

Dmitrii V Pasechnik

List of Publications by Year in descending order

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61
papers

18,494
citations

566801

15
h-index

168136

53
g-index

62
all docs

62
docs citations

62
times ranked

27489
citing authors

#	ARTICLE	IF	CITATIONS
1	SciPy 1.0: fundamental algorithms for scientific computing in Python. Nature Methods, 2020, 17, 261-272.	9.0	17,539
2	Approximation of the Stability Number of a Graph via Copositive Programming. SIAM Journal on Optimization, 2002, 12, 875-892.	1.2	229
3	Reduction of symmetric semidefinite programs using the regular \ast -representation. Mathematical Programming, 2007, 109, 613-624.	1.6	84
4	On Approximate Graph Colouring and MAX-k-CUT Algorithms Based on the \hat{I} -Function. Journal of Combinatorial Optimization, 2004, 8, 267-294.	0.8	55
5	Improved Bounds for the Crossing Numbers of $K_{m,n}$ and K_n . SIAM Journal on Discrete Mathematics, 2006, 20, 189-202.	0.4	46
6	Majorana representations of the symmetric group of degree 4. Journal of Algebra, 2010, 324, 2432-2463.	0.4	40
7	The Inverse Moment Problem for Convex Polytopes. Discrete and Computational Geometry, 2012, 48, 596-621.	0.4	39
8	Exploiting group symmetry in truss topology optimization. Optimization and Engineering, 2009, 10, 331-349.	1.3	38
9	CSS-Like Constructions of Asymmetric Quantum Codes. IEEE Transactions on Information Theory, 2013, 59, 6732-6754.	1.5	37
10	On Semidefinite Programming Relaxations of the Traveling Salesman Problem. SIAM Journal on Optimization, 2009, 19, 1559-1573.	1.2	32
11	Polynomial-time computing over quadratic maps i: sampling in real algebraic sets. Computational Complexity, 2005, 14, 20-52.	0.2	30
12	Complexity of Semi-algebraic Proofs. Lecture Notes in Computer Science, 2002, , 419-430.	1.0	22
13	Numerical block diagonalization of matrix \ast -algebras with application to semidefinite programming. Mathematical Programming, 2011, 129, 91.	1.6	21
14	Computing symmetry groups of polyhedra. LMS Journal of Computation and Mathematics, 2014, 17, 565-581.	0.9	21
15	Non-Abelian Representations of Some Sporadic Geometries. Journal of Algebra, 1996, 181, 523-557.	0.4	19
16	Computing the nucleolus of weighted voting games. , 2009, , .		15
17	Extending polar spaces of rank at least 3. Journal of Combinatorial Theory - Series A, 1995, 72, 232-242.	0.5	14
18	The Extensions of the Generalized Quadrangle of Order (3, 9). European Journal of Combinatorics, 1996, 17, 751-755.	0.5	12

#	ARTICLE	IF	CITATIONS
19	On semidefinite programming relaxations of maximum k -section. <i>Mathematical Programming</i> , 2012, 136, 253-278.	1.6	12
20	Geometric characterization of the sporadic groups Fi_{22} , Fi_{23} , and Fi_{24} . <i>Journal of Combinatorial Theory - Series A</i> , 1994, 68, 100-114.	0.5	11
21	Relaxations of Combinatorial Problems Via Association Schemes. <i>Profiles in Operations Research</i> , 2012, , 171-199.	0.3	11
22	Skew-symmetric association schemes with two classes and strongly regular graphs of type L $2n \times 1(4n \times 1)$. <i>Acta Applicandae Mathematicae</i> , 1992, 29, 129-138.	0.5	10
23	Bounding the Betti numbers and computing the Euler-Poincaré characteristic of semi-algebraic sets defined by partly quadratic systems of polynomials. <i>Journal of the European Mathematical Society</i> , 2010, 12, 529-553.	0.7	10
24	On computing Hilbert bases via the Elliot-MacMahon algorithm. <i>Theoretical Computer Science</i> , 2001, 263, 37-46.	0.5	9
25	On the Skeleton of the Metric Polytope. <i>Lecture Notes in Computer Science</i> , 2001, , 125-136.	1.0	9
26	Geometric Characterization of Graphs from the Suzuki Chain. <i>European Journal of Combinatorics</i> , 1993, 14, 491-499.	0.5	8
27	The Automorphism Group and the Convex Subgraphs of the Quadratic Forms Graph in Characteristic 2. <i>Journal of Algebraic Combinatorics</i> , 1993, 2, 411-419.	0.4	8
28	On NP-hardness of the clique partition-Independence number gap recognition and related problems. <i>Discrete Mathematics</i> , 2006, 306, 460-463.	0.4	8
29	Computing the Betti numbers of semi-algebraic sets defined by partly quadratic systems of polynomials. <i>Journal of Algebra</i> , 2009, 321, 2206-2229.	0.4	8
30	Dual Linear Extensions of Generalised Quadrangles. <i>European Journal of Combinatorics</i> , 1991, 12, 541-548.	0.5	7
31	Products of positive forms, linear matrix inequalities, and Hilbert 17th problem for ternary forms. <i>European Journal of Operational Research</i> , 2004, 157, 39-45.	3.5	7
32	Subsets close to invariant subsets for group actions. <i>Proceedings of the American Mathematical Society</i> , 1995, 123, 2283-2295.	0.4	7
33	Bounds on the Cost of Stabilizing a Cooperative Game. <i>Journal of Artificial Intelligence Research</i> , 0, 63, 987-1023.	7.0	7
34	The Universal Covers of Certain Semiplanes. <i>European Journal of Combinatorics</i> , 1997, 18, 491-496.	0.5	6
35	Exponential Lower Bound for Static Semi-algebraic Proofs. <i>Lecture Notes in Computer Science</i> , 2002, , 257-268.	1.0	6
36	On the Irreducibility of a Truncated Binomial Expansion. <i>Rocky Mountain Journal of Mathematics</i> , 2007, 37, .	0.2	5

#	ARTICLE	IF	CITATIONS
37	Book drawings of complete bipartite graphs. <i>Discrete Applied Mathematics</i> , 2014, 167, 80-93.	0.5	5
38	On moments of a polytope. <i>Analysis and Mathematical Physics</i> , 2018, 8, 255-287.	0.6	5
39	Distance-transitive Graphs of Type q . K_q, q and Projective Planes. <i>European Journal of Combinatorics</i> , 1990, 11, 341-346.	0.5	4
40	On Transitive Permutation Groups with Primitive Subconstituents. <i>Bulletin of the London Mathematical Society</i> , 1999, 31, 257-268.	0.4	4
41	The isometries of the cut, metric and hypermetric cones. <i>Journal of Algebraic Combinatorics</i> , 2006, 23, 197-203.	0.4	4
42	A New Family of Extended Generalized Quadrangles. <i>European Journal of Combinatorics</i> , 1997, 18, 155-169.	0.5	3
43	Implementing Brouwer's database of strongly regular graphs. <i>Designs, Codes, and Cryptography</i> , 2017, 84, 223-235.	1.0	3
44	RepnDecomp: A GAP package for decomposing linear representations of finite groups. <i>Journal of Open Source Software</i> , 2020, 5, 1835.	2.0	3
45	Multiple Extensions of Generalized Hexagons Related to the Simple Groups M_{24} and Co_3 . <i>Journal of the London Mathematical Society</i> , 1996, 54, 16-24.	0.5	2
46	On polygonal measures with vanishing harmonic moments. <i>Journal D'Analyse Mathematique</i> , 2014, 123, 281-301.	0.4	2
47	Sandpile groups of generalized de Bruijn and Kautz graphs and circulant matrices over finite fields. <i>Journal of Algebra</i> , 2015, 421, 268-295.	0.4	2
48	Random Chain Complexes. <i>Arnold Mathematical Journal</i> , 2017, 3, 197-204.	0.2	2
49	A GAP Package for Computation with Coherent Configurations. <i>Lecture Notes in Computer Science</i> , 2010, , 69-72.	1.0	2
50	A Note on the Stability Number of an Orthogonality Graph. <i>SSRN Electronic Journal</i> , 0, , .	0.4	2
51	Exploiting Group Symmetry in Truss Topology Optimization. <i>SSRN Electronic Journal</i> , 0, , .	0.4	2
52	Affine extensions of the Petersen graph and 2-arc-transitive graphs of girth 5. <i>European Journal of Combinatorics</i> , 1992, 13, 279-290.	0.5	1
53	Extended generalized octagons and the group H_e . <i>Geometriae Dedicata</i> , 1995, 56, 85-101.	0.1	1
54	The Universal Covers of the Sporadic Semiplanes. <i>European Journal of Combinatorics</i> , 1996, 17, 595-604.	0.5	1

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55	Two distance-regular graphs. <i>Journal of Algebraic Combinatorics</i> , 2012, 36, 403-407.	0.4	1
56	Edge-dominating cycles, k-walks and Hamilton prisms in 2K2-free graphs. <i>Journal of Knot Theory and Its Ramifications</i> , 2016, 25, 1642011.	0.1	1
57	Splitting fields of real irreducible representations of finite groups. <i>Representation Theory</i> , 2021, 25, 897-902.	0.2	1
58	On the Lovasz O-number of Almost Regular Graphs with Application to Erdos-Renyi Graphs. <i>SSRN Electronic Journal</i> , 0, , .	0.4	1
59	New examples of finite C_2 -geometries. <i>Geometriae Dedicata</i> , 1993, 46, 161-164.	0.1	0
60	Local characterizations of geometries. <i>Bulletin of the Australian Mathematical Society</i> , 1996, 53, 175-176.	0.3	0
61	Critical groups of generalized de Bruijn and Kautz graphs and circulant matrices over finite fields. , 2013, , 97-104.		0