

# Aymeric Robert

## List of Publications by Year in descending order

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93  
papers

3,889  
citations

159585

30  
h-index

128289

60  
g-index

94  
all docs

94  
docs citations

94  
times ranked

5023  
citing authors

#	ARTICLE	IF	CITATIONS
1	Determination of Nanocrystal Sizes: A Comparison of TEM, SAXS, and XRD Studies of Highly Monodisperse CoPt <sub>3</sub> Particles. <i>Langmuir</i> , 2005, 21, 1931-1936.	3.5	626
2	Linac Coherent Light Source: The first five years. <i>Reviews of Modern Physics</i> , 2016, 88, .	45.6	477
3	A time-dependent order parameter for ultrafast photoinduced phase transitions. <i>Nature Materials</i> , 2014, 13, 923-927.	27.5	214
4	The X-ray Pump-Probe instrument at the Linac Coherent Light Source. <i>Journal of Synchrotron Radiation</i> , 2015, 22, 503-507.	2.4	159
5	A single-shot transmissive spectrometer for hard x-ray free electron lasers. <i>Applied Physics Letters</i> , 2012, 101, .	3.3	129
6	Ultrafast energy- and momentum-resolved dynamics of magnetic correlations in the photo-doped Mott insulator Sr <sub>2</sub> IrO <sub>4</sub> . <i>Nature Materials</i> , 2016, 15, 601-605.	27.5	120
7	Single Shot Spatial and Temporal Coherence Properties of the SLAC Linac Coherent Light Source in the Hard X-Ray Regime. <i>Physical Review Letters</i> , 2012, 108, 024801.	7.8	115
8	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.	1.6	106
9	X-ray-scattering information obtained from near-field speckle. <i>Nature Physics</i> , 2008, 4, 238-243.	16.7	105
10	High Contrast X-ray Speckle from Atomic-Scale Order in Liquids and Glasses. <i>Physical Review Letters</i> , 2012, 109, 185502.	7.8	97
11	Performance of a picosecond x-ray delay line unit at 839 keV. <i>Optics Letters</i> , 2009, 34, 1768.	3.3	78
12	Investigation of $q$ -dependent dynamical heterogeneity in a colloidal gel by x-ray photon correlation spectroscopy. <i>Physical Review E</i> , 2007, 76, 051404.	2.1	77
13	Single Shot Coherence Properties of the Free-Electron Laser SACLA in the Hard X-ray Regime. <i>Scientific Reports</i> , 2014, 4, 5234.	3.3	69
14	Glassy dynamics and aging in a dense ferrofluid. <i>Europhysics Letters</i> , 2006, 75, 764-770.	2.0	63
15	Development of a hard X-ray delay line for X-ray photon correlation spectroscopy and jitter-free pump-probe experiments at X-ray free-electron laser sources. <i>Journal of Synchrotron Radiation</i> , 2011, 18, 481-491.	2.4	61
16	Coherent X-rays reveal the influence of cage effects on ultrafast water dynamics. <i>Nature Communications</i> , 2018, 9, 1917.	12.8	59
17	X-Ray Photon Correlation Spectroscopy (XPCS). , 2008, , 953-995.		56
18	Performance of a beam-multiplexing diamond crystal monochromator at the Linac Coherent Light Source. <i>Review of Scientific Instruments</i> , 2014, 85, 063106.	1.3	55

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19	Towards ultrafast dynamics with split-pulse X-ray photon correlation spectroscopy at free electron laser sources. <i>Nature Communications</i> , 2018, 9, 1704.	12.8	55
20	The X-ray Correlation Spectroscopy instrument at the Linac Coherent Light Source. <i>Journal of Synchrotron Radiation</i> , 2015, 22, 508-513.	2.4	54
21	The Linac Coherent Light Source. <i>Journal of Synchrotron Radiation</i> , 2015, 22, 472-476.	2.4	48
22	Micro-transitions or breathers in L-alanine?. <i>European Physical Journal B</i> , 2003, 37, 375-382.	1.5	43
23	Demonstration of Feasibility of X-Ray Free Electron Laser Studies of Dynamics of Nanoparticles in Entangled Polymer Melts. <i>Scientific Reports</i> , 2014, 4, 6017.	3.3	41
24	Revealing the atomic dance. <i>Nature Materials</i> , 2009, 8, 702-703.	27.5	40
25	All-diamond optical assemblies for a beam-multiplexing X-ray monochromator at the Linac Coherent Light Source. <i>Journal of Applied Crystallography</i> , 2014, 47, 1329-1336.	4.5	39
26	Single shot speckle and coherence analysis of the hard X-ray free electron laser LCLS. <i>Optics Express</i> , 2013, 21, 24647.	3.4	37
27	Photon-in photon-out hard X-ray spectroscopy at the Linac Coherent Light Source. <i>Journal of Synchrotron Radiation</i> , 2015, 22, 612-620.	2.4	35
28	Influence of functional organic groups on the structure of CTAB templated organosilica thin films. <i>Journal of Materials Chemistry</i> , 2004, 14, 1854-1860.	6.7	34
29	A single-shot intensity-position monitor for hard x-ray FEL sources. <i>Proceedings of SPIE</i> , 2011, , .	0.8	34
30	Phonon spectroscopy with sub-meV resolution by femtosecond x-ray diffuse scattering. <i>Physical Review B</i> , 2015, 92, .	3.2	34
31	Characterization of temporal coherence of hard X-ray free-electron laser pulses with single-shot interferograms. <i>IUCr</i> , 2017, 4, 728-733.	2.2	32
32	Sequential Single Shot X-ray Photon Correlation Spectroscopy at the SACLA Free Electron Laser. <i>Scientific Reports</i> , 2015, 5, 17193.	3.3	30
33	Itinerant and Localized Magnetization Dynamics in Antiferromagnetic Ho. <i>Physical Review Letters</i> , 2016, 116, 257202.	7.8	27
34	Performance of a hard X-ray split-and-delay optical system with a wavefront division. <i>Journal of Synchrotron Radiation</i> , 2018, 25, 20-25.	2.4	25
35	High wavevector temporal speckle correlations at the Linac Coherent Light Source. <i>Optics Express</i> , 2012, 20, 9790.	3.4	24
36	Following the dynamics of matter with femtosecond precision using the X-ray streaking method. <i>Scientific Reports</i> , 2015, 5, 7644.	3.3	24

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37	Dynamics of a colloid-stabilized cream. <i>Physical Review E</i> , 2009, 79, 011405.	2.1	23
38	Two-Dimensional Dynamics of Metal Nanoparticles on the Surface of Thin Polymer Films Studied with Coherent X Rays. <i>Physical Review Letters</i> , 2007, 98, 047801.	7.8	22
39	Development of a hard x-ray split-delay system at the Linac Coherent Light Source. <i>Proceedings of SPIE</i> , 2017, , .	0.8	21
40	Structure and dynamics of electrostatically interacting magnetic nanoparticles in suspension. <i>Journal of Chemical Physics</i> , 2005, 122, 084701.	3.0	20
41	Demonstration of simultaneous experiments using a thin crystal multiplexing at the Linac Coherent Light Source. <i>Journal of Synchrotron Radiation</i> , 2015, 22, 626-633.	2.4	20
42	Dynamics in dense suspensions of charge-stabilized colloidal particles. <i>European Physical Journal E</i> , 2008, 25, 77-81.	1.6	19
43	Focus characterization at an X-ray free-electron laser by coherent scattering and speckle analysis. <i>Journal of Synchrotron Radiation</i> , 2015, 22, 599-605.	2.4	18
44	X-ray spectrometer based on a bent diamond crystal for high repetition rate free-electron laser applications. <i>Optics Express</i> , 2017, 25, 2852.	3.4	18
45	Compact hard x-ray split-delay system based on variable-gap channel-cut crystals. <i>Optics Letters</i> , 2019, 44, 2582.	3.3	18
46	Application of an ePix100 detector for coherent scattering using a hard X-ray free-electron laser. <i>Journal of Synchrotron Radiation</i> , 2016, 23, 1171-1179.	2.4	17
47	Coherent X-rays as a new probe for the investigation of the dynamics of opaque colloidal suspensions. <i>Journal of Magnetism and Magnetic Materials</i> , 2005, 289, 47-49.	2.3	16
48	Probing heterogeneous dynamics of a repulsive colloidal glass by time resolved x-ray correlation spectroscopy. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 155104.	1.8	16
49	Hard x-ray delay line for x-ray photon correlation spectroscopy and jitter-free pump-probe experiments at LCLS. <i>Proceedings of SPIE</i> , 2012, , .	0.8	16
50	The cage elasticity and under-field structure of concentrated magnetic colloids probed by small angle X-ray scattering. <i>Soft Matter</i> , 2013, 9, 11480.	2.7	16
51	Surface ordering in a concentrated suspension of colloidal particles investigated by x-ray scattering methods. <i>Physical Review E</i> , 2001, 64, 061406.	2.1	15
52	Experience with the CSPAD during dedicated detector runs at LCLS. <i>Journal of Physics: Conference Series</i> , 2014, 493, 012011.	0.4	15
53	ePix100 camera: Use and applications at LCLS. <i>AIP Conference Proceedings</i> , 2016, , .	0.4	14
54	Pulse intensity characterization of the LCLS nanosecond double-bunch mode of operation. <i>Journal of Synchrotron Radiation</i> , 2018, 25, 642-649.	2.4	14

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55	Magnetic fluids with tunable interparticle interaction: monitoring the under-field local structure. <i>Magneto hydrodynamics</i> , 2012, 48, 415-426.	0.3	14
56	The X-ray Correlation Spectroscopy instrument at the Linac Coherent Light Source. <i>Journal of Physics: Conference Series</i> , 2013, 425, 212009.	0.4	13
57	Femtosecond electronic structure response to high intensity XFEL pulses probed by iron X-ray emission spectroscopy. <i>Scientific Reports</i> , 2020, 10, 16837.	3.3	13
58	Cobalt ferrite-silica core-shell colloids: a magnetic Yukawa system. <i>Applied Organometallic Chemistry</i> , 2004, 18, 520-522.	3.5	12
59	Structure and dynamics of complex liquids with magnetic dipole-dipole interactions by means of static and dynamic X-ray scattering. <i>Journal of Magnetism and Magnetic Materials</i> , 2005, 289, 54-57.	2.3	12
60	Field induced anisotropic cooperativity in a magnetic colloidal glass. <i>Soft Matter</i> , 2015, 11, 7165-7170.	2.7	12
61	Realizing split-pulse x-ray photon correlation spectroscopy to measure ultrafast dynamics in complex matter. <i>Physical Review Research</i> , 2020, 2, .	3.6	12
62	Time-resolved in situ visualization of the structural response of zeolites during catalysis. <i>Nature Communications</i> , 2020, 11, 5901.	12.8	11
63	The dynamic behavior of magnetic colloids in suspension. <i>Journal of Applied Crystallography</i> , 2007, 40, s250-s253.	4.5	9
64	Design and operation of a hard x-ray transmissive single-shot spectrometer at LCLS. <i>Journal of Physics: Conference Series</i> , 2013, 425, 052033.	0.4	9
65	A liquid jet setup for x-ray scattering experiments on complex liquids at free-electron laser sources. <i>Review of Scientific Instruments</i> , 2016, 87, 063905.	1.3	9
66	Nonuniform Flow Dynamics Probed by Nanosecond X-Ray Speckle Visibility Spectroscopy. <i>Physical Review Letters</i> , 2021, 127, 058001.	7.8	9
67	Measurement of self-diffusion constant with two-dimensional X-ray photon correlation spectroscopy. <i>Journal of Applied Crystallography</i> , 2007, 40, s34-s37.	4.5	8
68	Recent development of thin diamond crystals for X-ray FEL beam-sharing. <i>Proceedings of SPIE</i> , 2013, , .	0.8	8
69	Heterogeneous dynamics and ageing in a dense ferro-glass. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 204124.	1.8	7
70	Repulsive and attractive ferroglasses: a SAXS and XPCS study. <i>Brazilian Journal of Physics</i> , 2009, 39, 210-216.	1.4	7
71	Characterization of the LCLS "nanosecond two-bunch" mode for x-ray speckle visibility spectroscopy experiments. , 2017, , .		7
72	Disentangling transient charge order from structural dynamics contributions during coherent atomic motion studied by ultrafast resonant x-ray diffraction. <i>Physical Review B</i> , 2019, 99, .	3.2	7

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73	Double-pulse speckle contrast correlations with near Fourier transform limited free-electron laser light using hard X-ray split-and-delay. Scientific Reports, 2020, 10, 5054.	3.3	7
74	Measurement of the absolute number of photons of the hard X-ray beamline at the Linac Coherent Light Source. Journal of Synchrotron Radiation, 2019, 26, 320-327.	2.4	7
75	Characterization of the eLine ASICs in prototype detector systems for LCLS. , 2012, , .		6
76	A hard x-ray transmissive single-shot spectrometer for FEL sources. , 2012, , .		5
77	Ultra-thin Bragg crystals for LCLS beam-sharing operation. Proceedings of SPIE, 2012, , .	0.8	4
78	Experimental Measurements of Ultra-Thin Bragg Crystals for LCLS Beam-Sharing Operation. Journal of Physics: Conference Series, 2013, 425, 052002.	0.4	4
79	Studies of the ePix100 low-noise x-ray camera at SLAC. , 2014, , .		4
80	Intensity interferometry measurements with hard x-ray FEL pulses at the Linac Coherent Light Source. , 2014, , .		3
81	X-ray fluorescence correlation spectroscopy “a tool to study element-specific dynamics. Journal of Applied Crystallography, 2007, 40, s283-s285.	4.5	2
82	Design of a compact hard x-ray split-delay system based on variable-gap channelcut crystals. AIP Conference Proceedings, 2019, , .	0.4	2
83	Direct experimental observation of the gas density depression effect using a two-bunch X-ray FEL beam. Journal of Synchrotron Radiation, 2018, 25, 145-150.	2.4	2
84	Correlation spectroscopy with coherent X-rays: A new probe for the study of slow dynamics. , 1999, , .		1
85	Measurements at synchrotrons and FELs: Some differences observed with the CSPAD. , 2013, , .		1
86	Timepix detector at the X-ray Correlation Spectroscopy instrument at LCLS. Journal of Physics: Conference Series, 2013, 425, 062011.	0.4	1
87	Speckle correlation as a monitor of X-ray free-electron laser induced crystal lattice deformation. Journal of Synchrotron Radiation, 2020, 27, 1470-1476.	2.4	1
88	Single-shot beam profile diagnostics for x-ray FEL's using gas fluorescence. , 2017, , .		0
89	Design of a Multi-DOF Motion System for X-Ray Split and Delay. , 2017, , .		0
90	The LCLS X-ray Correlation Spectroscopy Instrument. , 2009, , .		0

#	ARTICLE	IF	CITATIONS
91	A detailed view of an ultrafast phase transition using femtosecond resonant x-ray diffraction. , 2014, , .		0
92	Higher order modes at FELs: a machine interpretation. , 2019, , .		0
93	Pulse power measurements and attenuator characterization of the hard X-ray beamline at the Linac Coherent Light Source. , 2019, , .		0