

Mikhail N Shneider

List of Publications by Year in descending order

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233
papers

5,205
citations

81900

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118850

62
g-index

238
all docs

238
docs citations

238
times ranked

2469
citing authors

#	ARTICLE	IF	CITATIONS
1	Controlling the motion of cold molecules with deep periodic optical potentials. Nature Physics, 2006, 2, 465-468.	16.7	171
2	Free-space nitrogen gas laser driven by a femtosecond filament. Physical Review A, 2012, 86, .	2.5	148
3	Modeling of air plasma generation by repetitive high-voltage nanosecond pulses. IEEE Transactions on Plasma Science, 2002, 30, 1301-1314.	1.3	145
4	Modeling of dielectric barrier discharge plasma actuator in air. Journal of Applied Physics, 2008, 103, .	2.5	142
5	Cavity cooling of an optically trapped nanoparticle. Physical Review A, 2010, 81, .	2.5	130
6	Magnetohydrodynamic Control of Hypersonic Flows and Scramjet Inlets Using Electron Beam Ionization. AIAA Journal, 2002, 40, 74-81.	2.6	126
7	Experimental investigation of dielectric barrier discharge plasma actuators driven by repetitive high-voltage nanosecond pulses with dc or low frequency sinusoidal bias. Journal of Applied Physics, 2008, 104, .	2.5	115
8	Long streamers in the upper atmosphere above thundercloud. Journal Physics D: Applied Physics, 1998, 31, 3255-3264.	2.8	107
9	Microwave diagnostics of small plasma objects. Journal of Applied Physics, 2005, 98, 033301.	2.5	105
10	Surface charge in dielectric barrier discharge plasma actuators. Physics of Plasmas, 2008, 15, .	1.9	104
11	Temporal behavior of cold atmospheric plasma jet. Applied Physics Letters, 2009, 94, .	3.3	104
12	Coherent Rayleigh-Brillouin scattering in molecular gases. Physical Review A, 2004, 69, .	2.5	102
13	Modeling of dielectric barrier discharge plasma actuators driven by repetitive nanosecond pulses. Physics of Plasmas, 2007, 14, 073501.	1.9	95
14	Electron-Beam-Generated Plasmas in Hypersonic Magnetohydrodynamic Channels. AIAA Journal, 2001, 39, 1127-1138.	2.6	93
15	Tailoring the air plasma with a double laser pulse. Physics of Plasmas, 2011, 18, .	1.9	93
16	Temporary-resolved measurement of electron density in small atmospheric plasmas. Applied Physics Letters, 2010, 96, .	3.3	88
17	Coherent Microwave Rayleigh Scattering from Resonance-Enhanced Multiphoton Ionization in Argon. Physical Review Letters, 2007, 98, 265005.	7.8	79
18	Non-equilibrium nanosecond-pulsed plasma generation in the liquid phase (water, PDMS) without bubbles: fast imaging, spectroscopy and leader-type model. Journal Physics D: Applied Physics, 2013, 46, 105201.	2.8	78

#	ARTICLE	IF	CITATIONS
19	Coherent Rayleigh-Brillouin Scattering. <i>Physical Review Letters</i> , 2002, 89, 183001.	7.8	74
20	Thermal and hydrodynamic effects of nanosecond discharges in atmospheric pressure air. <i>Journal Physics D: Applied Physics</i> , 2014, 47, 235202.	2.8	73
21	Magnetohydrodynamic Power Extraction from Cold Hypersonic Airflows with External Ionizers. <i>Journal of Propulsion and Power</i> , 2002, 18, 424-431.	2.2	71
22	Measurements of streamer head potential and conductivity of streamer column in cold nonequilibrium atmospheric plasmas. <i>Plasma Sources Science and Technology</i> , 2012, 21, 034006.	3.1	67
23	Subcritical microwave coupling to femtosecond and picosecond laser ionization for localized, multipoint ignition of methane/air mixtures. <i>Journal of Applied Physics</i> , 2010, 108, 093308.	2.5	57
24	Ionization in strong electric fields and dynamics of nanosecond-pulse plasmas. <i>Physics of Plasmas</i> , 2006, 13, 023502.	1.9	53
25	Microwave Scattering from Laser Ionized Molecules: A New Approach to Nonintrusive Diagnostics. <i>AIAA Journal</i> , 2007, 45, 513-515.	2.6	52
26	Slowing molecules by optical microlinear deceleration. <i>Physical Review A</i> , 2002, 66, .	2.5	51
27	Guiding radar signals by arrays of laser-induced filaments: finite-difference analysis. <i>Applied Optics</i> , 2007, 46, 5593.	2.1	51
28	Dielectric fluid in inhomogeneous pulsed electric field. <i>Physical Review E</i> , 2013, 87, 043004.	2.1	51
29	Optical microlinear accelerator for molecules and atoms. <i>Physical Review A</i> , 2001, 64, .	2.5	50
30	Turbulent decay of after-spark channels. <i>Physics of Plasmas</i> , 2006, 13, 073501.	1.9	49
31	Streamer- and leader-like processes in the upper atmosphere: Models of red sprites and blue jets. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	48
32	Temperature measurements by coherent Rayleigh scattering. <i>Optics Letters</i> , 2002, 27, 161.	3.3	46
33	On the mechanism of blue jet formation and propagation. <i>Geophysical Research Letters</i> , 2006, 33, .	4.0	44
34	Virtual Shapes in Supersonic Flow Control with Energy Addition. <i>Journal of Propulsion and Power</i> , 2008, 24, 900-915.	2.2	44
35	Counting the electrons in a multiphoton ionization by elastic scattering of microwaves. <i>Scientific Reports</i> , 2018, 8, 2874.	3.3	44
36	Modeling of discharges generated by electron beams in dense gases: Fountain and thunderstorm regimes. <i>Physics of Plasmas</i> , 2001, 8, 1518-1528.	1.9	43

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37	Microwave diagnostics of laser-induced avalanche ionization in air. <i>Journal of Applied Physics</i> , 2006, 100, 074912.	2.5	43
38	Investigation of positive and negative modes of nanosecond pulsed discharge in water and electrostriction model of initiation. <i>Journal Physics D: Applied Physics</i> , 2013, 46, 355201.	2.8	43
39	Leader's streamers nature of blue jets. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2007, 69, 925-938.	1.6	40
40	Population inversion of molecular nitrogen in an Ar: N ₂ mixture by selective resonance-enhanced multiphoton ionization. <i>Journal of Applied Physics</i> , 2011, 110, .	2.5	39
41	Magnetohydrodynamic Power Generation Using Externally Ionized, Cold, Supersonic Air as Working Fluid. <i>AIAA Journal</i> , 2006, 44, 119-127.	2.6	37
42	Power spectrum of coherent Rayleigh-Brillouin scattering in carbon dioxide. <i>Physical Review A</i> , 2005, 71, .	2.5	36
43	Long-lived laser-induced microwave plasma guides in the atmosphere: Self-consistent plasma-dynamic analysis and numerical simulations. <i>Journal of Applied Physics</i> , 2010, 108, 033113.	2.5	36
44	Theory of a filament initiated nitrogen laser. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2015, 48, 094016.	1.5	36
45	Steering Moments Creation in Supersonic Flow by Off-Axis Plasma Heat Addition. <i>Journal of Spacecraft and Rockets</i> , 2006, 43, 607-613.	1.9	34
46	Femtosecond laser guiding of a high-voltage discharge and the restoration of dielectric strength in air and nitrogen. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	33
47	Laser plasma formation assisted by ultraviolet pre-ionization. <i>Physics of Plasmas</i> , 2014, 21, .	1.9	33
48	On the electrostrictive mechanism of nanosecond-pulsed breakdown in liquid phase. <i>Journal Physics D: Applied Physics</i> , 2013, 46, 162001.	2.8	32
49	Dual-pulse laser ignition model. <i>Physics of Fluids</i> , 2018, 30, .	4.0	31
50	Dynamic contraction of the positive column of a self-sustained glow discharge in air flow. <i>Physics of Plasmas</i> , 2014, 21, .	1.9	29
51	Thermal-chemical instability of weakly ionized plasma in a reactive flow. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 484001.	2.8	29
52	Versatile radar measurement of the electron loss rate in air. <i>Applied Physics Letters</i> , 2013, 103, 224102.	3.3	28
53	Simultaneous resonant enhanced multiphoton ionization and electron avalanche ionization in gas mixtures. <i>Journal of Applied Physics</i> , 2008, 104, .	2.5	27
54	Plasma induced by resonance enhanced multiphoton ionization in inert gas. <i>Journal of Applied Physics</i> , 2007, 102, 123103.	2.5	26

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55	Numerical study of boundary layer separation control using magnetogasdynamic plasma actuators. <i>Physics of Fluids</i> , 2009, 21, .	4.0	26
56	Pre-breakdown processes in a dielectric fluid in inhomogeneous pulsed electric fields. <i>Journal of Applied Physics</i> , 2015, 117, .	2.5	26
57	Optical Landau damping. <i>Physical Review A</i> , 2005, 71, .	2.5	25
58	Dynamic contraction of the positive column of a self-sustained glow discharge in molecular gas. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	25
59	Laser induced avalanche ionization in gases or gas mixtures with resonantly enhanced multiphoton ionization or femtosecond laser pulse pre-ionization. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	25
60	Single-shot coherent Rayleigh-Brillouin scattering using a chirped optical lattice. <i>Optics Letters</i> , 2013, 38, 4449.	3.3	25
61	Simulation of decelerating streamers in inhomogeneous atmosphere with implications for runaway electron generation. <i>Journal of Applied Physics</i> , 2021, 129, .	2.5	25
62	Vibrational Excitation, Thermal Nonuniformities, and Unsteady Effects on Supersonic Blunt Bodies. <i>AIAA Journal</i> , 2002, 40, 1803-1810.	2.6	24
63	Jet regime of the afterspark channel decay. <i>Physics of Plasmas</i> , 2010, 17, 053505.	1.9	24
64	Experimental and numerical analysis of narrowband coherent Rayleigh-Brillouin scattering in atomic and molecular species. <i>Optics Express</i> , 2012, 20, 12975.	3.4	24
65	Cavitation in dielectric fluid in inhomogeneous pulsed electric field. <i>Journal of Applied Physics</i> , 2013, 114, .	2.5	24
66	Modeling thermionic emission from laser-heated nanoparticles. <i>Applied Physics Letters</i> , 2016, 108, .	3.3	24
67	Initiation stage of nanosecond breakdown in liquid. <i>Journal Physics D: Applied Physics</i> , 2014, 47, 025502.	2.8	23
68	Detailed Modeling of Plasmas for Computational Aerodynamics. <i>AIAA Journal</i> , 2016, 54, 898-911.	2.6	23
69	Electron and ion transport equations in computational weakly-ionized plasmadynamics. <i>Journal of Computational Physics</i> , 2014, 259, 51-69.	3.8	22
70	In situ Characterization of Nanoparticles Using Rayleigh Scattering. <i>Scientific Reports</i> , 2017, 7, 40230.	3.3	22
71	Mathematical Model of Dual-Pulse Laser Ignition. <i>Journal of Propulsion and Power</i> , 2018, 34, 408-414.	2.2	22
72	Reduction of drag and energy consumption during energy release preceding a blunt body in supersonic flow. <i>High Temperature</i> , 2004, 42, 901-910.	1.0	21

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73	Molecular transport in pulsed optical lattices. Applied Physics A: Materials Science and Processing, 2007, 89, 337-350.	2.3	21
74	Study of streamers in gradient density air: Table top modeling of red sprites. Geophysical Research Letters, 2010, 37, .	4.0	21
75	Sheath governing equations in computational weakly-ionized plasmadynamics. Journal of Computational Physics, 2013, 232, 234-251.	3.8	21
76	Dynamics and chemical mode analysis of plasma thermal-chemical instability. Plasma Sources Science and Technology, 2021, 30, 035002.	3.1	21
77	Suppression of the turbulent decay of an afterspark channel with residual current. Physics of Plasmas, 2007, 14, .	1.9	20
78	Four-Wave-Mixing Approach to <i>In-Situ</i> Detection of Nanoparticles. Physical Review Applied, 2018, 9, .	3.8	20
79	Optical Stark deceleration of nitric oxide and benzene molecules using optical lattices. Journal of Physics B: Atomic, Molecular and Optical Physics, 2006, 39, S1097-S1109.	1.5	19
80	Electrodynamic effects in nanosecond-pulse-sustained long dielectric-barrier-discharge plasma actuators. Applied Physics Letters, 2009, 94, 061503.	3.3	19
81	Remote-sensing gas measurements with coherent Rayleigh-Brillouin scattering. Applied Physics Letters, 2016, 109, .	3.3	19
82	Ignition by Short Duration, Nonequilibrium Plasma: Basic Concepts and Applications in Internal Combustion Engines. Combustion Science and Technology, 2016, 188, 831-852.	2.3	19
83	Three-Dimensional Simulation of the Electric Field and Magnetohydrodynamic Power Generation During Reentry. AIAA Journal, 2009, 47, 1327-1336.	2.6	18
84	Correlation of action potentials in adjacent neurons. Physical Biology, 2015, 12, 066009.	1.8	18
85	Modeling of Plasma Virtual Shape Control of Ram/Scramjet Inlet and Isolator. Journal of Propulsion and Power, 2006, 22, 447-454.	2.2	17
86	Generalized Ohm's law and potential equation in computational weakly-ionized plasmadynamics. Journal of Computational Physics, 2011, 230, 1439-1453.	3.8	17
87	Non-thermal mechanism of weak microwave fields influence on neurons. Journal of Applied Physics, 2013, 114, .	2.5	17
88	Average electron temperature estimation of streamer discharge in ambient air. Review of Scientific Instruments, 2018, 89, 113502.	1.3	17
89	Growth of nanoparticles in dynamic plasma. Physical Review E, 2019, 99, 063205.	2.1	17
90	Spectral Narrowing in Coherent Rayleigh Scattering. Physical Review Letters, 2007, 99, 133001.	7.8	16

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91	Kinetic modeling of the Townsend breakdown in argon. <i>Physics of Plasmas</i> , 2013, 20, .	1.9	16
92	Radar return enhanced by a grating of species-selective multiphoton ionization as a probe for trace impurities in the atmosphere. <i>Applied Physics B: Lasers and Optics</i> , 2006, 83, 149-153.	2.2	15
93	Non-thermal atmospheric pressure plasmas for aeronautic applications. <i>EPJ Applied Physics</i> , 2009, 47, 22802.	0.7	15
94	Strong Local-Field Effect on the Dynamics of a Dilute Atomic Gas Irradiated by Two Counterpropagating Optical Fields: Beyond Standard Optical Lattices. <i>Physical Review Letters</i> , 2011, 106, 210403.	7.8	15
95	Application of coherent Rayleigh-Brillouin scattering for <i>in situ</i> nanoparticle and large molecule detection. <i>Applied Physics Letters</i> , 2013, 102, .	3.3	15
96	Ambipolar diffusion and drift in computational weakly-ionized plasmadynamics. <i>Journal of Computational Physics</i> , 2011, 230, 8010-8027.	3.8	14
97	Laser Plasma Formation in Air Using Dual Pulse Pre-Ionization. , 2013, , .		14
98	New diagnostic methods for laser plasma- and microwave-enhanced combustion. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2015, 373, 20140338.	3.4	14
99	Pre-breakdown cavitation nanopores in the dielectric fluid in the inhomogeneous, pulsed electric fields. <i>Journal Physics D: Applied Physics</i> , 2015, 48, 424009.	2.8	14
100	Carbon nanoparticles in the radiation field of the stationary arc discharge. <i>Physics of Plasmas</i> , 2015, 22, .	1.9	14
101	Streamer self-focusing in an external longitudinal magnetic field. <i>Physical Review E</i> , 2021, 103, 063201.	2.1	14
102	Transport in room temperature gases induced by optical lattices. <i>Journal of Applied Physics</i> , 2006, 100, 074902.	2.5	13
103	Narrow-band coherent Rayleigh scattering. <i>Journal of Raman Spectroscopy</i> , 2006, 37, 655-662.	2.5	13
104	Coherent Brillouin scattering. <i>Optics Express</i> , 2011, 19, 24046.	3.4	13
105	The cutting mechanism of the electrosurgical scalpel. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 025401.	2.8	13
106	Model of UV flashes due to gigantic blue jets. <i>Journal Physics D: Applied Physics</i> , 2008, 41, 234013.	2.8	12
107	Effect of power losses on self-focusing of high-intensity laser beam in gases. <i>Journal Physics D: Applied Physics</i> , 2013, 46, 185502.	2.8	12
108	Initiation and blocking of the action potential in an axon in weak ultrasonic or microwave fields. <i>Physical Review E</i> , 2014, 89, 052713.	2.1	12

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109	Electromagnetic beam propagation in nonlinear media. High Power Laser Science and Engineering, 2015, 3, .	4.6	12
110	Similarity analysis of the streamer zone of Blue jets. Journal of Atmospheric and Solar-Terrestrial Physics, 2016, 147, 121-125.	1.6	12
111	Ponderomotive perturbations of low density low-temperature plasma under laser Thomson scattering diagnostics. Physics of Plasmas, 2017, 24, .	1.9	12
112	Kinetics model of femtosecond laser ionization in nitrogen and comparison to experiment. Journal of Applied Physics, 2019, 125, .	2.5	12
113	Coherent microwave scattering from resonance enhanced multi-photon ionization (radar REMPI): a review. Plasma Sources Science and Technology, 2021, 30, 103001.	3.1	12
114	Near-electrode sheath dynamics, current anharmonicity and battery effect in asymmetrical, low-pressure radio frequency discharges. Plasma Sources Science and Technology, 1992, 1, 102-108.	3.1	11
115	Coherent Rayleigh scattering in the high intensity regime. Optics Communications, 2004, 239, 205-211.	2.1	11
116	Action-potential-encoded second-harmonic generation as an ultrafast local probe for noninvasive membrane diagnostics. Physical Review E, 2010, 81, 031926.	2.1	11
117	Measurement of plasma decay processes in mixture of sodium and argon by coherent microwave scattering. Physics of Plasmas, 2010, 17, 033108.	1.9	11
118	Model of blue jet formation and propagation in the nonuniform atmosphere. Journal of Geophysical Research: Space Physics, 2014, 119, 5821-5829.	2.4	11
119	<i>In situ</i> diagnostics for nanomaterial synthesis in carbon arc plasma. Plasma Sources Science and Technology, 2018, 27, 084001.	3.1	11
120	Diagnostics of CO concentration in gaseous mixtures at elevated pressures by resonance enhanced multi-photon ionization and microwave scattering. Journal of Applied Physics, 2020, 128, 141301.	2.5	11
121	Hypersonic Aerodynamic Control and Thrust Vectoring by Nonequilibrium Cold-Air Magnetohydrodynamic Devices. Journal of Propulsion and Power, 2006, 22, 490-497.	2.2	10
122	Numerical Study of an Electron-Beam-Confined Faraday Accelerator. Journal of Propulsion and Power, 2007, 23, 1023-1032.	2.2	10
123	Energy and momentum deposition from pulsed optical lattices to nonionized gases. Applied Physics Letters, 2007, 90, 121130.	3.3	10
124	2-D model of the streamer zone of a leader. Journal of Plasma Physics, 2016, 82, .	2.1	10
125	Initial stage of cavitation in liquids and its observation by Rayleigh scattering. Fluid Dynamics Research, 2017, 49, 035503.	1.3	10
126	Optimum Performance of Electron Beam Driven Magnetohydrodynamic Generators for Scramjet Inlet Control. AIAA Journal, 2007, 45, 2157-2163.	2.6	9

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127	Kinetic description of the field-gas interaction in intense optical lattices. Optics Communications, 2011, 284, 1238-1242.	2.1	9
128	Time-resolved laser-induced incandescence from multiwalled carbon nanotubes in air. Applied Physics Letters, 2015, 106, .	3.3	9
129	Measurement of temperature dependent absorption coefficient of water at 1064nm wavelength. AIP Advances, 2019, 9, .	1.3	9
130	Plasma-Assisted Fuel Atomization and Multipoint Ignition for Scramjet Engines. Journal of Propulsion and Power, 2020, 36, 357-362.	2.2	9
131	Modeling of laser ignition in hydrogen-air mixture. , 2020, , .		9
132	Acceleration, deceleration, and separation of molecular ensembles in optical lattices. , 2004, , .		8
133	Cold molecules in pulsed optical lattices. Progress in Quantum Electronics, 2005, 29, 1-58.	7.0	8
134	Laser control of free-carrier density in solids through field-enhanced multiphonon tunneling recombination. Journal of Applied Physics, 2011, 109, 033109.	2.5	8
135	Measurement of sodium-argon cluster ion recombination by coherent microwave scattering. Applied Physics Letters, 2012, 100, .	3.3	8
136	Modeling weakly-ionized plasmas in magnetic field: A new computationally-efficient approach. Journal of Computational Physics, 2015, 300, 779-799.	3.8	8
137	Direct measurement of electron numbers created at near-infrared laser-induced ionization of various gases. Journal of Applied Physics, 2019, 125, 193301.	2.5	8
138	Thomson and collisional regimes of in-phase coherent microwave scattering off gaseous microplasmas. Scientific Reports, 2021, 11, 23389.	3.3	8
139	Combined Experimental and Numerical Investigation of Electric-Arc Airspikes For Blunt Body at Mach 3. AIP Conference Proceedings, 2005, , .	0.4	7
140	Micropropulsion devices based on molecular acceleration by pulsed optical lattices. Journal of Applied Physics, 2006, 99, 063102.	2.5	7
141	Separation of binary gas mixtures in a capillary with an optical lattice. Laser Physics Letters, 2007, 4, 519-523.	1.4	7
142	Spectra of molecular gases trapped in deep optical lattices. Physical Review A, 2008, 77, .	2.5	7
143	Modeling the action-potential-sensitive nonlinear-optical response of myelinated nerve fibers and short-term memory. Journal of Applied Physics, 2011, 110, .	2.5	7
144	Characterization of intermediate reactions following femtosecond laser excitation in argon-nitrogen mixtures. , 2017, , .		7

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145	Coherent microwave scattering from xenon resonance-enhanced multiphoton ionization-initiated plasma in air. <i>Journal of Applied Physics</i> , 2020, 127, .	2.5	7
146	Bulk Viscosity Measurements Using Coherent Rayleigh-Brillouin Scattering. , 2004, , .		6
147	Drag and Total Power Reduction for Artificial Heat Input in Front of Hypersonic Blunt Bodies. <i>AIP Conference Proceedings</i> , 2005, , .	0.4	6
148	Femtosecond filament initiated, microwave heated cavity-free nitrogen laser in air. <i>Journal of Applied Physics</i> , 2017, 121, .	2.5	6
149	Longitudinal structure of capacitative radiofrequency gamma discharge and its analogy with a direct current glow discharge. <i>Journal Physics D: Applied Physics</i> , 1994, 27, 1457-1464.	2.8	5
150	Experiments on Microwave Scattering of REMPI in Argon, Xenon and Nitric Oxide. , 2007, , .		5
151	Ignition Delay Time and Laminar Flame Velocity for a Combined Laser-“Microwave Ignition. <i>IEEE Transactions on Plasma Science</i> , 2011, 39, 3263-3268.	1.3	5
152	Coherent microwave radiation from a laser induced plasma. <i>Applied Physics Letters</i> , 2012, 101, 264105.	3.3	5
153	Remote steering of laser beams by radar- and laser-induced refractive-index gradients in the atmosphere. <i>Laser Physics Letters</i> , 2012, 9, 68-72.	1.4	5
154	Deflection of Streamer Path in DC Electric Potential. <i>IEEE Transactions on Plasma Science</i> , 2014, 42, 2402-2403.	1.3	5
155	Polarization forces in the vicinity of nanoparticles in weakly ionized plasma. <i>Physics of Plasmas</i> , 2016, 23, 094505.	1.9	5
156	Suppression of laser breakdown by pulsed nonequilibrium ns discharge. <i>Plasma Sources Science and Technology</i> , 2016, 25, 054008.	3.1	5
157	Sound produced by an oscillating arc in a high-pressure gas. <i>Journal of Applied Physics</i> , 2017, 122, .	2.5	5
158	Effect of weakly ionized plasma on osmotic pressure on cell membranes in a saline. <i>Journal of Applied Physics</i> , 2018, 123, 204701.	2.5	5
159	Magnetically Induced Depolarization of Microwave Scattering from a Laser-Generated Plasma. <i>Physical Review Applied</i> , 2019, 12, .	3.8	5
160	Dynamic modeling of carbon nanofiber growth in strong electric fields via plasma-enhanced chemical vapor deposition. <i>Journal of Applied Physics</i> , 2019, 125, .	2.5	5
161	Stimulated activity in the neural tissue. <i>Journal of Applied Physics</i> , 2019, 125, 211101.	2.5	5
162	Optimization of Filtered Rayleigh Scattering for the Measurement of Pressure and Temperature. <i>Combustion Science and Technology</i> , 2020, , 1-19.	2.3	5

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163	Plasma defocusing in dual-pulse laser ignition. Journal Physics D: Applied Physics, 2021, 54, 225205.	2.8	5
164	Electron generation and multiplication at the initial stage of nanosecond breakdown in water. Journal of Applied Physics, 2021, 129, .	2.5	5
165	Normal current density effect in RF-discharge according to results of two-dimensional numerical modeling. IEEE Transactions on Plasma Science, 1999, 27, 701-706.	1.3	4
166	High efficiency nonequilibrium air plasmas sustained by high energy electrons. , 0, , .		4
167	Experimental and Computational Investigation of Drag Reduction by Electric-Arc Airspikes at Mach 10. AIP Conference Proceedings, 2005, , .	0.4	4
168	Potential micrometeoroid and orbital debris protection system using a gradient magnetic field and magnetic flux compression. Applied Physics Letters, 2010, 97, 054102.	3.3	4
169	Analysis of UV flashes of millisecond scale detected by a low-orbit satellite. Journal of Geophysical Research, 2010, 115, .	3.3	4
170	Microwave scattering from laser spark in air. Journal of Applied Physics, 2012, 112, 063101.	2.5	4
171	Kinetic modeling of evolution of $3\sigma + 1$: Resonance enhanced multiphoton ionization plasma in argon at low pressures. Physics of Plasmas, 2014, 21, .	1.9	4
172	Theoretical analysis of supercontinuum and coloured conical emission produced during ultrashort laser pulse interaction with gases. Journal Physics D: Applied Physics, 2014, 47, 045503.	2.8	4
173	Cross-sections for neutral atoms and molecules collisions with charged spherical nanoparticle. Physics of Plasmas, 2016, 23, 124503.	1.9	4
174	Switching intense laser pulses guided by Kerr-effect-modified modes of a hollow-core photonic-crystal fiber. Physical Review E, 2005, 71, 026609.	2.1	3
175	Temperature Measurement of Flame by RADAR REMPI of Nitric Oxide. , 2008, , .		3
176	Ponderomotive convection in water induced by a CW laser. Journal of Applied Physics, 2016, 120, 244902.	2.5	3
177	Comment on "Non-thermal mechanism of weak microwave fields influence on neurons" [Appl. Phys. 114 , 104701 (2013)]. Journal of Applied Physics, 2016, 119, .	2.5	3
178	Rayleigh scattering on the cavitation region emerging in liquids. Optics Letters, 2016, 41, 1090.	3.3	3
179	Modeling of the FLEET Filament Interaction with a Nonuniform Gas Flow. , 2017, , .		3
180	An all-optical, in situ diagnostic for large molecule and nanoparticle detection. Proceedings of SPIE, 2017, , .	0.8	3

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181	Particle-in-cell modeling of laser Thomson scattering in low-density plasmas at elevated laser intensities. <i>Physics of Plasmas</i> , 2018, 25, 053513.	1.9	3
182	Analysis of harmonic generation by a hydrogen-like atom using a quasi-classical non-linear oscillator model with realistic electron potential. <i>OSA Continuum</i> , 2019, 2, 2343.	1.8	3
183	The behavior of a vapor film on a highly superheated surface immersed in subcooled water. <i>High Temperature</i> , 2005, 43, 103-118.	1.0	2
184	Gas mixing with pulsed optical lattices. <i>Physics of Fluids</i> , 2007, 19, .	4.0	2
185	Energy Deposition into a Collisional Gas from Optical Lattices Formed in an Optical Cavity. , 2008, , .		2
186	Radar REMPI Detection of NO ₂ by NO Photo-Fragments. , 2009, , .		2
187	Experimentally observed field-gas interaction in intense optical lattices. <i>Applied Physics Letters</i> , 2013, 103, 244106.	3.3	2
188	Mathematical modeling of dual-pulse laser ignition in a turbulent flow. , 2019, , .		2
189	Cavitation model of the inflationary stage of Big Bang. <i>Physics of Fluids</i> , 2021, 33, 017116.	4.0	2
190	Demonstration of single shot laser velocimetry with coherent Rayleigh-Brillouin scattering. , 2021, , .		2
191	Self-focusing threshold of a beam of laser radiation in rubidium vapor. <i>Journal of Optical Technology (A Translation of Opticheskii Zhurnal)</i> , 2016, 83, 667.	0.4	2
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