

Emanuele Pedersoli

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7454992/publications.pdf>

Version: 2024-02-01

99
papers

2,419
citations

236833

25
h-index

223716

46
g-index

107
all docs

107
docs citations

107
times ranked

2357
citing authors

#	ARTICLE	IF	CITATIONS
1	Short-wavelength four wave mixing experiments using single and two-color schemes at FERMI. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2022, 257, 146901.	0.8	2
2	Single-shot experiments at the soft X-FEL FERMI using a back-side-illuminated scientific CMOS detector. <i>Journal of Synchrotron Radiation</i> , 2022, 29, 103-110.	1.0	5
3	Observation of Magnetic Helicoidal Dichroism with Extreme Ultraviolet Light Vortices. <i>Physical Review Letters</i> , 2022, 128, 077401.	2.9	20
4	Ultrafast time-evolution of chiral Néel magnetic domain walls probed by circular dichroism in x-ray resonant magnetic scattering. <i>Nature Communications</i> , 2022, 13, 1412.	5.8	7
5	AC/DC: The FERMI FEL Split and Delay Optical Device for Ultrafast X-ray Science. <i>Photonics</i> , 2022, 9, 314.	0.9	0
6	The COMIX polarimeter: a compact device for XUV polarization analysis. <i>Journal of Synchrotron Radiation</i> , 2022, 29, 969-977.	1.0	1
7	Nonlinear harmonics of a seeded free-electron laser as a coherent and ultrafast probe to investigate matter at the water window and beyond. <i>Physical Review A</i> , 2022, 105, .	1.0	7
8	All-Optical Switching on the Nanometer Scale Excited and Probed with Femtosecond Extreme Ultraviolet Pulses. <i>Nano Letters</i> , 2022, 22, 4452-4458.	4.5	9
9	Nanoscale Transient Magnetization Gratings Created and Probed by Femtosecond Extreme Ultraviolet Pulses. <i>Nano Letters</i> , 2021, 21, 2905-2911.	4.5	16
10	Effect of Auger recombination on transient optical properties in XUV and soft X-ray irradiated silicon nitride. <i>Scientific Reports</i> , 2021, 11, 5203.	1.6	3
11	All-optical single-shot complete electric field measurement of extreme ultraviolet free electron laser pulses. <i>Optica</i> , 2021, 8, 545.	4.8	12
12	Ultrafast Adsorbate Excitation Probed with Subpicosecond-Resolution X-Ray Absorption Spectroscopy. <i>Physical Review Letters</i> , 2021, 127, 016802.	2.9	11
13	Generation and detection of 50 GHz surface acoustic waves by extreme ultraviolet pulses. <i>Applied Physics Letters</i> , 2021, 119, .	1.5	15
14	Tomography of a seeded free-electron laser focal spot: qualitative and quantitative comparison of two reconstruction methods for spot size characterization. <i>Optics Express</i> , 2021, 29, 36086.	1.7	3
15	Nanoscale Thermoelasticity in Silicon Nitride Membranes: Implications for Thermal Management. <i>ACS Applied Nano Materials</i> , 2021, 4, 10519-10527.	2.4	5
16	Time-Resolved XUV Absorption Spectroscopy and Magnetic Circular Dichroism at the Ni M _{2,3} -Edges. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 325.	1.3	17
17	Time-resolved observation of transient precursor state of CO on Ru(0001) using carbon K-edge spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 2677-2684.	1.3	15
18	Ultrafast Demagnetization Dominates Fluence Dependence of Magnetic Scattering at Co $M_{2,3}$ Edges. <i>Physical Review Letters</i> , 2020, 125, 127201.	2.9	15

#	ARTICLE	IF	CITATIONS
19	Simultaneous two-color snapshot view on ultrafast charge and spin dynamics in a Fe-Cu-Ni tri-layer. <i>Structural Dynamics</i> , 2020, 7, 054302.	0.9	10
20	Transient magnetic gratings on the nanometer scale. <i>Structural Dynamics</i> , 2020, 7, 054501.	0.9	16
21	Laser-induced ultrafast demagnetization and perpendicular magnetic anisotropy reduction in a Co88Tb12 thin film with stripe domains. <i>Physical Review B</i> , 2020, 102, .	1.1	21
22	Faster chiral versus collinear magnetic order recovery after optical excitation revealed by femtosecond XUV scattering. <i>Nature Communications</i> , 2020, 11, 6304.	5.8	19
23	Pulse-to-pulse wavefront sensing at free-electron lasers using ptychography. <i>Journal of Applied Crystallography</i> , 2020, 53, 949-956.	1.9	14
24	Single-shot Measurement of Extreme Ultraviolet Free Electron Laser Pulses. , 2020, , .		0
25	Exploring the multiparameter nature of EUV-visible wave mixing at the FERMI FEL. <i>Structural Dynamics</i> , 2019, 6, 040901.	0.9	3
26	Thermoelasticity of Nanoscale Silicon Carbide Membranes Excited by Extreme Ultraviolet Transient Gratings: Implications for Mechanical and Thermal Management. <i>ACS Applied Nano Materials</i> , 2019, 2, 5132-5139.	2.4	10
27	Kirkpatrickâ€™s active optics system at FERMI: system performance analysis. <i>Journal of Synchrotron Radiation</i> , 2019, 26, 1462-1472.	1.0	13
28	Nanoscale transient gratings excited and probed by extreme ultraviolet femtosecond pulses. <i>Science Advances</i> , 2019, 5, eaaw5805.	4.7	54
29	Nonlinear XUV-optical transient grating spectroscopy at the Si L2,3â€™edge. <i>Applied Physics Letters</i> , 2019, 114, 181101.	1.5	15
30	Time-resolved ionization measurements with intense ultrashort XUV and X-ray free-electron laser pulses. <i>Laser and Particle Beams</i> , 2019, 37, 235-241.	0.4	2
31	Single-shot time-resolved magnetic x-ray absorption at a free-electron laser. <i>Physical Review B</i> , 2019, 99, .	1.1	12
32	In situ single-shot diffractive fluence mapping for X-ray free-electron laser pulses. <i>Nature Communications</i> , 2018, 9, 214.	5.8	18
33	Characterization of ultrafast free-electron laser pulses using extreme-ultraviolet transient gratings. <i>Journal of Synchrotron Radiation</i> , 2018, 25, 32-38.	1.0	12
34	Advances in instrumentation for FEL-based four-wave-mixing experiments. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2018, 907, 132-148.	0.7	18
35	Timing methodologies and studies at the FERMI free-electron laser. <i>Journal of Synchrotron Radiation</i> , 2018, 25, 44-51.	1.0	5
36	Generation of coherent phonons by coherent extreme ultraviolet radiation in a transient grating experiment. <i>Applied Physics Letters</i> , 2018, 113, .	1.5	28

#	ARTICLE	IF	CITATIONS
37	Seeded X-ray free-electron laser generating radiation with laser statistical properties. Nature Communications, 2018, 9, 4498.	5.8	51
38	First Evidence of Purely Extreme-Ultraviolet Four-Wave Mixing. Physical Review Letters, 2018, 120, 263901.	2.9	37
39	Optical constants modelling in silicon nitride membrane transiently excited by EUV radiation. Optics Express, 2018, 26, 11877.	1.7	6
40	Multi-color imaging of magnetic Co/Pt heterostructures. Structural Dynamics, 2017, 4, 014301.	0.9	32
41	Soft x-ray induced femtosecond solid-to-solid phase transition. High Energy Density Physics, 2017, 24, 22-27.	0.4	37
42	Multi-Color Imaging of Magnetic Co/Pt Multilayers. IEEE Transactions on Magnetics, 2017, 53, 1-5.	1.2	4
43	Measurements of ultrafast spin-profiles and spin-diffusion properties in the domain wall area at a metal/ferromagnetic film interface. Scientific Reports, 2017, 7, 15064.	1.6	11
44	Probing ultrafast changes of spin and charge density profiles with resonant XUV magnetic reflectivity at the free-electron laser FERMI. Structural Dynamics, 2017, 4, 055101.	0.9	7
45	Notice of Removal: Generation of acoustic waves by an extreme ultra violet free electron laser in a transient grating experiment. , 2017, , .		0
46	Pulse Duration of Seeded Free-Electron Lasers. Physical Review X, 2017, 7, .	2.8	47
47	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.	0.9	9
48	Dynamics of the MnAs \hat{I}^2 -Striped Microstructure and of the Fe Magnetization Reversal in Fe/MnAs/GaAs(001): An Optical-Laser Pumped Free-Electron-Laser Probe Scattering Experiment. Photonics, 2017, 4, 21.	0.9	4
49	Four-wave-mixing experiments and beyond: the TIMER/mini-TIMER setups at FERMI. , 2017, , .		4
50	The FERMI seeded-FEL facility: Status and perspectives. AIP Conference Proceedings, 2016, , .	0.3	4
51	Widely tunable two-colour seeded free-electron laser source for resonant-pump resonant-probe magnetic scattering. Nature Communications, 2016, 7, 10343.	5.8	77
52	Imaging Non-Local Magnetization Dynamics. Synchrotron Radiation News, 2016, 29, 26-31.	0.2	0
53	Experimental setups for FEL-based four-wave mixing experiments at FERMI. Journal of Synchrotron Radiation, 2016, 23, 132-140.	1.0	9
54	Four-wave-mixing experiments with seeded free electron lasers. Faraday Discussions, 2016, 194, 283-303.	1.6	20

#	ARTICLE	IF	CITATIONS
55	Nonlinear optics with coherent free electron lasers. <i>Physica Scripta</i> , 2016, T169, 014003.	1.2	5
56	Direct Phasing of Finite Crystals Illuminated with a Free-Electron Laser. <i>Physical Review X</i> , 2015, 5, .	2.8	12
57	Multipurpose end-station for coherent diffraction imaging and scattering at FERMI@Elettra free-electron laser facility. <i>Journal of Synchrotron Radiation</i> , 2015, 22, 544-552.	1.0	29
58	Toward the Extreme Ultra Violet Four Wave Mixing Experiments: From Table Top Lasers to Fourth Generation Light Sources. <i>Photonics</i> , 2015, 2, 57-70.	0.9	1
59	FEL-based transient grating spectroscopy. <i>Proceedings of SPIE</i> , 2015, , .	0.8	2
60	Four-wave mixing experiments with extreme ultraviolet transient gratings. <i>Nature</i> , 2015, 520, 205-208.	13.7	184
61	Optically induced Fe magnetization reversal in Fe/MnAs/GaAs(001). <i>Proceedings of SPIE</i> , 2015, , .	0.8	0
62	Role of the ionization potential in nonequilibrium metals driven to absorption saturation. <i>Physical Review E</i> , 2015, 92, 011101.	0.8	6
63	Ultrafast spin-switching of a ferrimagnetic alloy at room temperature traced by resonant magneto-optical Kerr effect using a seeded free electron laser. <i>Review of Scientific Instruments</i> , 2015, 86, 083901.	0.6	18
64	Active optics systems at FERMI Free Electron Laser. , 2015, , .		0
65	Control of the Polarization of a Vacuum-Ultraviolet, High-Gain, Free-Electron Laser. <i>Physical Review X</i> , 2014, 4, .	2.8	80
66	Magnetization and Microstructure Dynamics in Fe/MnAs Laser Pulse. <i>Physical Review Letters</i> , 2014, 113, 247202.	2.9	26
67	Status of the K-B bendable optics at FERMI@Elettra FEL. , 2014, , .		8
68	Towards jitter-free pump-probe measurements at seeded free electron laser facilities. <i>Optics Express</i> , 2014, 22, 12869.	1.7	83
69	Conformation sequence recovery of a non-periodic object from a diffraction-before-destruction experiment. <i>Optics Express</i> , 2014, 22, 8085.	1.7	11
70	Multi-colour pulses from seeded free-electron-lasers: towards the development of non-linear core-level coherent spectroscopies. <i>Faraday Discussions</i> , 2014, 171, 487-503.	1.6	29
71	X-ray holography with a customizable reference. <i>Nature Communications</i> , 2014, 5, 4661.	5.8	22
72	Role of multilayer-like interference effects on the transient optical response of Si ₃ N ₄ films pumped with free-electron laser pulses. <i>Applied Physics Letters</i> , 2014, 104, 191104.	1.5	19

#	ARTICLE	IF	CITATIONS
73	Imaging Ultrafast Demagnetization Dynamics after a Spatially Localized Optical Excitation. Physical Review Letters, 2014, 112, .	2.9	113
74	Polarization measurement of free electron laser pulses in the VUV generated by the variable polarization source FERMI. , 2014, , .		4
75	Microfocusing of the FERMI@Elettra FEL beam with a Kâ€B active optics system: Spot size predictions by application of the WISE code. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 710, 131-138.	0.7	50
76	Invited Article: Coherent imaging using seeded free-electron laser pulses with variable polarization: First results and research opportunities. Review of Scientific Instruments, 2013, 84, 051301.	0.6	77
77	Sensing the wavefront of x-ray free-electron lasers using aerosol spheres. Optics Express, 2013, 21, 12385.	1.7	28
78	Toward unsupervised single-shot diffractive imaging of heterogeneous particles using X-ray free-electron lasers. Optics Express, 2013, 21, 28729.	1.7	20
79	Status and achievements at FERMI@Elettra: the first double cascade seeded EUV-SXR FEL facility open to users. , 2013, , .		3
80	Mesoscale morphology of airborne coreâ€shell nanoparticle clusters: x-ray laser coherent diffraction imaging. Journal of Physics B: Atomic, Molecular and Optical Physics, 2013, 46, 164033.	0.6	12
81	Ultrafast Dynamics of Magnetic Domain Structures Probed by Coherent Free-Electron Laser Light. Synchrotron Radiation News, 2013, 26, 27-32.	0.2	9
82	Two-colour pumpâ€probe experiments with a twin-pulse-seed extreme ultraviolet free-electron laser. Nature Communications, 2013, 4, 2476.	5.8	156
83	K-B bendable system optimization at FERMI@Elettra FEL: impact of different spatial wavelengths on the spot size. , 2013, , .		4
84	Tunability experiments at the FERMI@Elettra free-electron laser. New Journal of Physics, 2012, 14, 113009.	1.2	81
85	Profiling structured beams using injected aerosols. Proceedings of SPIE, 2012, , .	0.8	1
86	Noise-robust coherent diffractive imaging with a single diffraction pattern. Optics Express, 2012, 20, 16650.	1.7	73
87	Femtosecond dark-field imaging with an X-ray free electron laser. Optics Express, 2012, 20, 13501.	1.7	38
88	A scheme for lensless X-ray microscopy combining coherent diffraction imaging and differential corner holography. Optics Express, 2012, 20, 25152.	1.7	10
89	Fractal morphology, imaging and mass spectrometry of single aerosol particles in flight. Nature, 2012, 486, 513-517.	13.7	170
90	Unsupervised classification of single-particle X-ray diffraction snapshots by spectral clustering. Optics Express, 2011, 19, 16542.	1.7	91

#	ARTICLE	IF	CITATIONS
91	Single particle imaging with soft x-rays at the Linac Coherent Light Source. , 2011, , .		12
92	Multipurpose modular experimental station for the DiProl beamline of Fermi@Elettra free electron laser. Review of Scientific Instruments, 2011, 82, 043711.	0.6	28
93	Light tuning of the image potential state electron-electron interactions. Surface Science, 2008, 602, 2983-2988.	0.8	4
94	Surface and bulk contribution to Cu(111) quantum efficiency. Applied Physics Letters, 2008, 93, 183505.	1.5	15
95	Angle resolved photoemission study of image potential states and surface states on Cu(111). Surface Science, 2006, 600, 4290-4293.	0.8	5
96	On the role of athermal electrons in non-linear photoemission from Ag(100). European Physical Journal B, 2006, 53, 121-125.	0.6	3
97	Cu(111) and Cu(001) surface electronic states. Comparison between theory and experiment. Surface Science, 2006, 600, 3901-3905.	0.8	10
98	Evidence of vectorial photoelectric effect on Copper. Applied Physics Letters, 2005, 87, 081112.	1.5	9
99	Broken Ergodicity in Classically Chaotic Spin Systems. Journal of Statistical Physics, 2004, 116, 1435-1447.	0.5	59