

Marc M Messerschmidt

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186
papers

18,449
citations

67
h-index

134
g-index

201
ext. papers

20,557
ext. citations

11.3
avg, IF

5.39
L-index

#	Paper	IF	Citations
186	First lasing and operation of an Ångström-wavelength free-electron laser. <i>Nature Photonics</i> , 2010 , 4, 641-647	33.9	2216
185	Femtosecond X-ray protein nanocrystallography. <i>Nature</i> , 2011 , 470, 73-7	50.4	1473
184	Single mimivirus particles intercepted and imaged with an X-ray laser. <i>Nature</i> , 2011 , 470, 78-81	50.4	675
183	High-resolution protein structure determination by serial femtosecond crystallography. <i>Science</i> , 2012 , 337, 362-4	33.3	641
182	Femtosecond electronic response of atoms to ultra-intense X-rays. <i>Nature</i> , 2010 , 466, 56-61	50.4	607
181	Crystal structure of rhodopsin bound to arrestin by femtosecond X-ray laser. <i>Nature</i> , 2015 , 523, 561-7	50.4	572
180	Lipidic cubic phase injector facilitates membrane protein serial femtosecond crystallography. <i>Nature Communications</i> , 2014 , 5, 3309	17.4	416
179	Structure of the toxic core of β -synuclein from invisible crystals. <i>Nature</i> , 2015 , 525, 486-90	50.4	393
178	Serial femtosecond crystallography of G protein-coupled receptors. <i>Science</i> , 2013 , 342, 1521-4	33.3	367
177	Serial time-resolved crystallography of photosystem II using a femtosecond X-ray laser. <i>Nature</i> , 2014 , 513, 261-5	50.4	352
176	Natively inhibited <i>Trypanosoma brucei</i> cathepsin B structure determined by using an X-ray laser. <i>Science</i> , 2013 , 339, 227-230	33.3	350
175	Creation and diagnosis of a solid-density plasma with an X-ray free-electron laser. <i>Nature</i> , 2012 , 482, 59-62	50.4	343
174	Simultaneous femtosecond X-ray spectroscopy and diffraction of photosystem II at room temperature. <i>Science</i> , 2013 , 340, 491-5	33.3	334
173	Ultrafast X-ray probing of water structure below the homogeneous ice nucleation temperature. <i>Nature</i> , 2014 , 510, 381-4	50.4	325
172	Structure of the Angiotensin receptor revealed by serial femtosecond crystallography. <i>Cell</i> , 2015 , 161, 833-44	56.2	262
171	Ultrafast three-dimensional imaging of lattice dynamics in individual gold nanocrystals. <i>Science</i> , 2013 , 341, 56-9	33.3	228
170	De novo protein crystal structure determination from X-ray free-electron laser data. <i>Nature</i> , 2014 , 505, 244-7	50.4	226

169	Nanoscale spin reversal by non-local angular momentum transfer following ultrafast laser excitation in ferrimagnetic GdFeCo. <i>Nature Materials</i> , 2013 , 12, 293-8	27	225
168	Direct measurements of the ionization potential depression in a dense plasma. <i>Physical Review Letters</i> , 2012 , 109, 065002	7.4	198
167	Nonlinear atomic response to intense ultrashort x rays. <i>Physical Review Letters</i> , 2011 , 106, 083002	7.4	191
166	Time-resolved protein nanocrystallography using an X-ray free-electron laser. <i>Optics Express</i> , 2012 , 20, 2706-16	3.3	190
165	X-Ray Diffraction from Isolated and Strongly Aligned Gas-Phase Molecules with a Free-Electron Laser. <i>Physical Review Letters</i> , 2014 , 112,	7.4	185
164	Taking snapshots of photosynthetic water oxidation using femtosecond X-ray diffraction and spectroscopy. <i>Nature Communications</i> , 2014 , 5, 4371	17.4	184
163	Ultra-efficient ionization of heavy atoms by intense X-ray free-electron laser pulses. <i>Nature Photonics</i> , 2012 , 6, 858-865	33.9	181
162	Experimental demonstration of femtosecond two-color x-ray free-electron lasers. <i>Physical Review Letters</i> , 2013 , 110, 134801	7.4	180
161	In vivo protein crystallization opens new routes in structural biology. <i>Nature Methods</i> , 2012 , 9, 259-62	21.6	177
160	Ultraintense x-ray induced ionization, dissociation, and frustrated absorption in molecular nitrogen. <i>Physical Review Letters</i> , 2010 , 104, 253002	7.4	159
159	Femtosecond visualization of lattice dynamics in shock-compressed matter. <i>Science</i> , 2013 , 342, 220-3	33.3	150
158	Nanoflow electrospinning serial femtosecond crystallography. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2012 , 68, 1584-7		146
157	Visualizing a protein quake with time-resolved X-ray scattering at a free-electron laser. <i>Nature Methods</i> , 2014 , 11, 923-6	21.6	141
156	Room temperature femtosecond X-ray diffraction of photosystem II microcrystals. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 9721-6	11.5	135
155	Structural basis for bifunctional peptide recognition at human μ opioid receptor. <i>Nature Structural and Molecular Biology</i> , 2015 , 22, 265-8	17.6	133
154	Fixed-target protein serial microcrystallography with an x-ray free electron laser. <i>Scientific Reports</i> , 2014 , 4, 6026	4.9	127
153	The Coherent X-ray Imaging instrument at the Linac Coherent Light Source. <i>Journal of Synchrotron Radiation</i> , 2015 , 22, 514-9	2.4	126
152	Coherence properties of individual femtosecond pulses of an x-ray free-electron laser. <i>Physical Review Letters</i> , 2011 , 107, 144801	7.4	126

151	Femtosecond single-shot imaging of nanoscale ferromagnetic order in Co/Pd multilayers using resonant x-ray holography. <i>Physical Review Letters</i> , 2012 , 108, 267403	7.4	124
150	A Theoretical Databank of Transferable Aspherical Atoms and Its Application to Electrostatic Interaction Energy Calculations of Macromolecules. <i>Journal of Chemical Theory and Computation</i> , 2007 , 3, 232-47	6.4	122
149	A MHz-repetition-rate hard X-ray free-electron laser driven by a superconducting linear accelerator. <i>Nature Photonics</i> , 2020 , 14, 391-397	33.9	118
148	Accurate macromolecular structures using minimal measurements from X-ray free-electron lasers. <i>Nature Methods</i> , 2014 , 11, 545-8	21.6	118
147	Nanoplasma dynamics of single large xenon clusters irradiated with superintense x-ray pulses from the linac coherent light source free-electron laser. <i>Physical Review Letters</i> , 2012 , 108, 245005	7.4	114
146	Unveiling and driving hidden resonances with high-fluence, high-intensity x-ray pulses. <i>Physical Review Letters</i> , 2011 , 107, 233001	7.4	105
145	Megahertz serial crystallography. <i>Nature Communications</i> , 2018 , 9, 4025	17.4	104
144	The invariom model and its application: refinement of D,L-serine at different temperatures and resolution. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2005 , 61, 314-20		103
143	Energy-dispersive X-ray emission spectroscopy using an X-ray free-electron laser in a shot-by-shot mode. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 19103-7	11.5	98
142	Indications of radiation damage in ferredoxin microcrystals using high-intensity X-FEL beams. <i>Journal of Synchrotron Radiation</i> , 2015 , 22, 225-38	2.4	95
141	Spectral encoding of x-ray/optical relative delay. <i>Optics Express</i> , 2011 , 19, 21855-65	3.3	95
140	The soft x-ray instrument for materials studies at the linac coherent light source x-ray free-electron laser. <i>Review of Scientific Instruments</i> , 2012 , 83, 043107	1.7	95
139	The CSPAD megapixel x-ray camera at LCLS 2012 ,		94
138	CSPAD-140k: A versatile detector for LCLS experiments. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2013 , 718, 550-553	1.2	92
137	Femtosecond x-ray pulse length characterization at the Linac Coherent Light Source free-electron laser. <i>New Journal of Physics</i> , 2011 , 13, 093024	2.9	91
136	Protein crystal structure obtained at 2.9 Å resolution from injecting bacterial cells into an X-ray free-electron laser beam. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 12769-74	11.5	84
135	Liquid explosions induced by X-ray laser pulses. <i>Nature Physics</i> , 2016 , 12, 966-971	16.2	82
134	Anomalous Behavior of the Homogeneous Ice Nucleation Rate in "No-Man's Land". <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 2826-2832	6.4	81

133	Ultrafast charge rearrangement and nuclear dynamics upon inner-shell multiple ionization of small polyatomic molecules. <i>Physical Review Letters</i> , 2013 , 110, 053003	7.4	79
132	Anomalous nonlinear X-ray Compton scattering. <i>Nature Physics</i> , 2015 , 11, 964-970	16.2	75
131	Linac Coherent Light Source soft x-ray materials science instrument optical design and monochromator commissioning. <i>Review of Scientific Instruments</i> , 2011 , 82, 093104	1.7	75
130	X-ray focusing with efficient high-NA multilayer Laue lenses. <i>Light: Science and Applications</i> , 2018 , 7, 17160-7	6.7	75
129	Structure of a photosynthetic reaction centre determined by serial femtosecond crystallography. <i>Nature Communications</i> , 2013 , 4, 2911	17.4	74
128	Measuring the temporal structure of few-femtosecond free-electron laser X-ray pulses directly in the time domain. <i>Nature Photonics</i> , 2014 , 8, 950-957	33.9	74
127	Atomic-Scale Perspective of Ultrafast Charge Transfer at a Dye-Semiconductor Interface. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 2753-9	6.4	73
126	De novo phasing with X-ray laser reveals mosquito larvicide BinAB structure. <i>Nature</i> , 2016 , 539, 43-47	50.4	73
125	Dynamics of hollow atom formation in intense x-ray pulses probed by partial covariance mapping. <i>Physical Review Letters</i> , 2013 , 111, 073002	7.4	72
124	Pink-beam serial crystallography. <i>Nature Communications</i> , 2017 , 8, 1281	17.4	72
123	X-ray-optical cross-correlator for gas-phase experiments at the Linac Coherent Light Source free-electron laser. <i>Applied Physics Letters</i> , 2012 , 100, 121107	3.4	71
122	Megahertz data collection from protein microcrystals at an X-ray free-electron laser. <i>Nature Communications</i> , 2018 , 9, 3487	17.4	67
121	Femtosecond X-ray diffraction from two-dimensional protein crystals. <i>IUCrJ</i> , 2014 , 1, 95-100	4.7	67
120	Explosions of xenon clusters in ultraintense femtosecond x-ray pulses from the LCLS free electron laser. <i>Physical Review Letters</i> , 2012 , 108, 133401	7.4	67
119	Trinuclear gold(I) triazolates: a new class of wide-band phosphors and sensors. <i>Inorganic Chemistry</i> , 2006 , 45, 6592-4	5.1	67
118	Femtosecond and nanometre visualization of structural dynamics in superheated nanoparticles. <i>Nature Photonics</i> , 2016 , 10, 93-97	33.9	65
117	Electron density and bonding at inverted carbon atoms: an experimental study of a [1.1.1]propellane derivative. <i>Angewandte Chemie - International Edition</i> , 2005 , 44, 3925-8	16.4	65
116	Investigation of femtosecond collisional ionization rates in a solid-density aluminium plasma. <i>Nature Communications</i> , 2015 , 6, 6397	17.4	62

115	Toxicity of eosinophil MBP is repressed by intracellular crystallization and promoted by extracellular aggregation. <i>Molecular Cell</i> , 2015 , 57, 1011-1021	17.6	62
114	Transient lattice contraction in the solid-to-plasma transition. <i>Science Advances</i> , 2016 , 2, e1500837	14.3	58
113	Improving the scattering-factor formalism in protein refinement: application of the University at Buffalo Aspherical-Atom Databank to polypeptide structures. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2007 , 63, 160-70		58
112	Size-dependent ultrafast ionization dynamics of nanoscale samples in intense femtosecond x-ray free-electron-laser pulses. <i>Physical Review Letters</i> , 2012 , 108, 233401	7.4	57
111	The Atomic, Molecular and Optical Science instrument at the Linac Coherent Light Source. <i>Journal of Synchrotron Radiation</i> , 2015 , 22, 492-7	2.4	54
110	An unstable ligand-unsupported Cu(I) dimer stabilized in a supramolecular framework. <i>Angewandte Chemie - International Edition</i> , 2005 , 44, 4614-7	16.4	54
109	Atomic properties of N(2)O(4) based on its experimental charge density. <i>Journal of the American Chemical Society</i> , 2002 , 124, 732-3	16.4	54
108	Ultrafast transitions from solid to liquid and plasma states of graphite induced by x-ray free-electron laser pulses. <i>Physical Review Letters</i> , 2012 , 108, 217402	7.4	52
107	Temporal cross-correlation of x-ray free electron and optical lasers using soft x-ray pulse induced transient reflectivity. <i>Optics Express</i> , 2012 , 20, 11396-406	3.3	52
106	The Single Particles, Clusters and Biomolecules and Serial Femtosecond Crystallography instrument of the European XFEL: initial installation. <i>Journal of Synchrotron Radiation</i> , 2019 , 26, 660-676	2.4	52
105	Structure of CPV17 polyhedrin determined by the improved analysis of serial femtosecond crystallographic data. <i>Nature Communications</i> , 2015 , 6, 6435	17.4	51
104	Absolute pulse energy measurements of soft x-rays at the Linac Coherent Light Source. <i>Optics Express</i> , 2014 , 22, 21214-26	3.3	51
103	Imaging transient melting of a nanocrystal using an X-ray laser. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 7444-8	11.5	49
102	Spectral encoding method for measuring the relative arrival time between x-ray/optical pulses. <i>Review of Scientific Instruments</i> , 2014 , 85, 083116	1.7	49
101	Atomic structure of granulins determined from native nanocrystalline granulovirus using an X-ray free-electron laser. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 2247-2252	11.5	47
100	Performance of a beam-multiplexing diamond crystal monochromator at the Linac Coherent Light Source. <i>Review of Scientific Instruments</i> , 2014 , 85, 063106	1.7	47
99	Photon beamlines and diagnostics at LCLS. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2011 , 635, S6-S11	1.2	46
98	Structural insights into the extracellular recognition of the human serotonin 2B receptor by an antibody. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 8223-8228	11.5	43

97	Imaging molecular structure through femtosecond photoelectron diffraction on aligned and oriented gas-phase molecules. <i>Faraday Discussions</i> , 2014 , 171, 57-80	3.6	43
96	The RATIO method for time-resolved Laue crystallography. <i>Journal of Synchrotron Radiation</i> , 2009 , 16, 226-30	2.4	42
95	Comparing different approaches to characterization of focused X-ray laser beams. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2011 , 631, 130-133	1.2	41
94	Angle-resolved electron spectroscopy of laser-assisted Auger decay induced by a few-femtosecond x-ray pulse. <i>Physical Review Letters</i> , 2012 , 108, 063007	7.4	40
93	Time-resolved synchrotron diffraction and theoretical studies of very short-lived photo-induced molecular species. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2010 , 66, 179-88		39
92	The novel hydrogen bonding motifs and supramolecular patterns in 2,4-diaminopyrimidine- π -nitrobenzoate complexes. <i>Tetrahedron</i> , 2005 , 61, 7201-7210	2.4	39
91	Charge density analysis of the (C-C) \rightarrow Ti agostic interactions in a titanacyclobutane complex. <i>Journal of the American Chemical Society</i> , 2009 , 131, 6154-60	16.4	38
90	Femtosecond x-ray photoelectron diffraction on gas-phase dibromobenzene molecules. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2014 , 47, 124035	1.3	37
89	How Cubic Can Ice Be?. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 3216-3222	6.4	36
88	Establishing nonlinearity thresholds with ultraintense X-ray pulses. <i>Scientific Reports</i> , 2016 , 6, 33292	4.9	36
87	Supramolecular solids as a medium for single-crystal-to-single-crystal E/Z photoisomerization: kinetic study of the photoreactions of two Zn-coordinated tiglic acid molecules. <i>Chemistry - A European Journal</i> , 2008 , 14, 706-13	4.8	35
86	Effect of the environment on molecular properties: synthesis, structure, and photoluminescence of Cu(I) bis(2,9-dimethyl-1,10-phenanthroline) nanoclusters in eight different supramolecular frameworks. <i>Inorganic Chemistry</i> , 2006 , 45, 9281-9	5.1	32
85	Interaction of short x-ray pulses with low-Z x-ray optics materials at the LCLS free-electron laser. <i>Optics Express</i> , 2010 , 18, 23933-8	3.3	31
84	Second and third harmonic measurements at the linac coherent light source. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2011 , 14,		31
83	Femtosecond x-ray free electron laser pulse duration measurement from spectral correlation function. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2012 , 15,		31
82	Low-Z-polymer sample supports for fixed-target serial femtosecond X-ray crystallography. <i>Journal of Applied Crystallography</i> , 2015 , 48, 1072-1079	3.8	31
81	Single-crystal-to-single-crystal E \rightarrow Z isomerization of tiglic acid in a supramolecular framework. <i>Acta Crystallographica Section B: Structural Science</i> , 2007 , 63, 644-9		30
80	Membrane protein megahertz crystallography at the European XFEL. <i>Nature Communications</i> , 2019 , 10, 5021	17.4	29

79	Communication: The electronic structure of matter probed with a single femtosecond hard x-ray pulse. <i>Structural Dynamics</i> , 2014 , 1, 021101	3.2	29
78	Crystal and molecular structures and experimentally determined charge densities of fluorinated ethenes. <i>Chemistry - A European Journal</i> , 2004 , 10, 5059-66	4.8	29
77	Elektronendichte und Bindungsverhältnisse an invertierten Kohlenstoffatomen: eine experimentelle Studie an einem [1.1.1]Propellanderivat. <i>Angewandte Chemie</i> , 2005 , 117, 3993-3997	3.6	29
76	Supramolecular solids and time-resolved diffraction. <i>CrystEngComm</i> , 2006 , 8, 735	3.3	28
75	Atomic volumes and charges in a system with a strong hydrogen bond: L-tryptophan formic acid. <i>Acta Crystallographica Section B: Structural Science</i> , 2004 , 60, 184-90		28
74	Charge density of (-)-strychnine from 100 to 15 K, a comparison of four data sets. <i>Acta Crystallographica Section B: Structural Science</i> , 2005 , 61, 115-21		28
73	Ternary structure reveals mechanism of a membrane diacylglycerol kinase. <i>Nature Communications</i> , 2015 , 6, 10140	17.4	27
72	Using covariance mapping to investigate the dynamics of multi-photon ionization processes of Ne atoms exposed to X-FEL pulses. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2013 , 46, 164034	1.34	27
71	Atomic and bond topological properties of the tripeptide L-alanyl-L-alanyl-L-alanine based on its experimental charge density obtained at 20 K. <i>Organic and Biomolecular Chemistry</i> , 2006 , 4, 475-81	3.9	26
70	Serial femtosecond X-ray diffraction of 30S ribosomal subunit microcrystals in liquid suspension at ambient temperature using an X-ray free-electron laser. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2013 , 69, 1066-9		25
69	Toward atomic resolution diffractive imaging of isolated molecules with X-ray free-electron lasers. <i>Faraday Discussions</i> , 2014 , 171, 393-418	3.6	25
68	Ligand-unsupported Au(I) chains with short Au(I)...Au(I) contacts. <i>Chemical Communications</i> , 2006 , 3711-3.8	3.8	25
67	Submolecular partitioning of morphine hydrate based on its experimental charge density at 25 K. <i>Acta Crystallographica Section B: Structural Science</i> , 2005 , 61, 443-8		25
66	Covariance mapping of two-photon double core hole states in C ₂ H ₂ and C ₂ H ₆ produced by an x-ray free electron laser. <i>New Journal of Physics</i> , 2015 , 17, 073002	2.9	24
65	Comparative experimental electron density and electron localization function study of thymidine based on 20 K X-ray diffraction data. <i>Acta Crystallographica Section B: Structural Science</i> , 2008 , 64, 363-74		24
64	Megahertz single-particle imaging at the European XFEL. <i>Communications Physics</i> , 2020 , 3,	5.4	23
63	Crystal structure of DL-Tryptophan at 173K. <i>Crystal Research and Technology</i> , 2004 , 39, 274-278	1.3	23
62	Crystal structure analysis of 1,1,4,4-tetrafluorobutadiene and experimental determination of the charge density of 1,1,4,4-tetrafluorobutatriene. <i>Angewandte Chemie - International Edition</i> , 2002 , 41, 296-9	16.4	23

61	Single-crystal-to-single-crystal E \rightarrow Z and Z \rightarrow E isomerizations of 3-chloroacrylic acid within the nanocavities of a supramolecular framework. <i>Chemical Communications</i> , 2007 , 2735-7	5.8	22
60	High-resolution synchrotron data collection for charge-density work at 100 and 20 K. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2004 , 60, 390-6		22
59	Molecular frame Auger electron energy spectrum from N ₂ . <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2012 , 45, 055601	1.3	21
58	Electron density analyses of opioids: a comparative study. <i>Journal of Physical Chemistry A</i> , 2007 , 111, 5499-508	2.8	21
57	Effects of self-seeding and crystal post-selection on the quality of Monte Carlo-integrated SFX data. <i>Journal of Synchrotron Radiation</i> , 2015 , 22, 644-52	2.4	19
56	Demonstration of simultaneous experiments using thin crystal multiplexing at the Linac Coherent Light Source. <i>Journal of Synchrotron Radiation</i> , 2015 , 22, 626-33	2.4	19
55	In cellulo serial crystallography of alcohol oxidase crystals inside yeast cells. <i>IUCrJ</i> , 2016 , 3, 88-95	4.7	19
54	Imprinting a Focused X-Ray Laser Beam to Measure Its Full Spatial Characteristics. <i>Physical Review Applied</i> , 2015 , 4,	4.3	19
53	Inner-shell multiple ionization of polyatomic molecules with an intense x-ray free-electron laser studied by coincident ion momentum imaging. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2013 , 46, 164031	1.3	19
52	Ultrafast nonthermal heating of water initiated by an X-ray Free-Electron Laser. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 5652-5657	11.5	19
51	Near-ultraviolet luminescence of N ₂ irradiated by short X-ray pulses. <i>Physical Review Letters</i> , 2010 , 105, 043003	7.4	18
50	Charge-density study on cyclosporine A. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2009 , 65, 284-93		18
49	Neubestimmung der Ladungsdichte und topologische Analyse von E^{D} boran bei 94 K. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2004 , 630, 1313-1316	1.3	17
48	Characterization and use of the spent beam for serial operation of LCLS. <i>Journal of Synchrotron Radiation</i> , 2015 , 22, 634-43	2.4	16
47	Structural studies of P-type ATPase-ligand complexes using an X-ray free-electron laser. <i>IUCrJ</i> , 2015 , 2, 409-20	4.7	16
46	An Unstable Ligand-Unsupported CuI Dimer Stabilized in a Supramolecular Framework. <i>Angewandte Chemie</i> , 2005 , 117, 4690-4693	3.6	14
45	X-ray laser-induced electron dynamics observed by femtosecond diffraction from nanocrystals of Buckminsterfullerene. <i>Science Advances</i> , 2016 , 2, e1601186	14.3	14
44	Experience with the CSPAD during dedicated detector runs at LCLS. <i>Journal of Physics: Conference Series</i> , 2014 , 493, 012011	0.3	13

43	Multiphoton L-shell ionization of H2S using intense x-ray pulses from a free-electron laser. <i>Physical Review A</i> , 2012 , 86,	2.6	13
42	Optimizing the accuracy and precision of the single-pulse Laue technique for synchrotron photo-crystallography. <i>Journal of Synchrotron Radiation</i> , 2010 , 17, 479-85	2.4	13
41	Segmented flow generator for serial crystallography at the European X-ray free electron laser. <i>Nature Communications</i> , 2020 , 11, 4511	17.4	13
40	Single-shot diffraction data from the Mimivirus particle using an X-ray free-electron laser. <i>Scientific Data</i> , 2016 , 3, 160060	8.2	13
39	In cellulo crystallization of Trypanosoma brucei IMP dehydrogenase enables the identification of genuine co-factors. <i>Nature Communications</i> , 2020 , 11, 620	17.4	12
38	Femtosecond profiling of shaped x-ray pulses. <i>New Journal of Physics</i> , 2018 , 20, 033008	2.9	12
37	Coherent diffractive imaging of microtubules using an X-ray laser. <i>Nature Communications</i> , 2019 , 10, 2589	17.4	12
36	Opacity effects in a solid-density aluminium plasma created by photo-excitation with an X-ray laser. <i>High Energy Density Physics</i> , 2014 , 11, 59-69	1.2	12
35	Single particle imaging with soft x-rays at the Linac Coherent Light Source 2011 ,		11
34	Flow-aligned, single-shot fiber diffraction using a femtosecond X-ray free-electron laser. <i>Cytoskeleton</i> , 2017 , 74, 472-481	2.4	10
33	. <i>IEEE Transactions on Nuclear Science</i> , 2017 , 64, 2854-2868	1.7	10
32	Experimental charge density of an L-phenylalanine formic acid complex with a short hydrogen bond determined at 25 K. <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2006 , 221,	1	9
31	Serial femtosecond crystallography datasets from G protein-coupled receptors. <i>Scientific Data</i> , 2016 , 3, 160057	8.2	8
30	X-ray laser-induced ablation of lead compounds 2011 ,		8
29	Topological analysis of DL-arginine monohydrate at 100 K. <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2002 , 217, 168-173	1	8
28	Nanocrystallography measurements of early stage synthetic malaria pigment. <i>Journal of Applied Crystallography</i> , 2017 , 50, 1533-1540	3.8	8
27	X-ray Emission Spectroscopy at X-ray Free Electron Lasers: Limits to Observation of the Classical Spectroscopic Response for Electronic Structure Analysis. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 441-446	6.4	8
26	Spectral encoding based measurement of x-ray/optical relative delay to ~10 fs rms 2012 ,		7

25	Resolution extension by image summing in serial femtosecond crystallography of two-dimensional membrane-protein crystals. <i>IUCrJ</i> , 2018 , 5, 103-117	4.7	7
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