

Stephen B Libby

List of Publications by Year in descending order

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55
papers

1,813
citations

430874

18
h-index

265206

42
g-index

59
all docs

59
docs citations

59
times ranked

1361
citing authors

#	ARTICLE	IF	CITATIONS
1	Electron Delocalization by a Magnetic Field in Two Dimensions. <i>Physical Review Letters</i> , 1983, 51, 1915-1918.	7.8	296
2	Electron Density Measurements of High Density Plasmas Using Soft X-Ray Laser Interferometry. <i>Physical Review Letters</i> , 1995, 74, 3991-3994.	7.8	193
3	Ultraviolet surprise: Efficient soft x-ray high-harmonic generation in multiply ionized plasmas. <i>Science</i> , 2015, 350, 1225-1231.	12.6	165
4	Jet and lepton-pair production in high-energy lepton-hadron and hadron-hadron scattering. <i>Physical Review D</i> , 1978, 18, 3252-3268.	4.7	147
5	Theory of the quantized Hall effect (I). <i>Nuclear Physics B</i> , 1984, 240, 30-48.	2.5	137
6	Removing orbital debris with lasers. <i>Advances in Space Research</i> , 2012, 49, 1283-1300.	2.6	131
7	Mass divergences in two-particle inelastic scattering. <i>Physical Review D</i> , 1978, 18, 4737-4745.	4.7	72
8	Theory of the quantized hall effect (II). <i>Nuclear Physics B</i> , 1984, 240, 49-70.	2.5	71
9	Theory of the quantized Hall effect (III). <i>Nuclear Physics B</i> , 1984, 240, 71-90.	2.5	67
10	Scaling of conductivities in the fractional quantum Hall effect. <i>Physical Review B</i> , 1985, 32, 1311-1314.	3.2	60
11	Pulsed laser interactions with space debris: Target shape effects. <i>Advances in Space Research</i> , 2013, 52, 895-915.	2.6	46
12	High-energy behavior of jet and lepton-pair production. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1978, 78, 618-622.	4.1	43
13	Observation and Control of Shock Waves in Individual Nanoplasmas. <i>Physical Review Letters</i> , 2014, 112, 115004.	7.8	43
14	Petawatt laser absorption bounded. <i>Nature Communications</i> , 2014, 5, 4149.	12.8	39
15	Versatile laser-free trapped-ion entangling gates. <i>New Journal of Physics</i> , 2019, 21, 033033.	2.9	31
16	The evolution of high-energy-density physics: From nuclear testing to the superlasers. <i>Laser and Particle Beams</i> , 1997, 15, 607-626.	1.0	30
17	Mapping Nanoscale Absorption of Femtosecond Laser Pulses Using Plasma Explosion Imaging. <i>ACS Nano</i> , 2014, 8, 8810-8818.	14.6	30
18	Renormalization of the \hat{I} angle, the quantum Hall effect and the strong CP problem. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1985, 150, 182-186.	4.1	25

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19	Laser-free trapped-ion entangling gates with simultaneous insensitivity to qubit and motional decoherence. <i>Physical Review A</i> , 2020, 101, .	2.5	18
20	Non-abelian monopoles in the three-dimensional chiral spin liquid. <i>Nuclear Physics B</i> , 1991, 348, 693-713.	2.5	17
21	Cancellation of infrared divergences in massive-quark potential scattering. <i>Physical Review D</i> , 1979, 19, 2468-2470.	4.7	15
22	Development of a Bayesian method for the analysis of inertial confinement fusion experiments on the NIF. <i>Nuclear Fusion</i> , 2013, 53, 073032.	3.5	13
23	Application of x-ray-laser interferometry to study high-density laser-produced plasmas. <i>Journal of the Optical Society of America B: Optical Physics</i> , 1996, 13, 447.	2.1	12
24	Bayesian inference of inaccuracies in radiation transport physics from inertial confinement fusion experiments. <i>High Energy Density Physics</i> , 2013, 9, 457-461.	1.5	11
25	Atomic processes in near-equilibrium plasmas. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2001, 71, 505-518.	2.3	10
26	Atom Interferometry in the Presence of an External Test Mass. <i>Atoms</i> , 2016, 4, 14.	1.6	10
27	Momentum Transfer by Laser Ablation of Irregularly Shaped Space Debris. , 2010, , .		9
28	Simulating non-native cubic interactions on noisy quantum machines. <i>Physical Review A</i> , 2021, 103, .	2.5	8
29	Removing orbital debris with pulsed lasers. , 2012, , .		6
30	Motional Squeezing for Trapped Ion Transport and Separation. <i>Physical Review Letters</i> , 2021, 127, 083201.	7.8	6
31	Characterization of germanium stripe x-ray lasers. <i>Optical Engineering</i> , 1994, 33, 2434.	1.0	5
32	Gauge theory of the three-dimensional chiral spin liquid. <i>Nuclear Physics B</i> , 1994, 413, 579-604.	2.5	5
33	The viscosity to entropy ratio: From string theory motivated bounds to warm dense matter transport. <i>High Energy Density Physics</i> , 2014, 12, 21-26.	1.5	5
34	A genetic algorithm approach for reconstructing spectral content from filtered x-ray diode array spectrometers. <i>Review of Scientific Instruments</i> , 2020, 91, 083507.	1.3	5
35	Optimal choice of multiple line-of-sight measurements determining plasma hotspot velocity at the National Ignition Facility. <i>Review of Scientific Instruments</i> , 2021, 92, 023513.	1.3	5
36	Edward Teller's Scientific Life. <i>Physics Today</i> , 2004, 57, 45-50.	0.3	4

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37	Masterfields and the phases of quantum chromodynamics in two dimensions with fermions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1982, 115, 477-481.	4.1	3
38	Line overlap measurement for the photopumping of X-ray lasing transitions between n = 3 and n = 2 autoionizing states of lithium-like Al. Optics Communications, 1994, 113, 204-212.	2.1	3
39	Two-dimensional interferogram of an exploding selenium foil using a soft X-ray laser interferometer. IEEE Transactions on Plasma Science, 1996, 24, 31-32.	1.3	3
40	Implosions: An Experimental Testbed for High-Energy Density Physics. Astrophysical Journal, Supplement Series, 2000, 127, 227-232.	7.7	3
41	Derivation of soliton quantization in two gauge models. Nuclear Physics B, 1976, 113, 501-531.	2.5	2
42	Na-like autoionizing levels: Plasma diagnostics and prospects for photopumped soft X-ray lasers. AIP Conference Proceedings, 1995, , .	0.4	2
43	Systematic investigation of NLTE phenomena in the limit of small departures from LTE. , 1997, , .		2
44	Berni Julian Alder, theoretical physicist and inventor of molecular dynamics, 1925-2020. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	2
45	Electron Delocalization by a Magnetic Field in Two Dimensions. Physical Review Letters, 1984, 52, 1254-1254.	7.8	1
46	Development of XUV interferometry (155 Å) using a soft x-ray laser. , 1995, 2520, 288.		1
47	High density plasma diagnostics utilizing a neon-like yttrium x-ray laser. Journal of Quantitative Spectroscopy and Radiative Transfer, 1995, 54, 97-103.	2.3	1
48	<title>Characterization of germanium stripe x-ray lasers</title>. , 1994, , .		0
49	X-ray laser interferometry for probing high-density plasmas. , 1995, , .		0
50	High energy-density physics: From nuclear testing to the superlasers. AIP Conference Proceedings, 1996, , .	0.4	0
51	Atomic processes in inertial fusion plasmas. , 1998, , .		0
52	Clarifying Teller's Science Story. Physics Today, 2004, 57, 17-17.	0.3	0
53	EDWARD TELLER BIOGRAPHICAL MEMOIR. , 2010, , .		0
54	Ultrafast Dynamics of Individual, Isolated Nanoparticles and Nanoplasmas in Intense Laser Fields. , 2014, , .		0

#	ARTICLE	IF	CITATIONS
55	Realistic Model of Entanglement-Enhanced Sensing in Optical Fiber. Optics Express, 2022, 30, 8652-8666.	3.4	0