Elissaios Stavrou

List of Publications by Year
in descending order

38 papers	1,408 citations	567144 15 h-index	330025 37 g-index
38 all docs	38 docs citations	38 times ranked	1704 citing authors

#	Article	IF	Citations
1	Unexpected Stable Stoichiometries of Sodium Chlorides. Science, 2013, 342, 1502-1505.	6.0	394
2	A stable compound of helium and sodium at high pressure. Nature Chemistry, 2017, 9, 440-445.	6.6	276
3	High-Pressure Synthesis of a Pentazolate Salt. Chemistry of Materials, 2017, 29, 735-741.	3.2	170
4	Synthesis of sodium polyhydrides at high pressures. Nature Communications, 2016, 7, 12267.	5.8	79
5	Synthesis of Ultra-incompressible sp³-Hybridized Carbon Nitride with 1:1 Stoichiometry. Chemistry of Materials, 2016, 28, 6925-6933.	3.2	41
6	Synthesis of Xenon and Iron-Nickel Intermetallic Compounds at Earthâ€™s Core Thermodynamic Conditions. Physical Review Letters, 2018, 120, 096001.	2.9	39
7	Backbone NxH compounds at high pressures. Journal of Chemical Physics, 2015, 142, 214308.	1.2	38
8	The high pressure structure and equation of state of 2,6-diamino-3,5-dinitropyrazine-1-oxide (LLM-105) up to 20 GPa: X-ray diffraction measurements and first principles molecular dynamics simulations. Journal of Chemical Physics, 2015, 143, 144506.	1.2	36
9	Pressure-induced phase transition in 1,3,5-triamino-2,4,6-trinitrobenzene (TATB). Applied Physics Letters, 2019, 114, .	1.5	34
10	Partitioning and structural role of Mn and Fe ions in ionic sulfophosphate glasses. Journal of Chemical Physics, 2014, 141, 224509.	1.2	29
11	Melting and refreezing of zirconium observed using ultrafast x-ray diffraction. Physical Review Research, 2020, 2, .	1.3	22
12	High-pressure structural study of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MnF</mml:mi><mml:mn>2</mml:mn></mml:msub></mm Physical Review B, 2016, 93, .	1.1	20
13	Plasma flow reactor for steady state monitoring of physical and chemical processes at high temperatures. Review of Scientific Instruments, 2017, 88, 093506.	0.6	19
14	Extracting the Anharmonic Properties of the G-Band in Graphene Nanoplatelets. Journal of Physical Chemistry C, 2020, 124, 4835-4842.	1.5	17
15	Effects of pressure on the structure and lattice dynamics of Î±-glycine: a combined experimental and theoretical study. CrystEngComm, 2019, 21, 4457-4464.	1.3	16
16	High-Pressure Equation of State of 1,3,5-triamino-2,4,6-trinitrobenzene: Insights into the Monoclinic Phase Transition, Hydrogen Bonding, and Anharmonicity. Journal of Physical Chemistry A, 2020, 124, 10580-10591.	1.1	16
17	High-pressure X-ray diffraction, Raman and computational studies of MgCl2 up to 1 Mbar: Extensive pressure stability of the Î²-MgCl2 layered structure. Scientific Reports, 2016, 6, 30631.	1.6	15
18	Ultrafast shock compression of PDMSâ€based polymers. Journal of Polymer Science, Part B: Polymer Physics, 2018, 56, 827-832.	2.4	15

#	Article	IF	Citations
19	Anharmonicity-induced first-order isostructural phase transition of zirconium under pressure. Physical Review B, 2018, 98, .	1.1	15
20	An Isosymmetric High-Pressure Phase Transition in Î±-Glycylglycine: A Combined Experimental and Theoretical Study. Journal of Physical Chemistry B, 2020, 124, 1-10.	1.2	14
21	Detonation-induced transformation of graphite to hexagonal diamond. Physical Review B, 2020, 102, .	1.1	13
22	Probing the different spatial scales of Kel F-800 polymeric glass under pressure. Scientific Reports, 2013, 3, 1290.	1.6	11
23	Superconductivity in the van der Waals layered compound PS2. Physical Review B, 2019, 99, .	1.1	11
24	The equation of state of 5-nitro-2,4-dihydro-1,2,4,-triazol-3-one determined via in-situ optical microscopy and interferometry measurements. Journal of Applied Physics, 2016, 119, 135904.	1.1	10
25	A High-Pressure Compound of Argon and Nickel: Noble Gas in the Earthâ€™s Core?. ACS Earth and Space Chemistry, 2019, 3, 2517-2524.	1.2	10
26	Two good metals make a semiconductor: A potassium-nickel compound under pressure. Physical Review B, 2020, 102, .	1.1	7
27	Equations of state of anhydrous AlF3 and AlI3: Modeling of extreme condition halide chemistry. Journal of Chemical Physics, 2015, 142, 214506.	1.2	6
28	Effects of pressure on the structure and lattice dynamics of ammonium perchlorate: A combined experimental and theoretical study. Journal of Chemical Physics, 2018, 149, 034501.	1.2	6
29	High pressure chemical reactivity and structural study of the Naâ€“P and Liâ€“P systems. Journal of Materials Chemistry A, 2020, 8, 21797-21803.	5.2	5
30	High-pressure isothermal equation of state of composite materials: A case study of LX-17 polymer bonded explosive. Applied Physics Letters, 2019, 115, 051902.	1.5	4
31	Cold Spray Deposition of Thermoelectric Materials. Jom, 2020, 72, 2853-2859.	0.9	4
32	High-enthalpy crystalline phases of cadmium telluride. Physical Review Research, 2020, 2, .	1.3	4
33	A study of tantalum pentoxide Ta2O5 structures up to 28â€‰GPa. Journal of Applied Physics, 2017, 121, 175901.	1.1	3
34	High-pressure phase transition of alkali metalâ€“transition metal deuteride Li2PdD2. Journal of Chemical Physics, 2017, 146, 234506.	1.2	2
35	Observation of Fundamental Mechanisms in Compression-Induced Phase Transformations Using Ultrafast X-ray Diffraction. Jom, 2021, 73, 2185-2193.	0.9	2
36	Equation of State for Natural Almandine, Spessartine, Pyrope Garnet: Implications for Quartz-In-Garnet Elastic Geobarometry. Minerals (Basel, Switzerland), 2021, 11, 458.	0.8	2

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37	Ethane and methane at high pressures: structure and stability. Journal of Chemical Physics, 2021, 155, 184503.	1.2	2
38	High-pressure structural study of Î± -Mn: Experiments and calculations. Physical Review B, 2021, 103, .	1.1	1