles of Sam Loyd*, Dover, New York, NY.
652. M. Gardner [1960], *More Mathematical Puzzles of Sam Loyd*, Dover, New York, NY.

653. M. Gardner [1966], *More Mathematical Puzzles and Diversions*, Harmondsworth, Middlesex, England (Penguin Books), translated into German: *Mathematische Rätsel und Probleme*, Vieweg, Braunschweig, 1964.
654. M. Gardner, ed. [1967], *536 Puzzles and Curious Problems*, Scribner's, NY, reissue of H. E. Dudeney's *Modern Puzzles* and *Puzzles and Curious Problems*.
655. M. Gardner [1968], *Logic Machines, Diagrams and Boolean Algebra*, Dover, NY.
656. M. Gardner [1970], *Further Mathematical Diversions*, Allen and Unwin, London.
657. M. Gardner [1977], *Mathematical Magic Show*, Knopf, NY.
658. M. Gardner [1978], *Aha! Insight*, Freeman, New York, NY.
659. M. Gardner [1979], *Mathematical Circus*, Knopf, NY.
660. M. Gardner [1981], *Entertaining Science Experiments with Everyday Objects*, Dover, NY.
661. M. Gardner [1981], *Science Fiction Puzzle Tales*, Potter.
662. M. Gardner [1982], *Aha! Gotcha!*, Freeman, New York, NY.
663. M. Gardner [1983], *New Mathematical Diversions from Scientific American*, University of Chicago Press, Chicago, before that appeared in 1971, Simon and Schuster, New York, NY. First appeared in 1966.
664. M. Gardner [1983], *Order and Surprise*, Prometheus Books, Buffalo, NY.
665. M. Gardner [1983], *Wheels, Life and Other Mathematical Amusements*, Freeman, New York, NY.
666. M. Gardner [1984], *Codes, Ciphers and Secret Writing*, Dover, NY.
667. M. Gardner [1984], *Puzzles from Other Worlds*, Random House.
668. M. Gardner [1984], *The Magic Numbers of Dr. Matrix*, Prometheus.
669. M. Gardner [1984], *The Sixth Book of Mathematical Games*, Univ. of Chicago Press. First appeared in 1971, Freeman, New York, NY.
670. M. Gardner [1986], *Knotted Doughnuts and Other Mathematical Entertainments*, Freeman, New York, NY.
671. M. Gardner [1987], *The Second Scientific American Book of Mathematical Puzzles and Diversions*, University of Chicago Press, Chicago. First appeared in 1961, Simon and Schuster, NY.
672. M. Gardner [1988], *Hexaflexagons and Other Mathematical Diversions*, University of Chicago Press, Chicago, 1988. A first version appeared under the title *The Scientific American Book of Mathematical Puzzles and Diversions*, Simon & Schuster, 1959, NY.
673. M. Gardner [1988], *Perplexing Puzzles and Tantalizing Teasers*, Dover, NY.
674. M. Gardner [1988], *Riddles of the Sphinx*, Math. Assoc. of America, Washington, DC.
675. M. Gardner [1988], *Time Travel and Other Mathematical Bewilderments*, Freeman, New York, NY.

676. M. Gardner [1989], *How Not to Test a Psychic*, Prometheus Books, Buffalo, NY.
677. M. Gardner [1989], *Mathematical Carnival*, 2nd edition, Math. Assoc. of America, Washington, DC. First appeared in 1975, Knopf, NY.
678. M. Gardner [1990], *The New Ambidextrous Universe*, Freeman, New York, NY. First appeared in 1964, Basic Books, then in 1969, New American Library.
679. M. Gardner [1991], *The Unexpected Hanging and Other Mathematical Diversions*, University of Chicago Press. First appeared in 1969, Simon and Schuster, NY, adapted from “Further Mathematical Diversions”; translated into German: *Logik Unterm Galgen*, Vieweg, Braunschweig, 1980.
680. M. Gardner [1992], *Fractal Music, Hypercards and More*, Freeman, New York, NY.
681. M. Gardner [1992], *On the Wild Side*, Prometheus Books, Buffalo, NY.
682. M. Gardner [1993], *Book of Visual Illusions*, Dover, NY.
683. M. Gardner [1997], *Penrose Tiles to Trapdoor Ciphers*, The Math. Assoc. of America, Washington, DC. First appeared in 1989, Freeman, New York, NY. Freeman, New York, NY.
684. M. Gardner [1997], *The Last Recreations*, Copernicus, NY.
685. M. Gardner [2001], *A Gardner’s Workout: Training the Mind and Entertaining the Spirit*, A K Peters, Natick, MA.
686. M. R. Garey and D. S. Johnson [1979], *Computers and Intractability: A Guide to the Theory of NP-Completeness*, Freeman, San Francisco, Appendix A8: Games and Puzzles, pp. 254-258.
687. R. Gasser [1996], Solving nine men’s Morris, in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, pp. 101–114.
688. H. Gavel and P. Strimling [2004], Nim with a modular Muller twist, *Integers, Electr. J of Combinat. Number Theory* **4**, #G4, 9 pp., Comb. Games Sect., MR2116010.
<http://www.integers-ejcnt.org/vol4.html>
689. B. Gerla [2000], Conditioning a state by Łukasiewicz event: a probabilistic approach to Ulam Games, *Theoret. Comput. Sci. (Math Games)* **230**, 149–166, MR1725635 (2001e:03117).
690. C. Germain and H. Kheddouci [2003], Grundy coloring for power graphs, in: *Electron. Notes Discrete Math.* (D. Ray-Chaudhuri, A. Rao and B. Roy, eds.), Vol. 15, Elsevier, Amsterdam, pp. 67–69.
691. S. V. Gervacio [1979], On graphs all of whose orientations have kernels, *Proceedings of the First Franco-Southeast Asian Mathematical Conference (Singapore, 1979), Vol. II*, Vol. 46, pp. 259–263 (1980), MR582263 (83c:05103).
692. P. B. Gibbons and J. A. Webb [1997], Some new results for the queens domination problem, *Australas. J. Combin.* **15**, 145–160.

693. J. R. Gilbert, T. Lengauer and R. E. Tarjan [1980], The pebbling problem is complete in polynomial space, *SIAM J. Comput.* **9**, 513–524, preliminary version in Proc. 11th Ann. ACM Symp. Theory of Computing (Atlanta, GA, 1979), Assoc. Comput. Mach., New York, NY, pp. 237–248.
694. M. Ginsberg [2002], Alpha-beta pruning under partial orders, in: *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 2000, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 42, Cambridge University Press, Cambridge, pp. 37–48.
695. J. Ginsburg [1939], Gauss’s arithmetization of the problem of 8 queens, *Scripta Math.* **5**, 63–66.
696. A. S. Goldstein and E. M. Reingold [1995], The complexity of pursuit on a graph, *Theoret. Comput. Sci.* (Math Games) **143**, 93–112.
697. J. Goldwasser and W. Klostermeyer [1997], Maximization versions of “lights out” games in grids and graphs, *Congr. Numer.* **126**, 99–111, Proc. 28th Southeastern Internat. Conf. on Combinatorics, Graph Theory, and Computing (Boca Raton, FL, 1997), MR1604979 (98j:05119).
698. E. Goles [1991], Sand piles, combinatorial games and cellular automata, *Math. Appl.* **64**, 101–121.
699. E. Goles and M. A. Kiwi [1993], Games on line graphs and sand piles, *Theoret. Comput. Sci.* (Math Games) **115**, 321–349 (0-player game).
700. E. Goles, M. Latapy, C. Magnien, M. Morvan and H. D. Phan [2004], Sandpile models and lattices: a comprehensive survey, *Theoret. Comput. Sci.* **322**, 383–407, MR2080235 (2005h:05013).
701. E. Goles and M. Margenstern [1997], Universality of the chip-firing game, *Theoret. Comput. Sci.* (Math Games) **172**, 121–134.
702. E. Goles, M. Morvan and H. D. Phan [2002], The structure of a linear chip firing game and related models, *Theoret. Comput. Sci.* **270**, 827–841, MR1871097 (2002k:05013).
703. E. Goles and E. Prisner [2000], Source reversal and chip firing on graphs, *Theoret. Comput. Sci.* **233**, 287–295.
704. S. W. Golomb [1966], A mathematical investigation of games of “take-away”, *J. Combin. Theory* **1**, 443–458.
705. S. W. Golomb [1994], *Polyominoes: Puzzles, Patterns, Problems, and Packings*, Princeton University Press. Original edition: *Polyominoes*, Scribner’s, NY, 1965; Allen and Unwin, London, 1965.
706. S. W. Golomb and A. W. Hales [2002], Hypercube Tic-Tac-Toe, in: *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 2000, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 42, Cambridge University Press, Cambridge, pp. 167–182, MR1973012 (2004c:91030).
707. H. Gonshor [1986], *An Introduction to the Theory of Surreal Numbers*, Cambridge University Press, Cambridge.
708. D. M. Gordon, R. W. Robinson and F. Harary [1994], Minimum degree games for graphs, *Discrete Math.* **128**, 151–163, MR1271861 (95b:05201).

709. E. Grädel [1990], Domino games and complexity, *SIAM J. Comput.* **19**, 787–804.
710. S. B. Grantham [1985], Galvin’s “racing pawns” game and a well-ordering of trees, *Memoirs Amer. Math. Soc.* **53**(316), 63 pp.
711. S. Gravier, M. Mhalla and E. Tannier [2003], On a modular domination game, *Theoret. Comput. Sci.* **306**, 291–303, MR2000178 (2004i:91041).
712. R. Greenlaw, H. J. Hoover and W. L. Ruzzo [1995], *Limits to Parallel Computation: P-completeness Theory*, Oxford University Press, New York.
713. J. P. Grossman [2004], Periodicity in one-dimensional peg duotaire, *Theoret. Comp. Sci.* **313**, 417–425, special issue of Dagstuhl Seminar “Algorithmic Combinatorial Game Theory”, Feb. 2002, MR2056936 (2005b:91055).
714. J. P. Grossman and R. J. Nowakowski [2002], One-dimensional Phutball, in: *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 2000, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 42, Cambridge University Press, Cambridge, pp. 361–367, MR1973024.
715. J. P. Grossman and A. N. Siegel [2008], Reductions of partizan games, in: *Games of No Chance III*, Proc. BIRS Workshop on Combinatorial Games, July, 2005, Banff, Alberta, Canada, MSRI Publ. (M. H. Albert and R. J. Nowakowski, eds.), Cambridge University Press, Cambridge.
716. J. W. Grossman [2000], A variant of Nim, *Math. Mag.* **73**, 323–324, Problem No. 1580; originally posed *ibid.* **72** (1999) 325.
717. P. M. Grundy [1964], Mathematics and Games, *Eureka* **27**, 9–11, originally published: *ibid.* **2** (1939) 6–8.
718. P. M. Grundy and C. A. B. Smith [1956], Disjunctive games with the last player losing, *Proc. Camb. Phil. Soc.* **52**, 527–533.
719. F. Grunfeld and R. C. Bell [1975], *Games of the World*, Holt, Rinehart and Winston.
720. C. D. Grupp [1976], *Brettspiele-Denkspiele*, Humboldt-Taschenbuchverlag, München.
721. D. J. Guan and X. Zhu [1999], Game chromatic number of outerplanar graphs, *J. Graph Theory* **30**, 67–70.
722. L. J. Guibas, J.-C. Latombe, S. M. Lavalley, D. Lin and R. Motwani [1999], A visibility-based pursuit-evasion problem, *Internat. J. Comput. Geom. Appl.* **9**, 471–493, MR1712332 (2000e:68177).
723. L. J. Guibas and A. M. Odlyzko [1981], String overlaps, pattern matching, and nontransitive games, *J. Combin. Theory (Ser. A)* **30**, 183–208.
724. S. Gunther [1874], Zur mathematischen Theorie des Schachbretts, *Arch. Math. Physik* **56**, 281–292.
725. V. A. Gurvich [2007], On the misere version of game Euclid and miserable games, *Discrete Math.* **307**(9-10), 1199–1204, MR2292548 (2007k:91052).
726. R. K. Guy [1976], Packing $[1, n]$ with solutions of $ax + by = cz$; the unity

- of combinatorics, *Atti Conv. Lincei #17, Acad. Naz. Lincei, Tomo II*, Rome, pp. 173–179.
727. R. K. Guy [1976], Twenty questions concerning Conway's sylver coinage, *Amer. Math. Monthly* **83**, 634–637.
728. R. K. Guy [1977], Games are graphs, indeed they are trees, *Proc. 2nd Carib. Conf. Combin. and Comput.*, Letchworth Press, Barbados, pp. 6–18.
729. R. K. Guy [1977], She loves me, she loves me not; relatives of two games of Lenstra, *Een Pak met een Korte Broek* (papers presented to H. W. Lenstra), Mathematisch Centrum, Amsterdam.
730. R. K. Guy [1978], Partizan and impartial combinatorial games, *Colloq. Math. Soc. János Bolyai* **18**, 437–461, Proc. 5th Hungar. Conf. Combin. Vol. I (A. Hajnal and V. T. Sós, eds.), Keszthely, Hungary, 1976, North-Holland.
731. R. K. Guy [1979], Partizan Games, *Colloques Internationaux C. N. R. No. 260 — Problèmes Combinatoires et Théorie des Graphes*, pp. 199–205.
732. R. K. Guy [1981], Anyone for twopins?, in: *The Mathematical Gardner* (D. A. Klarner, ed.), Wadsworth Internat., Belmont, CA, pp. 2–15.
733. R. K. Guy [1983], Graphs and games, in: *Selected Topics in Graph Theory* (L. W. Beineke and R. J. Wilson, eds.), Vol. 2, Academic Press, London, pp. 269–295.
734. R. K. Guy [1986], John Isbell's game of beanstalk and John Conway's game of beans-don't-talk, *Math. Mag.* **59**, 259–269.
735. R. K. Guy [1989], *Fair Game*, COMAP Math. Exploration Series, Arlington, MA.
736. R. K. Guy [1990], A guessing game of Bill Sands, and Bernardo Recamán's Barranca, *Amer. Math. Monthly* **97**, 314–315.
737. R. K. Guy [1991], Mathematics from fun & fun from mathematics; an informal autobiographical history of combinatorial games, in: *Paul Halmos: Celebrating 50 Years of Mathematics* (J. H. Ewing and F. W. Gehring, eds.), Springer Verlag, New York, NY, pp. 287–295.
738. R. K. Guy [1995], Combinatorial games, in: *Handbook of Combinatorics*, (R. L. Graham, M. Grötschel and L. Lovász, eds.), Vol. II, North-Holland, Amsterdam, pp. 2117–2162.
739. R. K. Guy [1996], Impartial Games, in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, pp. 61–78, earlier version in: *Combinatorial Games*, Proc. Symp. Appl. Math. (R. K. Guy, ed.), Vol. 43, Amer. Math. Soc., Providence, RI, 1991, pp. 35–55.
740. R. K. Guy [1996], What is a game?, in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, pp. 43–60, earlier version in: *Combinatorial Games*, Proc. Symp.

- Appl. Math. (R. K. Guy, ed.), Vol. 43, Amer. Math. Soc., Providence, RI, 1991, pp. 1–21.
741. R. K. Guy [1996], Unsolved problems in combinatorial games, in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, pp. 475–491, update with 52 problems of earlier version with 37 problems, in: *Combinatorial Games*, Proc. Symp. Appl. Math. (R. K. Guy, ed.), Vol. 43, Amer. Math. Soc., Providence, RI, 1991, pp. 183–189.
742. R. K. Guy [2007], A parity subtraction game, *Cruz Math.* **33**, 37–39.
743. R. K. Guy and R. J. Nowakowski [1993], Mousetrap, in: *Combinatorics, Paul Erdős is eighty*, Vol. 1, Bolyai Soc. Math. Stud., János Bolyai Math. Soc., Budapest, pp. 193–206.
744. R. K. Guy and R. J. Nowakowski [2002], Unsolved problems in combinatorial games, in: *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 2000, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 42, Cambridge University Press, Cambridge, pp. 457–473.
745. R. K. Guy, R. J. Nowakowski, I. Caines and C. Gates [1999], Unsolved Problems: periods in taking and splitting games, *Amer. Math. Monthly* **106**, 359–361, Unsolved Problems Section.
746. R. K. Guy and C. A. B. Smith [1956], The G -values of various games, *Proc. Camb. Phil. Soc.* **52**, 514–526.
747. R. K. Guy and R. E. Woodrow, eds. [1994], *The Lighter Side of Mathematics*, Proc. E. Strens Memorial Conf. on Recr. Math. and its History, Calgary, 1986, Spectrum Series, Math. Assoc. Amer., Washington, DC.
748. W. Guzicki [1990], Ulam’s searching game with two lies, *J. Combin. Theory* (Ser. A) **54**, 1–19.
749. G. Hahn, F. Laviolette, N. Sauer and R. E. Woodrow [2002], On cop-win graphs, *Discrete Math.* **258**, 27–41, MR2002070 (2004f:05156).
750. G. Hahn and G. MacGillivray [2006], A note on k -cop, l -robber games on graphs, *Discrete Math.* **306**(19-20), 2492–2497, MR2261915 (2007d:05069).
751. A. Hajnal and Z. Nagy [1984], Ramsey games, *Trans. American Math. Soc.* **284**, 815–827.
752. D. R. Hale [1983], A variant of Nim and a function defined by Fibonacci representation, *Fibonacci Quart.* **21**, 139–142.
753. A. W. Hales and R. I. Jewett [1963], Regularity and positional games, *Trans. Amer. Math. Soc.* **106**, 222–229.
754. L. Halpenny and C. Smyth [1992], A classification of minimal standard-path 2×2 switching networks, *Theoret. Comput. Sci.* (Math Games) **102**, 329–354.
755. I. Halupczok and J.-C. Schlage-Puchta [2007], Achieving snaky, *Integers, Electr. J. of Combinat. Number Theory* **7**, #G02, 28 pp., MR2282185

- (2007i:05045).
<http://www.integers-ejcnt.org/vol7.html>
756. I. Halupczok and J.-C. Schlage-Puchta [2008], Some strategies for higher dimensional animal achievement games, *Discrete Math.* **308**, 3470–3478, **MR pending.
757. Y. O. Hamidoune [1987], On a pursuit game of Cayley digraphs, *Europ. J. Combin.* **8**, 289–295.
758. Y. O. Hamidoune and M. Las Vergnas [1985], The directed Shannon switching game and the one-way game, in: *Graph Theory with Applications to Algorithms and Computer Science* (Y. Alavi et al., eds.), Wiley, pp. 391–400.
759. Y. O. Hamidoune and M. Las Vergnas [1986], Directed switching games on graphs and matroids, *J. Combin. Theory* (Ser. B) **40**, 237–269.
760. Y. O. Hamidoune and M. Las Vergnas [1987], A solution to the box game, *Discrete Math.* **65**, 157–171.
761. Y. O. Hamidoune and M. Las Vergnas [1988], A solution to the misère Shannon switching game, *Discrete Math.* **72**, 163–166.
762. O. Hanner [1959], Mean play of sums of positional games, *Pacific J. Math.* **9**, 81–99.
763. F. Harary [1982], Achievement and avoidance games for graphs, *Ann. Discrete Math.* **13**, 111–119.
764. F. Harary [2002], Sum-free games, in: *Puzzler’s Tribute: a Feast for the Mind*, pp. 395–398, honoring Martin Gardner (D. Wolfe and T. Rodgers, eds.), A K Peters, Natick, MA.
765. F. Harary, H. Harborth and M. Seemann [2000], Handicap achievement for polyominoes, *Congr. Numer.* **145**, 65–80, Proc. 31st Southeastern Internat. Conf. on Combinatorics, Graph Theory, and Computing (Boca Raton, FL, 1999), MR1817942 (2001m:05083).
766. F. Harary and K. Plochinski [1987], On degree achievement and avoidance games for graphs, *Math. Mag.* **60**, 316–321.
767. F. Harary, B. Sagan and D. West [1985], Computer-aided analysis of monotonic sequence games, *Atti Accad. Peloritana Pericolanti Cl. Sci. Fis. Mat. Natur.* **61**, 67–78.
768. F. Harary, W. Slany and O. Verbitsky [2002], A symmetric strategy in graph avoidance games, in: *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 2000, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 42, Cambridge University Press, Cambridge, pp. 369–381, MR1973105 (2004b:91036).
769. F. Harary, W. Slany and O. Verbitsky [2004], On the length of symmetry breaking-preserving games on graphs, *Theoret. Comp. Sci.* **313**, 427–446, special issue of Dagstuhl Seminar “Algorithmic Combinatorial Game Theory”, Feb. 2002, MR2056937 (2005a:91025).
770. H. Harborth and M. Seemann [1996], Snaky is an edge-to-edge loser, *Geombinatorics* **5**, 132–136, MR1380142.

771. H. Harborth and M. Seemann [1997], Snaky is a paving winner, *Bull. Inst. Combin. Appl.* **19**, 71–78, MR1427578 (97g:05052).
772. H. Harborth and M. Seemann [2003], Handicap achievement for squares, *J. Combin. Math. Combin. Comput.* **46**, 47–52, 15th MCCC (Las Vegas, NV, 2001), MR2004838 (2004g:05044).
773. P. J. Hayes [1977], A note on the towers of Hanoi problem, *Computer J.* **20**, 282–285.
774. R. B. Hayward [2008], A puzzling Hex primer, in: *Games of No Chance III*, Proc. BIRS Workshop on Combinatorial Games, July, 2005, Banff, Alberta, Canada, MSRI Publ. (M. H. Albert and R. J. Nowakowski, eds.), Cambridge University Press, Cambridge.
775. R. Hayward, Y. Björnsson, M. Johanson, M. Kan, N. Po and J. van Rijswijk [2005], Solving 7×7 Hex with domination, fill-in, and virtual connections, *Theoret. Comput. Sci.* **349**(2), 123–139, MR2184213 (2006f:68112).
776. R. B. Hayward and J. van Rijswijk [2006], Hex and combinatorics, *Discrete Math.* **306**(19-20), 2515–2528, special issue: Creation and Recreation: A Tribute to the Memory of Claude Berge, MR2261917 (2007e:91045).
777. W. He, X. Hou, K.-W. Lih, J. Shao, W. Wang and X. Zhu [2002], Edge-partitions of planar graphs and their game coloring numbers, *J. Graph Theory* **41**(4), 307–317, MR1936946 (2003h:05153).
778. W. He, J. Wu and X. Zhu [2004], Relaxed game chromatic number of trees and outerplanar graphs, *Discrete Math.* **281**, 209–219, MR2047768 (2005a:05088).
779. R. A. Hearn [2005], The complexity of sliding block puzzles and plank puzzles, in: *Tribute to a Mathematician*, pp. 173–183, honoring Martin Gardner (B. Cipra, E. D. Demaine, M. L. Demaine and T. Rodgers, eds.), A K Peters, Wellesley, MA, pp. 93-99.
780. R. A. Hearn [2006], TipOver is NP-complete, *Math. Intelligencer* **28**, 10–14, Number 3, Summer 2006.
781. R. A. Hearn [2008], Amazons, Konane, and Cross Purposes are PSPACE-complete, in: *Games of No Chance III*, Proc. BIRS Workshop on Combinatorial Games, July, 2005, Banff, Alberta, Canada, MSRI Publ. (M. H. Albert and R. J. Nowakowski, eds.), Cambridge University Press, Cambridge.
782. R. A. Hearn and E. D. Demaine [2002], The nondeterministic constraint logic model of computation: reductions and applications, in: *Automata, Languages and Programming*, Vol. 2380 of *Lecture Notes in Comput. Sci.*, Springer, Berlin, pp. 401–413, MR2062475.
783. R. A. Hearn and E. D. Demaine [2005], PSPACE-completeness of sliding-block puzzles and other problems through the nondeterministic constraint logic model of computation, *Theoret. Comput. Sci.* **343**, 72–96, special issue: Game Theory Meets Theoretical Computer Science, MR2168845 (2006d:68070).

784. O. Heden [1992], On the modular n -queen problem, *Discrete Math.* **102**, 155–161.
785. O. Heden [1993], Maximal partial spreads and the modular n -queen problem, *Discrete Math.* **120**, 75–91.
786. O. Heden [1995], Maximal partial spreads and the modular n -queen problem II, *Discrete Math.* **142**, 97–106.
787. S. M. Hedetniemi, S. Hedetniemi and T. Beyer [1982], A linear algorithm for the Grundy (coloring) number of a tree, *Congr. Numer.* **36**, 351–363.
788. S. M. Hedetniemi, S. T. Hedetniemi and R. Reynolds [1998], Combinatorial problems on chessboards, II, in: *Domination in Graphs* (T. W. Haynes et al., ed.), M. Dekker, NY, pp. 133–162.
789. D. Hefetz, M. Krivelevich and T. Szabó [2007], Avoider-enforcer games, *J. Combin. Theory Ser. A* **114**(5), 840–853, MR2333136.
790. P. Hegarty and U. Larsson [2006], Permutations of the natural numbers with prescribed difference multisets, *Integers, Electr. J. of Combinat. Number Theory* **6**, #A03, 25 pp.
<http://www.integers-ejcnt.org/vol6.html>
791. P. Hein [1942], Vil de lre Polygon?, *Politiken* (description of Hex in this Danish newspaper of Dec. 26) .
792. D. Hensley [1988], A winning strategy at Taxman, *Fibonacci Quart.* **26**, 262–270.
793. C. W. Henson [1970], Winning strategies for the ideal game, *Amer. Math. Monthly* **77**, 836–840.
794. J. C. Hernández-Castro, I. Blasco-Lopez, J. M. Estévez-Tapiador and A. Ribagorda-Garnacho [2006], Steganography in games: A general methodology and its application to the game of Go., *Computers & Security* **25**, 64–71.
795. R. I. Hess [1999], Puzzles from around the world, in: *The Mathemagician and Pied Puzzler*, honoring Martin Gardner; E. Berlekamp and T. Rodgers, eds., A K Peters, Natick, MA, pp. 53-84.
796. G. A. Heuer [1982], Odds versus evens in Silverman-type games, *Internat. J. Game Theory* **11**, 183–194.
797. G. A. Heuer [1989], Reduction of Silverman-like games to games on bounded sets, *Internat. J. Game Theory* **18**, 31–36.
798. G. A. Heuer [2001], Three-part partition games on rectangles, *Theoret. Comput. Sci. (Math Games)* **259**, 639–661.
799. G. A. Heuer and U. Leopold-Wildburger [1995], *Silverman's game, A special class of two-person zero-sum games*, with a foreword by Reinhard Selten, Vol. 424 of Lecture Notes in Economics and Mathematical Systems, Springer-Verlag, Berlin.
800. G. A. Heuer and W. D. Rieder [1988], Silverman games on disjoint discrete sets, *SIAM J. Disc. Math.* **1**, 485–525.
801. R. Hill [1995], Searching with lies, in: *Surveys in Combinatorics*, Vol. 218, Cambridge University Press, Cambridge, pp. 41–70.

802. R. Hill and J. P. Karim [1992], Searching with lies: the Ulam problem, *Discrete Math.* **106/107**, 273–283.
803. T. P. Hill and U. Krengel [1991], Minimax-optimal stop rules and distributions in secretary problems, *Ann. Probab.* **19**, 342–353.
804. T. P. Hill and U. Krengel [1992], On the game of Googol, *Internat. J. Game Theory* **21**, 151–160.
805. P. G. Hinman [1972], Finite termination games with tie, *Israel J. Math.* **12**, 17–22.
806. A. M. Hinz [1989], An iterative algorithm for the tower of Hanoi with four pegs, *Computing* **42**, 133–140.
807. A. M. Hinz [1989], The tower of Hanoi, *Enseign. Math.* **35**, 289–321.
808. A. M. Hinz [1992], Pascal’s triangle and the tower of Hanoi, *Amer. Math. Monthly* **99**, 538–544.
809. A. M. Hinz [1992], Shortest paths between regular states of the tower of Hanoi, *Inform. Sci.* **63**, 173–181.
810. A. M. Hinz [1999], The tower of Hanoi, *Algebras and Combinatorics* (K. P. Shum, E. J. Taft and Z. X. Wan, eds.), Springer, Singapore, pp. 277–289.
811. A. M. Hinz and D. Parisse [2002], On the planarity of Hanoi graphs, *Expo. Math.* **20**, 263–268, MR1924112 (2003f:05034).
812. S. Hitotumatu [1968], *Sin Ishi tori gēmu no sūri* [*The Theory of Nim-Like Games*], Morikita Publishing Co., Tokyo, (Japanese).
813. S. Hitotumatu [1968], Some remarks on nim-like games, *Comment. Math. Univ. St. Paul* **17**, 85–98.
814. D. G. Hoffman and P. D. Johnson [1999], Greedy colorings and the Grundy chromatic number of the n -cube, *Bull. Inst. Combin. Appl.* **26**, 49–57.
815. E. J. Hoffman, J. C. Loessi and R. C. Moore [1969], Construction for the solution of the n -queens problem, *Math. Mag.* **42**, 66–72.
816. M. S. Hogan and D. G. Horrocks [2003], Geography played on an N -cycle times a 4-cycle, *Integers, Electr. J. of Combinat. Number Theory* **3**, #G2, 12 pp., Comb. Games Sect., MR1985672 (2004b:91037).
<http://www.integers-ejcnt.org/vol3.html>
817. J. C. Holladay [1957], Cartesian products of termination games, *Ann. of Math. Stud.* (Contributions to the Theory of Games), Princeton **3**(39), 189–200.
818. J. C. Holladay [1958], Matrix nim, *Amer. Math. Monthly* **65**, 107–109.
819. J. C. Holladay [1966], A note on the game of dots, *Amer. Math. Monthly* **73**, 717–720.
820. A. Holshouser and H. Reiter [2001], A generalization of Beatty’s Theorem, *Southwest J. Pure and Appl. Math.*, issue 2, 24–29.
821. A. Holshouser, H. Reiter and J. Rudzinski [2004], Pilesize dynamic one-pile Nim and Beatty’s theorem, *Integers, Electr. J. of Combinat. Number Theory* **4**, #G3, 13 pp., Comb. Games Sect., MR2079848.
<http://www.integers-ejcnt.org/vol4.html>

822. M. Holzer and W. Holzer [2004], $TANTRIX^{\text{TM}}$ rotation puzzles are intractable, *Discrete Appl. Math.* **144**, 345–358, MR2098189 (2005j:94043).
823. M. Holzer and S. Schwoon [2004], Assembling molecules in ATOMIX is hard, *Theoret. Comp. Sci.* **313**, 447–462, special issue of Dagstuhl Seminar “Algorithmic Combinatorial Game Theory”, Feb. 2002, MR2056938.
824. J. E. Hopcroft, J. T. Schwartz and M. Sharir [1984], On the complexity of motion planning for multiple independent objects: PSPACE-hardness of the “Warehouseman’s problem”, *J. Robot. Res.* **3** issue 4, 76–88.
825. B. Hopkins and J. A. Sellers [2007], *Exact enumeration of Garden of Eden partitions*, de Gruyter, pp. 299–303, Proc. Integers Conference, Carrollton, Georgia, October 27–30, 2005, in celebration of the 70th birthday of Ronald Graham. B. Landman, M. Nathanson, J. Nešetřil, R. Nowakowski, C. Pomerance eds., appeared also in *Integers, Electr. J. of Combinat. Number Theory* **7(20)**, special volume in honor of Ron Graham, #A19, 5 pp., MR2337053.
[http://www.integers-ejcnt.org/vol7\(2\).html](http://www.integers-ejcnt.org/vol7(2).html)
826. E. Hordern [1986], *Sliding Piece Puzzles*, Oxford University Press, Oxford.
827. D. G. Horrocks and R. J. Nowakowski [2003], Regularity in the \mathcal{G} -sequences of octal games with a pass, *Integers, Electr. J. of Combinat. Number Theory* **3**, #G1, 10 pp., Comb. Games Sect., MR1985671 (2004d:91049).
<http://www.integers-ejcnt.org/vol3.html>
828. D. G. Horrocks and M. A. Trenton [2008], Subtraction with a Muller twist, *Integers, Electr. J. of Combinat. Number Theory* **8**, #G05, 12 pp., Comb. Games Sect., **MR pending.
<http://www.integers-ejcnt.org/vol8.html>
829. S. Howse and R. J. Nowakowski [2004], Periodicity and arithmetic-periodicity in hexadecimal games, *Theoret. Comp. Sci.* **313**, 463–472, special issue of Dagstuhl Seminar “Algorithmic Combinatorial Game Theory”, Feb. 2002, MR2056939 (2005f:91037).
830. M. Y. Hsieh and S.-C. Tsai [2007], On the fairness and complexity of generalized k -in-a-row games, *Theoret. Comput. Sci.* **385**, 88–100, MR2356244.
831. S. Huddleston and J. Shurman [2002], Transfinite Chomp, in: *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 2000, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 42, Cambridge University Press, Cambridge, pp. 183–212, MR1973013 (2004b:91046).
832. P. Hunter and S. Kreutzer [2008], Digraph measures: Kelly decompositions, games, and orderings, *Theoret. Comput. Sci.* **399**, 206–219, **MR pending.
833. G. H. Hurlbert [1998], Two pebbling theorems, *Congr. Numer.* **135**, 55–63, Proc. 29-th Southeastern Internat. Conf. on Combinatorics, Graph Theory, and Computing (Boca Raton, FL, 1998).
834. G. H. Hurlbert [1999], A survey of graph pebbling, *Congr. Numer.* **139**,

- 41–64, Proc. 30-th Southeastern Internat. Conf. on Combinatorics, Graph Theory, and Computing (Boca Raton, FL, 1999).
835. G. Iba and J. Tanton [2003], Candy sharing, *Amer. Math. Monthly* **110**, 25–35, MR1952745.
836. K. Igusa [1985], Solution of the Bulgarian solitaire conjecture, *Math. Mag.* **58**(5), 259–271, MR810147 (87c:00003).
837. J. Isbell [1992], The Gordon game of a finite group, *Amer. Math. Monthly* **99**, 567–569.
838. V. Isler, S. Kannan and S. Khanna [2006], Randomized pursuit-evasion with local visibility, *SIAM J. Discrete Math.* **20**, 26–41 (electronic), MR2257242 (2007h:91038).
839. V. Isler and N. Karnad [2008], The role of information in the cop-robber game, *Theoret. Comput. Sci.* **399**, 179–190, **MR pending.
840. H. Ito, G. Nakamura and S. Takata [2007], Winning ways of weighted poset games, *Graphs Combin.* **23**(suppl. 1), 291–306, MR2320636.
841. O. Itzinger [1977], The South American game, *Math. Mag.* **50**, 17–21.
842. S. Iwata and T. Kasai [1994], The Othello game on an $n \times n$ board is PSPACE-complete, *Theoret. Comput. Sci. (Math Games)* **123**, 329–340.
843. C. F. A. Jaenisch [1862], *Traité des Applications de l'Analyse mathématiques au Jeu des Echecs*, Petrograd, three volumes (Carl Friedrich Andreyevich Jaenisch from St Petersburg [changed its name to Petrograd, then to Leningrad, and then back to St Petersburg] is also known by his cyrillic transliteration "Yanich", or in the French form: de J, or German form: von J).
844. J. James and M. Schlatter [2008], Some observations and solutions to short and long global Nim, *Integers, Electr. J. of Combinat. Number Theory* **8**, #G01, 14 pp., **MR pending.
<http://www.integers-ejcnt.org/vol8.html>
845. J. Jeffs and S. Seager [1995], The chip firing game on n -cycles, *Graphs Combin.* **11**, 59–67.
846. T. A. Jenkyns and J. P. Mayberry [1980], The skeleton of an impartial game and the Nim-function of Moore's Nim_k , *Internat. J. Game Theory* **9**, 51–63.
847. T. R. Jensen and B. Toft [1995], *Graph Coloring Problems*, Wiley-Interscience Series in Discrete Mathematics and Optimization, Wiley, New York, NY.
848. L. Y. Jin and J. Nievergelt [2008], Tigers and Goats is a draw, in: *Games of No Chance III*, Proc. BIRS Workshop on Combinatorial Games, July, 2005, Banff, Alberta, Canada, MSRI Publ. (M. H. Albert and R. J. Nowakowski, eds.), Cambridge University Press, Cambridge.
849. D. S. Johnson [1983], The NP-Completeness Column: An Ongoing Guide, *J. Algorithms* **4**, 397–411, 9th quarterly column (games); the column started in 1981; a further games update appeared in vol. **5**, 10th column, pp. 154–155.

850. W. W. Johnson [1879], Notes on the "15" puzzle, *Amer. J. Math.* **2**, 397–399.
851. J. P. Jones [1982], Some undecidable determined games, *Internat. J. Game Theory* **11**, 63–70.
852. J. P. Jones and A. S. Fraenkel [1995], Complexities of winning strategies in diophantine games, *J. Complexity* **11**, 435–455.
853. D. Joyner [2006], Mathematics of Ghaly's machine, *Integers, Electr. J. of Combinat. Number Theory* **6**, #G01, 27 pp., Comb. Games Sect. <http://www.integers-ejcnt.org/vol6.html>
854. M. Kac [1974], Hugo Steinhaus, a reminiscence and a tribute, *Amer. Math. Monthly* **81**, 572–581 (p. 577).
855. J. Kahane and A. S. Fraenkel [1987], k -Welter — a generalization of Welter's game, *J. Combin. Theory (Ser. A)* **46**, 1–20.
856. J. Kahane and A. J. Ryba [2001], The Hexad game, *Electr. J. Combin.* **8(2)**, #R11, 9 pp., Volume in honor of Aviezri S. Fraenkel, MR1853262 (2002h:91031). <http://www.combinatorics.org/>
857. J. Kahn, J. C. Lagarias and H. S. Witsenhausen [1987], Single-suit two-person card play, *Internat. J. Game Theory* **16**, 291–320, MR0918819 (88m:90162).
858. J. Kahn, J. C. Lagarias and H. S. Witsenhausen [1988], Single-suit two-person card play, II. Dominance, *Order* **5**, 45–60, MR0953941 (89j:90279).
859. J. Kahn, J. C. Lagarias and H. S. Witsenhausen [1989], On Lasker's card game, in: *Differential Games and Applications*, Lecture Notes in Control and Information Sciences (T. S. Başar and P. Bernhard, eds.), Vol. 119, Springer Verlag, Berlin, pp. 1–8, MR1230186.
860. J. Kahn, J. C. Lagarias and H. S. Witsenhausen [1989], Single-suit two-person card play, III. The misère game, *SIAM J. Disc. Math.* **2**, 329–343, MR1002697 (90g:90197).
861. L. Kalmár [1928], Zur Theorie der abstrakten Spiele, *Acta Sci. Math. Univ. Szeged* **4**, 65–85.
862. B. Kalyanasundram [1991], On the power of white pebbles, *Combinatorica* **11**, 157–171.
863. B. Kalyanasundram and G. Schnitger [1988], On the power of white pebbles, *Proc. 20th Ann. ACM Symp. Theory of Computing* (Chicago, IL, 1988), Assoc. Comput. Mach., New York, NY, pp. 258–266.
864. J. H. Kan [1994], (0, 1) matrices, combinatorial games and Ramsey problems, *Math. Appl. (Wuhan)* **7**, 97–101, (Chinese; English summary).
865. M. Kano [1983], Cycle games and cycle cut games, *Combinatorica* **3**, 201–206.
866. M. Kano [1993], An edge-removing game on a graph (a generalization of Nim and Kayles), in: *Optimal Combinatorial Structures on Discrete Mathematical Models* (in Japanese, Kyoto, 1992), Sūrikaiseikikenkyūsho Kōkyūroku, pp. 82–90, MR1259331 (94m:90132).

867. M. Kano [1996], Edge-removing games of star type, *Discrete Math.* **151**, 113–119.
868. M. Kano, T. Sasaki, H. Fujita and S. Hoshi [1993], Life games of Ibadai type, in: *Combinatorial Structure in Mathematical Models* (in Japanese, Kyoto, 1993), Sūrikaisekikenyūsho Kōkyūroku, pp. 108–117.
869. S. Kanungo and R. M. Low [2007], Further analysis on the king and rook vs. king on a quarter-infinite board problem, *Integers* **7**, #G09, 7 pp., **MR pending.
<http://www.integers-ejcnt.org/vol7.html>
870. K.-Y. Kao [2005], Summers – sums of ups and downs, *Integers, Electr. J. of Combinat. Number Theory* **5**, #G01, 13 pp., Comb. Games Sect., MR2139164 (2005k:91081).
<http://www.integers-ejcnt.org/vol5.html>
871. R. M. Karp and Y. Zhang [1989], On parallel evaluation of game trees, *Proc. ACM Symp. Parallel Algorithms and Architectures*, pp. 409–420.
872. T. Kasai, A. Adachi and S. Iwata [1979], Classes of pebble games and complete problems, *SIAM J. Comput.* **8**, 574–586.
873. Y. Kawano [1996], Using similar positions to search game trees, in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, pp. 193–202.
874. R. Kaye [2000], Minesweeper is NP-complete, *Math. Intelligencer* **22** issue 2, 9–15, MR1764264.
875. M. D. Kearse and P. B. Gibbons [2001], Computational methods and new results for chessboard problems, *Australas. J. Combin.* **23**, 253–284, MR1815018 (2001m:05190).
876. M. D. Kearse and P. B. Gibbons [2002], A new lower bound on upper irredundance in the queens’ graph, *Discrete Math.* **256**, 225–242, MR1927068 (2003g:05098).
877. J. C. Kenyon [1967], A Nim-like game with period 349, Res. Paper No. 13, Univ. of Calgary, Math. Dept.
878. J. C. Kenyon [1967], Nim-like games and the Sprague–Grundy theory, M.Sc. Thesis, Univ. of Calgary.
879. B. Kerst [1933], *Mathematische Spiele*, Reprinted by Dr. Martin Sändig oHG, Wiesbaden 1968.
880. H. A. Kierstead [2000], A simple competitive graph coloring algorithm, *J. Combin. Theory (Ser. B)* **78**, 57–68.
881. H. A. Kierstead [2005], Asymmetric graph coloring games, *J. Graph Theory* **48**(3), 169–185, MR2116838 (2006c:91033).
882. H. A. Kierstead [2006], Weak acyclic coloring and asymmetric coloring games, *Discrete Math.* **306**, 673–677.
883. H. A. Kierstead and W. T. Trotter [1994], Planar graph coloring with an uncooperative partner, *J. Graph Theory* **18**, 569–584, MR1292976 (95f:05043).

884. H. A. Kierstead and W. T. Trotter [2001], Competitive colorings of oriented graphs, *Electr. J. Combin.* **8(2)**, #R12, 15 pp., Volume in honor of Aviezri S. Fraenkel, MR1853263 (2002g:05083).
<http://www.combinatorics.org/>
885. H. A. Kierstead and Zs. Tuza [2003], Marking games and the oriented game chromatic number of partial k -trees, *Graphs Combin.* **19**, 121–129, MR1974374 (2003m:05069).
886. H. A. Kierstead and D. Yang [2005], Very asymmetric marking games, *Order* **22(2)**, 93–107 (2006), MR2207192 (2007d:91045).
887. Y. Kim [1996], New values in domineering, *Theoret. Comput. Sci. (Math Games)* **156**, 263–280.
888. C. Kimberling [2007], Complementary equations, *J. Integer Seq.* **10(1)**, Article 07.1.4, 14 pp. (electronic), MR2268455.
<http://www.cs.uwaterloo.ca/journals/JIS/VOL10/Kimberling/kimberling26.pdf>
889. H. Kinder [1973], Gewinnstrategien des Anziehenden in einigen Spielen auf Graphen, *Arch. Math.* **24**, 332–336.
890. M. A. Kiwi, R. Ndoundam, M. Tchente and E. Goles [1994], No polynomial bound for the period of the parallel chip firing game on graphs, *Theoret. Comput. Sci.* **136**, 527–532.
891. D. A. Klarner, ed. [1998], *Mathematical recreations. A collection in honor of Martin Gardner*, Dover, Mineola, NY, Corrected reprint of *The Mathematical Gardner*, Wadsworth Internat., Belmont, CA, 1981.
892. S. Klavžar and U. Milutinović [1997], Graphs $S(n, k)$ and a variant of the tower of Hanoi problem, *Czechoslovak Math. J.* **47**, 95–104, MR1435608 (97k:05061).
893. S. Klavžar and U. Milutinović [2002], Simple explicit formulas for the Frame-Stewart numbers, *Ann. Comb.* **6**, 157–167, MR1955516 (2003k:05004).
894. S. Klavžar, U. Milutinović and C. Petr [2001], Combinatorics of topmost discs of multi-peg tower of Hanoi problem, *Ars Combinatoria* **59**, 55–64, MR1832197 (2002b:05013).
895. S. Klavžar, U. Milutinović and C. Petr [2002], On the Frame-Stewart algorithm for the multi-peg tower of Hanoi problem, *Discrete Appl. Math.* **120**, 141–157, MR1966398.
896. M. M. Klawe [1985], A tight bound for black and white pebbles on the pyramids, *J. Assoc. Comput. Mach.* **32**, 218–228.
897. C. S. Klein and S. Minsker [1993], The super towers of Hanoi problem: large rings on small rings, *Discrete Math.* **114**, 283–295.
898. D. J. Kleitman and B. L. Rothschild [1972], A generalization of Kaplansky's game, *Discrete Math.* **2**, 173–178.
899. O. Kloster [2007], A solution to the angel problem, *Theoret. Comput. Sci.* **389**, 152–161, MR2363369.
900. T. Kløve [1977], The modular n -queen problem, *Discrete Math.* **19**, 289–291.

901. T. Kløve [1981], The modular n -queen problem II, *Discrete Math.* **36**, 33–48.
902. A. Knopfmacher and H. Prodinger [2001], A Simple Card Guessing Game Revisited, *Electr. J. Combin.* **8(2)**, #R13, 9 pp., Volume in honor of Aviezri S. Fraenkel, MR1853264 (2002g:05007).
<http://www.combinatorics.org/>
903. M. Knor [1996], On Ramsey-type games for graphs, *Australas. J. Combin.* **14**, 199–206.
904. D. E. Knuth [1974], *Surreal Numbers*, Addison-Wesley, Reading, MA.
905. D. E. Knuth [1976], The computer as Master Mind, *J. Recr. Math.* **9**, 1–6.
906. D. E. Knuth [1977], Are toy problems useful?, *Popular Computing* **5** issue 1, 3–10; continued in **5** issue 2, 3–7.
907. D. E. Knuth [1993], *The Stanford Graph Base: A Platform for Combinatorial Computing*, ACM Press, New York.
908. P. Komjáth [1984], A simple strategy for the Ramsey-game, *Studia Sci. Math. Hung.* **19**, 231–232.
909. A. Kotzig [1946], O k -posunutiach (On k -translations; in Slovakian), *Časop. pro Pěst. Mat. a Fys.* **71**, 55–61, extended abstract in French, pp. 62–66.
910. G. Kowalewski [1930], *Alte und neue mathematische Spiele*, Reprinted by Dr. Martin Sändig oHG, Wiesbaden 1968.
911. K. Koyama and T. W. Lai [1993], An optimal Mastermind strategy, *J. Recr. Math.* **25**, 251–256.
912. M. Kraitchik [1953], *Mathematical Recreations*, Dover, New York, NY, 2nd edn.
913. D. Král, V. Majerech, J. Sgall, T. Tichý and G. Woeginger [2004], It is tough to be a plumber, *Theoret. Comp. Sci.* **313**, 473–484, special issue of Dagstuhl Seminar “Algorithmic Combinatorial Game Theory”, Feb. 2002, MR2056940.
914. M. Krivelevich and T. Szabó [2008], Biased positional games and small hypergraphs with large covers, *Electr. J. Combin.* **15(1)**, #R70, 13 pp., **MR pending.
<http://www.combinatorics.org/>
915. B. Kummer [1980], *Spiele auf Graphen*, Internat. Series of Numerical Mathematics, Birkhäuser Verlag, Basel.
916. D. Kunkle and G. Cooperman [2007], Twenty-Six Moves Suffice for Rubik’s Cube, *Proc. Intern. Sympos. Symbolic and Algebraic Computation (ISSAC ’07)*, ACM Press, to appear.
917. M. Kutz [2005], Conway’s angel in three dimensions, *Theoret. Comput. Sci.* **349**, 443–451, MR2183168 (2006h:91045).
918. M. Kutz and A. Pór [2005], Angel, Devil, and King, in: *Computing and Combinatorics*, Vol. 3595 of *Lecture Notes in Comput. Sci.*, Springer, Berlin, pp. 925–934, Proc. COCOON, MR2190915 (2006g:91043).

919. M. Lachmann, C. Moore and I. Rapaport [2002], Who wins Domineering on rectangular boards?, in: *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 2000, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 42, Cambridge University Press, Cambridge, pp. 307–315, MR1973019 (2004b:91047).
920. R. E. Ladner and J. K. Norman [1985], Solitaire automata, *J. Comput. System Sci.* **30**, 116–129, MR 86i:68032.
921. J. C. Lagarias [1977], Discrete balancing games, *Bull. Inst. Math. Acad. Sinica* **5**, 363–373.
922. J. Lagarias and D. Sleator [1999], Who wins misère Hex?, in: *The Mathematician and Pied Puzzler*, honoring Martin Gardner; E. Berlekamp and T. Rodgers, eds., A K Peters, Natick, MA, pp. 237–240.
923. S. P. Lalley [1988], A one-dimensional infiltration game, *Naval Res. Logistics* **35**, 441–446.
924. P. C. B. Lam, W. C. Shiu and B. Xu [1999], Edge game-coloring of graphs, *Graph Theory Notes N. Y.* **37**, 17–19, MR1724310.
925. T. K. Lam [1997], Connected sprouts, *Amer. Math. Monthly* **104**, 116–119.
926. H. A. Landman [1996], Eyespace values in Go, in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, pp. 227–257, MR1427967 (97j:90100).
927. H. Landman [2002], A simple FSM-based proof of the additive periodicity of the Sprague-Grundy function of Wythoff’s game, in: *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 2000, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 42, Cambridge University Press, Cambridge, pp. 383–386, MR1973106 (2004b:91048).
928. L. Larson [1977], A theorem about primes proved on a chessboard, *Math. Mag.* **50**, 69–74.
929. E. Lasker [1931], *Brettspiele der Völker, Rätsel und mathematische Spiele*, Berlin.
930. M. Latapy and C. Magnien [2002], Coding distributive lattices with edge firing games, *Inform. Process. Lett.* **83**, 125–128, MR1837204 (2002h:37022).
931. M. Latapy and H. D. Phan [2001], The lattice structure of chip firing games and related models, *Phys. D* **155**, 69–82, MR1837204 (2002h:37022).
932. I. Lavalée [1985], Note sur le problème des tours d’Hanoi, *Rev. Roumaine Math. Pures Appl.* **30**, 433–438.
933. E. L. Lawler and S. Sarkissian [1995], An algorithm for “Ulam’s game” and its application to error correcting codes, *Inform. Process. Lett.* **56**, 89–93.
934. A. J. Lazarus, D. E. Loeb, J. G. Propp, W. R. Stromquist and D. Ullman [1999], Combinatorial games under auction play, *Games Econom. Behav.*

- 27**, 229–264, MR1685133 (2001f:91023).
935. A. J. Lazarus, D. E. Loeb, J. G. Propp and D. Ullman [1996], Richman Games, in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, pp. 439–449, MR1427981 (97j:90101).
936. S.-G. Lee and J.-M. Yang [2006], Linear algebraic approach on real σ -game, *J. Appl. Math. Comput.* **21**(1-2), 295–305, MR2218803 (2006k:91056).
937. D. B. Leep and G. Myerson [1999], Marriage, magic and solitaire, *Amer. Math. Monthly* **106**, 419–429.
938. A. Lehman [1964], A solution to the Shannon switching game, *SIAM J. Appl. Math.* **12**, 687–725.
939. E. L. Leiss [1983], On restricted Hanoi problems, *J. Combin. Inform. System Sci.* **8**, 277–285, MR783767 (86i:05072).
940. E. Leiss [1983], Solving the “Towers of Hanoi” on graphs, *J. Combin. Inform. System Sci.* **8**, 81–89, MR783741 (86i:05071).
941. E. L. Leiss [1984], Finite Hanoi problems: how many discs can be handled?, *Congr. Numer.* **44**, 221–229, Proc. 15th Southeastern Internat. Conf. on Combinatorics, Graph Theory and Computing (Baton Rouge, LA, 1984), MR777543 (87b:05062).
942. T. Lengauer and R. Tarjan [1980], The space complexity of pebble games on trees, *Inform. Process. Lett.* **10**, 184–188.
943. T. Lengauer and R. Tarjan [1982], Asymptotically tight bounds on time-space trade-offs in a pebble game, *J. Assoc. Comput. Mach.* **29**, 1087–1130.
944. T. Lengyel [2003], A Nim-type game and continued fractions, *Fibonacci Quart.* **41**, 310–320, MR2022411.
945. J. H. W. Lenstra [1977], On the algebraic closure of two, *Proc. Kon. Nederl. Akad. Wetensch. (Ser. A)* **80**, 389–396.
946. J. H. W. Lenstra [1977/1978], Nim multiplication, Séminaire de Théorie des Nombres No. 11, Université de Bordeaux, France.
947. L. Levine [2006], Fractal sequences and restricted Nim, *Ars Combin.* **80**, 113–127, MR2243082 (2007b:91029).
948. D. N. L. Levy, ed. [1988], *Computer Games I, II*, Springer-Verlag, New York, NY.
949. J. Lewin [1986], The lion and man problem revisited, *J. Optimization Theory and Applications* **49**, 411–430.
950. T. Lewis and S. Willard [1980], The rotating table, *Math. Mag.* **53**, 174–179.
951. C.-K. Li and I. Nelson [1998], Perfect codes on the towers of Hanoi graph, *Bull. Austral. Math. Soc.* **57**, 367–376.
952. S.-Y. R. Li [1974], Generalized impartial games, *Internat. J. Game Theory* **3**, 169–184.

953. S.-Y. R. Li [1976], Sums of Zuchswang games, *J. Combin. Theory* (Ser. A) **21**, 52–67.
954. S.-Y. R. Li [1977], N -person nim and N -person Moore's games, *Internat. J. Game Theory* **7**, 31–36.
955. D. Lichtenstein [1982], Planar formulae and their uses, *SIAM J. Comput.* **11**, 329–343.
956. D. Lichtenstein and M. Sipser [1980], Go is Polynomial-Space hard, *J. Assoc. Comput. Mach.* **27**, 393–401, earlier version appeared in Proc. 19th Ann. Symp. Foundations of Computer Science (Ann Arbor, MI, Oct. 1978), IEEE Computer Soc., Long Beach, CA, 1978, pp. 48–54.
957. H. Liebeck [1971], Some generalizations of the 14-15 puzzle, *Math. Mag.* **44**, 185–189.
958. C.-W. Lim [2005], Partial Nim, *Integers, Electr. J. of Combinat. Number Theory* **5**, #G02, 9 pp., Comb. Games Sect., MR2139165 (2005m:91046). <http://www.integers-ejcnt.org/vol5.html>
959. C. Löding and P. Rohde [2003], Solving the sabotage game is PSPACE-hard, in: *Mathematical Foundations of Computer Science 2003*, Vol. 2747 of *Lecture Notes in Comput. Sci.*, Springer, Berlin, pp. 531–540, MR2081603.
960. D. E. Loeb [1995], How to win at Nim, *UMAP J.* **16**, 367–388.
961. D. E. Loeb [1996], Stable winning coalitions, in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, pp. 451–471.
962. J. A. M. Lopez [1991], A prolog Mastermind program, *J. Recr. Math.* **23**, 81–93.
963. R. M. Low and M. Stamp [2006], King and rook vs. king on a quarter-infinite board, *Integers, Electr. J. of Combinat. Number Theory* **6**, #G3, 8 pp., MR2247807 (2007c:91038). <http://www.integers-ejcnt.org/vol6.html>
964. S. Loyd [1914], *Cyclopedia of Puzzles and Tricks*, Franklin Bigelow Corporation, Morningside Press, NY, reissued and edited by M. Gardner under the name *The Mathematical Puzzles of Sam Loyd* (two volumes), Dover, New York, NY, 1959.
965. X. Lu [1986], A Hamiltonian game, *J. Math. Res. Exposition (English Ed.)* **1**, 101–106.
966. X. Lu [1991], A matching game, *Discrete Math.* **94**, 199–207.
967. X. Lu [1992], A characterization on n -critical economical generalized tic-tac-toe games, *Discrete Math.* **110**, 197–203.
968. X. Lu [1992], Hamiltonian games, *J. Combin. Theory* (Ser. B) **55**, 18–32.
969. X. Lu [1995], A Hamiltonian game on $K_{n,n}$, *Discrete Math.* **142**, 185–191.
970. X. Lu [1995], A note on biased and non-biased games, *Discrete Appl. Math.* **60**, 285–291, Presented at ARIDAM VI and VII (New Brunswick, NJ, 1991/1992).

971. X.-M. Lu [1986], Towers of Hanoi graphs, *Intern. J. Comput. Math.* **19**, 23–38.
972. X.-M. Lu [1988], Towers of Hanoi problem with arbitrary $k \geq 3$ pegs, *Intern. J. Comput. Math.* **24**, 39–54.
973. X.-M. Lu [1989], An iterative solution for the 4-peg towers of Hanoi, *Comput. J.* **32**, 187–189.
974. X.-M. Lu and T. S. Dillon [1994], A note on parallelism for the towers of Hanoi, *Math. Comput. Modelling* **20** issue 3, 1–6.
975. X.-M. Lu and T. S. Dillon [1995], Parallelism for multipeg towers of Hanoi, *Math. Comput. Modelling* **21** issue 3, 3–17.
976. X.-M. Lu and T. S. Dillon [1996], Nonrecursive solution to parallel multi-peg towers of Hanoi: a decomposition approach, *Math. Comput. Modelling* **24** issue 3, 29–35.
977. É. Lucas [1960], *Récréations Mathématiques*, Vol. I – IV, A. Blanchard, Paris. Previous editions: Gauthier-Villars, Paris, 1891–1894.
978. É. Lucas [1974], *Introduction aux Récréations Mathématiques: L'Arithmétique Amusante*, reprinted by A. Blanchard, Paris. Originally published by A. Blanchard, Paris, 1895.
979. A. L. Ludington [1988], Length of the 7-number game, *Fibonacci Quart.* **26**, 195–204.
980. A. Ludington-Young [1990], Length of the n -number game, *Fibonacci Quart.* **28**, 259–265.
981. W. F. Lunnon [1986], The Reve's puzzle, *Comput. J.* **29**, 478.
982. M. Maamoun and H. Meyniel [1987], On a game of policemen and robber, *Discrete Appl. Math.* **17**, 307–309.
983. P. A. MacMahon [1921], *New Mathematical Pastimes*, Cambridge University Press, Cambridge.
984. F. Maffray [1986], On kernels in i -triangulated graphs, *Discrete Math.* **61**, 247–251.
985. F. Maffray [1992], Kernels in perfect line-graphs, *J. Combin. Theory (Ser. B)* **55**, 1–8.
986. C. Magnien, H. D. Phan and L. Vuillon [2001], Characterization of lattices induced by (extended) chip firing games, *Discrete models: combinatorics, computation, and geometry (Paris, 2001)*, 229–244 (electronic), *Discrete Math. and Theor. Comput. Sci. Proc.* pp. 229–244, MR1888776 (2003a:91029).
987. R. Mansfield [1996], Strategies for the Shannon switching game, *Amer. Math. Monthly* **103**, 250–252.
988. D. Marcu [1992], On finding a Grundy function, *Polytech. Inst. Bucharest Sci. Bull. Chem. Mater. Sci.* **54**, 43–47.
989. G. Martin [1991], *Polyominoes: Puzzles and Problems in Tiling*, Math. Assoc. America, Washington, DC.
990. G. Martin [2002], Restoring fairness to Dukego, in: *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 2000,

- Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 42, Cambridge University Press, Cambridge, pp. 79–87, MR1973006 (2004c:91031).
991. O. Martín-Sánchez and C. Pareja-Flores [2001], Two reflected analyses of lights out, *Math. Mag.* **74**, 295–304.
992. F. Mäser [2002], Global threats in combinatorial games: a computational model with applications to chess endgames, in: *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 2000, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 42, Cambridge University Press, Cambridge, pp. 137–149, MR1973010 (2004b:91049).
993. A. Máthé [2007], The angel of power 2 wins, *Combin. Probab. Comput.* **16**, 363–374, MR2312432 (2008a:91038).
994. J. G. Mauldon [1978], Num, a variant of nim with no first player win, *Amer. Math. Monthly* **85**, 575–578.
995. R. McConville [1974], *The History of Board Games*, Creative Publications, Palo Alto, CA.
996. S. K. McCurdy and R. Nowakowski [2005], Cutthroat, an all-small game on graphs, *Integers, Electr. J of Combinat. Number Theory* **5(2)**, #A13, 13 pp., MR2192091 (2006g:05076).
[http://www.integers-ejcnt.org/vol5\(2\).html](http://www.integers-ejcnt.org/vol5(2).html)
997. D. P. McIntyre [1942], A new system for playing the game of nim, *Amer. Math. Monthly* **49**, 44–46.
998. R. McNaughton [1993], Infinite games played on finite graphs, *Ann. Pure Appl. Logic* **65**, 149–184.
999. J. W. A. McWorter [1981], Kriegspiel Hex, *Math. Mag.* **54**, 85–86, solution to Problem 1084 posed by the author in *Math. Mag.* **52** (1979) 317.
1000. E. Mead, A. Rosa and C. Huang [1974], The game of SIM: A winning strategy for the second player, *Math. Mag.* **47**, 243–247.
1001. N. Megiddo, S. L. Hakimi, M. R. Garey, D. S. Johnson and C. H. Papadimitriou [1988], The complexity of searching a graph, *J. Assoc. Comput. Mach.* **35**, 18–44.
1002. K. Mehlhorn, S. Näher and M. Rauch [1990], On the complexity of a game related to the dictionary problem, *SIAM J. Comput.* **19**, 902–906, earlier draft appeared in Proc. 30th Ann. Symp. Foundations of Computer Science, pp. 546–548.
1003. N. S. Mendelsohn [1946], A psychological game, *Amer. Math. Monthly* **53**, 86–88.
1004. E. Mendelson [2004], *Introducing game theory and its applications*, Discrete Mathematics and its Applications (Boca Raton), Chapman & Hall/CRC, Boca Raton, FL, (Ch. 1 is on combinatorial games), MR2073442 (2005b:91003).
1005. C. G. Méndez [1981], On the law of large numbers, infinite games and category, *Amer. Math. Monthly* **88**, 40–42.
1006. C. Merino [2001], The chip firing game and matroid complexes, *Discrete models: combinatorics, computation, and geometry (Paris, 2001)*

- (*electronic*), *Discrete Math. and Theor. Comput. Sci. Proc.* pp. 245–255, MR1888777 (2002k:91048).
1007. C. Merino [2005], The chip firing game, *Discrete Math.* **302**, 188–210, MR2179643.
1008. C. Merino López [1997], Chip firing and the Tutte polynomial, *Ann. Comb.* **1**, 253–259, (C. Merino López = C.M. López = C. Merino is the same author), MR1630779 (99k:90232).
1009. G. A. Mesdal III [2008], Partizan splittles, in: *Games of No Chance III*, Proc. BIRS Workshop on Combinatorial Games, July, 2005, Banff, Alberta, Canada, MSRI Publ. (M. H. Albert and R. J. Nowakowski, eds.), Cambridge University Press, Cambridge.
1010. G. A. Mesdal and P. Ottaway [2007], Simplification of partizan games in misère play, *Integers, Electr. J of Combinat. Number Theory* **7**, #G06, 12 pp.), (G. A. Mesdal designates the following authors: M. Allen, J. P. Grossman, A. Hill, N. A. McKay, R. J. Nowakowski, T. Plambeck, A. A. Siegel, D. Wolfe, who participated at the 2006 “Games-at-Dal 4” (Dalhousie) conference), MR2299812 (2007k:91054).
<http://www.integers-ejcnt.org/vol7.html>
1011. D. Mey [1994], Finite games for a predicate logic without contractions, *Theoret. Comput. Sci.* **123**, 341–349.
1012. F. Meyer auf der Heide [1981], A comparison of two variations of a pebble game on graphs, *Theoret. Comput. Sci.* **13**, 315–322.
1013. H. Meyniel and J.-P. Roudneff [1988], The vertex picking game and a variation of the game of dots and boxes, *Discrete Math.* **70**, 311–313, MR0955128 (89f:05111).
1014. D. Michie and I. Bratko [1987], Ideas on knowledge synthesis stemming from the KBBKN endgame, *Internat. Comp. Chess Assoc. J.* **10**, 3–13.
1015. J. Milnor [1953], Sums of positional games, *Ann. of Math. Stud.* (Contributions to the Theory of Games, H. W. Kuhn and A. W. Tucker, eds.), Princeton **2**(28), 291–301.
1016. P. Min Lin [1982], Principal partition of graphs and connectivity games, *J. Franklin Inst.* **314**, 203–210.
1017. S. Minsker [1989], The towers of Hanoi rainbow problem: coloring the rings, *J. Algorithms* **10**, 1–19.
1018. S. Minsker [1991], The towers of Antwerpen problem, *Inform. Process. Lett.* **38**, 107–111.
1019. J. Missigman and R. Weida [2001], An easy solution to mini lights out, *Math. Mag.* **74**, 57–59.
1020. D. Moews [1991], Sums of games born on days 2 and 3, *Theoret. Comput. Sci.* (Math Games) **91**, 119–128, MR1142561 (93b:90130).
1021. D. Moews [1992], Pebbling graphs, *J. Combin. Theory* (Ser. B) **55**, 244–252.
1022. D. Moews [1996], Coin-sliding and Go, *Theoret. Comput. Sci.* (Math Games) **164**, 253–276.

1023. D. Moews [1996], Infinitesimals and coin-sliding, in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, pp. 315–327.
1024. D. Moews [1996], Loopy games and Go, in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, pp. 259–272, MR1427968 (98d:90152).
1025. D. Moews [2002], The abstract structure of the group of games, in: *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 2000, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 42, Cambridge University Press, Cambridge, pp. 49–57, MR1973004 (2004b:91034).
1026. C. Moore and D. Eppstein [2002], 1-dimensional peg solitaire, and duotaire, in: *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 2000, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 42, Cambridge University Press, Cambridge, pp. 341–350, MR1973022.
1027. E. H. Moore [1909–1910], A generalization of the game called nim, *Ann. of Math.* (Ser. 2) **11**, 93–94.
1028. A. H. Moorehead and G. Mott-Smith [1963], *Hoyle's Rules of Games*, Signet, New American Library.
1029. F. L. Morris [1981], Playing disjunctive sums is polynomial space complete, *Internat. J. Game Theory* **10**, 195–205.
1030. D. R. Morrison [1980], A Stolarsky array of Wythoff pairs, in: *A collection of manuscripts related to the Fibonacci sequence*, Fibonacci Assoc., Santa Clara, Calif., pp. 134–136, MR624110 (82j:05030).
1031. M. Morse and G. A. Hedlund [1944], Unending chess, symbolic dynamics and a problem in semigroups, *Duke Math. J.* **11**, 1–7.
1032. M. Müller [2003], Conditional combinatorial games and their application to analyzing capturing races in Go, *Information Sciences* **154**, 189–202.
1033. M. Müller and R. Gasser [1996], Conditional combinatorial games and their application to analyzing capturing races in Go, in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, pp. 273–284.
1034. M. Müller and T. Tegos [2002], Experiments in computer Amazons, in: *More games of no chance (Berkeley, CA, 2000)*, Vol. 42 of *Math. Sci. Res. Inst. Publ.*, Cambridge Univ. Press, Cambridge, pp. 243–260, MR1973016 (2004b:91050).
1035. D. Mundici [1991], Logic and algebra in Ulam's searching game with lies, *Jbuch. Kurt-Gödel-Ges.* pp. 109–114 (1993), MR1213606 (94j:03130).
1036. D. Mundici [1992], The logic of Ulam's game with lies, in: *Knowledge, Belief, and Strategic Interaction (Castiglione, 1989)*, Cambridge Stud.

- Probab. Induc. Decis. Theory, Cambridge Univ. Press, Cambridge, pp. 275–284, MR1206717 (94c:90133).
1037. D. Mundici and T. Trombetta [1997], Optimal comparison strategies in Ulam’s searching game with two errors, *Theoret. Comput. Sci. (Math Games)* **182**, 217–232.
1038. H. J. R. Murray [1952], *A History of Board Games Other Than Chess*, Oxford University Press.
1039. B. Nadel [1990], Representation selection for constraint satisfaction: a case study using n -queens, *IEEE Expert* **5** issue 3, 16–23.
1040. T. Nakamura [2008], On counting liberties in capturing races of Go, in: *Games of No Chance III*, Proc. BIRS Workshop on Combinatorial Games, July, 2005, Banff, Alberta, Canada, MSRI Publ. (M. H. Albert and R. J. Nowakowski, eds.), Cambridge University Press, Cambridge.
1041. T. Nakamura and E. Berlekamp [2003], Analysis of composite corridors, *Proc. Intern. Conference on Computers and Games CG’2002, Edmonton, Alberta, Canada, July 2002*, (Y. Björnsson, M. Müller and J. Schaeffer, eds.), Vol. LNCS 288, Lecture Notes in Computer Science, Springer, pp. 213–229.
1042. B. Nalebuff [1989], The other person’s envelope is always greener, *J. Economic Perspectives* **3** issue 1, 171–181.
1043. A. Napier [1970], A new game in town, *Empire Mag.*, Denver Post, May 2.
1044. Z. Nedeв [2008], Universal sets and the vector game, *Integers, Electr. J of Combinat. Number Theory* **8**, #A45, 5 pp., **MR pending.
<http://www.integers-ejcnt.org/vol8.html>
1045. Z. Nedeв and S. Muthukrishnan [2008], The Magnus-Derek game, *Theoret. Comput. Sci.* **393**(1-3), 124–132, MR2397246.
1046. Z. Nedeв and A. Quas [2008], Balanced sets and the vector game, *Int. J. Number Theory* **4**, 339–347, MR2424326.
1047. A. Negro and M. Sereno [1992], Solution of Ulam’s problem on binary search with three lies, *J. Combin. Theory Ser. A* **59**, 149–154, MR1141331 (92h:05013).
1048. A. Negro and M. Sereno [1992], Ulam’s searching game with three lies, *Adv. in Appl. Math.* **13**, 404–428, MR1190120 (93i:90129).
1049. J. Nešetřil and E. Sopena [2001], On the oriented game chromatic number, *Electr. J. Combin.* **8**(2), #R14, 13 pp., Volume in honor of Aviezri S. Fraenkel, MR1853265 (2002h:05069).
<http://www.combinatorics.org/>
1050. J. Nešetřil and R. Thomas [1987], Well quasi ordering, long games and combinatorial study of undecidability, in: *Logic and Combinatorics, Contemp. Math.* (S. G. Simpson, ed.), Vol. 65, Amer. Math. Soc., Providence, RI, pp. 281–293.
1051. S. Neufeld and R. J. Nowakowski [1993], A vertex-to-vertex pursuit game played with disjoint sets of edges, in: *Finite and Infinite Combinatorics in*

- Sets and Logic* (N. W. Sauer et al., eds.), Kluwer, Dordrecht, pp. 299–312.
1052. S. Neufeld and R. J. Nowakowski [1998], A game of cops and robbers played on products of graphs, *Discrete Math.* **186**, 253–268.
1053. J. Nievergelt, F. Maeser, B. Mann, K. Roeseler, M. Schulze and C. Wirth [1999], CRASH! Mathematik und kombinatorisches Chaos prallen aufeinander, *Informatik Spektrum* **22**, 45–48, (German).
1054. G. Nivasch [2006], The Sprague-Grundy function of the game Euclid, *Discrete Math.* **306**(21), 2798–2800, MR2264378 (2007i:91039).
1055. G. Nivasch [2008], More on the Sprague-Grundy function for Wythoff’s game, in: *Games of No Chance III*, Proc. BIRS Workshop on Combinatorial Games, July, 2005, Banff, Alberta, Canada, MSRI Publ. (M. H. Albert and R. J. Nowakowski, eds.), Cambridge University Press, Cambridge.
1056. I. Niven [1988], Coding theory applied to a problem of Ulam, *Math. Mag.* **61**, 275–281.
1057. H. Noon and G. V. Brummelen [2006], The non-attacking queens game, *College Math. J.* **37**, 223–227.
1058. R. J. Nowakowski [1991], . . . , Welter’s game, Sylver coinage, dots-and-boxes, . . . , in: *Combinatorial Games*, Proc. Symp. Appl. Math. (R. K. Guy, ed.), Vol. 43, Amer. Math. Soc., Providence, RI, pp. 155–182.
1059. R. J. Nowakowski and P. Ottaway [2005], Vertex Deletion Games with Parity Rules, *Integers, Electr. J. of Combinat. Number Theory* **5**(2), #A15, 16 pp., MR2192093.
[http://www.integers-ejcnt.org/vol5\(2\).html](http://www.integers-ejcnt.org/vol5(2).html)
1060. R. J. Nowakowski and D. G. Poole [1996], Geography played on products of directed cycles, in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, pp. 329–337.
1061. R. J. Nowakowski and A. A. Siegel [2007], *Partizan geography on $K_n \times K_2$* , de Gruyter, pp. 389–401, Proc. Integers Conference, Carrollton, Georgia, October 27–30, 2005, in celebration of the 70th birthday of Ronald Graham. B. Landman, M. Nathanson, J. Nešetřil, R. Nowakowski, C. Pomerance eds., appeared also in *Integers, Electr. J. of Combinat. Number Theory* **7**(20), special volume in honor of Ron Graham, #A29, 14 pp., MR2337063.
[http://www.integers-ejcnt.org/vol7\(2\).html](http://www.integers-ejcnt.org/vol7(2).html)
1062. R. Nowakowski and P. Winkler [1983], Vertex-to-vertex pursuit in a graph, *Discrete Math.* **43**, 235–239.
1063. S. P. Nudelman [1995], The modular n -queens problem in higher dimensions, *Discrete Math.* **146**, 159–167.
1064. T. H. O’Beirne [1984], *Puzzles and Paradoxes*, Dover, New York, NY. (Appeared previously by Oxford University Press, London, 1965.).
1065. G. L. O’Brian [1978–79], The graph of positions in the game of SIM, *J.*

- Recr. Math.* **11**, 3–9.
1066. J. Olson [1985], A balancing strategy, *J. Combin. Theory Ser. A* **40**, 175–178.
1067. T. Ooya and J. Akiyama [2003], Impact of binary and Fibonacci expansions of numbers on winning strategies for Nim-like games, *Internat. J. Math. Ed. Sci. Tech.* **34**, 121–128, MR1958736.
1068. H. K. Orman [1996], Pentominoes: a first player win, in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, pp. 339–344.
1069. P. R. J. Östergård and W. D. Weakley [2001], Values of domination numbers of the queen’s graph, *Electr. J. Combin.* **8(1)**, #R29, 19 pp.
<http://www.combinatorics.org/>
1070. J. Pach [1992], On the game of Misery, *Studia Sci. Math. Hungar.* **27**, 355–360.
1071. E. W. Packel [1987], The algorithm designer versus nature: a game-theoretic approach to information-based complexity, *J. Complexity* **3**, 244–257.
1072. C. H. Papadimitriou [1985], Games against nature, *J. Comput. System Sci.* **31**, 288–301.
1073. C. H. Papadimitriou [1994], *Computational Complexity*, Addison-Wesley, Chapter 19: Polynomial Space.
1074. C. H. Papadimitriou, P. Raghavan, M. Sudan and H. Tamaki [1994], Motion planning on a graph (extended abstract), *Proc. 35-th Annual IEEE Symp. on Foundations of Computer Science*, Santa Fe, NM, pp. 511–520.
1075. A. Papaioannou [1982], A Hamiltonian game, *Ann. Discrete Math.* **13**, 171–178.
1076. T. Pappas [1994], *The Magic of Mathematics*, Wide World, San Carlos.
1077. D. Parlett [1999], *The Oxford History of Board Games*, Oxford University Press.
1078. T. D. Parsons [1978], Pursuit-evasion in a graph, in: *Theory and Applications of Graphs* (Y. Alavi and D. R. Lick, eds.), Springer-Verlag, pp. 426–441.
1079. T. D. Parsons [1978], The search number of a connected graph, *Proc. 9th South-Eastern Conf. on Combinatorics, Graph Theory, and Computing*, pp. 549–554.
1080. O. Patashnik [1980], Qubic: $4 \times 4 \times 4$ Tic-Tac-Toe, *Math. Mag.* **53**, 202–216.
1081. J. L. Paul [1978], Tic-Tac-Toe in n dimensions, *Math. Mag.* **51**, 45–49.
1082. W. J. Paul, E. J. Prauss and R. Reischuk [1980], On alternation, *Acta Informatica* **14**, 243–255.
1083. W. J. Paul and R. Reischuk [1980], On alternation, II, *Acta Informatica* **14**, 391–403.
1084. W. J. Paul, R. E. Tarjan and J. R. Celoni [1976/77], Space bounds for a game on graphs, *Math. Systems Theory* **10**, 239–251, correction *ibid.*

- 11** (1977/78), 85. First appeared in Eighth Annual ACM Symposium on Theory of Computing (Hershey, Pa., 1976), Assoc. Comput. Mach., New York, NY, 1976, pp 149–160.
1085. M. M. Paulhus [1999], Beggar my neighbour, *Amer. Math. Monthly* **106**, 162–165.
1086. J. Pearl [1980], Asymptotic properties of minimax trees and game-searching procedures, *Artificial Intelligence* **14**, 113–138.
1087. J. Pearl [1984], *Heuristics: Intelligent Search Strategies for Computer Problem Solving*, Addison-Wesley, Reading, MA.
1088. A. Pedrotti [2002], Playing by searching: two strategies against a linearly bounded liar, *Theoret. Comput. Sci.* **282**, 285–302, special "Fun With Algorithms" issue, MR1909053 (2003m:91010).
1089. A. Pekeč [1996], A winning strategy for the Ramsey graph game, *Combin. Probab. Comput.* **5**, 267–276.
1090. A. Pelc [1986], Lie patterns in search procedures, *Theoret. Comput. Sci.* **47**, 61–69, MR871464 (88b:68020).
1091. A. Pelc [1987], Solution of Ulam's problem on searching with a lie, *J. Combin. Theory* (Ser. A) **44**, 129–140.
1092. A. Pelc [1988], Prefix search with a lie, *J. Combin. Theory* (Ser. A) **48**, 165–173.
1093. A. Pelc [1989], Detecting errors in searching games, *J. Combin. Theory* (Ser. A) **51**, 43–54.
1094. A. Pelc [2002], Searching games with errors—fifty years of coping with liars, *Theoret. Comput. Sci. (Math Games)* **270**, 71–109, MR1871067 (2002h:68040).
1095. D. H. Pelletier [1987], Merlin's magic square, *Amer. Math. Monthly* **94**, 143–150.
1096. H. Peng and C. H. Yan [1998], Balancing game with a buffer, *Adv. in Appl. Math.* **21**, 193–204.
1097. Y. Peres, O. Schramm, S. Sheffield and D. B. Wilson [2007], Random-turn Hex and other selection games, *Amer. Math. Monthly* **114**, 373–387.
1098. G. L. Peterson [1979], Press-Ups is Pspace-complete, Dept. of Computer Science, The University of Rochester, Rochester New York, 14627, unpublished manuscript.
1099. G. L. Peterson and J. H. Reif [1979], Multiple-person alternation, *Proc. 20th Ann. Symp. Foundations Computer Science* (San Juan, Puerto Rico, Oct. 1979), IEEE Computer Soc., Long Beach, CA, pp. 348–363.
1100. C. Pickover [2002], The fractal society, in: *Puzzler's Tribute: a Feast for the Mind*, pp. 377–381, honoring Martin Gardner (D. Wolfe and T. Rodgers, eds.), A K Peters, Natick, MA.
1101. O. Pikhurko [2003], Breaking symmetry on complete bipartite graphs of odd size, *Integers, Electr. J. of Combinat. Number Theory* **3**, #G4, 9 pp., Comb. Games Sect., MR2036488 (2004k:05117).
<http://www.integers-ejcnt.org/vol3.html>

1102. N. Pippenger [1980], Pebbling, *Proc. 5th IBM Symp. Math. Foundations of Computer Science*, IBM, Japan, 19 pp.
1103. N. Pippenger [1982], Advances in pebbling, *Proc. 9th Internat. Colloq. Automata, Languages and Programming*, Lecture Notes in Computer Science (M. Nielson and E. M. Schmidt, eds.), Vol. 140, Springer Verlag, New York, NY, pp. 407–417.
1104. T. E. Plambeck [1992], Daisies, Kayles, and the Sibert–Conway decomposition in misère octal games, *Theoret. Comput. Sci. (Math Games)* **96**, 361–388, MR1160551 (93c:90108).
1105. T. E. Plambeck [2005], Taming the wild in impartial combinatorial games, *Integers, Electr. J. of Combinat. Number Theory* **5**, #G5(1), 36 pp., Comb. Games Sect., MR2192253 (2006g:91044).
<http://www.integers-ejcnt.org/vol5.html>
1106. T. Plambeck [2008], Advances in losing, in: *Games of No Chance III*, Proc. BIRS Workshop on Combinatorial Games, July, 2005, Banff, Alberta, Canada, MSRI Publ. (M. H. Albert and R. J. Nowakowski, eds.), Cambridge University Press, Cambridge.
1107. V. Pless [1991], Games and codes, in: *Combinatorial Games*, Proc. Symp. Appl. Math. (R. K. Guy, ed.), Vol. 43, Amer. Math. Soc., Providence, RI, pp. 101–110.
1108. A. Pluhár [2002], The accelerated k -in-a-row game, *Theoret. Comput. Sci. (Math Games)* **270**, 865–875, MR1871100 (2002i:05017).
1109. R. Polizzi and F. Schaefer [1991], *Spin Again*, Chronicle Books.
1110. G. Pólya [1921], *Über die “doppelt-periodischen” Lösungen des n -Damens-Problems*, in: *W. Ahrens, Mathematische Unterhaltungen und Spiele*, Vol. 1, B.G. Teubner, Leipzig, 1918, pp. 364–374, also appeared in vol. IV of Pólya’s Collected Works, MIT Press, Cambridge, London, 1984 (G.-C Rota ed.), pp. 237–247.
1111. D. Poole [1992], The bottleneck towers of Hanoi problem, *J. Recr. Math.* **24**, 203–207.
1112. D. G. Poole [1994], The towers and triangles of Professor Claus (or, Pascal knows Hanoi), *Math. Mag.* **67**, 323–344.
1113. O. Pretzel [2002], Characterization of simple edge-firing games, *Inform. Process. Lett.* **84**, 235–236, MR1931725 (2003i:05128).
1114. D. Pritchard [1994], *The Family Book of Games*, Sceptre Books, Time-Life Books, Brockhampton Press.
1115. J. Propp [1994], A new take-away game, in: *The Lighter Side of Mathematics*, Proc. E. Strens Memorial Conf. on Recr. Math. and its History, Calgary, 1986, Spectrum Series (R. K. Guy and R. E. Woodrow, eds.), Math. Assoc. of America, Washington, DC, pp. 212–221.
1116. J. Propp [1996], About David Richman (Prologue to the paper by J. D. Lazarus et al.), in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, p.

- 437.
1117. J. Propp [2000], Three-player impartial games, *Theoret. Comput. Sci. (Math Games)* **233**, 263–278, MR1732189 (2001i:91040).
1118. J. Propp and D. Ullman [1992], On the cookie game, *Internat. J. Game Theory* **20**, 313–324, MR1163932 (93b:90131).
1119. P. Pudlák and J. Sgall [1997], An upper bound for a communication game related to time-space tradeoffs, in: *The Mathematics of Paul Erdős* (R. L. Graham and J. Nešetřil, eds.), Vol. I, Springer, Berlin, pp. 393–399.
1120. A. Pultr and F. L. Morris [1984], Prohibiting repetitions makes playing games substantially harder, *Internat. J. Game Theory* **13**, 27–40.
1121. A. Pultr and J. Úlehla [1985], Remarks on strategies in combinatorial games, *Discrete Appl. Math.* **12**, 165–173.
1122. A. Quilliot [1983], Discrete pursuit games, *Congr. Numer.* **38**, 227–241, Proc. 13th Southeastern Conf. on Combinatorics, Graph Theory and Computing, Boca Raton, FL, 1982.
1123. A. Quilliot [1985], A short note about pursuit games played on a graph with a given genus, *J. Combin. Theory (Ser. B)* **38**, 89–92.
1124. M. O. Rabin [1957], Effective computability of winning strategies, *Ann. of Math. Stud. (Contributions to the Theory of Games)*, Princeton **3**(39), 147–157.
1125. M. O. Rabin [1976], Probabilistic algorithms, *Proc. Symp. on New Directions and Recent Results in Algorithms and Complexity* (J. F. Traub, ed.), Carnegie-Mellon, Academic Press, New York, NY, pp. 21–39.
1126. D. Ratner and M. Warmuth [1990], The $(n^2 - 1)$ -puzzle and related relocation problems, *J. Symbolic Comput.* **10**, 111–137.
1127. B. Ravikumar [2004], Peg-solitaire, string rewriting systems and finite automata, *Theoret. Comput. Sci.* **321**, 383–394, Appeared first under same title in Proc. 8th Internat. Symp. Algorithms and Computation, Singapore, 233–242, 1997, MR 2005e:68119, MR2076153 (2005e:68119).
1128. B. Ravikumar and K. B. Lakshmanan [1982], Coping with known patterns of lies in a search game, in: *Foundations of software technology and theoretical computer science (Bangalore, 1982)*, Nat. Centre Software Develop. Comput. Tech., Bombay, pp. 363–377, MR678245 (83m:68114).
1129. B. Ravikumar and K. B. Lakshmanan [1984], Coping with known patterns of lies in a search game, *Theoret. Comput. Sci.* **33**, 85–94.
1130. N. Reading [1999], Nim-regularity of graphs, *Electr. J. Combinatorics* **6**, #R11, 8 pp.
<http://www.combinatorics.org/>
1131. M. Reichling [1987], A simplified solution of the N queens' problem, *Inform. Process. Lett.* **25**, 253–255.
1132. J. H. Reif [1984], The complexity of two-player games of incomplete information, *J. Comput. System Sci.* **29**, 274–301, earlier draft entitled Universal games of incomplete information, appeared in Proc. 11th Ann. ACM Symp. Theory of Computing (Atlanta, GA, 1979), Assoc. Comput.

- Mach., New York, NY, pp. 288–308.
1133. S. Reisch [1980], Gobang ist PSPACE-vollständig, *Acta Informatica* **13**, 59–66.
1134. S. Reisch [1981], Hex ist PSPACE-vollständig, *Acta Informatica* **15**, 167–191.
1135. M. Reiss [1857], Beiträge zur Theorie des Solitär-Spiels, *Crelles Journal* **54**, 344–379.
1136. P. Rendell [2001], Turing universality of the game of life, in: *Collision-Based Computing*, Springer Verlag, London, UK, pp. 513 – 539.
1137. C. S. ReVelle and K. E. Rosing [2000], Defendens imperium romanum [Defending the Roman Empire]: a classical problem in military strategy, *Amer. Math. Monthly* **107**, 585–594.
1138. M. Richardson [1953], Extension theorems for solutions of irreflexive relations, *Proc. Nat. Acad. Sci. USA* **39**, 649.
1139. M. Richardson [1953], Solutions of irreflexive relations, *Ann. of Math.* **58**, 573–590.
1140. R. D. Ringeisen [1974], Isolation, a game on a graph, *Math. Mag.* **47**, 132–138.
1141. R. L. Rivest, A. R. Meyer, D. J. Kleitman, K. Winklman and J. Spencer [1980], Coping with errors in binary search procedures, *J. Comput. System Sci.* **20**, 396–404.
1142. I. Rivin, I. Vardi and P. Zimmermann [1994], The n -queens problem, *Amer. Math. Monthly* **101**, 629–639.
1143. I. Rivin and R. Zabih [1992], A dynamic programming solution to the N -queens problem, *Inform. Process. Lett.* **41**, 253–256.
1144. E. Robertson and I. Munro [1978], NP-completeness, puzzles and games, *Utilitas Math.* **13**, 99–116.
1145. A. G. Robinson and A. J. Goldman [1989], The set coincidence game: complexity, attainability, and symmetric strategies, *J. Comput. System Sci.* **39**, 376–387.
1146. A. G. Robinson and A. J. Goldman [1990], On Ringeisen’s isolation game, *Discrete Math.* **80**, 297–312.
1147. A. G. Robinson and A. J. Goldman [1990], On the set coincidence game, *Discrete Math.* **84**, 261–283.
1148. A. G. Robinson and A. J. Goldman [1991], On Ringeisen’s isolation game, II, *Discrete Math.* **90**, 153–167.
1149. A. G. Robinson and A. J. Goldman [1993], The isolation game for regular graphs, *Discrete Math.* **112**, 173–184.
1150. J. M. Robson [1983], The complexity of Go, *Proc. Information Processing* 83 (R. E. A. Mason, ed.), Elsevier, Amsterdam, pp. 413–417.
1151. J. M. Robson [1984], Combinatorial games with exponential space complete decision problems, *Proc. 11th Symp. Math. Foundations of Computer Science*, Praha, Czechoslovakia, Lecture Notes in Computer Science (M. P. Chytil and V. Koubek, eds.), Vol. 176, Springer, Berlin, pp.

- 498–506.
1152. J. M. Robson [1984], N by N checkers is Exptime complete, *SIAM J. Comput.* **13**, 252–267.
1153. J. M. Robson [1985], Alternation with restrictions on looping, *Inform. and Control* **67**, 2–11.
1154. E. Y. Rodin [1989], A pursuit-evasion bibliography – version 2, *Comput. Math. Appl.* **18**, 245–320.
1155. J. S. Rohl [1983], A faster lexicographical n -queens algorithm, *Inform. Process. Lett.* **17**, 231–233.
1156. J. S. Rohl and T. D. Gedeon [1986], The Reve’s puzzle, *Comput. J.* **29**, 187–188, Corrigendum, *Ibid.* **31** (1988), 190.
1157. I. Roizen and J. Pearl [1983], A minimax algorithm better than alpha-beta? Yes and no, *Artificial Intelligence* **21**, 199–220.
1158. I. Rosenholtz [1993], Solving some variations on a variant of Tic-Tac-Toe using invariant subsets, *J. Recr. Math.* **25**, 128–135.
1159. A. S. C. Ross [1953], The name of the game of Nim, Note 2334, *Math. Gaz.* **37**, 119–120.
1160. A. E. Roth [1978], A note concerning asymmetric games on graphs, *Naval Res. Logistics* **25**, 365–367.
1161. A. E. Roth [1978], Two-person games on graphs, *J. Combin. Theory* (Ser. B) **24**, 238–241.
1162. T. Roth [1974], The tower of Brahma revisited, *J. Recr. Math.* **7**, 116–119.
1163. E. M. Rounds and S. S. Yau [1974], A winning strategy for SIM, *J. Recr. Math.* **7**, 193–202.
1164. W. L. Ruzzo [1980], Tree-size bounded alternation, *J. Comput. Systems Sci.* **21**, 218–235.
1165. S. Sackson [1969], *A Gamut of Games*, Random House.
1166. I. Safro and L. Segel [2003], Collective stochastic versions of playable games as metaphors for complex biosystems: team Connect Four, *Complexity* **8** issue 5, 46–55, MR2018947.
1167. M. Saks and A. Wigderson [1986], Probabilistic Boolean decision trees and the complexity of evaluating game trees, *Proc. 27th Ann. Symp. Foundations of Computer Science* (Toronto, Ont., Canada), IEEE Computer Soc., Washington, DC, pp. 29–38.
1168. D. Samet, I. Samet and D. Schmeidler [2004], One observation behind two-envelope puzzles, *Amer. Math. Monthly* **111**, 347–351, MR2057189 (2005e:00005).
1169. A. Sapir [2004], The tower of Hanoi with forbidden moves, *Comput. J.* **47**, 20–24.
1170. U. K. Sarkar [2000], On the design of a constructive algorithm to solve the multi-peg towers of Hanoi problem, *Theoret. Comput. Sci. (Math Games)* **237**, 407–421, MR1756218 (2001k:05025).
1171. M. Sato [1972], Grundy functions and linear games, *Publ. Res. Inst. Math. Sciences*, Kyoto Univ. **7**, 645–658.

1172. F. Scarioni and H. G. Speranza [1984], A probabilistic analysis of an error-correcting algorithm for the Towers of Hanoi puzzle, *Inform. Process. Lett.* **18**, 99–103.
1173. W. L. Schaaf [1955, 1970, 1973, 1978], *A Bibliography of Recreational Mathematics*, Vol. I – IV, Nat'l. Council of Teachers of Mathematics, Reston, VA.
1174. T. J. Schaefer [1976], Complexity of decision problems based on finite two-person perfect information games, *Proc. 8th Ann. ACM Symp. Theory of Computing* (Hershey, PA, 1976), Assoc. Comput. Mach., New York, NY, pp. 41–49.
1175. T. J. Schaefer [1978], On the complexity of some two-person perfect-information games, *J. Comput. System Sci.* **16**, 185–225.
1176. J. Schaeffer, N. Burch, Y. Björnsson, A. Kishimoto, M. Müller, R. Lake, P. Lu and S. Sutphen [2007], Checkers is solved, *Science* **317**(5844), 1518–1522, MR2348441.
1177. J. Schaeffer and R. Lake [1996], Solving the game of checkers, in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, pp. 119–133.
<http://www.msri.org/publications/books/Book29/files/schaeffer.ps.gz>
1178. M. Scheepers [1994], Variations on a game of Gale (II): Markov strategies, *Theoret. Comput. Sci. (Math Games)* **129**, 385–396.
1179. D. Schleicher and M. Stoll [2006], An introduction to Conway's games and numbers, *Mosc. Math. J.* **6**(2), 359–388, 407, MR2270619 (2007m:91033).
1180. G. Schmidt and T. Ströhlein [1985], On kernels of graphs and solutions of games: a synopsis based on relations and fixpoints, *SIAM J. Alg. Disc. Math.* **6**, 54–65.
1181. R. W. Schmittberger [1992], *New Rules for Classic Games*, Wiley, New York.
1182. G. Schrage [1985], A two-dimensional generalization of Grundy's game, *Fibonacci Quart.* **23**, 325–329.
1183. H. Schubert [1953], *Mathematische Mussestunden*, De Gruyter, Berlin, neubearbeitet von F. Fitting, Elfte Auflage.
1184. F. Schuh [1952], Spel van delers (The game of divisors), *Nieuw Tijdschrift voor Wiskunde* **39**, 299–304.
1185. F. Schuh [1968], *The Master Book of Mathematical Recreations*, Dover, New York, NY, translated by F. Göbel, edited by T. H. O'Beirne.
1186. B. L. Schwartz [1971], Some extensions of Nim, *Math. Mag.* **44**, 252–257.
1187. B. L. Schwartz, ed. [1979], *Mathematical solitaires and games*, Baywood Publishing Company, Farmingdale, NY, pp. 37–81.
1188. A. J. Schwenk [1970], Take-away games, *Fibonacci Quart.* **8**, 225–234.
1189. A. J. Schwenk [1991], Which rectangular chessboards have a knight's tour?, *Math. Mag.* **64**, 325–332, MR1141559 (93c:05081).

1190. A. J. Schwenk [2000], What is the correct way to seed a knockout tournament?, *Amer. Math. Monthly* **107**, 140–150.
1191. R. S. Scorer, P. M. Grundy and C. A. B. Smith [1944], Some binary games, *Math. Gaz.* **280**, 96–103.
1192. M. Sereno [1998], Binary search with errors and variable cost queries, *Inform. Process. Lett.* **68**, 261–270, MR1664741 (99i:68026).
1193. Á. Seress [1992], On Hajnal’s triangle-free game, *Graphs Combin.* **8**, 75–79.
1194. Á. Seress and T. Szabó [1999], On Erdős’ Eulerian trail game, *Graphs Combin.* **15**, 233–237.
1195. J. Sgall [2001], Solution of David Gale’s lion and man problem, *Theoret. Comput. Sci. (Math Games)* **259**, 663–670, MR1832815 (2002b:91025).
1196. L. E. Shader [1978], Another strategy for SIM, *Math. Mag.* **51**, 60–64.
1197. L. E. Shader and M. L. Cook [1980], A winning strategy for the second player in the game Tri-tip, *Proc. Tenth S.E. Conference on Computing, Combinatorics and Graph Theory*, Utilitas, Winnipeg.
1198. A. S. Shaki [1979], Algebraic solutions of partizan games with cycles, *Math. Proc. Camb. Phil. Soc.* **85**, 227–246.
1199. A. Shamir, R. L. Rivest and L. M. Adleman [1981], Mental Poker, in: *The Mathematical Gardner* (D. A. Klarner, ed.), Wadsworth Internat., Belmont, CA, pp. 37–43.
1200. A. Shankar and M. Sridharan [2005], New temperatures in Domineering, *Integers, Electr. J. of Combinat. Number Theory* **5**, #G04, 13 pp., Comb. Games Sect., MR2139167 (2006c:91036).
<http://www.integers-ejcnt.org/vol5.html>
1201. C. E. Shannon [1950], Programming a computer for playing chess, *Philos. Mag. (Ser. 7)* **41**, 256–275, MR0034095 (11,543f).
1202. K. Shelton [2007], *The game of take turn*, de Gruyter, pp. 413–430, Proc. Integers Conference, Carrollton, Georgia, October 27–30, 2005, in celebration of the 70th birthday of Ronald Graham. B. Landman, M. Nathanson, J. Nešetřil, R. Nowakowski, C. Pomerance eds., appeared also in *Integers, Electr. J. of Combinat. Number Theory* **7(20)**, special volume in honor of Ron Graham, #A31, 18 pp., MR2337065.
[http://www.integers-ejcnt.org/vol7\(2\).html](http://www.integers-ejcnt.org/vol7(2).html)
1203. A. Shen [2000], Lights out, *Math. Intelligencer* **22** issue 3, 20–21.
1204. R. Sheppard and J. Wilkinson [1995], *Strategy Games: A Collection Of 50 Games & Puzzles To Stimulate Mathematical Thinking*, Parkwest Publications.
1205. G. J. Sherman [1978], A child’s game with permutations, *Math. Mag.* **51**, 67–68.
1206. Z. Shi, W. Goddard, S. T. Hedetniemi, K. Kennedy, R. Laskar and A. McRae [2005], An algorithm for partial Grundy numbers on trees, *Discrete Math.* **304**, 108–116.

1207. W. L. Sibert and J. H. Conway [1992], Mathematical Kayles, *Internat. J. Game Theory* **20**, 237–246, MR1146325.
1208. G. Sicherman [2002], Theory and practice of Sylver coinage, *Integers, Electr. J. of Combinat. Number Theory* **2**, #G2, 8 pp., Comb. Games Sect., MR1934618 (2003h:05026).
<http://www.integers-ejcnt.org/vol2.html>
1209. N. Sieben [2004], Snaky is a 41-dimensional winner, *Integers, Electr. J. of Combinat. Number Theory* **4**, #G5, 4 pp., Comb. Games Sect., MR2116011.
<http://www.integers-ejcnt.org/vol4.html>
1210. N. Sieben and E. Deabay [2005], Polyomino weak achievement games on 3-dimensional rectangular boards, *Discrete Math.* **290**, 61–78, MR2117357 (2005h:05044).
1211. A. N. Siegel [2000], Combinatorial Game Suite, a software tool for investigating games.
<http://cgsuite.sourceforge.net/>
1212. A. N. Siegel [2006], Reduced canonical forms of stoppers, *Electron. J. Combin.* **13**(1), #R57, 14 pp., MR2240763 (2007b:91030).
<http://www.combinatorics.org/>
1213. A. N. Siegel [2008], Backsliding Toads and Frogs, in: *Games of No Chance III*, Proc. BIRS Workshop on Combinatorial Games, July, 2005, Banff, Alberta, Canada, MSRI Publ. (M. H. Albert and R. J. Nowakowski, eds.), Cambridge University Press, Cambridge.
1214. A. N. Siegel [2008], Coping with cycles, in: *Games of No Chance III*, Proc. BIRS Workshop on Combinatorial Games, July, 2005, Banff, Alberta, Canada, MSRI Publ. (M. H. Albert and R. J. Nowakowski, eds.), Cambridge University Press, Cambridge.
1215. A. N. Siegel [2008], Loopy games, in: *Games of No Chance III*, Proc. BIRS Workshop on Combinatorial Games, July, 2005, Banff, Alberta, Canada, MSRI Publ. (M. H. Albert and R. J. Nowakowski, eds.), Cambridge University Press, Cambridge.
1216. R. Silber [1976], A Fibonacci property of Wythoff pairs, *Fibonacci Quart.* **14**, 380–384.
1217. R. Silber [1977], Wythoff's Nim and Fibonacci representations, *Fibonacci Quart.* **15**, 85–88.
1218. J.-N. O. Silva [1993], Some game bounds depending on birthdays, *Portugaliae Math.* **50**, 353–358.
1219. R. Silver [1967], The group of automorphisms of the game of 3-dimensional ticktacktoe, *Amer. Math. Monthly* **74**, 247–254.
1220. D. L. Silverman [1971], *Your Move*, McGraw-Hill.
1221. G. J. Simmons [1969], The game of SIM, *J. Recr. Math.* **2**, 66.
1222. D. Singmaster [1981], Almost all games are first person games, *Eureka* **41**, 33–37.
1223. D. Singmaster [1982], Almost all partizan games are first person and

- almost all impartial games are maximal, *J. Combin. Inform. System Sci.* **7**, 270–274.
1224. D. Singmaster [1999], Some diophantine recreations, in: *The Mathemagician and Pied Puzzler*, honoring Martin Gardner; E. Berlekamp and T. Rodgers, eds., A K Peters, Natick, MA, pp. 219–235.
1225. W. Slany [2001], The complexity of graph Ramsey games, *Proc. Intern. Conference on Computers and Games CG'2000* (T. Marsland and I. Frank, eds.), Vol. 2063, Hamamatsu, Japan, Oct. 2000, Lecture Notes in Computer Science, Springer, pp. 186–203, MR1909610.
1226. W. Slany [2002], Endgame problems of Sim-like graph Ramsey avoidance games are PSPACE-complete, *Theoret. Comput. Sci. (Math Games)* **289**, 829–843, MR1933803 (2003h:05177).
1227. C. A. B. Smith [1966], Graphs and composite games, *J. Combin. Theory* **1**, 51–81, reprinted in slightly modified form in: *A Seminar on Graph Theory* (F. Harary, ed.), Holt, Rinehart and Winston, New York, NY, 1967, pp. 86–111.
1228. C. A. B. Smith [1968], Compound games with counters, *J. Recr. Math.* **1**, 67–77.
1229. C. A. B. Smith [1971], Simple game theory and its applications, *Bull. Inst. Math. Appl.* **7**, 352–357.
1230. D. E. Smith and C. C. Eaton [1911], Rithmomachia, the great medieval number game, *Amer. Math. Monthly* **18**, 73–80.
1231. F. Smith and P. Stănică [2002], Comply/constrain games or games with a Muller twist, *Integers, Electr. J. of Combinat. Number Theory* **2**, #G3, 10 pp., Comb. Games Sect., MR1945951 (2003i:91029).
<http://www.integers-ejcnt.org/vol2.html>
1232. R. Smullyan [2005], Gödelian puzzles, in: *Tribute to a Mathematician*, honoring Martin Gardner (B. Cipra, E. D. Demaine, M. L. Demaine and T. Rodgers, eds.), A K Peters, Wellesley, MA, pp. 49–54.
1233. R. G. Snatzke [2002], Exhaustive search in Amazons, in: *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 2000, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 42, Cambridge University Press, Cambridge, pp. 261–278, MR1973017.
1234. R. Sosic and J. Gu [1990], A polynomial time algorithm for the n -queens problem, *SIGART* **1** issue 3, 7–11.
1235. J. Spencer [1977], Balancing games, *J. Combin. Theory (Ser. B)* **23**, 68–74.
1236. J. Spencer [1984], Guess a number with lying, *Math. Mag.* **57**, 105–108.
1237. J. Spencer [1986], Balancing vectors in the max norm, *Combinatorica* **6**, 55–65.
1238. J. Spencer [1991], Threshold spectra via the Ehrenfeucht game, *Discrete Appl. Math.* **30**, 235–252.
1239. J. Spencer [1992], Ulam's searching game with a fixed number of lies, *Theoret. Comput. Sci. (Math Games)* **95**, 307–321.

1240. J. Spencer [1994], Randomization, derandomization and antirandomization: three games, *Theoret. Comput. Sci. (Math Games)* **131**, 415–429.
1241. W. L. Spight [2001], Extended thermography for multile kos in go, *Theoret. Comput. Sci.* **252**, 23–43, special "Computers and Games" issue; first version appeared in Proc. 1st Intern. Conf. on Computer Games CG'98, Tsukuba, Japan, Nov. 1998, *Lecture Notes in Computer Science*, Vol. 1558, Springer, pp. 232–251, 1999., MR1806224 (2001k:91041).
1242. W. L. Spight [2002], Go thermography: the 4/2/98 Jiang-Rui endgame, in: *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 2000, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 42, Cambridge University Press, Cambridge, pp. 89–105, MR1973007 (2004d:91050).
1243. E. L. Spitznagel, Jr. [1967], A new look at the fifteen puzzle, *Math. Mag.* **40**, 171–174.
1244. E. L. Spitznagel, Jr. [1973], Properties of a game based on Euclid's algorithm, *Math. Mag.* **46**, 87–92.
1245. R. Sprague [1935–36], Über mathematische Kampfspiele, *Tôhoku Math. J.* **41**, 438–444.
1246. R. Sprague [1937], Über zwei Abarten von Nim, *Tôhoku Math. J.* **43**, 351–354.
1247. R. Sprague [1947], Bemerkungen über eine spezielle Abelsche Gruppe, *Math. Z.* **51**, 82–84.
1248. R. Sprague [1961], *Unterhaltsame Mathematik*, Vieweg and Sohn, Braunschweig, Paperback reprint, translation by T. H. O'Beirne: *Recreation in Mathematics*, Blackie, 1963.
1249. R. G. Stanton [2004], Some design theory games, *Bull. Inst. Combin. Appl.* **41**, 61–63.
1250. H. Steinhaus [1960], Definitions for a theory of games and pursuit, *Naval Res. Logistics* **7**, 105–108.
1251. V. N. Stepanenko [1975], Grundy games under conditions of semidefiniteness, *Cybernetics* **11**, 167–172 (trans. of *Kibernetika* **11** (1975) 145–149).
1252. B. M. Stewart [1939], Problem 3918 (k -peg tower of Hanoi), *Amer. Math. Monthly* **46**, 363, solution by J. S. Frame, *ibid.* **48** (1941) 216–217; by the proposer, *ibid.* 217–219.
1253. I. Stewart [1991], Concentration: a winning strategy, *Sci. Amer.* **265**, 167–172, October issue.
1254. I. Stewart [2000], Hex marks the spot, *Sci. Amer.* **283**, 100–103, September issue.
1255. F. Stewart [2007], The sequential join of combinatorial games, *Integers, Electr. J. of Combinat. Number Theory* **7**, #G03, 10 pp., MR2299809. <http://www.integers-ejcnt.org/vol7.html>
1256. L. Stiller [1988], Massively parallel retrograde analysis, Tech. Rep. BU-CS TR88–014, Comp. Sci. Dept., Boston University.

1257. L. Stiller [1989], Parallel analysis of certain endgames, *Internat. Comp. Chess Assoc. J.* **12**, 55–64.
1258. L. Stiller [1991], Group graphs and computational symmetry on massively parallel architecture, *J. Supercomputing* **5**, 99–117.
1259. L. Stiller [1996], Multilinear algebra and chess endgames, in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, pp. 151–192.
1260. D. L. Stock [1989], Merlin’s magic square revisited, *Amer. Math. Monthly* **96**, 608–610.
1261. P. K. Stockmeyer [1994], Variations on the four-post Tower of Hanoi puzzle, *Congr. Numer.* **102**, 3–12, Proc. 25th Southeastern Internat. Conf. on Combinatorics, Graph Theory and Computing (Boca Raton, FL, 1994).
1262. P. K. Stockmeyer [1999], The average distance between nodes in the cyclic Tower of Hanoi digraph, *Combinatorics, Graph Theory, and Algorithms, Vol. I, II (Kalamazoo, MI, 1996)*, New Issues Press, Kalamazoo, MI, pp. 799–808.
1263. P. K. Stockmeyer [2005], The Tower of Hanoi: a bibliography, *Internet publication* 38 pp.
<http://www.cs.wm.edu/~pkstoc/hpapers.html>
1264. P. K. Stockmeyer, C. D. Bateman, J. W. Clark, C. R. Eyster, M. T. Harrison, N. A. Loehr, P. J. Rodriguez and J. R. S. III [1995], Exchanging disks in the tower of Hanoi, *Intern. J. Computer Math.* **59**, 37–47.
1265. L. J. Stockmeyer and A. K. Chandra [1979], Provably difficult combinatorial games, *SIAM J. Comput.* **8**, 151–174.
1266. K. B. Stolarsky [1976], Beatty sequences, continued fractions, and certain shift operators, *Canad. Math. Bull.* **19**, 473–482, MR0444558 (56 #2908).
1267. K. B. Stolarsky [1977], A set of generalized Fibonacci sequences such that each natural number belongs to exactly one, *Fibonacci Quart.* **15**, 224, MR0472674 (57 #12369).
1268. K. B. Stolarsky [1991], From Wythoff’s Nim to Chebyshev’s inequality, *Amer. Math. Monthly* **98**(10), 889–900, MR1137536 (93b:90132).
1269. J. A. Storer [1983], On the complexity of chess, *J. Comput. System Sci.* **27**, 77–100.
1270. W. E. Story [1879], Notes on the ”15” puzzle, *Amer. J. Math.* **2**, 399–404.
1271. P. D. Straffin, Jr. [1985], Three-person winner-take-all games with McCarthy’s revenge rule, *College J. Math.* **16**, 386–394.
1272. P. D. Straffin [1993], *Game Theory and Strategy*, New Mathematical Library, MAA, Washington, DC.
1273. P. D. Straffin, Jr. [1995], Position graphs for Pong Hau K’i and Mu Torere, *Math. Mag.* **68**, 382–386.
1274. T. Ströhlein and L. Zagler [1977], Analyzing games by Boolean matrix iteration, *Discrete Math.* **19**, 183–193.

1275. W. Stromquist [2007], Winning paths in N -by-infinity hex, *Integers, Electr. J. of Combinat. Number Theory* **7**, #G05, 3 pp., MR2299811.
<http://www.integers-ejcnt.org/vol7.html>
1276. W. Stromquist and D. Ullman [1993], Sequential compounds of combinatorial games, *Theoret. Comput. Sci. (Math Games)* **119**, 311–321.
1277. K. Sugihara and I. Suzuki [1989], Optimal algorithms for a pursuit-evasion problem in grids, *SIAM J. Disc. Math.* **2**, 126–143.
1278. X. Sun [2002], Improvements on Chomp, *Integers, Electr. J. of Combinat. Number Theory* **2**, #G1, 8 pp., Comb. Games Sect., MR1917957 (2003e:05015).
<http://www.integers-ejcnt.org/vol2.html>
1279. X. Sun [2005], Wythoff's sequence and N -heap Wythoff's conjectures, *Discrete Math.* **300**, 180–195, MR2170125.
1280. X. Sun and D. Zeilberger [2004], On Fraenkel's N -heap Wythoff's conjectures, *Ann. Comb.* **8**, 225–238, MR2079933 (2005e:91039).
1281. K. Sutner [1988], Additive automata on graphs, *Complex Systems* **2**, 649–661, MR987520 (90k:68127).
1282. K. Sutner [1988], On σ -automata, *Complex Systems* **2**, 1–28.
1283. K. Sutner [1989], Linear cellular automata and the Garden-of-Eden, *Math. Intelligencer* **11**, 49–53.
1284. K. Sutner [1990], The σ -game and cellular automata, *Amer. Math. Monthly* **97**, 24–34.
1285. K. Sutner [1995], On the computational complexity of finite cellular automata, *J. Comput. System Sci.* **50**, 87–97.
1286. K. Sutner [2001], Decomposition of additive cellular automata, *Complex Systems* **13**, 245–270, MR1916041 (2003e:37016).
1287. K. J. Swanepoel [2000], Balancing unit vectors, *J. Combin. Theory (Ser. A)* **89**, 105–112.
1288. M. Szegedy [1999], In how many steps the k peg version of the towers of Hanoi game can be solved?, in: *STACS 99, Trier, Lecture Notes in Computer Science*, Vol. 1563, Springer, Berlin, pp. 356–361.
1289. G. J. Székely and M. L. Rizzo [2007], The uncertainty principle of game theory, *Amer. Math. Monthly* **114**(8), 688–702, MR2354439.
1290. L. A. Székely [1984], On two concepts of discrepancy in a class of combinatorial games in: *Finite and infinite sets, Vol. I, II, Colloq. Math. Soc. János Bolyai*, 37, North-Holland, Amsterdam, pp. 679–683.
1291. J. L. Szwarcfiter and G. Chaty [1994], Enumerating the kernels of a directed graph with no odd circuits, *Inform. Process. Lett.* **51**, 149–153.
1292. A. Takahashi, S. Ueno and Y. Kajitani [1995], Mixed searching and proper-path-width, *Theoret. Comput. Sci. (Math Games)* **137**, 253–268.
1293. T. Takizawa [2002], An application of mathematical game theory to Go endgames: some width-two-entrance rooms with and without kos, in: *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games,

- July, 2000, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 42, Cambridge University Press, Cambridge, pp. 108–124, MR1973008.
1294. G. Tardos [1988], Polynomial bound for a chip firing game on graphs, *SIAM J. Disc. Math.* **1**, 397–398.
1295. M. Tarsi [1983], Optimal search on some game trees, *J. Assoc. Comput. Mach.* **30**, 389–396.
1296. R. Telgársky [1987], Topological games: on the 50th anniversary of the Banach-Mazur game, *Rocky Mountain J. Math.* **17**, 227–276.
1297. W. F. D. Theron and G. Geldenhuys [1998], Domination by queens on a square beehive, *Discrete Math.* **178**, 213–220.
1298. K. Thompson [1986], Retrograde analysis of certain endgames, *Internat. Comp. Chess Assoc. J.* **9**, 131–139.
1299. H. Tohyama and A. Adachi [2000], Complexity of path discovery problems, *Theoret. Comput. Sci. (Math Games)* **237**, 381–406.
1300. G. P. Tollisen and T. Lengyel [2000], Color switching games, *Ars Combin.* **56**, 223–234, MR1768618 (2001b:05094).
1301. I. Tomescu [1990], Almost all digraphs have a kernel, *Discrete Math.* **84**, 181–192.
1302. R. Tošić and S. Šćekić [1983], An analysis of some partizan graph games, *Proc. 4th Yugoslav Seminar on Graph Theory*, Novi Sad, pp. 311–319.
1303. S. P. Tung [1987], Computational complexities of Diophantine equations with parameters, *J. Algorithms* **8**, 324–336, MR905990 (88m:03063).
1304. A. M. Turing, M. A. Bates, B. V. Bowden and C. Strachey [1953], Digital computers applied to games, in: *Faster Than Thought* (B. V. Bowden, ed.), Pitman, London, pp. 286–310.
1305. R. Uehara and S. Iwata [1990], Generalized Hi-Q is NP-complete, *Trans. IEICE* **E73**, 270–273.
1306. J. Úlehla [1980], A complete analysis of von Neumann’s Hackendot, *Internat. J. Game Theory* **9**, 107–113.
1307. D. Ullman [1992], More on the four-numbers game, *Math. Mag.* **65**, 170–174.
1308. J. V. Uspensky [1927], On a problem arising out of the theory of a certain game, *Amer. Math. Monthly* **34**, 516–521.
1309. S. Vajda [1992], *Mathematical Games and How to Play Them*, Ellis Horwood Series in Mathematics and its Applications, Chichester, England.
1310. H. J. van den Herik and I. S. Herschberg [1985], The construction of an omniscient endgame database, *Internat. Comp. Chess Assoc. J.* **8**, 66–87.
1311. J. van den Heuvel [2001], Algorithmic aspects of a chip-firing game, *Combin. Probab. Comput.* **10**, 505–529, MR1869843 (2002h:05154).
1312. B. L. van der Waerden [1974], The game of rectangles, *Ann. Mat. Pura Appl.* **98**, 63–75, MR0351854 (50 #4342).
1313. J. van Leeuwen [1976], Having a Grundy-numbering is NP-complete, Report No. 207, Computer Science Dept., Pennsylvania State University, University Park, PA.

1314. A. J. van Zanten [1990], The complexity of an optimal algorithm for the generalized tower of Hanoi problem, *Intern. J. Comput. Math.* **36**, 1–8.
1315. A. J. van Zanten [1991], An iterative optimal algorithm for the generalized tower of Hanoi problem, *Intern. J. Comput. Math.* **39**, 163–168.
1316. I. Vardi [1991], *Computational Recreations in Mathematics*, Addison Wesley.
1317. L. P. Varvak [1968], A generalization of the concept of p -sum of graphs, *Dopovīdī Akad. Nauk Ukraїn. RSR Ser. A* **1968**, 965–968, MR0245468 (39 #6776).
1318. L. P. Varvak [1968], Games on the sum of graphs, *Cybernetics* **4**, 49–51 (trans. of *Kibernetika (Kiev)* **4** (1968) 63–66), MR0299238 (45 #8287).
1319. L. P. Varvak [1970], A certain generalization of the Grundy function, *Kibernetika (Kiev)* (5), 112–116, MR0295968 (45 #5029).
1320. L. P. Varvak [1971], Game properties of generalized p -sums of graphs, *Dopovīdī Akad. Nauk Ukraїn. RSR Ser. A* pp. 1059–1061, 1148, MR0307731 (46 #6851).
1321. L. P. Varvak [1973], A certain generalization of the nucleus of a graph, *Ukrainian Math. J.* **25**, 78–81, MR0323649 (48 #2005).
1322. J. Veerasamy and I. Page [1994], On the towers of Hanoi problem with multiple spare pegs, *Intern. J. Comput. Math.* **52**, 17–22.
1323. H. Venkateswaran and M. Tompa [1989], A new pebble game that characterizes parallel complexity classes, *SIAM J. Comput.* **18**, 533–549.
1324. D. Viaud [1987], Une stratégie générale pour jouer au Master-Mind, *RAIRO Recherche opérationnelle/Operations Research* **21**, 87–100.
1325. F. R. Villegas, L. Sadun and J. F. Voloch [2002], Blet: a mathematical puzzle, *Amer. Math. Monthly* **109**, 729–740.
1326. J. von Neumann [1928], Zur Theorie der Gesellschaftsspiele, *Math. Ann.* **100**, 295–320.
1327. J. von Neumann and O. Morgenstern [2004], *Theory of Games and Economic Behaviour*, Princeton University Press, Princeton, NJ, reprint of the 3rd 1980 edition; first edition appeared in 1944.
1328. R. G. Wahl [2005], The Butler University game, *Tribute to a Mathematician*, A K Peters, Wellesley, pp. 37–40, honoring Martin Gardner.
1329. J. Waldmann [2002], Rewrite games, *Rewriting Techniques and Applications, Copenhagen, 22-24 July 2002* (S. Tison, ed.), Vol. LNCS 2378, Lecture Notes in Computer Science, Springer, pp. 144–158.
1330. C. T. C. Wall [1955], Nim-arithmetic, *Eureka* no. 18 pp. 3–7.
1331. J. L. Walsh [1953], The name of the game of Nim, Letter to the Editor, *Math. Gaz.* **37**, 290.
1332. M. Walsh [2003], A note on the Grundy number, *Bull. Inst. Combin. Appl.* **38**, 23–26.
1333. T. R. Walsh [1982], The towers of Hanoi revisited: moving the rings by counting the moves, *Inform. Process. Lett.* **15**, 64–67.

1334. T. R. Walsh [1983], Iteration strikes back at the cyclic towers of Hanoi, *Inform. Process. Lett.* **16**, 91–93.
1335. W.-F. Wang [2006], Edge-partitions of graphs of nonnegative characteristic and their game coloring numbers, *Discrete Math.* **306**, 262–270.
1336. X. Wang and Y. Wu [2007], Minimum light number of lit-only σ -game on a tree, *Theoret. Comput. Sci.* **381**, 292–300, MR2347414.
1337. I. M. Wanless [1997], On the periodicity of graph games, *Australas. J. Combin.* **16**, 113–123, MR1477524 (98i:05159).
1338. I. M. Wanless [2001], Path achievement games, *Australas. J. Combin.* **23**, 9–18, MR1814595 (2002k:91050).
1339. R. H. Warren [1996], Disks on a chessboard, *Amer. Math. Monthly* **103**, 305–307.
1340. A. Washburn [1990], Deterministic graphical games, *J. Math. Anal. Appl.* **153**, 84–96.
1341. J. J. Watkins [1997], Knight’s tours on triangular honeycombs, *Congr. Numer.* **124**, 81–87, Proc. 28th Southeastern Internat. Conf. on Combinatorics, Graph Theory and Computing (Boca Raton, FL, 1997), MR1605097.
1342. J. J. Watkins [2000], Knight’s tours on cylinders and other surfaces, *Congr. Numer.* **143**, 117–127, Proc. 31st Southeastern Internat. Conf. on Combinatorics, Graph Theory and Computing (Boca Raton, FL, 2000), MR1817914 (2001k:05136).
1343. J. J. Watkins [2004], *Across the Board: The Mathematics of Chessboard Problems*, Princeton University Press, Princeton and Oxford, MR2041306 (2004m:00002).
1344. J. J. Watkins and R. L. Hoenigman [1997], Knight’s tours on a torus, *Math. Mag.* **70**, 175–184, MR1456114 (98i:00003).
1345. W. D. Weakley [1995], Domination in the queen’s graph, in: *Graph theory, Combinatorics, and Algorithms*, Vol. 2 (Kalamazoo, MI, 1992) (Y. Alavi and A. J. Schwenk, eds.), Wiley, New York, pp. 1223–1232.
1346. W. D. Weakley [2002], A lower bound for domination numbers of the queen’s graph, *J. Combin. Math. Combin. Comput.* **43**, 231–254.
1347. W. D. Weakley [2002], Upper bounds for domination numbers of the queen’s graph, *Discrete Math.* **242**, 229–243.
1348. W. A. Webb [1982], The length of the four-number game, *Fibonacci Quart.* **20**, 33–35, MR0660757 (84e:10017).
1349. C. P. Welter [1952], The advancing operation in a special abelian group, *Nederl. Akad. Wetensch. Proc. (Ser. A)* **55** = *Indag. Math.* **14**, 304–314.
1350. C. P. Welter [1954], The theory of a class of games on a sequence of squares, in terms of the advancing operation in a special group, *Nederl. Akad. Wetensch. Proc. (Ser. A)* **57** = *Indag. Math.* **16**, 194–200.
1351. J. West [1996], Champion-level play of domineering, in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994,

- Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, pp. 85–91.
1352. J. West [1996], Champion-level play of dots-and-boxes, in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, pp. 79–84, MR1427958.
1353. J. West [1996], New values for Top Entails, in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, pp. 345–350.
1354. M. J. Whinihan [1963], Fibonacci Nim, *Fibonacci Quart.* **1**(4), 9–13.
1355. R. Wilber [1988], White pebbles help, *J. Comput. System Sci.* **36**, 108–124.
1356. R. Wilfong [1991], Motion planning in the presence of movable obstacles. Algorithmic motion planning in robotics, *Ann. Math. Artificial Intelligence* **3**, 131–150.
1357. R. M. Wilson [1974], Graph puzzles, homotopy and the alternating group, *J. Combin. Theory* (Ser. B) **16**, 86–96.
1358. P. Winkler [2002], Games people don't play, in: *Puzzler's Tribute: a Feast for the Mind*, pp. 301–313, honoring Martin Gardner (D. Wolfe and T. Rodgers, eds.), A K Peters, Natick, MA, MR2034896 (2006c:00002).
1359. D. Wolfe [1993], Snakes in domineering games, *Theoret. Comput. Sci.* (Math Games) **119**, 323–329.
1360. D. Wolfe [1996], The gamesman's toolkit, in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, pp. 93–98.
<http://www.gustavus.edu/~wolfe/games/>
1361. D. Wolfe [2002], Go endgames are PSPACE-hard, in: *More Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 2000, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 42, Cambridge University Press, Cambridge, pp. 125–136, MR1973009 (2004b:91052).
1362. D. Wolfe [2008], on day n , in: *Games of No Chance III*, Proc. BIRS Workshop on Combinatorial Games, July, 2005, Banff, Alberta, Canada, MSRI Publ. (M. H. Albert and R. J. Nowakowski, eds.), Cambridge University Press, Cambridge.
1363. D. Wolfe and W. Fraser [2004], Counting the number of games, *Theoret. Comp. Sci.* **313**, 527–532, special issue of Dagstuhl Seminar “Algorithmic Combinatorial Game Theory”, Feb. 2002, MR2056944.
1364. D. Wood [1981], The towers of Brahma and Hanoi revisited, *J. Recr. Math.* **14**, 17–24.
1365. D. Wood [1983], Adjudicating a towers of Hanoi contest, *Intern. J. Comput. Math.* **14**, 199–207.
1366. J.-S. Wu and R.-J. Chen [1992], The towers of Hanoi problem with parallel

- moves, *Inform. Process. Lett.* **44**, 241–243.
1367. J.-S. Wu and R.-J. Chen [1993], The towers of Hanoi problem with cyclic parallel moves, *Inform. Process. Lett.* **46**, 1–6.
1368. J. Wu and X. Zhu [2006], Relaxed game chromatic number of outer planar graphs, *Ars Combin.* **81**, 359–367, MR2267825 (2007f:05067).
1369. J. Wu and X. Zhu [2008], Lower bounds for the game colouring number of partial k -trees and planar graphs, *Discrete Math.* **308**, 2637–2642, **MR pending.
1370. W. A. Wythoff [1907], A modification of the game of Nim, *Nieuw Arch. Wisk.* **7**, 199–202.
1371. A. M. Yaglom and I. M. Yaglom [1967], *Challenging Mathematical Problems with Elementary Solutions*, Vol. II, Holden-Day, San Francisco, translated by J. McCawley, Jr., revised and edited by B. Gordon.
1372. Y. Yamasaki [1978], Theory of division games, *Publ. Res. Inst. Math. Sciences, Kyoto Univ.* **14**, 337–358.
1373. Y. Yamasaki [1980], On misère Nim-type games, *J. Math. Soc. Japan* **32**, 461–475.
1374. Y. Yamasaki [1981], The projectivity of Y -games, *Publ. Res. Inst. Math. Sciences, Kyoto Univ.* **17**, 245–248.
1375. Y. Yamasaki [1981], Theory of Connexes I, *Publ. Res. Inst. Math. Sciences, Kyoto Univ.* **17**, 777–812.
1376. Y. Yamasaki [1985], Theory of connexes II, *Publ. Res. Inst. Math. Sciences, Kyoto Univ.* **21**, 403–409.
1377. Y. Yamasaki [1989], *Combinatorial Games: Back and Front*, Springer Verlag, Tokyo (in Japanese).
1378. Y. Yamasaki [1989], Shannon switching games without terminals II, *Graphs Combin.* **5**, 275–282.
1379. Y. Yamasaki [1991], A difficulty in particular Shannon-like games, *Discrete Appl. Math.* **30**, 87–90.
1380. Y. Yamasaki [1992], Shannon switching games without terminals III, *Graphs Combin.* **8**, 291–297.
1381. Y. Yamasaki [1993], Shannon-like games are difficult, *Discrete Math.* **111**, 481–483.
1382. Y. Yamasaki [1997], The arithmetic of reversed positional games, *Theoret. Comput. Sci. (Math Games)* **174**, 247–249, also in *Discrete Math.* **165/166** (1997) 639–641.
1383. J. Yang, S. Liao and M. Pawlak [2001], On a decomposition method for finding winning strategy in Hex game, in: *Proceedings ADCOG: Internat. Conf. Application and Development of Computer Games* (A. L. W. Sing, W. H. Man and W. Wai, eds.), City University of Honkong, pp. 96–111.
1384. L. J. Yedwab [1985], On playing well in a sum of games, M.Sc. Thesis, MIT, MIT/LCS/TR-348.
1385. Y. N. Yeh [1995], A remarkable endofunction involving compositions, *Stud. Appl. Math* **95**, 419–432.

1386. Y. Yesha [1978], Theory of annihilation games, Ph.D. Thesis, Weizmann Institute of Science, Rehovot, Israel.
1387. Y. K. Yu and R. B. Banerji [1982], Periodicity of Sprague–Grundy function in graphs with decomposable nodes, *Cybernetics and Systems: An Internat. J.* **13**, 299–310.
1388. S. Zachos [1988], Probabilistic quantifiers and games, *J. Comput. System Sci.* **36**, 433–451.
1389. M. Zaker [2005], Grundy chromatic number of the complement of bipartite graphs, *Australas. J. Combin.* **31**, 325–329, MR2113717 (2005h:05087).
1390. M. Zaker [2006], Results on the Grundy chromatic number of graphs, *Discrete Math.* **306**(23), 3166–3173, MR2273147.
1391. D. Zeilberger [2001], Three-rowed Chomp, *Adv. in Appl. Math.* **26**, 168–179, MR1808446 (2001k:91009).
1392. D. Zeilberger [2004], Chomp, recurrences and chaos(?), *J. Difference Equ. Appl.* **10**, 1281–1293, MR2100728 (2005g:39014).
1393. E. Zermelo [1913], Über eine Anwendung der Mengenlehre auf die Theorie des Schachspiels, *Proc. 5th Int. Cong. Math. Cambridge 1912*, Vol. II, Cambridge University Press, pp. 501–504.
1394. X. Zhu [1999], The game coloring number of planar graphs, *J. Combin. Theory (Ser. B)* **75**, 245–258, MR1676891 (99m:05064).
1395. X. Zhu [2000], The game coloring number of pseudo partial k -trees, *Discrete Math.* **215**, 245–262, MR1746462 (2000m:05102).
1396. X. Zhu [2008], Refined activation strategy for the marking game, *J. Combin. Theory Ser. B* **98**, 1–18, MR2368019.
1397. M. Zieve [1996], Take-away games, in: *Games of No Chance*, Proc. MSRI Workshop on Combinatorial Games, July, 1994, Berkeley, CA, MSRI Publ. (R. J. Nowakowski, ed.), Vol. 29, Cambridge University Press, Cambridge, pp. 351–361.
1398. U. Zwick and M. S. Paterson [1993], The memory game, *Theoret. Comput. Sci. (Math Games)* **110**, 169–196.
1399. U. Zwick and M. S. Paterson [1996], The complexity of mean payoff games on graphs, *Theoret. Comput. Sci. (Math Games)* **158**, 343–359.
1400. W. S. Zwicker [1987], Playing games with games: the hypergame paradox, *Amer. Math. Monthly* **94**, 507–514.