Holger Lange

List of Publications by Year
in descending order

53	1,719	24	40
papers	citations	h-index	g-index
		293460	325983

54	54	54	3244
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Unsupervised learning approaches to characterizing heterogeneous samples using X-ray single-particle imaging. IUCrJ, 2022, 9, 204-214.	1.0	9
2	Carrier localization in zero-dimensional and one-dimensional CdSeâ€"CdS heterostructures. Journal of Chemical Physics, 2022, 156, 061102.	1.2	1
3	Full-Spectrum InP-Based Quantum Dots with Near-Unity Photoluminescence Quantum Efficiency. ACS Nano, 2022, 16, 9701-9712.	7.3	44
4	Surface-Enhanced Raman Scattering and Surface-Enhanced Infrared Absorption by Plasmon Polaritons in Three-Dimensional Nanoparticle Supercrystals. ACS Nano, 2021, 15, 5523-5533.	7.3	58
5	Size-Dependent Electronâ€"Phonon Coupling in Monocrystalline Gold Nanoparticles. ACS Photonics, 2021, 8, 752-757.	3.2	23
6	3D diffractive imaging of nanoparticle ensembles using an x-ray laser. Optica, 2021, 8, 15.	4.8	48
7	Postdeposition Ligand Exchange Allows Tuning the Transport Properties of Largeâ€Scale CuInSe 2 Quantum Dot Solids. Advanced Optical Materials, 2020, 8, 1901058.	3.6	14
8	Spectroscopic Effects of Lattice Strain in InP/ZnSe and InP/ZnS Nanocrystals. Journal of Physical Chemistry C, 2020, 124, 22839-22844.	1.5	23
9	Deep strong lightâ€"matter coupling in plasmonic nanoparticle crystals. Nature, 2020, 583, 780-784.	13.7	144
10	Structural order in plasmonic superlattices. Nature Communications, 2020, 11, 3821.	5.8	56
11	Plasmonic Supercrystals with a Layered Structure Studied by a Combined TEMâ€SAXSâ€XCCA Approach. Advanced Materials Interfaces, 2020, 7, 2000919.	1.9	8
12	Experimental Evidence for Nonthermal Contributions to Plasmon-Enhanced Electrochemical Oxidation Reactions. ACS Catalysis, 2020, 10, 2345-2353.	5.5	35
13	Dark plasmon modes for efficient hot electron generation in multilayers of gold nanoparticles. Journal of Chemical Physics, 2020, 152, 064710.	1.2	9
14	Impact of substrate on tip-enhanced Raman spectroscopy: A comparison between field-distribution simulations and graphene measurements. Physical Review Research, 2020, 2, .	1.3	14
15	Strain in InP/ZnSe, S core/shell quantum dots from lattice mismatch and shell thicknessâ€"Material stiffness influence. Journal of Chemical Physics, 2019, 151, 154704.	1.2	22
16	Supercrystal Formation of Gold Nanorods by High Pressure Stimulation. Journal of Physical Chemistry C, 2019, 123, 29994-30000.	1.5	4
17	Kinetics of pressure-induced nanocrystal superlattice formation. Physical Chemistry Chemical Physics, 2019, 21, 21349-21354.	1.3	7
18	Direct optical excitation of dark plasmons for hot electron generation. Faraday Discussions, 2019, 214, 159-173.	1.6	15

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19	Phonon-Assisted Auger Process Enables Ultrafast Charge Transfer in CdSe Quantum Dot/Organic Molecule. Journal of Physical Chemistry C, 2019, 123, 17127-17135.	1.5	4
20	Resonant Energy Transfer can Trigger Multiexciton Recombination in Dense Quantum Dot Ensembles. Small, 2019, 15, 1803798.	5.2	7
21	Local orientational order in self-assembled nanoparticle films: the role of ligand composition and salt. Journal of Applied Crystallography, 2019, 52, 777-782.	1.9	5
22	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.	1.2	17
23	Dark Interlayer Plasmons in Colloidal Gold Nanoparticle Bi- and Few-Layers. ACS Photonics, 2018, 5, 3962-3969.	3.2	28
24	Pressure-Stimulated Supercrystal Formation in Nanoparticle Suspensions. Journal of Physical Chemistry Letters, 2018, 9, 4720-4724.	2.1	14
25	Strain Engineering in InP/(Zn,Cd)Se Core/Shell Quantum Dots. Chemistry of Materials, 2018, 30, 4393-4400.	3.2	43
26	Heterogeneous local order in self-assembled nanoparticle films revealed by X-ray cross-correlations. IUCrJ, 2018, 5, 354-360.	1.0	14
27	Excitation-Dependence of Plasmon-Induced Hot Electrons in Gold Nanoparticles. Journal of Physical Chemistry Letters, 2017, 8, 4925-4929.	2.1	70
28	Size-Dependent Phase Transfer Functionalization of Gold Nanoparticles To Promote Well-Ordered Self-Assembly. Langmuir, 2017, 33, 14437-14444.	1.6	31
29	Impact of the Crosslinkerâ€™s Molecular Structure on the Aggregation of Gold Nanoparticles. Zeitschrift Fur Physikalische Chemie, 2017, 231, 19-31.	1.4	6
30	Functional-Group-Dependent Formation of Bioactive Fluorescent-Plasmonic Nanohybrids. Journal of Physical Chemistry C, 2016, 120, 25732-25741.	1.5	3
31	Tuning the Interaction of Nanoparticles from Repulsive to Attractive by Pressure. Journal of Physical Chemistry C, 2016, 120, 19856-19861.	1.5	19
32	Ligand Layer Engineering To Control Stability and Interfacial Properties of Nanoparticles. Langmuir, 2016, 32, 7897-7907.	1.6	31
33	Metalâ€“Semiconductor Nanoparticle Hybrids Formed by Self-Organization: A Platform to Address Excitonâ€“Plasmon Coupling. Nano Letters, 2016, 16, 4811-4818.	4.5	37
34	Effective PEGylation of gold nanorods. Nanoscale, 2016, 8, 7296-7308.	2.8	50
35	Solidâ€State Chemistry on the Nanoscale: Ion Transport through Interstitial Sites or Vacancies?. Angewandte Chemie - International Edition, 2015, 54, 14183-14186.	7.2	37
36	Clustering of CdSe/CdS Quantum Dot/Quantum Rods into Micelles Can Form Bright, Non-blinking, Stable, and Biocompatible Probes. Langmuir, 2015, 31, 9441-9447.	1.6	18

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37	â€œFlashâ€•Synthesis of CdSe/CdS Coreâ€“Shell Quantum Dots. Chemistry of Materials, 2014, 26, 1154-1160.	3.2	124
38	Homogeneously Alloyed CdSe1â€“xSx Quantum Dots (0 â‰ x â‰ 1): An Efficient Synthesis for Full Optical Tunability. Chemistry of Materials, 2013, 25, 2388-2390.	3.2	58
39	Radical Initiated Reactions on Biocompatible CdSe-Based Quantum Dots: Ligand Cross-Linking, Crystal Annealing, and Fluorescence Enhancement. Journal of Physical Chemistry C, 2013, 117, 8570-8578.	1.5	21
40	Tunable Plasmon Coupling in Distance-Controlled Gold Nanoparticles. Langmuir, 2012, 28, 8862-8866.	1.6	85
41	Interfacial Alloying in CdSe/CdS Heteronanocrystals: A Raman Spectroscopy Analysis. Chemistry of Materials, 2012, 24, 311-318.	3.2	146
42	Formation of gold nanoparticles in polymeric nanowires by low-temperature thermolysis of gold mesitylene. Journal of Materials Chemistry, 2012, 22, 684-690.	6.7	6
43	Adsorption Behavior of 4-Methoxypyridine on Gold Nanoparticles. Langmuir, 2011, 27, 7258-7264.	1.6	18
44	Raman spectroscopy of PbTe/CdTe nanocrystals. Physica Status Solidi (B): Basic Research, 2011, 248, 2748-2750.	0.7	10
45	Size-dependence of the anharmonicities in the vibrational potential of colloidal CdSe nanocrystals. Solid State Communications, 2011, 151, 67-70.	0.9	28
46	Optical phonons in colloidal CdSe nanorods. Physica Status Solidi (B): Basic Research, 2010, 247, 2488-2497.	0.7	21
47	Raman investigation of strain effects in CdSe nanorods. Physica Status Solidi (B): Basic Research, 2009, 246, 2817-2819.	0.7	9
48	Geometry dependence of the phonon modes in CdSe nanorods. Nanotechnology, 2009, 20, 045705.	1.3	53
49	Thin-walled Er3+:Y2O3 nanotubes showing up-converted fluorescence. Physical Chemistry Chemical Physics, 2009, 11, 3623.	1.3	9
50	Direct Observation of the Radial Breathing Mode in CdSe Nanorods. Nano Letters, 2008, 8, 4614-4617.	4.5	36
51	Experimental investigation of exciton-LO-phonon couplings in CdSe/ZnS core/shell nanorods. Physical Review B, 2008, 77, .	1.1	51
52	Effect of ZnS shell on the Raman spectra from CdSe nanorods. Physica Status Solidi - Rapid Research Letters, 2007, 1, 274-276.	1.2	25
53	Stimulated emission from ZnO nanorods. Physica Status Solidi (B): Basic Research, 2006, 243, 853-857.	0.7	47