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	The Structure of Ferrihydrite, a Nanocrystalline Material. Science, 2007, 316, 1726-1729.	6.0	754
2	Structural Characteristics of Synthetic Amorphous Calcium Carbonate. Chemistry of Materials, 2008, 20, 4720-4728.	3.2	210
3	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
4	Pressure-Induced Disordered Substitution Alloy in Sb₂Te₃. Inorganic Chemistry, 2011, 50, 11291-11293.	1.9	70
5	Phenomenological theory of the reconstructive phase transition between the NaCl and CsCl structure types. Physical Review B, 2003, 67, .	1.1	67
6	Pressure-induced structural phase transition in the IVâ€“VI semiconductor SnS. Journal of Physics Condensed Matter, 2004, 16, 3545-3554.	0.7	62
7	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
8	The high-pressure ?/? phase transition in lead sulphide (PbS). European Physical Journal B, 2003, 31, 297-303.	0.6	50
9	High-pressure phase transitions, amorphization, and crystallization behaviors in Bi₂Se₃. Journal of Physics Condensed Matter, 2013, 25, 125602.	0.7	50
10	High pressure and multiferroics materials: a happy marriage. IUCrJ, 2014, 1, 590-603.	1.0	43
11	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
12	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
13	Raman spectroscopic study of PbCO3 at high pressures and temperatures. Physics and Chemistry of Minerals, 2010, 37, 45-56.	0.3	32
14	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
15	Structural changes in nanocrystalline mackinawite (FeS) at high pressure. Journal of Applied Crystallography, 2009, 42, 15-21.	1.9	28
16	High-pressure behavior of otavite (CdCO3). Journal of Alloys and Compounds, 2010, 508, 251-257.	2.8	28
17	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
18	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

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19	Iodine in Metalâ€“Organic Frameworks at High Pressure. Journal of Physical Chemistry A, 2018, 122, 6109-6117.	1.1	26
20	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
21	Î²â€diopside, a new ultrahighâ€pressure polymorph of CaMgSi₂O₆with sixâ€coordinated silicon. Geophysical Research Letters, 2012, 39, .	1.5	22
22	High-pressure X-ray diffraction study on Î±-PbF2. Journal of Physics and Chemistry of Solids, 2003, 64, 919-925.	1.9	21
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	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
25	Evidence of tetragonal nanodomains in the high-pressure polymorph of BaTiO3. Applied Physics Letters, 2011, 98, .	1.5	20
26	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
27	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
28	Study of liquid gallium at high pressure using synchrotron x-ray. Journal of Applied Physics, 2012, 111, .	1.1	16
29	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
30	Guest disorder and high pressure behavior of argon hydrates. Chemical Physics Letters, 2010, 485, 104-109.	1.2	14
31	Pressure-induced stiffness of Au nanoparticles to 71â€‰GPa under quasi-hydrostatic loading. Journal of Physics Condensed Matter, 2015, 27, 485303.	0.7	14
32	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
33	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
34	Estimating intensity errors of powder diffraction data from area detectors. High Pressure Research, 2000, 17, 315-323.	0.4	11
35	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
36	Pressure-Induced Martensitic Phase Transition and Low Lattice Thermal Conductivity of SrClF. Journal of Physical Chemistry C, 2021, 125, 17261-17270.	1.5	9

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37	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
38	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
39	Anomalous Lattice Thermal Conductivity in Rocksalt IIAâ€“VIA Compounds. ACS Applied Energy Materials, 2022, 5, 882-896.	2.5	8
40	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
41	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
42	Structural Chemistry of Akdalaite, Al10O14(OH)2, the Isostructural Aluminum Analogue of Ferrihydrite. Crystals, 2019, 9, 246.	1.0	7
43	The high-pressure behaviour of 3R-NbS2. Zeitschrift Fur Kristallographie - Crystalline Materials, 2002, 217, 522-524.	0.4	6
44	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
45	High-pressure and high-temperature powder diffraction on molybdenum diphosphide, MoP2. Zeitschrift Fur Kristallographie - Crystalline Materials, 2004, 219, 309-313.	0.4	6
46	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
47	Theoretical and Experimental Investigations into Novel Oxynitride Discovery in the GaN-TiO2 System at High Pressure. Crystals, 2018, 8, 15.	1.0	5
48	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
49	Structure of Fe0.47NbS2: corrigendum. Journal of Alloys and Compounds, 2005, 395, L1-L2.	2.8	4
50	Advances and synergy of high-pressure sciences at synchrotron sources. Journal of Synchrotron Radiation, 2009, 16, 697-698.	1.0	4
51	Crystal structure of the Chevrel phaseSnMo6S8at high pressure. Physical Review B, 2005, 72, .	1.1	3
52	High-Pressure Research at the National Synchrotron Light Source. Synchrotron Radiation News, 2010, 23, 24-30.	0.2	3
53	Towards a better understanding of the structure of nano-minerals at ambient and extreme conditions.. , 2009, , .		1
54	Quantitative measurements of phase transitions in nano- and glassy materials. Journal of Physics: Conference Series, 2010, 215, 012021.	0.3	0

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55	High-pressure pair distribution function (PDF) measurement using high-energy focused x-ray beam. AIP Conference Proceedings, 2016, , .	0.3	0
56	Absolute x-ray energy calibration and monitoring using a diffraction-based method. AIP Conference Proceedings, 2016, , .	0.3	0
57	High-energy X-ray focusing and high-pressure pair distribution function measurement. AIP Conference Proceedings, 2016, , .	0.3	0