Volodymyr Svitlyk

List of Publications by Year
in descending order

37 papers	905 citations	471509 17 h-index	454955 30 g-index
41 all docs	41 docs citations	41 times ranked	1355 citing authors

#	Article	IF	Citations
1	Superconductivity at 161â€¯K in thorium hydride ThH10: Synthesis and properties. Materials Today, 2020, 33, 36-44.	14.2	187
2	Iron-vacancy superstructure and possible room-temperature antiferromagnetic order in superconducting Cs<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mi>y</mml:mi></mml:mrow></mml:msub></mml:mrow></mml:math>Fe<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow><mml:mo>â^’	3.2	88
3	Feâ€“FeO and Feâ€“Fe3C melting relations at Earth's coreâ€“mantle boundary conditions: Implications for a volatile-rich or oxygen-rich core. Earth and Planetary Science Letters, 2017, 473, 94-103.	4.4	77
4	The synthesis, and crystal and magnetic structure of the iron selenide BaFe₂Se₃with possible superconductivity atT_c= 11 K. Journal of Physics Condensed Matter, 2011, 23, 402201.	1.8	43
5	Chirality-Dependent Growth of Self-Assembled Diphenylalanine Microtubes. Crystal Growth and Design, 2019, 19, 6414-6421.	3.0	38
6	Gd5Si4â^’xPx: Targeted Structural Changes through Increase in Valence Electron Count. Journal of the American Chemical Society, 2009, 131, 2367-2374.	13.7	35
7	Methodology for in situ synchrotron X-ray studies in the laser-heated diamond anvil cell. High Pressure Research, 2017, 37, 170-180.	1.2	34
8	Stability of Fe,Al-bearing bridgmanite in the lower mantle and synthesis of pure Fe-bridgmanite. Science Advances, 2016, 2, e1600427.	10.3	31
9	Intrinsic crystal phase separation in the antiferromagnetic superconductor Rb_yFe_{2â^’x}Se₂: a diffraction study. Journal of Physics Condensed Matter, 2012, 24, 435701.	1.8	28
10	Superconductivity in alkali metal intercalated iron selenides. Journal of Physics Condensed Matter, 2016, 28, 293002.	1.8	28
11	Structure and Density of Feâ€“C Liquid Alloys Under High Pressure. Journal of Geophysical Research: Solid Earth, 2017, 122, 7813-7823.	3.4	28
12	Synthetic Approach for (Mn,Fe)₂(Si,P) Magnetocaloric Materials: Purity, Structural, Magnetic, and Magnetocaloric Properties. Inorganic Chemistry, 2017, 56, 2827-2833.	4.0	27
13	Crystal structure of BaFe₂Se₃as a function of temperature and pressure: phase transition phenomena and high-order expansion of Landau potential. Journal of Physics Condensed Matter, 2013, 25, 315403.	1.8	25
14	Incommensurate crystal structure of PbHfO₃. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2020, 76, 7-12.	1.1	25
15	Gd5Ni0.96Sb2.04 and Gd5Ni0.71Bi2.29: Crystal structure, magnetic properties and magnetocaloric effect. Structural transformation and magnetic properties of hexagonal Gd5Bi3. Journal of Solid State Chemistry, 2008, 181, 1080-1086.	2.9	21
16	Temperature and Pressure Evolution of the Crystal Structure of A_x(Fe_{1â€“y}Se)₂ (A = Cs, Rb, K) Studied by Synchrotron Powder Diffraction. Inorganic Chemistry, 2011, 50, 10703-10708.	4.0	20
17	Iron under conditions close to the Î±â^’Î³â^’Ïµ triple point. Applied Physics Letters, 2018, 112, .	3.3	17
18	High Pressure Investigation of the Sâ€“N₂ System up to the Megabar Range: Synthesis and Characterization of the SN₂ Solid. Inorganic Chemistry, 2019, 58, 9195-9204.	4.0	17

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19	existence in Cs<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>0.8</mml:mn></mml:mrow></mml:msub></mml:math>Fe<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>1.6</mml:mn></mml:mrow></mml:msub></mml:math>Se<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow	3.2	16
20	Gd5Si4-xBix Structures: Novel Slab Sequences Achieved by Turning off the Directionality of Nearest-Slab Interactions. Inorganic Chemistry, 2009, 48, 10364-10370.	4.0	15
21	Structural, magnetic and magnetocaloric properties of the Gd5Si4â˜xSbx (x=0.5â€“3.5) phases. Journal of Magnetism and Magnetic Materials, 2010, 322, 2558-2566.	2.3	14
22	Complex biphase nature of the superconducting dome of the FeSe phase diagram. Physical Review B, 2017, 96, .	3.2	12
23	High-pressure polymorphism of BaFe2Se3. Journal of Physics Condensed Matter, 2019, 31, 085401.	1.8	12
24	Compressibility and pressure-induced disorder in superconducting phase-separated<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mn>Cs</mml:mn></mml:mrow><mml:mrow><m xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mn>Fe</mml:mn></mml:mrow><mml:mrow><m xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mn>Se</mml:mn></mml:mrow><m. Physical Review B, 2014, 89, .	3.2	11
25	High-pressure behavior of Î±-boron studied on single crystals by X-ray diffraction, Raman and IR spectroscopy. Journal of Solid State Chemistry, 2017, 245, 50-60.	2.9	9
26	Structural stability and mechanism of compression of stoichiometric B13C2 up to 68GPa. Scientific Reports, 2017, 7, 8969.	3.3	8
27	Insertion and Confinement of H₂O in Hydrophobic Siliceous Zeolites at High Pressure. Journal of Physical Chemistry C, 2019, 123, 17432-17439.	3.1	8
28	High-Temperature Orderâ˜Disorder Transition in CoCr2Se4and Trapping Co Disorder in Monoclinic CoCr2Se4: Structural Features of Cu1â˜xCoxCr2Se4Phases. Inorganic Chemistry, 2009, 48, 5296-5302.	4.0	7
29	Crystal Structure and Nonâ€Hydrostatic Stressâ€Induced Phase Transition of Urotropine Under High Pressure. Chemistry - A European Journal, 2021, 27, 1094-1102.	3.3	7
30	Singleâ€Bonded Cubic AsN from Highâ€Pressure and Highâ€Temperature Chemical Reactivity of Arsenic and Nitrogen. Angewandte Chemie - International Edition, 2022, 61, .	13.8	7
31	Immobilization of radiotoxic elements with Yâ€stabilized zirconia: The thorium case. Journal of the American Ceramic Society, 2022, 105, 5975-5983.	3.8	3
32	Pressure-induced enhancement of two-dimensionality in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>La</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mrow><mml:mn>1</mml:mn><mml:mtext>â˜</mml:mtext><mml:mi>x</mml:mi></mml:mro		

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37	Temperature- and Pressure-Induced Spin Crossover in Co1+xCr2â€“xSe4 (x = 0.24): A Diffraction Study. Inorganic Chemistry, 2016, 55, 338-344.	4.0	0