Ruth Franco

List of Publications by Year
in descending order

23 papers	1,074 citations	759233 12 h-index	642732 23 g-index
23 all docs	23 docs citations	23 times ranked	914 citing authors

#	Article	IF	Citations
1	Thermodynamical properties of solids from microscopic theory: applications to MgF2 and Al2O3. Computational and Theoretical Chemistry, 1996, 368, 245-255.	1.5	523
2	Theoretical Study of Structural and Vibrational Properties of (AlP)n, (AlAs)n, (GaP)n, (GaAs)n, (InP)n, and (InAs)nClusters withn= 1, 2, 3. Journal of Physical Chemistry B, 2002, 106, 1940-1944.	2.6	105
3	Theoretical explanation of the uniform compressibility behavior observed in oxide spinels. Physical Review B, 2001, 63, .	3.2	96
4	Periodic DFT Study of the Structural and Electronic Properties of Bulk CoAl2O4Spinel. Journal of Physical Chemistry B, 2006, 110, 988-995.	2.6	80
5	Theoretical compressibilities of high-pressure ZnTe polymorphs. Physical Review B, 2003, 68, .	3.2	44
6	Quantum-mechanical simulation ofMgAl2O4under high pressure. Physical Review B, 2002, 66, .	3.2	43
7	Theoretical Study of Structural and Electronic Properties of Methyl Silsesquioxanes. Journal of Physical Chemistry B, 2002, 106, 1709-1713.	2.6	35
8	Computer simulations of 3C-SiC under hydrostatic and non-hydrostatic stresses. Physical Chemistry Chemical Physics, 2016, 18, 8132-8139.	2.8	23
9	Theoretical investigation of the inversion parameter in Co3â^'sAlsO4 (s=0â€“3) spinel structures. Solid State Ionics, 2009, 180, 1011-1016.	2.7	22
10	Understanding the Pressure Effect on the Elastic, Electronic, Vibrational, and Bonding Properties of the CeScO₃ Perovskite. Journal of Physical Chemistry C, 2021, 125, 107-119.	3.1	17
11	Microscopic analysis of the compressibility in the spinel phase of Si 3 N 4. Europhysics Letters, 2001, 54, 760-766.	2.0	16
12	Cation distributions on CoAl₂O₄and Co₂AlO₄spinels: pressure and temperature effects. High Pressure Research, 2008, 28, 521-524.	1.2	15
13	Atomistic simulation of the pressure-temperature-volume diagram in Î±-Al2O3. Solid State Communications, 1996, 98, 41-44.	1.9	9
14	Hysteresis and bonding reconstruction in the pressure-induced B3â€“B1 phase transition of 3C-SiC. Physical Chemistry Chemical Physics, 2017, 19, 22887-22894.	2.8	8
15	Microscopic partition of pressure and elastic constants in CdTe polymorphs. Journal of Alloys and Compounds, 2014, 592, 150-156.	5.5	7
16	Disclosing the behavior under hydrostatic pressure of rhombohedral MgIn₂Se₄ by means of first-principles calculations. Physical Chemistry Chemical Physics, 2020, 22, 21909-21918.	2.8	7
17	A local topological view of pressure-induced polymorphs in SiO2. Theoretical Chemistry Accounts, 2014, 133, 1.	1.4	6
18	Quantum-mechanical simulations of pressure effects on MgIn₂S₄ polymorphs. Phase Transitions, 2018, 91, 759-771.	1.3	6

#	Article	IF	Citations
19	Ab initio perturbed ion description of the equation of state and a high pressure phase transition of Al2O3. Computational and Theoretical Chemistry, 1998, 426, 233-240.	1.5	3
20	Computational Modeling of Tensile Stress Effects on the Structure and Stability of Prototypical Covalent and Layered Materials. Nanomaterials, 2019, 9, 1483.	4.1	3
21	Pressure and temperature stability boundaries of cubic SiC polymorphs: a first-principles investigation. Physical Chemistry Chemical Physics, 2022, 24, 16228-16236.	2.8	3
22	Stability of MgAl 2 O 4 Under High-Pressure Conditions. High Pressure Research, 2002, 22, 447-450.	1.2	2
23	Theoretical study of the coordination of the Cr³⁺ ion in Î±-Al₂O₃. Radiation Effects and Defects in Solids, 1995, 134, 123-126.	1.2	1