Karoly Bezdek

List of Publications by Year
in descending order

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87	607	687363	713466
papers	citations	13 h-index	21 g-index

89	89	89	151
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ball-Polyhedra. Discrete and Computational Geometry, 2007, 38, 201-230.	0.6	57
2	The Radon Number of the Three-Dimensional Integer Lattice. Discrete and Computational Geometry, 2003, 30, 181-184.	0.6	38
3	Sphere packings revisited. European Journal of Combinatorics, 2006, 27, 864-883.	0.8	34
4	Classical Topics in Discrete Geometry. CMS Books in Mathematics, 2010, , .	0.8	31
5	The problem of illumination of the boundary of a convex body by affine subspaces. Mathematika, 1991, 38, 362-375.	0.5	28
6	The illumination conjecture and its extensions. Periodica Mathematica Hungarica, 2006, 53, 59-69.	0.9	28
7	On the vertex index of convex bodies. Advances in Mathematics, 2007, 215, 626-641.	1.1	23
8	Hadwiger-Leviâ€™s Covering Problem Revisited. Algorithms and Combinatorics, 1993, , 199-233.	0.6	20
9	Pushing disks apart - the Kneser-Poulsen conjecture in the plane. Journal Fur Die Reine Und Angewandte Mathematik, 2002, 2002, .	0.9	16
10	Rigidity of ball-polyhedra in Euclidean 3-space. European Journal of Combinatorics, 2006, 27, 255-268.	0.8	16
11	Contact graphs of unit sphere packings revisited. Journal of Geometry, 2013, 104, 57-83.	0.4	15
12	On the Maximum Number of Touching Pairs in a Finite Packing of Translates of a Convex Body. Journal of Combinatorial Theory - Series A, 2002, 98, 192-200.	0.8	14
13	Shortest billiard trajectories. Geometriae Dedicata, 2009, 141, 197-206.	0.3	14
14	Lectures on Sphere Arrangements â€“ the Discrete Geometric Side. Fields Institute Monographs, 2013, , .	0.4	14
15	A Proof of Hadwiger's Covering Conjecture for Dual Cyclic Polytopes. Geometriae Dedicata, 1997, 68, 29-41.	0.3	13
16	Contact Numbers for Congruent Sphere Packings in Euclidean 3-Space. Discrete and Computational Geometry, 2012, 48, 298-309.	0.6	13
17	The Geometry of Homothetic Covering and Illumination. Springer Proceedings in Mathematics and Statistics, 2018, , 1-30.	0.2	13
18	The Kneser?Poulsen Conjecture for Spherical Polytopes. Discrete and Computational Geometry, 2004, 32, 101-106.	0.6	12

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19	Illuminating Spindle Convex Bodies and Minimizing the Volume of Spherical Sets of Constant Width. Discrete and Computational Geometry, 2012, 47, 275-287.	0.6	12
20	On the illumination of smooth convex bodies. Archiv Der Mathematik, 1992, 58, 611-614.	0.5	10
21	Finding the Best Face on a Voronoi Polyhedron â€“ The Strong Dodecahedral Conjecture Revisited. Monatshefte Fur Mathematik, 2005, 145, 191-206.	0.9	10
22	On the X-ray Number of Almost Smooth Convex Bodies and of Convex Bodies of Constant Width. Canadian Mathematical Bulletin, 2009, 52, 342-348.	0.5	10
23	A Solution of Conway's Fried Potato Problem. Bulletin of the London Mathematical Society, 1995, 27, 492-496.	0.8	8
24	Covering Convex Bodies by Cylinders and Lattice Points by Flats. Journal of Geometric Analysis, 2009, 19, 233-243.	1.0	8
25	An illumination problem for zonoids. Israel Journal of Mathematics, 1993, 81, 265-272.	0.8	7
26	Isoperimetric Inequalities and the Dodecahedral Conjecture. International Journal of Mathematics, 1997, 08, 759-780.	0.5	7
27	Improving Rogersâ€™ Upper Bound for the Density of Unit Ball Packings via Estimating the Surface Area of Voronoi Cells from Below in Euclidean sl d -Space for All sl d â‰¥ f 8. Discrete and Computational Geometry, 2002, 28, 75-106.	0.6	7
28	Hadwiger's Covering Conjecture and Its Relatives. American Mathematical Monthly, 1992, 99, 954-956.	0.3	6
29	Hadwiger's covering conjecture and low dimensional dual cyclic polytopes. Geometriae Dedicata, 1993, 46, 279-286.	0.3	6
30	On the transversal Helly numbers of disjoint and overlapping disks. Archiv Der Mathematik, 2006, 87, 86-96.	0.5	6
31	Density bounds for outer parallel domains of unit ball packings. Proceedings of the Steklov Institute of Mathematics, 2015, 288, 209-225.	0.3	6
32	On contact numbers of totally separable unit sphere packings. Discrete Mathematics, 2016, 339, 668-676.	0.7	6
33	On hyperplanes and polytopes. Monatshefte Fur Mathematik, 1990, 109, 39-48.	0.9	5
34	TWO-DISTANCE PRESERVING FUNCTIONS FROM EUCLIDEAN SPACE. Periodica Mathematica Hungarica, 2000, 39, 185-200.	0.9	5
35	The Knesерâ€“Poulsen Conjecture for Special Contractions. Discrete and Computational Geometry, 2018, 60, 967-980.	0.6	5
36	From r-dual sets to uniform contractions. Aequationes Mathematicae, 2018, 92, 123-134.	0.8	5

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37	Facets with fewest vertices. Monatshefte Fur Mathematik, 1990, 109, 89-96.	0.9	4
38	Hadwiger's Covering Conjecture and its Relatives. American Mathematical Monthly, 1992, 99, 954.	0.3	4
39	The polyhedral Tammes problem. Archiv Der Mathematik, 2001, 76, 314-320.	0.5	4
40	On the covering index of convex bodies. Aequationes Mathematicae, 2016, 90, 879-903.	0.8	4
41	Circle packings into convex domains of the Euclidean and hyperbolic plane and the sphere. Geometriae Dedicata, 1986, 21, 249-255.	0.3	3
42	On the illumination of unbounded closed convex sets. Israel Journal of Mathematics, 1992, 80, 87-96.	0.8	3
43	A note on the illumination of convex bodies. Geometriae Dedicata, 1993, 45, 89-91.	0.3	3
44	VORONOI POLYHEDRA OF UNIT BALL PACKINGS WITH SMALL SURFACE AREA. Periodica Mathematica Hungarica, 2000, 39, 107-118.	0.9	3
45	On the successive illumination parameters of convex bodies. Periodica Mathematica Hungarica, 2006, 53, 71-82.	0.9	3
46	ON A STRONG VERSION OF THE KEPLER CONJECTURE. Mathematika, 2013, 59, 23-30.	0.5	3
47	On Non-separable Families of Positive Homothetic Convex Bodies. Discrete and Computational Geometry, 2016, 56, 802-813.	0.6	3
48	Packing Convex Bodies by Cylinders. Discrete and Computational Geometry, 2016, 55, 725-738.	0.6	3
49	Contact Numbers for Sphere Packings. Bolyai Society Mathematical Studies, 2018, , 25-47.	0.3	3
50	Minimizing the mean projections of finite $$ho $$ Ï•-separable packings. Monatshefte Fur Mathematik, 2019, 188, 611-620.	0.9	3
51	The thinnest holding-lattice of a set. Monatshefte Fur Mathematik, 1987, 103, 177-185.	0.9	2
52	Light-Sources That Illuminate the Boundary Points All But the Vertices of a Convex Polyhedron. Periodica Mathematica Hungarica, 1997, 34, 17-21.	0.9	2
53	Minimal Translation Covers For Sets of Diameter 1. Periodica Mathematica Hungarica, 1997, 34, 23-27.	0.9	2
54	ALMOST EQUIDISTANT POINTS ON S D-1. Periodica Mathematica Hungarica, 2000, 39, 139-144.	0.9	2

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55	Spindle starshaped sets. Aequationes Mathematicae, 2015, 89, 803-819.	0.8	2
56	On the second smallest distance between finitely many points on the sphere. Geometriae Dedicata, 1989, 29, 141.	0.3	1
57	Lower bounds for packing densities. Acta Mathematica Hungarica, 1991, 57, 291-311.	0.5	1
58	Interior points of the convex hull of few points in $$mathbb{E}^d $$. Monatshefte Fur Mathematik, 1991, 111, 181-186.	0.9	1
59	On illumination in the plane by line segments. Geometriae Dedicata, 1992, 41, 39.	0.3	1
60	Finite and uniform stability of sphere coverings. Discrete and Computational Geometry, 1995, 13, 313-319.	0.6	1
61	Antipodality in hyperbolic space. Journal of Geometry, 2006, 85, 22-31.	0.4	1
62	From the Kneser-Poulsen conjecture to ball-polyhedra via Voronoi diagrams. , 2007, , .		1
63	On the weighted Kneser-Poulsen conjecture. Periodica Mathematica Hungarica, 2008, 57, 121-129.	0.9	1
64	From the Kneserâ€“Poulsen conjecture to ball-polyhedra. European Journal of Combinatorics, 2008, 29, 1820-1830.	0.8	1
65	The illumination conjecture for spindle convex bodies. Proceedings of the Steklov Institute of Mathematics, 2011, 275, 169-176.	0.3	1
66	Rigid Ball-Polyhedra in Euclidean $$3$$ -Space. Discrete and Computational Geometry, 2013, 49, 189-199.	0.6	1
67	On contact graphs of totally separable packings in low dimensions. Advances in Applied Mathematics, 2018, 101, 266-280.	0.7	1
68	On contact graphs of totally separable domains. Aequationes Mathematicae, 2019, 93, 757-780.	0.8	1
69	On the intrinsic volumes of intersections of congruent balls. Discrete Optimization, 2019, , 100539.	0.9	1
70	Bounds for Totally Separable Translative Packings in the Plane. Discrete and Computational Geometry, 2020, 63, 49-72.	0.6	1
71	From spherical to Euclidean illumination. Monatshefte Fur Mathematik, 2020, 192, 483-492.	0.9	1
72	ON CONTACT NUMBERS OF LOCALLY SEPARABLE UNIT SPHERE PACKINGS. Mathematika, 2021, 67, 714-729.	0.5	1

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73	Selected Open Problems in Discrete Geometry and Optimization. Fields Institute Communications, 2013, , 321-336.	1.3	1
74	On the (n ? 2)-transversals of n convex subsets of the plane. Geometriae Dedicata, 1991, 40, 263.	0.3	0
75	3rd Geometry Festival: An International Conference on Packings, Coverings and Tilings. Periodica Mathematica Hungarica, 1997, 34, 1-1.	0.9	0
76	DANZER-GRÃ¼NBAUM'S THEOREM REVISITED. Periodica Mathematica Hungarica, 2000, 39, 7-15.	0.9	0
77	4th GEOMETRY FESTIVAL, BUDAPEST. Periodica Mathematica Hungarica, 2000, 39, 1-6.	0.9	0
78	Proofs on Coverings by Cylinders. Fields Institute Monographs, 2013, , 143-156.	0.4	0
79	ON UNIFORM CONTRACTIONS OF BALLS IN MINKOWSKI SPACES. Mathematika, 2020, 66, 448-457.	0.5	0
80	Volumetric bounds for intersections of congruent balls in Euclidean spaces. Aequationes Mathematicae, 2021, 95, 653-665.	0.8	0
81	Contractions of Sphere Arrangements. Fields Institute Monographs, 2013, , 57-66.	0.4	0
82	Unit Sphere Packings. Fields Institute Monographs, 2013, , 1-16.	0.4	0
83	Coverings by Cylinders. Fields Institute Monographs, 2013, , 131-142.	0.4	0
84	Proofs on Ball-Polyhedra and Spindle Convex Bodies. Fields Institute Monographs, 2013, , 99-129.	0.4	0
85	On Minimal Tilings with Convex Cells Each Containing a Unit Ball. Fields Institute Communications, 2013, , 45-54.	1.3	0
86	Ball-Polyhedra and Spindle Convex Bodies. Fields Institute Monographs, 2013, , 83-98.	0.4	0
87	On k-diametral point configurations in Minkowski spaces. Discrete Mathematics, 2022, 345, 112700.	0.7	0