

# Mikhail Katanaev

## List of Publications by Year in descending order

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55  
papers

1,170  
citations

567281

15  
h-index

395702

33  
g-index

58  
all docs

58  
docs citations

58  
times ranked

321  
citing authors

#	ARTICLE	IF	CITATIONS
1	Theory of defects in solids and three-dimensional gravity. <i>Annals of Physics</i> , 1992, 216, 1-28.	2.8	437
2	Geometric theory of defects. <i>Physics-Usppekhi</i> , 2005, 48, 675-701.	2.2	83
3	Two-dimensional gravity with dynamical torsion and strings. <i>Annals of Physics</i> , 1990, 197, 1-32.	2.8	75
4	On the completeness of the black hole singularity in 2D dilaton theories. <i>Nuclear Physics B</i> , 1997, 486, 353-370.	2.5	56
5	Geometric interpretation and classification of global solutions in generalized dilaton gravity. <i>Physical Review D</i> , 1996, 53, 5609-5618.	4.7	47
6	Scattering on Dislocations and Cosmic Strings in the Geometric Theory of Defects. <i>Annals of Physics</i> , 1999, 271, 203-232.	2.8	43
7	Complete integrability of two-dimensional gravity with dynamical torsion. <i>Journal of Mathematical Physics</i> , 1990, 31, 882-891.	1.1	34
8	Conformal invariance, extremals, and geodesics in two-dimensional gravity with torsion. <i>Journal of Mathematical Physics</i> , 1991, 32, 2483-2496.	1.1	32
9	All universal coverings of two-dimensional gravity with torsion. <i>Journal of Mathematical Physics</i> , 1993, 34, 700-736.	1.1	31
10	Wedge Dislocation in the Geometric Theory of Defects. <i>Theoretical and Mathematical Physics(Russian)</i> Tj ETQq0 0 0 rgBT /Overlock 10 T	0.9	31
11	Global Properties of Warped Solutions in General Relativity. <i>Annals of Physics</i> , 1999, 276, 191-222.	2.8	28
12	Canonical quantization of the string with dynamical geometry and anomaly free nontrivial string in two dimensions. <i>Nuclear Physics B</i> , 1994, 416, 563-605.	2.5	16
13	Effective Action for Scalar Fields in Two-Dimensional Gravity. <i>Annals of Physics</i> , 2002, 296, 1-50.	2.8	16
14	One-Dimensional Topologically Nontrivial Solutions in the Skyrme Model. <i>Theoretical and Mathematical Physics(Russian Federation)</i> , 2004, 138, 163-176.	0.9	16
15	Point massive particle in General Relativity. <i>General Relativity and Gravitation</i> , 2013, 45, 1861-1875.	2.0	16
16	Killing vector fields and a homogeneous isotropic universe. <i>Physics-Usppekhi</i> , 2016, 59, 689-700.	2.2	14
17	Euclidean two-dimensional gravity with torsion. <i>Journal of Mathematical Physics</i> , 1997, 38, 946-980.	1.1	11
18	Lorentz invariant vacuum solutions in general relativity. <i>Proceedings of the Steklov Institute of Mathematics</i> , 2015, 290, 138-142.	0.3	11

#	ARTICLE	IF	CITATIONS
19	Gauge theory for the Poincaré $\mathfrak{h}_2$ group. Theoretical and Mathematical Physics(Russian Federation), 1983, 54, 248-252.	0.9	10
20	Tube dislocations in gravity. Journal of Mathematical Physics, 2009, 50, 042501.	1.1	10
21	Chern-Simons term in the geometric theory of defects. Physical Review D, 2017, 96, .	4.7	9
22	Chern-Simons Action and Disclinations. Proceedings of the Steklov Institute of Mathematics, 2018, 301, 114-133.	0.3	9
23	The $\mathfrak{h}_2$ Hooft-Polyakov monopole in the geometric theory of defects. Modern Physics Letters B, 2020, 34, 2050126.	1.9	9
24	New constraints in dynamical torsion theory. General Relativity and Gravitation, 1993, 25, 349-359.	2.0	8
25	Cosmological models with homogeneous and isotropic spatial sections. Theoretical and Mathematical Physics(Russian Federation), 2017, 191, 661-668.	0.9	8
26	Scalar fields and dynamical torsion in Kaluza-Klein theories. Theoretical and Mathematical Physics(Russian Federation), 1986, 66, 53-60.	0.9	7
27	Polynomial form of the Hilbert-Einstein action. General Relativity and Gravitation, 2006, 38, 1233-1240.	2.0	7
28	Disclinations in the Geometric Theory of Defects. Proceedings of the Steklov Institute of Mathematics, 2021, 313, 78-98.	0.3	7
29	String with dynamical geometry. Hamiltonian analysis in conformal gauge. Theoretical and Mathematical Physics(Russian Federation), 1989, 80, 838-848.	0.9	6
30	Global solutions in gravity. Nuclear Physics, Section B, Proceedings Supplements, 2000, 88, 233-236.	0.4	6
31	On homogeneous and isotropic universe. Modern Physics Letters A, 2015, 30, 1550186.	1.2	6
32	Point disclinations in the Chern-Simons geometric theory of defects. Modern Physics Letters B, 2020, 34, 2150012.	1.9	6
33	Inside the BTZ black hole. Physical Review D, 2007, 75, .	4.7	5
34	Passing the Einstein-Rosen bridge. Modern Physics Letters A, 2014, 29, 1450090.	1.2	5
35	Rotational elastic waves in double wall tube. Physics Letters, Section A: General, Atomic and Solid State Physics, 2015, 379, 1544-1548.	2.1	5
36	Rotational elastic waves in a cylindrical waveguide with wedge dislocation. Journal of Physics A: Mathematical and Theoretical, 2016, 49, 085202.	2.1	5

#	ARTICLE	IF	CITATIONS
37	Description of Disclinations and Dislocations by the Chern-Simons Action for $S^3$ Connection. Physics of Particles and Nuclei, 2018, 49, 890-893.	0.7	5
38	Linear connection in theories of Kaluza-Klein type. Theoretical and Mathematical Physics(Russian) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.9	4
39	Polynomial Hamiltonian form of general relativity. Theoretical and Mathematical Physics(Russian) Tj ETQq1 1 0.784314 rgBT /Overlock	0.9	4
40	Normal Coordinates in Affine Geometry. Lobachevskii Journal of Mathematics, 2018, 39, 464-476.	0.9	4
41	Spin Distribution for the $TM^4$ Hooft-Polyakov Monopole in the Geometric Theory of Defects. Universe, 2021, 7, 256.	2.5	4
42	Generalized supergravity in two dimensions. Nuclear Physics B, 1998, 530, 457-486.	2.5	3
43	Gravity with dynamical torsion. Classical and Quantum Gravity, 2021, 38, 015014.	4.0	3
44	Kinetic term for the Lorentz connection. Theoretical and Mathematical Physics(Russian Federation), 1985, 65, 1043-1050.	0.9	2
45	Kinetic part of dynamical torsion theory. Theoretical and Mathematical Physics(Russian Federation), 1987, 72, 735-741.	0.9	2
46	Adiabatic theorem for finite dimensional quantum mechanical systems. Russian Physics Journal, 2011, 54, 342-353.	0.4	2
47	On geometric interpretation of the Aharonov-Bohm effect. Russian Physics Journal, 2011, 54, 507-514.	0.4	2
48	Wedge dislocations, three-dimensional gravity, and the Riemann-Hilbert problem. Physics of Particles and Nuclei, 2012, 43, 639-643.	0.7	2
49	Wedge dislocations and three-dimensional gravity. P-Adic Numbers, Ultrametric Analysis, and Applications, 2012, 4, 5-19.	0.4	2
50	On geometric interpretation of the berry phase. Russian Physics Journal, 2012, 54, 1082-1092.	0.4	2
51	Gauge Parameterization of the n-Field. Proceedings of the Steklov Institute of Mathematics, 2019, 306, 127-134.	0.3	2
52	Global properties of warped solutions in general relativity with an electromagnetic field and a cosmological constant. Physical Review D, 2019, 100, .	4.7	1
53	Large-scale limit of dynamic-torsion theory. Soviet Physics Journal (English Translation of Izvestiia) Tj ETQq1 1 0.784314 rgBT /Overlock	0.0	0
54	Nonrelativistic Limit of the Bosonic String. Proceedings of the Steklov Institute of Mathematics, 2020, 309, 183-193.	0.3	0

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55	Global properties of warped solutions in general relativity with an electromagnetic field and a cosmological constant. II.. Physical Review D, 2020, 101, .	4.7	0