Douglass W. Schumacher

List of Publications by Year
in descending order

36	2,534	279798	345221
papers	citations	23 h-index	36 g-index

37	37	37	1557
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Softening of theH2+molecular bond in intense laser fields. Physical Review Letters, 1990, 64, 1883-1886.	7.8	542
2	Ionization and dissociation ofH2in intense laser fields at 1.064 Î¼m, 532 nm, and 355 nm. Physical Review A, 1990, 42, 5500-5513.	2.5	322
3	Above-threshold ionisation with a two-colour laser field. Journal of Physics B: Atomic, Molecular and Optical Physics, 1990, 23, 2761-2769.	1.5	188
4	Phase Dependence of Intense Field Ionization: A Study Using Two Colors. Physical Review Letters, 1994, 73, 1344-1347.	7.8	183
5	Asymmetries in Above-Threshold Ionization. Physical Review Letters, 1988, 60, 2458-2461.	7.8	150
6	High-Intensity Kapitza-Dirac Effect. Physical Review Letters, 1988, 61, 1182-1185.	7.8	146
7	Ramsey interference in strongly driven Rydberg systems. Physical Review Letters, 1993, 71, 2575-2578.	7.8	109
8	Population trapping in Kr and Xe in intense laser fields. Physical Review A, 1993, 47, R49-R52.	2.5	88
9	Phase dependence of intense-field ionization. Physical Review A, 1996, 54, 4271-4278.	2.5	69
10	Above-threshold ionization with elliptically polarized light. Physical Review Letters, 1987, 59, 274-277.	7.8	57
11	Programmable cesium Rydberg wave packets. Physical Review A, 1995, 52, 4719-4726.	2.5	56
12	Bound-state interferometry using incoherent light. Journal of Physics B: Atomic, Molecular and Optical Physics, 1995, 28, L405-L411.	1.5	53
13	Effects of front-surface target structures on properties of relativistic laser-plasma electrons. Physical Review E, 2014, 89, 013106.	2.1	51
14	Fast electron generation in cones with ultraintense laser pulses. Physics of Plasmas, 2008, 15, 056304.	1.9	47
15	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.	1.9	47
16	Temporal resolution criterion for correctly simulating relativistic electron motion in a high-intensity laser field. Physics of Plasmas, 2015, 22, .	1.9	44
17	Effects of target charging and ion emission on the energy spectrum of emitted electrons. Physics of Plasmas, 2011, 18, .	1.9	43
18	Effects of Preplasma Scale Length and Laser Intensity on the Divergence of Laser-Generated Hot Electrons. Physical Review Letters, 2013, 110, 065007.	7.8	42

#	Article	IF	Citations
19	Wave Packets in Perturbed Rydberg Systems. Physical Review Letters, 1997, 78, 4359-4362.	7.8	37
20	Nonresonant above-threshold ionization by circularly polarized subpicosecond pulses. Physical Review A, 1990, 41, 4119-4122.	2.5	35
21	Liquid crystal films as on-demand, variable thickness (50â€“5000â€‰nm) targets for intense lasers. Physics of Plasmas, 2014, 21, .	1.9	30
22	Time-resolved configuration interaction. Journal of Physics B: Atomic, Molecular and Optical Physics, 1996, 29, L397-L403.	1.5	26
23	Above-threshold ionization in helium. Physical Review A, 1988, 37, 3615-3618.	2.5	23
24	Temporal dynamics of a two-electron wave packet. Physical Review A, 1998, 57, 3712-3718.	2.5	22
25	Enhancing Bremsstrahlung production from ultraintense laser-solid interactions with front surface structures. European Physical Journal D, 2014, 68, 1.	1.3	20
26	Longer wavelengths require lower intensity in multiphoton detachment of negative ions. Physical Review Letters, 1992, 69, 3459-3462.	7.8	18
27	Coupling of laser energy into hot-electrons in high-contrast relativistic laser-plasma interactions. Physics of Plasmas, 2013, 20, 033104.	1.9	13
28	How well do time-integrated KÎ± images represent hot electron spatial distributions?. Physics of Plasmas, 2011, 18, .	1.9	12
29	A confocal microscope position sensor for micron-scale target alignment in ultra-intense laser-matter experiments. Review of Scientific Instruments, 2015, 86, 053303.	1.3	12
30	The shaped critical surface in high intensity laser plasma interactions. Physics of Plasmas, 2011, 18, 013102.	1.9	11
31	Using time-integrated KÎ± images to study refluxing and the extent of pre-plasmas in intense laser-plasma experiment. Physics of Plasmas, 2011, 18, .	1.9	9
32	Modeling crater formation in femtosecond-pulse laser damage from basic principles. Optics Letters, 2015, 40, 2189.	3.3	9
33	Time dependence of fast electron beam divergence in ultraintense laser-plasma interactions. Physical Review E, 2012, 86, 026404.	2.1	8
34	A novel study of supercontinuum generation. Applied Physics B: Lasers and Optics, 2002, 74, s57-s62.	2.2	5
35	On specular reflectivity measurements in high and low-contrast relativistic laser-plasma interactions. Physics of Plasmas, 2015, 22, 013110.	1.9	5
36	Modeling pulse-cleaning plasma mirrors from dielectric response to saturation: A particle-in-cell approach. Physics of Plasmas, 2019, 26, 103103.	1.9	2