# Mingkai Li

## List of Publications by Year in descending order

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|---|---|---|---|
| 48 papers | 819 citations | 516710 16 h-index | 552781 26 g-index |
| 48 all docs | 48 docs citations | 48 times ranked | 831 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Multi-component ZnO alloys: Bandgap engineering, hetero-structures, and optoelectronic devices. Materials Science and Engineering Reports, 2022, 147, 100661. | 31.8 | 58 |
| 2 | The elastic, electron, phonon, and vibrational properties of monolayer XO2 (XÂ=ÂCr, Mo, W) from first principles calculations. Materials Today Communications, 2022, 30, 103183. | 1.9 | 6 |
| 3 | High-performance self-driven ultraviolet photodetector based on SnO2 p-n homojunction. Optical Materials, 2022, 129, 112571. | 3.6 | 6 |
| 4 | Monolayer SnX (X = O, S, Se): Two-Dimensional Materials with Low Lattice Thermal Conductivities and High Thermoelectric Figures of Merit. ACS Applied Energy Materials, 2022, 5, 7802-7812. | 5.1 | 20 |
| 5 | XTlO (XÂ=ÂK, Rb, Cs): Novel 2D semiconductors with high electron mobilities, ultra-low lattice thermal conductivities and high thermoelectric figures of merit at room temperature. Applied Surface Science, 2022, 599, 153924. | 6.1 | 20 |
| 6 | Achieving p-type conductivity in wide-bandgap SnO2 by a two-step process. Applied Physics Letters, 2021, 118, . | 3.3 | 12 |
| 7 | Enhancing visible-light transmittance while reducing phase transition temperature of VO2 by Hfâ€“W co-doping. Applied Physics Letters, 2021, 118, . | 3.3 | 21 |
| 8 | Conjugated Ditertiary Ammonium Templated (100)-Oriented 2D Perovskite with Efficient Broad-Band Emission. Chemistry of Materials, 2021, 33, 4456-4464. | 6.7 | 23 |
| 9 | Nb-doped ZrxSn1â^'xO2: Experimental and first-principles study. Journal of Applied Physics, 2021, 130, . | 2.5 | 2 |
| 10 | Intermolecular Hydrogen-Bonding Correlated Structure Distortion and Broadband White-Light Emission in 5-Ammonium Valeric Acid Templated Lead Chloride Perovskites. Crystal Growth and Design, 2021, 21, 5731-5739. | 3.0 | 13 |
| 11 | Highâ€Performance Selfâ€Powered Ultraviolet Photodetector based on Coupled Ferroelectric Depolarization Field and Heterojunction Builtâ€in Potential. Advanced Electronic Materials, 2021, 7, 2100717. | 5.1 | 26 |
| 12 | Antisolventâ€assisted Crystallization of Centimeterâ€sized Leadâ€free Bismuth Bromide Hybrid Perovskite Single Crystals with Xâ€ray Sensitive Merits. Chemistry - an Asian Journal, 2021, 16, 4137-4144. | 3.3 | 10 |
| 13 | The S-content-dependent lattice structure evolution and bandgap modulation in quaternary MgZnOS alloy films. Journal Physics D: Applied Physics, 2021, 54, 065104. | 2.8 | 1 |
| 14 | Highly Sensitive and Tunable Self-Powered UV Photodetectors Driven Jointly by p-n Junction and Ferroelectric Polarization. ACS Applied Materials & Interfaces, 2020, 12, 53957-53965. | 8.0 | 65 |
| 15 | Two-dimensional SnO ultrathin epitaxial films: Pulsed laser deposition growth and quantum confinement effects. Physica B: Condensed Matter, 2020, 599, 412467. | 2.7 | 4 |
| 16 | RuVO2 alloy epitaxial films: Lowered insulatorâ€“metal transition temperature and retained modulation capacity. Applied Physics Letters, 2020, 116, 192103. | 3.3 | 8 |
| 17 | Size effect on excess resistivity induced by hydrogen in ultra-thin vanadium systems. Physical Chemistry Chemical Physics, 2020, 22, 11609-11613. | 2.8 | 1 |
| 18 | High performance solar-blind UV detector based on Hf0.38Sn0.62O2 epitaxial film. Applied Physics Letters, 2020, 116, . | 3.3 | 7 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | The band alignment of nonpolar m-plane ZnO1âˆ’xSx/Mg0.4Zn0.6O heterojunctions. AIP Advances, 2020, 10, 015314. | 1.3 | 3 |
| 20 | Effects of oxygen pressure on PLD-grown Be and Cd co-substituted ZnO alloy films for ultraviolet photodetectors. Journal of Alloys and Compounds, 2020, 833, 155032. | 5.5 | 19 |
| 21 | Electronic structure and dynamic properties of two-dimensional W Mo1âˆ’S2 ternary alloys from first-principles calculations. Computational Materials Science, 2020, 182, 109797. | 3.0 | 11 |
| 22 | Photovoltaic effect in m-plane orientated ZnOS epitaxial thin films. Applied Physics Letters, 2019, 115, . | 3.3 | 8 |
| 23 | Influence of growth temperature on the characteristics of Î²-Ga2O3 epitaxial films and related solar-blind photodetectors. Applied Surface Science, 2019, 489, 101-109. | 6.1 | 73 |
| 24 | Pulsed laser deposition and characteristics of epitaxial non-polar m-plane ZnO1-xSx alloy films. Journal of Alloys and Compounds, 2019, 773, 443-448. | 5.5 | 10 |
| 25 | From stannous oxide to stannic oxide epitaxial films grown by pulsed laser deposition with a metal tin target. Applied Surface Science, 2019, 466, 765-771. | 6.1 | 8 |
| 26 | Theoretical investigation of the structural, electronic, and thermodynamic properties of CdS1-xSex alloys. Journal of Applied Physics, 2018, 123, . | 2.5 | 10 |
| 27 | Electronic-structure and thermodynamic properties of ZnS1âˆ’Se ternary alloys from the first-principles calculations. Computational Materials Science, 2018, 149, 386-396. | 3.0 | 12 |
| 28 | Pulsed laser deposited Be x Zn 1-x O 1-y S y quaternary alloy films: structure, composition, and band gap bowing. Applied Surface Science, 2018, 433, 674-679. | 6.1 | 10 |
| 29 | Conducting Polymer Paper-Derived Mesoporous 3D N-doped Carbon Current Collectors for Na and Li Metal Anodes: A Combined Experimental and Theoretical Study. Journal of Physical Chemistry C, 2018, 122, 23352-23363. | 3.1 | 27 |
| 30 | Accounting for the thermo-stability of PdHx (xÂ=Â1â€“3) by density functional theory. International Journal of Hydrogen Energy, 2018, 43, 18372-18381. | 7.1 | 12 |
| 31 | Greatly enhanced photocurrent in inorganic perovskite [KNbO<sub>3</sub>]<sub>0.9</sub>[BaNi<sub>0.5</sub>Nb<sub>0.5</sub>O<sub>3â€“ƒ</sub>]<sub>0.1</sub> ferroelectric thinâ€film solar cell. Journal of the American Ceramic Society, 2018, 101, 4892-4898. | 3.8 | 29 |
| 32 | Inter-Conversion between Different Compounds of Ternary Cs-Pb-Br System. Materials, 2018, 11, 717. | 2.9 | 29 |
| 33 | Theoretical investigation on thermodynamic properties of ZnO1âˆ’xTexalloys. Materials Research Express, 2017, 4, 055901. | 1.6 | 5 |
| 34 | First-principles calculations of the phase equilibrium of BexZn1âˆ’xO alloys. Journal of Applied Physics, 2017, 121, 205101. | 2.5 | 8 |
| 35 | First-principles calculations of the thermodynamics of wurtzite and zincblende ZnO 1-x S x alloys. Physica B: Condensed Matter, 2017, 520, 1-6. | 2.7 | 7 |
| 36 | Magnetic order and phase diagram of magnetic alloy system: Mg<sub>x</sub>Ni<sub>1â€“x</sub>O alloy. Physica Status Solidi (B): Basic Research, 2017, 254, 1700085. | 1.5 | 4 |

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|---|---|---|---|
| 37 | Synthesis of all-inorganic CsPb<sub>2</sub>Br<sub>5</sub> perovskite and determination of its luminescence mechanism. RSC Advances, 2017, 7, 54002-54007. | 3.6 | 49 |
| 38 | SnO2 epitaxial films with varying thickness on c-sapphire: Structure evolution and optical band gap modulation. Applied Surface Science, 2017, 423, 611-618. | 6.1 | 42 |
| 39 | The S concentration dependence of lattice parameters and optical band gap of a-plane ZnOS grown epitaxially on r-plane sapphire. Journal of Alloys and Compounds, 2015, 630, 106-109. | 5.5 | 14 |
| 40 | Single-phase quaternary MgxZn1âˆ'xO1âˆ'ySy alloy thin films grown by pulsed laser deposition. Journal of Applied Physics, 2015, 117, 065301. | 2.5 | 8 |
| 41 | Structural properties and enhanced bandgap tunability of quaternary CdZnOS epitaxial films grown by pulsed laser deposition. Journal of Alloys and Compounds, 2015, 650, 748-752. | 5.5 | 11 |
| 42 | First-principles study of divalent IIA and transition IIB metals doping into Cu2O. Journal Wuhan University of Technology, Materials Science Edition, 2015, 30, 458-462. | 1.0 | 8 |
| 43 | Annealing and characterisation of CuInS2 thin films prepared on sapphire substrates by pulsed laser deposition. Materials Research Innovations, 2014, 18, S4-22-S4-25. | 2.3 | 0 |
| 44 | Optical properties of the nonpolar a-plane MgZnO films grown on a-GaN/r-sapphire templates by pulsed laser deposition. Optical Materials Express, 2014, 4, 2346. | 3.0 | 7 |
| 45 | Annealing effects on CuInS2 thin films grown on glass substrates by using pulsed laser deposition. Journal of the Korean Physical Society, 2014, 64, 410-414. | 0.7 | 6 |
| 46 | Structural and optical properties of single-phase ZnO1âˆ'S alloy films epitaxially grown by pulsed laser deposition. Journal of Alloys and Compounds, 2014, 587, 369-373. | 5.5 | 23 |
| 47 | Tuning the composition and optical band gap of pulsed laser deposited ZnO1âˆ'S alloy films by controlling the substrate temperature. Journal of Alloys and Compounds, 2014, 617, 413-417. | 5.5 | 15 |
| 48 | Solubility limits and phase structures in epitaxial ZnOS alloy films grown by pulsed laser deposition. Journal of Alloys and Compounds, 2012, 534, 81-85. | 5.5 | 48 |