

Materials discovery at high pressures

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Superheating of monolayer ice in graphene nanocapillaries. <i>Journal of Chemical Physics</i> , 2017, 146, 134703.	1.2	19
2	Tetragonal Structure BC_4 as a Superhard Material. <i>Journal of Physical Chemistry C</i> , 2017, 121, 10119-10123.	1.5	6
3	Ternary Gold Hydrides: Routes to Stable and Potentially Superconducting Compounds. <i>Journal of the American Chemical Society</i> , 2017, 139, 8740-8751.	6.6	47
4	Compressed few-layer black phosphorus nanosheets from semiconducting to metallic transition with the highest symmetry. <i>Nanoscale</i> , 2017, 9, 10741-10749.	2.8	16
5	Coordination-modulated piezochromism in metal-organic viologen materials. <i>Journal of Materials Chemistry C</i> , 2017, 5, 12400-12408.	2.7	90
6	Hydrogen Clathrate Structures in Rare Earth Hydrides at High Pressures: Possible Route to Room-Temperature Superconductivity. <i>Physical Review Letters</i> , 2017, 119, 107001.	2.9	591
7	Pressure-Stabilized Semiconducting Electrides in Alkaline-Earth-Metal Subnitrides. <i>Journal of the American Chemical Society</i> , 2017, 139, 13798-13803.	6.6	43
8	Stable and metallic two-dimensional TaC_2 as an anode material for lithium-ion battery. <i>Journal of Materials Chemistry A</i> , 2017, 5, 18698-18706.	5.2	75
9	Structural prediction of two-dimensional materials under strain. <i>2D Materials</i> , 2017, 4, 045009.	2.0	19
10	Superconductivity in FeH_5 . <i>Physical Review B</i> , 2017, 96, .	1.4	15
11	High-pressure crystallization and properties of diamond from magnesium-based catalysts. <i>CrystEngComm</i> , 2017, 19, 4459-4475.	1.3	54
12	Suppressing Electron-Phonon Coupling through Laser-Induced Phase Transition. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 23309-23313.	4.0	18
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14	Hexagonal BC_2N with Remarkably High Hardness. <i>Journal of Physical Chemistry C</i> , 2018, 122, 6801-6807.	1.5	26
15	Pressure and Photoinduced Phase Transitions of Elemental Sulfur Confined by Open-End Single-Wall Carbon Nanohorns. <i>Journal of Physical Chemistry C</i> , 2018, 122, 6976-6983.	1.5	1
16	High Pressure and High Temperature Synthesis of the Iron Pernitride FeN_2 . <i>Inorganic Chemistry</i> , 2018, 57, 6245-6251.	1.9	46
17	Revealing unusual rigid diamond net analogues in superhard titanium carbides. <i>RSC Advances</i> , 2018, 8, 14479-14487.	1.7	9
18	High-pressure polymorphs of $LiPN_2$: A first-principles study. <i>Frontiers of Physics</i> , 2018, 13, 1.	2.4	5

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19	Phonons, phase transitions and thermal expansion in LiAlO_2 : an <i>ab initio</i> density functional study. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 12248-12259.	1.3	9
20	High Hydrides of Scandium under Pressure: Potential Superconductors. <i>Journal of Physical Chemistry C</i> , 2018, 122, 6298-6309.	1.5	83
21	Diamond anvil cell behavior up to 4 Mbar. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 1713-1717.	3.3	85
22	<i>Colloquium</i> : High pressure and road to room temperature superconductivity. <i>Reviews of Modern Physics</i> , 2018, 90, .	16.4	110
23	Pressure-induced structural phase transformation and superconducting properties of titanium mononitride. <i>Solid State Communications</i> , 2018, 271, 16-20.	0.9	3
24	A new orthorhombic ground-state phase and mechanical strengths of ternary B_2CO compound. <i>Chemical Physics Letters</i> , 2018, 701, 86-92.	1.2	10
25	Theoretical research on novel orthorhombic tungsten dinitride from first principles calculations. <i>RSC Advances</i> , 2018, 8, 9272-9276.	1.7	4
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27	Hydrogen-rich superconductors at high pressures. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2018, 8, e1330.	6.2	57
28	Phase transition and superconductivity in ReS_2 , ReSe_2 and ReTe_2 . <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 29472-29479.	1.3	15
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30	Carbon network evolution from dimers to sheets in superconducting yttrium dicarbide under pressure. <i>Communications Chemistry</i> , 2018, 1, .	2.0	8
31	First-Principles Study on Superconductivity of P- and Cl-Doped H_3S . <i>Journal of the Physical Society of Japan</i> , 2018, 87, 124711.	0.7	25
32	Dynamics and superconductivity in compressed lanthanum superhydride. <i>Physical Review B</i> , 2018, 98, .	1.1	85
33	Stable structures and superconductivity of an $\text{At}^{\text{e}}\text{H}$ system at high pressure. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 24783-24789.	1.3	1
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36	Mixed-valence Compounds: AuO_2 and AuS . <i>ChemPhysChem</i> , 2018, 19, 2989-2994.	1.0	7

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40	Barium in High Oxidation States in Pressure-Stabilized Barium Fluorides. <i>Journal of Physical Chemistry C</i> , 2018, 122, 12448-12453.	1.5	22
41	Stability, Elastic Properties, and Deformation of LiBN ₂ : A Potential High-Energy Material. <i>Inorganic Chemistry</i> , 2018, 57, 6333-6339.	1.9	0
42	Exotic high-pressure behavior of double nitride CuPN ₂ . <i>Computational Materials Science</i> , 2018, 152, 217-222.	1.4	0
43	Impact of Pressure on Magnetic Order in Jarosite. <i>Journal of the American Chemical Society</i> , 2018, 140, 12001-12009.	6.6	9
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47	Two-dimensional NaCl crystals of unconventional stoichiometries on graphene surface from dilute solution at ambient conditions. <i>Nature Chemistry</i> , 2018, 10, 776-779.	6.6	116
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50	Enhanced thermoelectric properties of nonstoichiometric TiO _{1.76} with excellent mechanical properties induced by optimizing processing parameters. <i>Ceramics International</i> , 2018, 44, 19859-19865.	2.3	15
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52	Isostructural phase transition-induced bulk modulus multiplication in dopant-stabilized ZrO ₂ solid solution. <i>Chinese Physics B</i> , 2019, 28, 076109.	0.7	3
53	Effect of high pressure on the typical 2D hydrogen-bonded crystal azodicarbonamide. <i>Journal of Physics and Chemistry of Solids</i> , 2019, 135, 109096.	1.9	1
54	Band structure and thermoelectric properties of Al-doped Mg ₃ Al _x Sb ₂ compounds. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 15206-15213.	1.1	8

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57	Recent advances in photofunctional polymorphs of molecular materials. <i>Chinese Chemical Letters</i> , 2019, 30, 1908-1922.	4.8	69
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75	Metal halide perovskites under compression. Journal of Materials Chemistry A, 2019, 7, 16089-16108.	5.2	42
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110	Pressure-promoted irregular CoMoP ₂ nanoparticles activated by surface reconstruction for oxygen evolution reaction electrocatalysts. <i>Journal of Materials Chemistry A</i> , 2020, 8, 2001-2007.	5.2	34
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128	Non-Bonded Radii of the Atoms Under Compression. <i>ChemPhysChem</i> , 2020, 21, 2441-2453.	1.0	24
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139	Computational predictions of two-dimensional anode materials of metal-ion batteries. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2020, 10, e1473.	6.2	30
140	Exploring the Limits of Transition-Metal Fluorination at High Pressures. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 9155-9162.	7.2	17
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