

Christoph Bostedt

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11179139/publications.pdf>

Version: 2024-02-01

93
papers

9,894
citations

66343

42
h-index

53230

85
g-index

94
all docs

94
docs citations

94
times ranked

6775
citing authors

#	ARTICLE	IF	CITATIONS
1	Sizes of pure and doped helium droplets from single shot x-ray imaging. Journal of Chemical Physics, 2022, 156, 041102.	3.0	3
2	Few-femtosecond resolved imaging of laser-driven nanoplasma expansion. New Journal of Physics, 2022, 24, 043024.	2.9	7
3	Widely tunable two-color x-ray free-electron laser pulses. Physical Review Research, 2022, 4, .	3.6	8
4	Relation between Inner Structural Dynamics and Ion Dynamics of Laser-Heated Nanoparticles. Physical Review X, 2021, 11, .	8.9	3
5	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
6	Aggregation of solutes in bosonic versus fermionic quantum fluids. Science Advances, 2021, 7, eabk2247.	10.3	7
7	Shapes of rotating normal fluid ^3He versus superfluid ^4He droplets in molecular beams. Physical Review B, 2020, 102, .	3.2	16
8	Electronic Population Transfer via Impulsive Stimulated X-Ray Raman Scattering with Attosecond Soft-X-Ray Pulses. Physical Review Letters, 2020, 125, 073203.	7.8	42
9	Imaging plasma formation in isolated nanoparticles with ultrafast resonant scattering. Structural Dynamics, 2020, 7, 034303.	2.3	14
10	Angular Momentum in Rotating Superfluid Droplets. Physical Review Letters, 2020, 124, 215301.	7.8	30
11	The role of transient resonances for ultra-fast imaging of single sucrose nanoclusters. Nature Communications, 2020, 11, 167.	12.8	27
12	Refinement for single-nanoparticle structure determination from low-quality single-shot coherent diffraction data. IUCr, 2020, 7, 10-17.	2.2	6
13	Characterizing crystalline defects in single nanoparticles from angular correlations of single-shot diffracted X-rays. IUCr, 2020, 7, 276-286.	2.2	4
14	Clusters and Nanocrystals. , 2020, , 1525-1573.		3
15	Evaporation of an anisotropic nanoplasma. EPJ Web of Conferences, 2019, 205, 06006.	0.3	1
16	Elucidation of the photoaquation reaction mechanism in ferrous hexacyanide using synchrotron x-rays with sub-pulse-duration sensitivity. Journal of Chemical Physics, 2019, 151, 144306.	3.0	24
17	Ultrafast Structural Dynamics of Nanoparticles in Intense Laser Fields. Physical Review Letters, 2019, 123, 123201.	7.8	14
18	Electrospray sample injection for single-particle imaging with x-ray lasers. Science Advances, 2019, 5, eaav8801.	10.3	49

#	ARTICLE	IF	CITATIONS
19	Multispectroscopic Study of Single Xe Clusters Using XFEL Pulses. Applied Sciences (Switzerland), 2019, 9, 4932.	2.5	2
20	The SwissFEL soft X-ray free-electron laser beamline: Athos. Journal of Synchrotron Radiation, 2019, 26, 1073-1084.	2.4	51
21	Micro-focused MHz pink beam for time-resolved X-ray emission spectroscopy. Journal of Synchrotron Radiation, 2019, 26, 1956-1966.	2.4	7
22	Clusters and Nanocrystals. , 2019, , 1-49.		0
23	Femtosecond X-ray Fourier holography imaging of free-flying nanoparticles. Nature Photonics, 2018, 12, 150-153.	31.4	58
24	The LAMP instrument at the Linac Coherent Light Source free-electron laser. Review of Scientific Instruments, 2018, 89, 035112.	1.3	24
25	Chemical Understanding of the Limited Site-Specificity in Molecular Inner-Shell Photofragmentation. Journal of Physical Chemistry Letters, 2018, 9, 1156-1163.	4.6	31
26	Roadmap of ultrafast x-ray atomic and molecular physics. Journal of Physics B: Atomic, Molecular and Optical Physics, 2018, 51, 032003.	1.5	240
27	Considerations for three-dimensional image reconstruction from experimental data in coherent diffractive imaging. IUCr, 2018, 5, 531-541.	2.2	40
28	Relativistic and resonant effects in the ionization of heavy atoms by ultra-intense hard X-rays. Nature Communications, 2018, 9, 4200.	12.8	29
29	Ab initio structure determination from experimental fluctuation X-ray scattering data. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 11772-11777.	7.1	24
30	Free-electron laser data for multiple-particle fluctuation scattering analysis. Scientific Data, 2018, 5, 180201.	5.3	6
31	XUV double-pulses with femtosecond to 650â€¦ps separation from a multilayer-mirror-based split-and-delay unit at FLASH. Journal of Synchrotron Radiation, 2018, 25, 1517-1528.	2.4	6
32	Shapes of rotating superfluid helium nanodroplets. Physical Review B, 2017, 95, .	3.2	33
33	Observing Femtosecond Fragmentation Using Ultrafast X-ray-Induced Auger Spectra. Applied Sciences (Switzerland), 2017, 7, 681.	2.5	19
34	Open data set of live cyanobacterial cells imaged using an X-ray laser. Scientific Data, 2016, 3, 160058.	5.3	7
35	Charge transfer in dissociating iodomethane and fluoromethane molecules ionized by intense femtosecond X-ray pulses. Structural Dynamics, 2016, 3, 043207.	2.3	59
36	A data set from flash X-ray imaging of carboxysomes. Scientific Data, 2016, 3, 160061.	5.3	11

#	ARTICLE	IF	CITATIONS
37	Single-shot diffraction data from the Mimivirus particle using an X-ray free-electron laser. <i>Scientific Data</i> , 2016, 3, 160060.	5.3	18
38	Stimulated X-ray Raman scattering – a critical assessment of the building block of nonlinear X-ray spectroscopy. <i>Faraday Discussions</i> , 2016, 194, 305-324.	3.2	25
39	Recombination-Enhanced Surface Expansion of Clusters in Intense Soft X-Ray Laser Pulses. <i>Physical Review Letters</i> , 2016, 117, 153401.	7.8	21
40	Coupled motion of Xe clusters and quantum vortices in He nanodroplets. <i>Physical Review B</i> , 2016, 93, .	3.2	31
41	Linac Coherent Light Source: The first five years. <i>Reviews of Modern Physics</i> , 2016, 88, .	45.6	477
42	Femtosecond and nanometre visualization of structural dynamics in superheated nanoparticles. <i>Nature Photonics</i> , 2016, 10, 93-97.	31.4	89
43	Transient lattice contraction in the solid-to-plasma transition. <i>Science Advances</i> , 2016, 2, e1500837.	10.3	70
44	Clusters and Nanocrystals. , 2016, , 1323-1364.		0
45	Communication: X-ray coherent diffractive imaging by immersion in nanodroplets. <i>Structural Dynamics</i> , 2015, 2, 051102.	2.3	38
46	Imaging single cells in a beam of live cyanobacteria with an X-ray laser. <i>Nature Communications</i> , 2015, 6, 5704.	12.8	156
47	The 3D-architecture of individual free silver nanoparticles captured by X-ray scattering. <i>Nature Communications</i> , 2015, 6, 6187.	12.8	82
48	Three-Dimensional Reconstruction of the Giant Mimivirus Particle with an X-Ray Free-Electron Laser. <i>Physical Review Letters</i> , 2015, 114, 098102.	7.8	284
49	The Atomic, Molecular and Optical Science instrument at the Linac Coherent Light Source. <i>Journal of Synchrotron Radiation</i> , 2015, 22, 492-497.	2.4	61
50	Ultrafast isomerization initiated by X-ray core ionization. <i>Nature Communications</i> , 2015, 6, 8199.	12.8	92
51	Clusters and Nanocrystals. , 2015, , 1-38.		0
52	Theoretical Tracking of Resonance-Enhanced Multiple Ionization Pathways in X-ray Free-Electron Laser Pulses. <i>Physical Review Letters</i> , 2014, 113, 253001.	7.8	48
53	Generation and structure of extremely large clusters in pulsed jets. <i>Journal of Chemical Physics</i> , 2014, 141, 044306.	3.0	38
54	Imaging molecular structure through femtosecond photoelectron diffraction on aligned and oriented gas-phase molecules. <i>Faraday Discussions</i> , 2014, 171, 57-80.	3.2	55

#	ARTICLE	IF	CITATIONS
55	High-throughput imaging of heterogeneous cell organelles with an X-ray laser. <i>Nature Photonics</i> , 2014, 8, 943-949.	31.4	156
56	Shapes and vorticities of superfluid helium nanodroplets. <i>Science</i> , 2014, 345, 906-909.	12.6	197
57	Imaging charge transfer in iodomethane upon x-ray photoabsorption. <i>Science</i> , 2014, 345, 288-291.	12.6	183
58	Size and shape dependent photoluminescence and excited state decay rates of diamondoids. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 3070-3076.	2.8	35
59	X-Ray Diffraction from Isolated and Strongly Aligned Gas-Phase Molecules with a Free-Electron Laser. <i>Physical Review Letters</i> , 2014, 112, .	7.8	217
60	Electronic structure tuning of diamondoids through functionalization. <i>Journal of Chemical Physics</i> , 2013, 138, 024310.	3.0	51
61	Resonance-enhanced multiple ionization of krypton at an x-ray free-electron laser. <i>Physical Review A</i> , 2013, 87, .	2.5	57
62	Sensing the wavefront of x-ray free-electron lasers using aerosol spheres. <i>Optics Express</i> , 2013, 21, 12385.	3.4	28
63	Toward unsupervised single-shot diffractive imaging of heterogeneous particles using X-ray free-electron lasers. <i>Optics Express</i> , 2013, 21, 28729.	3.4	20
64	Stimulated Electronic X-Ray Raman Scattering. <i>Physical Review Letters</i> , 2013, 111, 233902.	7.8	123
65	Profiling structured beams using injected aerosols. <i>Proceedings of SPIE</i> , 2012, , .	0.8	1
66	Femtosecond free-electron laser x-ray diffraction data sets for algorithm development. <i>Optics Express</i> , 2012, 20, 4149.	3.4	56
67	Time-resolved protein nanocrystallography using an X-ray free-electron laser. <i>Optics Express</i> , 2012, 20, 2706.	3.4	219
68	Ultra-efficient ionization of heavy atoms by intense X-ray free-electron laser pulses. <i>Nature Photonics</i> , 2012, 6, 858-865.	31.4	218
69	Atomic inner-shell X-ray laser at 1.46 nanometres pumped by an X-ray free-electron laser. <i>Nature</i> , 2012, 481, 488-491.	27.8	321
70	Transient X-Ray Fragmentation: Probing a Prototypical Photoinduced Ring Opening. <i>Physical Review Letters</i> , 2012, 108, 253006.	7.8	56
71	Lipidic phase membrane protein serial femtosecond crystallography. <i>Nature Methods</i> , 2012, 9, 263-265.	19.0	135
72	Self-terminating diffraction gates femtosecond X-ray nanocrystallography measurements. <i>Nature Photonics</i> , 2012, 6, 35-40.	31.4	292

#	ARTICLE	IF	CITATIONS
73	In vivo protein crystallization opens new routes in structural biology. <i>Nature Methods</i> , 2012, 9, 259-262.	19.0	193
74	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.	7.8	60
75	Double Core Hole Spectroscopy of Small Molecules. , 2012, , .		0
76	Double-core-hole spectroscopy for chemical analysis with an intense X-ray femtosecond laser. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 16912-16915.	7.1	165
77	Unsupervised classification of single-particle X-ray diffraction snapshots by spectral clustering. <i>Optics Express</i> , 2011, 19, 16542.	3.4	91
78	Radiation damage in protein serial femtosecond crystallography using an x-ray free-electron laser. <i>Physical Review B</i> , 2011, 84, 214111.	3.2	156
79	Single particle imaging with soft x-rays at the Linac Coherent Light Source. , 2011, , .		12
80	Single mimivirus particles intercepted and imaged with an X-ray laser. <i>Nature</i> , 2011, 470, 78-81.	27.8	790
81	Femtosecond X-ray protein nanocrystallography. <i>Nature</i> , 2011, 470, 73-77.	27.8	1,771
82	Ultrafast imaging of nanoclusters with intense x-ray laser pulses. , 2011, , .		0
83	Large-format, high-speed, X-ray pnCCDs combined with electron and ion imaging spectrometers in a multipurpose chamber for experiments at 4th generation light sources. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2010, 614, 483-496.	1.6	275
84	Fast electrons from multi-electron dynamics in xenon clusters induced by inner-shell ionization. <i>New Journal of Physics</i> , 2010, 12, 083004.	2.9	58
85	Experimental and theoretical study of the absorption properties of thiolated diamondoids. <i>Journal of Chemical Physics</i> , 2010, 132, 144305.	3.0	31
86	The influence of a single thiol group on the electronic and optical properties of the smallest diamondoid adamantane. <i>Journal of Chemical Physics</i> , 2010, 132, 024710.	3.0	38
87	Intrinsic photoluminescence of adamantane in the ultraviolet spectral region. <i>Physical Review B</i> , 2009, 80, .	3.2	35
88	Short-pulse Laser Induced Transient Structure Formation and Ablation Studied with Time-resolved Coherent XUV-scattering. <i>Materials Research Society Symposia Proceedings</i> , 2009, 1230, 1.	0.1	3
89	Experiments at FLASH. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2009, 601, 108-122.	1.6	88
90	Optical Response of Diamond Nanocrystals as a Function of Particle Size, Shape, and Symmetry. <i>Physical Review Letters</i> , 2009, 103, 047402.	7.8	110

#	ARTICLE	IF	CITATIONS
91	Femtosecond time-delay X-ray holography. Nature, 2007, 448, 676-679.	27.8	238
92	Femtosecond diffractive imaging with a soft-X-ray free-electron laser. Nature Physics, 2006, 2, 839-843.	16.7	910
93	Charging and ion ejection dynamics of large helium nanodroplets exposed to intense femtosecond soft X-ray pulses. European Physical Journal: Special Topics, 0, , 1.	2.6	3