Dn Gupta

List of Publications by Year
in descending order

111	1,410	394421 19	434195 31
papers	citations	h-index	g-index

112	112	112	478
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Second-Harmonic Generation of a Short-Laser Pulse From a Gas-Jet Immersed in a Magnetic Field. IEEE Transactions on Plasma Science, 2022, 50, 17-22.	1.3	1
2	Self-compression of a high-intensity laser pulse in a double-ionizing gas. Physics of Plasmas, 2022, 29, 012109.	1.9	1
3	Coherent terahertz radiation generation by a flattened Gaussian laser beam at a plasmaâ€“vacuum interface. Applied Physics B: Lasers and Optics, 2022, 128, 1.	2.2	8
4	Optical second-and third harmonic radiation generation in a laser-produced plasma. Laser Physics, 2022, 32, 085001.	1.2	1
5	Optical Second-Harmonic Generation of Terahertz Field from n-type InSb Semiconductors. Plasmonics, 2021, 16, 419-424.	3.4	27
6	Terahertz radiation generation by a super-Gaussian laser pulse in a magnetized plasma. Optik, 2021, 227, 165824.	2.9	19
7	Short-pulse laser propagation in a tunnel ionizing plasma and subsequent electron acceleration. AIP Conference Proceedings, 2021, , .	0.4	1
8	Terahertz radiation generation from short-pulse laser interaction with electron-hole plasmas. Europhysics Letters, 2021, 133, 14001.	2.0	10
9	Pulse-length Effect on Laser Wakefield Acceleration of Electrons by Skewed Laser Pulses. IEEE Transactions on Plasma Science, 2021, 49, 1152-1158.	1.3	13
10	Generation of intense coherent electromagnetic radiation during the interaction of a multi-terawatt laser pulse with a nanowire target*. Quantum Electronics, 2021, 51, 323-332.	1.0	7
11	Investigation of electron beam parameters in laser wakefield acceleration using skewed laser pulse and external magnetic field. Current Applied Physics, 2021, 25, 82-89.	2.4	9
12	Improvement of electron beam quality in laser wakefield acceleration by a circularly-polarized laser pulse. Plasma Physics and Controlled Fusion, 2021, 63, 075007.	2.1	8
13	Scattering of a Monopolar TE-Polarized Electromagnetic Pulse on an Ideally Conducting Cylinder. Journal of Communications Technology and Electronics, 2021, 66, 818-821.	0.5	0
14	Enhanced Broadband Terahertz Radiation from Two-Colour Laser Pulse Interaction with Thin Dielectric Solid Target in Air. Journal of Infrared, Millimeter, and Terahertz Waves, 2021, 42, 747-760.	2.2	6
15	Electron bunch charge enhancement in laser wakefield acceleration using a flattened Gaussian laser pulse. Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 414, 127631.	2.1	10
16	Optimization of electron bunch quality using a chirped laser pulse in laser wakefield acceleration. Physical Review Accelerators and Beams, 2021, 24, .	1.6	9
17	Electron plasma wave excitation by a q-Gaussian laser beam and subsequent electron acceleration. Physics of Plasmas, 2020, 27, .	1.9	27
18	High-Field Coherent Terahertz Radiation Generation From Chirped Laser Pulse Interaction With Plasmas. IEEE Transactions on Plasma Science, 2020, 48, 3727-3734.	1.3	17

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19	Plasma bubble evolution in laser wakefield acceleration in a petawatt regime. Laser Physics Letters, 2020, 17, 076001.	1.4	2
20	Optimization of laser parameters for proton acceleration using double laser pulses in TNSA mechanism. Laser and Particle Beams, 2020, 38, 73-78.	1.0	6
21	Scaling up and parametric characterization of two-color air plasma terahertz source. Laser Physics, 2020, 30, 036002.	1.2	6
22	Effect of a tightly focused chirped Gaussian laser pulse on electron acceleration in helical undulator. Physics of Plasmas, 2020, 27, 043105.	1.9	5
23	Enhanced Pulse-Compression from Tunnel-Ionized Plasma Interactions with a Laser Pulse. , 2020, , .		0
24	Proton acceleration from overdense plasma target interacting with shaped laser pulses in the presence of preplasmas. Plasma Physics and Controlled Fusion, 2019, 61, 085001.	2.1	12
25	Temporal characteristics of relativistic stimulated Brillouin scattering of a laser in plasmas. Laser Physics Letters, 2019, 16, 056005.	1.4	0
26	Electronâ€“Ion Recombination Effect on Electron Acceleration by an Intense Laser Pulse. IEEE Transactions on Plasma Science, 2019, 47, 4891-4897.	1.3	9
27	Characteristics of quasi-unipolar electromagnetic pulses formed in the interaction of high-power laser pulses with nanoscale targets. Quantum Electronics, 2019, 49, 788-795.	1.0	8
28	Electron acceleration by a radially polarized laser pulse in the presence of an intense pulsed magnetic field. Laser Physics, 2019, 29, 015301.	1.2	6
29	Laser-pulse shape effects on magnetic field generation in underdense plasmas. Indian Journal of Physics, 2018, 92, 919-925.	1.8	4
30	Exponential density transition based self-focusing of Gaussian laser beam in collisional plasma. Optik, 2018, 158, 1034-1039.	2.9	14
31	Effect of q-parameter on relativistic self-focusing of q-Gaussian laser beam in plasma. Optik, 2018, 158, 574-579.	2.9	20
32	Laser-absorption effect on pulse-compression under Ohmic and weak-relativistic ponderomotive nonlinearity in plasmas. Laser Physics Letters, 2018, 15, 016001.	1.4	3
33	Whistler mode localization and turbulence implicating particle acceleration in radiation belts. Physics of Plasmas, 2018, 25, .	1.9	4
34	Excitation of plasma wave by lasers beating in a collisional and mild-relativistic plasma. Journal of Physics: Conference Series, 2018, 1067, 042014.	0.4	0
35	Oscillating two-stream instability in strongly coupled plasma. Laser and Particle Beams, 2018, 36, 376-383.	1.0	5
36	Electron Acceleration by a Relativistic Electron Plasma Wave in Inverse-Free-Electron Laser Mechanism. IEEE Transactions on Plasma Science, 2018, 46, 2521-2527.	1.3	9

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37	Electron energy optimization by plasma density ramp in laser wakefield acceleration in bubble regime. Laser and Particle Beams, 2018, 36, 195-202.	1.0	3
38	Relativistic electron-beam assisted growth of oscillating two-stream instability of a plasma wave. Physics of Plasmas, 2017, 24, .	1.9	3
39	Terahertz radiation emission from plasma beat-wave interactions with a relativistic electron beam. Optics Communications, 2017, 401, 71-74.	2.1	10
40	Optimization and control of electron beams from laser wakefield accelerations using asymmetric laser pulses. Physics of Plasmas, 2017, 24, .	1.9	20
41	Evolution of laser pulse shape in a parabolic plasma channel. Laser Physics, 2017, 27, 015401.	1.2	1
42	Electron Acceleration by a Radially Polarized Laser Pulse in an Ion Channel. IEEE Transactions on Plasma Science, 2017, 45, 2841-2847.	1.3	14
43	Large-scale magnetic field generation by asymmetric laser-pulse interactions with a plasma in low-intensity regime. Journal of Applied Physics, 2016, 119, .	2.5	10
44	Dephasing length optimization by controlling plasma density in laser wakefield accelerators. , 2016, , .		1
45	Laser-pulse compression in a collisional plasma under weak-relativistic ponderomotive nonlinearity. Physics of Plasmas, 2016, 23, .	1.9	2
46	Simulation of laser-driven plasma beat-wave propagation in collisional weakly relativistic plasmas. Europhysics Letters, 2016, 116, 35001.	2.0	2
47	Parametric instabilities in strongly correlated plasma. Physics of Plasmas, 2016, 23, 102704.	1.9	7
48	Suppression of stimulated Brillouin instability of a beat-wave of two lasers in multiple-ion-species plasmas. Physics of Plasmas, 2016, 23, 012110.	1.9	6
49	Space-Charge Field Assisted Electron Acceleration by Plasma Wave in Magnetic Plasma Channel. IEEE Transactions on Plasma Science, 2016, 44, 2867-2873.	1.3	6
50	Temporally asymmetric laser pulse for magnetic-field generation in plasmas. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 1437-1441.	2.1	7
51	Optimum trapping condition for laser wakefield acceleration of electrons in an inhomogenious plasma. , 2015, , .		0
52	Asymmetric laser-pulse based magnetic field enhancement in a plasma. , 2015, , .		0
53	Plasma based optical guiding of an amplitude-modulated electromagnetic beam. Proceedings of SPIE, 2015, , .	0.8	2
54	Efficient second- and third-harmonic radiation generation from relativistic laser-plasma interactions. Physics of Plasmas, 2015, 22, .	1.9	12

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55	Onset of stimulated Raman scattering of a laser in a plasma in the presence of hot drifting electrons. Physics of Plasmas, 2015, 22, 052101.	1.9	13
56	Enhanced betatron oscillations in laser wakefield acceleration by off-axis laser alignment to a capillary plasma waveguide. Plasma Physics and Controlled Fusion, 2015, 57, 075002.	2.1	11
57	Amplitude saturation effect of a laser-driven plasma beat-wave on electron accelerations. Journal of Plasma Physics, 2015, 81, .	2.1	2
58	Mode-coupling assisted electron accelerations by a plasma wave. Current Applied Physics, 2015, 15, 174-179.	2.4	3
59	Laser wakefield acceleration of electrons from a density-modulated plasma. Laser and Particle Beams, 2014, 32, 449-454.	1.0	29
60	Interaction physics for the stimulated Brillouin scattering of a laser in laser driven fusion. , 2014, , .		0
61	Modulation instabilities and group velocity dispersion in partially stripped magnetoplasma channels. Plasma Physics and Controlled Fusion, 2014, 56, 075011.	2.1	1
62	Relativistic Third-Harmonic Generation of a Laser in a Self-Sustained Magnetized Plasma Channel. IEEE Journal of Quantum Electronics, 2014, 50, 491-496.	1.9	12
63	Generation of terahertz and infrared relativistic half-cycle pulses in laser pulse interaction with nanodimensional targets. , 2014, , .		0
64	Laser pulse distortion in a plasma of the weakly relativistic regime. Laser Physics Letters, 2014, 11, 056003.	1.4	12
65	Laser pulse propagation in inhomogeneous magnetoplasma channels and wakefield acceleration. Physics of Plasmas, 2014, 21, 023108.	1.9	6
66	Combined effect of ponderomotive and relativistic self-focusing on laser beam propagation in a plasma. Applied Physics B: Lasers and Optics, 2013, 111, 1-6.	2.2	72
67	Self-focusing of a high-intensity laser in a collisional plasma under weak relativistic-ponderomotive nonlinearity. Physics of Plasmas, 2013, 20, 123103.	1.9	18
68	Transient self-focusing of an intense laser pulse in magnetized plasmas under non-paraxial approximation. Laser and Particle Beams, 2013, 31, 307-312.	1.0	1
69	Double ionization effect in electron accelerations by high-intensity laser pulse interaction with a neutral gas. EPJ Web of Conferences, 2013, 59, 17003.	0.3	0
70	Optical field-ionization of a neutral gas with inhomogeneous density for electron acceleration by a high-intensity laser. Physics of Plasmas, 2012, 19, 023103.	1.9	3
71	Resonant third-harmonic generation of a short-pulse laser from electron-hole plasmas. Physics of Plasmas, 2012, 19, 013101.	1.9	21
72	Cyclotron resonance effects on electron acceleration by two lasers of different wavelengths. Laser and Particle Beams, 2012, 30, 275-280.	1.0	5

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73	Electron acceleration by a plasma wave in a density modulated plasma. , 2012, , .		0
74	Enhanced thermal self-focusing of a Gaussian laser beam in a collisionless plasma. Physics of Plasmas, 2011, 18, 124501.	1.9	26
75	Generation of second-harmonic radiations of a self-focusing laser from a plasma with density-transition. Physics Letters, Section A: General, Atomic and Solid State Physics, 2011, 375, 3134-3137.	2.1	34
76	Laser-driven plasma beat-wave propagation in a density-modulated plasma. Physical Review E, 2011, 84, 056403.	2.1	21
77	Electron energy enhancement by a circularly polarized laser pulse in vacuum. Laser and Particle Beams, 2009, 27, 635-642.	1.0	13
78	Combined effect of tight-focusing and frequency-chirping on laser acceleration of an electron in vacuum. Journal of Applied Physics, 2009, 105, .	2.5	21
79	Efficient high-harmonic radiations by chirped laser-pulse interactions with electrons in the presence of a magnetic field. Journal of Applied Physics, 2009, 105, .	2.5	5
80	Effect of laser-induced double-step ionization of a gas on vacuum electron acceleration. Applied Physics Letters, 2009, 94, 021502.	3.3	7
81	Laser Electron Acceleration: Role of an Additional Long-Wavelength Electromagnetic Wave and a Magnetic Field. Journal of the Korean Physical Society, 2009, 54, 376-380.	0.7	2
82	Enhanced electron trapping by a static longitudinal magnetic field in laser wakefield acceleration. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 2684-2687.	2.1	37
83	Quasi-monoenergetic GeV electrons from the interaction of two laser pulses with a gas. Laser and Particle Beams, 2008, 26, 597-604.	1.0	14
84	The effect of laser pulse parameters and initial phase on the acceleration of electrons in a vacuum. Physica Scripta, 2008, 77, 045401.	2.5	5
85	Pulse width effects on Raman backward laser amplification. Journal Physics D: Applied Physics, 2007, 40, 5155-5160.	2.8	10
86	Simulation for generation of 15fs laser pulses by Raman backscatter in plasmas. Applied Physics Letters, 2007, 91, 101501.	3.3	6
87	Enhanced focusing of laser beams in semiconductor plasmas. Journal of Applied Physics, 2007, 101, 043109.	2.5	13
88	Electron acceleration by a short laser beam in the presence of a long-wavelength electromagnetic wave. Journal of Applied Physics, 2007, 102, .	2.5	12
89	Plasma density ramp for relativistic self-focusing of an intense laser. Journal of the Optical Society of America B: Optical Physics, 2007, 24, 1155.	2.1	65
90	Influence of electromagnetic oscillating two-stream instability on the evolution of laser-driven plasma beat-wave. Physics of Plasmas, 2007, 14, 013101.	1.9	1

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91	Energetic electron beam generation by laser-plasma interaction and its application for neutron production. Journal of Applied Physics, 2007, 101, 114908.	2.5	18
92	Comment on â€œElectron acceleration by a chirped Gaussian laser pulse in vacuumâ€•[Phys. Plasmas 13, 123108 (2006)]. Physics of Plasmas, 2007, 14, 044701.	1.9	7
93	Additional focusing of a high-intensity laser beam in a plasma with a density ramp and a magnetic field. Applied Physics Letters, 2007, 91, .	3.3	38
94	Electron acceleration to GeV energy by a radially polarized laser. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 368, 402-407.	2.1	128
95	Realistic laser focusing effect on electron acceleration in the presence of a pulsed magnetic field. Applied Physics Letters, 2007, 91, .	3.3	17
96	Electron acceleration to high energy by using two chirped lasers. Laser and Particle Beams, 2007, 25, 31-36.	1.0	55
97	Numerical Investigation on Self-Focusing during Laser Electron Acceleration in a Magnetized Plasma. Journal of the Korean Physical Society, 2007, 50, 1406.	0.7	3
98	Energy exchange during stimulated Raman scattering of a relativistic laser in a plasma. Journal of Applied Physics, 2006, 100, 103101.	2.5	20
99	Combined role of frequency variation and magnetic field on laser electron acceleration. Physics of Plasmas, 2006, 13, 013105.	1.9	43
100	Relativistic effect on stimulated Raman scattering of a laser in plasma. Physica Scripta, 2006, 73, 284-287.	2.5	10
101	Frequency chirping for resonance-enhanced electron energy during laser acceleration. Physics of Plasmas, 2006, 13, 044507.	1.9	34
102	Electron acceleration by a circularly polarized laser pulse in the presence of an obliquely incident magnetic field in vacuum. Physics of Plasmas, 2005, 12, 053103.	1.9	49
103	Relativistic second-harmonic generation of a laser from underdense plasmas. Physics of Plasmas, 2005, 12, 013101-013101-4.	1.9	25
104	Electron acceleration and electron-positron pair production by laser in tunnel ionized inhomogeneous plasma. Physics of Plasmas, 2005, 12, 093110.	1.9	8
105	Oscillating Two Stream Instability of a Laser in a Two Ion Species Plasma. Physica Scripta, 2004, 69, 130-134.	2.5	4
106	Electron acceleration by a self-diverging intense laser pulse. Physical Review E, 2004, 69, 046406.	2.1	12
107	Nonlinear saturation of laser driven plasma beat wave by oscillating two-stream instability. Physics of Plasmas, 2004, 11, 5250-5255.	1.9	11
108	Parametric up-conversion of a trivelpieceâ€"gould mode in a beamâ€"plasma system. Laser and Particle Beams, 2004, 22, 89-94.	1.0	8

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109	Propagation of High Power Short Pulse Laser in a Tunnel Ionizing Inhomogeneous Gas. Physica Scripta, 2003, 67, 246-249.	2.5	7
110	Transient Self-Focusing of an Intense Short Pulse Laser in Magnetized Plasma. Physica Scripta, 2002, 66, 262-264.	2.5	19
111	Frequency blueshift during laser-induced breakdown of dielectrics. , 0, , .		0