

List of Publications

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March 27, 2013

- [1] Günter M. Ziegler. On the poset of partitions of an integer. *Journal of Combinatorial Theory, Ser. A*, 42:215–222, 1986.
- [2] Günter M. Ziegler. *Algebraic Combinatorics of Hyperplane Arrangements*. PhD thesis, MIT, Cambridge, MA, 1987. <http://dspace.mit.edu/handle/1721.1/14854>.
- [3] Günter M. Ziegler. Branchings in rooted graphs and the diameter of greedoids. *Combinatorica*, 8:217–234, 1988.
- [4] Günter M. Ziegler. The face lattice of hyperplane arrangements. *Discrete Mathematics*, 73:233–238, 1988/89.
- [5] Günter M. Ziegler. Multiarrangements of hyperplanes and their freeness. In *Proc. International Conference “Singularities” (Iowa City 1986)*, volume 90 of *Contemporary Mathematics*, pages 345–358. Amer. Math. Soc., 1989.
- [6] Günter M. Ziegler. Combinatorial construction of logarithmic differential forms. *Advances in Mathematics*, 76:116–154, 1989.
- [7] Anders Björner, Paul H. Edelman, and Günter M. Ziegler. Hyperplane arrangements with a lattice of regions. *Discrete & Computational Geometry*, 5:263–288, 1990.
- [8] Günter M. Ziegler. Matroid representations and free arrangements. *Transactions of the American Mathematical Society*, 320:525–541, 1990.
- [9] Anders Björner and Günter M. Ziegler. Broken circuit complexes: factorizations and generalizations. *Journal of Combinatorial Theory, Ser. B*, 51:96–126, 1991.
- [10] Günter M. Ziegler. Binary supersolvable matroids and modular constructions. *Proceedings of the American Mathematical Society*, 113:817–829, 1991.
- [11] Jeffrey C. Lagarias and Günter M. Ziegler. Bounds for lattice polytopes containing a fixed number of interior points in a sublattice. *Canadian Journal of Mathematics*, 43:1022–1035, 1991.
- [12] Günter M. Ziegler. Posets with maximal Möbius function. *Journal of Combinatorial Theory, Ser. A*, 56:203–222, 1991.

- [13] Thomas Wanner and Günter M. Ziegler. Supersolvable and modularly complemented matroid extensions. *European Journal of Combinatorics*, 12:341–360, 1991.
- [14] Günter M. Ziegler. Some minimal non-orientable matroids of rank three. *Geometriae Dedicata*, 38:365–371, 1991.
- [15] Anders Björner and Günter M. Ziegler. Introduction to greedoids. In N. White, editor, *Matroid Applications*, volume 40 of *Encyclopedia of Mathematics*, pages 284–357. Cambridge University Press, 1992.
- [16] Anders Björner and Günter M. Ziegler. Combinatorial stratification of complex arrangements. *Journal of the American Mathematical Society*, 5:105–149, 1992.
- [17] Günter M. Ziegler. Matroid shellability, β -systems, and affine hyperplane arrangements. *Journal of Algebraic Combinatorics*, 1:283–300, 1992.
- [18] Günter M. Ziegler. *Combinatorial Models for Subspace Arrangements*. Habilitationsschrift, TU Berlin, 1992. Zbl. 779.52015.
- [19] Anders Björner, Michel Las Vergnas, Bernd Sturmfels, Neil White, and Günter M. Ziegler. *Oriented Matroids*, volume 46 of *Encyclopedia of Mathematics*. Cambridge University Press, Cambridge, 1993.
- [20] Bernd Sturmfels and Günter M. Ziegler. Extension spaces of oriented matroids. *Discrete & Computational Geometry*, 10:23–45, 1993.
- [21] Günter M. Ziegler. Some almost exceptional arrangements. *Advances in Mathematics*, 101:50–58, 1993.
- [22] Thomas H. Brylawski and Günter M. Ziegler. Topological representation of dual pairs of oriented matroids. In J. Richter-Gebert and Günter M. Ziegler, editors, *Special issue on "Oriented Matroids"*, volume (3)10 of *Discrete & Computational Geometry*, pages 237–240. Springer-Verlag, 1993.
- [23] Jiyong Liu, Leslie E. Trotter Jr., and Günter M. Ziegler. On the height of the minimal Hilbert basis. *Results in Mathematics*, 23:374–376, 1993.
- [24] Günter M. Ziegler. Higher Bruhat orders and cyclic hyperplane arrangements. *Topology*, 32:259–279, 1993.
- [25] Nikolai E. Mnëv and Günter M. Ziegler. Combinatorial models for the finite-dimensional Grassmannians. In J. Richter-Gebert and Günter M. Ziegler, editors, *special issue on "Oriented Matroids"*, volume (3)10 of *Discrete & Computational Geometry*, pages 241–250. Springer-Verlag, 1993.
- [26] Günter M. Ziegler and Rade T. Živaljević. Homotopy types of subspace arrangements via diagrams of spaces. *Mathematische Annalen*, 295:527–548, 1993.
- [27] Günter M. Ziegler. On the difference between real and complex arrangements. *Mathematische Zeitschrift*, 212:1–11, 1993.
- [28] Günter M. Ziegler. "What is a complex matroid?". In J. Richter-Gebert and Günter M. Ziegler, editors, *Special issue on "Oriented Matroids"*, volume (3)10 of *Discrete & Computational Geometry*, pages 313–348. Springer-Verlag, 1993.
- [29] Bruce E. Sagan, Yeong Nan Yeh, and Günter M. Ziegler. Maximizing Möbius functions on subsets of Boolean algebras. *Discrete Mathematics*, 126:293–311, 1994.
- [30] Günter M. Ziegler. A new local criterion for the lattice property. *Algebra Universalis*, 31:608–610, 1994.

- [31] Günter M. Ziegler. Shellability of chessboard complexes. *Israel J. Mathematics*, 87:97–110, 1994.
- [32] Victor Reiner and Günter M. Ziegler. Coxeter-associahedra. *Mathematika*, 41:364–393, 1994.
- [33] Jürgen Richter-Gebert and Günter M. Ziegler. Zonotopal tilings and the Bohne-Dress theorem. In H. Barcelo and G. Kalai, editors, *Proc. “Jerusalem Combinatorics 93”*, volume 178 of *Contemporary Mathematics*, pages 211–232. American Math. Society, 1994.
- [34] Günter M. Ziegler. Three problems about 4-polytopes. In T. Bisztriczky, P. McMullen, and A. Weiss, editors, *Polytopes: Abstract, Convex and Computational (Proc. NATO Advanced Study Institute, Toronto 1993)*, pages 499–502, Dordrecht, 1994. Kluwer Academic Publishers.
- [35] Bernd Gärtner and Günter M. Ziegler. Randomized simplex algorithms on Klee-Minty cubes. In *Proc. 35th Annual “Symposium on Foundations of Computer Science” (FOCS), Nov. 20–22, 1994, Santa Fe NM*, pages 502–510, Los Alamitos CA, 1994. IEEE Computer Society Press.
- [36] László Lovász, László Pyber, Dominic J. A. Welsh, and Günter M. Ziegler. Combinatorics in pure mathematics. In R. Graham, M. Grötschel, and L. Lovász, editors, *Handbook of Combinatorics*, chapter 41, pages 2039–2082. North Holland/Elsevier, Amsterdam, 1995.
- [37] Günter M. Ziegler. *Lectures on Polytopes*, volume 152 of *Graduate Texts in Mathematics*. Springer-Verlag, New York, 1995. Revised edition, 1998; seventh updated printing 2007.
- [38] Bernd Sturmfels, Robert Weismantel, and Günter M. Ziegler. Gröbner bases of lattices, corner polyhedra, and integer programming. *Beiträge zur Algebra und Geometrie/Contributions to Algebra and Geometry*, 36:281–298, 1995.
- [39] Jürgen Richter-Gebert and Günter M. Ziegler. Realization spaces of 4-polytopes are universal. *Bulletin of the American Mathematical Society*, 32:403–412, 1995.
- [40] Andreas S. Schulz, Robert Weismantel, and Günter M. Ziegler. 0/1-integer programming: Augmentation and optimization are equivalent. In P. Spirakis, editor, *“Algorithms — ESA ’95”: Proc. Third Annual European Symposium, Corfu, Greece, September 1995*, volume 979 of *Springer Lecture Notes in Computer Science*, pages 473–483. Springer-Verlag, 1995.
- [41] Jörg Rambau and Günter M. Ziegler. Projections of polytopes and the Generalized Baues Conjecture. *Discrete & Computational Geometry*, 16:215–237, 1996.
- [42] Günter M. Ziegler. Oriented matroids today: Dynamic survey and updated bibliography. *the electronic journal of combinatorics*, 3:DS#4, 1996. (published April 1, 1996; revised version June 22, 1996; revised version September 15, 1998).
- [43] Nina Amenta and Günter M. Ziegler. Shadows and slices of polytopes. In *Proceedings of the 12th Annual ACM Symposium on Computational Geometry*, pages 10–19, May 1996.
- [44] Günter M. Ziegler. Polytopes and optimization: Recent progress and some challenges. *GMÖOR Newsletter*, (3/4):3–12, 1996.
- [45] David Massey, Rodica E. Simion, Richard P. Stanley, Dirk L. Vertigan, Dominic J. A. Welsh, and Günter M. Ziegler. Lê numbers, matroid identities, and the Tutte polynomial. *Journal of Combinatorial Theory, Ser. B*, 70:118–133, 1997.
- [46] Regina Urbaniak, Robert Weismantel, and Günter M. Ziegler. A variant of the Buchberger algorithm for integer programming. *SIAM Journal on Discrete Mathematics*, 10:96–108, 1997.

- [47] Jürgen Richter-Gebert and Günter M. Ziegler. Oriented matroids. In J. E. Goodman and J. O'Rourke, editors, *Handbook of Discrete and Computational Geometry*, chapter 6, pages 111–132. CRC Press, Boca Raton, 1997.
- [48] Martin Henk, Jürgen Richter-Gebert, and Günter M. Ziegler. Basic properties of convex polytopes. In J. E. Goodman and J. O'Rourke, editors, *Handbook of Discrete and Computational Geometry*, chapter 13, pages 243–270. CRC Press, Boca Raton, 1997.
- [49] Ulrich H. Kortenkamp, Jürgen Richter-Gebert, A. Sarangarajan, and Günter M. Ziegler. Extremal properties of 0/1-polytopes. *Discrete & Computational Geometry*, 17:439–448, 1997.
- [50] Günter M. Ziegler. *[The Mathematics of Convex Polytopes]*. Springer-Verlag, Tokyo, Japanese edition, 1998. Translation of “Lectures on Polytopes” based on the 1998 revised English edition by Masahiro Hachimori and Yoshio Okamoto.
- [51] Bernd Gärtner, Martin Henk, and Günter M. Ziegler. Randomized simplex algorithms on Klee-Minty cubes. *Combinatorica*, 18:349–372, 1998.
- [52] Günter M. Ziegler. Shelling polyhedral 3-balls and 4-polytopes. *Discrete & Computational Geometry*, 19:159–174, 1998.
- [53] Nina Amenta and Günter M. Ziegler. Deformed products and maximal shadows. In B. Chazelle, J. E. Goodman, and R. Pollack, editors, *Advances in Discrete and Computational Geometry (South Hadley, MA, 1996)*, volume 223 of *Contemporary Mathematics*, pages 57–90, Providence RI, 1998. Amer. Math. Soc.
- [54] Günter M. Ziegler. Recent progress on polytopes. In B. Chazelle, J. E. Goodman, and R. Pollack, editors, *Advances in Discrete and Computational Geometry*, volume 223 of *Contemporary Mathematics*, pages 395–406. Amer. Math. Soc., Providence RI, 1998.
- [55] Dimitrios I. Dais, Martin Henk, and Günter M. Ziegler. All abelian quotient c.i.-singularities admit projective crepant resolutions in all dimensions. *Advances in Mathematics*, 139:194–239, 1998.
- [56] Henryk Trappmann and Günter M. Ziegler. Shellability of complexes of trees. *J. Combinatorial Theory, Ser. A*, 82:168–178, 1998.
- [57] Martin Aigner and Günter M. Ziegler. *Proofs from THE BOOK*. Springer-Verlag, Heidelberg Berlin, 1998.
- [58] Anders Björner, Michel Las Vergnas, Bernd Sturmfels, Neil White, and Günter M. Ziegler. *Oriented Matroids*, volume 46 of *Encyclopedia of Mathematics*. Cambridge University Press, Cambridge, second (paperback) edition, 1999.
- [59] Volkmar Welker, Günter M. Ziegler, and Rade T. Živaljević. Homotopy colimits – comparison lemmas for combinatorial applications. *Journal für die Reine und Angewandte Mathematik (Crelles Journal)*, 509:117–149, 1999.
- [60] Günter M. Ziegler. Gröbner bases and integer programming. In A. M. Cohen, H. Cuypers, and H. Sterk, editors, *Some Tapas of Computer Algebra*, pages 168–183. Springer-Verlag, Heidelberg Berlin, 1999.
- [61] Robert T. Firla and Günter M. Ziegler. Hilbert bases, unimodular triangulations, and binary covers of rational polyhedral cones. *Discrete & Computational Geometry*, 21:205–216, 1999.
- [62] Günter M. Ziegler. Methoden der Kombinatorischen Geometrie “im Einsatz”. *Mathematische Semesterberichte*, 46:187–203, 1999.

- [63] Eva Maria Feichtner and Günter M. Ziegler. The integral cohomology algebras of ordered configuration spaces of spheres. *Documenta Math.*, 5:115–139, 2000.
- [64] Andrea Höppner and Günter M. Ziegler. A census of flag-vectors of 4-polytopes. In G. Kalai and G. M. Ziegler, editors, *Polytopes — Combinatorics and Computation*, volume 29 of *DMV Seminars*, pages 105–110. Birkhäuser-Verlag, Basel, 2000.
- [65] Christian Haase and Günter M. Ziegler. On the maximal width of empty lattice simplices. *European J. Combinatorics*, 21:111–119, 2000.
- [66] Eva Maria Feichtner and Günter M. Ziegler. On cohomology algebras of complex subspace arrangements. *Transactions of the American Mathematical Society*, 352:3523–3555, 2000.
- [67] Michael Joswig and Günter M. Ziegler. Neighborly cubical polytopes. *Discrete & Computational Geometry (Grünbaum Festschrift: G. Kalai, V. Klee, eds.)*, (2-3)24:325–344, 2000. <http://arXiv.org/abs/math/9812033>.
- [68] Michael Joswig and Günter M. Ziegler. A neighborly cubical 4-polytope. *EG-Models*, <http://www.eg-models.de/>, 2000. Electronic Geometry Model No. 2000.05.003.
- [69] Masahiro Hachimori and Günter M. Ziegler. Decompositions of simplicial balls and spheres with knots consisting of few edges. *Mathematische Zeitschrift*, 235:159–171, 2000.
- [70] Gil Kalai and Günter M. Ziegler, editors. *Polytopes — Combinatorics and Computation*, volume 29 of *DMV Seminars*. Birkhäuser-Verlag, Basel, 2000.
- [71] Günter M. Ziegler. Lectures on 0/1-polytopes. In G. Kalai and G. M. Ziegler, editors, *Polytopes — Combinatorics and Computation*, volume 29 of *DMV Seminars*, pages 1–41. Birkhäuser-Verlag, Basel, 2000.
- [72] Günter M. Ziegler. Sharir's cube. *EG-Models*, <http://www.eg-models.de/>, 2000. Electronic Geometry Model No. 2000.09.028.
- [73] Komei Fukuda and Günter M. Ziegler, editors. *Special Issue: Combinatorics of Polytopes*. *European J. Combinatorics* (1)21 (2000), 1-152.
- [74] Martin Aigner and Günter M. Ziegler. *Proofs from THE BOOK*. Springer-Verlag, Heidelberg Berlin, second edition, 2001.
- [75] Martin Aigner and Günter M. Ziegler. *[Proofs from THE BOOK]*. Institute for Studies in Theoretical Physics and Mathematics (IPM), Teheran, Iran, Farsi edition, 2001. Translated from the first English edition by Siamak Kazemi; ISBN 964-90010-8-5.
- [76] Dimitrios I. Dais, Christian Haase, and Günter M. Ziegler. All toric local complete intersection singularities admit projective crepant resolutions. *Tohoku Math. Journal*, 53:95–107, 2001. <http://arXiv.org/abs/math/9812025>.
- [77] Stefan Felsner and Günter M. Ziegler. Zonotopes associated with higher Bruhat orders. *Discrete Mathematics (Tverberg Festschrift: B. Lindström, J. Zaks, eds.)*, 241:301–312, 2001.
- [78] Michael Joswig, Volker Kaibel, Marc E. Pfetsch, and Günter M. Ziegler. Vertex-facet incidences of unbounded polyhedra. *Advances in Geometry*, 1:23–36, 2001.
- [79] Michael Joswig, Volker Kaibel, Marc E. Pfetsch, and Günter M. Ziegler. Ambiguous incidences of unbounded polyhedra. *EG-Models*, <http://www.eg-models.de/>, 2000. Electronic Geometry Model No. 2000.05.001.
- [80] Günter M. Ziegler. Coloring Hamming graphs, optimal binary codes, and the 0/1-Borsuk problem in low dimensions. In H. Alt, editor, *Computational Discrete Mathematics Lectures*, volume 2122 of *Lecture Notes in Computer Science*, pages 159–171. Springer-Verlag, 2001.

- [81] Günter M. Ziegler. Questions about polytopes. In B. Enquist and W. Schmid, editors, *Mathematics Unlimited – 2001 and Beyond*, pages 1195–1211. Springer-Verlag, Berlin Heidelberg, 2001. Japanese translation published in: “Mathematics Unlimited – 2001 and Beyond” (Japanese translation of selected chapters), Vol. 1, Springer-Verlag Tokyo 2002, pp. 160-186.
- [82] Martin Aigner and Günter M. Ziegler. *Das BUCH der Beweise*. Springer-Verlag, Heidelberg Berlin, 2002.
- [83] Martin Aigner and Günter M. Ziegler. *Dowody z Księgi*. Polish Scientific Publishers PWN, Warsaw, Polish edition, 2002. Translated from the second English edition by Paweł Strzalecki; ISBN 83-01-13722-3.
- [84] Martin Aigner and Günter M. Ziegler. *As provas estão n’O LIVRO*. Editora Edgard Blücher, São Paulo, Brazilian/Portuguese edition, 2002. Translated from the second English edition by Marcos Botelho; ISBN 85-212-0306-3.
- [85] Martin Aigner and Günter M. Ziegler. *[Proofs from THE BOOK]*. Springer-Verlag, Tokyo, Japanese edition, 2002. Translated from the second English edition by Yukihiro Kanie; ISBN 4-431-70986-X.
- [86] Martin Henk and Günter M. Ziegler. Kugeln im Computer — Die Kepler-Vermutung. In E. Behrends and M. Aigner, editors, *Alles Mathematik. Von Pythagoras zum CD-Player*, pages 153–175. Vieweg, Wiesbaden, second (expanded, paperback) edition, 2002. In German.
- [87] Eva Maria Feichtner and Günter M. Ziegler. On orbit configuration spaces of spheres. *Topology and its Applications (Proc. “Arrangements in Boston”: A. Suciu, D. Cohen, eds.)*, 118:85–102, 2002.
- [88] Martin Henk, Günter M. Ziegler, and Chuanming Zong. On free planes in lattice ball packings. *Bull. London Math. Soc.*, 34:284–290, 2002.
- [89] Christian Haase and Günter M. Ziegler. Examples and counterexamples for the Perles conjecture. *Discrete & Computational Geometry*, 28:29–44, 2002. <http://arXiv.org/abs/math/0011170>.
- [90] Günter M. Ziegler. Generalized Kneser coloring theorems with combinatorial proofs. *Inventiones math.*, 147:671–691, 2002. Erratum 163 (2006), 227-228.
- [91] Günter M. Ziegler. Face numbers of 4-polytopes and 3-spheres. In Li Tatsien, editor, *Proceedings of the International Congress of Mathematicians (ICM 2002, Beijing)*, volume III, pages 625–634, Beijing, China, 2002. Higher Education Press. <http://arXiv.org/abs/math/0208073>.
- [92] Martin Aigner and Günter M. Ziegler. *Proofs from THE BOOK*. Springer-Verlag, Heidelberg Berlin, third edition, 2004.
- [93] Martin Aigner and Günter M. Ziegler. *Das BUCH der Beweise*. Springer-Verlag, Heidelberg Berlin, second edition, 2004.
- [94] Martin Aigner and Günter M. Ziegler. *Raisonnements divins. Quelques démonstrations mathématiques particulièrement élégantes*. Springer-Verlag, Paris, French edition, 2002. Translated from the second English edition by Nicolas Puech and Jean-Marie Morvan.
- [95] David Eppstein, Greg Kuperberg, and Günter M. Ziegler. Fat 4-polytopes and fatter 3-spheres. In A. Bezdek, editor, *Discrete Geometry: In honor of W. Kuperberg’s 60th birthday*, volume 253 of *Pure and Applied Mathematics*, pages 239–265. Marcel Dekker Inc., New York, 2003. <http://arXiv.org/abs/math/0204007>.

- [96] Branko Grünbaum. *Convex Polytopes*, volume 221 of *Graduate Texts in Math.* Springer-Verlag, New York, 2003. Second edition prepared by V. Kaibel, V. Klee and G. M. Ziegler (original edition: Interscience, London 1967).
- [97] Volker Kaibel and Günter M. Ziegler. Counting lattice triangulations. In C. D. Wensley, editor, *Surveys in Combinatorics 2003*, number 307 in London Math. Society Lecture Notes Series, pages 277–307. Cambridge University Press, 2003. <http://arXiv.org/abs/math/0211268>.
- [98] Günter M. Ziegler. Geometrie zum Anfassen: Kachelungen und Polyeder. In H.-W. Henn, editor, *Beiträge zum Mathematikunterricht 2003. Vorträge auf der 37. Tagung für Didaktik der Mathematik vom 3. bis 7. März 2003 in Dortmund*, pages 41–48, Hildesheim und Berlin, 2003. Verlag Franzbecker.
- [99] Jiří Matoušek. *Using the Borsuk–Ulam Theorem. Lectures on Topological Methods in Combinatorics and Geometry.* Universitext. Springer-Verlag, Heidelberg, 2003. Written in cooperation with Anders Björner and Günter M. Ziegler.
- [100] Jürgen Richter-Gebert and Günter M. Ziegler, editors. *Special Issue: Oriented Matroids. Discrete Comput. Geometry* (3)10 (2003), 235–348.
- [101] Jürgen Richter-Gebert and Günter M. Ziegler. Oriented matroids. In J. E. Goodman and J. O’Rourke, editors, *Handbook of Discrete and Computational Geometry*, chapter 6, pages 129–151. Chapman & Hall/CRC Press, Boca Raton, second edition, 2004.
- [102] Martin Henk, Jürgen Richter-Gebert, and Günter M. Ziegler. Basic properties of convex polytopes. In J. E. Goodman and J. O’Rourke, editors, *Handbook of Discrete and Computational Geometry*, chapter 16, pages 355–382. Chapman & Hall/CRC Press, Boca Raton, second edition, 2004. (First edition 1997).
- [103] Martin Aigner and Günter M. Ziegler. *Bizonyítások a Könyvből [Proofs from THE BOOK]*. Typotex Ltd., Budapest, Hungarian edition, 2004. Translated from the third English edition by Nóra Révai, ISBN 963-9548-00-6.
- [104] Günter M. Ziegler. Typical and extremal linear programs. In M. Grötschel, editor, *The Sharpest Cut: The Impact of Manfred Padberg and His Work*, volume 4 of *MPS-SIAM Series on Optimization*, chapter 14, pages 217–230. SIAM, Philadelphia, PA, 2004.
- [105] Michael Joswig and Günter M. Ziegler. Convex hulls, oracles, and homology. *J. Symbolic Computation (special issue for ICMS 2002)*, 38:1247–1259, 2004. <http://arXiv.org/abs/math/0301100>.
- [106] Jiří Matoušek and Günter M. Ziegler. Topological lower bounds for the chromatic number: A hierarchy. *Jahresbericht der DMV*, 106:71–90, 2004. <http://arXiv.org/abs/math/0208072>.
- [107] Julian Pfeifle and Günter M. Ziegler. Many triangulated 3-spheres. *Mathematische Annalen*, 330:829–837, 2004. <http://arXiv.org/abs/math/0304492>.
- [108] Andreas Paffenholz and Günter M. Ziegler. The E_t -construction for lattices, spheres and polytopes. *Discrete & Computational Geometry (Billera Festschrift: M. Bayer, C. Lee, B. Sturmfels, eds.)*, 32:601–624, 2004. <http://arXiv.org/abs/math/0304492>.
- [109] Alexander Schwartz and Günter M. Ziegler. Construction techniques for cubical complexes, odd cubical 4-polytopes, and prescribed dual manifolds. *Experimental Math.*, 13:385–413, 2004. <http://arXiv.org/abs/math/0310269>.

- [110] Alexander Schwartz and Günter M. Ziegler. A cubical 4-polytope with a dual Klein bottle. *EG-Models*, <http://www.eg-models.de/>, 2004. Electronic Geometry Model No. 2004.05.001.
- [111] Julian Pfeifle and Günter M. Ziegler. On the Monotone Upper Bound Problem. *Experimental Math.*, 13:1–11, 2004. <http://arXiv.org/abs/math/0308186>.
- [112] Anders Björner, Andreas Paffenholz, Jonas Sjöstrand, and Günter M. Ziegler. Bier spheres and posets. *Discrete & Computational Geometry*, 34:71–86, 2005. published online September 15, 2004; <http://arXiv.org/abs/math/0311356>.
- [113] Florian Pfender and Günter M. Ziegler. Kissing numbers, sphere packings, and some unexpected proofs. *Notices of the AMS*, 51(8):873–883, September 2004.
- [114] Günter M. Ziegler. Projected products of polygons. *Electronic Research Announcements AMS*, 10:122–134, 2004. <http://arXiv.org/abs/math/0407042>.
- [115] Volker Kaibel, Rafael Mechtel, Micha Sharir, and Günter M. Ziegler. The simplex algorithm in dimension three. *SIAM J. Computing*, 34:475–497, 2005. <http://arXiv.org/abs/math/0309351>.
- [116] Alexander Schwartz and Günter M. Ziegler. A cubical 4-polytope with an odd number of facets. *EG-Models*, <http://www.eg-models.de/>, July 2005. Electronic Geometry Model No. 2004.07.001.
- [117] Martin Aigner and Günter M. Ziegler. *EL LIBRO de las demostraciones [Proofs from THE BOOK]*. NIVOLA libros y ediciones, Tres Cantos (Madrid), Spanish edition, 2005. Translated from the third English edition by Lourdes Figueiras, Julián Pfeifle and Pedro A. Ramos, ISBN 84-95599-95-3.
- [118] Torsten Schöneborn and Günter M. Ziegler. The Topological Tverberg Problem and winding numbers. *J. Combinatorial Theory, Ser. A*, 112:82–104, 2005. <http://arXiv.org/abs/math/0409081>.
- [119] Günter M. Ziegler. Projected polytopes, Gale diagrams, and polyhedral surfaces (joint work with Raman Sanyal and Thilo Schröder). *Oberwolfach Reports*, 2(2):986–989, 2005.
- [120] Martin Aigner and Günter M. Ziegler. *Proofs from THE BOOK. Edizione italiana a cura di Alfio Quarteroni*. Springer, Milano, Italian edition, 2006. Translated from the third English edition by Alfio Quarteroni; ISBN: 88-470-0435-7.
- [121] Thomas Voigt and Günter M. Ziegler. Singular 0/1-matrices, and the hyperplanes spanned by random 0/1-vectors. *Combinatorics, Probability & Computing*, 15:463–471, 2006.
- [122] Martin Aigner and Günter M. Ziegler. *Raisonnements divins. Quelques démonstrations mathématiques particulièrement élégantes*. Springer-Verlag, Paris, second French edition, 2006. Translated from the third English edition by Nicolas Puech.
- [123] Martin Aigner and Günter M. Ziegler. *Proofs from THE BOOK. Reprint for China, with a preface by Chuanming Zong*. Beijing World Publishing Corp., Beijing, Chinese edition, 2006.
- [124] Martin Aigner and Günter M. Ziegler. *[Proofs from THE BOOK]*. Mir Scientific Publishers, Moscow, Russian edition, 2006. Translated from the third English edition by B. I. Selivanov and A. Zubkov, ISBN 5-03-003690-3.
- [125] Günter M. Ziegler. Combinatorial and polyhedral surfaces (joint work with Raman Sanyal and Thilo Schröder). *Oberwolfach Reports*, 3(1):14–17, 2006.

- [126] Günter M. Ziegler. Convex polytopes: Extremal constructions and f -vector shapes. In E. Miller, V. Reiner, and B. Sturmfels, editors, “*Geometric Combinatorics*”, *Proc. Park City Mathematical Institute (PCMI) 2004*, pages 617–691, Providence, RI, 2007. Amer. Math. Society. With an appendix by Th. Schröder and N. Witte; <http://arXiv.org/abs/math/0411400>.
- [127] Carsten Lange and Günter M. Ziegler. On generalized Kneser hypergraph colorings. *J. Combinatorial Theory, Ser. A*, 114:159–166, 2007.
- [128] Dimitrios Dais, Martin Henk, and Günter M. Ziegler. On the existence of crepant resolutions of Gorenstein abelian quotient singularities in dimensions ≥ 4 . In C. A. Athanasiadis, V. V. Batyrev, D. I. Dais, M. Henk, and F. Santos, editors, *Algebraic and Geometric Combinatorics (Proc. Anogia, August 2005)*, volume 423 of *Contemporary Math.*, pages 125–204. Amer. Math. Soc., Providence, RI, 2007.
- [129] Günter M. Ziegler and Christian Blatter. Euler’s polyhedron formula as a starting point for modern polytope theory. *Elemente Math.*, 62:184–192, 2007.
- [130] Thilo Rörig. Polyhedral surfaces in wedge products (joint work with Raman Sanyal and Günter M. Ziegler). *Oberwolfach Reports*, 4(1):244–247, 2007.
- [131] Günter M. Ziegler. Das Jahrhundert der Mathematik. In *Berufs- und Karriere-Planer Mathematik 2008*, pages 36–41. Vieweg, Wiesbaden, 2008.
- [132] Günter M. Ziegler. Non-rational configurations, polytopes, and surfaces. *Mathematical Intelligencer*, 30(3):36–42, 2008. <http://arXiv.org/abs/0710.4453>.
- [133] Günter M. Ziegler. Polyhedral surfaces of high genus. In Alexander I. Bobenko, Peter Schröder, John M. Sullivan, and Günter M. Ziegler, editors, *Discrete Differential Geometry*, volume 38 of *Oberwolfach Seminars*, pages 191–213, Basel, 2008. Birkhäuser. ISBN: 978-3-7643-8620-7; <http://arXiv.org/abs/math/0412093>.
- [134] Bernhard Hanke, Raman Sanyal, Carsten Schultz, and Günter M. Ziegler. Combinatorial Stokes formulas via minimal resolutions. *J. Combinatorial Theory, Ser. A*, 116:404–420, 2009. <http://arxiv.org/abs/0710.0050>.
- [135] Günter M. Ziegler. Face numbers of centrally-symmetric polytopes: Conjectures, examples, counterexamples (joint work with Raman Sanyal and Thilo Schröder). *Oberwolfach Reports*, 5(1):71–74, 2008.
- [136] Alexander I. Bobenko, Peter Schröder, John M. Sullivan, and Günter M. Ziegler, editors. *Discrete Differential Geometry*, volume 38 of *Oberwolfach Seminars*. Birkhäuser, Basel, 2008. ISBN: 978-3-7643-8620-7.
- [137] Ehrhard Behrends, Peter Gritzmann, and Günter M. Ziegler, editors. *II & Co. Kaleidoskop der Mathematik*. Springer, Heidelberg, 2008.
- [138] Martin Aigner and Günter M. Ziegler. *[Proofs from THE BOOK]*. Kyowooosa Publisher, Seoul (Korea), Korean edition, 2008. Translated from the third English edition.
- [139] Günter M. Ziegler. Primzahltests und Primzahlrekorde. *Computeralgebra Rundbrief (Sonderheft zum Jahr der Mathematik)*, pages 29–31, April 2008.
- [140] Martin Henk and Günter M. Ziegler. La congettura di Keplero. In C. Bartocci and P. Odifreddi, editors, *La matematica. Problemi e teoremi*, volume II, pages 765–792. Einaudi, Torino, 2008. In Italian.
- [141] Frank Lutz and Günter M. Ziegler. A small polyhedral \mathbb{Z} -acyclic 2-complex in \mathbb{R}^4 . *EG-Models*, <http://www.eg-models.de/>, 2008. Electronic Geometry Model No. 2008.11.001.

- [142] Thilo Rörig, Nikolaus Witte, and Günter M. Ziegler. Zonotopes with large 2D-cuts. *EG-Models*, <http://www.eg-models.de/>, 2008. Electronic Geometry Model No. 2008.10.002.
- [143] Gerd Fischer and Günter M. Ziegler. *Warum Lineare Algebra?* in: Gerd Fischer “Lineare Algebra”, 16. Auflage, Vieweg+Teubner, Wiesbaden 2008, S. IX-XIV.
- [144] Martin Henk and Günter M. Ziegler. Kugeln im Computer — Die Kepler-Vermutung. In E. Behrends and M. Aigner, editors, *Alles Mathematik. Von Pythagoras zum CD-Player*, pages 177–201. Vieweg+Teubner, Wiesbaden, third (expanded, paperback) edition, 2009. In German.
- [145] Raman Sanyal, Axel Werner, and Günter M. Ziegler. On Kalai’s conjectures about centrally symmetric polytopes. *Discrete Comput. Geometry*, 41:183–198, 2009.
- [146] Günter M. Ziegler. Computeralgebra in Forschung und Lehre: Primzahltests und Primzahlrekorde. *Informatik-Spektrum*, 32(1):33–36, 2009.
- [147] Martin Aigner and Günter M. Ziegler. *Kitap’tan Deliller [Proofs from THE BOOK]*. Bilgi Iletisim Grubu Yayincili, Sisli (Turkey), turkish edition, 2009. Translated from the third English edition by A. Muhammed Uludağ.
- [148] Martin Aigner and Günter M. Ziegler. *[Proofs from THE BOOK]*. Higher Education Press, Beijing, second Chinese edition, 2009. Translated from the third English edition by Chuanming Zong et al.
- [149] Thilo Rörig, Nikolaus Witte, and Günter M. Ziegler. Zonotopes with large 2D-cuts. *Discrete Comput. Geometry*, 42:527–541, 2009.
- [150] Günter M. Ziegler. On the number of simplicial 3-spheres and 4-polytopes with n facets (joint work with Bruno Benedetti). *Oberwolfach Reports*, 5(4):2512–2514, 2008.
- [151] Peter Gritzmann, Bernd Sturmfels, and Günter M. Ziegler, editors. *The Victor Klee Memorial Festschrift*. *Discrete Comput. Geometry* (2)42 (2009), 131-340.
- [152] Axel Hultman, Svante Linusson, and Günter M. Ziegler, editors. *The Björner Festschrift Volume*. *Electronic J. Combinatorics* 16(2), (2009), preface and R1–R23, <http://www.combinatorics.org/>.
- [153] Martin Aigner and Günter M. Ziegler. *Proofs from THE BOOK*. Springer-Verlag, Heidelberg Berlin, fourth edition, 2009.
- [154] Martin Aigner and Günter M. Ziegler. *Das BUCH der Beweise*. Springer-Verlag, Heidelberg Berlin, third edition, 2009.
- [155] Pavle V. M. Blagojević and Günter M. Ziegler. Tetrahedra on deformed spheres and integral group cohomology. *Electronic J. Combinatorics*, 16(2) (Björner Festschrift, eds. A. Hultman, S. Linusson, G. M. Ziegler), R16, 11 pages, 2009. Published June 10, 2009; <http://arXiv.org/abs/0808.3841>.
- [156] Raman Sanyal and Günter M. Ziegler. Construction and analysis of projected deformed products. *Discrete Comput. Geometry*, 43:412–435, 2010. <http://arxiv.org/abs/0710.2162>.
- [157] Günter M. Ziegler and Christian Blatter. Eulers Polyederformel und die Arithmetisierung der Gestalt. In H. Bredekamp and W. Velminski, editors, *Mathesis & Graphé. Leonhard Euler und die Entfaltung der Wissenssysteme*, pages 243–256. Akademie-Verlag, Berlin, 2010. in German; ISBN 978-3-05-004566-5.

- [158] Martin Henk and Günter M. Ziegler. Spheres in the Computer—the Kepler Conjecture. In E. Behrends and M. Aigner, editors, *Mathematics Everywhere*, chapter 11, pages 143–164. Amer. Math. Soc., Providence, RI, 2010. Translated by P. G. Spain.
- [159] Günter M. Ziegler. 3N bunte Punkte in der Ebene. *Mitteilungen der DMV*, 18(3):164–170, 2010. <http://page.math.tu-berlin.de/~mdmv/archive/18/mdmv-18-3-164.pdf>.
- [160] Benjamin Matschke and Günter M. Ziegler. Die Rätselseite: Zehn bunte Punkte in der Ebene. *Mitteilungen der DMV*, 18(3):171, 2010. <http://page.math.tu-berlin.de/~mdmv/archive/18/mdmv-18-3-171.pdf>.
- [161] Günter M. Ziegler. Convex polytopes: Examples and conjectures (Notes by Vincent Pilaud). In Marc Noy and Julian Pfeifle, editors, *Doc Course Combinatorics and Geometry 2009 “Discrete and Computational Geometry”*, volume 5.1 of *CRM Documents*, pages 9–49, Bellaterra (Barcelona), 2010.
- [162] Pavle V. M. Blagojević, Benjamin Matschke, and Günter M. Ziegler. Optimal bounds for a colorful Tverberg–Vrećica type problem. *Advances in Math.*, 226:5198–5215, 2011.
- [163] Thilo Rörig and Günter M. Ziegler. Polyhedral surfaces in wedge products. *Geometriae Dedicata*, 151:155–173, 2011.
- [164] Günter M. Ziegler. 3N colored points in a plane. *Notices of the AMS*, (4):550–557, 2011. <http://www.ams.org/notices/201104/rtx110400550p.pdf>.
- [165] Ronald Wotzlaw and Günter M. Ziegler. A lost counterexample and a problem on illuminated polytopes. *American Math. Monthly*, 118:534–543, 2011.
- [166] Martin Aigner and Günter M. Ziegler. *[Proofs from THE BOOK]*. Higher Education Press, Beijing, third Chinese edition, 2011. Translated from the fourth English edition by Chuanming Zong et al.
- [167] Bruno Benedetti and Günter M. Ziegler. On locally constructible spheres and balls. *Acta Mathematica*, 206:205–243, 2011. <http://arxiv.org/abs/0902.0436>.
- [168] Pavle V. M. Blagojević and Günter M. Ziegler. The ideal-valued index for a dihedral group action, and mass partition by two hyperplanes. *Topology and its Applications (Proc. ATA2010)*, 158:1326–1351, 2011. Long preprint version, 44 pages: <http://arXiv.org/abs/0704.1943>.
- [169] Pavle V. M. Blagojević, Benjamin Matschke, and Günter M. Ziegler. A tight colored Tverberg theorem for maps to manifolds. *Topology and its Applications (Proc. ATA2010)*, 158:1445–1452, 2011. <http://arxiv.org/abs/1107.1904>.
- [170] Pavle V. M. Blagojević, Benjamin Matschke, and Günter M. Ziegler. A tight colored Tverberg theorem for maps to manifolds (extended abstract). In *Proc. FPSAC 2011 (Reykjavík, Iceland)*, volume AO of *Discrete Mathematics and Theoretical Computer Science (DMTCS)*, <http://www.dmtcs.org>, page 183–190, 2011. <http://combinatorics.is/proceedings/dmAO0117.pdf>.
- [171] Benjamin Nill and Günter M. Ziegler. Projecting lattice polytopes without interior lattice points. *Math. of Operations Research*, 36:462–467, 2011.
- [172] Günter M. Ziegler. Polytopes with low-dimensional realization spaces (joint work with Karim Adiprasito). *Oberwolfach Reports*, 8(3):2522–2525, 2011.
- [173] Cesar Ceballos and Günter M. Ziegler. Realizing the associahedron: Mysteries and questions. In F. Müller-Hoissen, J. Pallo, and J. Stasheff, editors, *“Associahedra, Tamari Lattices and Related Structures”*, *Tamari Memorial Festschrift*, volume 299 of *Progress in Mathematics*, pages 119–127. Springer, Basel, 2012.

- [174] Martin Aigner and Günter M. Ziegler. *Raisonnements divins. Quelques démonstrations mathématiques particulièrement élégantes*. Springer-Verlag, Paris, third French edition, 2013. Translated from the fourth English edition by Nicolas Puech.
- [175] Bernd Gonska and Günter M. Ziegler. Inscriptible stacked polytopes. MATHEON Preprint Nr. 830, November 2011, 15 pages; <http://arxiv.org/abs/1111.5322>; *Advances in Geometry*, published ahead of print March 19, 2013.
- [176] Moritz Schmitt and Günter M. Ziegler. Ten problems. In M. Senechal, editor, *Shaping Space. Exploring Polyhedra in Nature, Art, and the Geometrical Imagination*, pages 279–289 and 315–319. Springer, New York, 2013.
- [177] Ragnar Freij, Matthias Henze, Moritz W. Schmitt, and Günter M. Ziegler. Face numbers of centrally symmetric polytopes from split graphs. MATHEON Preprint Nr. 900, January 2012, 10 pages; <http://arxiv.org/abs/1201.5790>.
- [178] Pavle V. M. Blagojević, Benjamin Matschke, and Günter M. Ziegler. Optimal bounds for the colored Tverberg problem. Preprint, October 2009, 10 pages; revised November 2009, 11 pages; <http://arXiv.org/abs/0910.4987>.
- [179] Cesar Ceballos, Francisco Santos, and Günter M. Ziegler. Many non-equivalent realizations of the associahedron. Preprint, September 2011, 28 pages; <http://arxiv.org/abs/1109.5544>.
- [180] Robert Haller-Dintelmann, Wolfgang Höppner, Hans-Christoph Kaiser, Joachim Rehberg, and Günter M. Ziegler. Optimal elliptic Sobolev regularity near three-dimensional, multi-material Neumann vertices. MATHEON Preprint Nr. 777, April 2011, 27 pages; *Funkt. Analysis Appl.*, to appear.
- [181] Pavle V. M. Blagojević and Günter M. Ziegler. Convex equipartitions via equivariant obstruction theory. Preprint, February 2012, 16 pages; <http://arxiv.org/abs/1202.5504>; revised, 17 pages, April 2012; *Israel J. Math.*, to appear.
- [182] Pavle V. M. Blagojević, Wolfgang Lück, and Günter M. Ziegler. Equivariant topology of configuration spaces. Preprint, 29 pages, July 2012; revised, September 2012, 40 pages; <http://arxiv.org/abs/1207.2852>.
- [183] Michael Joswig and Günter M. Ziegler. Foldable triangulations of lattice polygons. Preprint, July 2012, 4 pages; <http://arxiv.org/abs/1207.6865>; revised and extended, January 2013; *Amer. Math. Monthly*, to appear.

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