Felix LehmkÃ¼hler

List of Publications by Year
in descending order

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57 papers	1,380 citations	394421 19 h-index	361022 35 g-index
59 all docs	59 docs citations	59 times ranked	1764 citing authors

#	Article	IF	Citations
1	Diffusive dynamics during the high-to-low density transition in amorphous ice. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 8193-8198.	7.1	155
2	Single Shot Spatial and Temporal Coherence Properties of the SLAC Linac Coherent Light Source in the Hard X-Ray Regime. Physical Review Letters, 2012, 108, 024801.	7.8	115
3	Single Shot Coherence Properties of the Free-Electron Laser SACLA in the Hard X-ray Regime. Scientific Reports, 2014, 4, 5234.	3.3	69
4	The Carbon Dioxideâ^'Water Interface at Conditions of Gas Hydrate Formation. Journal of the American Chemical Society, 2009, 131, 585-589.	13.7	66
5	Coherent X-rays reveal the influence of cage effects on ultrafast water dynamics. Nature Communications, 2018, 9, 1917.	12.8	59
6	Structural order in plasmonic superlattices. Nature Communications, 2020, 11, 3821.	12.8	56
7	Towards ultrafast dynamics with split-pulse X-ray photon correlation spectroscopy at free electron laser sources. Nature Communications, 2018, 9, 1704.	12.8	55
8	Tetrahydrofuran Clathrate Hydrate Formation. Physical Review Letters, 2009, 103, 218301.	7.8	50
9	Correlated heterogeneous dynamics in glass-forming polymers. Physical Review E, 2015, 91, 042309.	2.1	39
10	Single shot speckle and coherence analysis of the hard X-ray free electron laser LCLS. Optics Express, 2013, 21, 24647.	3.4	37
11	From Femtoseconds to Hoursâ€"Measuring Dynamics over 18 Orders of Magnitude with Coherent X-rays. Applied Sciences (Switzerland), 2021, 11, 6179.	2.5	36
12	Detecting orientational order in model systems by X-ray cross-correlation methods. Journal of Applied Crystallography, 2014, 47, 1315-1323.	4.5	31
13	Ligand Layer Engineering To Control Stability and Interfacial Properties of Nanoparticles. Langmuir, 2016, 32, 7897-7907.	3.5	31
14	Emergence of anomalous dynamics in soft matter probed at the European XFEL. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 24110-24116.	7.1	31
15	Sequential Single Shot X-ray Photon Correlation Spectroscopy at the SACLA Free Electron Laser. Scientific Reports, 2015, 5, 17193.	3.3	30
16	Monitoring Nanocrystal Selfâ€Assembly in Real Time Using In Situ Smallâ€Angle Xâ€Ray Scattering. Small, 2019, 15, e1900438.	10.0	30
17	On the Spontaneous Formation of Clathrate Hydrates at Waterâ€"Guest Interfaces. Journal of Physical Chemistry C, 2012, 116, 8548-8553.	3.1	24
18	Recent Notable Approaches to Study Selfâ€Assembly of Nanoparticles with Xâ€Ray Scattering and Electron Microscopy. Particle and Particle Systems Characterization, 2021, 38, 2100087.	2.3	23

#	Article	IF	Citations
19	Tuning the Interaction of Nanoparticles from Repulsive to Attractive by Pressure. Journal of Physical Chemistry C, 2016, 120, 19856-19861.	3.1	19
20	Anisotropic and heterogeneous dynamics in an aging colloidal gel. Soft Matter, 2020, 16, 2864-2872.	2.7	19
21	The barium giant dipole resonance in barite: a study of soft X-ray absorption edges using hard X-rays. Journal of Analytical Atomic Spectrometry, 2008, 23, 807.	3.0	18
22	Intramolecular structure and energetics in supercooled water down to 255 K. Physical Chemistry Chemical Physics, 2016, 18, 6925-6930.	2.8	18
23	Anomalous Dynamics of Concentrated Silica-PNIPAm Nanogels. Journal of Physical Chemistry Letters, 2019, 10, 5231-5236.	4.6	18
24	Structure beyond pair correlations: X-ray cross-correlation from colloidal crystals. Journal of Applied Crystallography, 2016, 49, 2046-2052.	4.5	18
25	Dynamics of soft nanoparticle suspensions at hard X-ray FEL sources below the radiation-damage threshold. IUCrJ, 2018, 5, 801-807.	2.2	18
26	Structure and Stability of PEGâ€•and Mixed PEGâ€Layerâ€Coated Nanoparticles at High Particle Concentrations Studied In Situ by Smallâ€Angle Xâ€Ray Scattering. Particle and Particle Systems Characterization, 2018, 35, 1700319.	2.3	17
27	Anomalous Energetics in Tetrahydrofuran Clathrate Hydrate Revealed by X-ray Compton Scattering. Journal of Physical Chemistry Letters, 2010, 1, 2832-2836.	4.6	16
28	Nano-beam X-ray microscopy of dried colloidal films. Soft Matter, 2015, 11, 5465-5472.	2.7	16
29	Coexistence of hcp and bct Phases during In Situ Superlattice Assembly from Faceted Colloidal Nanocrystals. Journal of Physical Chemistry Letters, 2019, 10, 6331-6338.	4.6	15
30	Pressure-Stimulated Supercrystal Formation in Nanoparticle Suspensions. Journal of Physical Chemistry Letters, 2018, 9, 4720-4724.	4.6	14
31	Microsecond hydrodynamic interactions in dense colloidal dispersions probed at the European XFEL. IUCrJ, 2021, 8, 775-783.	2.2	14
32	Heterogeneous local order in self-assembled nanoparticle films revealed by X-ray cross-correlations. IUCrJ, 2018, 5, 354-360.	2.2	14
33	Temperature-Induced Structural Changes of Tetrahydrofuran Clathrate and of the Liquid Water/Tetrahydrofuran Mixture. Journal of Physical Chemistry C, 2011, 115, 21009-21015.	3.1	12
34	The phase diagram of colloidal silicaâ€“PNIPAm coreâ€“shell nanogels. Soft Matter, 2020, 16, 466-475.	2.7	12
35	Colloidal crystallite suspensions studied by high pressure small angle x-ray scattering. Journal of Chemical Physics, 2016, 144, 084903.	3.0	11
36	Analysis Strategies for MHz XPCS at the European XFEL. Applied Sciences (Switzerland), 2021, 11, 8037.	2.5	11

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37	An in situ and real time study of the formation of CdSe NCs. Nanoscale, 2020, 12, 22928-22934.	5.6	11
38	X-ray spectroscopy with variable line spacing based on reflection zone plate optics. Optics Letters, 2018, 43, 4390.	3.3	10
39	Slowing down of dynamics and orientational order preceding crystallization in hard-sphere systems. Science Advances, 2020, 6, .	10.3	10
40	A liquid jet setup for x-ray scattering experiments on complex liquids at free-electron laser sources. Review of Scientific Instruments, 2016, 87, 063905.	1.3	9
41	Standing-wave excited photoemission experiments on Si/MoSi2 multilayer mirrors in the soft x-ray regime: An analytical modeling approach. Journal of Applied Physics, 2009, 106, 124906.	2.5	8
42	Microsecond Structural Rheology. Journal of Physical Chemistry Letters, 2017, 8, 3581-3585.	4.6	8
43	Plasmonic Supercrystals with a Layered Structure Studied by a Combined TEMâ€SAXSâ€XCCA Approach. Advanced Materials Interfaces, 2020, 7, 2000919.	3.7	8
44	Real-Time X-ray Scattering Discovers Rich Phase Behavior in PbS Nanocrystal Superlattices during In Situ Assembly. Chemistry of Materials, 2021, 33, 6553-6563.	6.7	8
45	A sample cell to study hydrate formation with x-ray scattering. Review of Scientific Instruments, 2009, 80, 026103.	1.3	7
46	The Ba 4dâ€“4f giant dipole resonance in complex Ba/Si compounds. Journal of Physics B: Atomic, Molecular and Optical Physics, 2014, 47, 045102.	1.5	7
47	Temperature dependence of the hydrogen bond network in trimethylamine N-oxide and guanidine hydrochlorideâ€“water solutions. Physical Chemistry Chemical Physics, 2017, 19, 28470-28475.	2.8	7
48	Kinetics of pressure-induced nanocrystal superlattice formation. Physical Chemistry Chemical Physics, 2019, 21, 21349-21354.	2.8	7
49	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
50	In situ small-angle X-ray scattering environment for studying nanocrystal self-assembly upon controlled solvent evaporation. Review of Scientific Instruments, 2019, 90, 036103.	1.3	6
51	Shear-induced ordering in liquid microjets seen by x-ray cross correlation analysis. Structural Dynamics, 2020, 7, 054901.	2.3	5
52	Influence of TMAO as coâ€solvent on the gelation of silicaâ€PNIPAm coreâ€shell nanogels at intermediate volume fractions. ChemPhysChem, 2020, 21, 1318-1325.	2.1	5
53	Glass-liquid and glass-gel transitions of soft-shell particles. Physical Review E, 2021, 104, L012602.	2.1	5
54	Local orientational order in self-assembled nanoparticle films: the role of ligand composition and salt. Journal of Applied Crystallography, 2019, 52, 777-782.	4.5	5

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55	Supercrystal Formation of Gold Nanorods by High Pressure Stimulation. Journal of Physical Chemistry C, 2019, 123, 29994-30000.	3.1	4
56	Determination of microscopic interaction constants by X-ray reflectivity measurements. Fluid Phase Equilibria, 2008, 268, 95-99.	2.5	3
57	Concentration-Induced Wetting Transition in Waterâ€“Tetrahydrofuranâ€“Isobutane Systems. Journal of Physical Chemistry C, 2011, 115, 18235-18238.	3.1	3