

Vladimir Dmitriev

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/10986131/publications.pdf>

Version: 2024-02-01

39
papers

1,981
citations

331670

21
h-index

302126

39
g-index

42
all docs

42
docs citations

42
times ranked

2435
citing authors

#	ARTICLE	IF	CITATIONS
1	Giant negative linear compressibility in zinc dicyanoaurate. <i>Nature Materials</i> , 2013, 12, 212-216.	27.5	217
2	Large breathing of the MOF MIL-47(VIV) under mechanical pressure: a joint experimental modelling exploration. <i>Chemical Science</i> , 2012, 3, 1100.	7.4	176
3	Porous and Dense Magnesium Borohydride Frameworks: Synthesis, Stability, and Reversible Absorption of Guest Species. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 11162-11166.	13.8	175
4	Colossal Pressure-Induced Lattice Expansion of Graphite Oxide in the Presence of Water. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 8268-8271.	13.8	109
5	High-Pressure Polymorphism as a Step towards Destabilization of LiBH_4 . <i>Angewandte Chemie - International Edition</i> , 2008, 47, 529-532.	13.8	106
6	Light metal borohydrides: crystal structures and beyond. <i>Zeitschrift für Kristallographie</i> , 2008, 223, .	1.1	100
7	Homologous Critical Behavior in the Molecular Frameworks $\text{Zn}(\text{CN})_2$ and $\text{Cd}(\text{imidazolate})_2$. <i>Journal of the American Chemical Society</i> , 2013, 135, 7610-7620.	13.7	85
8	Synthesis of an orthorhombic high pressure boron phase. <i>Science and Technology of Advanced Materials</i> , 2008, 9, 044209.	6.1	78
9	Pressure-Induced Insertion of Liquid Alcohols into Graphite Oxide Structure. <i>Journal of the American Chemical Society</i> , 2009, 131, 18445-18449.	13.7	74
10	In situ pressure-induced solid-state amorphization in $\text{Sm}_2(\text{MoO}_4)_3$, $\text{Eu}_2(\text{MoO}_4)_3$ and $\text{Gd}_2(\text{MoO}_4)_3$ crystals: chemical decomposition scenario. <i>Journal of Physics and Chemistry of Solids</i> , 2003, 64, 307-312.	4.0	69
11	Compression behavior of nanocrystalline anatase TiO_2 . <i>Solid State Communications</i> , 2003, 125, 111-115.	1.9	66
12	Impact of the Metal Centre and Functionalization on the Mechanical Behaviour of MIL-53 Metal-Organic Frameworks. <i>European Journal of Inorganic Chemistry</i> , 2016, 2016, 4424-4429.	2.0	60
13	High-pressure phase and transition phenomena in ammonia borane NH_3BH_3 : x-ray diffraction, Landau theory, and <i>ab initio</i> calculations. <i>Physical Review B</i> , 2009, 79, .	3.2	59
14	Nanomechanical and Structural Properties of Native Cellulose Under Compressive Stress. <i>Biomacromolecules</i> , 2011, 12, 2178-2183.	5.4	57
15	Exploration of the mechanical behavior of metal organic frameworks UiO-66(Zr) and MIL-125(Ti) and their NH_2 -functionalized versions. <i>Dalton Transactions</i> , 2016, 45, 4283-4288.	3.3	53
16	Pressure-induced over-hydration and water ordering in gismondine: A synchrotron powder diffraction study. <i>American Mineralogist</i> , 2008, 93, 1393-1403.	1.9	32
17	Size effects on the structure and phase transition behavior of baddeleyite TiO_2 . <i>Solid State Communications</i> , 2005, 134, 541-546.	1.9	30
18	Pressure-induced structural deformation and elastic behavior of wairakite. <i>American Mineralogist</i> , 2008, 93, 53-62.	1.9	24

#	ARTICLE	IF	CITATIONS
19	Elastic behavior of MFI-type zeolites: 1-Compressibility of Na-ZSM-5 in penetrating and non-penetrating media. <i>Microporous and Mesoporous Materials</i> , 2011, 142, 696-707.	4.4	24
20	Decomposition of LiGdF ₄ scheelite at high pressures. <i>Journal of Physics Condensed Matter</i> , 2004, 16, 7779-7786.	1.8	22
21	Pressure-induced water intrusion in FER-type zeolites and the influence of extraframework species on structural deformations. <i>Microporous and Mesoporous Materials</i> , 2014, 191, 27-37.	4.4	22
22	Pressure-induced tricritical phase transition from the scheelite structure to the fergusonite structure in LiLuF ₄ . <i>Journal of Physics Condensed Matter</i> , 2005, 17, 763-770.	1.8	20
23	Compressibility and crystal-fluid interactions in all-silica ferrierite at high pressure. <i>Microporous and Mesoporous Materials</i> , 2015, 218, 42-54.	4.4	20
24	Structural and Mechanical Properties of TTR105-115 Amyloid Fibrils from Compression Experiments. <i>Biophysical Journal</i> , 2011, 100, 193-197.	0.5	19
25	Elastic behavior of MFI-type zeolites: 3 Compressibility of silicalite and mutinaite. <i>Journal of Solid State Chemistry</i> , 2012, 191, 201-212.	2.9	19
26	High-Pressure Study of Mn(BH ₄) ₂ Reveals a Stable Polymorph with High Hydrogen Density. <i>Chemistry of Materials</i> , 2016, 28, 274-283.	6.7	17
27	Cation Size and Anion Anisotropy in Structural Chemistry of Metal Borohydrides. The Peculiar Pressure Evolution of RbBH ₄ . <i>Inorganic Chemistry</i> , 2010, 49, 5285-5292.	4.0	16
28	Bulk Silicon Crystals with the High Boron Content, Si _{1-x} B _x : Two Semiconductors Form an Unusual Metal. <i>Chemistry of Materials</i> , 2014, 26, 5274-5281.	6.7	15
29	Unravelling the High-Pressure Behaviour of Dye-Zeolite L Hybrid Materials. <i>Crystals</i> , 2018, 8, 79.	2.2	15
30	Elastic behavior and high pressure-induced phase transition in chabazite: New data from a natural sample from Nova Scotia. <i>Microporous and Mesoporous Materials</i> , 2013, 170, 52-61.	4.4	13
31	Compressibility of microporous materials with CHA topology: 2. ALPO-34. <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2012, 227, 514-521.	0.8	11
32	The crystal structures of pressure-induced LiSrAlF ₆ -II and LiCaAlF ₆ -II. <i>Journal of Physics Condensed Matter</i> , 2004, 16, 1033-1043.	1.8	9
33	Compressibility of insulin amyloid fibrils determined by X-ray diffraction in a diamond anvil cell. <i>High Pressure Research</i> , 2009, 29, 665-670.	1.2	9
34	LiSrAlF ₆ with the LiBaCrF ₆ -type structure. <i>Journal of Physics Condensed Matter</i> , 2004, 16, 3005-3013.	1.8	7
35	Dilithium zirconium hexafluoride Li ₂ ZrF ₆ at high pressures: A new monoclinic phase. <i>Journal of Physics and Chemistry of Solids</i> , 2005, 66, 1769-1774.	4.0	6
36	Effect of Extra-Framework Cations on Negative Linear Compressibility and High-Pressure Phase Transitions: A Study of KCd[Ag(CN) ₂] ₃ . <i>Journal of Physical Chemistry C</i> , 2020, 124, 6896-6906.	3.1	5

#	ARTICLE	IF	CITATIONS
37	Elastic behavior and pressure-induced structural modifications of the microporous $\text{Ca}(\text{VO})\text{Si}_4\text{O}_{10} \cdot 4\text{H}_2\text{O}$ dimorphs cavansite and pentagonite. <i>Microporous and Mesoporous Materials</i> , 2015, 204, 257-268.	4.4	4
38	Anisotropic thermal expansion in LiCaAlF_6 and LiSrAlF_6 . <i>Journal of Physics Condensed Matter</i> , 2004, 16, 5769-5780.	1.8	3
39	Domains and reconstructive phase transitions in crystals, Quasicrystals and complex fluids. <i>Ferroelectrics</i> , 1997, 191, 85-107.	0.6	1