

Varghese Swamy

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6705270/publications.pdf>

Version: 2024-02-01

58
papers

3,611
citations

186209

28
h-index

175177

52
g-index

60
all docs

60
docs citations

60
times ranked

5448
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | First-principles calculations of the phase stability of TiO ₂ . Physical Review B, 2002, 65, . | 1.1 | 464 |
| 2 | Finite-size and pressure effects on the Raman spectrum of nanocrystalline anatase TiO ₂ . Physical Review B, 2005, 71, . | 1.1 | 374 |
| 3 | The hardest known oxide. Nature, 2001, 410, 653-654. | 13.7 | 316 |
| 4 | Size-dependent modifications of the Raman spectrum of rutile TiO ₂ . Applied Physics Letters, 2006, 89, 163118. | 1.5 | 267 |
| 5 | Nanostructuring Mixed-Dimensional Perovskites: A Route Toward Tunable, Efficient Photovoltaics. Advanced Materials, 2016, 28, 3653-3661. | 11.1 | 251 |
| 6 | Enhancing moisture tolerance in efficient hybrid 3D/2D perovskite photovoltaics. Journal of Materials Chemistry A, 2018, 6, 2122-2128. | 5.2 | 163 |
| 7 | Size-Dependent Pressure-Induced Amorphization in Nanoscale TiO ₂ . Physical Review Letters, 2006, 96, 135702. | 2.9 | 150 |
| 8 | A thermodynamic assessment of silica phase diagram. Journal of Geophysical Research, 1994, 99, 11787-11794. | 3.3 | 134 |
| 9 | Size-dependent modifications of the first-order Raman spectra of nanostructured rutile TiO_2 Physical Review B, 2008, 77, . | 1.1 | 118 |
| 10 | Atomistic simulation of the crystal structures and bulk moduli of TiO ₂ polymorphs. Journal of Physics and Chemistry of Solids, 2001, 62, 887-895. | 1.9 | 112 |
| 11 | Nonlinear size dependence of anatase TiO ₂ lattice parameters. Applied Physics Letters, 2006, 88, 243103. | 1.5 | 98 |
| 12 | High-temperature powder x-ray diffraction of yttria to melting point. Journal of Materials Research, 1999, 14, 456-459. | 1.2 | 94 |
| 13 | Transferable variable-charge interatomic potential for atomistic simulation of titanium oxides. Physical Review B, 2000, 62, 5406-5412. | 1.1 | 85 |
| 14 | Thermodynamic properties of Y ₂ O ₃ phases and the yttrium-oxygen phase diagram. Journal of Alloys and Compounds, 1998, 269, 201-207. | 2.8 | 73 |
| 15 | Simulation of low index rutile surfaces with a transferable variable-charge Ti-O interatomic potential and comparison with ab initio results. Surface Science, 2002, 504, 115-124. | 0.8 | 70 |
| 16 | Compression behavior of nanocrystalline anatase TiO ₂ . Solid State Communications, 2003, 125, 111-115. | 0.9 | 66 |
| 17 | Unusual Compression Behavior of Anatase TiO_2 Nanocrystals. Physical Review Letters, 2009, 103, 075505. | 2.9 | 63 |
| 18 | Ultrastiff Cubic TiO ₂ Identified via First-Principles Calculations. Physical Review Letters, 2007, 98, 035502. | 2.9 | 59 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Size dependence of rutile TiO ₂ lattice parameters determined via simultaneous size, strain, and shape modeling. Applied Physics Letters, 2009, 94, . | 1.5 | 53 |
| 20 | Thermodynamic data for the phases in the CaSiO ₃ system. Geochimica Et Cosmochimica Acta, 1997, 61, 1181-1191. | 1.6 | 46 |
| 21 | Bulk modulus of anatase. Journal of Physics and Chemistry of Solids, 2001, 62, 673-675. | 1.9 | 43 |
| 22 | A new natural, super-hard, transparent polymorph of carbon from the Popigai impact crater, Russia. Comptes Rendus - Geoscience, 2003, 335, 889-898. | 0.4 | 43 |
| 23 | High-Temperature Raman Spectra and Thermal Expansion of Wollastonite. Journal of the American Ceramic Society, 1997, 80, 2237-2247. | 1.9 | 37 |
| 24 | Thermodynamic modeling of the Al ₂ O ₃ -B ₂ O ₃ -SiO ₂ system. Journal of Non-Crystalline Solids, 2009, 355, 1679-1686. | 1.5 | 35 |
| 25 | Thermodynamic modeling of the B ₂ O ₃ -SiO ₂ and B ₂ O ₃ -Al ₂ O ₃ systems. International Journal of Materials Research, 2007, 98, 987-994. | 0.1 | 33 |
| 26 | Effectiveness of lanthanum triflate activated silica nanoparticles as fillers in silane films for corrosion protection of low carbon steel. Progress in Organic Coatings, 2016, 90, 222-234. | 1.9 | 32 |
| 27 | Improving combustion characteristics of diesel and biodiesel droplets by graphite oxide addition for diesel engine applications. International Journal of Energy Research, 2017, 41, 2258-2267. | 2.2 | 31 |
| 28 | Size effects on the structure and phase transition behavior of baddeleyite TiO ₂ . Solid State Communications, 2005, 134, 541-546. | 0.9 | 30 |
| 29 | High-Pressure Behavior of Perovskite: $FeTiO_3$ Dissociation into $FeTiO_3$ | | |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | Controlling electron and energy transfer paths by selective excitation in a zinc porphyrinâ€“BODIPYâ€“C ₆₀ multi-modular triad. <i>Nanoscale</i> , 2017, 9, 18054-18065. | 2.8 | 14 |
| 38 | Effects of dispersed multiwalled carbon nanotubes on the micro-explosion and combustion characteristics of 2-methylfuran â€“ diesel mixture droplets. <i>Fuel</i> , 2022, 316, 123308. | 3.4 | 14 |
| 39 | Low hysteresis relative humidity sensing characteristics of graphene oxideâ€“gold nanocomposite coated langasite crystal microbalance. <i>Surfaces and Interfaces</i> , 2021, 23, 100964. | 1.5 | 13 |
| 40 | An optimal thermal evaporation synthesis of c-axis oriented ZnO nanowires with excellent UV sensing and emission characteristics. <i>Materials Research Bulletin</i> , 2016, 77, 147-154. | 2.7 | 11 |
| 41 | QCM-Micropillar-Based Coupled Resonators in the Detection of Gas Mass Flow Rates. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2019, 68, 303-305. | 2.4 | 11 |
| 42 | A Langasite Crystal Microbalance Coated with Graphene Oxide-Platinum Nanocomposite as a Volatile Organic Compound Sensor: Detection and Discrimination Characteristics. <i>Sensors</i> , 2020, 20, 334. | 2.1 | 9 |
| 43 | An assessment of the one-bar liquidus phase relations in the MgOâ€“SiO ₂ system. <i>Calphad: Computer Coupling of Phase Diagrams and Thermochemistry</i> , 1994, 18, 157-164. | 0.7 | 7 |
| 44 | Compression Behavior of Zr-doped Nanoanatase. <i>Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences</i> , 2006, 61, 1577-1585. | 0.3 | 7 |
| 45 | Multilayer graphene electrodes for one-port surface acoustic wave resonator mass sensor. <i>Japanese Journal of Applied Physics</i> , 2017, 56, 024301. | 0.8 | 7 |
| 46 | Tensile properties of hydrogenated hybrid grapheneâ€“hexagonal boron nitride nanosheets: a reactive force field study. <i>Molecular Simulation</i> , 2020, 46, 1220-1229. | 0.9 | 6 |
| 47 | Stiffening of nanoscale anatase Ti _{0.9} Zr _{0.1} O ₂ upon multiple compression cycles. <i>Journal of Physics and Chemistry of Solids</i> , 2008, 69, 2230-2233. | 1.9 | 5 |
| 48 | Legumain Targeting Peptide Conjugated Fluorescent Porous Silicon Nanoparticles for Breast Cancer Imaging. <i>Advances in Science and Technology</i> , 0, , . | 0.2 | 4 |
| 49 | The structural origin of the unusual compression behaviors in nanostructured TiO ₂ : insights from first-principles calculations. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 18156-18162. | 1.3 | 3 |
| 50 | Low cost batch fabrication of microdevices using ultraviolet light-emitting diode photolithography technique. <i>Journal of Micro/ Nanolithography, MEMS, and MOEMS</i> , 2016, 15, 010501. | 1.0 | 3 |
| 51 | Seismicity of Peninsular Malaysia due to intraplate and far field sources. <i>Earthquake and Structures</i> , 2016, 10, 1391-1404. | 1.0 | 3 |
| 52 | Effect of lanthanide activated nanoâ€“SiO ₂ on the corrosion behavior of silaneâ€“based hybrid coatings on low carbon steel. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2015, 66, 1223-1231. | 0.8 | 2 |
| 53 | Polymer-Free 2-D Heterostructure Transfer Onto Quartz Crystal Microbalance Electrode Surface: Method and Sensing Characteristics. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2020, 69, 3241-3248. | 2.4 | 2 |
| 54 | Linear versus Branched Peptide with Same Amino Acid Sequence for Legumainâ€“Targeting in Macrophages: Targeting Efficiency and Bioimaging Potential. <i>ChemistrySelect</i> , 2020, 5, 9911-9919. | 0.7 | 2 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 55 | Strain Engineering to Release Trapped Hole Carriers in p-Type Haeckelite GaN. ACS Applied Electronic Materials, 2021, 3, 5257-5264. | 2.0 | 1 |
| 56 | Data analytic engineering and its application in earthquake engineering: An overview. , 2014, , . | | 0 |
| 57 | Hydrostatic Compression of Graphite Oxide to 49 GPa: A Raman Spectroscopic Study. Materials Research Society Symposia Proceedings, 2015, 1727, 49. | 0.1 | 0 |
| 58 | Smartphone Display Based Photolithography to Fabricate Microdevices. IEEE Access, 2018, 6, 35713-35719. | 2.6 | 0 |