List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	An arrayed-window microfluidic device for observation of mixed nanoparticles with an X-ray free-electron laser. Optical Review, 2022, 29, 7.	2.0	Ο
2	Separating Non-linear Optical Signals of a Sample from High Harmonic Radiation in a Soft X-ray Free Electron Laser. E-Journal of Surface Science and Nanotechnology, 2022, 20, 31-35.	0.4	8
3	Conformational alterations in unidirectional ion transport of a light-driven chloride pump revealed using X-ray free electron lasers. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	11
4	Single-shot spectrometer using diamond microcrystals for X-ray free-electron laser pulses. Journal of Synchrotron Radiation, 2022, 29, 862-865.	2.4	3
5	Hard x-ray intensity autocorrelation using direct two-photon absorption. Physical Review Research, 2022, 4, .	3.6	8
6	Serial crystallography captures dynamic control of sequential electron and proton transfer events in a flavoenzyme. Nature Chemistry, 2022, 14, 677-685.	13.6	24
7	Generating 77 T using a portable pulse magnet for single-shot quantum beam experiments. Applied Physics Letters, 2022, 120, 142403.	3.3	8
8	Crystal structure of CmABCB1 multi-drug exporter in lipidic mesophase revealed by LCP-SFX. IUCrJ, 2022, 9, 134-145.	2.2	2
9	Lipidic cubic phase serial femtosecond crystallography structure of a photosynthetic reaction centre. Acta Crystallographica Section D: Structural Biology, 2022, 78, 698-708.	2.3	7
10	Excited-state intermediates in a designer protein encoding a phototrigger caught by an X-ray free-electron laser. Nature Chemistry, 2022, 14, 1054-1060.	13.6	6
11	Using Diffuse Scattering to Observe X-Ray-Driven Nonthermal Melting. Physical Review Letters, 2021, 126, 015703.	7.8	10
12	Suppression of thermal nanoplasma emission in clusters strongly ionized by hard x-rays. Journal of Physics B: Atomic, Molecular and Optical Physics, 2021, 54, 044001.	1.5	7
13	Time-resolved serial femtosecond crystallography reveals early structural changes in channelrhodopsin. ELife, 2021, 10, .	6.0	41
14	Capturing structural changes of the S ₁ to S ₂ transition of photosystem II using time-resolved serial femtosecond crystallography. IUCrJ, 2021, 8, 431-443.	2.2	24
15	XFEL Crystal Structures of Peroxidase Compound II. Angewandte Chemie - International Edition, 2021, 60, 14578-14585.	13.8	18
16	XFEL Crystal Structures of Peroxidase Compound II. Angewandte Chemie, 2021, 133, 14699-14706.	2.0	0
17	High-resolution crystal structures of transient intermediates in the phytochrome photocycle. Structure, 2021, 29, 743-754.e4.	3.3	31
18	Extreme Ultraviolet Second Harmonic Generation Spectroscopy in a Polar Metal. Nano Letters, 2021, 21, 6095-6101.	9.1	17

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19	X-ray free-electron laser studies reveal correlated motion during isopenicillin <i>N</i> synthase catalysis. Science Advances, 2021, 7, .	10.3	23
20	Microcrystal preparation for serial femtosecond X-ray crystallography of bacterial copper amine oxidase. Acta Crystallographica Section F, Structural Biology Communications, 2021, 77, 356-363.	0.8	2
21	Polarization-Resolved Extreme-Ultraviolet Second-Harmonic Generation from <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>LiNbO</mml:mi></mml:mrow><mml:mrow>< Physical Review Letters. 2021. 127. 237402.</mml:mrow></mml:msub></mml:mrow></mml:math 	m 718 mn>3	3 <i><1</i> 5 mml:mn>
22	Crystallization kinetics of atomic crystals revealed by a single-shot and single-particle X-ray diffraction experiment. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	7
23	Inducing thermodynamically blocked atomic ordering via strongly driven nonequilibrium kinetics. Science Advances, 2021, 7, eabj8552.	10.3	6
24	Multi-particle momentum correlations extracted using covariance methods on multiple-ionization of diiodomethane molecules by soft-X-ray free-electron laser pulses. Physical Chemistry Chemical Physics, 2020, 22, 2648-2659.	2.8	5
25	High-Resolution XFEL Structure of the Soluble Methane Monooxygenase Hydroxylase Complex with its Regulatory Component at Ambient Temperature in Two Oxidation States. Journal of the American Chemical Society, 2020, 142, 14249-14266.	13.7	41
26	Slowing down of dynamics and orientational order preceding crystallization in hard-sphere systems. Science Advances, 2020, 6, .	10.3	10
27	Scanning magneto-optical Kerr effect (MOKE) measurement with element-selectivity by using a soft x-ray free-electron laser and an ellipsoidal mirror. Applied Physics Letters, 2020, 117, .	3.3	6
28	Development of an Experimental Platform for Combinative Use of an XFEL and a High-Power Nanosecond Laser. Applied Sciences (Switzerland), 2020, 10, 2224.	2.5	16
29	Real-time observation of disintegration processes within argon clusters ionized by a hard-x-ray pulse of moderate fluence. Physical Review A, 2020, 101, .	2.5	7
30	Ellipsometer Equipped with Multiple Mirrors for Element-selective Soft X-ray Experiments. E-Journal of Surface Science and Nanotechnology, 2020, 18, 231-234.	0.4	5
31	Structural Investigation of Single Specimens with a Femtosecond X-Ray Laser: Routes to Signal-to-Noise Ratio Enhancement. Physical Review Applied, 2020, 13, .	3.8	4
32	Photoswitching mechanism of a fluorescent protein revealed by time-resolved crystallography and transient absorption spectroscopy. Nature Communications, 2020, 11, 741.	12.8	56
33	Characterizing the intrinsic properties of individual XFEL pulses via single-particle diffraction. Journal of Synchrotron Radiation, 2020, 27, 17-24.	2.4	7
34	Viscosity-adjustable grease matrices for serial nanocrystallography. Scientific Reports, 2020, 10, 1371.	3.3	10
35	Nanofocusing Optics for an X-Ray Free-Electron Laser Generating an Extreme Intensity of 100 EW/cm2 Using Total Reflection Mirrors. Applied Sciences (Switzerland), 2020, 10, 2611.	2.5	17
36	Structure of the dopamine D2 receptor in complex with the antipsychotic drug spiperone. Nature Communications, 2020, 11, 6442.	12.8	47

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37	Untangling the sequence of events during the S ₂ → S ₃ transition in photosystem II and implications for the water oxidation mechanism. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 12624-12635.	7.1	149
38	Single shot x-ray diffractometry in SACLA with pulsed magnetic fields up to 16 T. Physical Review Research, 2020, 2, .	3.6	4
39	Generation of an X-ray nanobeam of a free-electron laser using reflective optics with speckle interferometry. Journal of Synchrotron Radiation, 2020, 27, 883-889.	2.4	8
40	Refinement for single-nanoparticle structure determination from low-quality single-shot coherent diffraction data. IUCrJ, 2020, 7, 10-17.	2.2	6
41	Comparing serial X-ray crystallography and microcrystal electron diffraction (MicroED) as methods for routine structure determination from small macromolecular crystals. IUCrJ, 2020, 7, 306-323.	2.2	32
42	Characterizing crystalline defects in single nanoparticles from angular correlations of single-shot diffracted X-rays. IUCrJ, 2020, 7, 276-286.	2.2	4
43	High-resolution crystal structures of a myxobacterial phytochrome at cryo and room temperatures. Structural Dynamics, 2019, 6, 054701.	2.3	19
44	An oxyl/oxo mechanism for oxygen-oxygen coupling in PSII revealed by an x-ray free-electron laser. Science, 2019, 366, 334-338.	12.6	248
45	Ultrafast Structural Dynamics of Nanoparticles in Intense Laser Fields. Physical Review Letters, 2019, 123, 123201.	7.8	14
46	Ultrafast anisotropic disordering in graphite driven by intense hard X-ray pulses. High Energy Density Physics, 2019, 32, 63-69.	1.5	13
47	Direct observation of picosecond melting and disintegration of metallic nanoparticles. Nature Communications, 2019, 10, 2411.	12.8	43
48	Generation of narrow-band X-ray free-electron laser via reflection self-seeding. Nature Photonics, 2019, 13, 319-322.	31.4	81
49	Pump-Probe Time-Resolved Serial Femtosecond Crystallography at SACLA: Current Status and Data Collection Strategies. Applied Sciences (Switzerland), 2019, 9, 5505.	2.5	10
50	Electron spectroscopic study of nanoplasma formation triggered by intense soft x-ray pulses. Journal of Chemical Physics, 2019, 151, 184305.	3.0	5
51	High-viscosity sample-injection device for serial femtosecond crystallography at atmospheric pressure. Journal of Applied Crystallography, 2019, 52, 1280-1288.	4.5	43
52	Multiple-beamline operation of SACLA. Journal of Synchrotron Radiation, 2019, 26, 595-602.	2.4	32
53	Polarization control with an X-ray phase retarder for high-time-resolution pump–probe experiments at SACLA. Journal of Synchrotron Radiation, 2019, 26, 1139-1143.	2.4	3
54	Intense sub-micrometre focusing of soft X-ray free-electron laser beyond 1016 Wâ€cmâ^'2 with an ellipsoidal mirror. Journal of Synchrotron Radiation, 2019, 26, 1406-1411.	2.4	23

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55	Dose-resolved serial synchrotron and XFEL structures of radiation-sensitive metalloproteins. IUCrJ, 2019, 6, 543-551.	2.2	65
56	High-throughput structures of protein–ligand complexes at room temperature using serial femtosecond crystallography. IUCrJ, 2019, 6, 1074-1085.	2.2	36
57	Toward G protein-coupled receptor structure-based drug design using X-ray lasers. IUCrJ, 2019, 6, 1106-1119.	2.2	53
58	An optical design of twin Wolter mirrors for focusing and imaging experiments with soft X-ray free electron lasers. , 2019, , .		4
59	Comparing the spatial coherence of the natural and focused X-rays from a free electron laser. Optics Express, 2019, 27, 19573.	3.4	7
60	Full-field microscope with twin Wolter mirrors for soft X-ray free-electron lasers. Optics Express, 2019, 27, 33889.	3.4	12
61	Absolute laser-intensity measurement and online monitor calibration using a calorimeter at a soft X-ray free-electron laser beamline in SACLA. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 894, 107-110.	1.6	4
62	Crystal Structures of Human Orexin 2 Receptor Bound to the Subtype-Selective Antagonist EMPA. Structure, 2018, 26, 7-19.e5.	3.3	55
63	Superradiance of an ensemble of nuclei excited by a free electron laser. Nature Physics, 2018, 14, 261-264.	16.7	39
64	Femtosecond resonant magneto-optical Kerr effect measurement on an ultrathin magnetic film in a soft X-ray free electron laser. Japanese Journal of Applied Physics, 2018, 57, 09TD02.	1.5	8
65	Evaluation of Pulse Duration of the Soft X-ray Free Electron Laser at SACLA BL1 with Single-Shot Spectrometry. , 2018, , .		0
66	Superfluorescence, Free-Induction Decay, and Four-Wave Mixing: Propagation of Free-Electron Laser Pulses through a Dense Sample of Helium Ions. Physical Review Letters, 2018, 121, 263201.	7.8	27
67	Nanofocusing of X-ray free-electron laser using wavefront-corrected multilayer focusing mirrors. Scientific Reports, 2018, 8, 17440.	3.3	43
68	Radiation-Induced Chemical Dynamics in Ar Clusters Exposed to Strong X-Ray Pulses. Physical Review Letters, 2018, 120, 223201.	7.8	18
69	Element Selectivity in Second-Harmonic Generation of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>GaFeO</mml:mi></mml:mrow><mml:mrow by a Soft-X-Ray Free-Electron Laser. Physical Review Letters. 2018. 120. 223902.</mml:mrow </mml:msub></mml:mrow></mml:math 	> < <mark>7.8</mark> :mn:	>3< 7 mml:mr>
70	Necessary Experimental Conditions for Single-Shot Diffraction Imaging of DNA-Based Structures with X-ray Free-Electron Lasers. ACS Nano, 2018, 12, 7509-7518.	14.6	24
71	Systematic-error-free wavefront measurement using an X-ray single-grating interferometer. Review of Scientific Instruments, 2018, 89, 043106.	1.3	13
72	Following the Birth of a Nanoplasma Produced by an Ultrashort Hard-X-Ray Laser in Xenon Clusters. Physical Review X, 2018, 8, .	8.9	16

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73	X-ray Hanbury Brown-Twiss interferometry for determination of ultrashort electron-bunch duration. Physical Review Accelerators and Beams, 2018, 21, .	1.6	27
74	Performance of a hard X-ray split-and-delay optical system with a wavefront division. Journal of Synchrotron Radiation, 2018, 25, 20-25.	2.4	25
75	A soft X-ray free-electron laser beamline at SACLA: the light source, photon beamline and experimental station. Journal of Synchrotron Radiation, 2018, 25, 282-288.	2.4	78
76	Structural basis for light control of cell development revealed by crystal structures of a myxobacterial phytochrome. IUCrJ, 2018, 5, 619-634.	2.2	33
77	Dynamics of soft nanoparticle suspensions at hard X-ray FEL sources below the radiation-damage threshold. IUCrJ, 2018, 5, 801-807.	2.2	18
78	Crystallography on a chip – without the chip: sheet-on-sheet sandwich. Acta Crystallographica Section D: Structural Biology, 2018, 74, 1000-1007.	2.3	51
79	Light-induced structural changes and the site of O=O bond formation in PSII caught by XFEL. Nature, 2017, 543, 131-135.	27.8	515
80	Overview of optics, photon diagnostics and experimental instruments at SACLA: development, operation and scientific applications. , 2017, , .		3
81	Hydroxyethyl cellulose matrix applied to serial crystallography. Scientific Reports, 2017, 7, 703.	3.3	74
82	On the size of the secondary electron cloud in crystals irradiated by hard X-ray photons. European Physical Journal D, 2017, 71, 1.	1.3	13
83	Diverse Application Platform for Hard X-ray Diffraction in SACLA (DAPHNIS). Synchrotron Radiation News, 2017, 30, 12-15.	0.8	2
84	XFEL structures of the influenza M2 proton channel: Room temperature water networks and insights into proton conduction. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 13357-13362.	7.1	64
85	A nanosecond time-resolved XFEL analysis of structural changes associated with CO release from cytochrome c oxidase. Science Advances, 2017, 3, e1603042.	10.3	68
86	Serial femtosecond crystallography structure of cytochrome c oxidase at room temperature. Scientific Reports, 2017, 7, 4518.	3.3	34
87	Capturing an initial intermediate during the P450nor enzymatic reaction using time-resolved XFEL crystallography and caged-substrate. Nature Communications, 2017, 8, 1585.	12.8	74
88	Multi-Beamline Operation Expands Research Opportunity at SACLA. Synchrotron Radiation News, 2017, 30, 11-16.	0.8	2
89	Multi-wavelength anomalous diffraction de novo phasing using a two-colour X-ray free-electron laser with wide tunability. Nature Communications, 2017, 8, 1170.	12.8	28
90	Measurement of the X-ray Spectrum of a Free Electron Laser with a Wide-Range High-Resolution Single-Shot Spectrometer. Applied Sciences (Switzerland), 2017, 7, 584.	2.5	31

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91	Nanosecond pump–probe device for time-resolved serial femtosecond crystallography developed at SACLA. Journal of Synchrotron Radiation, 2017, 24, 1086-1091.	2.4	28
92	Status of the SACLA Facility. Applied Sciences (Switzerland), 2017, 7, 604.	2.5	29
93	Experimental phase determination with selenomethionine or mercury-derivatization in serial femtosecond crystallography. IUCrJ, 2017, 4, 639-647.	2.2	24
94	Characterization of temporal coherence of hard X-ray free-electron laser pulses with single-shot interferograms. IUCrJ, 2017, 4, 728-733.	2.2	32
95	Protein–ligand complex structure from serial femtosecond crystallography using soaked thermolysin microcrystals and comparison with structures from synchrotron radiation. Acta Crystallographica Section D: Structural Biology, 2017, 73, 702-709.	2.3	8
96	Dynamic fracture of tantalum under extreme tensile stress. Science Advances, 2017, 3, e1602705.	10.3	41
97	Compact bolometric radiometer for free-electron lasers in a wavelength range from extreme-ultraviolet to x-rays. Optics Letters, 2017, 42, 4776.	3.3	7
98	3D visualization of XFEL beam focusing properties using LiF crystal X-ray detector. Scientific Reports, 2016, 5, 17713.	3.3	43
99	Single-pulse enhanced coherent diffraction imaging of bacteria with an X-ray free-electron laser. Scientific Reports, 2016, 6, 34008.	3.3	22
100	Fixed target single-shot imaging of nanostructures using thin solid membranes at SACLA. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 034008.	1.5	17
101	Damage threshold of coating materials on x-ray mirror for x-ray free electron laser. Review of Scientific Instruments, 2016, 87, 051801.	1.3	25
102	A three-dimensional movie of structural changes in bacteriorhodopsin. Science, 2016, 354, 1552-1557.	12.6	350
103	Oil-free hyaluronic acid matrix for serial femtosecond crystallography. Scientific Reports, 2016, 6, 24484.	3.3	46
104	Development of speckle-free channel-cut crystal optics using plasma chemical vaporization machining for coherent x-ray applications. Review of Scientific Instruments, 2016, 87, 063118.	1.3	14
105	Wavelength-tunable split-and-delay optical system for hard X-ray free-electron lasers. Optics Express, 2016, 24, 9187.	3.4	52
106	Data processing pipeline for serial femtosecond crystallography at SACLA. Journal of Applied Crystallography, 2016, 49, 1035-1041.	4.5	76
107	Membrane protein structure determination by SAD, SIR, or SIRAS phasing in serial femtosecond crystallography using an iododetergent. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 13039-13044.	7.1	43
108	Redox-coupled structural changes in nitrite reductase revealed by serial femtosecond and microfocus crystallography. Journal of Biochemistry, 2016, 159, 527-538.	1.7	26

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109	Observation of femtosecond X-ray interactions with matter using an X-ray–X-ray pump–probe scheme. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 1492-1497.	7.1	80
110	Angular correlations of photons from solution diffraction at a free-electron laser encode molecular structure. IUCrJ, 2016, 3, 420-429.	2.2	20
111	Nanoplasma Formation by High Intensity Hard X-rays. Scientific Reports, 2015, 5, 10977.	3.3	60
112	An isomorphous replacement method for efficient de novo phasing for serial femtosecond crystallography. Scientific Reports, 2015, 5, 14017.	3.3	54
113	Room-temperature calorimeter for x-ray free-electron lasers. Review of Scientific Instruments, 2015, 86, 093104.	1.3	14
114	Native sulfur/chlorine SAD phasing for serial femtosecond crystallography. Acta Crystallographica Section D: Biological Crystallography, 2015, 71, 2519-2525.	2.5	51
115	Direct observation of bond formation in solution with femtosecond X-ray scattering. Nature, 2015, 518, 385-389.	27.8	207
116	Diverse application platform for hard X-ray diffraction in SACLA (DAPHNIS): application toÂserial protein crystallography using an X-ray free-electron laser. Journal of Synchrotron Radiation, 2015, 22, 532-537.	2.4	80
117	Grease matrix as a versatile carrier of proteins for serial crystallography. Nature Methods, 2015, 12, 61-63.	19.0	193
118	Characterizing transverse coherence of an ultra-intense focused X-ray free-electron laser by an extended Young's experiment. IUCrJ, 2015, 2, 620-626.	2.2	18
119	Imaging live cell in micro-liquid enclosure by X-ray laser diffraction. Nature Communications, 2014, 5, 3052.	12.8	183
120	X-Ray Second Harmonic Generation. Physical Review Letters, 2014, 112, 163901.	7.8	116
121	Macromolecular structures probed by combining single-shot free-electron laser diffraction with synchrotron coherent X-ray imaging. Nature Communications, 2014, 5, 3798.	12.8	61
122	Generation of 1020 W cmâ^'2 hard X-ray laser pulses with two-stage reflective focusing system. Nature Communications, 2014, 5, 3539.	12.8	124
123	Single Shot Coherence Properties of the Free-Electron Laser SACLA in the Hard X-ray Regime. Scientific Reports, 2014, 4, 5234.	3.3	69
124	Determination of damage-free crystal structure of an X-ray–sensitive protein using an XFEL. Nature Methods, 2014, 11, 734-736.	19.0	237
125	Multiple application X-ray imaging chamber for single-shot diffraction experiments with femtosecond X-ray laser pulses. Journal of Applied Crystallography, 2014, 47, 188-197.	4.5	49
126	Two-colour hard X-ray free-electron laser with wide tunability. Nature Communications, 2013, 4, 2919.	12.8	172

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127	Focusing of X-ray free-electron laser pulses with reflective optics. Nature Photonics, 2013, 7, 43-47.	31.4	234
128	Deep Inner-Shell Multiphoton Ionization by Intense X-Ray Free-Electron Laser Pulses. Physical Review Letters, 2013, 110, 173005.	7.8	136
129	Beamline mirrors and monochromator for X-ray free electron laser of SACLA. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 710, 139-142.	1.6	19
130	Double Core-Hole Creation by Sequential Attosecond Photoionization. Physical Review Letters, 2013, 111, 043001.	7.8	55
131	A Bragg beam splitter for hard x-ray free-electron lasers. Optics Express, 2013, 21, 2823.	3.4	55
132	Beamline, experimental stations and photon beam diagnostics for the hard x-ray free electron laser of SACLA. New Journal of Physics, 2013, 15, 083035.	2.9	230
133	Time-interleaved multienergy acceleration for an x-ray free-electron laser facility. Physical Review Special Topics: Accelerators and Beams, 2013, 16, .	1.8	19
134	Development of ultrafast pump and probe experimental system at SACLA. Journal of Physics: Conference Series, 2013, 425, 092009.	0.4	8
135	Damage study of optical substrates using 1-μm-focusing beam of hard X-ray free-electron laser. Journal of Physics: Conference Series, 2013, 463, 012043.	0.4	7
136	A compact X-ray free-electron laser emitting in the sub-ångström region. Nature Photonics, 2012, 6, 540-544.	31.4	1,542
137	Determination of the Pulse Duration of an X-Ray Free Electron Laser Using Highly Resolved Single-Shot Spectra. Physical Review Letters, 2012, 109, 144801.	7.8	162
138	Single-shot beam-position monitor for x-ray free electron laser. Review of Scientific Instruments, 2011, 82, 023108.	1.3	94