

Surendra Singh

List of Publications by Year in descending order

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131
papers

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132
docs citations

132
times ranked

1085
citing authors

#	ARTICLE	IF	CITATIONS
1	Diffraction of Laguerre-Gauss Vortex Beams from Cantor Set and Sierpinski Carpet. , 2021, , .		0
2	Fluctuation-induced current from freestanding graphene. Physical Review E, 2020, 102, 042101.	0.8	20
3	Symmetry in the diffraction of beams carrying orbital angular momentum. Physical Review A, 2019, 99, .	1.0	11
4	A new method for detecting the nonlinearity of the Pancharatnam phase of light. Optics Communications, 2019, 451, 62-66.	1.0	1
5	Friedel's Law in the Diffraction of Angular Momentum Carrying Paraxial Beams. , 2019, , .		0
6	Conditional waiting-time probabilities for the nth photodetection for classical and quantum light sources. , 2019, , .		0
7	Degeneracy in the diffraction of orbital angular momentum carrying beams. Optics Letters, 2018, 43, 5833.	1.7	2
8	Diffraction of Laguerre-Gauss Vortex Beams from Sierpinski Triangles. , 2018, , .		0
9	Toy model for uncommon spin-orbit-driven spin-torque terms. Journal of Physics Condensed Matter, 2017, 29, 254001.	0.7	1
10	Diffractals from regular polygon Sierpinski gaskets. , 2017, , .		1
11	Waiting time distributions for the first photodetection for classical and quantum light sources. , 2017, , .		0
12	Variation of polarization profile of Ince-Gaussian beams with eccentricity. , 2017, , .		0
13	Polarization properties of Ince-Gaussian laser beams. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2017, 34, 2261.	0.8	3
14	New relativistic Hamiltonian: the angular magnetoelectric coupling. , 2016, , .		4
15	Anomalous Dynamical Behavior of Freestanding Graphene Membranes. Physical Review Letters, 2016, 117, 126801.	2.9	59
16	Observation of Ince-Gaussian beams and their polarization properties. , 2016, , .		0
17	Electron spin interaction with the angular momentum of the electromagnetic field. , 2016, , .		0
18	Effects of Misalignment on Diffraction of Laguerre-Gauss Vortex Beams by a Circular Aperture. , 2015, , .		0

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19	Relativistic interaction Hamiltonian coupling the angular momentum of light and the electron spin. Physical Review B, 2015, 92, .	1.1	41
20	Polarization properties of the Airy beam. Optics Letters, 2015, 40, 4516.	1.7	13
21	Polarization of the Airy beam. , 2015, , .		0
22	Observation of cross polarization of linearly polarized Airy beam. , 2014, , .		0
23	A new Green's function Monte Carlo algorithm for the solution of the three-dimensional nonlinear Poissonâ€Boltzmann equation: Application to the modeling of plasma sheath layers. Monte Carlo Methods and Applications, 2014, 20, .	0.3	0
24	Prediction of novel interface-driven spintronic effects. Journal of Physics Condensed Matter, 2014, 26, 315008.	0.7	13
25	Revisiting galvanomagnetic effects in conducting ferromagnets. Journal of Physics Condensed Matter, 2014, 26, 432201.	0.7	5
26	Diffraction of Laguerre-Gauss vortex beams by regular polygons. , 2014, , .		2
27	Coupling of the angular momentum density with magnetic moments explains the intrinsic anomalous Hall effect. Physical Review B, 2013, 88, .	1.1	9
28	Predicted Coupling of the Electromagnetic Angular Momentum Density with Magnetic Moments. Physical Review Letters, 2013, 110, 137205.	2.9	30
29	Polarization of orbital angular momentum carrying laser beams. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2013, 30, 821.	0.8	11
30	Polarization and Propagation Characteristics of Laser Beams. , 2013, , .		0
31	Cross-polarization of linearly polarized Hermiteâ€Gauss laser beams. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2012, 29, 579.	0.8	10
32	Effect of quadratic radial variation of phase on single slit diffraction of Laguerreâ€Gauss vortex beams. Journal of Modern Optics, 2012, 59, 1232-1242.	0.6	8
33	ENHANCEMENT OF ANTIMICROBIAL ACTIVITIES OF NATURALLY OCCURRING PHENOLIC COMPOUNDS BY NANOSCALE DELIVERY AGAINST LISTERIA MONOCYTOGENES, ESCHERICHIA COLI O157:H7 AND SALMONELLA TYPHIMURIUM IN BROTH AND CHICKEN MEAT SYSTEM. Journal of Food Safety, 2011, 31, 462-471.	1.1	57
34	Propagation of linearly polarized Laguerre-Gauss vortex beams. , 2011, , .		0
35	Far-field Diffraction of Vortex Beams. , 2011, , .		0
36	Propagation of the cross-polarization component of Hermite-Gauss laser beams. , 2011, , .		0

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37	Nonclassicality of light from a degenerate parametric oscillator. Journal of Modern Optics, 2010, 57, 1293-1299.	0.6	2
38	An optical parametric oscillator as a high-flux source of two-mode light for quantum lithography. New Journal of Physics, 2009, 11, 113055.	1.2	5
39	Multiplicative noise-induced probability distributions in three-level atomic optical bistability. Physical Review A, 2009, 79, .	1.0	6
40	Statistical properties of light from optical parametric oscillators. Physical Review A, 2009, 80, .	1.0	6
41	A Study of Fibroblast Growth Factor and its Receptor Complex Using Light Scattering. , 2009, , .		0
42	Nonclassical Nature of Counting Probabilities in the Detection of Light from the DPO. , 2009, , .		0
43	Vector sequence accelerator for solving problems in computational electromagnetics using the method of moments. Microwave and Optical Technology Letters, 2008, 50, 589-592.	0.9	0
44	A Light Scattering Study of the Interaction of Fibroblast Growth Factor (FGF) with its Receptor. Biophysical Journal, 2008, 94, L71-L73.	0.2	10
45	Phase and interference properties of optical vortex beams. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2008, 25, 823.	0.8	83
46	Cross polarization of Maxwell-Gaussian laser beams with orbital and spin angular momentum. , 2007, , CSuA24.		0
47	Synchronized and unsynchronized chaos in a modulated bidirectional ring laser. Physical Review A, 2007, 75, .	1.0	1
48	Polarization Properties of Ince-Gaussian Beams. , 2007, , .		0
49	Chaotic dynamics of a gain modulated YAG ring laser. , 2007, , .		0
50	Nonlinear dynamics of a modulated bidirectional solid-state ring laser. Journal of the Optical Society of America B: Optical Physics, 2006, 23, 1785.	0.9	7
51	Measurement of Conditional Squeezing for non-Gaussian fields. , 2006, , LTuG3.		0
52	An iterative method for the numerical solution of integral equations using the method of moments. Microwave and Optical Technology Letters, 2006, 48, 118-121.	0.9	0
53	A method to generate a sparse matrix for thin-wire structures using the method of moments. Microwave and Optical Technology Letters, 2006, 48, 243-246.	0.9	0
54	Conditional homodyne detection of light with squeezed quadrature fluctuations. Physical Review A, 2006, 74, .	1.0	6

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55	THE HIDDEN SIDE OF A LASER BEAM. , 2006, , .		0
56	Cross-Polarization of Paraxial Maxwell-Gaussian Beams. , 2005, , FWT3.		0
57	Plasmonic resonances and electromagnetic forces between coupled silver nanowires. Physical Review B, 2005, 72, .	1.1	27
58	A novel technique for computing electromagnetic scattering from wire antennas. Microwave and Optical Technology Letters, 2005, 45, 554-556.	0.9	0
59	Conditional detection of fluctuations in the light from an atom in a high Q-cavity. , 2005, , LTuD5.		0
60	On the bichromatic excitation of a two-level atom with squeezed light. European Physical Journal D, 2004, 29, 95-103.	0.6	0
61	Computation of Sommerfeld integrals using tanh transformation. Microwave and Optical Technology Letters, 2003, 37, 177-180.	0.9	6
62	An iterative method for solving a large dense matrix in the method of moments solution of an electrostatic problem. Microwave and Optical Technology Letters, 2003, 39, 378-380.	0.9	3
63	Quantum well in a microcavity with injected squeezed vacuum. Physical Review A, 2003, 67, .	1.0	16
64	Conditional measurements as probes of quantum dynamics. Physical Review A, 2003, 67, .	1.0	8
65	On the bichromatic excitation of a two-level atom with squeezed light. , 2003, , .		0
66	Higher order photon statistics of intracavity second harmonic generation. , 2003, , 513-514.		0
67	Measurements of intensity fluctuations in a laser with a saturable absorber. Physical Review A, 2002, 65, .	1.0	2
68	Higher-order sub-Poissonian photon statistics in terms of factorial moments. Journal of the Optical Society of America B: Optical Physics, 2002, 19, 1471.	0.9	29
69	Entanglement, Interference, and Measurement in a Degenerate Parametric Oscillator. Physical Review Letters, 2001, 86, 2770-2773.	2.9	24
70	Nonclassical effects in photon statistics of atomic optical bistability. Physical Review A, 2001, 64, .	1.0	4
71	Higher-order nonclassical effects in a parametric oscillator. Physical Review A, 2000, 62, .	1.0	12
72	Antibunching and photoemission waiting times. Journal of the Optical Society of America B: Optical Physics, 2000, 17, 634.	0.9	13

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73	Two-photon detection of light from a degenerate parametric oscillator. Optics Communications, 1997, 142, 223-228.	1.0	1
74	Measurements of Higher Order Photon Bunching of Light Beams. Physical Review Letters, 1996, 76, 1236-1239.	2.9	13
75	Homodyne detection for the enhancement of antibunching. Physical Review A, 1996, 54, 2391-2396.	1.0	8
76	Singh and Cantrell Reply:. Physical Review Letters, 1996, 77, 4973-4973.	2.9	0
77	Measurements of Higher-Order Photon Correlations of Laser Light. , 1996, , 413-414.		0
78	Exact Quantum Distribution for Parametric Oscillators. Physical Review Letters, 1995, 74, 2208-2211.	2.9	10
79	Measurements of photon statistics in second-harmonic generation. Physical Review A, 1995, 51, 2530-2536.	1.0	12
80	Scaling behavior of photon number fluctuations at laser threshold. Optics Communications, 1994, 105, 325-329.	1.0	20
81	Polarization properties of Maxwell-Gaussian laser beams. Physical Review E, 1994, 49, 5778-5786.	0.8	77
82	Second-harmonic generation and photon bunching in multimode laser beams. Physical Review A, 1993, 47, 3259-3263.	1.0	14
83	Resonance fluorescence with squeezed-light excitation. Physical Review A, 1992, 45, 8095-8109.	1.0	32
84	Enhancement of photon antibunching by passive interferometry. Physical Review A, 1992, 45, 4932-4943.	1.0	10
85	Photon correlation effects in second harmonic generation. Optics Communications, 1992, 90, 111-114.	1.0	27
86	Intensity correlation functions of the laser with multiplicative white noise. Physical Review A, 1991, 44, 3239-3249.	1.0	13
87	NON-EQUILIBRIUM TRICRITICAL BEHAVIOR IN LASERS. Modern Physics Letters B, 1991, 05, 245-258.	1.0	1
88	Tricritical behavior in the laser with a saturable absorber. Physical Review Letters, 1990, 64, 741-744.	2.9	5
89	Some Recent Development, In the Fundamental Theor of Light. Advances in Atomic, Molecular and Optical Physics, 1990, , 75-142.	2.3	30
90	Continuous and Discontinuous Phase Transitions in the Laser with a Saturable Absorber. , 1990, , 775-779.		0

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91	Correlation Functions of a He:Ne Laser with Multiplicative White Noise. , 1990, , 915-919.		0
92	Nonlinear Interaction of Modes in the Ring Laser with a Saturable Absorber. , 1990, , 1183-1187.		0
93	Photon-counting statistics of the degenerate optical parametric oscillator. Physical Review A, 1989, 40, 5147-5159.	1.0	62
94	Quantum statistics of broadband squeezed light. Optics Letters, 1989, 14, 1110.	1.7	26
95	Photoelectron waiting times and atomic state reduction in resonance fluorescence. Physical Review A, 1989, 39, 1200-1218.	1.0	177
96	Statistical properties of a laser with multiplicative noise. Optics Letters, 1988, 13, 21.	1.7	35
97	Measurements of first-passage-time distributions in laser transients near threshold. Journal of the Optical Society of America B: Optical Physics, 1988, 5, 1011.	0.9	4
98	Waiting-time distributions in the photodetection of squeezed light. Physical Review A, 1988, 38, 2423-2430.	1.0	35
99	Effects of multiplicative white noise on laser light fluctuations. Physical Review A, 1988, 38, 238-244.	1.0	33
100	Inhomogeneously broadened laser with a saturable absorber. Physical Review A, 1987, 35, 429-432.	1.0	5
101	Observation of the "Brownian motion" of the electric field in a laser. Physical Review A, 1987, 35, 1453-1456.	1.0	24
102	Fluctuations in intracavity second harmonic generation. Optics Communications, 1987, 62, 289-294.	1.0	4
103	Laser theory without the rotating-wave approximation. Physical Review A, 1986, 33, 375-381.	1.0	24
104	Decay of an unstable state. Physical Review A, 1985, 31, 888-891.	1.0	13
105	Statistical properties of single-mode and two-mode ring lasers. Physics Reports, 1984, 108, 217-273.	10.3	51
106	First-Passage-Time Distributions in a Bistable Two-Mode Laser. , 1984, , 165-172.		0
107	Photon Statistics in Resonance Fluorescence with Finite Bandwidth Excitation. , 1984, , 457-464.		0
108	Antibunching, sub-poissonian photon statistics and finite bandwidth effects in resonance fluorescence. Optics Communications, 1983, 44, 254-258.	1.0	59

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109	Chaos in coherent two-photon processes in a ring cavity. <i>Optics Communications</i> , 1983, 47, 73-76.	1.0	2
110	First-passage time distributions and switching statistics in a bistable two-mode laser. <i>Physical Review A</i> , 1983, 28, 2318-2328.	1.0	23
111	Frequency dependence of laser light fluctuations. <i>Physical Review A</i> , 1983, 27, 381-391.	1.0	13
112	Effect of pump fluctuations on line shapes in coherent anti-Stokes Raman scattering. <i>Physical Review A</i> , 1982, 25, 3195-3205.	1.0	43
113	Field statistics in some generalized Jaynes-Cummings models. <i>Physical Review A</i> , 1982, 25, 3206-3216.	1.0	205
114	Effect of detuning on the fluctuation properties of a laser. <i>Optics Letters</i> , 1982, 7, 99.	1.7	5
115	Method for determining absolute photon numbers in a laser. <i>Journal of the Optical Society of America</i> , 1982, 72, 304.	1.2	4
116	Measurement of two-time correlations in a two-mode ring laser. <i>Optics Communications</i> , 1981, 40, 139-143.	1.0	3
117	Correlations, transients, bistability, and phase-transition analogy in two-mode lasers. <i>Physical Review A</i> , 1981, 24, 2050-2074.	1.0	34
118	Macroscopic Quantum Fluctuations and First-Order Phase Transition in a Laser. <i>Physical Review Letters</i> , 1981, 47, 1892-1895.	2.9	52
119	Intensity correlations in a two-mode laser with coupled transitions. <i>Physical Review A</i> , 1981, 23, 2507-2512.	1.0	5
120	Quantum statistical theory of the ring laser. <i>Physical Review A</i> , 1981, 23, 837-852.	1.0	12
121	Optical Bistability Effects in a Dye Ring Laser. , 1981, , 127-150.		3
122	Resonant Scattering of Phonons by Bound Holes in Gallium Doped Ge and Boron Doped Silicon in the Temperature Range 1 to 5 K. <i>Physica Status Solidi (B): Basic Research</i> , 1980, 98, K101.	0.7	1
123	Bistability and intensity fluctuations in Zeeman lasers and amplifiers. <i>Optics Communications</i> , 1980, 32, 339-344.	1.0	9
124	Quantum theory of a two-mode laser with coupled transitions. <i>Physical Review A</i> , 1980, 21, 281-292.	1.0	38
125	Low-temperature magneto-phonon conductivity of lightly doped Si. <i>Physical Review B</i> , 1980, 22, 6350-6354.	1.1	1
126	Chemical shift and donor-electron radius for lightly dopedn-Ge. <i>Physical Review B</i> , 1980, 22, 6347-6349.	1.1	1

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127	Effect of mode competition on beam divergence in a ring laser. Journal of the Optical Society of America, 1980, 70, 252.	1.2	2
128	Role of compensation in electron-phonon scattering in lightly doped semiconductors. Physical Review B, 1979, 19, 1069-1076.	1.1	3
129	Mode competition in a homogeneously broadened ring laser. Physical Review A, 1979, 20, 2459-2463.	1.0	54
130	Magnetic field dependence of the "chemical shift" and the donor-electron radius in the lightly dopedn-type Ge. Physical Review B, 1979, 19, 5433-5438.	1.1	1
131	Correlation functions of the two-mode ring laser. Physical Review A, 1979, 19, 2036-2045.	1.0	30