

# Toshio Kamiya

## List of Publications by Citations

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401 papers	30,416 citations	78 h-index	168 g-index
441 ext. papers	32,998 ext. citations	4 avg, IF	7.07 L-index

#	Paper	IF	Citations
401	Room-temperature fabrication of transparent flexible thin-film transistors using amorphous oxide semiconductors. <i>Nature</i> , <b>2004</b> , 432, 488-92	50.4	5517
400	Thin-film transistor fabricated in single-crystalline transparent oxide semiconductor. <i>Science</i> , <b>2003</b> , 300, 1269-72	33.3	1534
399	Present status of amorphous In-Ga-Zn-O thin-film transistors. <i>Science and Technology of Advanced Materials</i> , <b>2010</b> , 11, 044305	7.1	1287
398	Iron-based layered superconductor: LaOFeP. <i>Journal of the American Chemical Society</i> , <b>2006</b> , 128, 10012-16	36.4	1051
397	High-mobility thin-film transistor with amorphous InGaZnO <sub>4</sub> channel fabricated by room temperature rf-magnetron sputtering. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 112123	3.4	944
396	Material characteristics and applications of transparent amorphous oxide semiconductors. <i>NPG Asia Materials</i> , <b>2010</b> , 2, 15-22	10.3	664
395	High-density electron anions in a nanoporous single crystal: [Ca <sub>24</sub> Al <sub>28</sub> O <sub>64</sub> ] <sup>4+</sup> (4e <sup>-</sup> ). <i>Science</i> , <b>2003</b> , 301, 626-9	33.3	638
394	Amorphous Oxide Semiconductors for High-Performance Flexible Thin-Film Transistors. <i>Japanese Journal of Applied Physics</i> , <b>2006</b> , 45, 4303-4308	1.4	589
393	p-channel thin-film transistor using p-type oxide semiconductor, SnO. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 032113	3.4	491
392	Light-induced conversion of an insulating refractory oxide into a persistent electronic conductor. <i>Nature</i> , <b>2002</b> , 419, 462-5	50.4	386
391	Carrier transport and electronic structure in amorphous oxide semiconductor, a-InGaZnO <sub>4</sub> . <i>Thin Solid Films</i> , <b>2005</b> , 486, 38-41	2.2	385
390	Origins of High Mobility and Low Operation Voltage of Amorphous Oxide TFTs: Electronic Structure, Electron Transport, Defects and Doping. <i>Journal of Display Technology</i> , <b>2009</b> , 5, 273-288		371
389	Origins of threshold voltage shifts in room-temperature deposited and annealed a-InGaZnO <sub>4</sub> thin-film transistors. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 013502	3.4	295
388	Modeling of amorphous InGaZnO <sub>4</sub> thin film transistors and their subgap density of states. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 133503	3.4	289
387	Fabrication and photoresponse of a pn-heterojunction diode composed of transparent oxide semiconductors, p-NiO and n-ZnO. <i>Applied Physics Letters</i> , <b>2003</b> , 83, 1029-1031	3.4	288
386	Subgap states in transparent amorphous oxide semiconductor, InGaZnO <sub>4</sub> , observed by bulk sensitive x-ray photoelectron spectroscopy. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 202117	3.4	268
385	Trap densities in amorphous-InGaZnO <sub>4</sub> thin-film transistors. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 133512	3.4	254

384	Local coordination structure and electronic structure of the large electron mobility amorphous oxide semiconductor In-Ga-Zn-O: Experiment and ab initio calculations. <i>Physical Review B</i> , <b>2007</b> , 75,	3.3	252
383	Nickel-based oxyphosphide superconductor with a layered crystal structure, LaNiOP. <i>Inorganic Chemistry</i> , <b>2007</b> , 46, 7719-21	5.1	245
382	Defect passivation and homogenization of amorphous oxide thin-film transistor by wet O <sub>2</sub> annealing. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 192107	3.4	243
381	Origins of High Mobility and Low Operation Voltage of Amorphous Oxide TFTs: Electronic Structure, Electron Transport, Defects and Doping*. <i>Journal of Display Technology</i> , <b>2009</b> , 5, 468-483		235
380	Carrier transport in transparent oxide semiconductor with intrinsic structural randomness probed using single-crystalline InGaO <sub>3</sub> (ZnO) <sub>5</sub> films. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 1993-1995	3.4	229
379	Crystal Structures, Optoelectronic Properties, and Electronic Structures of Layered Oxychalcogenides MCuOCh (M = Bi, La; Ch = S, Se, Te): Effects of Electronic Configurations of M <sup>3+</sup> Ions. <i>Chemistry of Materials</i> , <b>2008</b> , 20, 326-334	9.6	227
378	Advantageous grain boundaries in iron pnictide superconductors. <i>Nature Communications</i> , <b>2011</b> , 2, 409	17.4	212
377	Ambipolar oxide thin-film transistor. <i>Advanced Materials</i> , <b>2011</b> , 23, 3431-4	24	207
376	Combinatorial approach to thin-film transistors using multicomponent semiconductor channels: An application to amorphous oxide semiconductors in InGaZnO system. <i>Applied Physics Letters</i> , <b>2007</b> , 90, 242114	3.4	200
375	Epitaxial growth of high mobility Cu <sub>2</sub> O thin films and application to p-channel thin film transistor. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 202107	3.4	193
374	Electronic structure of oxygen deficient amorphous oxide semiconductor a-InGaZnO <sub>4-x</sub> : Optical analyses and first-principle calculations. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2008</b> , 5, 3098-3100		187
373	Tin monoxide as an s-orbital-based p-type oxide semiconductor: Electronic structures and TFT application. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2009</b> , 206, 2187-2191	1.6	185
372	Electronic Structures Above Mobility Edges in Crystalline and Amorphous In-Ga-Zn-O: Percolation Conduction Examined by Analytical Model. <i>Journal of Display Technology</i> , <b>2009</b> , 5, 462-467		185
371	Electronic structure of the amorphous oxide semiconductor a-InGaZnO <sub>4-x</sub> : Tauc-Lorentz optical model and origins of subgap states. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2009</b> , 206, 860-867	1.6	183
370	Metallic state in a lime-alumina compound with nanoporous structure. <i>Nano Letters</i> , <b>2007</b> , 7, 1138-43	11.5	183
369	UV-detector based on pn-heterojunction diode composed of transparent oxide semiconductors, p-NiO/n-ZnO. <i>Thin Solid Films</i> , <b>2003</b> , 445, 317-321	2.2	183
368	Work Function of a Room-Temperature, Stable Electride [Ca <sub>24</sub> Al <sub>28</sub> O <sub>64</sub> ] <sup>4+</sup> (e <sup>-</sup> ) <sub>4</sub> . <i>Advanced Materials</i> , <b>2007</b> , 19, 3564-3569	24	176
367	Specific contact resistances between amorphous oxide semiconductor InGaZnO and metallic electrodes. <i>Thin Solid Films</i> , <b>2008</b> , 516, 5899-5902	2.2	171

366	Effects of excess oxygen on operation characteristics of amorphous In-Ga-Zn-O thin-film transistors. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 093507	3.4	166
365	Sputtering formation of p-type SnO thin-film transistors on glass toward oxide complimentary circuits. <i>Applied Physics Letters</i> , <b>2010</b> , 97, 072111	3.4	165
364	Amorphous oxide channel TFTs. <i>Thin Solid Films</i> , <b>2008</b> , 516, 1516-1522	2.2	155
363	Degenerate p-type conductivity in wide-gap LaCuOS <sub>1-x</sub> Se <sub>x</sub> (x=0.1) epitaxial films. <i>Applied Physics Letters</i> , <b>2003</b> , 82, 1048-1050	3.4	155
362	Effects of Diffusion of Hydrogen and Oxygen on Electrical Properties of Amorphous Oxide Semiconductor, In-Ga-Zn-O. <i>ECS Journal of Solid State Science and Technology</i> , <b>2013</b> , 2, P5-P8	2	152
361	Factors controlling electron transport properties in transparent amorphous oxide semiconductors. <i>Journal of Non-Crystalline Solids</i> , <b>2008</b> , 354, 2796-2800	3.9	152
360	Amorphous InGaZnO coplanar homojunction thin-film transistor. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 133502	3.4	150
359	Intrinsic defects in a photovoltaic perovskite variant Cs <sub>2</sub> SnI <sub>6</sub> . <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 18900-3	3.6	148
358	Field Emission of Electron Anions Clathrated in Subnanometer-Sized Cages in [Ca <sub>24</sub> Al <sub>28</sub> O <sub>64</sub> ] <sup>4+</sup> (4e <sup>-</sup> ). <i>Advanced Materials</i> , <b>2004</b> , 16, 685-689	2.4	146
357	Growth, structure and carrier transport properties of Ga <sub>2</sub> O <sub>3</sub> epitaxial film examined for transparent field-effect transistor. <i>Thin Solid Films</i> , <b>2006</b> , 496, 37-41	2.2	142
356	Depth analysis of subgap electronic states in amorphous oxide semiconductor, a-In-Ga-Zn-O, studied by hard x-ray photoelectron spectroscopy. <i>Journal of Applied Physics</i> , <b>2011</b> , 109, 073726	2.5	141
355	Highly stable amorphous In-Ga-Zn-O thin-film transistors produced by eliminating deep subgap defects. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 053505	3.4	139
354	A p-Type Amorphous Oxide Semiconductor and Room Temperature Fabrication of Amorphous Oxide p-n Heterojunction Diodes. <i>Advanced Materials</i> , <b>2003</b> , 15, 1409-1413	2.4	138
353	Bipolar Conduction in SnO Thin Films. <i>Electrochemical and Solid-State Letters</i> , <b>2011</b> , 14, H13		132
352	Itinerant ferromagnetism in the layered crystals LaCoOX(X=P,As). <i>Physical Review B</i> , <b>2008</b> , 77,	3.3	129
351	Proton Conduction in In <sup>3+</sup> -Doped SnP <sub>2</sub> O <sub>7</sub> at Intermediate Temperatures. <i>Journal of the Electrochemical Society</i> , <b>2006</b> , 153, A1604	3.9	129
350	Subgap states, doping and defect formation energies in amorphous oxide semiconductor a-InGaZnO <sub>4</sub> studied by density functional theory. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2010</b> , 207, 1698-1703	1.6	127
349	Frontier of transparent oxide semiconductors. <i>Solid-State Electronics</i> , <b>2003</b> , 47, 2261-2267	1.7	123

348	Origin of definite Hall voltage and positive slope in mobility-donor density relation in disordered oxide semiconductors. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 122103	3.4	121
347	Field-induced current modulation in epitaxial film of deep-ultraviolet transparent oxide semiconductor Ga <sub>2</sub> O <sub>3</sub> . <i>Applied Physics Letters</i> , <b>2006</b> , 88, 092106	3.4	117
346	Two-Dimensional Transition-Metal Electride Y <sub>2</sub> C. <i>Chemistry of Materials</i> , <b>2014</b> , 26, 6638-6643	9.6	113
345	Fabrication and characterization of heteroepitaxial p-n junction diode composed of wide-gap oxide semiconductors p-ZnRh <sub>2</sub> O <sub>4</sub> /n-ZnO. <i>Applied Physics Letters</i> , <b>2003</b> , 82, 823-825	3.4	112
344	Nickel-based phosphide superconductor with infinite-layer structure, BaNi <sub>2</sub> P <sub>2</sub> . <i>Solid State Communications</i> , <b>2008</b> , 147, 111-113	1.6	110
343	Biaxially textured cobalt-doped BaFe <sub>2</sub> As <sub>2</sub> films with high critical current density over 1 MA/cm <sup>2</sup> on MgO-buffered metal-tape flexible substrates. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 242510	3.4	105
342	Fast Thin-Film Transistor Circuits Based on Amorphous Oxide Semiconductor. <i>IEEE Electron Device Letters</i> , <b>2007</b> , 28, 273-275	4.4	104
341	Electronic Defects in Amorphous Oxide Semiconductors: A Review. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2019</b> , 216, 1800372	1.6	103
340	Superconductivity in Epitaxial Thin Films of Co-Doped SrFe <sub>2</sub> As <sub>2</sub> with Bilayered FeAs Structures and their Magnetic Anisotropy. <i>Applied Physics Express</i> , <b>2008</b> , 1, 101702	2.4	101
339	Hydrogen passivation of electron trap in amorphous In-Ga-Zn-O thin-film transistors. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 202114	3.4	92
338	Characteristics of optical guided modes in multilayer metal-clad planar optical guide with low-index dielectric buffer layer. <i>IEEE Journal of Quantum Electronics</i> , <b>1975</b> , 11, 729-736	2	91
337	Heteroepitaxial growth and optoelectronic properties of layered iron oxyarsenide, LaFeAsO. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 162504	3.4	88
336	Single-atomic-layered quantum wells built in wide-gap semiconductors LnCuOCh (Ln=lanthanide, Ch=chalcogen). <i>Physical Review B</i> , <b>2004</b> , 69,	3.3	88
335	Transparent amorphous oxide semiconductors for organic electronics: Application to inverted OLEDs. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, 233-238	11.5	86
334	Nickel-based layered superconductor, LaNiOAs. <i>Journal of Solid State Chemistry</i> , <b>2008</b> , 181, 2117-2120	3.3	86
333	Electrical and Optical Properties and Electronic Structures of LnCuOS (Ln = La~Nd). <i>Chemistry of Materials</i> , <b>2003</b> , 15, 3692-3695	9.6	84
332	Ligand-Hole in [SnI <sub>6</sub> ] Unit and Origin of Band Gap in Photovoltaic Perovskite Variant Cs <sub>2</sub> SnI <sub>6</sub> . <i>Bulletin of the Chemical Society of Japan</i> , <b>2015</b> , 88, 1250-1255	5.1	83
331	Heavy hole doping of epitaxial thin films of a wide gap p-type semiconductor, LaCuOSe, and analysis of the effective mass. <i>Applied Physics Letters</i> , <b>2007</b> , 91, 012104	3.4	82

- 330 Room temperature nanocrystalline silicon single-electron transistors. *Journal of Applied Physics*, **2003**, 94, 633-637 2.5 82
- 329 Three-dimensionally stacked flexible integrated circuit: Amorphous oxide/polymer hybrid complementary inverter using n-type a-InGaZnO and p-type poly-(9,9-dioctylfluorene-co-bithiophene) thin-film transistors. *Applied Physics Letters*, **2010**, 96, 263509 3.4 81
- 328 High Critical Current Density 4 MA/cm<sup>2</sup> in Co-Doped BaFe<sub>2</sub>As<sub>2</sub> Epitaxial Films Grown on (La,Sr)(Al,Ta)O<sub>3</sub> Substrates without Buffer Layers. *Applied Physics Express*, **2010**, 3, 063101 2.4 81
- 327 Intermediate-Temperature Proton Conduction in Al<sup>[sup 3+]</sup>-Doped SnP<sub>2</sub>O<sub>7</sub>. *Journal of the Electrochemical Society*, **2007**, 154, B1265 3.9 81
- 326 Device characteristics improvement of a-InGaZnO TFTs by low-temperature annealing. *Thin Solid Films*, **2010**, 518, 3017-3021 2.2 80
- 325 Femtosecond-laser-encoded distributed-feedback color center laser in lithium fluoride single crystals. *Applied Physics Letters*, **2004**, 84, 311-313 3.4 79
- 324 Wide-gap layered oxychalcogenide semiconductors: Materials, electronic structures and optoelectronic properties. *Thin Solid Films*, **2006**, 496, 8-15 2.2 77
- 323 Electron field emission from TiO<sub>2</sub> nanotube arrays synthesized by hydrothermal reaction. *Applied Physics Letters*, **2006**, 89, 043114 3.4 76
- 322 Bandgap Optimization of Perovskite Semiconductors for Photovoltaic Applications. *Chemistry - A European Journal*, **2018**, 24, 2305-2316 4.8 76
- 321 A germanate transparent conductive oxide. *Nature Communications*, **2011**, 2, 470 17.4 75
- 320 Structural relaxation in amorphous oxide semiconductor, a-In-Ga-Zn-O. *Journal of Applied Physics*, **2012**, 111, 073513 2.5 74
- 319 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
- 318 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
- 317 (Invited) Roles of Hydrogen in Amorphous Oxide Semiconductor. *ECS Transactions*, **2013**, 54, 103-113 1 70
- 316 Electronic structure of oxygen dangling bond in glassy SiO<sub>2</sub>: the role of hyperconjugation. *Physical Review Letters*, **2003**, 90, 186404 7.4 70
- 315 Stability and high-frequency operation of amorphous InGaZnO thin-film transistors with various passivation layers. *Thin Solid Films*, **2012**, 520, 3778-3782 2.2 69
- 314 . *IEEE Electron Device Letters*, **2011**, 32, 1695-1697 4.4 69
- 313 Electromagnetic properties and electronic structure of the iron-based layered superconductor LaFePO. *Physical Review B*, **2008**, 77, 3.3 68

312	ZnInD based thin-film transistors: Compositional dependence. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2008</b> , 205, 1915-1919	1.6	67
311	Fabrication of Highly Conductive $12\text{CaO} \cdot 7\text{Al}_2\text{O}_3$ Thin Films Encaging Hydride Ions by Proton Implantation. <i>Advanced Materials</i> , <b>2003</b> , 15, 1100-1103	24	67
310	Josephson junction in cobalt-doped $\text{BaFe}_2\text{As}_2$ epitaxial thin films on $(\text{La},\text{Sr})(\text{Al},\text{Ta})\text{O}_3$ bicrystal substrates. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 142507	3.4	66
309	Improved coupled mode analysis of corrugated waveguides and lasers. <i>IEEE Journal of Quantum Electronics</i> , <b>1978</b> , 14, 245-258	2	66
308	First-principles study of native point defects in crystalline indium gallium zinc oxide. <i>Journal of Applied Physics</i> , <b>2009</b> , 105, 093712	2.5	65
307	Atomically-flat, chemically-stable, superconducting epitaxial thin film of iron-based superconductor, cobalt-doped $\text{BaFe}_2\text{As}_2$ . <i>Solid State Communications</i> , <b>2009</b> , 149, 2121-2124	1.6	65
306	Intense thermal field electron emission from room-temperature stable electride. <i>Applied Physics Letters</i> , <b>2005</b> , 87, 254103	3.4	65
305	Water-induced superconductivity in $\text{SrFe}_2\text{As}_2$ . <i>Physical Review B</i> , <b>2009</b> , 80,	3.3	64
304	Electronic Structures and Device Applications of Transparent Oxide Semiconductors: What Is the Real Merit of Oxide Semiconductors?. <i>International Journal of Applied Ceramic Technology</i> , <b>2005</b> , 2, 285-294	2.94	60
303	Effects of post-annealing on (110) $\text{Cu}_2\text{O}$ epitaxial films and origin of low mobility in $\text{Cu}_2\text{O}$ thin-film transistor. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2009</b> , 206, 2192-2197	1.6	59
302	Photoelectron Spectroscopic Study of $\text{C}_{12}\text{A}_7$ :e- and $\text{Alq}_3$ Interface: The Formation of a Low Electron-Injection Barrier. <i>Journal of Physical Chemistry C</i> , <b>2007</b> , 111, 8403-8406	3.8	59
301	Optical and Carrier Transport Properties of Cosputtered $\text{ZnInSnD}$ Films and Their Applications to TFTs. <i>Journal of the Electrochemical Society</i> , <b>2008</b> , 155, H390	3.9	57
300	Conversion of an ultra-wide bandgap amorphous oxide insulator to a semiconductor. <i>NPG Asia Materials</i> , <b>2017</b> , 9, e359-e359	10.3	56
299	Large Photoresponse in Amorphous $\text{InGaZnD}$ and Origin of Reversible and Slow Decay. <i>Electrochemical and Solid-State Letters</i> , <b>2010</b> , 13, H324		54
298	Growth mechanism for single-crystalline thin film of $\text{InGaO}_3(\text{ZnO})_5$ by reactive solid-phase epitaxy. <i>Journal of Applied Physics</i> , <b>2004</b> , 95, 5532-5539	2.5	54
297	Electrical Properties and Structure of p-Type Amorphous Oxide Semiconductor $x\text{ZnO} \cdot \text{Rh}_2\text{O}_3$ . <i>Advanced Functional Materials</i> , <b>2005</b> , 15, 968-974	15.6	54
296	Third-order optical nonlinearity originating from room-temperature exciton in layered compounds $\text{LaCuOS}$ and $\text{LaCuOSe}$ . <i>Applied Physics Letters</i> , <b>2004</b> , 84, 879-881	3.4	52
295	Localized and Delocalized Electrons in Room-Temperature Stable Electride $[\text{Ca}_{24}\text{Al}_{28}\text{O}_{64}]^{4+}(\text{O}^{2-})_{2-x}(\text{e}^-)_{2x}$ : Analysis of Optical Reflectance Spectra. <i>Journal of Physical Chemistry C</i> , <b>2008</b> , 112, 4753-4760	3.8	51

- 294 Amorphous InGaZn-O thin-film transistor with coplanar homojunction structure. *Thin Solid Films*, **2009**, 518, 1309-1313 2.2 50
- 293 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
- 292 Excitonic blue luminescence from p-LaCuOSe<sub>2</sub>-InGaZn<sub>5</sub>O<sub>8</sub> light-emitting diode at room temperature. *Applied Physics Letters*, **2005**, 87, 211107 3.4 50
- 291 Intrinsic carrier mobility in amorphous InGaZnO thin-film transistors determined by combined field-effect technique. *Applied Physics Letters*, **2010**, 96, 262105 3.4 48
- 290 High electron doping to a wide band gap semiconductor 12CaO $\cdot$ Al<sub>2</sub>O<sub>3</sub> thin film. *Applied Physics Letters*, **2007**, 90, 182105 3.4 48
- 289 Formation of inorganic electride thin films via site-selective extrusion by energetic inert gas ions. *Journal of Applied Physics*, **2005**, 97, 023510 2.5 48
- 288 Holographic writing of volume-type microgratings in silica glass by a single chirped laser pulse. *Applied Physics Letters*, **2002**, 81, 1137-1139 3.4 48
- 287 Thin Film Growth and Device Fabrication of Iron-Based Superconductors. *Journal of the Physical Society of Japan*, **2012**, 81, 011011 1.5 47
- 286 Simple Analytical Model of On Operation of Amorphous InGaZnO Thin-Film Transistors. *IEEE Transactions on Electron Devices*, **2011**, 58, 3463-3471 2.9 47
- 285 Thin film fabrication of nano-porous 12CaO $\cdot$ Al<sub>2</sub>O<sub>3</sub> crystal and its conversion into transparent conductive films by light illumination. *Thin Solid Films*, **2003**, 445, 309-312 2.2 47
- 284 Electron Confinement in Channel Spaces for One-Dimensional Electride. *Journal of Physical Chemistry Letters*, **2015**, 6, 4966-71 6.4 46
- 283 DC superconducting quantum interference devices fabricated using bicrystal grain boundary junctions in Co-doped BaFe<sub>2</sub>As<sub>2</sub> epitaxial films. *Superconductor Science and Technology*, **2010**, 23, 082001 3.1 46
- 282 42.1: Invited Paper: Improved Amorphous In-Ga-Zn-O TFTs. *Digest of Technical Papers SID International Symposium*, **2008**, 39, 621 0.5 46
- 281 P-13: Photosensitivity of Amorphous IGZO TFTs for Active-Matrix Flat-Panel Displays. *Digest of Technical Papers SID International Symposium*, **2008**, 39, 1215 0.5 46
- 280 Comprehensive studies on the stabilities of a-In-Ga-Zn-O based thin film transistor by constant current stress. *Thin Solid Films*, **2010**, 518, 3012-3016 2.2 45
- 279 Opto-electronic properties and light-emitting device application of widegap layered oxychalcogenides: LaCuOCh (Ch = chalcogen) and La<sub>2</sub>CdO<sub>2</sub>Se<sub>2</sub>. *Physica Status Solidi (A) Applications and Materials Science*, **2006**, 203, 2800-2811 1.6 45
- 278 n-type conversion of SnS by isovalent ion substitution: Geometrical doping as a new doping route. *Scientific Reports*, **2015**, 5, 10428 4.9 44
- 277 Antiferromagnetic bipolar semiconductor LaMnPO with ZrCuSiAs-type structure. *Journal of Applied Physics*, **2009**, 105, 093916 2.5 44

276	Roles of Hydrogen in Amorphous Oxide Semiconductor In-Ga-Zn-O: Comparison of Conventional and Ultra-High-Vacuum Sputtering. <i>ECS Journal of Solid State Science and Technology</i> , <b>2014</b> , 3, Q3085-Q3090	3.0	43
275	Operation Characteristics of Thin-Film Transistors Using Very Thin Amorphous InGaZnO Channels. <i>Electrochemical and Solid-State Letters</i> , <b>2011</b> , 14, H197		43
274	Low Threshold Voltage and Carrier Injection Properties of Inverted Organic Light-Emitting Diodes with [Ca <sub>24</sub> Al <sub>28</sub> O <sub>64</sub> ] <sup>4+</sup> (4e <sup>-</sup> ) Cathode and Cu <sub>2</sub> Se Anode. <i>Journal of Physical Chemistry C</i> , <b>2009</b> , 113, 18379-18384	3.8	42
273	High critical-current density with less anisotropy in BaFe <sub>2</sub> (As,P) <sub>2</sub> epitaxial thin films: Effect of intentionally grown c-axis vortex-pinning centers. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 182603	3.4	41
272	Thin film growth by pulsed laser deposition and properties of 122-type iron-based superconductor AE(Fe <sub>1-x</sub> Cox) <sub>2</sub> As <sub>2</sub> (AE=alkaline earth). <i>Superconductor Science and Technology</i> , <b>2012</b> , 25, 084015	3.1	41
271	Identical effects of indirect and direct electron doping of superconducting BaFe <sub>2</sub> As <sub>2</sub> thin films. <i>Physical Review B</i> , <b>2012</b> , 85,	3.3	41
270	ZnO-Based Semiconductors as Building Blocks for Active Devices. <i>MRS Bulletin</i> , <b>2008</b> , 33, 1061-1066	3.2	41
269	Device applications of transparent oxide semiconductors: Excitonic blue LED and transparent flexible TFT. <i>Journal of Electroceramics</i> , <b>2006</b> , 17, 267-275	1.5	41
268	Growth, structure, and transport properties of thin (>10 nm) n-type microcrystalline silicon prepared on silicon oxide and its application to single-electron transistor. <i>Journal of Applied Physics</i> , <b>2001</b> , 89, 6265-6271	2.5	41
267	Amorphous InGaZnO Dual-Gate TFTs: Current-Voltage Characteristics and Electrical Stress Instabilities. <i>IEEE Transactions on Electron Devices</i> , <b>2012</b> , 59, 1928-1935	2.9	40
266	EPR identification of two types of carbon vacancies in 4H-BiC. <i>Physical Review B</i> , <b>2004</b> , 69,	3.3	40
265	Calculation of Crystal Structures, Dielectric Constants and Piezoelectric Properties of Wurtzite-Type Crystals Using Ab-Initio Periodic Hartree-Fock Method. <i>Japanese Journal of Applied Physics</i> , <b>1996</b> , 35, 4421-4426	1.4	39
264	Photoluminescence from Au ion-implanted nanoporous single-crystal 12CaO $\cdot$ 7Al <sub>2</sub> O <sub>3</sub> . <i>Physical Review B</i> , <b>2006</b> , 73,	3.3	39
263	Field-Induced Current Modulation in Nanoporous Semiconductor, Electron-Doped 12CaO $\cdot$ 7Al <sub>2</sub> O <sub>3</sub> . <i>Chemistry of Materials</i> , <b>2005</b> , 17, 6311-6316	9.6	39
262	Role of lone pair electrons in determining the optoelectronic properties of BiCuOSe. <i>Physical Review B</i> , <b>2012</b> , 85,	3.3	37
261	Heteroepitaxial film growth of layered compounds with the ZrCuSiAs-type and ThCr <sub>2</sub> Si <sub>2</sub> -type structures: From Cu-based semiconductors to Fe-based superconductors. <i>Physica C: Superconductivity and Its Applications</i> , <b>2009</b> , 469, 657-666	1.3	37
260	Origins of hole doping and relevant optoelectronic properties of wide gap p-type semiconductor, LaCuOSe. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 15060-7	16.4	36
259	Heteroepitaxial growth of layered semiconductors, LaZnOP <sub>n</sub> (P <sub>n</sub> = P and As). <i>Thin Solid Films</i> , <b>2008</b> , 516, 5800-5804	2.2	36

- 258 Relationship between non-localized tail states and carrier transport in amorphous oxide semiconductor, InGaZnO. *Physica Status Solidi (A) Applications and Materials Science*, **2008**, 205, 1910-1914<sup>1.6</sup> 36
- 257 Route to n-type doping in SnS. *Applied Physics Letters*, **2015**, 106, 152103 3.4 35
- 256 Amorphous SnGaZnO channel thin-film transistors. *Physica Status Solidi (A) Applications and Materials Science*, **2008**, 205, 1920-1924 1.6 34
- 255 Electron effective mass and mobility limits in degenerate perovskite stannate BaSnO<sub>3</sub>. *Physical Review B*, **2017**, 95, 3.3 33
- 254 Band alignment of InGaZnO<sub>4</sub>/Si interface by hard x-ray photoelectron spectroscopy. *Journal of Applied Physics*, **2012**, 112, 033713 2.5 33
- 253 Sn[sub 0.9]In[sub 0.1]P[sub 2]O[sub 7]-Based Organic/Inorganic Composite Membranes. *Journal of the Electrochemical Society*, **2007**, 154, B63 3.9 33
- 252 Temperature dependence of single-event transient current induced by heavy-ion microbeam on p/sup +//n/n/sup +/ epilayer junctions. *IEEE Transactions on Nuclear Science*, **2004**, 51, 2834-2839 1.7 33
- 251 Synthesis of single-phase layered oxychalcogenide La<sub>2</sub>CdO<sub>2</sub>Se<sub>2</sub>: crystal structure, optical and electrical properties. *Journal of Materials Chemistry*, **2004**, 14, 2946 33
- 250 Wide gap p-type degenerate semiconductor: Mg-doped LaCuOSe. *Thin Solid Films*, **2003**, 445, 304-308 2.2 33
- 249 mubeam system for study of single event upset of semiconductor devices. *Nuclear Instruments & Methods in Physics Research B*, **1992**, 64, 362-366 1.2 33
- 248 Microstructure and transport properties of [001]-tilt bicrystal grain boundaries in iron pnictide superconductor, cobalt-doped BaFe<sub>2</sub>As<sub>2</sub>. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2012**, 177, 515-519 3.1 32
- 247 Control of carrier concentration and surface flattening of CuGaO<sub>2</sub> epitaxial films for a p-channel transparent transistor. *Thin Solid Films*, **2008**, 516, 5790-5794 2.2 32
- 246 N-channel MOSFETs fabricated on homoepitaxy-grown 3C-SiC films. *IEEE Electron Device Letters*, **2003**, 24, 466-468 4.4 32
- 245 Sub-micron microbeam apparatus for high resolution materials analyses. *Nuclear Instruments & Methods in Physics Research B*, **1996**, 118, 447-450 1.2 32
- 244 Effects of low-temperature ozone annealing on operation characteristics of amorphous InGaZnO thin-film transistors. *Thin Solid Films*, **2012**, 520, 3787-3790 2.2 30
- 243 Mobility- and temperature-dependent device model for amorphous InGaZnO thin-film transistors. *Thin Solid Films*, **2014**, 559, 40-43 2.2 30
- 242 Doping effects in amorphous oxides. *Journal of the Ceramic Society of Japan*, **2012**, 120, 447-457 1 30
- 241 New functionalities in abundant element oxides: ubiquitous element strategy. *Science and Technology of Advanced Materials*, **2011**, 12, 034303 7.1 30

240	Epitaxial film growth and optoelectrical properties of layered semiconductors, LaMnXO (X=P, As, and Sb). <i>Journal of Applied Physics</i> , <b>2009</b> , 105, 073903	2.5	30
239	Optical Properties and Two-Dimensional Electronic Structure in Wide-Gap Layered Oxychalcogenide: La <sub>2</sub> CdO <sub>2</sub> Se <sub>2</sub> . <i>Journal of Physical Chemistry B</i> , <b>2004</b> , 108, 17344-17351	3.4	30
238	LaCo <sub>2</sub> B <sub>2</sub> : a Co-based layered superconductor with a ThCr <sub>2</sub> Si <sub>2</sub> -type structure. <i>Physical Review Letters</i> , <b>2011</b> , 106, 237001	7.4	29
237	Carrier transport, structure and orientation in polycrystalline silicon on glass. <i>Thin Solid Films</i> , <b>1999</b> , 337, 45-50	2.2	29
236	Electride and superconductivity behaviors in Mn <sub>5</sub> Si <sub>3</sub> -type intermetallics. <i>Npj Quantum Materials</i> , <b>2017</b> , 2,	5	28
235	Effects of residual hydrogen in sputtering atmosphere on structures and properties of amorphous In-Ga-Zn-O thin films. <i>Journal of Applied Physics</i> , <b>2015</b> , 118, 205703	2.5	28
234	Film Texture, Hole Transport and Field-Effect Mobility in Polycrystalline SnO Thin Films on Glass. <i>ECS Journal of Solid State Science and Technology</i> , <b>2014</b> , 3, Q3040-Q3044	2	28
233	Low and small resistance hole-injection barrier for NPB realized by wide-gap p-type degenerate semiconductor, LaCuOSe:Mg. <i>Organic Electronics</i> , <b>2008</b> , 9, 890-894	3.5	28
232	Li-Doped NiO Epitaxial Thin Film with Atomically Flat Surface. <i>Journal of Materials Research</i> , <b>2004</b> , 19, 913-920	2.5	28
231	Fabrication of heteroepitaxial thin films of layered oxychalcogenides LnCuOCh (Ln = La, Nd; Ch = S, Se) by reactive solid-phase epitaxy. <i>Journal of Materials Research</i> , <b>2004</b> , 19, 2137-2143	2.5	28
230	Control of orientation from random to (220) or (400) in polycrystalline silicon films. <i>Thin Solid Films</i> , <b>1999</b> , 337, 18-22	2.2	28
229	Growth of high-quality SnS epitaxial films by H <sub>2</sub> S flow pulsed laser deposition. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 072106	3.4	27
228	Heteroepitaxial growth of SnSe films by pulsed laser deposition using Se-rich targets. <i>Journal of Applied Physics</i> , <b>2015</b> , 118, 205302	2.5	27
227	Solid State Syntheses of 12SrO $\cdot$ 7Al <sub>2</sub> O <sub>3</sub> and Formation of High Density Oxygen Radical Anions, O $\cdot$ and O <sub>2</sub> $\cdot$ . <i>Chemistry of Materials</i> , <b>2008</b> , 20, 5987-5996	9.6	27
226	Apparent bipolarity and Seebeck sign inversion in a layered semiconductor: LaZnOP. <i>Physical Review B</i> , <b>2007</b> , 76,	3.3	27
225	Solid phase epitaxial growth of high mobility La:BaSnO <sub>3</sub> thin films co-doped with interstitial hydrogen. <i>Applied Physics Letters</i> , <b>2016</b> , 108, 172101	3.4	27
224	Enhanced critical-current in P-doped BaFeAs thin films on metal substrates arising from poorly aligned grain boundaries. <i>Scientific Reports</i> , <b>2016</b> , 6, 36828	4.9	26
223	Electric double-layer transistor using layered iron selenide Mott insulator TlFe <sub>1.6</sub> Se <sub>2</sub> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, 3979-83	11.5	26

222	Surface reactivity and oxygen migration in amorphous indium-gallium-zinc oxide films annealed in humid atmosphere. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 201904	3.4	26
221	Reduction of grain-boundary potential barrier height in polycrystalline silicon with hot H <sub>2</sub> O-vapor annealing probed using point-contact devices. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>2003</b> , 21, 1000		26
220	Narrow bandgap in BaZnAs <sub>2</sub> and its chemical origins. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 14959-65	16.4	25
219	Optimization of Transparent Conductive Oxide for Improved Resistance to Reactive and/or High Temperature Optoelectronic Device Processing. <i>Japanese Journal of Applied Physics</i> , <b>1999</b> , 38, 5796-5804	1.4	25
218	Magnetic structure and electromagnetic properties of LnCrAsO with a ZrCuSiAs-type structure (Ln = La, Ce, Pr, and Nd). <i>Inorganic Chemistry</i> , <b>2013</b> , 52, 13363-8	5.1	23
217	Thin film and bulk fabrication of room-temperature-stable electride C12A7:e <sup>-</sup> utilizing reduced amorphous 12CaO·7Al <sub>2</sub> O <sub>3</sub> (C12A7). <i>Journal of Non-Crystalline Solids</i> , <b>2008</b> , 354, 2772-2776	3.9	23
216	. <i>Journal of Display Technology</i> , <b>2015</b> , 11, 523-527		22
215	Critical factor for epitaxial growth of cobalt-doped BaFe <sub>2</sub> As <sub>2</sub> films by pulsed laser deposition. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 172602	3.4	22
214	Anion Incorporation-induced Cage Deformation in 12CaO·7Al <sub>2</sub> O <sub>3</sub> Crystal. <i>Chemistry Letters</i> , <b>2007</b> , 36, 902-903	1.7	22
213	Single-electron effects in side-gated point contacts fabricated in low-temperature deposited nanocrystalline silicon films. <i>Applied Physics Letters</i> , <b>2001</b> , 78, 1083-1085	3.4	22
212	Electron injection barriers between air-stable electride with low work function, C12A7:e <sup>-</sup> and pentacene, C <sub>60</sub> and copper phthalocyanine. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 4278		21
211	Interface electronic structures of zinc oxide and metals: First-principle study. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2008</b> , 205, 1929-1933	1.6	21
210	Function Cultivation of Transparent Oxides Utilizing Built-In Nanostructure. <i>Bulletin of the Chemical Society of Japan</i> , <b>2006</b> , 79, 1-24	5.1	21
209	Electronic insulator-conductor conversion in hydride ion-doped 12CaO·7Al <sub>2</sub> O <sub>3</sub> by electron-beam irradiation. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 022109	3.4	21
208	Creation of new functions in transparent oxides utilizing nanostructures embedded in crystal and artificially encoded by laser pulses. <i>Semiconductor Science and Technology</i> , <b>2005</b> , 20, S92-S102	1.8	21
207	Control of grain-boundary tunneling barriers in polycrystalline silicon. <i>Applied Physics Letters</i> , <b>2002</b> , 81, 2388-2390	3.4	21
206	. <i>Journal of Display Technology</i> , <b>2015</b> , 11, 518-522		20
205	Positive Gate Bias Instability Induced by Diffusion of Neutral Hydrogen in Amorphous In-Ga <sub>1-x</sub> Sn-O Thin-Film Transistor. <i>IEEE Electron Device Letters</i> , <b>2014</b> , 35, 832-834	4.4	20

204	Magnetic and carrier transport properties of Mn-doped p-type semiconductor LaCuOSe: An investigation of the origin of ferromagnetism. <i>Journal of Applied Physics</i> , <b>2006</b> , 100, 033717	2.5	20
203	Synthesis, structure and physical properties of layered semiconductors M <sub>2</sub> CuFCh (M=Sr, Eu, Ch=S, Se). <i>Journal of Solid State Chemistry</i> , <b>2006</b> , 179, 1668-1673	3.3	20
202	The structure of 1.52.0 eV band gap amorphous silicon films prepared by chemical annealing. <i>Journal of Non-Crystalline Solids</i> , <b>2000</b> , 266-269, 630-634	3.9	20
201	Comparison of Microstructure and Crystal Structure of Polycrystalline Silicon Exhibiting Varied Textures Fabricated by Microwave and Very High Frequency Plasma Enhanced Chemical Vapor Deposition and Their Transport Properties. <i>Japanese Journal of Applied Physics</i> , <b>1999</b> , 38, 5750-5756	1.4	20
200	Multiple Roles of Hydrogen Treatments in Amorphous InGaZnO Films. <i>ECS Journal of Solid State Science and Technology</i> , <b>2017</b> , 6, P365-P372	2	19
199	Metal-Semiconductor Field-Effect Transistor Made Using Amorphous In-Ga-Zn-O Channel and Bottom Pt Schottky Contact Structure at 200°C. <i>ECS Solid State Letters</i> , <b>2012</b> , 1, Q8-Q10		19
198	Novel Room Temperature Stable Electride 12SrO 7Al <sub>2</sub> O <sub>3</sub> Thin Films: Fabrication, Optical and Electron Transport Properties. <i>Journal of the Ceramic Society of Japan</i> , <b>2007</b> , 115, 567-570	1	19
197	Control of Orientation for Polycrystalline Silicon Thin Films Fabricated from Fluorinated Source Gas by Microwave Plasma Enhanced Chemical Vapor Deposition. <i>Japanese Journal of Applied Physics</i> , <b>1998</b> , 37, L1026-L1029	1.4	19
196	Photovoltaic properties of n-type amorphous InGaZnO and p-type single crystal Si heterojunction solar cells: Effects of Ga content. <i>Thin Solid Films</i> , <b>2012</b> , 520, 3808-3812	2.2	18
195	Optical evidence for quantization in transparent amorphous oxide semiconductor superlattice. <i>Physical Review B</i> , <b>2012</b> , 86,	3.3	18
194	Magnetic scattering and electron pair breaking by rare-earth-ion substitution in BaFe <sub>2</sub> As <sub>2</sub> epitaxial films. <i>New Journal of Physics</i> , <b>2013</b> , 15, 073019	2.9	18
193	Optoelectronic properties and electronic structure of YCuOSe. <i>Journal of Applied Physics</i> , <b>2007</b> , 102, 113714	2.5	18
192	Self-Adjusted, Three-Dimensional Lattice-Matched Buffer Layer for Growing ZnO Epitaxial Film: Homologous Series Layered Oxide, InGaO <sub>3</sub> (ZnO) <sub>5</sub> . <i>Crystal Growth and Design</i> , <b>2006</b> , 6, 2451-2456	3.5	18
191	All oxide transparent MISFET using high-k dielectrics gates. <i>Microelectronic Engineering</i> , <b>2004</b> , 72, 294-298	3.5	18
190	Two-dimensional electronic structure and multiple excitonic states in layered oxychalcogenide semiconductors, LaCuOCh (Ch=S, Se, Te): Optical properties and relativistic ab initio study. <i>Thin Solid Films</i> , <b>2005</b> , 486, 98-103	2.2	18
189	Effects of Pb Doping on Hole Transport Properties and Thin-Film Transistor Characteristics of SnO Thin Films. <i>ECS Journal of Solid State Science and Technology</i> , <b>2015</b> , 4, Q26-Q30	2	17
188	Layered mixed-anion compounds: Epitaxial growth, active function exploration, and device application. <i>Journal of the European Ceramic Society</i> , <b>2009</b> , 29, 245-253	6	17
187	Fabrication and electron transport properties of epitaxial films of electron-doped 12CaO $\cdot$ 7Al <sub>2</sub> O <sub>3</sub> and 12SrO $\cdot$ 7Al <sub>2</sub> O <sub>3</sub> . <i>Journal of Solid State Chemistry</i> , <b>2010</b> , 183, 385-391	3.3	17

- 186 Unusual pressure effects on the superconductivity of indirectly electron-doped (Ba<sub>1-x</sub>La<sub>x</sub>)Fe<sub>2</sub>As<sub>2</sub> epitaxial films. *Physical Review B*, **2013**, 88, 3.3 16
- 185 Bistable resistance switching in surface-oxidized C12A7:e single-crystal. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2009**, 161, 76-79 3.1 16
- 184 Steady-state photoconductivity of amorphous In<sub>0.5</sub>Ga<sub>0.5</sub>N. *Thin Solid Films*, **2010**, 518, 3000-3003 2.2 16
- 183 Growth of bismuth silicate films on Si and its dielectric properties. *Journal of Applied Physics*, **1994**, 75, 2924-2928 2.5 16
- 182 Improved coupled mode analysis of corrugated waveguides and lasers - II: TM mode. *IEEE Journal of Quantum Electronics*, **1978**, 14, 620-624 2 16
- 181 N-type conduction in SnS by anion substitution with Cl. *Applied Physics Express*, **2016**, 9, 051201 2.4 16
- 180 . *Journal of Display Technology*, **2014**, 10, 979-983 15
- 179 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
- 178 Built-in Quantum Dots in Nano-Porous Crystal 12CaO·7Al<sub>2</sub>O<sub>3</sub>: Simplified Views for Electronic Structure and Carrier Transport. *Japanese Journal of Applied Physics*, **2005**, 44, 774-782 1.4 15
- 177 Anomalous scaling behavior in a mixed-state Hall effect of a cobalt-doped BaFe<sub>2</sub>As<sub>2</sub> epitaxial film with a high critical current density over 1 MA/cm<sup>2</sup>. *Physical Review B*, **2013**, 87, 3.3 14
- 176 Microbeam complex at TIARA: Technologies to meet a wide range of applications. *Nuclear Instruments & Methods in Physics Research B*, **2011**, 269, 2184-2188 1.2 14
- 175 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
- 174 Natural nanostructures in ionic semiconductors. *Microelectronic Engineering*, **2004**, 73-74, 620-626 2.5 14
- 173 Quantum beat between two excitonic levels split by spin-orbit interactions in the oxychalcogenide LaCuOS. *Optics Letters*, **2004**, 29, 1659-61 3 14
- 172 Carrier Transport across a Few Grain Boundaries in Highly Doped Polycrystalline Silicon. *Japanese Journal of Applied Physics*, **2001**, 40, L615-L617 1.4 14
- 171 Fabrication of Polycrystalline Silicon Films from SiF<sub>4</sub>/H<sub>2</sub>/SiH<sub>4</sub> Gas Mixture Using Very High Frequency Plasma Enhanced Chemical Vapor Deposition with In Situ Plasma Diagnostics and Their Structural Properties. *Japanese Journal of Applied Physics*, **2000**, 39, 3294-3301 1.4 14
- 170 The Unique Electronic Structure of Mg Si: Shaping the Conduction Bands of Semiconductors with Multicenter Bonding. *Angewandte Chemie - International Edition*, **2017**, 56, 10135-10139 16.4 13
- 169 Widely bandgap tunable amorphous Cd<sub>1-x</sub>Te<sub>x</sub> oxide semiconductors exhibiting electron mobilities 10 cm<sup>2</sup> V<sup>-1</sup> s<sup>-1</sup>. *Applied Physics Letters*, **2015**, 106, 082106 3.4 13

168	Superconducting Properties and Phase Diagram of Indirectly Electron-Doped $(\text{Sr}_{1-x}\text{La}_x)\text{FeAs}_2$ Epitaxial Films Grown by Pulsed Laser Deposition. <i>IEEE Transactions on Applied Superconductivity</i> , <b>2013</b> , 23, 7300405-7300405	1.8	13
167	Electronic and magnetic properties of layered $\text{LnFePO}$ ( $\text{Ln}=\text{La}$ and $\text{Ce}$ ). <i>Journal of Physics and Chemistry of Solids</i> , <b>2008</b> , 69, 2916-2918	3.9	13
166	Growth and structure of heteroepitaxial thin films of homologous compounds $\text{RAO}_3(\text{MO})_m$ by reactive solid-phase epitaxy: Applicability to a variety of materials and epitaxial template layers. <i>Thin Solid Films</i> , <b>2006</b> , 496, 64-69	2.2	13
165	Growth of epitaxial $\text{ZnO}$ thin films on lattice-matched buffer layer: Application of $\text{InGaO}_3(\text{ZnO})_6$ single-crystalline thin film. <i>Thin Solid Films</i> , <b>2005</b> , 486, 28-32	2.2	13
164	Nonequilibrium Rock-Salt-Type Pb-Doped $\text{SnSe}$ with High Carrier Mobilities $100 \text{ cm}^2/(\text{Vs})$ . <i>Chemistry of Materials</i> , <b>2016</b> , 28, 2278-2286	9.6	13
163	Ultrawide band gap amorphous oxide semiconductor, $\text{GaInO}$ . <i>Thin Solid Films</i> , <b>2016</b> , 614, 84-89	2.2	12
162	An Exceptionally Narrow Band-Gap ( $\sim 4 \text{ eV}$ ) Silicate Predicted in the Cubic Perovskite Structure: $\text{BaSiO}$ . <i>Inorganic Chemistry</i> , <b>2017</b> , 56, 10535-10542	5.1	12
161	. <i>Journal of Display Technology</i> , <b>2014</b> , 10, 975-978		12
160	Electrical properties and local structure of n-type conducting amorphous indium sulphide. <i>Philosophical Magazine Letters</i> , <b>2004</b> , 84, 665-671	1	12
159	Electronic structure of interstitial hydrogen in In-Ga-Zn-O semiconductor simulated by muon. <i>Applied Physics Letters</i> , <b>2019</b> , 115, 122104	3.4	11
158	p-Type Transparent Quadruple Perovskite Halide Conductors: Fact or Fiction?. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 1909906	15.6	11
157	Effects of thermal annealing on elimination of deep defects in amorphous $\text{InGaZnO}$ thin-film transistors. <i>Thin Solid Films</i> , <b>2016</b> , 614, 73-78	2.2	11
156	Growth of c-axis-oriented superconducting $\text{KFeAs}$ thin films. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 14293-301	9.5	11
155	Operation model with carrier-density dependent mobility for amorphous $\text{InGaZnO}$ thin-film transistors. <i>Thin Solid Films</i> , <b>2012</b> , 520, 3791-3795	2.2	11
154	Humidity-Sensitive Electrical Conductivity in $\text{Ca}_{12}\text{Al}_{14}\text{Si}_x\text{O}_{32}\text{Cl}_{2+x}$ ( $0 \leq x \leq 4$ ) Ceramics. <i>Electrochemical and Solid-State Letters</i> , <b>2009</b> , 12, J11		11
153	Short-channel nanowire transistor using a nanoporous crystal semiconductor $12\text{CaO} \cdot 7\text{Al}_2\text{O}_3$ . <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2010</b> , 173, 37-40	3.1	11
152	Single-electron charging in nanocrystalline silicon point-contacts. <i>Microelectronic Engineering</i> , <b>2002</b> , 63, 267-275	2.5	11
151	Electron transport in $\text{InGaO}_3(\text{ZnO})_m$ ( $m=\text{integer}$ ) studied using single-crystalline thin films and transparent MISFETs. <i>Thin Solid Films</i> , <b>2003</b> , 445, 322-326	2.2	11

150	Extremely Narrow Band Gap, ~1.50 eV, Amorphous Silicon. <i>Materials Research Society Symposia Proceedings</i> , <b>1998</b> , 507, 211		11
149	Preparation of Bismuth Silicate Films on Si Wafer by Metalorganic Chemical Vapor Deposition. <i>Japanese Journal of Applied Physics</i> , <b>1993</b> , 32, 135-138	1.4	11
148	Effect of waveguiding properties on the axial mode competition in stripe-geometry semiconductor lasers. <i>IEEE Journal of Quantum Electronics</i> , <b>1981</b> , 17, 706-713	2	11
147	SnS thin films prepared by H <sub>2</sub> S-free process and its p-type thin film transistor. <i>AIP Advances</i> , <b>2016</b> , 6, 015112	1.5	11
146	Multiple Color Inorganic Thin-Film Phosphor, RE-Doped Amorphous Gallium Oxide (RE = Rare Earth: Pr, Sm, Tb, and Dy), Deposited at Room Temperature. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2019</b> , 216, 1700833	1.6	11
145	Effects of Base Pressure on Growth and Optoelectronic Properties of Amorphous In-Ga-Zn-O: Ultralow Optimum Oxygen Supply and Bandgap Widening. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2019</b> , 216, 1700832	1.6	11
144	Key Factors for Insulator-Superconductor Transition in FeSe Thin Films by Electric Field. <i>IEEE Transactions on Applied Superconductivity</i> , <b>2017</b> , 27, 1-5	1.8	10
143	Epitaxial growth and electronic structure of a layered zinc pnictide semiconductor, BaZn <sub>2</sub> As <sub>2</sub> . <i>Thin Solid Films</i> , <b>2014</b> , 559, 100-104	2.2	10
142	Fabrication and characterization of ZnS:(Cu,Al) thin film phosphors on glass substrates by pulsed laser deposition. <i>Thin Solid Films</i> , <b>2014</b> , 559, 18-22	2.2	10
141	. <i>Journal of Display Technology</i> , <b>2015</b> , 11, 720-724		10
140	Electronic Structure and Photovoltaic Properties of n-Type Amorphous In-Ga-Zn-O and p-Type Single Crystal Si Heterojunctions. <i>Electrochemical and Solid-State Letters</i> , <b>2011</b> , 14, H346		10
139	Femtosecond-laser-encoded distributed-feedback color center laser in lithium fluoride single crystal. <i>Journal of Non-Crystalline Solids</i> , <b>2006</b> , 352, 2347-2350	3.9	10
138	Excitonic properties related to valence band levels split by spin-orbit interaction in layered oxychalcogenide LaCuOCh (Ch=S, Se). <i>Journal of Luminescence</i> , <b>2005</b> , 112, 66-70	3.8	10
137	Characterization of Tunnel Barriers in Polycrystalline Silicon Point-Contact Single-Electron Transistors. <i>Japanese Journal of Applied Physics</i> , <b>2002</b> , 41, 2675-2678	1.4	10
136	Optical absorption and Hall effect in (220) and (400) oriented polycrystalline silicon films. <i>Journal of Applied Physics</i> , <b>2000</b> , 88, 3310-3315	2.5	10
135	Role of Seed Crystal Layer in Two-Step-Growth Procedure for Low Temperature Growth of Polycrystalline Silicon Thin Film from SiF <sub>4</sub> by a Remote-Type Microwave Plasma Enhanced Chemical Vapor Deposition. <i>Japanese Journal of Applied Physics</i> , <b>1999</b> , 38, 5762-5767	1.4	10
134	The phase shift of the light output in sinusoidally modulated semiconductor lasers. <i>IEEE Journal of Quantum Electronics</i> , <b>1979</b> , 15, 791-798	2	10
133	Room-temperature fabrication of light-emitting thin films based on amorphous oxide semiconductor. <i>AIP Advances</i> , <b>2016</b> , 6, 015106	1.5	10

132	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> , <b>2017</b> , 56, 03BB03	1.4	9
131	BaFe <sub>2</sub> (As <sub>1-x</sub> P <sub>x</sub> ) <sub>2</sub> (x= 0.22-0.42) thin films grown on practical metal tape substrates and their critical current densities. <i>Superconductor Science and Technology</i> , <b>2017</b> , 30, 044003	3.1	9
130	Transparent amorphous oxide semiconductor thin film phosphor, In-Mg-O:Eu. <i>Journal of the Ceramic Society of Japan</i> , <b>2016</b> , 124, 532-535	1	9
129	Difficulty of carrier generation in orthorhombic PbO. <i>Journal of Applied Physics</i> , <b>2016</b> , 119, 165701	2.5	9
128	Fabrication and transport properties of 12CaO-7Al <sub>2</sub> O <sub>3</sub> (C12A7) electride nanowire. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2008</b> , 205, 2047-2051	1.6	9
127	Combinatorial Study on In-Ga-Zn-O Semiconductor Films as Active-channel Layers for Thin-film Transistor. <i>Materials Research Society Symposia Proceedings</i> , <b>2006</b> , 928, 1		9
126	Detection of dead layers and defects in polycrystalline Cu <sub>2</sub> O thin-film transistors by x-ray reflectivity and photoresponse spectroscopy analyses. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2015</b> , 33, 051211	1.3	8
125	Fabrication of nanowires by varying energy microbeam lithography using heavy ions at the TIARA. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2009</b> , 267, 2317-2320	1.2	8
124	P-29: Modeling of Amorphous Oxide Semiconductor Thin Film Transistors and Subgap Density of States. <i>Digest of Technical Papers SID International Symposium</i> , <b>2008</b> , 39, 1277	0.5	8
123	Nano-fabrication of optical devices in transparent dielectrics: volume gratings in SiO <sub>2</sub> and DFB Color center laser in LiF. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2004</b> , 218, 332-336	1.2	8
122	Symmetric Ambipolar Thin-Film Transistors and High-Gain CMOS-like Inverters Using Environmentally Friendly Copper Nitride. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 35132-35137	9.5	7
121	Electrical and magnetic properties of quaternary compounds LnMnPO (Ln=Nd, Sm, Gd) with ZrCuSiAs-type structure. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2010</b> , 173, 47-50	3.1	7
120	Development of Cyclotron Beam Technology for Applications in Materials Science and Biotechnology at JAERI-TIARA. <i>AIP Conference Proceedings</i> , <b>2003</b> ,	0	7
119	Carrier removal in lattice-mismatched InGaP solar cells under 1-MeV-electron irradiation. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 2511-2513	3.4	7
118	Comprehensive study on layout dependence of soft errors in CMOS latch circuits and its scaling trend for 65 nm technology node and beyond		7
117	Structural properties of polycrystalline silicon films having varied textures fabricated with intentional control of surface reactions using SiF <sub>4</sub> /H <sub>2</sub> /SiH <sub>4</sub> mixing gas. <i>Journal of Non-Crystalline Solids</i> , <b>2000</b> , 266-269, 120-124	3.9	7
116	Oxide TFTs		7
115	Amorphous Gallium Oxide as an Improved Host for Inorganic Light-Emitting Thin Film Semiconductor Fabricated at Room Temperature on Glass. <i>ECS Journal of Solid State Science and Technology</i> , <b>2017</b> , 6, P410-P414	2	6

- 114 Vortex Pinning Properties of Phosphorous-Doped  $\text{BaFe}_{1-x}\text{As}_x$  Epitaxial Films: Comparison Between  $(\text{La},\text{Sr})\text{AlTaO}_6$  and  $\text{MgO}$  Substrates. *IEEE Transactions on Applied Superconductivity*, **2015**, 25, 1-5 1.8 6
- 113 Multiple states and roles of hydrogen in p-type SnS semiconductors. *Physical Chemistry Chemical Physics*, **2018**, 20, 20952-20956 3.6 6
- 112 Superconducting compounds with metallic square net. *Solid State Communications*, **2012**, 152, 666-670 1.6 6
- 111 Effects of sulfur substitution in amorphous  $\text{InGaZnO}_4$ : optical properties and first-principles calculations. *Journal of the Ceramic Society of Japan*, **2015**, 123, 537-541 1 6
- 110 Light Irradiation History Sensor Using Amorphous In-Ga-Zn-O Thin-Film Transistor Exposed to Ozone Annealing. *IEEE Electron Device Letters*, **2012**, 33, 384-386 4.4 6
- 109 P.142L: Late-News Poster: Electron Injecting Material for OLEDs driven by Oxide TFTs: Amorphous  $\text{C12A7}$  Electride. *Digest of Technical Papers SID International Symposium*, **2013**, 44, 1473-1476 0.5 6
- 108 Excimer laser crystallization of  $\text{InGaZnO}_4$  on  $\text{SiO}_2$  substrate. *Journal of Materials Science: Materials in Electronics*, **2011**, 22, 1694-1696 2.1 6
- 107 Electronic structures of MnP-based crystals:  $\text{LaMnOP}$ ,  $\text{BaMn}_2\text{P}_2$ , and  $\text{KMnP}$ . *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2010**, 173, 239-243 3.1 6
- 106 Origin of high-density hole doping and anisotropic hole transport in a wide gap layered semiconductor  $\text{LaCuOSe}$  studied by first-principles calculations. *Physica Status Solidi (A) Applications and Materials Science*, **2010**, 207, 1636-1641 1.6 6
- 105 Photoconductivity gain over 10 at a large electric field in wide gap a-Si:H. *Journal of Non-Crystalline Solids*, **1998**, 227-230, 220-224 3.9 6
- 104 Epitaxial film growth, optical, electrical, and magnetic properties of layered oxide  $\text{In}_3\text{FeTi}_2\text{O}_{10}$ . *Journal of Applied Physics*, **2007**, 101, 103714 2.5 6
- 103 Microstructure control of very thin polycrystalline silicon layers on glass substrate by plasma enhanced CVD. *Solar Energy Materials and Solar Cells*, **2001**, 66, 305-311 6.4 6
- 102 High-quality narrow gap ( $\sim 1.52$  eV) a-Si:H with improved stability fabricated by excited inert gas treatment. *Solar Energy Materials and Solar Cells*, **2001**, 66, 321-327 6.4 6
- 101 Modification of the tunneling barrier in a nanocrystalline silicon single-electron transistor. *Journal of Non-Crystalline Solids*, **2002**, 299-302, 405-410 3.9 6
- 100 High electric field photocurrent of Vidicon and diode devices using wide band gap a-Si:H prepared with intentional control of silicon network by chemical annealing. *Journal of Organometallic Chemistry*, **2000**, 611, 525-530 2.3 6
- 99 Anisotropic carrier transport in preferentially oriented polycrystalline silicon films fabricated by very-high-frequency plasma enhanced chemical vapor deposition using fluorinated source gas. *Journal of Non-Crystalline Solids*, **2000**, 266-269, 341-346 3.9 6
- 98 Microstructure and photovoltaic properties of low temperature polycrystalline silicon solar cells fabricated by VHF-GD CVD using fluorinated gas. *Journal of Non-Crystalline Solids*, **2000**, 266-269, 1088-1093 3.9 6
- 97 Shallow Valence Band of Rutile  $\text{GeO}_2$  and P-type Doping. *Journal of Physical Chemistry C*, **2020**, 124, 25731-25738 3.1 6

96	69-4: NBIS-Stable Oxide Thin-Film Transistors Using Ultra-Wide Bandgap Amorphous Oxide Semiconductors. <i>Digest of Technical Papers SID International Symposium</i> , <b>2016</b> , 47, 951-953	0.5	6
95	Intrinsic and Extrinsic Defects in Layered Nitride Semiconductor SrTiN <sub>2</sub> . <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 19307-19314	3.8	5
94	Fabrication of Atomically Flat ScAlMgO <sub>4</sub> Epitaxial Buffer Layer and Low-Temperature Growth of High-Mobility ZnO Films. <i>Crystal Growth and Design</i> , <b>2010</b> , 10, 1084-1089	3.5	5
93	Large domain growth of GaN epitaxial films on lattice-matched buffer layer ScAlMgO <sub>4</sub> . <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2009</b> , 161, 66-70	3.1	5
92	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. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2008</b> , 205, 2007-2012	1.6	5
91	Heteroepitaxial growth of wide gap p-type semiconductors: LnCuOCh (Lr=La, Pr and Nd; Ch=S or Se) by reactive solid-phase epitaxy. <i>Applied Physics A: Materials Science and Processing</i> , <b>2004</b> , 79, 1517-1520	2.6	5
90	Improvement of transport properties for polycrystalline silicon prepared by plasma-enhanced chemical vapor deposition. <i>Applied Physics A: Materials Science and Processing</i> , <b>2001</b> , 73, 151-159	2.6	5
89	Properties of amorphous silicon solar cells fabricated from SiH <sub>2</sub> Cl <sub>2</sub> . <i>Solar Energy Materials and Solar Cells</i> , <b>2001</b> , 66, 289-295	6.4	5
88	In situ hydrogen plasma treatment for improved transport of (4 0 0) oriented polycrystalline silicon films. <i>Solar Energy Materials and Solar Cells</i> , <b>2001</b> , 66, 313-320	6.4	5
87	Stable Solar Cells Prepared from Dichlorosilane. <i>Materials Research Society Symposia Proceedings</i> , <b>1998</b> , 507, 199		5
86	Narrow Band Gap Amorphous Silicon-Based Solar Cells Prepared by High Temperature Processing. <i>Materials Research Society Symposia Proceedings</i> , <b>1998</b> , 507, 205		5
85	High Rates and Very Low Temperature Fabrication of Polycrystalline Silicon From Fluorinated Source GAS and Their Transport Properties. <i>Materials Research Society Symposia Proceedings</i> , <b>1999</b> , 557, 513		5
84	Double Charge Polarity Switching in Sb-Doped SnSe with Switchable Substitution Sites. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2008092	15.6	5
83	Phonon scattering limited mobility in the representative cubic perovskite semiconductors SrGeO <sub>3</sub> , BaSnO <sub>3</sub> , and SrTiO <sub>3</sub> . <i>Physical Review B</i> , <b>2020</b> , 101,	3.3	4
82	Transition Metal-Doped Amorphous Oxide Semiconductor Thin-Film Phosphor, Chromium-Doped Amorphous Gallium Oxide. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2019</b> , 216, 1800198	1.6	4
81	P-177L: Late-News Poster: Highly Efficient Inverted OLEDs using A New Transparent Amorphous Oxide Semiconductor. <i>Digest of Technical Papers SID International Symposium</i> , <b>2015</b> , 46, 1714-1716	0.5	4
80	Maximum applied voltage detector using amorphous InGaZnO thin-film transistor exposed to ozone annealing. <i>Solid-State Electronics</i> , <b>2012</b> , 75, 74-76	1.7	4
79	Apparent high mobility ~30 cm <sup>2</sup> /Vs of amorphous InGaZnO thin-film transistor and its origin. <i>Journal of the Ceramic Society of Japan</i> , <b>2013</b> , 121, 295-298	1	4

78	INCREASING ANTITUMOR EFFECTS OF CHEMORADIOTHERAPY BY DRUG EFFLUX INHIBITION WITH ENCAPSULATED ANTI-RLIP-76. <i>International Journal of PIXE</i> , <b>2011</b> , 21, 39-46	0.1	4
77	Impurities in FeAs-based superconductor, SrFe <sub>2</sub> As <sub>2</sub> , studied by first-principles calculations. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2010</b> , 173, 244-247	3.1	4
76	Fabrication of ScAlMgO <sub>4</sub> epitaxial thin films using ScGaO <sub>3</sub> (ZnO) <sub>m</sub> buffer layers and its application to lattice-matched buffer layer for ZnO epitaxial growth. <i>Thin Solid Films</i> , <b>2008</b> , 516, 5842-5846	2.2	4
75	Development of latent images due to transient free carrier electrons by femtosecond laser pulses and its application to grating shape trimming. <i>Applied Physics Letters</i> , <b>2007</b> , 90, 011107	3.4	4
74	Degradation of Charge Collection Efficiency Obtained for 6H-SiC n+p Diodes Irradiated with Gold Ions. <i>Materials Science Forum</i> , <b>2007</b> , 556-557, 913-916	0.4	4
73	Photoluminescence of Au <sup>+</sup> formed in 12CaO·7Al <sub>2</sub> O <sub>3</sub> single crystal by Au <sup>+</sup> -implantation. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2006</b> , 250, 368-371	1.2	4
72	Calculation of Band Structures for Perovskite-Type Crystals Using Discrete Variational Method. <i>Japanese Journal of Applied Physics</i> , <b>1994</b> , 33, 3965-3970	1.4	4
71	The Unique Electronic Structure of Mg <sub>2</sub> Si: Shaping the Conduction Bands of Semiconductors with Multicenter Bonding. <i>Angewandte Chemie</i> , <b>2017</b> , 129, 10269-10273	3.6	3
70	Insulator-like behavior coexisting with metallic electronic structure in strained FeSe thin films grown by molecular beam epitaxy. <i>Physical Review B</i> , <b>2019</b> , 99,	3.3	3
69	Particulate Generation on Surface of Iron Selenide Films by Air Exposure. <i>Journal of Superconductivity and Novel Magnetism</i> , <b>2019</b> , 32, 3047-3055	1.5	3
68	Amorphous Oxide Semiconductor Thin-Film Transistors <b>2019</b> , 573-587		3
67	4.1: Invited Paper: Electronic Structure, Carrier Transport, Defects and Impurities in Amorphous Oxide Semiconductor. <i>Digest of Technical Papers SID International Symposium</i> , <b>2013</b> , 44, 11-13	0.5	3
66	Electromagnetic properties of undoped LaFePnO (Pn= P, As). <i>Journal of Physics: Conference Series</i> , <b>2009</b> , 150, 052090	0.3	3
65	Fabrication of GaN epitaxial thin film on InGaZnO <sub>4</sub> single-crystalline buffer layer. <i>Thin Solid Films</i> , <b>2010</b> , 518, 2996-2999	2.2	3
64	Large conductivity enhancement in polycrystalline 12CaO·7Al <sub>2</sub> O <sub>3</sub> thin films induced by extrusion of clathrated O <sub>2</sub> ions by hot Au <sup>+</sup> implantation and ultraviolet light illumination. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2006</b> , 250, 155-158	1.2	3
63	Free carrier optical absorption used to analyze the electrical properties of polycrystalline silicon films formed by plasma enhanced chemical vapor deposition. <i>Thin Solid Films</i> , <b>2001</b> , 383, 248-250	2.2	3
62	Stability of a-Si:H solar cells deposited by Ar-treatment or by ECR techniques. <i>Solar Energy Materials and Solar Cells</i> , <b>2001</b> , 66, 297-303	6.4	3
61	Efficient DC and AC analysis of I <sup>2</sup> L devices based on quasi-three-dimensional modeling. <i>IEEE Transactions on Electron Devices</i> , <b>1982</b> , 29, 418-430	2.9	3

60	Amorphous In-Ga-Zn-O Thin Film Transistors: Fabrication and Properties <b>2012</b> , 485-536		3
59	Reversible 3D-2D structural phase transition and giant electronic modulation in nonequilibrium alloy semiconductor, lead-tin-selenide. <i>Science Advances</i> , <b>2021</b> , 7,	14.3	3
58	Crystal Structure Built from a GeO <sub>6</sub> /TeO <sub>5</sub> Polyhedra Network with High Thermal Stability: BrGe <sub>2</sub> O <sub>5</sub> . <i>ACS Applied Electronic Materials</i> , <b>2019</b> , 1, 1989-1993	4	2
57	P-187: Electronic Structures of Various Color Light-Emitting Amorphous Oxide Semiconductor Thin Films. <i>Digest of Technical Papers SID International Symposium</i> , <b>2017</b> , 48, 1974-1976	0.5	2
56	Pressure effects on T <sub>c</sub> of iron-based layered superconductor LaTMPO (TM= Fe, Ni). <i>Journal of Physics: Conference Series</i> , <b>2009</b> , 150, 052075	0.3	2
55	Integrated Circuits Based on Amorphous Indium-Gallium-Zinc-Oxide-Channel Thin-Film Transistors. <i>ECS Transactions</i> , <b>2006</b> , 3, 293-300	1	2
54	Relationship between the Current Direction in the Inversion Layer and the Electrical Characteristics of Metal-Oxide-Semiconductor Field Effect Transistors on 3C-SiC. <i>Materials Science Forum</i> , <b>2004</b> , 457-460, 1405-1408	0.4	2
53	Two-Dimensional Electronic Structures in Layered Oxychalcogenide Semiconductors, LaCuOCh (Ch=S, Se, Te) and La <sub>2</sub> CdO <sub>2</sub> Se <sub>2</sub> . <i>Materials Research Society Symposia Proceedings</i> , <b>2004</b> , 811, 134		2
52	Photoemission Spectroscopic Studies on Oxide/SiC Interfaces Formed by Dry and Pyrogenic Oxidation. <i>Materials Science Forum</i> , <b>2004</b> , 457-460, 1341-1344	0.4	2
51	Nanosilicon for single-electron devices. <i>Current Applied Physics</i> , <b>2004</b> , 4, 98-101	2.6	2
50	Development of Monte Carlo modeling for proton induced charge in Si pin photodiode. <i>IEEE Transactions on Nuclear Science</i> , <b>2004</b> , 51, 2770-2775	1.7	2
49	Effects of Oxidation and Annealing Temperature on Grain Boundary Properties in Polycrystalline Silicon Probed Using Nanometre-Scale Point-Contact Devices. <i>Solid State Phenomena</i> , <b>2003</b> , 93, 345-350	0.4	2
48	Improved p-i-n solar cells structure for narrow bandgap a-Si:H prepared by Ar* chemical annealing at high temperatures. <i>Solar Energy Materials and Solar Cells</i> , <b>2001</b> , 66, 329-335	6.4	2
47	Transport Properties of Polycrystalline Silicon with Various Textures and Microstructures. <i>Materials Research Society Symposia Proceedings</i> , <b>2000</b> , 609, 2711		2
46	Fabrication of Solar Cells Having SiH <sub>2</sub> Cl <sub>2</sub> -Based I-Layer Materials. <i>Japanese Journal of Applied Physics</i> , <b>1999</b> , 38, 6617-6623	1.4	2
45	Effect of Halogen on the Structure of Low Temperature Polycrystalline Silicon Thin Films Fabricated on Glass Substrates.. <i>Journal of the Ceramic Society of Japan</i> , <b>1999</b> , 107, 1099-1104		2
44	Power enhancement in argon II narrow-tube lasers due to zeeman effect by a transverse magnetic field. <i>IEEE Journal of Quantum Electronics</i> , <b>1987</b> , 23, 633-640	2	2
43	Breaking of Thermopower-Conductivity Trade-Off in LaTiO Film around Mott Insulator to Metal Transition. <i>Advanced Science</i> , <b>2021</b> , 8, e2102097	13.6	2

42	Strain Engineering at Heterointerfaces: Application to an Iron Pnictide Superconductor, Cobalt-Doped BaFeAs. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 50096-50104	9.5	2
41	31-4: Novel Inorganic Electron Injection and Transport Materials Enabling Large-Sized Inverted OLEDs Driven by Oxide TFTs. <i>Digest of Technical Papers SID International Symposium</i> , <b>2016</b> , 47, 401-404	0.5	2
40	New Amorphous InGaZnO Thin-Film Transistor-Based Optical Pixel Sensor for Optical Input Signal With Short Wavelength. <i>IEEE Transactions on Electron Devices</i> , <b>2019</b> , 66, 3841-3846	2.9	1
39	P-13: Quantitative Analysis and Deconvolution of Subgap States in Amorphous In-Ga-Zn-O. <i>Digest of Technical Papers SID International Symposium</i> , <b>2017</b> , 48, 1273-1275	0.5	1
38	Fabrication and opto-electrical properties of amorphous (Zn,B)O thin film by pulsed laser deposition. <i>Journal of the Ceramic Society of Japan</i> , <b>2015</b> , 123, 523-526	1	1
37	P.3: 3-D Stacked Complementary TFT Devices using n-type HfGZO and p-type F8T2 TFTs □ Operation Confirmation of NOT and NAND Logic Circuits □ <i>Digest of Technical Papers SID International Symposium</i> , <b>2013</b> , 44, 995-998	0.5	1
36	35.5L: Late-News Paper: An Ambipolar Oxide TFT. <i>Digest of Technical Papers SID International Symposium</i> , <b>2011</b> , 42, 486-487	0.5	1
35	EPR and Pulsed ENDOR Study of El6 and Related Defects in 4H-SiC. <i>Materials Science Forum</i> , <b>2004</b> , 457-460, 465-468	0.4	1
34	High-Density Electron Anions in a Nanoporous Single Crystal: [Ca <sub>24</sub> Al <sub>28</sub> O <sub>64</sub> ] <sub>4+</sub> (4e <sup>-</sup> ).. <i>ChemInform</i> , <b>2003</b> , 34, no		1
33	Single-Electron Charging Phenomena in Nano/Polycrystalline Silicon Point Contact Transistors. <i>Solid State Phenomena</i> , <b>2003</b> , 93, 419-428	0.4	1
32	High electric field response of wide bandgap a-Si:H photodiodes probed by transient current measurements. <i>Journal of Non-Crystalline Solids</i> , <b>2004</b> , 338-340, 802-805	3.9	1
31	Carrier Transport in Ultra-Thin Nano/Polycrystalline Silicon Films and Nanowires. <i>Materials Research Society Symposia Proceedings</i> , <b>2001</b> , 664, 1621		1
30	Wide Band Gap a-Si:H Based High Gain Vidicon Devices Prepared by Chemical Annealing. <i>Materials Research Society Symposia Proceedings</i> , <b>1998</b> , 507, 357		1
29	Amorphous Silicon Solar Cells Techniques for Reactive Conditions. <i>Materials Research Society Symposia Proceedings</i> , <b>1999</b> , 557, 791		1
28	Insulator-metal Transition of an Alumina Cement Constituent, C12A7, Realized by Employing a Built-in Nanostructure: Fabrication of Highly Transparent Conductive Thin Films and Their Application to an Electron Injection Electrode in Organic Devices Utilizing the Low Work Function. <i>Hyomen Kagaku</i> , <b>2008</b> , 29, 2-9		1
27			
26	Oxide TFTs <b>2015</b> , 1-28		1
25	Amorphous pnictide semiconductor BaZn <sub>2</sub> As <sub>2</sub> exhibiting high hole mobility. <i>Applied Physics Letters</i> , <b>2016</b> , 109, 242105	3.4	1

24	Electronic and Lattice Thermal Conductivity Switching by 3D $\rightarrow$ 2D Crystal Structure Transition in Nonequilibrium (Pb 1& Sn x )Se. <i>Advanced Electronic Materials</i> ,2200024	6.4	1
23	Degenerated Hole Doping and Ultra-Low Lattice Thermal Conductivity in Polycrystalline SnSe by Nonequilibrium Isovalent Te Substitution.. <i>Advanced Science</i> , <b>2022</b> , e2105958	13.6	1
22	State and Role of Hydrogen in Amorphous Oxide Semiconductors <b>2022</b> , 145-157		1
21	Photo-Induced Insulator-Semiconductor Transition in 12CaO $\cdot$ 7Al <sub>2</sub> O <sub>3</sub> (C12A7). <i>Materials Research Society Symposia Proceedings</i> , <b>2002</b> , 747, 1		0
20	Ion Substitution Effect on Defect Formation in Two-Dimensional Transition Metal Nitride Semiconductors, TiN (= Ca, Sr, and Ba). <i>Inorganic Chemistry</i> , <b>2021</b> , 60, 10227-10234	5.1	0
19	On the Origin of the Negative Thermal Expansion Behavior of YCu. <i>Inorganic Chemistry</i> , <b>2019</b> , 58, 11819-11827	4.1	1
18	Exotic Crystal Structures and Electronic Structures in Novel Structured Inorganic Materials <b>2019</b> , 107-120		
17	Research Progress on Materials for MEMS and Electronics Devices of Electronics Materials Development Group. <i>Materia Japan</i> , <b>2015</b> , 54, 232-235	0.1	
16	Amorphous Oxide Semiconductor Thin Films. <i>Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan</i> , <b>2013</b> , 64, 392-395	0.1	
15	Solid-phase epitaxial growth of (111)-oriented Si film on InGaO <sub>3</sub> (ZnO) <sub>5</sub> buffer layer. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2011</b> , 22, 920-923	2.1	
14	Carrier transport of extended and localized states in InGaO <sub>3</sub> (ZnO) <sub>5</sub> . <i>Materials Research Society Symposia Proceedings</i> , <b>2004</b> , 811, 90		
13	Persistent Electronic Conduction in 12CaO $\cdot$ 7Al <sub>2</sub> O <sub>3</sub> Thin Films Produced by Ar Ion Implantation: Selective Kick-Out Effect Leads to Electride Thin Films. <i>Materials Research Society Symposia Proceedings</i> , <b>2004</b> , 811, 85		
12	Growth and Transport Property of Polycrystalline Silicon Fabricated with Intentional Orientation Control on Glass. <i>Key Engineering Materials</i> , <b>2000</b> , 181-182, 125-128	0.4	
11	Transparent Conductive Oxide for Solar Cells Having Resistance to High Density Hydrogen Plasma and/or High Temperature. <i>Key Engineering Materials</i> , <b>2000</b> , 181-182, 105-108	0.4	
10	Structure Control of Polycrystalline Silicon Films on Glass Substrates and Their Properties. <i>Key Engineering Materials</i> , <b>1999</b> , 169-170, 171-174	0.4	
9	Amorphous Silicon Solar Cell Techniques for High Temperature and/or Reactive Deposition Conditions. <i>Materials Research Society Symposia Proceedings</i> , <b>1999</b> , 557, 767		
8	Study of the Electronic State of Hydrogen by a Combination of the Muon as Pseudo Hydrogen and First-Principles Calculation. <i>Journal of Computer Chemistry Japan</i> , <b>2020</b> , 19, 106-114	0.2	
7	Transparent Conducting Properties in Layered Oxychalcogenides. <i>Ceramic Transactions</i> ,466-473	0.1	

- 6 Photoelectron Spectroscopic Study of Energy Level Alignment at C12A7:e- / Alq3 Interfaces. *Ceramic Transactions*, 79-84 0.1
- 5 Local Structure Properties of Hydrogenated and Nonhydrogenated Amorphous InGaZnO Thin Films Using XAFS and High-Energy XRD. *Journal of Physical Chemistry C*, **2021**, 125, 13619-13628 3.8
- 4 15.1: Invited Paper: Understanding and controlling electronic defects in amorphous oxide semiconductor. *Digest of Technical Papers SID International Symposium*, **2021**, 52, 97-99 0.5
- 3 49.2: Invited Paper: Research and Applications of Amorphous Metal-Oxide Semiconductor Devices - In-Ga-Zn-O and Ga-Sn-O Thin-Film Devices -. *Digest of Technical Papers SID International Symposium*, **2018**, 49, 512-515 0.5
- 2 Defects and Relevant Properties **2022**, 93-103
- 1 Rare Earth and Transition Metal Doped Amorphous Oxide Semiconductor Phosphors for Novel Light-Emitting Diode Displays **2022**, 577-584