Serguei Krouglov

List of Publications by Year in descending order

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69 papers

1,642 citations

257450 24 h-index 36 g-index

79 all docs

79 docs citations

79 times ranked 576 citing authors

#	Article	IF	CITATIONS
1	Hierarchical Model of Fibrillar Collagen Organization for Interpreting the Second-Order Susceptibility Tensors in Biological Tissue. Biophysical Journal, 2012, 103, 2093-2105.	0.5	116
2	A model of nonlinear electrodynamics. Annals of Physics, 2015, 353, 299-306.	2.8	94
3	Double Stokes Mueller polarimetry of second-harmonic generation in ordered molecular structures. Journal of the Optical Society of America B: Optical Physics, 2015, 32, 451.	2.1	61
4	Nonlinear arcsinâ€electrodynamics. Annalen Der Physik, 2015, 527, 397-401.	2.4	60
5	Nonlinear arcsinâ€electrodynamics and asymptotic Reissnerâ€Nordström black holes. Annalen Der Physik, 2016, 528, 588-596.	2.4	57
6	Characterization of collagen in non-small cell lung carcinoma with second harmonic polarization microscopy. Biomedical Optics Express, 2014, 5, 3562.	2.9	55
7	Nonlinear Electrodynamics and Magnetic Black Holes. Annalen Der Physik, 2017, 529, 1700073.	2.4	54
8	Black hole as a magnetic monopole within exponential nonlinear electrodynamics. Annals of Physics, 2017, 378, 59-70.	2.8	52
9	Born–Infeld-type electrodynamics and magnetic black holes. Annals of Physics, 2017, 383, 550-559.	2.8	51
10	Collagen chirality and threeâ€dimensional orientation studied with polarimetric secondâ€harmonic generation microscopy. Journal of Biophotonics, 2019, 12, e201800241.	2.3	51
11	Vacuum birefringence from the effective Lagrangian of the electromagnetic field. Physical Review D, 2007, 75, .	4.7	48
12	Acceleration of universe by nonlinear electromagnetic fields. International Journal of Modern Physics D, 2016, 25, 1640002.	2.1	41
13	On generalized Born–Infeld electrodynamics. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 375402.	2.1	38
14	Nonlinear Stokes-Mueller polarimetry. Physical Review A, 2016, 93, .	2.5	37
15	Nonlinear electromagnetic fields as a source of universe acceleration. International Journal of Modern Physics A, 2016, 31, 1650058.	1.5	34
16	Magnetically charged black hole in framework of nonlinear electrodynamics model. International Journal of Modern Physics A, 2018, 33, 1850023.	1.5	33
17	Complex Susceptibilities and Chiroptical Effects of Collagen Measured with Polarimetric Second-Harmonic Generation Microscopy. Scientific Reports, 2019, 9, 12488.	3.3	33
18	Characterization of Pancreatic Cancer Tissue Using Multiphoton Excitation Fluorescence and Polarization-Sensitive Harmonic Generation Microscopy. Frontiers in Oncology, 2019, 9, 272.	2.8	32

#	Article	IF	CITATIONS
19	On generalized logarithmic electrodynamics. European Physical Journal C, 2015, 75, 1.	3.9	31
20	Second harmonic generation double stokes Mueller polarimetric microscopy of myofilaments. Biomedical Optics Express, 2016, 7, 559.	2.9	31
21	Modified Nonlinear Model of Arcsin-Electrodynamics. Communications in Theoretical Physics, 2016, 66, 59-65.	2.5	30
22	The shadow of M87â^— black hole within rational nonlinear electrodynamics. Modern Physics Letters A, 2020, 35, 2050291.	1.2	30
23	Nonlinear electrodynamics with birefringence. Physics Letters, Section A: General, Atomic and Solid State Physics, 2015, 379, 623-625.	2.1	27
24	Nonlinear electrodynamics and black holes. International Journal of Geometric Methods in Modern Physics, 2015, 12, 1550073.	2.0	26
25	Remarks on Heisenberg–Euler-type electrodynamics. Modern Physics Letters A, 2017, 32, 1750092.	1.2	25
26	Dyonic Black Holes with Nonlinear Logarithmic Electrodynamics. Gravitation and Cosmology, 2019, 25, 190-195.	1.1	25
27	MODIFIED WAVE EQUATION FOR SPINLESS PARTICLES AND ITS SOLUTIONS IN AN EXTERNAL MAGNETIC FIELD. Modern Physics Letters A, 2013, 28, 1350014.	1.2	23
28	Pair Production and Vacuum Polarization of Arbitrary Spin Particles with EDM and AMM. Annals of Physics, 2001, 293, 228-239.	2.8	22
29	Magnetized black holes and nonlinear electrodynamics. International Journal of Modern Physics A, 2017, 32, 1750147.	1.5	21
30	Notes on Born–Infeld-type electrodynamics. Modern Physics Letters A, 2017, 32, 1750201.	1.2	21
31	Corrections to Reissner-Nordstr $ ilde{A}\P$ m black hole solution due to exponential nonlinear electrodynamics. Europhysics Letters, 2016, 115, 60006.	2.0	20
32	Effective Lagrangian at cubic order in electromagnetic fields and vacuum birefringence. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2007, 652, 146-149.	4.1	18
33	Inflation of universe due to nonlinear electrodynamics. International Journal of Modern Physics A, 2017, 32, 1750071.	1.5	17
34	On a Model of Magnetically Charged Black Hole with Nonlinear Electrodynamics. Universe, 2018, 4, 66.	2.5	17
35	Second Harmonic Generation Mediated by Aligned Water in Starch Granules. Journal of Physical Chemistry B, 2014, 118, 141216070413005.	2.6	16
36	Pair production and vacuum polarization of vector particles with electric dipole moments and anomalous magnetic moments. European Physical Journal C, 2001, 22, 89-98.	3.9	15

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37	ON EXPONENTIAL MODIFIED GRAVITY. International Journal of Modern Physics A, 2013, 28, 1350119.	1.5	14
38	Einstein <mml:math altimg="si6.svg" display="inline" id="d1e1070" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mo>â^'</mml:mo></mml:math> Gauss <mml:math altimg="si6.svg" display="inline" id="d1e1075" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mo>â^'</mml:mo></mml:math> Bonnet gravity with nonlinear electrodynamics. Annals of Physics, 2021, 428, 168449.	2.8	14
39	Beyond Starobinsky inflation. Physical Review D, 2018, 98, .	4.7	13
40	Dyonic black holes in framework of Born–Infeld-type electrodynamics. General Relativity and Gravitation, 2019, 51, 1.	2.0	13
41	Dyonic and magnetized black holes based on nonlinear electrodynamics. European Physical Journal C, 2020, $80,1.$	3.9	13
42	Born–Infeld-Like Modified Gravity. International Journal of Theoretical Physics, 2013, 52, 2477-2484.	1.2	12
43	Dyonic and magnetic black holes with nonlinear arcsin-electrodynamics. Annals of Physics, 2019, 409, 167937.	2.8	12
44	Remarks on Nonsingular Models of Hayward and Magnetized Black Hole with Rational Nonlinear Electrodynamics. Gravitation and Cosmology, 2021, 27, 78-84.	1.1	12
45	Magnetic black holes with generalized ModMax model of nonlinear electrodynamics. International Journal of Modern Physics D, 2022, 31, .	2.1	12
46	Three-photon Stokes-Mueller polarimetry. Physical Review A, 2016, 93, .	2.5	11
47	Black hole solution in the framework of arctan-electrodynamics. International Journal of Modern Physics D, 2017, 26, 1750075.	2.1	11
48	Rational nonlinear electrodynamics causes the inflation of the universe. International Journal of Modern Physics A, 2020, 35, 2050168.	1.5	11
49	Einstein–Gauss–Bonnet Gravity with Nonlinear Electrodynamics: Entropy, Energy Emission, Quasinormal Modes and Deflection Angle. Symmetry, 2021, 13, 944.	2.2	11
50	Holographic Superconductors with Nonlinear Arcsinâ€Electrodynamics. Annalen Der Physik, 2018, 530, 1800070.	2.4	9
51	Non-Singular Model of Magnetized Black Hole Based on Nonlinear Electrodynamics. Universe, 2019, 5, 225.	2.5	9
52	Second harmonic generation theory for a helical macromolecule with high sensitivity to structural disorder. Physical Chemistry Chemical Physics, 2021, 23, 20201-20217.	2.8	9
53	Regular model of magnetized black hole with rational nonlinear electrodynamics. International Journal of Modern Physics A, 2021, 36, 2150158.	1.5	9
54	New Model of 4D Einstein–Gauss–Bonnet Gravity Coupled with Nonlinear Electrodynamics. Universe, 2021, 7, 249.	2.5	9

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55	Characterization of heterogeneous media using nonlinear Stokes–Mueller polarimetry. Journal of the Optical Society of America B: Optical Physics, 2016, 33, 2617.	2.1	9
56	VACUUM BIREFRINGENCE CAUSED BY ARBITRARY SPIN PARTICLES. Modern Physics Letters A, 2008, 23, 245-248.	1.2	8
57	4D Einstein–Gauss–Bonnet Gravity Coupled with Nonlinear Electrodynamics. Symmetry, 2021, 13, 204.	2.2	8
58	Third-harmonic generation Stokes-Mueller polarimetric microscopy. Optics Express, 2017, 25, 13174.	3.4	7
59	Einstein-Gauss-Bonnet gravity with rational nonlinear electrodynamics. Europhysics Letters, 2021, 133, 69001.	2.0	7
60	Notes on Born–Infeld-like modified gravity. Astrophysics and Space Science, 2016, 361, 1.	1.4	6
61	Three-dimensional nonlinear Stokes–Mueller polarimetry. Journal of the Optical Society of America B: Optical Physics, 2019, 36, 541.	2.1	6
62	Rational non-linear electrodynamics of AdS black holes and extended phase space thermodynamics. European Physical Journal C, 2022, 82, 1.	3.9	6
63	A new F (R) \$F(R)\$ gravity model. Astrophysics and Space Science, 2015, 358, 1.	1.4	5
64	Universe inflation based on nonlinear electrodynamics. European Physical Journal Plus, 2020, 135, 1.	2.6	4
65	A new model of arcsin-gravity. International Journal of Geometric Methods in Modern Physics, 2015, 12, 1550077.	2.0	3
66	Born–Infeld-type modified gravity. International Journal of Geometric Methods in Modern Physics, 2019, 16, 1950070.	2.0	2
67	Inflation of universe by nonlinear electrodynamics. International Journal of Modern Physics D, 2020, 29, 2050102.	2.1	2
68	Holographic superconductor with nonlinear Born–Infeld-type electrodynamics. International Journal of Modern Physics A, 2019, 34, 1950019.	1.5	1
69	Experimental demonstration of third-harmonic generation nonlinear Stokes-Mueller polarimetric microscopy., 2016, , .		0