

# Daniel Seipt

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8949981/publications.pdf>

Version: 2024-02-01

50  
papers

1,943  
citations

218592

26  
h-index

243529

44  
g-index

52  
all docs

52  
docs citations

52  
times ranked

739  
citing authors

#	ARTICLE	IF	CITATIONS
1	Polarized QED cascades. <i>New Journal of Physics</i> , 2021, 23, 053025.	1.2	27
2	The effects of laser polarization and wavelength on injection dynamics of a laser wakefield accelerator. <i>Physics of Plasmas</i> , 2021, 28, .	0.7	5
3	Generation of straight and curved hollow plasma channels by laser-generated nonlinear wakefields and studies of ultra-intense laser pulse guiding. <i>Physics of Plasmas</i> , 2021, 28, 063104.	0.7	0
4	Relativistic modified Bessel-Gaussian beam generated from plasma-based beam braiding. <i>Physical Review A</i> , 2021, 104, .	1.0	3
5	Conceptual design report for the LUXE experiment. <i>European Physical Journal: Special Topics</i> , 2021, 230, 2445-2560.	1.2	89
6	Towards pair production in the non-perturbative regime. <i>New Journal of Physics</i> , 2021, 23, 105002.	1.2	15
7	Modeling chromatic emittance growth in staged plasma wakefield acceleration to 1ÂTeV using nonlinear transfer matrices. <i>Physical Review Accelerators and Beams</i> , 2021, 24, .	0.6	2
8	Spin- and polarization-dependent locally-constant-field-approximation rates for nonlinear Compton and Breit-Wheeler processes. <i>Physical Review A</i> , 2020, 102, .	1.0	53
9	Polarization-Dependent Self-Injection by Above Threshold Ionization Heating in a Laser Wakefield Accelerator. <i>Physical Review Letters</i> , 2020, 124, 114801.	2.9	11
10	Radiation beaming in the quantum regime. <i>Physical Review A</i> , 2020, 101, .	1.0	17
11	Relativistic plasma physics in supercritical fields. <i>Physics of Plasmas</i> , 2020, 27, .	0.7	81
12	A Frenet-Serret interpretation of particle dynamics in high-intensity laser fields. <i>Plasma Physics and Controlled Fusion</i> , 2019, 61, 074005.	0.9	8
13	Optimizing Laser Pulses for Narrow-Band Inverse Compton Sources in the High-Intensity Regime. <i>Physical Review Letters</i> , 2019, 122, 204802.	2.9	22
14	Extended locally constant field approximation for nonlinear Compton scattering. <i>Physical Review A</i> , 2019, 99, .	1.0	100
15	Ultrafast polarization of an electron beam in an intense bichromatic laser field. <i>Physical Review A</i> , 2019, 100, .	1.0	48
16	Higher-Dimensional Caustics in Nonlinear Compton Scattering. <i>Physical Review Letters</i> , 2018, 120, 044802.	2.9	17
17	Backreaction on background fields: A coherent state approach. <i>Physical Review D</i> , 2018, 97, .	1.6	27
18	Angular streaking of betatron X-rays in a transverse density gradient laser-wakefield accelerator. <i>Physics of Plasmas</i> , 2018, 25, .	0.7	12

#	ARTICLE	IF	CITATIONS
19	Mode truncations and scattering in strong fields. <i>Physical Review D</i> , 2018, 98, .	1.6	7
20	Benchmarking semiclassical approaches to strong-field QED: Nonlinear Compton scattering in intense laser pulses. <i>Physics of Plasmas</i> , 2018, 25, .	0.7	53
21	Theory of radiative electron polarization in strong laser fields. <i>Physical Review A</i> , 2018, 98, .	1.0	65
22	Electron spin polarization in realistic trajectories around the magnetic node of two counter-propagating, circularly polarized, ultra-intense lasers. <i>Plasma Physics and Controlled Fusion</i> , 2018, 60, 064003.	0.9	44
23	Spin-dependent rescattering in strong-field ionization of helium. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2017, 50, 065001.	0.6	6
24	Spin polarization of electrons by ultraintense lasers. <i>Physical Review A</i> , 2017, 96, .	1.0	77
25	Photoexcitation of atoms by Laguerre-Gaussian beams. <i>Physical Review A</i> , 2017, 96, .	1.0	31
26	Depletion of Intense Fields. <i>Physical Review Letters</i> , 2017, 118, 154803.	2.9	46
27	Spin-dependent quantum theory of high-order above-threshold ionization. <i>Physical Review A</i> , 2017, 95, .	1.0	6
28	Caustic structures in x-ray Compton scattering off electrons driven by a short intense laser pulse. <i>New Journal of Physics</i> , 2016, 18, 023044.	1.2	21
29	Two-color above-threshold ionization of atoms and ions in XUV Bessel beams and intense laser light. <i>Physical Review A</i> , 2016, 94, .	1.0	18
30	Analytical results for nonlinear Compton scattering in short intense laser pulses. <i>Journal of Plasma Physics</i> , 2016, 82, .	0.7	40
31	Pair production by Schwinger and Breit-Wheeler processes in bi-frequent fields. <i>Journal of Plasma Physics</i> , 2016, 82, .	0.7	18
32	Temporal laser-pulse-shape effects in nonlinear Thomson scattering. <i>Physical Review A</i> , 2016, 93, .	1.0	13
33	Determination of the carrier envelope phase for short, circularly polarized laser pulses. <i>Physical Review D</i> , 2016, 93, .	1.6	24
34	Elastic scattering of vortex electrons provides direct access to the Coulomb phase. <i>Physical Review D</i> , 2016, 94, .	1.6	40
35	Spectral caustics in laser assisted Breit-Wheeler process. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2016, 755, 162-167.	1.5	23
36	Compton scattering of twisted light: Angular distribution and polarization of scattered photons. <i>Physical Review A</i> , 2015, 92, .	1.0	37

#	ARTICLE	IF	CITATIONS
37	Scattering of twisted relativistic electrons by atoms. <i>Physical Review A</i> , 2015, 92, .	1.0	70
38	Effect of bound-state dressing in laser-assisted radiative recombination. <i>Physical Review A</i> , 2015, 92, .	1.0	6
39	Interaction of twisted light with many-electron atoms and ions. <i>Physical Review A</i> , 2015, 91, .	1.0	43
40	Narrowband inverse Compton scattering x-ray sources at high laser intensities. <i>Physical Review A</i> , 2015, 91, .	1.0	49
41	Lifting shell structures in the dynamically assisted Schwinger effect in periodic fields. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2015, 740, 335-340.	1.5	54
42	Laser-assisted Compton scattering of x-ray photons. <i>Physical Review A</i> , 2014, 89, .	1.0	17
43	Structured x-ray beams from twisted electrons by inverse Compton scattering of laser light. <i>Physical Review A</i> , 2014, 90, .	1.0	30
44	Nonlinear Compton scattering of ultrahigh-intensity laser pulses. <i>Laser Physics</i> , 2013, 23, 075301.	0.6	12
45	Asymmetries of azimuthal photon distributions in nonlinear Compton scattering in ultrashort intense laser pulses. <i>Physical Review A</i> , 2013, 88, .	1.0	38
46	High Resolution Energy-Angle Correlation Measurement of Hard X Rays from Laser-Thomson Backscattering. <i>Physical Review Letters</i> , 2013, 111, 114803.	2.9	68
47	Two-photon Compton process in pulsed intense laser fields. <i>Physical Review D</i> , 2012, 85, .	1.6	88
48	Pair production in short laser pulses near threshold. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2012, 715, 246-250.	1.5	71
49	Nonlinear Compton scattering of ultrashort intense laser pulses. <i>Physical Review A</i> , 2011, 83, .	1.0	162
50	Beam-shape effects in nonlinear Compton and Thomson scattering. <i>Physical Review A</i> , 2010, 81, .	1.0	126