Juhao Wu

List of Publications by Year in Descending Order

38 papers	3,688 citations	14 h-index	39 g-index
39 ext. papers	4,170 ext. citations	5 avg, IF	3.97 L-index

#	Paper	IF	Citations
38	Numerical characterization of quasi-steady thermal load for thin crystal at cryogenic temperature with nondiffusive heat transfer. *Journal of Applied Physics*, **2021**, 130, 144503	2.5	0
37	On the gauge transformation for the rotation of the singular string in the Dirac monopole theory. *International Journal of Modern Physics A*, **2021**, 36, 2150019	1.2	
36	New mounting mechanism for cryogenically cooled thin crystal x-ray optics in high brightness high repetition rate free-electron laser applications. *Review of Scientific Instruments*, **2021**, 92, 083904	1.7	0
35	Two-stage reflective self-seeding scheme for high-repetition-rate X-ray free-electron lasers. *Journal of Synchrotron Radiation*, **2021**, 28, 44-51	2.4	
34	Thermal loading on self-seeding monochromators in x-ray free electron lasers. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2020**, 969, 163936	1.2	4
33	Theoretical formulation of phase space microbunching instability in the presence of intrabeam scattering for single-pass or recirculation accelerators. *Physical Review Accelerators and Beams*, **2020**, 23,	1.8	2
32	Analytical model for monochromator performance characterizations under thermal load. *Optics Express*, **2020**, 28, 30075-30084	3.3	3
31	Coherence time characterization method for hard X-ray free-electron lasers. *Optics Express*, **2020**, 28, 10928-10938	3.3	
30	Dynamic pulse-to-pulse thermal load effects in pulse-train-mode self-seeded X-ray free-electron laser. *Journal of Synchrotron Radiation*, **2020**, 27, 1725-1729	2.4	1
29	Attosecond Coherence Time Characterization in Hard X-Ray Free-Electron Laser. *Scientific Reports*, **2020**, 10, 5961	4.9	1
28	Electromagnetically induced amplification via counter-rotating-wave terms in a three-level Λ-type system. *Physica Scripta*, **2019**, 94, 095104	2.6	
27	The seed energy fluctuation of hard X-ray self-seeding free electron laser. *AIP Advances*, **2019**, 9, 035254	1.5	
26	The detuning effect of crystal monochromator in self-seeding and oscillator free electron laser. *Optics Express*, **2019**, 27, 13229-13239	3.3	3
25	Area-preserving scheme for efficiency enhancement in single-pass tapered free electron lasers. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2019**, 913, 107-119	1.2	4
24	Transient thermal stress wave and vibrational analyses of a thin diamond crystal for X-ray free-electron lasers under high-repetition-rate operation. *Journal of Synchrotron Radiation*, **2018**, 25, 166-176	2.4	5
23	Single-pass high-gain tapered free-electron laser with transverse diffraction in the postsaturation regime. *Physical Review Accelerators and Beams*, **2018**, 21,	1.8	2
22	Multi-dimensional optimization of a terawatt seeded tapered Free Electron Laser with a Multi-Objective Genetic Algorithm. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2017**, 846, 56-63	1.2	10

21	Experimental demonstration of fresh bunch self-seeding in an X-ray free electron laser. *Applied Physics Letters*, **2017**, 110, 154101	3.4	33
20	Sideband instability analysis based on a one-dimensional high-gain free electron laser model. *Physical Review Accelerators and Beams*, **2017**, 20,	1.8	4
19	High efficiency, multiterawatt x-ray free electron lasers. *Physical Review Accelerators and Beams*, **2016**, 19,	1.8	31
18	Experimental demonstration of a soft x-ray self-seeded free-electron laser. *Physical Review Letters*, **2015**, 114, 054801	7.4	125
17	Few-femtosecond time-resolved measurements of X-ray free-electron lasers. *Nature Communications*, **2014**, 5, 3762	17.4	157
16	Terawatt x-ray free-electron-laser optimization by transverse electron distribution shaping. *Physical Review Special Topics: Accelerators and Beams*, **2014**, 17,		14
15	High-brightness X-ray free-electron laser with an optical undulator by pulse shaping. *Optics Express*, **2013**, 21, 32013-8	3.3	15
14	High-gain Thompson-scattering x-ray free-electron laser by time-synchronic laterally tilted optical wave. *Physical Review Letters*, **2013**, 110, 064802	7.4	32
13	Demonstration of self-seeding in a hard-X-ray free-electron laser. *Nature Photonics*, **2012**, 6, 693-698	33.9	473
12	Modeling and multidimensional optimization of a tapered free electron laser. *Physical Review Special Topics: Accelerators and Beams*, **2012**, 15,		44
11	Femtosecond x-ray pulse characterization in free-electron lasers using a cross-correlation technique. *Physical Review Letters*, **2012**, 109, 254802	7.4	73
10	First lasing and operation of an Ångstrom-wavelength free-electron laser. *Nature Photonics*, **2010**, 4, 641-647	33.9	2216
9	Influence of an imperfect energy profile on a seeded free electron laser performance. *Physical Review Special Topics: Accelerators and Beams*, **2010**, 13,		8
8	Electron beam energy and bunch length feed forward control studies using an artificial neural network at the Linac coherent light source. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2009**, 610, 629-635	1.2	3
7	Exponential growth, superradiance, and tunability of a seeded free electron laser. *Optics Express*, **2008**, 16, 3255-60	3.3	6
6	Analytical analysis of longitudinal space charge effects for a bunched beam with radial dependence. *Physical Review Special Topics: Accelerators and Beams*, **2008**, 11,		13
5	Commissioning the Linac Coherent Light Source injector. *Physical Review Special Topics: Accelerators and Beams*, **2008**, 11,		168
4	Interplay of the chirps and chirped pulse compression in a high-gain seeded free-electron laser. *Journal of the Optical Society of America B: Optical Physics*, **2007**, 24, 484	1.7	20

3	Suppression of microbunching instability in the linac coherent light source. *Physical Review Special Topics: Accelerators and Beams*, **2004**, 7,		164
2	Theory of high gain harmonic generation: an analytical estimate. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2002**, 483, 493-498	1.2	48
1	Eigenmodes and mode competition in a high-gain free-electron laser including alternating-gradient focusing. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2001**, 475, 79-85	1.2	6