Lars Ehm

List of Publications by Year
in descending order

57 papers	2,134 citations	331538 21 h-index	223716 46 g-index
59 all docs	59 docs citations	59 times ranked	3484 citing authors

#	Article	IF	Citations
1	Anomalous Lattice Thermal Conductivity in Rocksalt IIAâ€“VIA Compounds. ACS Applied Energy Materials, 2022, 5, 882-896.	2.5	8
2	X-ray Free Electron Laser-Induced Synthesis of Îµ-Iron Nitride at High Pressures. Journal of Physical Chemistry Letters, 2021, 12, 3246-3252.	2.1	14
3	Novel experimental setup for megahertz X-ray diffraction in a diamond anvil cell at the High Energy Density (HED) instrument of the European X-ray Free-Electron Laser (EuXFEL). Journal of Synchrotron Radiation, 2021, 28, 688-706.	1.0	21
4	Pressure-Induced Martensitic Phase Transition and Low Lattice Thermal Conductivity of SrClF. Journal of Physical Chemistry C, 2021, 125, 17261-17270.	1.5	9
5	Enhanced Formation of Solvent-Shared Ion Pairs in Aqueous Calcium Perchlorate Solution toward Saturated Concentration or Deep Supercooling Temperature and Its Effects on the Water Structure. Journal of Physical Chemistry B, 2019, 123, 9654-9667.	1.2	8
6	First synthesis of poly(furfuryl) alcohol precursor-based porous carbon beads as an efficient adsorbent for volatile organic compounds. Chemical Engineering Journal, 2019, 373, 365-374.	6.6	28
7	Structural Chemistry of Akdalaite, Al10O14(OH)2, the Isostructural Aluminum Analogue of Ferrihydrite. Crystals, 2019, 9, 246.	1.0	7
8	Pressure-induced amorphization in plagioclase feldspars: A time-resolved powder diffraction study during rapid compression. Earth and Planetary Science Letters, 2019, 507, 166-174.	1.8	28
9	Synthesis and characterization of polycrystalline KAlSi3O8 hollandite [liebermannite]: Sound velocities vs. pressure to 13â€…GPa at room temperature. Comptes Rendus - Geoscience, 2019, 351, 113-120.	0.4	8
10	Experimental impact cratering: A summary of the major results of the <scp>MEMIN</scp> research unit. Meteoritics and Planetary Science, 2018, 53, 1543-1568.	0.7	25
11	Phase transitions of Î±â€quartz at elevated temperatures under dynamic compression using a membraneâ€driven diamond anvil cell: Clues to impact cratering?. Meteoritics and Planetary Science, 2018, 53, 1687-1695.	0.7	7
12	Theoretical and Experimental Investigations into Novel Oxynitride Discovery in the GaN-TiO2 System at High Pressure. Crystals, 2018, 8, 15.	1.0	5
13	Iodine in Metalâ€“Organic Frameworks at High Pressure. Journal of Physical Chemistry A, 2018, 122, 6109-6117.	1.1	26
14	Highâ€pressure phase transitions of Î±â€quartz under nonhydrostatic dynamic conditions: A reconnaissance study at <scp>PETRA III</scp>. Meteoritics and Planetary Science, 2017, 52, 1465-1474.	0.7	15
15	High-pressure pair distribution function (PDF) measurement using high-energy focused x-ray beam. AIP Conference Proceedings, 2016, , .	0.3	0
16	Absolute x-ray energy calibration and monitoring using a diffraction-based method. AIP Conference Proceedings, 2016, , .	0.3	0
17	High-energy X-ray focusing and high-pressure pair distribution function measurement. AIP Conference Proceedings, 2016, , .	0.3	0
18	High-energy X-ray focusing and applications to pair distribution function investigation of Pt and Au nanoparticles at high pressures. Scientific Reports, 2016, 6, 21434.	1.6	18

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19	Maskelynite formation via solidâ€state transformation: Evidence of infrared and Xâ€ray anisotropy. Journal of Geophysical Research E: Planets, 2015, 120, 570-587.	1.5	53
20	Understanding the Adsorption Mechanism of Xe and Kr in a Metalâ€“Organic Framework from X-ray Structural Analysis and First-Principles Calculations. Journal of Physical Chemistry Letters, 2015, 6, 1790-1794.	2.1	38
21	Pressure-induced stiffness of Au nanoparticles to 71â€‰GPa under quasi-hydrostatic loading. Journal of Physics Condensed Matter, 2015, 27, 485303.	0.7	14
22	High pressure and multiferroics materials: a happy marriage. IUCrJ, 2014, 1, 590-603.	1.0	43
23	Polyhedral units and network connectivity in GeO2 glass at high pressure: An X-ray total scattering investigation. Applied Physics Letters, 2014, 105, .	1.5	21
24	Determination of the Crystal Structure of Hexaphenyldisilane from Powder Diffraction Data and Its Thermodynamic Properties. Crystal Growth and Design, 2014, 14, 2937-2944.	1.4	7
25	Pressure-Induced Phase Transitions and Correlation between Structure and Superconductivity in Iron-Based Superconductor Ce(O_{0.84}F_{0.16})FeAs. Inorganic Chemistry, 2013, 52, 8067-8073.	1.9	6
26	High-pressure phase transitions, amorphization, and crystallization behaviors in Bi₂Se₃. Journal of Physics Condensed Matter, 2013, 25, 125602.	0.7	50
27	Study of liquid gallium at high pressure using synchrotron x-ray. Journal of Applied Physics, 2012, 111, .	1.1	16
28	Î²â€diopside, a new ultrahighâ€pressure polymorph of CaMgSi₂O₆with sixâ€coordinated silicon. Geophysical Research Letters, 2012, 39, .	1.5	22
29	Pressure-Induced Disordered Substitution Alloy in Sb₂Te₃. Inorganic Chemistry, 2011, 50, 11291-11293.	1.9	70
30	Evidence of tetragonal nanodomains in the high-pressure polymorph of BaTiO3. Applied Physics Letters, 2011, 98, .	1.5	20
31	Quantitative measurements of phase transitions in nano- and glassy materials. Journal of Physics: Conference Series, 2010, 215, 012021.	0.3	0
32	Raman spectroscopic study of PbCO3 at high pressures and temperatures. Physics and Chemistry of Minerals, 2010, 37, 45-56.	0.3	32
33	Guest disorder and high pressure behavior of argon hydrates. Chemical Physics Letters, 2010, 485, 104-109.	1.2	14
34	Evidence for the existence of a PbCO₃-II phase from high pressure X-ray measurements. Zeitschrift FÃ¼r Kristallographie, 2010, 225, 146-152.	1.1	10
35	High-pressure behavior of otavite (CdCO3). Journal of Alloys and Compounds, 2010, 508, 251-257.	2.8	28
36	Effect of H2O on upper mantle phase transitions in MgSiO3: Is the depth of the seismic X-discontinuity an indicator of mantle water content?. Physics of the Earth and Planetary Interiors, 2010, 183, 234-244.	0.7	33

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37	High-Pressure Research at the National Synchrotron Light Source. Synchrotron Radiation News, 2010, 23, 24-30.	0.2	3
38	Towards a better understanding of the structure of nano-minerals at ambient and extreme conditions.. , 2009, , .		1
39	Advances and synergy of high-pressure sciences at synchrotron sources. Journal of Synchrotron Radiation, 2009, 16, 697-698.	1.0	4
40	Structural changes in nanocrystalline mackinawite (FeS) at high pressure. Journal of Applied Crystallography, 2009, 42, 15-21.	1.9	28
41	Structural Characteristics of Synthetic Amorphous Calcium Carbonate. Chemistry of Materials, 2008, 20, 4720-4728.	3.2	210
42	Studies of local and intermediate range structure in crystalline and amorphous materials at high pressure using high-energy X-rays. Powder Diffraction, 2007, 22, 108-112.	0.4	28
43	Pressure induced phase transition in Fe0.47NbS2 studied by powder X-ray diffraction. Journal of Alloys and Compounds, 2007, 429, 82-86.	2.8	12
44	Similarities in 2- and 6-Line Ferrihydrite Based on Pair Distribution Function Analysis of X-ray Total Scattering. Chemistry of Materials, 2007, 19, 1489-1496.	3.2	131
45	The Structure of Ferrihydrite, a Nanocrystalline Material. Science, 2007, 316, 1726-1729.	6.0	754
46	Crystal structure of the Chevrel phaseSnMo6S8at high pressure. Physical Review B, 2005, 72, .	1.1	3
47	Structure of Fe0.47NbS2: corrigendum. Journal of Alloys and Compounds, 2005, 395, L1-L2.	2.8	4
48	High-pressure and high-temperature powder diffraction on molybdenum diphosphide, MoP2. Zeitschrift Fur Kristallographie - Crystalline Materials, 2004, 219, 309-313.	0.4	6
49	Pressure-induced structural phase transition in the IVâ€“VI semiconductor SnS. Journal of Physics Condensed Matter, 2004, 16, 3545-3554.	0.7	62
50	The high-pressure ?/? phase transition in lead sulphide (PbS). European Physical Journal B, 2003, 31, 297-303.	0.6	50
51	High-pressure X-ray diffraction study on Î±-PbF2. Journal of Physics and Chemistry of Solids, 2003, 64, 919-925.	1.9	21
52	Phenomenological theory of the reconstructive phase transition between the NaCl and CsCl structure types. Physical Review B, 2003, 67, .	1.1	67
53	The pseudo-binary mercury chalcogenide alloy HgSe0.7S0.3at high pressure: a mechanism for the zinc blende to cinnabar reconstructive phase transition. Journal of Physics Condensed Matter, 2003, 15, 2339-2349.	0.7	4
54	The high-pressure behaviour of 3R-NbS2. Zeitschrift Fur Kristallographie - Crystalline Materials, 2002, 217, 522-524.	0.4	6

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55	X-ray powder diffraction and 57Fe MÃ¶ssbauer spectroscopy study on Fe0.47NbS2. Journal of Alloys and Compounds, 2002, 339, 30-34.	2.8	6
56	The High Pressure Behaviour of SnS2: X-Ray Powder Diffraction and Quantum Mechanical Calculations up to 10 GPa. Physica Status Solidi (B): Basic Research, 2001, 223, 435-440.	0.7	19
57	Estimating intensity errors of powder diffraction data from area detectors. High Pressure Research, 2000, 17, 315-323.	0.4	11