Giuseppe Penco

List of Publications by Year
in descending order

87 papers	3,474 citations	186265 28 h-index	138484 58 g-index
88 all docs	88 docs citations	88 times ranked	2385 citing authors

#	Article	IF	Citations
1	Highly coherent and stable pulses from the FERMI seeded free-electron laser in the extreme ultraviolet. Nature Photonics, 2012, 6, 699-704.	31.4	903
2	Two-stage seeded soft-X-ray free-electron laser. Nature Photonics, 2013, 7, 913-918.	31.4	424
3	Coherent control with a short-wavelength free-electron laser. Nature Photonics, 2016, 10, 176-179.	31.4	197
4	Two-colour pumpâ€“probe experiments with a twin-pulse-seed extreme ultraviolet free-electron laser. Nature Communications, 2013, 4, 2476.	12.8	156
5	Attosecond pulse shaping using a seeded free-electron laser. Nature, 2020, 578, 386-391.	27.8	116
6	The FERMI free-electron lasers. Journal of Synchrotron Radiation, 2015, 22, 485-491.	2.4	101
7	Coherent soft X-ray pulses from an echo-enabled harmonic generation free-electron laser. Nature Photonics, 2019, 13, 555-561.	31.4	92
8	Tunability experiments at the FERMI@Elettra free-electron laser. New Journal of Physics, 2012, 14, 113009.	2.9	81
9	Control of the Polarization of a Vacuum-Ultraviolet, High-Gain, Free-Electron Laser. Physical Review X, 2014, 4, .	8.9	80
10	Widely tunable two-colour seeded free-electron laser source for resonant-pump resonant-probe magnetic scattering. Nature Communications, 2016, 7, 10343.	12.8	77
11	Spectrotemporal Shaping of Seeded Free-Electron Laser Pulses. Physical Review Letters, 2015, 115, 114801.	7.8	68
12	Soft X-Ray Second Harmonic Generation as an Interfacial Probe. Physical Review Letters, 2018, 120, 023901.	7.8	64
13	Single-shot spectro-temporal characterization of XUV pulses from a seeded free-electron laser. Nature Communications, 2015, 6, 8075.	12.8	55
14	Tracking attosecond electronic coherences using phase-manipulated extreme ultraviolet pulses. Nature Communications, 2020, 11, 883.	12.8	50
15	Laser heater commissioning at an externally seeded free-electron laser. Physical Review Special Topics: Accelerators and Beams, 2014, 17, .	1.8	49
16	Multicolor High-Gain Free-Electron Laser Driven by Seeded Microbunching Instability. Physical Review Letters, 2015, 115, 214801.	7.8	48
17	Pulse Duration of Seeded Free-Electron Lasers. Physical Review X, 2017, 7, .	8.9	47
18	Single Shot Polarization Characterization of XUV FEL Pulses from Crossed Polarized Undulators. Scientific Reports, 2015, 5, 13531.	3.3	44

#	Article	IF	Citations
19	Chirped pulse amplification in an extreme-ultraviolet free-electron laser. Nature Communications, 2016, 7, 13688.	12.8	43
20	Two-colour generation in a chirped seeded free-electron laser: a close look. Optics Express, 2013, 21, 22728.	3.4	42
21	The TeraFERMI terahertz source at the seeded FERMI free-electron-laser facility. Review of Scientific Instruments, 2013, 84, 022702.	1.3	39
22	Experimental Demonstration of Electron Longitudinal-Phase-Space Linearization by Shaping the Photoinjector Laser Pulse. Physical Review Letters, 2014, 112, 044801.	7.8	39
23	Optimization of a high brightness photoinjector for a seeded FEL facility. Journal of Instrumentation, 2013, 8, P05015-P05015.	1.2	37
24	Experimental Demonstration of Enhanced Self-Amplified Spontaneous Emission by an Optical Klystron. Physical Review Letters, 2015, 114, 013901.	7.8	32
25	Time-Resolved Measurement of Interatomic Coulombic Decay Induced by Two-Photon Double Excitation of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>Ne</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></ Physical Review Letters, 2017, 118, 033202.	7.8	32
26	Formation of electron bunches for harmonic cascade x-ray free electron lasers. Physical Review Special Topics: Accelerators and Beams, 2006, 9, .	1.8	30
27	Design and simulation challenges for FERMI@elettra. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 608, 19-27.	1.6	28
28	Implementation of Radio-Frequency Deflecting Devices for Comprehensive High-Energy Electron Beam Diagnosis. IEEE Transactions on Nuclear Science, 2015, 62, 210-220.	2.0	28
29	Slow Interatomic Coulombic Decay of Multiply Excited Neon Clusters. Physical Review Letters, 2016, 117, 276806.	7.8	24
30	New Method for Measuring Angle-Resolved Phases in Photoemission. Physical Review X, 2020, 10, .	8.9	23
31	Complete Characterization of Phase and Amplitude of Bichromatic Extreme Ultraviolet Light. Physical Review Letters, 2019, 123, 213904.	7.8	21
32	Impact of Non-Gaussian Electron Energy Heating upon the Performance of a Seeded Free-Electron Laser. Physical Review Letters, 2014, 112, 114802.	7.8	20
33	Beyond the limits of 1D coherent synchrotron radiation. New Journal of Physics, 2018, 20, 073035.	2.9	20
34	Generation and measurement of intense few-femtosecond superradiant extreme-ultraviolet free-electron laser pulses. Nature Photonics, 2021, 15, 523-529.	31.4	20
35	Experimental studies on transient beam loading effects in the presence of a superconducting third harmonic cavity. Physical Review Special Topics: Accelerators and Beams, 2006, 9, .	1.8	19
36	Characterization of coherent THz radiation bursting regime at Elettra. Infrared Physics and Technology, 2010, 53, 300-303.	2.9	18

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37	Transverse emittance preservation during bunch compression in the Fermi free electron laser. Physical Review Special Topics: Accelerators and Beams, 2012, 15, .	1.8	18
38	Modeling and experimental study to identify arrival-time jitter sources in the presence of a magnetic chicane. Physical Review Special Topics: Accelerators and Beams, 2013, 16, .	1.8	18
39	Echo-Enabled Harmonic Generation Studies for the FERMI Free-Electron Laser. Photonics, 2017, 4, 19.	2.0	18
40	Coherent THz Emission Enhanced by Coherent Synchrotron Radiation Wakefield. Scientific Reports, 2018, 8, 11661.	3.3	16
41	Absolute Bunch Length Measurement Using Coherent Diffraction Radiation. Physical Review Letters, 2013, 110, 074802.	7.8	15
42	Passive Linearization of the Magnetic Bunch Compression Using Self-Induced Fields. Physical Review Letters, 2017, 119, 184802.	7.8	14
43	Enhanced seeded free electron laser performance with a â€œcoldâ€•electron beam. Physical Review Accelerators and Beams, 2020, 23, .	1.6	14
44	Impact of an initial energy chirp and an initial energy curvature on a seeded free electron laser: the Green's function. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 045202.	2.1	13
45	Impact of an initial energy chirp and an initial energy curvature on a seeded free electron laser: free electron laser properties. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 085405.	2.1	13
46	Experimental evidence of intrabeam scattering in a free-electron laser driver. New Journal of Physics, 2020, 22, 083053.	2.9	13
47	A detailed investigation of single-photon laser enabled Auger decay in neon. New Journal of Physics, 2019, 21, 113036.	2.9	12
48	Optical Klystron Enhancement to Self Amplïi¬ed Spontaneous Emission at FERMI. Photonics, 2017, 4, 15.	2.0	11
49	Polarization Characterization of Soft X-Ray Radiation at FERMI FEL-2. Photonics, 2017, 4, 29.	2.0	11
50	Design and experimental tests of free electron laser wire scanners. Physical Review Accelerators and Beams, 2016, 19, .	1.6	11
51	Element Selective Probe of the Ultra-Fast Magnetic Response to an Element Selective Excitation in Fe-Ni Compounds Using a Two-Color FEL Source. Photonics, 2017, 4, 6.	2.0	9
52	Two-photon absorption of soft X-ray free electron laser radiation by graphite near the carbon K-absorption edge. Chemical Physics Letters, 2018, 703, 112-116.	2.6	9
53	Free electron laser polarization control with interfering crossed polarized fields. Physical Review Accelerators and Beams, 2019, 22, .	1.6	9
54	Characterisation of microbunching instability with 2D Fourier analysis. Scientific Reports, 2020, 10, 5059.	3.3	7

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55	Nonlinear harmonics of a seeded free-electron laser as a coherent and ultrafast probe to investigate matter at the water window and beyond. Physical Review A, 2022, 105, .	2.5	7
56	FERMI@Elettra, a seeded free electron laser source for a broad scientific user program. , 2011, , .		6
57	Theoretical and experimental analysis of a linear accelerator endowed with single feed coupler with movable short-circuit. Review of Scientific Instruments, 2013, 84, 114701.	1.3	6
58	Energy slicing analysis for time-resolved measurement of electron-beam properties. Physical Review Special Topics: Accelerators and Beams, 2014, 17, .	1.8	6
59	Two-bunch operation with ns temporal separation at the FERMI FEL facility. New Journal of Physics, 2018, 20, 053047.	2.9	6
60	First operational results of the 3rd harmonic super conducting cavities in SLS and ELETTRA. , 0, , .		5
61	Polarization measurement of free electron laser pulses in the VUV generated by the variable polarization source FERMI. , 2014, , .		4
62	The FERMI seeded-FEL facility: Status and perspectives. AIP Conference Proceedings, 2016, , .	0.4	4
63	Spectrotemporal control of soft x-ray laser pulses. Physical Review Accelerators and Beams, 2020, 23, .	1.6	4
64	Linac upgrading program for the FERMI project: Status and perspectives. , 2007, , .		3
65	The new photoinjector for the FERMI project. , 2007, , .		3
66	The new elettra booster injector. , 2007, , .		3
67	Status and achievements at FERMI@Elettra: the first double cascade seeded EUV-SXR FEL facility open to users. , 2013, , .		3
68	How the optical timing system, the longitudinal diagnostics and the associated feedback systems provide femtosecond stable operation at the FERMI free electron laser. High Power Laser Science and Engineering, 2016, 4, .	4.6	3
69	Characterization of soft x-ray echo-enabled harmonic generation free-electron laser pulses in the presence of incoherent electron beam energy modulations. Physical Review Accelerators and Beams, 2021, 24, .	1.6	3
70	A nanofabricated wirescanner with free standing wires: Design, fabrication and experimental results. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 891, 32-36.	1.6	2
71	Nanofabricated free-standing wire scanners for beam diagnostics with submicrometer resolution. Physical Review Accelerators and Beams, 2020, 23, .	1.6	2
72	Microbunching instability characterization via temporally modulated laser pulses. Physical Review Accelerators and Beams, 2020, 23, .	1.6	2

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73	Single-shot transverse coherence in seeded and unseeded free-electron lasers: A comparison. Physical Review Accelerators and Beams, 2022, 25, .	1.6	2
74	Publisherâ€™s Note: Transverse emittance preservation during bunch compression in the Fermi free electron laser [Phys. Rev. ST Accel. Beams15, 020701 (2012)]. Physical Review Special Topics: Accelerators and Beams, 2012, 15, .	1.8	1
75	Addendum: Beyond the limits of 1D coherent synchrotron radiation (2018 New J. Phys. 20 073035). New Journal of Physics, 2021, 23, 049401.	2.9	1
76	Facility Updates: Fermi @ Elettra: A Free Electron Laser for EUV and Soft X-ray Radiation. Synchrotron Radiation News, 2005, 18, 30-35.	0.8	0
77	Review of the longitudinal impedance budget of the ELETTRA storage ring. , 2007, , .		0
78	The TeraFERMI beamline at the FERMI Free-Electron-Laser. , 2013, , .		0
79	Interatomic Coulombic Decay Processes after Multiple Valence Excitations in Ne Clusters. Journal of Physics: Conference Series, 2015, 635, 112067.	0.4	0
80	Optical klystron SASE at FERMI. Proceedings of SPIE, 2015, , .	0.8	0
81	Experimental characterization of the FERMI laser heater and its impact on the FEL operations. Proceedings of SPIE, 2015, , .	0.8	0
82	FERMI longitudinal diagnostics: results and future challenges. Proceedings of SPIE, 2015, , .	0.8	0
83	THz coherent transition radiation at TeraFERMI: First characterization of THz radiation and electron beam dynamics. , 2016, , .		0
84	TeraFERMI: Status of the beamline and pilot experiments. , 2017, , .		0
85	Coherent Pulses from a Seeded Free-Electron Laser in the Extreme Ultraviolet. Springer Proceedings in Physics, 2014, , 1-6.	0.2	0
86	A Novel Attosecond Timing Tool for Free-Electron Laser Experiment. , 2020, , .		0
87	Addendum: Experimental evidence of intrabeam scattering in a free-electron laser driver (2020 New J.) Tj ETQq1 1 0.784314 rgBT /Overl	2.9	0