Daniel Seipt

List of Publications by Year
in descending order

50	1,943	218592	243529
papers	citations	26 h-index	44 g-index

52	52	52	739
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Nonlinear Compton scattering of ultrashort intense laser pulses. Physical Review A, 2011, 83, .	1.0	162
2	Beam-shape effects in nonlinear Compton and Thomson scattering. Physical Review A, 2010, 81, .	1.0	126
3	Extended locally constant field approximation for nonlinear Compton scattering. Physical Review A, 2019, 99, .	1.0	100
4	Conceptual design report for the LUXE experiment. European Physical Journal: Special Topics, 2021, 230, 2445-2560.	1.2	89
5	Two-photon Compton process in pulsed intense laser fields. Physical Review D, 2012, 85, .	1.6	88
6	Relativistic plasma physics in supercritical fields. Physics of Plasmas, 2020, 27, .	0.7	81
7	Spin polarization of electrons by ultraintense lasers. Physical Review A, 2017, 96, .	1.0	77
8	Pair production in short laser pulses near threshold. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 715, 246-250.	1.5	71
9	Scattering of twisted relativistic electrons by atoms. Physical Review A, 2015, 92, .	1.0	70
10	High Resolution Energy-Angle Correlation Measurement of Hard X Rays from Laser-Thomson Backscattering. Physical Review Letters, 2013, 111, 114803.	2.9	68
11	Theory of radiative electron polarization in strong laser fields. Physical Review A, 2018, 98, .	1.0	65
12	Lifting shell structures in the dynamically assisted Schwinger effect in periodic fields. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 740, 335-340.	1.5	54
13	Benchmarking semiclassical approaches to strong-field QED: Nonlinear Compton scattering in intense laser pulses. Physics of Plasmas, 2018, 25, .	0.7	53
14	Spin- and polarization-dependent locally-constant-field-approximation rates for nonlinear Compton and Breit-Wheeler processes. Physical Review A, 2020, 102, .	1.0	53
15	Narrowband inverse Compton scattering x-ray sources at high laser intensities. Physical Review A, 2015, 91, .	1.0	49
16	Ultrafast polarization of an electron beam in an intense bichromatic laser field. Physical Review A, 2019, 100, .	1.0	48
17	Depletion of Intense Fields. Physical Review Letters, 2017, 118, 154803.	2.9	46
18	Electron spin polarization in realistic trajectories around the magnetic node of two counter-propagating, circularly polarized, ultra-intense lasers. Plasma Physics and Controlled Fusion, 2018, 60, 064003.	0.9	44

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19	Interaction of twisted light with many-electron atoms and ions. Physical Review A, 2015, 91, .	1.0	43
20	Analytical results for nonlinear Compton scattering in short intense laser pulses. Journal of Plasma Physics, 2016, 82, .	0.7	40
21	Elastic scattering of vortex electrons provides direct access to the Coulomb phase. Physical Review D, 2016, 94, .	1.6	40
22	Asymmetries of azimuthal photon distributions in nonlinear Compton scattering in ultrashort intense laser pulses. Physical Review A, 2013, 88, .	1.0	38
23	Compton scattering of twisted light: Angular distribution and polarization of scattered photons. Physical Review A, 2015, 92, .	1.0	37
24	Photoexcitation of atoms by Laguerre-Gaussian beams. Physical Review A, 2017, 96, .	1.0	31
25	Structured x-ray beams from twisted electrons by inverse Compton scattering of laser light. Physical Review A, 2014, 90, .	1.0	30
26	Backreaction on background fields: A coherent state approach. Physical Review D, 2018, 97, .	1.6	27
27	Polarized QED cascades. New Journal of Physics, 2021, 23, 053025.	1.2	27
28	Determination of the carrier envelope phase for short, circularly polarized laser pulses. Physical Review D, 2016, 93, .	1.6	24
29	Spectral caustics in laser assisted Breitâ€“Wheeler process. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 755, 162-167.	1.5	23
30	Optimizing Laser Pulses for Narrow-Band Inverse Compton Sources in the High-Intensity Regime. Physical Review Letters, 2019, 122, 204802.	2.9	22
31	Caustic structures in x-ray Compton scattering off electrons driven by a short intense laser pulse. New Journal of Physics, 2016, 18, 023044.	1.2	21
32	Two-color above-threshold ionization of atoms and ions in XUV Bessel beams and intense laser light. Physical Review A, 2016, 94, .	1.0	18
33	Pair production by Schwinger and Breitâ€“Wheeler processes in bi-frequent fields. Journal of Plasma Physics, 2016, 82, .	0.7	18
34	Laser-assisted Compton scattering of x-ray photons. Physical Review A, 2014, 89, .	1.0	17
35	Higher-Dimensional Caustics in Nonlinear Compton Scattering. Physical Review Letters, 2018, 120, 044802.	2.9	17
36	Radiation beaming in the quantum regime. Physical Review A, 2020, 101, .	1.0	17

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37	Towards pair production in the non-perturbative regime. New Journal of Physics, 2021, 23, 105002.	1.2	15
38	Temporal laser-pulse-shape effects in nonlinear Thomson scattering. Physical Review A, 2016, 93, .	1.0	13
39	Nonlinear Compton scattering of ultrahigh-intensity laser pulses. Laser Physics, 2013, 23, 075301.	0.6	12
40	Angular streaking of betatron X-rays in a transverse density gradient laser-wakefield accelerator. Physics of Plasmas, 2018, 25, .	0.7	12
41	Polarization-Dependent Self-Injection by Above Threshold Ionization Heating in a Laser Wakefield Accelerator. Physical Review Letters, 2020, 124, 114801.	2.9	11
42	A Frenetâ€“Serret interpretation of particle dynamics in high-intensity laser fields. Plasma Physics and Controlled Fusion, 2019, 61, 074005.	0.9	8
43	Mode truncations and scattering in strong fields. Physical Review D, 2018, 98, .	1.6	7
44	Effect of bound-state dressing in laser-assisted radiative recombination. Physical Review A, 2015, 92, .	1.0	6
45	Spin-dependent rescattering in strong-field ionization of helium. Journal of Physics B: Atomic, Molecular and Optical Physics, 2017, 50, 065001.	0.6	6
46	Spin-dependent quantum theory of high-order above-threshold ionization. Physical Review A, 2017, 95, .	1.0	6
47	The effects of laser polarization and wavelength on injection dynamics of a laser wakefield accelerator. Physics of Plasmas, 2021, 28, .	0.7	5
48	Relativistic modified Bessel-Gaussian beam generated from plasma-based beam braiding. Physical Review A, 2021, 104, .	1.0	3
49	Modeling chromatic emittance growth in staged plasma wakefield acceleration to 1ÂTeV using nonlinear transfer matrices. Physical Review Accelerators and Beams, 2021, 24, .	0.6	2
50	Generation of straight and curved hollow plasma channels by laser-generated nonlinear wakefields and studies of ultra-intense laser pulse guiding. Physics of Plasmas, 2021, 28, 063104.	0.7	0