Douglass W. Schumacher

List of Publications by Year
in descending order

36	2,534	318942	388640
papers	citations	23 h-index	36 g-index

37	37	37	1676
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Modeling pulse-cleaning plasma mirrors from dielectric response to saturation: A particle-in-cell approach. Physics of Plasmas, 2019, 26, 103103.	0.7	2
2	On specular reflectivity measurements in high and low-contrast relativistic laser-plasma interactions. Physics of Plasmas, 2015, 22, 013110.	0.7	5
3	Temporal resolution criterion for correctly simulating relativistic electron motion in a high-intensity laser field. Physics of Plasmas, 2015, 22, .	0.7	44
4	A confocal microscope position sensor for micron-scale target alignment in ultra-intense laser-matter experiments. Review of Scientific Instruments, 2015, 86, 053303.	0.6	12
5	Modeling crater formation in femtosecond-pulse laser damage from basic principles. Optics Letters, 2015, 40, 2189.	1.7	9
6	On the origin of super-hot electrons from intense laser interactions with solid targets having moderate scale length preformed plasmas. Physics of Plasmas, 2014, 21, 023112.	0.7	47
7	Enhancing Bremsstrahlung production from ultraintense laser-solid interactions with front surface structures. European Physical Journal D, 2014, 68, 1.	0.6	20
8	Liquid crystal films as on-demand, variable thickness (50â€“5000â€‰nm) targets for intense lasers. Physics of Plasmas, 2014, 21, .	0.7	30
9	Effects of front-surface target structures on properties of relativistic laser-plasma electrons. Physical Review E, 2014, 89, 013106.	0.8	51
10	Coupling of laser energy into hot-electrons in high-contrast relativistic laser-plasma interactions. Physics of Plasmas, 2013, 20, 033104.	0.7	13
11	Effects of Preplasma Scale Length and Laser Intensity on the Divergence of Laser-Generated Hot Electrons. Physical Review Letters, 2013, 110, 065007.	2.9	42
12	Time dependence of fast electron beam divergence in ultraintense laser-plasma interactions. Physical Review E, 2012, 86, 026404.	0.8	8
13	The shaped critical surface in high intensity laser plasma interactions. Physics of Plasmas, 2011, 18, 013102.	0.7	11
14	How well do time-integrated KÎ± images represent hot electron spatial distributions?. Physics of Plasmas, 2011, 18, .	0.7	12
15	Using time-integrated KÎ± images to study refluxing and the extent of pre-plasmas in intense laser-plasma experiment. Physics of Plasmas, 2011, 18, .	0.7	9
16	Effects of target charging and ion emission on the energy spectrum of emitted electrons. Physics of Plasmas, 2011, 18, .	0.7	43
17	Fast electron generation in cones with ultraintense laser pulses. Physics of Plasmas, 2008, 15, 056304.	0.7	47
18	A novel study of supercontinuum generation. Applied Physics B: Lasers and Optics, 2002, 74, s57-s62.	1.1	5

#	Article	IF	Citations
19	Temporal dynamics of a two-electron wave packet. Physical Review A, 1998, 57, 3712-3718.	1.0	22
20	Wave Packets in Perturbed Rydberg Systems. Physical Review Letters, 1997, 78, 4359-4362.	2.9	37
21	Phase dependence of intense-field ionization. Physical Review A, 1996, 54, 4271-4278.	1.0	69
22	Time-resolved configuration interaction. Journal of Physics B: Atomic, Molecular and Optical Physics, 1996, 29, L397-L403.	0.6	26
23	Programmable cesium Rydberg wave packets. Physical Review A, 1995, 52, 4719-4726.	1.0	56
24	Bound-state interferometry using incoherent light. Journal of Physics B: Atomic, Molecular and Optical Physics, 1995, 28, L405-L411.	0.6	53
25	Phase Dependence of Intense Field Ionization: A Study Using Two Colors. Physical Review Letters, 1994, 73, 1344-1347.	2.9	183
26	Population trapping in Kr and Xe in intense laser fields. Physical Review A, 1993, 47, R49-R52.	1.0	88
27	Ramsey interference in strongly driven Rydberg systems. Physical Review Letters, 1993, 71, 2575-2578.	2.9	109
28	Longer wavelengths require lower intensity in multiphoton detachment of negative ions. Physical Review Letters, 1992, 69, 3459-3462.	2.9	18
29	Softening of theH2+molecular bond in intense laser fields. Physical Review Letters, 1990, 64, 1883-1886.	2.9	542
30	Nonresonant above-threshold ionization by circularly polarized subpicosecond pulses. Physical Review A, 1990, 41, 4119-4122.	1.0	35
31	Ionization and dissociation ofH2in intense laser fields at 1.064 Î¼m, 532 nm, and 355 nm. Physical Review A, 1990, 42, 5500-5513.	1.0	322
32	Above-threshold ionisation with a two-colour laser field. Journal of Physics B: Atomic, Molecular and Optical Physics, 1990, 23, 2761-2769.	0.6	188
33	High-Intensity Kapitza-Dirac Effect. Physical Review Letters, 1988, 61, 1182-1185.	2.9	146
34	Asymmetries in Above-Threshold Ionization. Physical Review Letters, 1988, 60, 2458-2461.	2.9	150
35	Above-threshold ionization in helium. Physical Review A, 1988, 37, 3615-3618.	1.0	23
36	Above-threshold ionization with elliptically polarized light. Physical Review Letters, 1987, 59, 274-277.	2.9	57