Richard Pausch

List of Publications by Year
in descending order

25 papers	534 citations	840776 11 h-index	677142 22 g-index
25 all docs	25 docs citations	25 times ranked	709 citing authors

#	Article	IF	Citations
1	Challenges Porting a C++ Template-Metaprogramming Abstraction Layer to Directive-Based Offloading. Lecture Notes in Computer Science, 2022, , 92-111.	1.3	3
2	Demonstration of a compact plasma accelerator powered by laser-accelerated electron beams. Nature Communications, 2021, 12, 2895.	12.8	31
3	Restoring betatron phase coherence in a beam-loaded laser-wakefield accelerator. Physical Review Accelerators and Beams, 2021, 24, .	1.6	4
4	Gas-dynamic density downramp injection in a beam-driven plasma wakefield accelerator. Physical Review Research, 2021, 3, .	3.6	11
5	Characterization of Accumulated B-Integral of Regenerative Amplifier Based CPA Systems. Crystals, 2020, 10, 847.	2.2	8
6	Laser-plasma proton acceleration with a combined gas-foil target. New Journal of Physics, 2020, 22, 103068.	2.9	8
7	Design study for a compact laser-driven source for medical x-ray fluorescence imaging. Physical Review Accelerators and Beams, 2020, 23, .	1.6	12
8	Probing ultrafast magnetic-field generation by current filamentation instability in femtosecond relativistic laser-matter interactions. Physical Review Research, 2020, 2, .	3.6	19
9	Hybrid LWFAâ€“PWFA staging as a beam energy and brightness transformer: conceptual design and simulations. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20180175.	3.4	11
10	Circumventing the Dephasing and Depletion Limits of Laser-Wakefield Acceleration. Physical Review X, 2019, 9, .	8.9	38
11	Building an Optical Free-Electron Laser in the Traveling-Wave Thomson-Scattering Geometry. Frontiers in Physics, 2019, 6, .	2.1	11
12	Improved performance of laser wakefield acceleration by tailored self-truncated ionization injection. Plasma Physics and Controlled Fusion, 2018, 60, 044015.	2.1	16
13	Quantitatively consistent computation of coherent and incoherent radiation in particle-in-cell codesâ€”A general form factor formalism for macro-particles. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 909, 419-422.	1.6	4
14	Making spectral shape measurements in inverse Compton scattering a tool for advanced diagnostic applications. Scientific Reports, 2018, 8, 1398.	3.3	34
15	Advanced Methods for Temporal Reconstruction of Modulated Electron Bunches. , 2018, , .		0
16	All-optical structuring of laser-driven proton beam profiles. Nature Communications, 2018, 9, 5292.	12.8	16
17	Identifying the linear phase of the relativistic Kelvin-Helmholtz instability and measuring its growth rate via radiation. Physical Review E, 2017, 96, 013316.	2.1	6
18	First results with the novel petawatt laser acceleration facility in Dresden. Journal of Physics: Conference Series, 2017, 874, 012028.	0.4	68

#	Article	IF	Citations
19	Demonstration of a beam loaded nanocoulomb-class laser wakefield accelerator. Nature Communications, 2017, 8, 487.	12.8	124
20	Brilliant and efficient optical free-electron lasers with traveling-wave Thomson-Scattering. AIP Conference Proceedings, 2016, , .	0.4	3
21	Optical free-electron lasers with Traveling-Wave Thomson-Scattering. Journal of Physics B: Atomic, Molecular and Optical Physics, 2014, 47, 234011.	1.5	28
22	Visualizing the Radiation of the Kelvin-Helmholtz Instability. IEEE Transactions on Plasma Science, 2014, 42, 2638-2639.	1.3	0
23	Wave optical description of the Traveling-Wave Thomson-Scattering optical undulator field and its application to the TWTS-FEL. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 740, 147-152.	1.6	8
24	How to test and verify radiation diagnostics simulations within particle-in-cell frameworks. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 740, 250-256.	1.6	14
25	Radiative signatures of the relativistic Kelvin-Helmholtz instability. , 2013, , .		57