Nursultan E Sagatov

List of Publications by Year
in descending order

30	235	933447 10	1125743 13
papers	citations	h-index	g-index

30	30	30	140
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Calcium orthocarbonate, Ca2CO4-Pnma: A potential host for subducting carbon in the transition zone and lower mantle. Lithos, 2020, 370-371, 105637.	1.4	23
2	Formation of Mg-Orthocarbonate through the Reaction MgCO₃ + MgO = Mg₂CO₄ at Earthâ€™s Lower Mantle Pâ€“T Conditions. Crystal Growth and Design, 2021, 21, 2986-2992.	3.0	19
3	Orthocarbonates of Ca, Sr, and Baâ€”The Appearance of sp³-Hybridized Carbon at a Low Pressure of 5 GPa and Dynamic Stability at Ambient Pressure. ACS Earth and Space Chemistry, 2021, 5, 1948-1957.	2.7	18
4	Disordered Aragonite: The New High-Pressure, High-Temperature Phase of CaCO3. Journal of Physical Chemistry C, 2020, 124, 26467-26473.	3.1	16
5	Metastable structures of CaCO₃ and their role in transformation of calcite to aragonite and postaragonite. Crystal Growth and Design, 2021, 21, 65-74.	3.0	16
6	New high-pressure phases of Fe7N3 and Fe7C3 stable at Earth's core conditions: evidences for carbonâ€“nitrogen isomorphism in Fe-compounds. RSC Advances, 2019, 9, 3577-3581.	3.6	15
7	Stability of Ca₂CO₄-Pnma against the Main Mantle Minerals from Ab Initio Computations. ACS Earth and Space Chemistry, 2021, 5, 1709-1715.	2.7	14
8	Novel Calcium sp³ Carbonate CaC₂O₅-I4Ì…2d May Be a Carbon Host in Earthâ€™s Lower Mantle. ACS Earth and Space Chemistry, 2022, 6, 73-80.	2.7	13
9	High-Pressure Phase Diagrams of Na2CO3 and K2CO3. Minerals (Basel, Switzerland), 2019, 9, 599.	2.0	11
10	(Fe,Ni)2P allabogdanite can be an ambient pressure phase in iron meteorites. Scientific Reports, 2020, 10, 8956.	3.3	10
11	Phase Diagrams of Iron Hydrides at Pressures of 100â€“400 GPa and Temperatures of 0â€“5000 K. JETP Letters, 2020, 111, 145-150.	1.4	10
12	Phase relations in the Fe-P system at high pressures and temperatures from ab initio computations. High Pressure Research, 2020, 40, 235-244.	1.2	9
13	Alkali Metal (Li, Na, and K) Orthocarbonates: Stabilization of sp³-Bonded Carbon at Pressures above 20 GPa. Crystal Growth and Design, 2021, 21, 6744-6751.	3.0	7
14	Î³-BaB₂O₄: High-Pressure High-Temperature Polymorph of Barium Borate with Edge-Sharing BO₄ Tetrahedra. Inorganic Chemistry, 2022, 61, 2340-2350.	4.0	7
15	Phase Relations of Iron Carbides Fe2C, Fe3C, and Fe7C3 at the Earthâ€™s Core Pressures and Temperatures. Russian Geology and Geophysics, 2020, 61, 1345-1353.	0.7	6
16	Synthesis and Growth of Rare Earth Borates NaSrR(BO₃)₂ (R = Hoâ€“Lu, Y, Sc). Inorganic Chemistry, 2022, 61, 7497-7505.	4.0	6
17	Structure and Properties of New High-Pressure Phases of Fe7N3. JETP Letters, 2018, 107, 379-383.	1.4	5
18	Towards the investigation of ternary compound in the Ti-Al-Zr-O system: Effect of oxygen fugacity on phase formation. Journal of the European Ceramic Society, 2020, 40, 3663-3672.	5.7	5

#	Article	IF	Citations
19	First-Principles investigation of Pressure-Induced structural transformations of barium borates in the BaO-B2O3-BaF2 system in the range of 0â€“10 GPa. Computational Materials Science, 2021, 199, 110735.	3.0	5
20	Temperature induced twinning in aragonite: transmission electron microscopy experiments and ab initio calculations. Zeitschrift Fur Kristallographie - Crystalline Materials, 2019, 234, 79-84.	0.8	4
21	Phase Stability in Nickel Phosphides at High Pressures. ACS Earth and Space Chemistry, 2020, 4, 1978-1984.	2.7	4
22	High-Pressure Synthesis and Ambient-Pressure Tem Investigation of Mg-Orthocarbonate. SSRN Electronic Journal, 0, , .	0.4	3
23	Phase Relations in the Niâ€“S System at High Pressures from ab Initio Computations. ACS Earth and Space Chemistry, 2021, 5, 596-603.	2.7	2
24	Phase Relations in CaSiO3 System up to 100 GPa and 2500 K. Geochemistry International, 2021, 59, 791-800.	0.7	2
25	Feâ€“N System at High Pressures and Its Relevance to the Earthâ€™s Core Composition. Crystal Growth and Design, 0, , .	3.0	2
26	High-Pressure Synthesis, Electronic Properties, and Raman Spectroscopy of Barium Tetraborate BaB₄O₇ Polymorphs. Crystal Growth and Design, 2022, 22, 3405-3412.	3.0	2
27	The search for the new superconductors in the Ni-N system. Journal of Physics: Conference Series, 2020, 1590, 012010.	0.4	1
28	Experimental and Ab Initio Investigation of the Formation of Phosphoran Olivine. ACS Earth and Space Chemistry, 2021, 5, 1373-1383.	2.7	0
29	Phase relations, and mechanical and electronic properties of nickel borides, carbides, and nitrides from ab initio calculations. RSC Advances, 2021, 11, 33781-33787.	3.6	0
30	Ba₃(BO₃)₂: the first example of the dynamic disordering in borate crystal. Physical Chemistry Chemical Physics, 0, , .	2.8	0