

Hidenori Hiramatsu

List of Publications by Year in descending order

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187
papers

9,399
citations

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92
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198
all docs

198
docs citations

198
times ranked

7204
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Iron-Based Layered Superconductor: LaOFeP . Journal of the American Chemical Society, 2006, 128, 10012-10013. | 6.6 | 1,207 |
| 2 | p-channel thin-film transistor using p-type oxide semiconductor, SnO. Applied Physics Letters, 2008, 93, . | 1.5 | 577 |
| 3 | Recent advances in iron-based superconductors toward applications. Materials Today, 2018, 21, 278-302. | 8.3 | 310 |
| 4 | Nickel-Based Oxyphosphide Superconductor with a Layered Crystal Structure, LaNiOP . Inorganic Chemistry, 2007, 46, 7719-7721. | 1.9 | 268 |
| 5 | Preparation of highly conductive, deep ultraviolet transparent $\text{In}^2\text{-Ga}_2\text{O}_3$ thin film at low deposition temperatures. Thin Solid Films, 2002, 411, 134-139. | 0.8 | 261 |
| 6 | Crystal Structures, Optoelectronic Properties, and Electronic Structures of Layered Oxychalcogenides M_3CuOCh ($\text{M} = \text{Bi, La}$; $\text{Ch} = \text{S, Se, Te}$): Effects of Electronic Configurations of M^{3+} Ions. Chemistry of Materials, 2008, 20, 326-334. | 3.2 | 258 |
| 7 | Advantageous grain boundaries in iron pnictide superconductors. Nature Communications, 2011, 2, 409. | 5.8 | 246 |
| 8 | Tin monoxide as an orbital-based p-type oxide semiconductor: Electronic structures and TFT application. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 2187-2191. | 0.8 | 213 |
| 9 | Discovery of earth-abundant nitride semiconductors by computational screening and high-pressure synthesis. Nature Communications, 2016, 7, 11962. | 5.8 | 208 |
| 10 | Exploration of new superconductors and functional materials, and fabrication of superconducting tapes and wires of iron pnictides. Science and Technology of Advanced Materials, 2015, 16, 033503. | 2.8 | 188 |
| 11 | Growth, structure and carrier transport properties of Ga_2O_3 epitaxial film examined for transparent field-effect transistor. Thin Solid Films, 2006, 496, 37-41. | 0.8 | 173 |
| 12 | Degenerate p-type conductivity in wide-gap $\text{LaCuOS}_{1-x}\text{Se}_x$ ($x=0\sim 1$) epitaxial films. Applied Physics Letters, 2003, 82, 1048-1050. | 1.5 | 166 |
| 13 | Field-induced current modulation in epitaxial film of deep-ultraviolet transparent oxide semiconductor Ga_2O_3 . Applied Physics Letters, 2006, 88, 092106. | 1.5 | 137 |
| 14 | Frontier of transparent oxide semiconductors. Solid-State Electronics, 2003, 47, 2261-2267. | 0.8 | 129 |
| 15 | Hydrogen passivation of electron trap in amorphous In-Ga-Zn-O thin-film transistors. Applied Physics Letters, 2013, 103, . | 1.5 | 112 |
| 16 | Biaxially textured cobalt-doped BaFe_2As_2 films with high critical current density over 1 MA/cm^2 on MgO-buffered metal-tape flexible substrates. Applied Physics Letters, 2011, 98, 242510. | 1.5 | 110 |
| 17 | Heteroepitaxial growth of a wide-gap p-type semiconductor, LaCuOS . Applied Physics Letters, 2002, 81, 598-600. | 1.5 | 105 |
| 18 | Pseudoisotropic Upper Critical Field in Cobalt-Doped SrFe_2As_2 Films. Physical Review Letters, 2009, 102, 117004. | 2.9 | 104 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Superconductivity in Epitaxial Thin Films of Co-Doped SrFe ₂ As ₂ with Bilayered FeAs Structures and their Magnetic Anisotropy. Applied Physics Express, 2008, 1, 101702. | 1.1 | 103 |
| 20 | Single-atomic-layered quantum wells built in wide-gap semiconductors LnCuOCh (Ln=lanthanide, Ch=chalcogen). Physical Review B, 2004, 69, . | 1.1 | 97 |
| 21 | Electrical and Optical Properties and Electronic Structures of LnCuOS (Ln = La ^{1/4} Nd). Chemistry of Materials, 2003, 15, 3692-3695. | 3.2 | 94 |
| 22 | Electric field-induced superconducting transition of insulating FeSe thin film at 35 K. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 3986-3990. | 3.3 | 93 |
| 23 | Electrical and Optical Properties of Radio-Frequency-Sputtered Thin Films of (ZnO) ₅ In ₂ O ₃ . Chemistry of Materials, 1998, 10, 3033-3039. | 3.2 | 91 |
| 24 | Heavy hole doping of epitaxial thin films of a wide gap p-type semiconductor, LaCuOSe, and analysis of the effective mass. Applied Physics Letters, 2007, 91, . | 1.5 | 91 |
| 25 | Heteroepitaxial growth and optoelectronic properties of layered iron oxyarsenide, LaFeAsO. Applied Physics Letters, 2008, 93, 162504. | 1.5 | 91 |
| 26 | Structural relaxation in amorphous oxide semiconductor, a-In-Ga-Zn-O. Journal of Applied Physics, 2012, 111, . | 1.1 | 90 |
| 27 | Conversion of an ultra-wide bandgap amorphous oxide insulator to a semiconductor. NPG Asia Materials, 2017, 9, e359-e359. | 3.8 | 89 |
| 28 | Performance boosting strategy for perovskite light-emitting diodes. Applied Physics Reviews, 2019, 6, 031402. | 5.5 | 88 |
| 29 | Improvement in thermoelectric properties of (ZnO) ₅ In ₂ O ₃ through partial substitution of yttrium for indium. Journal of Materials Research, 1998, 13, 523-526. | 1.2 | 87 |
| 30 | Wide-gap layered oxychalcogenide semiconductors: Materials, electronic structures and optoelectronic properties. Thin Solid Films, 2006, 496, 8-15. | 0.8 | 86 |
| 31 | Exploration of Stable Strontium Phosphide-Based Electrides: Theoretical Structure Prediction and Experimental Validation. Journal of the American Chemical Society, 2017, 139, 15668-15680. | 6.6 | 84 |
| 32 | High Critical Current Density 4 MA/cm ² in Co-Doped BaFe ₂ As ₂ Epitaxial Films Grown on (La,Sr)(Al,Ta)O ₃ Substrates without Buffer Layers. Applied Physics Express, 2010, 3, 063101. | 1.1 | 83 |
| 33 | Extraordinary Strong Band Edge Absorption in Distorted Chalcogenide Perovskites. Solar Rrl, 2020, 4, 1900555. | 3.1 | 82 |
| 34 | Intrinsic excitonic photoluminescence and band-gap engineering of wide-gap-type oxychalcogenide epitaxial films of LnCuOCh (Ln=La, Pr, and Nd; Ch=S or Se) semiconductor alloys. Journal of Applied Physics, 2003, 94, 5805-5808. | 1.1 | 79 |
| 35 | Preparation of transparent p-type (La ^{1-x} Sr _x O)CuS thin films by r.f. sputtering technique. Thin Solid Films, 2002, 411, 125-128. | 0.8 | 77 |
| 36 | Thin film growth of Fe-based superconductors: from fundamental properties to functional devices. A comparative review. Reports on Progress in Physics, 2014, 77, 046502. | 8.1 | 74 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | Water-induced superconductivity in SrFe ₂ As ₂ . Physical Review B, 2009, 80, . | 1.1 | 69 |
| 38 | Josephson junction in cobalt-doped BaFe ₂ As ₂ epitaxial thin films on (La,Sr)(Al,Ta)O ₃ bicrystal substrates. Applied Physics Letters, 2010, 96, . | 1.5 | 68 |
| 39 | Atomically-flat, chemically-stable, superconducting epitaxial thin film of iron-based superconductor, cobalt-doped. Solid State Communications, 2009, 149, 2121-2124. | 0.9 | 66 |
| 40 | Electrical conductivity control in transparent p-type (LaO)CuS thin films prepared by rf sputtering. Journal of Applied Physics, 2002, 91, 9177-9181. | 1.1 | 65 |
| 41 | n-type conversion of SnS by isovalent ion substitution: Geometrical doping as a new doping route. Scientific Reports, 2015, 5, 10428. | 1.6 | 59 |
| 42 | Material Design of Green-Light-Emitting Semiconductors: Perovskite-Type Sulfide SrHfS ₃ . Journal of the American Chemical Society, 2019, 141, 5343-5349. | 6.6 | 59 |
| 43 | Third-order optical nonlinearity originating from room-temperature exciton in layered compounds LaCuOS and LaCuOSe. Applied Physics Letters, 2004, 84, 879-881. | 1.5 | 56 |
| 44 | Mechanism for Heteroepitaxial Growth of Transparent P-Type Semiconductor: LaCuOS by Reactive Solid-Phase Epitaxy. Crystal Growth and Design, 2004, 4, 301-307. | 1.4 | 54 |
| 45 | Excitonic blue luminescence from p-LaCuOSe/n-InGaZn ₅ O ₈ light-emitting diode at room temperature. Applied Physics Letters, 2005, 87, 211107. | 1.5 | 53 |
| 46 | Opto-electronic properties and light-emitting device application of widegap layered oxychalcogenides: LaCuOCh (Ch= chalcogen) and La ₂ CdO ₂ Se ₂ . Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 2800-2811. | 0.8 | 50 |
| 47 | Thin Film Growth and Device Fabrication of Iron-Based Superconductors. Journal of the Physical Society of Japan, 2012, 81, 011011. | 0.7 | 50 |
| 48 | Roles of Hydrogen in Amorphous Oxide Semiconductor In-Ga-Zn-O: Comparison of Conventional and Ultra-High-Vacuum Sputtering. ECS Journal of Solid State Science and Technology, 2014, 3, Q3085-Q3090. | 0.9 | 50 |
| 49 | Low Threshold Voltage and Carrier Injection Properties of Inverted Organic Light-Emitting Diodes with [Ca ₂₄ Al ₂₈ O ₆₄] ⁴⁺ Cathode and Cu ₂ Se Anode. Journal of Physical Chemistry C, 2009, 113, 18379-18384. | 1.5 | 49 |
| 50 | DC superconducting quantum interference devices fabricated using bicrystal grain boundary junctions in Co-doped BaFe ₂ As ₂ epitaxial films. Superconductor Science and Technology, 2010, 23, 082001. | 1.8 | 47 |
| 51 | Device applications of transparent oxide semiconductors: Excitonic blue LED and transparent flexible TFT. Journal of Electroceramics, 2006, 17, 267-275. | 0.8 | 46 |
| 52 | Electron effective mass and mobility limits in degenerate perovskite stannate BaSnO ₃ . Physical Review B, 2017, 95, . | 1.1 | 45 |
| 53 | Liquid vortex phase and strong c-axis pinning in low anisotropy BaCo ₂ Fe ₂ As ₂ pnictide films. Superconductor Science and Technology, 2011, 24, 055007. | 1.8 | 44 |
| 54 | Origins of Hole Doping and Relevant Optoelectronic Properties of Wide Gap p-Type Semiconductor, LaCuOSe. Journal of the American Chemical Society, 2010, 132, 15060-15067. | 6.6 | 43 |

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|----|--|-----|-----------|
| 55 | High critical-current density with less anisotropy in BaFe ₂ (As,P) ₂ epitaxial thin films: Effect of intentionally grown <i>c</i> -axis vortex-pinning centers. Applied Physics Letters, 2014, 104, . | 1.5 | 43 |
| 56 | Identical effects of indirect and direct electron doping of superconducting BaFe ₂ As ₂ thin films. Physical Review B, 2012, 85, . | 1.1 | 42 |
| 57 | Role of lone pair electrons in determining the optoelectronic properties of BiCuOSe. Physical Review B, 2012, 85, . | 1.1 | 42 |
| 58 | Thin film growth by pulsed laser deposition and properties of 122-type iron-based superconductor AE(Fe _{1-x} Co _x) ₂ As ₂ (AE=alkaline earth). Superconductor Science and Technology, 2012, 25, 084015. | 1.8 | 42 |
| 59 | Wide gap p-type degenerate semiconductor: Mg-doped LaCuOSe. Thin Solid Films, 2003, 445, 304-308. | 0.8 | 41 |
| 60 | Heteroepitaxial growth of layered semiconductors, LaZnOPn (Pn=P and As). Thin Solid Films, 2008, 516, 5800-5804. | 0.8 | 40 |
| 61 | Heteroepitaxial film growth of layered compounds with the ZrCuSiAs-type and ThCr ₂ Si ₂ -type structures: From Cu-based semiconductors to Fe-based superconductors. Physica C: Superconductivity and Its Applications, 2009, 469, 657-666. | 0.6 | 39 |
| 62 | Competition and cooperation of pinning by extrinsic point-like defects and intrinsic strong columnar defects in BaFe ₂ As ₂ thin films. Physical Review B, 2012, 86, . | 1.1 | 39 |
| 63 | Heteroepitaxial growth of SnSe films by pulsed laser deposition using Se-rich targets. Journal of Applied Physics, 2015, 118, . | 1.1 | 38 |
| 64 | High-field transport properties of a P-doped BaFe ₂ As ₂ film on technical substrate. Scientific Reports, 2017, 7, 39951. | 1.6 | 38 |
| 65 | Synthesis of single-phase layered oxchalcogenide La ₂ CdO ₂ Se ₂ : crystal structure, optical and electrical properties. Journal of Materials Chemistry, 2004, 14, 2946. | 6.7 | 35 |
| 66 | Microstructure and transport properties of [001]-tilt bicrystal grain boundaries in iron pnictide superconductor, cobalt-doped BaFe ₂ As ₂ . Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2012, 177, 515-519. | 1.7 | 35 |
| 67 | SnAs with the NaCl-type Structure: Type-I Superconductivity and Single Valence State of Sn. Chemistry of Materials, 2014, 26, 7209-7213. | 3.2 | 35 |
| 68 | Enhanced critical-current in P-doped BaFe ₂ As ₂ thin films on metal substrates arising from poorly aligned grain boundaries. Scientific Reports, 2016, 6, 36828. | 1.6 | 35 |
| 69 | Effects of residual hydrogen in sputtering atmosphere on structures and properties of amorphous In-Ga-Zn-O thin films. Journal of Applied Physics, 2015, 118, . | 1.1 | 34 |
| 70 | Thermoelectric Properties of (ZnO) ₅ In ₂ O ₃ Thin Films Prepared by r.f. Sputtering Method.. Funtai Oyobi Fumatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 1997, 44, 44-49. | 0.1 | 33 |
| 71 | Optical Properties and Two-Dimensional Electronic Structure in Wide-Gap Layered Oxchalcogenide: La ₂ CdO ₂ Se ₂ . Journal of Physical Chemistry B, 2004, 108, 17344-17351. | 1.2 | 33 |
| 72 | Epitaxial film growth and optoelectrical properties of layered semiconductors, LaMnXO (X=P, As, and Tl) on MgO substrate. Applied Physics Letters, 2008, 93, 081101. | 1.1 | 33 |

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|----|--|-----|-----------|
| 73 | Narrow Bandgap in BaZn_2As_2 and Its Chemical Origins. Journal of the American Chemical Society, 2014, 136, 14959-14965. | 6.6 | 33 |
| 74 | Growth of high-quality SnS epitaxial films by H ₂ S flow pulsed laser deposition. Applied Physics Letters, 2014, 104, . | 1.5 | 32 |
| 75 | Solid phase epitaxial growth of high mobility La:BaSnO ₃ thin films co-doped with interstitial hydrogen. Applied Physics Letters, 2016, 108, . | 1.5 | 32 |
| 76 | Fabrication of heteroepitaxial thin films of layered oxychalcogenides LnCuOCh (Ln = La, Nd; Ch = S, Se) by pulsed laser deposition. Applied Physics Letters, 2014, 104, . | 1.2 | 31 |
| 77 | Coexistence of superconductivity and antiferromagnetic ordering in the layered superconductor SmFePO. Physical Review B, 2008, 78, . | 1.1 | 31 |
| 78 | Electric double-layer transistor using layered iron selenide Mott insulator TlFe _{1.6} Se ₂ . Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 3979-3983. | 3.3 | 30 |
| 79 | Multiple Roles of Hydrogen Treatments in Amorphous InGaZnO Films. ECS Journal of Solid State Science and Technology, 2017, 6, P365-P372. | 0.9 | 30 |
| 80 | Low and small resistance hole-injection barrier for NPB realized by wide-gap p-type degenerate semiconductor, LaCuOSe:Mg. Organic Electronics, 2008, 9, 890-894. | 1.4 | 29 |
| 81 | Apparent bipolarity and Seebeck sign inversion in a layered semiconductor: LaZnOP. Physical Review B, 2007, 76, . | 1.1 | 28 |
| 82 | Film Texture, Hole Transport and Field-Effect Mobility in Polycrystalline SnO Thin Films on Glass. ECS Journal of Solid State Science and Technology, 2014, 3, Q3040-Q3044. | 0.9 | 28 |
| 83 | Charge Compensation by Excess Oxygen in Amorphous InGaZnO Films Deposited by Pulsed Laser Deposition. Journal of Display Technology, 2015, 11, 518-522. | 1.3 | 26 |
| 84 | Origin of Lower Film Density and Larger Defect Density in Amorphous InGaZnO Deposited at High Total Pressure. Journal of Display Technology, 2015, 11, 523-527. | 1.3 | 26 |
| 85 | In-situ growth of superconducting SmO _{1-x} FeAs thin films by pulsed laser deposition. Scientific Reports, 2016, 6, 35797. | 1.6 | 26 |
| 86 | Efficient construction method for phase diagrams using uncertainty sampling. Physical Review Materials, 2019, 3, . | 0.9 | 26 |
| 87 | Electrical and Photonic Functions Originating from Low-Dimensional Structures in Wide-Gap Semiconductors LnCuOCh (Ln=lanthanide, Ch=chalcogen): A Review. Journal of the Ceramic Society of Japan, 2005, 113, 10-16. | 1.3 | 24 |
| 88 | Magnetic and carrier transport properties of Mn-doped p-type semiconductor LaCuOSe: An investigation of the origin of ferromagnetism. Journal of Applied Physics, 2006, 100, 033717. | 1.1 | 24 |
| 89 | Angular and field properties of the critical current and melting line of Co-doped SrFe ₂ As ₂ epitaxial films. Superconductor Science and Technology, 2009, 22, 125011. | 1.8 | 23 |
| 90 | Critical factor for epitaxial growth of cobalt-doped BaFe ₂ As ₂ films by pulsed laser deposition. Applied Physics Letters, 2014, 104, . | 1.5 | 22 |

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| 91 | Pulsed laser deposition system for producing oxide thin films at high temperature. Review of Scientific Instruments, 2001, 72, 3340-3343. | 0.6 | 21 |
| 92 | Two-dimensional electronic structure and multiple excitonic states in layered oxychalcogenide semiconductors, LaCuOCh (Ch=S, Se, Te): Optical properties and relativistic ab initio study. Thin Solid Films, 2005, 486, 98-103. | 0.8 | 21 |
| 93 | Layered mixed-anion compounds: Epitaxial growth, active function exploration, and device application. Journal of the European Ceramic Society, 2009, 29, 245-253. | 2.8 | 21 |
| 94 | Effects of High-Temperature Annealing on Operation Characteristics of a-In-Ga-Zn-O TFTs. Journal of Display Technology, 2014, 10, 979-983. | 1.3 | 21 |
| 95 | Heteroepitaxial growth of single-phase zinc blende ZnS films on transparent substrates by pulsed laser deposition under H ₂ S atmosphere. Solid State Communications, 2002, 124, 411-415. | 0.9 | 19 |
| 96 | Optoelectronic properties and electronic structure of YCuOSe. Journal of Applied Physics, 2007, 102, 113714. | 1.1 | 19 |
| 97 | Direct imaging of doped fluorine in LaFeAsO _{1-x} F _x superconductor by atomic scale spectroscopy. Applied Physics Letters, 2009, 95, . | 1.5 | 19 |
| 98 | Fabrication and electron transport properties of epitaxial films of electron-doped 12CaO·7Al ₂ O ₃ and 12SrO·7Al ₂ O ₃ . Journal of Solid State Chemistry, 2010, 183, 385-391. | 1.4 | 19 |
| 99 | Transport and magnetic properties of Co-doped BaFe ₂ As ₂ epitaxial thin films grown on MgO substrate. Superconductor Science and Technology, 2010, 23, 105016. | 1.8 | 19 |
| 100 | Superconductivity at 48 K of heavily hydrogen-doped SmFeAsO epitaxial films grown by topotactic chemical reaction using CaH_2 . Physical Review Materials, 2019, 3, . | 0.9 | 19 |
| 101 | Magnetic scattering and electron pair breaking by rare-earth-ion substitution in BaFe ₂ As ₂ epitaxial films. New Journal of Physics, 2013, 15, 073019. | 1.2 | 18 |
| 102 | Recent progress in pulsed laser deposition of iron based superconductors. Journal Physics D: Applied Physics, 2016, 49, 345301. | 1.3 | 18 |
| 103 | Nonequilibrium Rock-Salt-Type Pb-Doped SnSe with High Carrier Mobilities $\sim 300 \text{ cm}^2/\text{Vs}$. Chemistry of Materials, 2016, 28, 2278-2286. | 3.2 | 18 |
| 104 | Degenerate electrical conductive and excitonic photoluminescence properties of epitaxial films of wide gap p-type layered oxychalcogenides, LnCuOCh (Ln=La, Pr and Nd; Ch=S or Se). Applied Physics A: Materials Science and Processing, 2004, 79, 1521-1523. | 1.1 | 17 |
| 105 | Natural nanostructures in ionic semiconductors. Microelectronic Engineering, 2004, 73-74, 620-626. | 1.1 | 17 |
| 106 | Quantum beat between two excitonic levels split by spin-orbit interactions in the oxychalcogenide LaCuOS. Optics Letters, 2004, 29, 1659. | 1.7 | 17 |
| 107 | SnS thin films prepared by H ₂ S-free process and its p-type thin film transistor. AIP Advances, 2016, 6, . | 0.6 | 17 |
| 108 | Unusual pressure effects on the superconductivity of indirectly electron-doped (Ba _{1-x} La _x)Fe ₂ As ₂ epitaxial films. Physical Review B, 2013, 88, . | 1.1 | 16 |

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|-----|--|-----|-----------|
| 109 | Anomalous scaling behavior in a mixed-state Hall effect of a cobalt-doped BaFe ₂ As ₂ epitaxial film with a high critical current density over 1 MA/cm ² . <i>Physical Review B</i> , 2013, 87, . | 1.1 | 16 |
| 110 | An Exceptionally Narrow Band-Gap ($\sim 1/4$ eV) Silicate Predicted in the Cubic Perovskite Structure: BaSiO ₃ . <i>Inorganic Chemistry</i> , 2017, 56, 10535-10542. | 1.9 | 16 |
| 111 | Heteroepitaxial Thin-Film Growth of a Ternary Nitride Semiconductor CaZn ₂ N ₂ . <i>ACS Applied Electronic Materials</i> , 2019, 1, 1433-1438. | 2.0 | 16 |
| 112 | Electronic and magnetic properties of layered LnFePO (Ln=La and Ce). <i>Journal of Physics and Chemistry of Solids</i> , 2008, 69, 2916-2918. | 1.9 | 15 |
| 113 | Characterization of copper selenide thin film hole-injection layers deposited at room temperature for use with p-type organic semiconductors. <i>Journal of Applied Physics</i> , 2008, 104, . | 1.1 | 15 |
| 114 | Indium-Based Ultraviolet-Transparent Electroconductive Oxyfluoride InOF: Ambient-Pressure Synthesis and Unique Electronic Properties in Comparison with In ₂ O ₃ . <i>Journal of the American Chemical Society</i> , 2013, 135, 13080-13088. | 6.6 | 15 |
| 115 | The atomic structure, band gap, and electrostatic potential at the (112)[111] twin grain boundary of CuInSe ₂ . <i>Applied Physics Letters</i> , 2014, 104, . | 1.5 | 15 |
| 116 | Growth of <i>c</i> -Axis-Oriented Superconducting KFe ₂ As ₂ Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 14293-14301. | 4.0 | 15 |
| 117 | Tunable Light Emission through the Range 1.8–3.2 eV and p-Type Conductivity at Room Temperature for Nitride Semiconductors, Ca(Mg _{1-x} Zn _x) ₂ N ₂ ($x = 0, 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1$) | 1.9 | 15 |
| 118 | Multiple Color Inorganic Thin-Film Phosphor, RE-Doped Amorphous Gallium Oxide (RE = Rare Earth: Pr, Tm, Yb) <i>Journal of Applied Physics</i> , 2019, 126, 1700833. | 0.8 | 15 |
| 119 | Excitonic properties related to valence band levels split by spin-orbit interaction in layered oxychalcogenide LaCuOCh (Ch=S, Se). <i>Journal of Luminescence</i> , 2005, 112, 66-70. | 1.5 | 14 |
| 120 | Effects of Base Pressure on Growth and Optoelectronic Properties of Amorphous InGaZnO: Ultralow Optimum Oxygen Supply and Bandgap Widening. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2019, 216, 1700832. | 0.8 | 14 |
| 121 | Superconducting Properties and Phase Diagram of Indirectly Electron-Doped Sr _{1-x} Bi _x FeAs ₂ . <i>Transactions on Applied Superconductivity</i> , 2013, 23, 7300405-7300405. | 1.1 | 13 |
| 122 | Epitaxial growth and electronic structure of a layered zinc pnictide semiconductor, \hat{I}^2 -BaZn ₂ As ₂ . <i>Thin Solid Films</i> , 2014, 559, 100-104. | 0.8 | 13 |
| 123 | Ultrawide band gap amorphous oxide semiconductor, GaZnO. <i>Thin Solid Films</i> , 2016, 614, 84-89. | 0.8 | 13 |
| 124 | Effects of thermal annealing on elimination of deep defects in amorphous InGaZnO thin-film transistors. <i>Thin Solid Films</i> , 2016, 614, 73-78. | 0.8 | 13 |
| 125 | Highly hydrogen-sensitive thermal desorption spectroscopy system for quantitative analysis of low hydrogen concentration ($\sim 1/4$ Å ⁻³ = 10 ¹⁶ atoms/cm ³) in thin-film samples. <i>Review of Scientific Instruments</i> , 2017, 88, 053103. | 0.6 | 13 |
| 126 | Effects of working pressure and annealing on bulk density and nanopore structures in amorphous InGaZnO thin-film transistors. <i>Japanese Journal of Applied Physics</i> , 2017, 56, 03BB03. | 0.8 | 13 |

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|-----|---|-----|-----------|
| 127 | Room-temperature fabrication of light-emitting thin films based on amorphous oxide semiconductor. AIP Advances, 2016, 6, . | 0.6 | 11 |
| 128 | Key Factors for Insulator→Superconductor Transition in FeSe Thin Films by Electric Field. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5. | 1.1 | 11 |
| 129 | Low anisotropic upper critical fields in SmO _{1-x} F _x /FeAs thin films with a layered hybrid structure. Superconductor Science and Technology, 2019, 32, 044003. | 1.8 | 11 |
| 130 | Fabrication and characterization of ZnS:(Cu,Al) thin film phosphors on glass substrates by pulsed laser deposition. Thin Solid Films, 2014, 559, 18-22. | 0.8 | 10 |
| 131 | Pulsed laser deposition of SmFeAsO _{1-x} on MgO(100) substrates. Applied Surface Science, 2018, 437, 418-428. | 3.1 | 10 |
| 132 | Multiple states and roles of hydrogen in p-type SnS semiconductors. Physical Chemistry Chemical Physics, 2018, 20, 20952-20956. | 1.3 | 10 |
| 133 | Novel solid-phase epitaxy for multi-component materials with extremely high vapor pressure elements: An application to KFe ₂ As ₂ . Applied Physics Express, 2016, 9, 055505. | 1.1 | 10 |
| 134 | Photonic materials utilizing naturally occurring nanostructures. Journal of Photochemistry and Photobiology A: Chemistry, 2004, 166, 141-147. | 2.0 | 9 |
| 135 | Terahertz conductivity measurement of FeSe _{0.5} Te _{0.5} and Co-doped BaFe ₂ As ₂ thin films. Physica C: Superconductivity and Its Applications, 2011, 471, 634-638. | 0.6 | 9 |
| 136 | Detection of dead layers and defects in polycrystalline Cu ₂ O thin-film transistors by x-ray reflectivity and photoresponse spectroscopy analyses. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2015, 33, 051211. | 0.6 | 9 |
| 137 | Transparent amorphous oxide semiconductor thin film phosphor, In–Mg–O:Eu. Journal of the Ceramic Society of Japan, 2016, 124, 532-535. | 0.5 | 9 |
| 138 | BaFe ₂ (As _{1-x} P _x) ₂ ($x=0.22\sim 0.42$) thin films grown on practical metal"tape substrates and their critical current densities. Superconductor Science and Technology, 2017, 30, 044003. | 1.8 | 9 |
| 139 | Origin of high–density hole doping and anisotropic hole transport in a wide gap layered semiconductor LaCuOSe studied by first–principles calculations. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 1636-1641. | 0.8 | 8 |
| 140 | Ultralow-Dissipative Conductivity by Dirac Fermions in BaFe ₂ As ₂ . Journal of the Physical Society of Japan, 2013, 82, 043709. | 0.7 | 8 |
| 141 | Effects of sulfur substitution in amorphous InGaZnO ₄ : optical properties and first-principles calculations. Journal of the Ceramic Society of Japan, 2015, 123, 537-541. | 0.5 | 8 |
| 142 | Electrical and optical properties of copper–based chalcogenide thin films deposited by pulsed laser deposition at room temperature: Toward p–channel thin film transistor fabricable at room temperature. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 2007-2012. | 0.8 | 7 |
| 143 | Insulator-like behavior coexisting with metallic electronic structure in strained FeSe thin films grown by molecular beam epitaxy. Physical Review B, 2019, 99, . | 1.1 | 7 |
| 144 | Superconducting transition temperatures in the electronic and magnetic phase diagrams of Sr ₂ VFeAsO _{3-x} , a superconductor. Journal of Physics Condensed Matter, 2019, 31, 115801. | 0.7 | 7 |

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