Sergei Tabachnikov

List of Publications by Year in descending order

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394421 1,571 99 19 citations papers

377865 34 g-index h-index

105 105 105 416 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Dan Reznik's identities and more. European Journal of Mathematics, 2022, 8, 1341-1354.	0.5	19
2	Billiards in ellipses revisited. European Journal of Mathematics, 2022, 8, 1313-1327.	0.5	17
3	Cross-ratio Dynamics on Ideal Polygons. International Mathematics Research Notices, 2022, 2022, 6770-6853.	1.0	6
4	Remarks on Rigidity Properties of Conics. Regular and Chaotic Dynamics, 2022, 27, 18-23.	0.8	0
5	Loewner's "Forgotten―Theorem. Mathematical Intelligencer, 2022, 44, 7-11.	0.2	O
6	Symplectically convex and symplectically star-shaped curves: a variational problem. Journal of Fixed Point Theory and Applications, 2022, 24, 1.	1.1	0
7	Polar Bear or Penguin? Musings on Earth Cartography and Chebyshev Nets. Mathematical Intelligencer, 2021, 43, 20-24.	0.2	0
8	Four equivalent properties of integrable billiards. Israel Journal of Mathematics, 2021, 241, 693-719.	0.8	2
9	Remarks on Joachimsthal Integral and Poritsky Property. Arnold Mathematical Journal, 2021, 7, 483-491.	0.4	1
10	Variations on the Tait–Kneser Theorem. Mathematical Intelligencer, 2021, 43, 8-14.	0.2	5
11	Tire Tracks and Integrable Curve Evolution. International Mathematics Research Notices, 2020, 2020, 2698-2768.	1.0	16
12	Wire billiards, the first steps. Advances in Mathematics, 2020, 368, 107154.	1.1	9
13	Descartes Circle Theorem, Steiner Porism, and Spherical Designs. American Mathematical Monthly, 2020, 127, 238-248.	0.3	2
14	Two Variations on the Periscope Theorem. Regular and Chaotic Dynamics, 2020, 25, 11-17.	0.8	2
15	Kasner Meets Poncelet. Mathematical Intelligencer, 2019, 41, 56-59.	0.2	1
16	Projective Configuration Theorems: Old Wine into New Wineskins. , 2019, , 401-434.		2
17	Dual Numbers, Weighted Quivers, and Extended Somos and Gale-Robinson Sequences. Algebras and Representation Theory, 2018, 21, 1119-1132.	0.7	6
18	Vladimir Igorevich Arnold. 12 June 1937—3 June 2010. Biographical Memoirs of Fellows of the Royal Society, 2018, 64, 7-26.	0.1	0

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19	On Centro-Affine Curves and BÃeklund Transformations of the KdV Equation. Arnold Mathematical Journal, 2018, 4, 445-458.	0.4	4
20	Open problems, questions and challenges in finite- dimensional integrable systems. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20170430.	3.4	18
21	A Four-Vertex Theorem for Frieze Patterns?. Mathematical Intelligencer, 2018, 40, 14-18.	0.2	O
22	Introducing symplectic billiards. Advances in Mathematics, 2018, 333, 822-867.	1.1	7
23	Billiard transformations of parallel flows: A periscope theorem. Journal of Geometry and Physics, 2017, 115, 157-166.	1.4	10
24	Polynomials as Polygons. Mathematical Intelligencer, 2017, 39, 41-43.	0.2	2
25	Iterating Evolutes and Involutes. Discrete and Computational Geometry, 2017, 58, 80-143.	0.6	5
26	On the bicycle transformation and the filament equation: Results and conjectures. Journal of Geometry and Physics, 2017, 115, 116-123.	1.4	10
27	lvory's theorem revisited. Journal of Integrable Systems, 2017, 2, .	0.4	20
28	Hopf Fibrations and Hurwitz-Radon Numbers. Mathematical Intelligencer, 2016, 38, 11-18.	0.2	9
29	The Six Circles Theorem Revisited. American Mathematical Monthly, 2016, 123, 689.	0.3	0
30	On Lagrangian tangent sweeps and Lagrangian outer billiards. Geometriae Dedicata, 2016, 182, 203-213.	0.3	0
31	Centers of Mass of Poncelet Polygons, 200 Years After. Mathematical Intelligencer, 2016, 38, 29-34.	0.2	16
32	Integrable cluster dynamics of directed networks and pentagram maps. Advances in Mathematics, 2016, 300, 390-450.	1.1	20
33	Skewers. Arnold Mathematical Journal, 2016, 2, 171-193.	0.4	1
34	Configuration Spaces of Plane Polygons and a sub-Riemannian Approach to the Equitangent Problem. Journal of Dynamical and Control Systems, 2016, 22, 227-250.	0.8	1
35	Iterating Evolutes of Spacial Polygons and of Spacial Curves. Moscow Mathematical Journal, 2016, 16, 667-689.	0.4	1
36	Introducing supersymmetric frieze patterns and linear difference operators. Mathematische Zeitschrift, 2015, 281, 1061-1087.	0.9	4

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37	On curves and polygons with the equiangular chord property. Pacific Journal of Mathematics, 2015, 274, 305-324.	0.5	5
38	A Baker's Dozen of Problems. Arnold Mathematical Journal, 2015, 1, 59-67.	0.4	2
39	Remarks on the Circumcenter of Mass. Arnold Mathematical Journal, 2015, 1, 101-112.	0.4	5
40	Coxeter's frieze patterns and discretization of the Virasoro orbit. Journal of Geometry and Physics, 2015, 87, 373-381.	1.4	3
41	Dragon Curves Revisited. Mathematical Intelligencer, 2014, 36, 13-17.	0.2	15
42	The Ice Cube Proof. Mathematical Intelligencer, 2014, 36, 1-3.	0.2	1
43	Circumcenter of Mass and Generalized Euler Line. Discrete and Computational Geometry, 2014, 51, 815-836.	0.6	9
44	Linear difference equations, frieze patterns, and the combinatorial Gale transform. Forum of Mathematics, Sigma, 2014, 2, .	0.7	22
45	Liouville $\hat{a}\in ``Arnold integrability of the pentagram map on closed polygons. Duke Mathematical Journal, 2013, 162, .$	1.5	32
46	Tractrices, Bicycle Tire Tracks, Hatchet Planimeters, and a 100-year-old Conjecture. American Mathematical Monthly, 2013, 120, 199.	0.3	27
47	Osculating Curves: Around the Tait-Kneser Theorem. Mathematical Intelligencer, 2013, 35, 61-66.	0.2	20
48	On fibrations with flat fibres. Bulletin of the London Mathematical Society, 2013, 45, 625-632.	0.8	11
49	The (Un)equal Tangents Problem. American Mathematical Monthly, 2012, 119, 398.	0.3	5
50	Discrete spherical means of directional derivatives and Veronese maps. Journal of Geometry and Physics, 2012, 62, 124-136.	1.4	1
51	Higher pentagram maps, weighted directed networks, and cluster dynamics. Electronic Research Announcements in Mathematical Sciences, 2012, 19, 1-17.	0.6	11
52	2-frieze patterns and the cluster structure of the space of polygons. Annales De L'Institut Fourier, 2012, 62, 937-987.	0.6	26
53	Tribute to Vladimir Arnold. Notices of the American Mathematical Society, 2012, 59, 378.	0.2	1
54	Variations on R. Schwartz's Inequality for the Schwarzian Derivative. Discrete and Computational Geometry, 2011, 46, 724-742.	0.6	4

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55	The Pentagram Integrals on Inscribed Polygons. Electronic Journal of Combinatorics, 2011, 18, .	0.4	6
56	Elementary Surprises in Projective Geometry. Mathematical Intelligencer, 2010, 32, 31-34.	0.2	17
57	The Pentagram Map: A Discrete Integrable System. Communications in Mathematical Physics, 2010, 299, 409-446.	2.2	76
58	Existence and nonexistence of skew branes. Journal of Fixed Point Theory and Applications, 2010, 7, 419-431.	1.1	1
59	TOPOLOGICAL ASPECTS OF THE DVORETZKY THEOREM. Journal of Topology and Analysis, 2010, 02, 453-467.	0.5	4
60	Contact complete integrability. Regular and Chaotic Dynamics, 2010, 15, 504.	0.8	1
61	Self-dual polygons and self-dual curves. Functional Analysis and Other Mathematics, 2009, 2, 203-220.	0.3	8
62	Chases and Escapes. The Mathematics of Pursuit and Evasion by Paul J. Nahin. Mathematical Intelligencer, 2009, 31, 78-79.	0.2	4
63	Pseudo-Riemannian geodesics and billiards. Advances in Mathematics, 2009, 221, 1364-1396.	1.1	56
64	On Bicycle Tire Tracks Geometry, Hatchet Planimeter, Menzin's Conjecture, and Oscillation of Unicycle Tracks. Experimental Mathematics, 2009, 18, 173-186.	0.7	17
65	Quasiperiodic motion for the pentagram map. Electronic Research Announcements in Mathematical Sciences, 2009, 16, 1-8.	0.6	5
66	Totally skew embeddings of manifolds. Mathematische Zeitschrift, 2008, 258, 499-512.	0.9	20
67	Converse Sturm–Hurwitz–Kellogg theorem and related results. Journal of Fixed Point Theory and Applications, 2008, 3, 121-130.	1.1	0
68	On algebraically integrable outer billiards. Pacific Journal of Mathematics, 2008, 235, 89-92.	0.5	15
69	The Poncelet Grid and Billiards in Ellipses. American Mathematical Monthly, 2007, 114, 895-908.	0.3	36
70	Hyperbolic Carathéodory conjecture. Proceedings of the Steklov Institute of Mathematics, 2007, 258, 178-193.	0.3	4
71	Arnold's Problem. Mathematical Intelligencer, 2007, 29, 49-52.	0.2	1
72	A proof of Culter's theorem on the existence of periodic orbits in polygonal outer billiards. Geometriae Dedicata, 2007, 129, 83-87.	0.3	10

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73	On configuration spaces of plane polygons, sub-Riemannian geometry and periodic orbits of outer billiards. Journal of Modern Dynamics, 2007, 1, 155-173.	0.5	11
74	Tire track geometry: Variations on a theme. Israel Journal of Mathematics, 2006, 151, 1-28.	0.8	25
75	Non-existence of \$n\$-dimensional \$T\$-embedded discs in \$mathbb R^{2n}\$. Commentarii Mathematici Helvetici, 2006, 81, 877-882.	0.7	7
76	Dual Billiards. Mathematical Intelligencer, 2005, 27, 18-25.	0.2	27
77	Title is missing!. International Mathematics Research Notices, 2003, 2003, 1853.	1.0	57
78	On three-periodic trajectories of multi-dimensional dual billiards. Algebraic and Geometric Topology, 2003, 3, 993-1004.	0.4	6
79	Dual billiards in the hyperbolic plane*. Nonlinearity, 2002, 15, 1051-1072.	1.4	12
80	Chapter 13 Rational billiards and flat structures. Handbook of Dynamical Systems, 2002, 1, 1015-1089.	0.6	150
81	MASS program at penn state. Mathematical Intelligencer, 2002, 24, 50-56.	0.2	1
82	Periodic trajectories in 3-dimensional convex billiards. Manuscripta Mathematica, 2002, 108, 431-437.	0.6	9
83	Billiards in Finsler and Minkowski geometries. Journal of Geometry and Physics, 2002, 40, 277-301.	1.4	35
84	Topology of cyclic configuration spaces and periodic trajectories of multi-dimensional billiards. Topology, 2002, 41, 553-589.	0.3	32
85	Going in Circles: Variations on the Money-Coutts Theorem. Geometriae Dedicata, 2000, 80, 201-209.	0.3	7
86	A Four Vertex Theorem for Polygons. American Mathematical Monthly, 2000, 107, 830-833.	0.3	6
87	A Four Vertex Theorem for Polygons. American Mathematical Monthly, 2000, 107, 830.	0.3	3
88	More on Paperfolding. American Mathematical Monthly, 1999, 106, 27-35.	0.3	42
89	Fagnano Orbits of Polygonal Dual Billiards. Geometriae Dedicata, 1999, 77, 279-286.	0.3	7
90	More on Paperfolding. American Mathematical Monthly, 1999, 106, 27.	0.3	24

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91	Introducing projective billiards. Ergodic Theory and Dynamical Systems, 1997, 17, 957-976.	0.6	13
92	Invariants of Legendrian and transverse knots in the standard contact space. Topology, 1997, 36, 1025-1053.	0.3	92
93	Estimates for the Bennequin number of Legendrian links from state models for knot polynomials. Mathematical Research Letters, 1997, 4, 143-156.	0.5	21
94	Asymptotic dynamics of the dual billiard transformation. Journal of Statistical Physics, 1996, 83, 27-37.	1.2	12
95	Title is missing!. International Mathematics Research Notices, 1996, 1996, 705.	1.0	2
96	Commuting dual billiard maps. Geometriae Dedicata, 1994, 53, 57-68.	0.3	11
97	Geometry of Lagrangian and Legendrian 2-web. Differential Geometry and Its Applications, 1993, 3, 265-284.	0.5	9
98	Fun Problems in Geometry and Beyond. Symmetry, Integrability and Geometry: Methods and Applications (SIGMA), 0 , , .	0.5	2
99	Open Problems on Billiards and Geometric Optics. Arnold Mathematical Journal, 0, , 1.	0.4	1