## Sergei Tabachnikov

## List of Publications by Year

 in descending orderSource: https:|/exaly.com/author-pdf/190650/publications.pdf
Version: 2024-02-01

1 Dan Reznikâ $€^{T M}$ s identities and more. European Journal of Mathematics, 2022, 8, 1341-1354. 0.5 ..... 19
$2 \quad$ Billiards in ellipses revisited. European Journal of Mathematics, 2022, 8, 1313-1327. ..... 0.5 ..... 17
Cross-ratio Dynamics on Ideal Polygons. International Mathematics Research Notices, 2022, 2022,1.06770-6853.4 Remarks on Rigidity Properties of Conics. Regular and Chaotic Dynamics, 2022, 27, 18-23.Symplectically convex and symplectically star-shaped curves: a variational problem. Journal of FixedPoint Theory and Applications, 2022, 24, 1.1.10
11 Tire Tracks and Integrable Curve Evolution. International Mathematics Research Notices, 2020, 2020,
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12 Wire billiards, the first steps. Advances in Mathematics, 2020, 368, 107154.1.19
Descartes Circle Theorem, Steiner Porism, and Spherical Designs. American Mathematical Monthly,2020, 127, 238-248.
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14 Two Variations on the Periscope Theorem. Regular and Chaotic Dynamics, 2020, 25, 11-17.0.82
15 Kasner Meets Poncelet. Mathematical Intelligencer, 2019, 41, 56-59. ..... $0.2 \quad 1$
Projective Configuration Theorems: Old Wine into New Wineskins. , 2019, , 401-434.2

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19 On Centro-Affine Curves and BÃcklund Transformations of the KdV Equation. Arnold Mathematical
Journal, 2018, 4, 445-458. Journal, 2018, 4, 445-458.
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$3.4 \quad 18$
Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20170430.

21 A Four-Vertex Theorem for Frieze Patterns?. Mathematical Intelligencer, 2018, 40, 14-18.
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22 Introducing symplectic billiards. Advances in Mathematics, 2018, 333, 822-867.
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23 Billiard transformations of parallel flows: A periscope theorem. Journal of Geometry and Physics,
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24 Polynomials as Polygons. Mathematical Intelligencer, 2017, 39, 41-43.
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25 Iterating Evolutes and Involutes. Discrete and Computational Geometry, 2017, 58, 80-143.
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On the bicycle transformation and the filament equation: Results and conjectures. Journal of Geometry and Physics, 2017, 115, 116-123.

27 Ivoryâ $€^{T M}$ s theorem revisited. Journal of Integrable Systems, 2017, 2, .
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28 Hopf Fibrations and Hurwitz-Radon Numbers. Mathematical Intelligencer, 2016, 38, 11-18.
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29 The Six Circles Theorem Revisited. American Mathematical Monthly, 2016, 123, 689.
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30 On Lagrangian tangent sweeps and Lagrangian outer billiards. Geometriae Dedicata, 2016, 182, 203-213.
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31 Centers of Mass of Poncelet Polygons, 200 Years After. Mathematical Intelligencer, 2016, 38, 29-34.
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Integrable cluster dynamics of directed networks and pentagram maps. Advances in Mathematics, 2016, 300, 390-450.
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Configuration Spaces of Plane Polygons and a sub-Riemannian Approach to the Equitangent Problem.

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Iterating Evolutes of Spacial Polygons and of Spacial Curves. Moscow Mathematical Journal, 2016, 16,
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\begin{aligned}
& \text { On curves and polygons with the equiangular chord property. Pacific Journal of Mathematics, 2015, } \\
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| 44Linear difference equations, frieze patterns, and the combinatorial Gale transform. Forum of <br> Mathematics, Sigma, 2014, 2,. | 0.7 |  |
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| 45 | Liouvilleâ€"Arnold integrability of the pentagram map on closed polygons. Duke Mathematical Journal, <br> $2013,162,$. | 1.5 |
| 46 | Tractrices, Bicycle Tire Tracks, Hatchet Planimeters, and a 100-year-old Conjecture. American <br> Mathematical Monthly, 2013, 120,199. | 0.3 |

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
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Discrete spherical means of directional derivatives and Veronese maps. Journal of Geometry and1.41Physics, 2012, 62, 124-136.Higher pentagram maps, weighted directed networks, and cluster dynamics. Electronic ResearchAnnouncements in Mathematical Sciences, 2012, 19, 1-17.
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53 Tribute to Vladimir Arnold. Notices of the American Mathematical Society, 2012, 59, 378. ..... 0.2 ..... 1

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56 Elementary Surprises in Projective Geometry. Mathematical Intelligencer, 2010, 32, 31-34.
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57 The Pentagram Map: A Discrete Integrable System. Communications in Mathematical Physics, 2010, 299,
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58 Existence and nonexistence of skew branes. Journal of Fixed Point Theory and Applications, 2010, 7,
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TOPOLOGICAL ASPECTS OF THE DVORETZKY THEOREM. Journal of Topology and Analysis, 2010, 02,
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61 Self-dual polygons and self-dual curves. Functional Analysis and Other Mathematics, 2009, 2, 203-220.
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## 62 Chases and Escapes. The Mathematics of Pursuit and Evasion by Paul J. Nahin. Mathematical

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Quasiperiodic motion for the pentagram map. Electronic Research Announcements in Mathematical
Sciences, 2009, 16, 1-8.
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66 Totally skew embeddings of manifolds. Mathematische Zeitschrift, 2008, 258, 499-512.
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Converse Sturmâ€"Hurwitzâ€"Kellogg theorem and related results. Journal of Fixed Point Theory and
Applications, 2008, 3, 121-130.

68 On algebraically integrable outer billiards. Pacific Journal of Mathematics, 2008, 235, 89-92.
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69 The Poncelet Grid and Billiards in Ellipses. American Mathematical Monthly, 2007, 114, 895-908. 36

Hyperbolic CarathÃ@odory conjecture. Proceedings of the Steklov Institute of Mathematics, 2007, 258, 178-193.
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74 Tire track geometry: Variations on a theme. Israel Journal of Mathematics, 2006, 151, 1-28. .....
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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, 553-589.0.332
85 Going in Circles: Variations on the Money-Coutts Theorem. Geometriae Dedicata, 2000, 80, 201-209. ..... 0.3 ..... 7

92 Invariants of Legendrian and transverse knots in the standard contact space. Topology, 1997, 36, 1025-1053.

Estimates for the Bennequin number of Legendrian links from state models for knot polynomials.
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94 Asymptotic dynamics of the dual billiard transformation. Journal of Statistical Physics, 1996, 83, 27-37.

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Fun Problems in Geometry and Beyond. Symmetry, Integrability and Geometry: Methods and

