

Luca Fedeli

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5848829/publications.pdf>

Version: 2024-02-01

38
papers

677
citations

471509

17
h-index

580821

25
g-index

39
all docs

39
docs citations

39
times ranked

669
citing authors

#	ARTICLE	IF	CITATIONS
1	PICSAR-QED: a Monte Carlo module to simulate strong-field quantum electrodynamics in particle-in-cell codes for exascale architectures. <i>New Journal of Physics</i> , 2022, 24, 025009.	2.9	6
2	Quantum vacuum processes in the extremely intense light of relativistic plasma mirror sources. <i>New Journal of Physics</i> , 2022, 24, 065005.	2.9	3
3	A hybrid nodal-staggered pseudo-spectral electromagnetic particle-in-cell method with finite-order centering. <i>Computer Physics Communications</i> , 2022, 279, 108457.	7.5	1
4	Modeling of a chain of three plasma accelerator stages with the WarpX electromagnetic PIC code on GPUs. <i>Physics of Plasmas</i> , 2021, 28, .	1.9	23
5	Probing Strong-Field QED with Doppler-Boosted Petawatt-Class Lasers. <i>Physical Review Letters</i> , 2021, 127, 114801.	7.8	24
6	Efficient laser-driven proton and bremsstrahlung generation from cluster-assembled foam targets. <i>New Journal of Physics</i> , 2021, 23, 093015.	2.9	12
7	Porting WarpX to GPU-accelerated platforms. <i>Parallel Computing</i> , 2021, 108, 102833.	2.1	25
8	Advanced laser-driven ion sources and their applications in materials and nuclear science. <i>Plasma Physics and Controlled Fusion</i> , 2020, 62, 014022.	2.1	35
9	A theoretical model of laser-driven ion acceleration from near-critical double-layer targets. <i>Communications Physics</i> , 2020, 3, .	5.3	22
10	Enhanced laser-driven hadron sources with nanostructured double-layer targets. <i>New Journal of Physics</i> , 2020, 22, 033045.	2.9	11
11	Superintense Laser-driven Ion Beam Analysis. <i>Scientific Reports</i> , 2019, 9, 9202.	3.3	24
12	Extreme high field plasmonics: Electron acceleration and XUV harmonic generation from ultrashort surface plasmons. <i>Physics of Plasmas</i> , 2019, 26, 042114.	1.9	4
13	Ultra-intense laser interaction with nanostructured near-critical plasmas. <i>Scientific Reports</i> , 2018, 8, 3834.	3.3	35
14	Extensive study of electron acceleration by relativistic surface plasmons. <i>Physics of Plasmas</i> , 2018, 25, 031907.	1.9	18
15	Few-Cycle Surface Plasmon Polariton Generation by Rotating Wavefront Pulses. <i>ACS Photonics</i> , 2018, 5, 1068-1073.	6.6	8
16	Structured targets for advanced laser-driven sources. <i>Plasma Physics and Controlled Fusion</i> , 2018, 60, 014013.	2.1	19
17	Extreme Ultraviolet Beam Enhancement by Relativistic Surface Plasmons. <i>Physical Review Letters</i> , 2018, 120, 264803.	7.8	16
18	Relativistic surface plasmon enhanced harmonic generation from gratings. <i>Applied Physics Letters</i> , 2017, 110, 051103.	3.3	21

#	ARTICLE	IF	CITATIONS
19	Parametric investigation of laser interaction with uniform and nanostructured near-critical plasmas. European Physical Journal D, 2017, 71, 1.	1.3	19
20	High Field Plasmonics. Springer Theses, 2017, , .	0.1	3
21	Foam Targets for Enhanced Ion Acceleration. Springer Theses, 2017, , 99-130.	0.1	0
22	Introduction on High Intensity Laser-Plasma Interaction and High Field Plasmonics. Springer Theses, 2017, , 7-40.	0.1	0
23	Electron Acceleration with Grating Targets. Springer Theses, 2017, , 63-97.	0.1	0
24	Numerical Exploration of High Field Plasmonics in Different Scenarios. Springer Theses, 2017, , 131-163.	0.1	0
25	Numerical Tools. Springer Theses, 2017, , 41-62.	0.1	0
26	Development of foam-based layered targets for laser-driven ion beam production. Plasma Physics and Controlled Fusion, 2016, 58, 034019.	2.1	61
27	Vlasov simulation of laser-driven shock acceleration and ion turbulence. Plasma Physics and Controlled Fusion, 2016, 58, 034021.	2.1	16
28	Electron Acceleration by Relativistic Surface Plasmons in Laser-Grating Interaction. Physical Review Letters, 2016, 116, 015001.	7.8	53
29	Electron heating in subpicosecond laser interaction with overdense and near-critical plasmas. Physical Review E, 2016, 94, 053201.	2.1	18
30	High field plasmonics and laser-plasma acceleration in solid targets. Plasma Physics and Controlled Fusion, 2016, 58, 014004.	2.1	17
31	Toward high-energy laser-driven ion beams: Nanostructured double-layer targets. Physical Review Accelerators and Beams, 2016, 19, .	1.6	48
32	Kinetic effects in the transverse filamentation instability of pair plasmas. EPJ Web of Conferences, 2015, 105, 02005.	0.3	0
33	Laser-driven Rayleigh-Taylor instability: Plasmonic effects and three-dimensional structures. Physical Review E, 2015, 91, 013106.	2.1	65
34	Enhanced electron acceleration via ultra-intense laser interaction with structured targets. Proceedings of SPIE, 2015, , .	0.8	4
35	Particle acceleration and radiation friction effects in the filamentation instability of pair plasmas. Monthly Notices of the Royal Astronomical Society, 2015, 451, 3460-3467.	4.4	12
36	Measurement of reflectivity of spherically bent crystals using $K\beta$ signal from hot electrons produced by laser-matter interaction. Review of Scientific Instruments, 2015, 86, 073507.	1.3	12

#	ARTICLE	IF	CITATIONS
37	Development of x-ray radiography for high energy density physics. Physics of Plasmas, 2014, 21, .	1.9	34
38	Phase space dynamics after the breaking of a relativistic Langmuir wave in a thermal plasma. European Physical Journal D, 2014, 68, 1.	1.3	8