

# Simone Di Mitri

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/695153/publications.pdf>

Version: 2024-02-01

99  
papers

3,226  
citations

257450

24  
h-index

155660

55  
g-index

102  
all docs

102  
docs citations

102  
times ranked

2508  
citing authors

#	ARTICLE	IF	CITATIONS
1	Single-shot transverse coherence in seeded and unseeded free-electron lasers: A comparison. Physical Review Accelerators and Beams, 2022, 25, .	1.6	2
2	Addendum: Experimental evidence of intrabeam scattering in a free-electron laser driver (2020 New J.) Tj ETQq0 0 0,rgBT /Overlock 10 Tt	2.9	0
3	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
4	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
5	Matrix model for collective phenomena in electron beamâ€™s longitudinal phase space. Scientific Reports, 2021, 11, 7895.	3.3	5
6	Generation and measurement of intense few-femtosecond superradiant extreme-ultraviolet free-electron laser pulses. Nature Photonics, 2021, 15, 523-529.	31.4	20
7	Bridging the gap of storage ring light sources and linac-driven free-electron lasers. Physical Review Accelerators and Beams, 2021, 24, .	1.6	4
8	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
9	Scaling of Beam Collective Effects with Bunch Charge in the CompactLight Free-Electron Laser. Photonics, 2020, 7, 125.	2.0	4
10	Electron Beam Transport in Plasma-Accelerator-Driven Free-Electron Lasers in the Presence of Coherent Synchrotron Radiation and Microbunching Instability. Physics, 2020, 2, 521-530.	1.4	0
11	Terahertz Tuning of Dirac Plasmons in $\text{Bi}_2\text{Te}_3$ Topological Insulator. Physical Review Letters, 2020, 124, 226403.	7.82	2
12	Characterisation of microbunching instability with 2D Fourier analysis. Scientific Reports, 2020, 10, 5059.	3.3	7
13	The TeraFERMI Electro-Optic Sampling Set-Up for Fluence-Dependent Spectroscopic Measurements. Condensed Matter, 2020, 5, 8.	1.8	4
14	Slice collective dynamics, projected emittance deterioration and free electron laser performances detrimental effects. Journal of Plasma Physics, 2020, 86, .	2.1	1
15	Experimental evidence of intrabeam scattering in a free-electron laser driver. New Journal of Physics, 2020, 22, 083053.	2.9	13
16	Spectrotemporal control of soft x-ray laser pulses. Physical Review Accelerators and Beams, 2020, 23, .	1.6	4
17	Microbunching instability characterization via temporally modulated laser pulses. Physical Review Accelerators and Beams, 2020, 23, .	1.6	2
18	Linear optics control of sideband instability for improved free-electron laser spectral brightness. Physical Review Accelerators and Beams, 2020, 23, .	1.6	5

#	ARTICLE	IF	CITATIONS
19	Enhanced seeded free electron laser performance with a cold electron beam. <i>Physical Review Accelerators and Beams</i> , 2020, 23, .	1.6	14
20	A detailed investigation of single-photon laser enabled Auger decay in neon. <i>New Journal of Physics</i> , 2019, 21, 113036.	2.9	12
21	Coherent soft X-ray pulses from an echo-enabled harmonic generation free-electron laser. <i>Nature Photonics</i> , 2019, 13, 555-561.	31.4	92
22	MariX, an advanced MHz-class repetition rate X-ray source for linear regime time-resolved spectroscopy and photon scattering. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2019, 930, 167-172.	1.6	29
23	GeV-Class Two-Fold CW Linac Driven by an Arc-Compressor. <i>Instruments</i> , 2019, 3, 54.	1.8	3
24	Wakefield benchmarking at a single-pass high brightness electron linac. <i>Physical Review Accelerators and Beams</i> , 2019, 22, .	1.6	4
25	Two-pass two-way acceleration in a superconducting continuous wave linac to drive low jitter x-ray free electron lasers. <i>Physical Review Accelerators and Beams</i> , 2019, 22, .	1.6	10
26	Laser-slicing at a low-emittance storage ring. <i>Journal of Synchrotron Radiation</i> , 2019, 26, 1523-1538.	2.4	3
27	Simple and robust free-electron laser doubler. <i>Physical Review Accelerators and Beams</i> , 2019, 22, .	1.6	0
28	Progress of the development of the ELI-NP GBS high level applications. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2018, 909, 327-331.	1.6	0
29	Soft X-Ray Second Harmonic Generation as an Interfacial Probe. <i>Physical Review Letters</i> , 2018, 120, 023901.	7.8	64
30	Beyond the limits of 1D coherent synchrotron radiation. <i>New Journal of Physics</i> , 2018, 20, 073035.	2.9	20
31	Two-photon absorption of soft X-ray free electron laser radiation by graphite near the carbon K-absorption edge. <i>Chemical Physics Letters</i> , 2018, 703, 112-116.	2.6	9
32	EuPRAXIA@SPARC_LAB Design study towards a compact FEL facility at LNF. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2018, 909, 134-138.	1.6	46
33	Coherent THz Emission Enhanced by Coherent Synchrotron Radiation Wakefield. <i>Scientific Reports</i> , 2018, 8, 11661.	3.3	16
34	One way only to synchrotron light sources upgrade?. <i>Journal of Synchrotron Radiation</i> , 2018, 25, 1323-1334.	2.4	4
35	Time-Resolved Measurement of Interatomic Coulombic Decay Induced by Two-Photon Double Excitation of $Ne^{2+}$ . <i>Physical Review Letters</i> , 2017, 118, 033202.	7.8	32
36	Compact FEL-driven inverse Compton scattering gamma-ray source. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2017, 855, 55-60.	1.6	9

#	ARTICLE	IF	CITATIONS
37	TeraFERMI: A Superradiant Beamline for THz Nonlinear Studies at the FERMI Free Electron Laser Facility. <i>Synchrotron Radiation News</i> , 2017, 30, 36-39.	0.8	12
38	Passive Linearization of the Magnetic Bunch Compression Using Self-Induced Fields. <i>Physical Review Letters</i> , 2017, 119, 184802.	7.8	14
39	Design study of high gradient, low impedance accelerating structures for the FERMI free electron laser linac upgrade. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2017, 867, 78-87.	1.6	5
40	TeraFERMI: Status of the beamline and pilot experiments. , 2017, , .		0
41	Polarization Characterization of Soft X-Ray Radiation at FERMI FEL-2. <i>Photonics</i> , 2017, 4, 29.	2.0	11
42	Conditions for coherent-synchrotron-radiation-induced microbunching suppression in multibend beam transport or recirculation arcs. <i>Physical Review Accelerators and Beams</i> , 2017, 20, .	1.6	11
43	Compact compressive arc and beam switchyard for energy recovery linac-driven ultraviolet free electron lasers. <i>Physical Review Accelerators and Beams</i> , 2017, 20, .	1.6	5
44	Microbunching instability study in a linac-driven free electron laser spreader beam line. <i>Physical Review Accelerators and Beams</i> , 2017, 20, .	1.6	6
45	The FERMI seeded-FEL facility: Status and perspectives. <i>AIP Conference Proceedings</i> , 2016, , .	0.4	4
46	THz coherent transition radiation at TeraFERMI: First characterization of THz radiation and electron beam dynamics. , 2016, , .		0
47	Chirped pulse amplification in an extreme-ultraviolet free-electron laser. <i>Nature Communications</i> , 2016, 7, 13688.	12.8	43
48	Slow Interatomic Coulombic Decay of Multiply Excited Neon Clusters. <i>Physical Review Letters</i> , 2016, 117, 276806.	7.8	24
49	Four-wave-mixing experiments with seeded free electron lasers. <i>Faraday Discussions</i> , 2016, 194, 283-303.	3.2	20
50	Coherent control with a short-wavelength free-electron laser. <i>Nature Photonics</i> , 2016, 10, 176-179.	31.4	197
51	Feasibility study of a periodic arc compressor in the presence of coherent synchrotron radiation. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2016, 806, 184-192.	1.6	15
52	Multicolor High-Gain Free-Electron Laser Driven by Seeded Microbunching Instability. <i>Physical Review Letters</i> , 2015, 115, 214801.	7.8	48
53	Interatomic Coulombic Decay Processes after Multiple Valence Excitations in Ne Clusters. <i>Journal of Physics: Conference Series</i> , 2015, 635, 112067.	0.4	0
54	Operating synchrotron light sources with a high gain free electron laser. <i>New Journal of Physics</i> , 2015, 17, 113006.	2.9	10

#	ARTICLE	IF	CITATIONS
55	On the Importance of Electron Beam Brightness in High Gain Free Electron Lasers. Photonics, 2015, 2, 317-341.	2.0	19
56	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
57	The FERMI free-electron lasers. Journal of Synchrotron Radiation, 2015, 22, 485-491.	2.4	101
58	Experimental characterization of the FERMI laser heater and its impact on the FEL operations. Proceedings of SPIE, 2015, , .	0.8	0
59	Transverse emittance-preserving arc compressor for high-brightness electron beam-based light sources and colliders. Europhysics Letters, 2015, 109, 62002.	2.0	21
60	Control of the Polarization of a Vacuum-Ultraviolet, High-Gain, Free-Electron Laser. Physical Review X, 2014, 4, .	8.9	80
61	Laser heater commissioning at an externally seeded free-electron laser. Physical Review Special Topics: Accelerators and Beams, 2014, 17, .	1.8	49
62	Noninvasive emittance and energy spread monitor using optical synchrotron radiation. Physical Review Special Topics: Accelerators and Beams, 2014, 17, .	1.8	2
63	Estimate of free electron laser gain length in the presence of electron beam collective effects. Physical Review Special Topics: Accelerators and Beams, 2014, 17, .	1.8	8
64	Intrabeam scattering in high brightness electron linacs. Physical Review Special Topics: Accelerators and Beams, 2014, 17, .	1.8	6
65	Energy slicing analysis for time-resolved measurement of electron-beam properties. Physical Review Special Topics: Accelerators and Beams, 2014, 17, .	1.8	6
66	Microbunching Instability Suppression via Electron-Magnetic-Phase Mixing. Physical Review Letters, 2014, 112, 134802.	7.8	21
67	Experimental Demonstration of Electron Longitudinal-Phase-Space Linearization by Shaping the Photoinjector Laser Pulse. Physical Review Letters, 2014, 112, 044801.	7.8	39
68	Electron beam brightness in linac drivers for free-electron-lasers. Physics Reports, 2014, 539, 1-48.	25.6	53
69	Merit functions for the linac optics design for colliders and light sources. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 735, 60-65.	1.6	13
70	Polarization measurement of free electron laser pulses in the VUV generated by the variable polarization source FERMI. , 2014, , .		4
71	Coherent Pulses from a Seeded Free-Electron Laser in the Extreme Ultraviolet. Springer Proceedings in Physics, 2014, , 1-6.	0.2	0
72	The TeraFERMI terahertz source at the seeded FERMI free-electron-laser facility. Review of Scientific Instruments, 2013, 84, 022702.	1.3	39

#	ARTICLE	IF	CITATIONS
73	Two-stage seeded soft-X-ray free-electron laser. <i>Nature Photonics</i> , 2013, 7, 913-918.	31.4	424
74	The TeraFERMI beamline at the FERMI Free-Electron-Laser. , 2013, , .		0
75	Electron slicing for the generation of tunable femtosecond soft x-ray pulses from a free electron laser and slice diagnostics. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2013, 16, .	1.8	10
76	Two-colour generation in a chirped seeded free-electron laser: a close look. <i>Optics Express</i> , 2013, 21, 22728.	3.4	42
77	Status and achievements at FERMI@Elettra: the first double cascade seeded EUV-SXR FEL facility open to users. , 2013, , .		3
78	Cancellation of Coherent Synchrotron Radiation Kicks with Optics Balance. <i>Physical Review Letters</i> , 2013, 110, 014801.	7.8	54
79	Modeling and experimental study to identify arrival-time jitter sources in the presence of a magnetic chicane. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2013, 16, .	1.8	18
80	Maximum brightness of linac-driven electron beams in the presence of collective effects. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2013, 16, .	1.8	9
81	Two-colour pump-probe experiments with a twin-pulse-seed extreme ultraviolet free-electron laser. <i>Nature Communications</i> , 2013, 4, 2476.	12.8	156
82	Tunability experiments at the FERMI@Elettra free-electron laser. <i>New Journal of Physics</i> , 2012, 14, 113009.	2.9	81
83	Electron beam optics and trajectory control in the Fermi free electron laser delivery system. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2012, 15, .	1.8	8
84	Influence of longitudinally tapered collimators on a high brightness electron beam. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2012, 15, .	1.8	5
85	Publisher's Note: Transverse emittance preservation during bunch compression in the Fermi free electron laser [Phys. Rev. ST Accel. Beams 15, 020701 (2012)]. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2012, 15, .	1.8	1
86	Transverse emittance preservation during bunch compression in the Fermi free electron laser. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2012, 15, .	1.8	18
87	Highly coherent and stable pulses from the FERMI seeded free-electron laser in the extreme ultraviolet. <i>Nature Photonics</i> , 2012, 6, 699-704.	31.4	903
88	FERMI@Elettra, a seeded free electron laser source for a broad scientific user program. , 2011, , .		6
89	Suppression of microbunching instability with magnetic bunch length compression in a linac-based free electron laser. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2010, 13, .	1.8	15
90	Geometric efficiency of a two-stage fully absorbing collimation system in single-pass linacs. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2010, 13, .	1.8	4

#	ARTICLE	IF	CITATIONS
91	Single-bunch emittance preservation in the presence of trajectory jitter for FERMI@elettra-seeded FEL. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 604, 457-465.	1.6	11
92	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
93	Linac upgrading program for the FERMI project: Status and perspectives. , 2007, , .		3
94	The new elettra booster injector. , 2007, , .		3
95	Formation of electron bunches for harmonic cascade x-ray free electron lasers. Physical Review Special Topics: Accelerators and Beams, 2006, 9, .	1.8	30
96	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
97	Photo-injector study for the ELETTRA linac FEL. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 528, 412-415.	1.6	2
98	FERMI@ELETTRA: the single-pass free-electron laser for the VUV and soft x-ray spectral range at ELETTRA. , 0, , .		0
99	Commissioning of two new insertion devices at ELETTRA. , 0, , .		1