## PUBLICATIONS

ANDERS BJÖRNER

(1) Fixed points in partially ordered sets (with K. Baclawski), Advances in Math. 31 (1979), 263-287.
(2) Shellable and Cohen-Macaulay partially ordered sets, Trans. Amer. Math. Soc. 260 (1980), 159-183.
(3) The minimum number of faces of a simple polyhedron, European J. Combinatorics 1 (1980), 27-31.
(4) A note on fixed points in semimodular lattices (with I. Rival), Discrete Math. 29 (1980), 245-250.
(5) Some matroid inequalities, Discrete Math. 31 (1980), 101-103.
(6) Homotopy type of posets and lattice complementation, J. Combinatorial Theory, Ser. A, 30 (1981), 90-100.
(7) The unimodality conjecture for convex polytopes, Bull. Amer. Math. Soc. 4 (1981), 187-188.
(8) Order-reversing maps and unique fixed points in complete lattices, Algebra Universalis 12 (1981), 402-403.
(9) Fixed points and complements in finite lattices (with K. Baclawski), J. Combinatorial Theory, Ser. A, 30 (1981), 335-338.
(10) On complements in lattices of finite length, Discrete Math. $\mathbf{3 6}$ (1981), 325-326.
(11) On the homology of geometric lattices, Algebra Universalis 14 (1982), 107-128.
(12) Bruhat order of Coxeter groups and shellability (with M. Wachs), Advances in Math. 43 (1982), 87-100.
(13) An introduction to Cohen-Macaulay partially ordered sets (with A.M. Garsia and R.P. Stanley), in "Ordered Sets" (ed. I. Rival), Reidel, Dordrecht, 1982, pp. 583-615.
(14) A homotopy complementation formula for partially ordered sets (with J. Walker), European J. Combinatorics 4 (1983), 11-19.
(15) On lexicographically shellable posets (with M. Wachs), Trans. Amer. Math. Soc. 277 (1983), 323-341.
(16) Some combinatorial and algebraic properties of Coxeter complexes and Tits buildings, Advances in Math. 52 (1984), 173-212.
(17) Posets, regular CW complexes and Bruhat order, European J. Combinatorics 5 (1984), 7-16.
(18) Orderings of Coxeter groups, in "Combinatorics and Algebra" (ed. C. Greene), Contemporary Mathematics, Vol. 34, Amer. Math. Soc., Providence, R.I., 1984, pp. 175-195.
(19) Combinatorics and Topology, Notices Amer. Math. Soc. 32 (1985), 339-345.
(20) On matroids, groups and exchange languages, in "Matroid Theory, Szeged 1982" (ed. L. Lovász and A. Recski), Coll. Math. Soc. János Bolyai, Vol. 40. North-Holland, Amsterdam-Budapest, 1985, pp. 25-60.
(21) Reflexive domains and fixed points, Acta Applic. Math. 4 (1985), 99-100.
(22) Coxeter groups and Combinatorics, in "Proceedings of XIXth Nordic Congress of Mathematicians, Reykjavik 1984" (ed. J. Stefánsson), Icelandic Math. Soc., Reykjavik, 1985, pp. 24-32.
(23) Homotopy properties of greedoids (with B. Korte and L. Lovász), Advances in Appl. Math. 6 (1985), 447-494.
(24) Continuous partition lattice, Proc. Natl. Acad. Sci. USA 84 (1987), 6327-6329.
(25) The number of faces of balanced Cohen-Macaulay complexes and a generalized Macaulay theorem (with P. Frankl and R. Stanley), Combinatorica 7 (1987), 23-34.
(26) Some Cohen-Macaulay complexes arising in group theory, in "Commutative Algebra and Combinatorics, Kyoto 1985" (ed. M. Nagata and H. Matsumura), Advanced Studies in Pure Math., Vol. 11, North-Holland, Amsterdam-New York, 1987, pp. 13-19.
(27) Face numbers of complexes and polytopes, in "Proceedings of the International Congress of Mathematicians, Berkeley, 1986", Amer. Math. Soc., 1987, pp. 1408-1418.
(28) Pseudomodular lattices and continuous matroids (with L. Lovász), Acta Sci. Math. Szeged 51 (1987), 295-308.
(29) Generalized quotients in Coxeter groups (with M. Wachs), Trans. Amer. Math. Soc. 308 (1988), 1-37.
(30) An extended Euler-Poincaré theorem (with G. Kalai), Acta Math. 161 (1988), 279-303.
(31) On $f$-vectors and homology (with G. Kalai), in "Combinatorial Mathematics: Proceedings of the Third Intern. Conf., New York 1985", (ed. G. Bloom, R. Graham and J. Malkevitch), Annals of N.Y. Acad. Sci., Vol. 555, New York Acad. Sci., 1989, pp. 63-80.
(32) $q$-Hook length formulas for forests (with M. Wachs), J. Combinatorial Theory, Ser. A, 52 (1989), 165-187.
(33) The Möbius function of subword order, in "Invariant Theory and Tableaux" (ed. D. Stanton), IMA Volumes in Math. and its Applic., Vol. 19, Springer-Verlag, New York, 1990, pp. 118-124.
(34) Hyperplane arrangements with a lattice of regions (with P. Edelman and G. M. Ziegler), Discrete and Computational Geometry 5 (1990), 263-288.
(35) Betti numbers of Buchsbaum complexes (with T. Hibi), Math. Scand. 67 (1990), 193-196.
(36) Permutation statistics and linear extensions of posets (with M. Wachs), J. Combinatorial Theory, Ser. A, 58 (1991), 85-114.
(37) Chip-firing games on graphs (with L. Lovász and P. W. Shor), European J. Combinatorics 12 (1991), 283-291.
(38) Extended Euler-Poincaré relations for cell complexes (with G. Kalai), in "Applied Geometry and Discrete Mathematics (The Victor Klee Festschrift)" (eds. P. Gritzmann and B. Sturmfels), Amer. Math. Soc., Providence, R. I., 1991, pp. 81-89.
(39) Broken circuit complexes: Factorizations and generalizations (with G. M. Ziegler), J. Combinatorial Theory, Ser. B, 51 (1991), 96-126.
(40) The homology and shellability of matroids and geometric lattices, in "Matroid Applications"(ed. N. White), Cambridge Univ. Press, 1992, pp. 226-283.
(41) Introduction to greedoids (with G. M. Ziegler), in "Matroid Applications" (ed. N. White), Cambridge Univ. Press, 1992, pp. 284-357.
(42) Combinatorial stratification of complex arrangements (with G. M. Ziegler), Journal Amer. Math. Soc. 5 (1992), 105-149.
(43) Rationality of the Möbius function of subword order (with C. Reutenauer), Theoretical Computer Sci. 98 (1992), 53-63.
(44) Linear decision trees: volume estimates and topological bounds (with L. Lovász and A. Yao), in: Proc. 24th ACM Symp. on Theory of Computing (May 1992), ACM Press, N.Y., 1992, pp. 170-177.
(45) Invertibility of the base Radon transform of a matroid (with J. Karlander), Discrete Math. 108 (1992), 139-147.
(46) Communication complexity of two decision problems (with J. Karlander and B. Lindström), Discrete Appl. Math. 39 (1992), 161-163.
(47) Essential chains and homotopy type of posets, Proc. Amer. Math. Soc. 116 (1992), 1179-1181.
(48) Chip-firing games on directed graphs (with L. Lovász), Journal Alg. Combinatorics 1 (1992), 305-328.
(49) The $\bmod p$ rank of incidence matrices for connected uniform hypergraphs (with J. Karlander), European J. Combinatorics 14 (1993), 151-155.
(50) The Möbius function of factor order, Theoretical Computer Sci. 117 (1993), 91-98.
(51) Chessboard complexes and matching complexes (with L. Lovász, S. Vrećica and R. Živaljević), J. London Math. Soc. (2) 49 (1994), 25-39.
(52) Linear decision trees, subspace arrangements and Möbius functions (with L. Lovász), Journal Amer. Math. Soc. 7 (1994), 677-706.
(53) Extendable shellability for rank 3 matroid complexes (with K. Eriksson), Discrete Math. 132 (1994), 373-376.
(54) Subspace arrangements, in "First European Congress of Mathematics, Paris 1992" (eds. A. Joseph et al.), Progress in Math. Series, Vol. 119, Birkhäuser, Boston, 1994, pp. 321-370.
(55) Partial unimodality for $f$-vectors of simplicial polytopes and spheres, in "Jerusalem Combinatorics '93" (eds. H. Barcelo and G. Kalai), Contemporary Math. Series, Vol. 178, Amer. Math. Soc., 1994, pp. 45-54.
(56) The homology of "k-equal" manifolds and related partition lattices (with V. Welker), Advances in Math. 110 (1995), 277-313.
(57) Topological Methods, in "Handbook of Combinatorics" (eds. R. Graham, M. Grötschel and L. Lovász), North-Holland, Amsterdam, 1995, pp. 1819-1872.
(58) Shellable nonpure complexes and posets I (with M. Wachs), Trans. Amer. Math. Soc. 348 (1996), 1299-1327.
(59) Shellable nonpure complexes and posets II (with M. Wachs), Trans. Amer. Math. Soc. 349 (1997), 3945-3975.
(60) Affine permutations of type A (with F. Brenti), Electronic Journal of Combinatorics 3(2) (1996), \#R18 (35 pp).
[http://www.combinatorics.org]
(61) Nonpure shellability, $f$-vectors, subspace arrangements and complexity, in "Formal Power Series and Algebraic Combinatorics, DIMACS workshop, May 1994" (eds. L.J. Billera et al.), DIMACS Series in Discrete Math. and Theor. Computer Science, Amer. Math. Soc., Providence, RI, 1996, pp. $25-53$.
(62) An improved tableau criterion for Bruhat order (with F. Brenti), Electronic Journal of Combinatorics 3 (1996), \#R22 (5 pp). [http://www.combinatorics.org]
(63) Subspace arrangements of type $B_{n}$ and $D_{n}$ (with B. Sagan), J. Algebraic Combinatorics 5 (1996), 291-314.
(64) On $f$-vectors and Betti numbers of multicomplexes (with S. Vrećica), Combinatorica 17 (1997), 53-65.
(65) Face numbers of polytopes and complexes (with L. J. Billera), in "Handbook of Discrete and Computational Geometry" (eds. Jacob E. Goodman and Joseph O'Rourke), CRC Press, Boca Raton, Florida, 1997, pp. 291-310.
Updated version in Second Edition of ibid., Chapman\&Hall/CRC, 2004, pp. 407-430.
(66) Subspace arrangements over finite fields: cohomological and enumerative aspects (with T. Ekedahl), Advances in Mathematics 129 (1997), 159-187.
(67) Note on a combinatorial application of Alexander duality (with L.M. Butler and A.O. Matveev), Journal of Combinatorial Theory, Series A, 80 (1997), 163-165.
(68) A general homotopy complementation formula, Discrete Mathematics 193 (1998), 85-91.
(69) The zeta function of a simplicial complex (with K. S. Sarkaria), Israel Journal of Mathematics 103 (1998), 29-40.
(70) Complexes of not $i$-connected graphs (with E. Babson, S. Linusson, J. Shareshian and V. Welker), Topology 38 (1999), 271-299.
(71) The number of $k$-faces of a simple $d$-polytope (with S. Linusson), Discrete and Computational Geometry 21 (1999), 1-16.
(72) Complexes of directed graphs (with V. Welker), SIAM Journal on Discrete Mathematics 12 (1999), 413-424.
(73) Face numbers of Scarf complexes, Discrete and Computational Geometry 24 (2000), 185-196.
(74) Simplicial manifolds, bistellar flips and a 16-vertex triangulation of the Poincaré homology 3-sphere (with F. H. Lutz), Experimental Mathematics 21 (2000), 275-289.
(75) Neighborhood complexes of stable Kneser graphs (with M. de Longueville), Combinatorica 23 (2003), 23-34.
(76) Nerves, fibers and homotopy groups, J. Combinatorial Theory, Ser. $A, 102$ (2003), 88-93.
(77) Geometrically constructed bases for homology of partition lattices of types $A, B$ and $D$ (with M. Wachs), Electronic Journal of Combinatorics 11(2) (2004), \#R3.
(78) A note on blockers in posets (with A. Hultman), Annals of Combinatorics 8 (2004), 123-131.
(79) Poset fiber theorems (with M. Wachs and V. Welker), Trans. Amer. Math. Soc. 357 (2004), 1877-1899.
(80) Bier spheres and posets (with A. Paffenholz, J. Sjöstrand and G. M. Ziegler), Discrete and Computational Geometry 34 (2005), 71-86.
(81) Segre and Rees products of posets, with ring-theoretic applications (with V. Welker), Journal of Pure and Applied Algebra 198 (2005), 43-55.
(82) Subspace arrangements defined by products of linear forms (with I. Peeva and J. Sidman), Journal of the London Math. Society (2) 71 (2005), 273-288.
(83) Chain polynomials of distributive lattices are $75 \%$ unimodal (with J. D. Farley), Electronic Journal of Combinatorics 12 (2005), \#N4. ( 7 pp. )
(84) Rationality of the Möbius function of a composition poset (with B.E. Sagan), Theoretical Computer Science 359 (2006), 282-298.
(85) A comparison theorem for $f$-vectors of simplicial polytopes, Pure and Applied Mathematics Quarterly 3 (2007), 347-356.
(86) Random walks, arrangements, cell complexes, greedoids, and selforganizing libraries, in "Building Bridges - The Lovász Festschrift" (eds. M. Grötschel and G. O. H. Katona), Bolyai Soc. Math. Studies 19 (2008), Springer (Berlin) and Janos Bolyai Math. Soc. (Budapest), pp.165-203.
(87) Appendix to "Hyperplane arrangements and box splines" by C. De Concini and C. Procesi, Michigan Math. J. 57 (2008), 221-225.
(88) On the shape of Bruhat intervals (with T. Ekedahl), Annals of Math. 170 (2009), 799-817.
(89) On sequentially Cohen-Macaulay complexes and posets (with M. Wachs and V. Welker), Israel J. Math. 169 (2009), 295-316.
(90) Note: Random-to-front shuffles on trees, Elect. Comm. in Probab. 14 (2009), 36-41.
(91) Combinatorial Alexander duality - a short and elementary proof (with M. Tancer), Discrete and Computational Geometry 42 (2009), 586-593.
(92) Connectivity of chamber graphs of buildings and related complexes (with K. Vorwerk), Europ. J. Combinatorics 31 (2010), 2149-2160.
(93) A $q$-analogue of the FKG inequality and some applications, Combinatorica 31 (2011), 151-164.
(94) A cell complex in number theory, Advances in Appl. Math. 46 (2011), 71-85.
(95) "Let $\Delta$ be a Cohen-Macaulay complex ...", in the Stanley@70 Festschrift, Amer. Math. Soc., to appear. Preprint 2012, 11 pp, www.arxiv.org/abs/0906.1389.
(96) On the connectivity of manifold graphs (with K. Vorwerk), Proc. Amer. Math. Soc., 143 (2015),4123-4132.
(97) Filtered geometric lattices and Lefschetz section theorems over the tropical ring (with K. Adiprasito),
Preprint 2014. (35 pp.) http://www.arxiv.org/abs/1401.7301. Under consideration at the Journal of the Amer. Math. Soc.
(98) h-triangles, sequential Cohen-Macaulayness and Betti tables of componentwise linear iedeals (with K. Adiprasito and A. Goodarzi), Preprint 2014, (21 pp.), Submitted. http://www.arxiv.org/abs/1401.7301.
(99) Positive sum systems, in "Combinatorial methods in topology and algebra", Springer INdAM Series Vol. 12, 2015, pp. 157-171.
(100) On codimension one embedding of simplicial complexes (with A, Goodarzi), in "The mathematics of Jiri Matousek", to apppear. Preprint 2016, 9 pp, www.arxiv.org/abs/0906.1389.

## Books.

(1) Oriented Matroids (with M. LasVergnas, B. Sturmfels, N. White and G. M. Ziegler), Cambridge Univ. Press, 1993. Second Edition 1999. 560 pages. (ISBN 0-521-77750-X)
(2) New Perspectives in Algebraic Combinatorics (coedited with L. J. Billera, C. Greene, R. E. Simion and R. P. Stanley), Mathematical Sciences Research Institute Publications Nr. 38, Cambridge Univ. Press, 1999. (ISBN 0-521-77087-4)
(3) Combinatorics of Coxeter Groups (with F. Brenti), Graduate Texts in Mathematics, Vol. 231, Springer-Verlag, New York, 2005. 367 pages. (ISBN 3-540-44238-3)
(4) A Combinatorial Miscellany (with R. P. Stanley), Monograph Nr 42, L'Enseignement Mathématique, Geneva, 2010. 164 pages. (ISBN 978-2-940264-09-4)

## Unpublished reports.

(1) Some combinatorial properties of infinite geometric lattices, preprint, Univ. of Stockholm, 1977.
(2) On spherical posets, Möbius functions and Bruhat order, preprint, Univ. of California at San Diego, 1980.
(3) On a combinatorial game of S. Mozes, preprint, KTH, Stockholm, 1988.

## Educational and general.

(1) "Matematik för Naturvetare, Del 1, 2 och 3" (with L. Brandell and O. Schönbeck), Univ. of Stockholm, 1977 and 1978.
(2) Träd och koder, in "Välj specialarbete i matematik" (ed. D. Laksov), Institut Mittag-Leffler, 1989, pp. 27-40.
(3) The mathematical work of Bernt Lindström, European J. Combinatorics 14 (1993), 143-149.
(4) Matematiken som skön konst och intellektuellt äventyr, in "Vetenskapens vackra verktyg - Matematiken som arbetsredskap", NFRs Årsbok 1993, pp. 9-23.

