

Jiwei Lu

List of Publications by Year in descending order

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78
papers

4,213
citations

185998

28
h-index

106150

65
g-index

80
all docs

80
docs citations

80
times ranked

5528
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Weak Antilocalization and Anisotropic Magnetoresistance as a Probe of Surface States in Topological Bi ₂ TeSe ₃ Thin Films. Scientific Reports, 2020, 10, 4845. | 1.6 | 24 |
| 2 | Growth and Characterization of NbTiN Films Synthesized by Reactive Bias Target Ion Beam Deposition (RBTIBD). IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5. | 1.1 | 4 |
| 3 | Structural, transport, and ultrafast dynamic properties of V _{1-x} Nb _x O ₂ thin films. Physical Review B, 2019, 99, . | 1.1 | 2 |
| 4 | Phase Change Hyperbolic Heterostructures for Nanopolaritonics: A Case Study of hBN/VO ₂ . Advanced Materials, 2019, 31, e1900251. | 11.1 | 43 |
| 5 | Transport phenomena in SrVO ₃ /SrTiO ₃ superlattices. Journal Physics D: Applied Physics, 2018, 51, 10LT01. | 1.3 | 5 |
| 6 | Surface morphology control of Nb thin films by biased target ion beam deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, 031507. | 0.9 | 6 |
| 7 | Effect of Surface Plasmons on the Insulator to Metal Transition in Thin Film Vanadium Dioxide. , 2018, , . | | 0 |
| 8 | Spin-torque oscillation in large size nano-magnet with perpendicular magnetic fields. Journal of Magnetism and Magnetic Materials, 2017, 432, 356-361. | 1.0 | 9 |
| 9 | Ultrafast electron-lattice coupling dynamics in VO ₂ thin films. Physical Review B, 2017, 96, . | 1.1 | 32 |
| 10 | Controlling phase separation in vanadium dioxide thin films via substrate engineering. Physical Review B, 2017, 96, . | 1.1 | 13 |
| 11 | Time-resolved light-induced insulator-metal transition in niobium dioxide and vanadium dioxide thin films. Optical Materials Express, 2017, 7, 213. | 1.6 | 23 |
| 12 | Magneto-transport and domain wall scattering in epitaxy L1 MnAl thin film. Journal of Applied Physics, 2016, 119, . | 1.1 | 11 |
| 13 | Threshold Switching Characteristics of Nb/NbO ₂ /TiN Vertical Devices. IEEE Journal of the Electron Devices Society, 2016, 4, 11-14. | 1.2 | 17 |
| 14 | Optical Studies on VO ₂ Thin Films. Materials Research Society Symposia Proceedings, 2015, 1803, 1. | 0.1 | 0 |
| 15 | Phase transition in bulk single crystals and thin films of VO ₂ by nanoscale infrared spectroscopy and imaging. Physical Review B, 2015, 91, . | 1.1 | 88 |
| 16 | Radiation effects on the magnetism and the spin dependent transport in magnetic materials and nanostructures for spintronic applications. Journal of Materials Research, 2015, 30, 1430-1439. | 1.2 | 13 |
| 17 | Epitaxial niobium dioxide thin films by reactive-biased target ion beam deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, 021516. | 0.9 | 28 |
| 18 | Large epitaxial bi-axial strain induces a Mott-like phase transition in VO ₂ . Applied Physics Letters, 2014, 105, . | 1.5 | 61 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Symmetry breaking and geometric confinement in VO ₂ : Results from a three-dimensional infrared nano-imaging. Applied Physics Letters, 2014, 104, 121905. | 1.5 | 36 |
| 20 | Magnetic damping and spin polarization of highly ordered B2 Co ₂ FeAl thin films. Journal of Applied Physics, 2014, 116, 073902. | 1.1 | 15 |
| 21 | Spin torque nano oscillators as key building blocks for the Systems-on-Chip of the future. , 2014, , . | | 5 |
| 22 | Distinct Length Scales in the VO ₂ Metal-Insulator Transition Revealed by Bichromatic Optical Probing. Advanced Optical Materials, 2014, 2, 30-33. | 3.6 | 18 |
| 23 | Two-Dimensional Mott Insulators in SrVO ₃ Ultrathin Films. Advanced Materials Interfaces, 2014, 1, 1300126. | 1.9 | 55 |
| 24 | Rapid, cost-effective DNA quantification via a visually-detectable aggregation of superparamagnetic silica-magnetite nanoparticles. Nano Research, 2014, 7, 755-764. | 5.8 | 14 |
| 25 | Transport behavior and electronic structure of phase pure VO ₂ thin films grown on c-plane sapphire under different O ₂ partial pressure. Journal of Applied Physics, 2013, 114, . | 1.1 | 38 |
| 26 | Metal-insulator transition induced in CaVO ₃ thin films. Journal of Applied Physics, 2013, 113, . | 1.1 | 31 |
| 27 | Metal-insulator transition in nanocomposite VO _x films formed by anodic electrodeposition. Applied Physics Letters, 2013, 103, 202102. | 1.5 | 4 |
| 28 | Electron molecular beam epitaxy: Layer-by-layer growth of complex oxides via pulsed electron-beam deposition. Journal of Applied Physics, 2013, 113, . | 1.1 | 16 |
| 29 | Structural, magnetic, and nanoscale switching properties of BiFeO ₃ thin films grown by pulsed electron deposition. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2013, 31, . | 0.6 | 5 |
| 30 | Recovery of the chemical ordering in L1 MnAl epitaxial thin films irradiated by 2 MeV protons. Applied Physics Letters, 2013, 102, . | 1.5 | 10 |
| 31 | Strain-induced enhancement of coercivity in amorphous TbFeCo films. Journal of Applied Physics, 2013, 113, . | 1.1 | 29 |
| 32 | Interfacial perpendicular magnetic anisotropy and damping parameter in ultra thin Co ₂ FeAl films. Applied Physics Letters, 2013, 102, . | 1.5 | 49 |
| 33 | Structural and magnetic properties of Cr-diluted CoFeB. Journal of Applied Physics, 2013, 114, 153902. | 1.1 | 4 |
| 34 | Metal-insulator transition in SrTi _{1-x} V _x O ₃ thin films. Applied Physics Letters, 2013, 103, . | 1.5 | 13 |
| 35 | Self-assembled multiferroic magnetic QCA structures for low power systems. , 2012, , . | | 1 |
| 36 | Magnetic anisotropy in composite CoFe ₂ O ₄ -BiFeO ₃ ultrathin films grown by pulsed-electron deposition. Journal of Applied Physics, 2012, 111, . | 1.1 | 25 |

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|----|---|------|-----------|
| 37 | Directed Self-Assembly of Epitaxial $\text{CoFe}_2\text{O}_4/\text{BiFeO}_3$ Multiferroic Nanocomposites. <i>Nano Letters</i> , 2012, 12, 2367-2373. | 4.5 | 113 |
| 38 | Enhanced magnetic and electrical properties in amorphous Ge:Mn thin films by non-magnetic codoping. <i>Journal of Applied Physics</i> , 2012, 111, 033916. | 1.1 | 6 |
| 39 | THz spectroscopy of VO_2 epitaxial films: controlling the anisotropic properties through strain engineering. <i>New Journal of Physics</i> , 2012, 14, 083026. | 1.2 | 46 |
| 40 | Terahertz-field-induced insulator-to-metal transition in vanadium dioxide metamaterial. <i>Nature</i> , 2012, 487, 345-348. | 13.7 | 1,046 |
| 41 | Microstructural and domain effects in epitaxial CoFe_2O_4 films on MgO with perpendicular magnetic anisotropy. <i>Journal of Magnetism and Magnetic Materials</i> , 2012, 324, 524-527. | 1.0 | 21 |
| 42 | Large strain-induced conductivity anisotropy in VO_2 thin films, probed by THz spectroscopy. , 2011, , . | | 0 |
| 43 | Magnetic properties of ion implanted $\text{Ge}_{1-x}\text{Mn}_x$ thin films solidified through pulsed laser melting. <i>Journal of Applied Physics</i> , 2011, 109, 093917. | 1.1 | 8 |
| 44 | Metal-oxide-oxide-metal granular tunnel diodes fabricated by anodization. <i>Applied Physics Letters</i> , 2011, 99, 252101. | 1.5 | 4 |
| 45 | Alkyl chain length effects on solid-state difluoroboron $\hat{\text{I}}^2$ -diketonate mechanochromic luminescence. <i>Journal of Materials Chemistry</i> , 2011, 21, 8409. | 6.7 | 161 |
| 46 | Arene effects on difluoroboron $\hat{\text{I}}^2$ -diketonate mechanochromic luminescence. <i>Journal of Materials Chemistry</i> , 2011, 21, 8401. | 6.7 | 110 |
| 47 | Transport Anisotropy of Epitaxial VO_2 Films near the Metal-Semiconductor Transition. <i>Applied Physics Express</i> , 2011, 4, 091104. | 1.1 | 17 |
| 48 | Epitaxial $\hat{\text{I}}$, phase MnAl thin films on MgO (001) with thickness-dependent magnetic anisotropy. <i>Journal of Applied Physics</i> , 2011, 110, . | 1.1 | 23 |
| 49 | Correlation of Nanoscale Structure and Magnetic Properties in Manganese Doped Germanium Dilute Magnetic Semiconductors. <i>Materials Research Society Symposia Proceedings</i> , 2011, 1305, 1. | 0.1 | 0 |
| 50 | The Promise of Nanomagnetism and Spintronics for Future Logic and Universal Memory. <i>Proceedings of the IEEE</i> , 2010, 98, 2155-2168. | 16.4 | 266 |
| 51 | Temperature-dependent dielectric relaxation in bismuth zinc niobate thin films. <i>Applied Physics Letters</i> , 2010, 97, 022902. | 1.5 | 11 |
| 52 | Detection of bottom ferromagnetic electrode oxidation in magnetic tunnel junctions by magnetometry measurements. <i>Journal of Applied Physics</i> , 2010, 108, 113918. | 1.1 | 1 |
| 53 | Electron conduction in lateral granular oxide-metal tunnel junctions. <i>Applied Physics Letters</i> , 2010, 97, 242113. | 1.5 | 7 |
| 54 | Modulation of the magnetism in ion implanted $\text{Mn}_x\text{Ge}_{1-x}$ thin films by rapid thermal anneal. <i>Journal of Applied Physics</i> , 2010, 108, . | 1.1 | 8 |

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|----|--|-----|-----------|
| 55 | An Easy Method To Monitor Lactide Polymerization with a Boron Fluorescent Probe. ACS Applied Materials & Interfaces, 2010, 2, 3069-3074. | 4.0 | 16 |
| 56 | Polymorphism and Reversible Mechanochromic Luminescence for Solid-State Difluoroboron Avobenzene. Journal of the American Chemical Society, 2010, 132, 2160-2162. | 6.6 | 765 |
| 57 | Mechanochromic Luminescence Quenching: Force-Enhanced Singlet-to-Triplet Intersystem Crossing for Iodide-Substituted Difluoroboron ⁺ Dibenzoylmethane ⁺ Dodecane in the Solid State. Inorganic Chemistry, 2010, 49, 10747-10749. | 1.9 | 85 |
| 58 | Magnetism in Ge[sub (1 ^x)]Mn[sub (x)] Thin Films and Quantum Dots Synthesized by Ion Implantation. , 2009, , . | | 0 |
| 59 | Effects of target bias voltage in magnetic tunnel junctions grown by ion beam deposition. Journal of Applied Physics, 2009, 106, 013905. | 1.1 | 7 |
| 60 | Properties of vanadium and tantalum granular oxide-metal tunnel junctions fabricated by electrochemical anodization. Applied Physics Letters, 2009, 95, . | 1.5 | 6 |
| 61 | Ferromagnetism in Rutile Structure Cr Doped VO ₂ Thin Films Prepared by Reactive-Bias Target Ion Beam Deposition. Journal of Superconductivity and Novel Magnetism, 2008, 21, 87-92. | 0.8 | 28 |
| 62 | Very large anisotropy in the dc conductivity of epitaxial VO ₂ thin films grown on (011) rutile TiO ₂ substrates. Applied Physics Letters, 2008, 93, . | 1.5 | 36 |
| 63 | Growth and characterization of vanadium dioxide thin films prepared by reactive-biased target ion beam deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2008, 26, 133-139. | 0.9 | 77 |
| 64 | Low-loss tunable capacitors fabricated directly on gold bottom electrodes. Applied Physics Letters, 2006, 88, 112905. | 1.5 | 29 |
| 65 | Atomic structure of (111) SrTiO ₃ •Pt interfaces. Applied Physics Letters, 2006, 88, 131914. | 1.5 | 23 |
| 66 | Phase transitions in textured SrTiO ₃ thin films on epitaxial Pt electrodes. Journal of Applied Physics, 2006, 99, 033521. | 1.1 | 18 |
| 67 | GEOMETRICAL SCALING EFFECTS IN HIGH PERMITTIVITY CAPACITORS. Integrated Ferroelectrics, 2006, 80, 437-442. | 0.3 | 1 |
| 68 | Microstructure of Epitaxial SrTiO ₃ /Pt/Ti/ Sapphire Heterostructures. Journal of Materials Research, 2005, 20, 2261-2265. | 1.2 | 16 |
| 69 | Microstructure and Dielectric Properties of Textured SrTiO ₃ Thin Films. Journal of the American Ceramic Society, 2005, 88, 789-801. | 1.9 | 43 |
| 70 | BZN THIN FILM CAPACITORS FOR MICROWAVE LOW LOSS TUNABLE APPLICATIONS. Integrated Ferroelectrics, 2005, 77, 21-26. | 0.3 | 10 |
| 71 | HIGH FREQUENCY LOSS MODELING USING DIELECTRIC RELAXATION. Integrated Ferroelectrics, 2005, 77, 87-92. | 0.3 | 3 |
| 72 | Contributions to the dielectric losses of textured SrTiO ₃ thin films with Pt electrodes. Journal of Applied Physics, 2005, 98, 054101. | 1.1 | 21 |

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|----|--|-----|-----------|
| 73 | Microwave dielectric properties of tunable capacitors employing bismuth zinc niobate thin films. Journal of Applied Physics, 2005, 97, 084110. | 1.1 | 70 |
| 74 | Temperature dependence of the dielectric tunability of pyrochlore bismuth zinc niobate thin films. Applied Physics Letters, 2005, 86, 032901. | 1.5 | 88 |
| 75 | Influence of strain on the dielectric relaxation of pyrochlore bismuth zinc niobate thin films. Applied Physics Letters, 2004, 84, 957-959. | 1.5 | 55 |
| 76 | Low-loss, tunable bismuth zinc niobate films deposited by rf magnetron sputtering. Applied Physics Letters, 2003, 83, 2411-2413. | 1.5 | 177 |
| 77 | Composition control and dielectric properties of bismuth zinc niobate thin films synthesized by radio-frequency magnetron sputtering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2003, 21, 1745-1751. | 0.9 | 40 |
| 78 | Fabrication of high toughness alumina with elongated grains. Journal of Materials Science Letters, 2001, 20, 1425-1427. | 0.5 | 4 |