

Zengming Zhang

List of Publications by Year in descending order

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79
papers

1,111
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393982

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525886

27
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all docs

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docs citations

80
times ranked

1512
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Pressure Effects on the Thermal Decomposition of LLM-105 Crystal. <i>Physical Chemistry Chemical Physics</i> , 2022, , . | 1.3 | 4 |
| 2 | Initial decomposition step and bimolecular hydrogen transfer of 3, 3,4-diamino-4, 4-azoxyfuran under high pressure and high temperature. <i>Combustion and Flame</i> , 2022, 240, 111981. | 2.8 | 2 |
| 3 | Multiple yet switchable hydrogen-bonded organic frameworks with white-light emission. <i>Nature Communications</i> , 2022, 13, 1882. | 5.8 | 61 |
| 4 | Critical behavior and phase diagram of layered ferromagnetic $\text{S}_{1-x}\text{FeTa}_x\text{S}_6$ single crystals. <i>Physical Review B</i> , 2022, 105, . | 1.1 | 5 |
| 5 | Inference of a "Hot Ice" Layer in Nitrogen-Rich Planets: Demixing the Phase Diagram and Phase Composition for Variable Concentration Helium-Nitrogen Mixtures Based on Isothermal Compression. <i>Journal of Physical Chemistry A</i> , 2022, 126, 3745-3757. | 1.1 | 0 |
| 6 | RKKY-type in-plane ferromagnetism in layered $\text{Mn}_2\text{Nb}_4\text{S}_{10}$ single crystals. <i>Physical Review B</i> , 2022, 105, . | | |
| 7 | Defect Origin of Emission in CsCu_2I_3 and Pressure-Induced Anomalous Enhancement. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 317-323. | 2.1 | 15 |
| 8 | Itinerant magnetism in the half-metallic Heusler compound HfSn_2 : Evidence from critical behavior combined with first-principles calculations. <i>Physical Review B</i> , 2021, 103, . | 1.1 | 11 |
| 9 | Enhanced PEC Water Splitting Performance of Silver Nanoparticle-Coated CdS Nanowire Photoanodes: The Role of Silver Deposition. <i>Journal of Physical Chemistry C</i> , 2021, 125, 7542-7551. | 1.5 | 10 |
| 10 | Pressure-Induced Phase Transition of $\hat{1}^2$ -RDX Single Crystals. <i>Journal of Physical Chemistry C</i> , 2021, 125, 6418-6426. | 1.5 | 9 |
| 11 | Colossal Anomalous Hall Effect in Ferromagnetic van der Waals CrTe_2 . <i>ACS Nano</i> , 2021, 15, 9759-9763. | 7.3 | 30 |
| 12 | Pressure-Induced Anomalous Emission Behaviors of MnS/ZnS Quantum Dots. <i>Journal of Physical Chemistry C</i> , 2021, 125, 9281-9286. | 1.5 | 3 |
| 13 | Pressure-Induced In Situ Construction of P-CO/HNIW Explosive Composites with Excellent Laser Initiation and Detonation Performance. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 20718-20727. | 4.0 | 4 |
| 14 | Significant perpendicular magnetic anisotropy in room-temperature layered ferromagnet of Cr-intercalated CrTe_2 . <i>2D Materials</i> , 2021, 8, 031003. | 2.0 | 27 |
| 15 | Experimental Observation of New Phase, Determination of Loading-Path of Amorphous State and Loading-Path Dependent Phase Transitions for Pyridine around Freezing Pressure via Raman Modes in Low Wavenumber. <i>Journal of Physical Chemistry C</i> , 2021, 125, 11159-11165. | 1.5 | 3 |
| 16 | Possible Topological Hall Effect above Room Temperature in Layered $\text{Cr}_{1.2}\text{Te}_2$ Ferromagnet. <i>Nano Letters</i> , 2021, 21, 4280-4286. | 4.5 | 35 |
| 17 | Temperature Evolution of Optical Behaviors of $\hat{1}^2$ -HMX Single Crystals from Spectroscopy Ellipsometry. <i>Journal of Physical Chemistry C</i> , 2021, 125, 12390-12397. | 1.5 | 3 |
| 18 | Correlation between Photoluminescence Properties of Surface Defects and Laser-Induced Damage Threshold of Fused Silica. <i>Laser and Particle Beams</i> , 2021, 2021, . | 0.4 | 3 |

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|----|--|-----|-----------|
| 19 | Time-Resolved Photoluminescence Study of MnS/ZnS Core/Shell Quantum Dots at High Pressure and Low Temperature. <i>Journal of Physical Chemistry C</i> , 2021, 125, 22354-22359. | 1.5 | 1 |
| 20 | Analysis of residual stress fields from fictive temperature distributions within heat-affected zones of fused silica. <i>Optics Express</i> , 2021, 29, 42511. | 1.7 | 6 |
| 21 | Fast-Response Metal-Semiconductor-Metal Junction Ultraviolet Photodetector Based on ZnS:Mn Nanorod Networks via a Cost-Effective Method. <i>ACS Omega</i> , 2021, 6, 32930-32937. | 1.6 | 13 |
| 22 | Electronic Structure of LLM-105 Crystal under High Pressure and Low Temperature. <i>Journal of Physical Chemistry C</i> , 2020, 124, 2399-2405. | 1.5 | 10 |
| 23 | Thermally stable Na _{3.6} Y _{1.8} (PO ₄) ₃ :Eu ³⁺ phosphor, luminescent properties and application in WLEDs. <i>Journal of Alloys and Compounds</i> , 2020, 821, 153513. | 2.8 | 20 |
| 24 | Anomalous Octahedron Distortion of Bi-Alloyed Cs ₂ AgInCl ₆ Crystal via XRD, Raman, Huang-Rhys Factor, and Photoluminescence. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 9572-9578. | 2.1 | 60 |
| 25 | Multiple magnetic phase transitions, electrical and optical properties of FeTe ₂ single crystals. <i>Journal of Physics Condensed Matter</i> , 2020, 32, 035808. | 0.7 | 11 |
| 26 | Prediction of MnSiTe_3 as an intrinsic layered half-metal. <i>Physical Review B</i> , 2020, 101, . | | |
| 27 | Temperature dependent optical properties of LaCoO ₃ /SrTiO ₃ thin film studied by spectroscopic ellipsometry. <i>AIP Advances</i> , 2020, 10, 035117. | 0.6 | 2 |
| 28 | Magneto-transport and Shubnikov-de Haas oscillations in the layered ternary telluride topological semimetal candidate Ta ₃ SiTe ₆ . <i>Applied Physics Letters</i> , 2020, 116, . | 1.5 | 15 |
| 29 | Phase Transition Routes for $\hat{\mu}$ - and $\hat{\beta}$ -CL-20 Crystals under High Pressures of up to 60 GPa. <i>Journal of Physical Chemistry C</i> , 2020, 124, 5061-5068. | 1.5 | 9 |
| 30 | Observation of superconductivity accompanying the pressure-induced structural phase transition in LaSb. <i>Physical Review B</i> , 2020, 101, . | 1.1 | 9 |
| 31 | Constructing a Spectral Down Converter to Enhance Cu(In,Ga)Se ₂ Solar Cell Performance Using Yttrium Aluminum Garnet:Ce ³⁺ Ceramics. <i>Solar Rrl</i> , 2020, 4, 1900518. | 3.1 | 3 |
| 32 | Quasi-Static Two-Dimensional Infrared Spectra of the Carboxyhemoglobin Subsystem under Electric Fields: A Theoretical Study. <i>Journal of Physical Chemistry B</i> , 2020, 124, 9570-9578. | 1.2 | 3 |
| 33 | High-temperature Raman and FTIR study of aragonite-group carbonates. <i>Physics and Chemistry of Minerals</i> , 2019, 46, 51-62. | 0.3 | 24 |
| 34 | Pressure-induced modification of the anomalous Hall effect in layered Fe_3Te_2 . <i>Physical Review B</i> , 2019, 100, . | | |
| 35 | In-situ high-temperature vibrational spectra for synthetic and natural clinohumite: Implications for dense hydrous magnesium silicates in subduction zones. <i>American Mineralogist</i> , 2019, 104, 53-63. | 0.9 | 14 |
| 36 | Pressure-Dependent Luminescence and Absorption in 3,3'-Diamino-4,4'-azoxyfuran: Secondary Bonding Interaction in Molecular Crystals. <i>Journal of Physical Chemistry C</i> , 2019, 123, 8731-8739. | 1.5 | 7 |

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|----|--|-----|-----------|
| 37 | Critical behavior in the half-metallic Heusler alloy CoTiSn . Physical Review B, 2019, 100, . | 1.1 | 18 |
| 38 | Phase Confirmation and Equation of State of $\hat{\Gamma}^2$ -HMX under 40 GPa. Journal of Physical Chemistry C, 2019, 123, 30121-30128. | 1.5 | 10 |
| 39 | Pressure- and Temperature-Dependent Structural Stability of LLM-105 Crystal. Journal of Physical Chemistry C, 2019, 123, 1110-1119. | 1.5 | 30 |
| 40 | In Situ Monitoring of Thermal Degradation of $\text{CH}_3\text{NH}_3\text{PbI}_3$ Films by Spectroscopic Ellipsometry. Journal of Physical Chemistry C, 2019, 123, 1362-1369. | 1.5 | 13 |
| 41 | $\text{Tm}^{3+}/\text{Dy}^{3+}/\text{Eu}^{3+}$ (Sm^{3+}) tri-activated Y_2WO_6 as one potential single-phase phosphor for WLEDs. Journal of Alloys and Compounds, 2019, 778, 942-950. | 2.8 | 35 |
| 42 | Wide-range ratiometric upconversion luminescence thermometry based on non-thermally coupled levels of Er in high-temperature cubic phase NaYF_4 : Yb, Er. Optics Letters, 2019, 44, 4678. | 1.7 | 6 |
| 43 | Temperature dependent optical properties of SnO_2 film study by ellipsometry. Optical Materials Express, 2019, 9, 3691. | 1.6 | 18 |
| 44 | Pressure-induced topological phase transitions and structural transition in 1T-TiTe ₂ single crystal. Applied Physics Letters, 2018, 112, . | 1.5 | 26 |
| 45 | Effect of pressure gradient and new phases for 1,3,5-trinitrohexahydro- <i>s</i> -triazine (RDX) under high pressures. Physical Chemistry Chemical Physics, 2018, 20, 14374-14383. | 1.3 | 21 |
| 46 | Exact interband transition energies of VO ₂ films. Thin Solid Films, 2018, 645, 160-165. | 0.8 | 6 |
| 47 | Strain-induced conductivity accelerated recoveries in $\text{LaAlO}_3/\text{SrTiO}_3$ heterostructure with millimeter scale. RSC Advances, 2018, 8, 37804-37810. | 1.7 | 0 |
| 48 | High-Pressure Phase Transition of Micro- and Nanoscale HoVO_4 and High-Pressure Phase Diagram of REVO_4 with RE Ionic Radius. ACS Omega, 2018, 3, 18227-18233. | 1.6 | 7 |
| 49 | Na^+ -Driven Nucleation of NaYF_4 :Yb,Er Nanocrystals and Effect of Temperature on Their Structural Transformations and Luminescent Properties. Journal of Physical Chemistry C, 2018, 122, 23242-23250. | 1.5 | 16 |
| 50 | Revealing the role of oxygen vacancies on the phase transition of VO ₂ film from the optical-constant measurements. RSC Advances, 2018, 8, 19151-19156. | 1.7 | 23 |
| 51 | Pressure-Induced Conformer Modifications and Electronic Structural Changes in 1,3,5-Triamino-2,4,6-trinitrobenzene (TATB) up to 20 GPa. Journal of Physical Chemistry C, 2018, 122, 15861-15867. | 1.5 | 16 |
| 52 | Laser effects on phase transition for cubic Sb_2O_3 microcrystals under high pressure. Journal of Materials Chemistry C, 2017, 5, 5451-5457. | 2.7 | 26 |
| 53 | Pressure and Temperature Study on the Structural Stability of GdNbO_4 : Eu^{3+} . Journal of Physical Chemistry C, 2017, 121, 14787-14794. | 1.5 | 25 |
| 54 | Heat-Induced Solid-Solid Phase Transformation of TKX-50. Journal of Physical Chemistry C, 2017, 121, 8262-8271. | 1.5 | 42 |

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|----|---|-----|-----------|
| 55 | Facile fabrication of infrared photodetector using metastable vanadium dioxide VO ₂ (B) nanorod networks. Applied Physics Letters, 2017, 111, . | 1.5 | 21 |
| 56 | Nature-Mimic ZnO Nanoflowers Architecture: Chalcogenide Quantum Dots Coupling with ZnO/ZnTiO ₃ Nanoheterostructures for Efficient Photoelectrochemical Water Splitting. Journal of Physical Chemistry C, 2017, 121, 21096-21104. | 1.5 | 32 |
| 57 | Growth and Characterization of β -RDX Single-Crystal Particles. Journal of Physical Chemistry C, 2017, 121, 17586-17594. | 1.5 | 18 |
| 58 | Does increasing pressure always accelerate the condensed material decay initiated through bimolecular reactions? A case of the thermal decomposition of TKX-50 at high pressures. Physical Chemistry Chemical Physics, 2017, 19, 23309-23317. | 1.3 | 12 |
| 59 | Cyclic Phase Transition from Hexagonal to Orthorhombic Then Back to Hexagonal of EuF ₃ While Loading Uniaxial Pressure and under High Temperature. Journal of Physical Chemistry C, 2016, 120, 18780-18787. | 1.5 | 11 |
| 60 | Irreversible temperature quenching and anti-quenching of photoluminescence of ZnS/CdS:Mn/ZnS quantum well quantum dots. Chemical Physics Letters, 2015, 625, 147-150. | 1.2 | 6 |
| 61 | Structure transformation and remarkable site-distribution modulation of Eu ³⁺ ions in CaMoO ₄ · α -Eu ³⁺ nanocrystals under high pressure. CrystEngComm, 2015, 17, 7905-7914. | 1.3 | 12 |
| 62 | Characterizations, structure and optical properties of ZnWO ₄ :Eu nanorods under high temperature. Surface and Interface Analysis, 2014, 46, 1151-1155. | 0.8 | 8 |
| 63 | Pressure-induced irreversible phase transitions of the monoclinic GdOOH nanorods at ambient temperature. Chemical Physics Letters, 2014, 612, 138-142. | 1.2 | 2 |
| 64 | White light emission of Eu ³⁺ /Ag co-doped Y ₂ Si ₂ O ₇ . Journal of Rare Earths, 2014, 32, 779-786. | 2.5 | 12 |
| 65 | Upconversion luminescence of NaYF ₄ :Yb,Er nanocrystals with high uniformity. Journal of Rare Earths, 2014, 32, 802-805. | 2.5 | 26 |
| 66 | Raman and luminescence studies on phase transition of EuNbO ₄ under high pressure. Journal of Rare Earths, 2014, 32, 787-791. | 2.5 | 27 |
| 67 | Pressure and temperature dependent up-conversion properties of Yb ³⁺ -Er ³⁺ co-doped BaBi ₄ Ti ₄ O ₁₅ ferroelectric ceramics. Journal of Rare Earths, 2014, 32, 879-883. | 2.5 | 13 |
| 68 | Selective functionalization of silicon surface controlled by metastable helium atom beam for patterning chemisorbed monolayer molecular assemblies. Surface and Interface Analysis, 2014, 46, 1196-1199. | 0.8 | 1 |
| 69 | Method for a quick estimation of energy dependent reflection electron energy loss spectroscopy spectra for Al and Si. Physica B: Condensed Matter, 2013, 423, 64-68. | 1.3 | 4 |
| 70 | Pressure-Induced Reverse Reaction of the Photochemical Decomposition of Germanium Tetraiodide Molecular Crystal. Journal of Physical Chemistry C, 2013, 117, 25012-25018. | 1.5 | 1 |
| 71 | Raman studies of selenium nanowires under high pressure. Materials Research Bulletin, 2011, 46, 350-354. | 2.7 | 8 |
| 72 | Raman studies of hexagonal MoO ₃ at high pressure. Physica Status Solidi (B): Basic Research, 2011, 248, 1119-1122. | 0.7 | 24 |

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|----|---|-----|-----------|
| 73 | Effective energy loss functions of Mo and Ta derived from reflection electron energy loss spectra. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2007, 159, 62-65. | 0.8 | 7 |
| 74 | Study of X-ray absorption near-edge structure with a photoemission electron microscope. <i>Surface and Interface Analysis</i> , 2006, 38, 574-578. | 0.8 | 1 |
| 75 | Angular distribution of X-ray photoelectrons emitted from silver. <i>Surface Science</i> , 2005, 592, 18-24. | 0.8 | 6 |
| 76 | Comparison of Energy-Loss Functions from Reflection Electron Energy-Loss Spectroscopy Spectra with Surface and Bulk Energy-Loss Functions: in Case of Cu. <i>Japanese Journal of Applied Physics</i> , 2004, 43, 7137-7143. | 0.8 | 8 |
| 77 | Effective depths for surface excitation derived by reflection electron energy-loss spectroscopy analysis. <i>Surface and Interface Analysis</i> , 2004, 36, 334-338. | 0.8 | 4 |
| 78 | Monte-Carlo simulation of secondary electron emission by x-ray irradiation?an application of x-ray absorption near-edge structure (XANES). <i>Surface and Interface Analysis</i> , 2004, 36, 1413-1416. | 0.8 | 8 |
| 79 | Monte-Carlo simulation of x-ray photoelectron emission from silver. <i>Surface and Interface Analysis</i> , 2003, 35, 818-823. | 0.8 | 8 |