Hidenori Hiramatsu

List of Publications by Citations

179 papers	7,948 citations	45 h-index	84 g-index
197 ext. papers	8,701 ext. citations	4.4 avg, IF	5.8 L-index

#	Paper	IF	Citations
179	Iron-based layered superconductor: LaOFeP. *Journal of the American Chemical Society*, **2006**, 128, 10012-3	16.4	1051
178	p-channel thin-film transistor using p-type oxide semiconductor, SnO. *Applied Physics Letters*, **2008**, 93, 032113	3.4	491
177	Nickel-based oxyphosphide superconductor with a layered crystal structure, LaNiOP. *Inorganic Chemistry*, **2007**, 46, 7719-21	5.1	245
176	Preparation of highly conductive, deep ultraviolet transparent β-Ga2O3 thin film at low deposition temperatures. *Thin Solid Films*, **2002**, 411, 134-139	2.2	237
175	Crystal Structures, Optoelectronic Properties, and Electronic Structures of Layered Oxychalcogenides MCuOCh (M = Bi, La; Ch = S, Se, Te): Effects of Electronic Configurations of M3+ Ions. *Chemistry of Materials*, **2008**, 20, 326-334	9.6	227
174	Advantageous grain boundaries in iron pnictide superconductors. *Nature Communications*, **2011**, 2, 409	17.4	212
173	Recent advances in iron-based superconductors toward applications. *Materials Today*, **2018**, 21, 278-302	21.8	200
172	Tin monoxide as an s-orbital-based p-type oxide semiconductor: Electronic structures and TFT application. *Physica Status Solidi (A) Applications and Materials Science*, **2009**, 206, 2187-2191	1.6	185
171	Degenerate p-type conductivity in wide-gap LaCuOS1−xSex (x=0–1) epitaxial films. *Applied Physics Letters*, **2003**, 82, 1048-1050	3.4	155
170	Growth, structure and carrier transport properties of Ga2O3 epitaxial film examined for transparent field-effect transistor. *Thin Solid Films*, **2006**, 496, 37-41	2.2	142
169	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	7.1	141
168	Discovery of earth-abundant nitride semiconductors by computational screening and high-pressure synthesis. *Nature Communications*, **2016**, 7, 11962	17.4	133
167	Frontier of transparent oxide semiconductors. *Solid-State Electronics*, **2003**, 47, 2261-2267	1.7	123
166	Field-induced current modulation in epitaxial film of deep-ultraviolet transparent oxide semiconductor Ga2O3. *Applied Physics Letters*, **2006**, 88, 092106	3.4	117
165	Biaxially textured cobalt-doped BaFe2As2 films with high critical current density over 1 MA/cm2 on MgO-buffered metal-tape flexible substrates. *Applied Physics Letters*, **2011**, 98, 242510	3.4	105
164	Superconductivity in Epitaxial Thin Films of Co-Doped SrFe2As2with Bilayered FeAs Structures and their Magnetic Anisotropy. *Applied Physics Express*, **2008**, 1, 101702	2.4	101
163	Pseudoisotropic upper critical field in cobalt-doped SrFe2As2 epitaxial films. *Physical Review Letters*, **2009**, 102, 117004	7.4	99

162	Heteroepitaxial growth of a wide-gap p-type semiconductor, LaCuOS. *Applied Physics Letters*, **2002**, 81, 598-600	3.4	96
161	Hydrogen passivation of electron trap in amorphous In-Ga-Zn-O thin-film transistors. *Applied Physics Letters*, **2013**, 103, 202114	3.4	92
160	Heteroepitaxial growth and optoelectronic properties of layered iron oxyarsenide, LaFeAsO. *Applied Physics Letters*, **2008**, 93, 162504	3.4	88
159	Single-atomic-layered quantum wells built in wide-gap semiconductors LnCuOCh (Ln=lanthanide, Ch=chalcogen). *Physical Review B*, **2004**, 69,	3.3	88
158	Electrical and Optical Properties of Radio-Frequency-Sputtered Thin Films of (ZnO)5In2O3. *Chemistry of Materials*, **1998**, 10, 3033-3039	9.6	85
157	Electrical and Optical Properties and Electronic Structures of LnCuOS (Ln = La~Nd). *Chemistry of Materials*, **2003**, 15, 3692-3695	9.6	84
156	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, 012104	3.4	82
155	High Critical Current Density 4 MA/cm2in Co-Doped BaFe2As2Epitaxial Films Grown on (La,Sr)(Al,Ta)O3Substrates without Buffer Layers. *Applied Physics Express*, **2010**, 3, 063101	2.4	81
154	Wide-gap layered oxychalcogenide semiconductors: Materials, electronic structures and optoelectronic properties. *Thin Solid Films*, **2006**, 496, 8-15	2.2	77
153	Structural relaxation in amorphous oxide semiconductor, a-In-Ga-Zn-O. *Journal of Applied Physics*, **2012**, 111, 073513	2.5	74
152	Intrinsic excitonic photoluminescence and band-gap engineering of wide-gap p-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	2.5	74
151	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, 3986-90	11.5	73
150	Preparation of transparent p-type (La1⊠SrxO)CuS thin films by r.f. sputtering technique. *Thin Solid Films*, **2002**, 411, 125-128	2.2	71
149	Improvement in thermoelectric properties of (ZnO)5In2O3 through partial substitution of yttrium for indium. *Journal of Materials Research*, **1998**, 13, 523-526	2.5	70
148	Thin film growth of Fe-based superconductors: from fundamental properties to functional devices. A comparative review. *Reports on Progress in Physics*, **2014**, 77, 046502	14.4	67
147	Josephson junction in cobalt-doped BaFe2As2 epitaxial thin films on (La,Sr)(Al,Ta)O3 bicrystal substrates. *Applied Physics Letters*, **2010**, 96, 142507	3.4	66
146	Atomically-flat, chemically-stable, superconducting epitaxial thin film of iron-based superconductor, cobalt-doped BaFe2As2. *Solid State Communications*, **2009**, 149, 2121-2124	1.6	65
145	Water-induced superconductivity in SrFe2As2. *Physical Review B*, **2009**, 80,	3.3	64

144	Performance boosting strategy for perovskite light-emitting diodes. *Applied Physics Reviews*, **2019**, 6, 031402	17.3	63
143	Electrical conductivity control in transparent p-type (LaO)CuS thin films prepared by rf sputtering. *Journal of Applied Physics*, **2002**, 91, 9177-9181	2.5	60
142	Exploration of Stable Strontium Phosphide-Based Electrides: Theoretical Structure Prediction and Experimental Validation. *Journal of the American Chemical Society*, **2017**, 139, 15668-15680	16.4	57
141	Conversion of an ultra-wide bandgap amorphous oxide insulator to a semiconductor. *NPG Asia Materials*, **2017**, 9, e359-e359	10.3	56
140	Third-order optical nonlinearity originating from room-temperature exciton in layered compounds LaCuOS and LaCuOSe. *Applied Physics Letters*, **2004**, 84, 879-881	3.4	52
139	Mechanism for Heteroepitaxial Growth of Transparent P-Type Semiconductor: LaCuOS by Reactive Solid-Phase Epitaxy. *Crystal Growth and Design*, **2004**, 4, 301-307	3.5	50
138	Excitonic blue luminescence from p-LaCuOSe□-InGaZn5O8 light-emitting diode at room temperature. *Applied Physics Letters*, **2005**, 87, 211107	3.4	50
137	Thin Film Growth and Device Fabrication of Iron-Based Superconductors. *Journal of the Physical Society of Japan*, **2012**, 81, 011011	1.5	47
136	DC superconducting quantum interference devices fabricated using bicrystal grain boundary junctions in Co-doped BaFe2As2epitaxial films. *Superconductor Science and Technology*, **2010**, 23, 082001	3.1	46
135	Opto-electronic properties and light-emitting device application of widegap layered oxychalcogenides: LaCuOCh (Ch = chalcogen) and La2CdO2Se2. *Physica Status Solidi (A) Applications and Materials Science*, **2006**, 203, 2800-2811	1.6	45
134	n-type conversion of SnS by isovalent ion substitution: Geometrical doping as a new doping route. *Scientific Reports*, **2015**, 5, 10428	4.9	44
133	Liquid vortex phase and strongc-axis pinning in low anisotropy BaCoxFe2 □As2pnictide films. *Superconductor Science and Technology*, **2011**, 24, 055007	3.1	44
132	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	2	43
131	Low Threshold Voltage and Carrier Injection Properties of Inverted Organic Light-Emitting Diodes with [Ca24Al28O64]4+(4e□Cathode and Cu2□Se Anode. *Journal of Physical Chemistry C*, **2009**, 113, 18379-18384	3.8	42
130	High critical-current density with less anisotropy in BaFe2(As,P)2 epitaxial thin films: Effect of intentionally grown c-axis vortex-pinning centers. *Applied Physics Letters*, **2014**, 104, 182603	3.4	41
129	Thin film growth by pulsed laser deposition and properties of 122-type iron-based superconductor AE(Fe1□Cox)2As2(AE=alkaline earth). *Superconductor Science and Technology*, **2012**, 25, 084015	3.1	41
128	Identical effects of indirect and direct electron doping of superconducting BaFe2As2 thin films. *Physical Review B*, **2012**, 85,	3.3	41
127	Device applications of transparent oxide semiconductors: Excitonic blue LED and transparent flexible TFT. *Journal of Electroceramics*, **2006**, 17, 267-275	1.5	41

126	Competition and cooperation of pinning by extrinsic point-like defects and intrinsic strong columnar defects in BaFe2As2 thin films. *Physical Review B*, **2012**, 86,	3.3	38
125	Role of lone pair electrons in determining the optoelectronic properties of BiCuOSe. *Physical Review B*, **2012**, 85,	3.3	37
124	Heteroepitaxial film growth of layered compounds with the ZrCuSiAs-type and ThCr2Si2-type structures: From Cu-based semiconductors to Fe-based superconductors. *Physica C: Superconductivity and Its Applications*, **2009**, 469, 657-666	1.3	37
123	Origins of hole doping and relevant optoelectronic properties of wide gap p-type semiconductor, LaCuOSe. *Journal of the American Chemical Society*, **2010**, 132, 15060-7	16.4	36
122	Heteroepitaxial growth of layered semiconductors, LaZnOPn (Pn = P and As). *Thin Solid Films*, **2008**, 516, 5800-5804	2.2	36
121	Electron effective mass and mobility limits in degenerate perovskite stannate BaSnO3. *Physical Review B*, **2017**, 95,	3.3	33
120	Synthesis of single-phase layered oxychalcogenide La2CdO2Se2: crystal structure, optical and electrical properties. *Journal of Materials Chemistry*, **2004**, 14, 2946		33
119	Wide gap p-type degenerate semiconductor: Mg-doped LaCuOSe. *Thin Solid Films*, **2003**, 445, 304-308	2.2	33
118	Microstructure and transport properties of [001]-tilt bicrystal grain boundaries in iron pnictide superconductor, cobalt-doped BaFe2As2. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2012**, 177, 515-519	3.1	32
117	Extraordinary Strong Band-Edge Absorption in Distorted Chalcogenide Perovskites. *Solar Rrl*, **2020**, 4, 1900555	7.1	31
116	Epitaxial film growth and optoelectrical properties of layered semiconductors, LaMnXO (X=P, As, and Sb). *Journal of Applied Physics*, **2009**, 105, 073903	2.5	30
115	Optical Properties and Two-Dimensional Electronic Structure in Wide-Gap Layered Oxychalcogenide: La2CdO2Se2. *Journal of Physical Chemistry B*, **2004**, 108, 17344-17351	3.4	30
114	Material Design of Green-Light-Emitting Semiconductors: Perovskite-Type Sulfide SrHfS. *Journal of the American Chemical Society*, **2019**, 141, 5343-5349	16.4	29
113	High-field transport properties of a P-doped BaFeAs film on technical substrate. *Scientific Reports*, **2017**, 7, 39951	4.9	29
112	Coexistence of superconductivity and antiferromagnetic ordering in the layered superconductor SmFePO. *Physical Review B*, **2008**, 78,	3.3	29
111	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, 205703	2.5	28
110	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	2	28
109	Thermoelectric Properties of (ZnO)5In2O3 Thin Films Prepared by r.f. Sputtering Method.. *Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy*, **1997**, 44, 44-49	0.2	28

108	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	3.5	28
107	Fabrication of heteroepitaxial thin films of layered oxychalcogenides LnCuOCh (Ln = La□Nd; Ch = S□Te) by reactive solid-phase epitaxy. *Journal of Materials Research*, **2004**, 19, 2137-2143	2.5	28
106	Growth of high-quality SnS epitaxial films by H2S flow pulsed laser deposition. *Applied Physics Letters*, **2014**, 104, 072106	3.4	27
105	Heteroepitaxial growth of SnSe films by pulsed laser deposition using Se-rich targets. *Journal of Applied Physics*, **2015**, 118, 205302	2.5	27
104	Apparent bipolarity and Seebeck sign inversion in a layered semiconductor: LaZnOP. *Physical Review B*, **2007**, 76,	3.3	27
103	Solid phase epitaxial growth of high mobility La:BaSnO3 thin films co-doped with interstitial hydrogen. *Applied Physics Letters*, **2016**, 108, 172101	3.4	27
102	Enhanced critical-current in P-doped BaFeAs thin films on metal substrates arising from poorly aligned grain boundaries. *Scientific Reports*, **2016**, 6, 36828	4.9	26
101	Electric double-layer transistor using layered iron selenide Mott insulator TlFe1.6Se2. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 3979-83	11.5	26
100	Narrow bandgap in □BaZn□As□and its chemical origins. *Journal of the American Chemical Society*, **2014**, 136, 14959-65	16.4	25
99	SnAs with the NaCl-type Structure: Type-I Superconductivity and Single Valence State of Sn. *Chemistry of Materials*, **2014**, 26, 7209-7213	9.6	25
98	Angular and field properties of the critical current and melting line of Co-doped SrFe2As2epitaxial films. *Superconductor Science and Technology*, **2009**, 22, 125011	3.1	23
97	. *Journal of Display Technology*, **2015**, 11, 523-527		22
96	Critical factor for epitaxial growth of cobalt-doped BaFe2As2 films by pulsed laser deposition. *Applied Physics Letters*, **2014**, 104, 172602	3.4	22
95	In-situ growth of superconducting SmOFFeAs thin films by pulsed laser deposition. *Scientific Reports*, **2016**, 6, 35797	4.9	21
94	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		21
93	. *Journal of Display Technology*, **2015**, 11, 518-522		20
92	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	2.5	20
91	Multiple Roles of Hydrogen Treatments in Amorphous In□Ga□Zn□O Films. *ECS Journal of Solid State Science and Technology*, **2017**, 6, P365-P372	2	19

90	Magnetic scattering and electron pair breaking by rare-earth-ion substitution in BaFe2As2epitaxial films. *New Journal of Physics*, **2013**, 15, 073019	2.9	18
89	Transport and magnetic properties of Co-doped BaFe2As2epitaxial thin films grown on MgO substrate. *Superconductor Science and Technology*, **2010**, 23, 105016	3.1	18
88	Direct imaging of doped fluorine in LaFeAsO1−xFx superconductor by atomic scale spectroscopy. *Applied Physics Letters*, **2009**, 95, 193107	3.4	18
87	Optoelectronic properties and electronic structure of YCuOSe. *Journal of Applied Physics*, **2007**, 102, 113714	2.5	18
86	Heteroepitaxial growth of single-phase zinc blende ZnS films on transparent substrates by pulsed laser deposition under H2S atmosphere. *Solid State Communications*, **2002**, 124, 411-415	1.6	18
85	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	2.2	18
84	Layered mixed-anion compounds: Epitaxial growth, active function exploration, and device application. *Journal of the European Ceramic Society*, **2009**, 29, 245-253	6	17
83	Fabrication and electron transport properties of epitaxial films of electron-doped 12CaO·7Al2O3 and 12SrO·7Al2O3. *Journal of Solid State Chemistry*, **2010**, 183, 385-391	3.3	17
82	Pulsed laser deposition system for producing oxide thin films at high temperature. *Review of Scientific Instruments*, **2001**, 72, 3340-3343	1.7	17
81	Unusual pressure effects on the superconductivity of indirectly electron-doped (Ba1−xLax)Fe2As2 epitaxial films. *Physical Review B*, **2013**, 88,	3.3	16
80	Efficient construction method for phase diagrams using uncertainty sampling. *Physical Review Materials*, **2019**, 3,	3.2	16
79	. *Journal of Display Technology*, **2014**, 10, 979-983		15
78	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	2.6	15
77	Recent progress in pulsed laser deposition of iron based superconductors. *Journal Physics D: Applied Physics*, **2016**, 49, 345301	3	15
76	The atomic structure, band gap, and electrostatic potential at the (112)[11−0] twin grain boundary of CuInSe2. *Applied Physics Letters*, **2014**, 104, 153904	3.4	14
75	Anomalous scaling behavior in a mixed-state Hall effect of a cobalt-doped BaFe2As2 epitaxial film with a high critical current density over 1 MA/cm2. *Physical Review B*, **2013**, 87,	3.3	14
74	Characterization of copper selenide thin film hole-injection layers deposited at room temperature for use with p-type organic semiconductors. *Journal of Applied Physics*, **2008**, 104, 113723	2.5	14
73	Natural nanostructures in ionic semiconductors. *Microelectronic Engineering*, **2004**, 73-74, 620-626	2.5	14

72	Quantum beat between two excitonic levels split by spin--orbit interactions in the oxychalcogenide LaCuOS. *Optics Letters*, **2004**, 29, 1659-61	3	14
71	Superconducting Properties and Phase Diagram of Indirectly Electron-Doped $(hbox{Sr}_{1 - x}hbox{La}_{x})hbox{Fe}_{2}hbox{As}_{2}$ Epitaxial Films Grown by Pulsed Laser Deposition. *IEEE Transactions on Applied Superconductivity*, **2013**, 23, 7300405-7300405	1.8	13
70	Electronic and magnetic properties of layered LnFePO (Ln=La and Ce). *Journal of Physics and Chemistry of Solids*, **2008**, 69, 2916-2918	3.9	13
69	Nonequilibrium Rock-Salt-Type Pb-Doped SnSe with High Carrier Mobilities 300 cm2/(Vs). *Chemistry of Materials*, **2016**, 28, 2278-2286	9.6	13
68	Highly hydrogen-sensitive thermal desorption spectroscopy system for quantitative analysis of low hydrogen concentration (~1 10 atoms/cm) in thin-film samples. *Review of Scientific Instruments*, **2017**, 88, 053103	1.7	12
67	Ultrawide band gap amorphous oxide semiconductor, Ga2nO. *Thin Solid Films*, **2016**, 614, 84-89	2.2	12
66	An Exceptionally Narrow Band-Gap (~4 eV) Silicate Predicted in the Cubic Perovskite Structure: BaSiO. *Inorganic Chemistry*, **2017**, 56, 10535-10542	5.1	12
65	Low anisotropic upper critical fields in SmO1 F x FeAs thin films with a layered hybrid structure. *Superconductor Science and Technology*, **2019**, 32, 044003	3.1	11
64	Effects of thermal annealing on elimination of deep defects in amorphous InGaZnO thin-film transistors. *Thin Solid Films*, **2016**, 614, 73-78	2.2	11
63	Growth of c-axis-oriented superconducting KFeAs thin films. *ACS Applied Materials & Interfaces*, **2014**, 6, 14293-301	9.5	11
62	SnS thin films prepared by H2S-free process and its p-type thin film transistor. *AIP Advances*, **2016**, 6, 015112	1.5	11
61	Multiple Color Inorganic Thin-Film Phosphor, RE-Doped Amorphous Gallium Oxide (RE = Rare Earth: Pr, Sm, Tb, and Dy), Deposited at Room Temperature. *Physica Status Solidi (A) Applications and Materials Science*, **2019**, 216, 1700833	1.6	11
60	Effects of Base Pressure on Growth and Optoelectronic Properties of Amorphous In-Ga-Zn-O: Ultralow Optimum Oxygen Supply and Bandgap Widening. *Physica Status Solidi (A) Applications and Materials Science*, **2019**, 216, 1700832	1.6	11
59	Key Factors for InsulatorSuperconductor Transition in FeSe Thin Films by Electric Field. *IEEE Transactions on Applied Superconductivity*, **2017**, 27, 1-5	1.8	10
58	Epitaxial growth and electronic structure of a layered zinc pnictide semiconductor, BaZn2As2. *Thin Solid Films*, **2014**, 559, 100-104	2.2	10
57	Fabrication and characterization of ZnS:(Cu,Al) thin film phosphors on glass substrates by pulsed laser deposition. *Thin Solid Films*, **2014**, 559, 18-22	2.2	10
56	Indium-based ultraviolet-transparent electroconductive oxyfluoride InOF: ambient-pressure synthesis and unique electronic properties in comparison with In2O3. *Journal of the American Chemical Society*, **2013**, 135, 13080-8	16.4	10
55	Excitonic properties related to valence band levels split by spinorbit interaction in layered oxychalcogenide LaCuOCh(Ch=S,Se). *Journal of Luminescence*, **2005**, 112, 66-70	3.8	10

54	Room-temperature fabrication of light-emitting thin films based on amorphous oxide semiconductor. *AIP Advances*, **2016**, 6, 015106	1.5	10
53	Effects of working pressure and annealing on bulk density and nanopore structures in amorphous In□Ga2Zn□O thin-film transistors. *Japanese Journal of Applied Physics*, **2017**, 56, 03BB03	1.4	9
52	BaFe2(As1□xPx)2(x= 0.22□0.42) thin films grown on practical metal□tape substrates and their critical current densities. *Superconductor Science and Technology*, **2017**, 30, 044003	3.1	9
51	Transparent amorphous oxide semiconductor thin film phosphor, In–Mg–O:Eu. *Journal of the Ceramic Society of Japan*, **2016**, 124, 532-535	1	9
50	Superconductivity at 48 K of heavily hydrogen-doped SmFeAsO epitaxial films grown by topotactic chemical reaction using CaH2. *Physical Review Materials*, **2019**, 3,	3.2	9
49	Pulsed laser deposition of SmFeAsO1□δ on MgO(100) substrates. *Applied Surface Science*, **2018**, 437, 418-423	3.7	8
48	Detection of dead layers and defects in polycrystalline Cu2O thin-film transistors by x-ray reflectivity and photoresponse spectroscopy analyses. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2015**, 33, 051211	1.3	8
47	Ultralow-Dissipative Conductivity by Dirac Fermions in BaFe2As2. *Journal of the Physical Society of Japan*, **2013**, 82, 043709	1.5	8
46	Terahertz conductivity measurement of FeSe0.5Te0.5 and Co-doped BaFe2As2 thin films. *Physica C: Superconductivity and Its Applications*, **2011**, 471, 634-638	1.3	8
45	Heteroepitaxial Thin-Film Growth of a Ternary Nitride Semiconductor CaZn2N2. *ACS Applied Electronic Materials*, **2019**, 1, 1433-1438	4	7
44	Photonic materials utilizing naturally occurring nanostructures. *Journal of Photochemistry and Photobiology A: Chemistry*, **2004**, 166, 141-147	4.7	7
43	Novel solid-phase epitaxy for multi-component materials with extremely high vapor pressure elements: An application to KFe2As2. *Applied Physics Express*, **2016**, 9, 055505	2.4	7
42	Amorphous Gallium Oxide as an Improved Host for Inorganic Light-Emitting Thin Film Semiconductor Fabricated at Room Temperature on Glass. *ECS Journal of Solid State Science and Technology*, **2017**, 6, P410-P414	2	6
41	Tunable Light Emission through the Range 1.8-3.2 eV and p-Type Conductivity at Room Temperature for Nitride Semiconductors, Ca(MgZn)N (= 0-1). *Inorganic Chemistry*, **2019**, 58, 12311-12316	5.1	6
40	Vortex Pinning Properties of Phosphorous-Doped $hbox{BaFe}_{2}hbox{As}_{2}$ Epitaxial Films: Comparison Between $(hbox{La},hbox{Sr})(hbox{Al},hbox{Ta})hbox{O}_{3} $ and MgO Substrates. *IEEE Transactions on Applied Superconductivity*, **2015**, 25, 1-5	1.8	6
39	Multiple states and roles of hydrogen in p-type SnS semiconductors. *Physical Chemistry Chemical Physics*, **2018**, 20, 20952-20956	3.6	6
38	Effects of sulfur substitution in amorphous InGaZnO4: optical properties and first-principles calculations. *Journal of the Ceramic Society of Japan*, **2015**, 123, 537-541	1	6
37	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	1.6	6

36	Superconducting transition temperatures in the electronic and magnetic phase diagrams of SrVFeAsO , a superconductor. *Journal of Physics Condensed Matter*, **2019**, 31, 115801	1.8	6
35	Characterization of epitaxial Co-doped BaFe2As2 thin films. *Physica C: Superconductivity and Its Applications*, **2011**, 471, 1181-1184	1.3	5
34	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	1.6	5
33	Heteroepitaxial growth of wide gap p-type semiconductors: LnCuOCh (Lr=La, Pr and Nd; Ch=S or Se) by reactive solid-phase epitaxy. *Applied Physics A: Materials Science and Processing*, **2004**, 79, 1517-1520	2.6	5
32	Double Charge Polarity Switching in Sb-Doped SnSe with Switchable Substitution Sites. *Advanced Functional Materials*, **2021**, 31, 2008092	15.6	5
31	Transition Metal-Doped Amorphous Oxide Semiconductor Thin-Film Phosphor, Chromium-Doped Amorphous Gallium Oxide. *Physica Status Solidi (A) Applications and Materials Science*, **2019**, 216, 1800198	1.6	4
30	Structure determination in thin film Ba1−xLaxFe2As2: Relation between the FeAs4 geometry and superconductivity. *Physical Review B*, **2017**, 96,	3.3	4
29	Impurities in FeAs-based superconductor, SrFe2As2, studied by first-principles calculations. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2010**, 173, 244-247	3.1	4
28	Insulator-like behavior coexisting with metallic electronic structure in strained FeSe thin films grown by molecular beam epitaxy. *Physical Review B*, **2019**, 99,	3.3	3
27	Particulate Generation on Surface of Iron Selenide Films by Air Exposure. *Journal of Superconductivity and Novel Magnetism*, **2019**, 32, 3047-3055	1.5	3
26	Amorphous Oxide Semiconductor Thin-Film Transistors **2019**, 573-587		3
25	Reversible 3D-2D structural phase transition and giant electronic modulation in nonequilibrium alloy semiconductor, lead-tin-selenide. *Science Advances*, **2021**, 7,	14.3	3
24	Stabilization and heteroepitaxial growth of metastable tetragonal FeS thin films by pulsed laser deposition. *Superconductor Science and Technology*, **2019**, 32, 054002	3.1	2
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