

Jin-Hyuk Bae

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

180
papers

1,858
citations

19
h-index

38
g-index

193
ext. papers

2,439
ext. citations

2.8
avg, IF

4.98
L-index

#	Paper	IF	Citations
180	Large-area perovskite solar cells employing spiro-Naph hole transport material. <i>Nature Photonics</i> , 2022 , 16, 119-125	33.9	31
179	Flexible Sol-Gel-Processed YO RRAM Devices Obtained via UV/Ozone-Assisted Photochemical Annealing Process.. <i>Materials</i> , 2022 , 15,	3.5	1
178	Room-Temperature High-Detectivity Flexible Near-Infrared Photodetectors with Chalcogenide Silver Telluride Nanoparticles.. <i>ACS Omega</i> , 2022 , 7, 10262-10267	3.9	0
177	Viable strategy to minimize trap states of patterned oxide thin films for both exceptional electrical performance and uniformity in sol-gel processed transistors. <i>Chemical Engineering Journal</i> , 2022 , 441, 135833	14.7	0
176	Importance of Zinc Oxide Nanoparticle Concentration on the Electrical Properties of Lead Sulfide Quantum Dots-Based Shortwave Infrared Photodetectors. <i>Journal of Sensor Science and Technology</i> , 2022 , 31, 125-130	0.3	0
175	Atomic Structure Evaluation of Solution-Processed a-IZO Films and Electrical Behavior of a-IZO TFTs. <i>Materials</i> , 2022 , 15, 3416	3.5	0
174	Design of Capacitorless DRAM Based on Polycrystalline Silicon Nanotube Structure. <i>IEEE Access</i> , 2021 , 9, 163675-163685	3.5	0
173	Effect of Source/Drain Electric Field on Charge Transport Mechanism in Polymer-Based Thin-Film Transistors. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2021 , 218, 2000753	1.6	1
172	Improving of Sensitivity of PbS Quantum Dot Based SWIR Photodetector Using P3HT. <i>Materials</i> , 2021 , 14,	3.5	1
171	Investigation on the Electrical Stability of 5,11-Bis(triethylsilylethynyl)anthradithiophene Thin-Film Transistors. <i>Journal of Nanoscience and Nanotechnology</i> , 2021 , 21, 1754-1760	1.3	
170	Textile Triboelectric Nanogenerators with Diverse 3D-Spacer Fabrics for Improved Output Voltage. <i>Electronics (Switzerland)</i> , 2021 , 10, 937	2.6	4
169	Importance of Architectural Asymmetry for Improved Triboelectric Nanogenerators with 3D Spacer Fabrics. <i>Macromolecular Research</i> , 2021 , 29, 443-447	1.9	3
168	Numerical Design of Carrier Transporting Layer in Top-Gate InGaZnO Thin-Film Transistors for Controlling Potential Energy. <i>Journal of Nanoscience and Nanotechnology</i> , 2021 , 21, 3847-3852	1.3	0
167	Electrical Instability of Single-Walled Carbon Nanotube Network Thin-Film Transistors. <i>Journal of Nanoscience and Nanotechnology</i> , 2021 , 21, 3938-3942	1.3	
166	Improved Negative Bias Stress Stability of Sol-Gel-Processed Li-Doped SnO ₂ Thin-Film Transistors. <i>Electronics (Switzerland)</i> , 2021 , 10, 1629	2.6	1
165	Polycrystalline-Silicon-MOSFET-Based Capacitorless DRAM With Grain Boundaries and Its Performances. <i>IEEE Access</i> , 2021 , 1-1	3.5	1
164	Influence of Active Channel Layer Thickness on SnO ₂ Thin-Film Transistor Performance. <i>Electronics (Switzerland)</i> , 2021 , 10, 200	2.6	3

163	Printing of Polymer Dielectric via Optimal Blade Coating for Large-scale Low-Leakage Capacitors. <i>Journal of Sensor Science and Technology</i> , 2021 , 30, 51-55	0.3	0
162	Design of a Capacitorless Dynamic Random Access Memory Based on Ultra-Thin Polycrystalline Silicon Junctionless Field-Effect Transistor with Dual-Gate. <i>Journal of Nanoscience and Nanotechnology</i> , 2021 , 21, 4223-4229	1.3	0
161	The Effect of Grain Boundary on Electrical Characteristics in the Source and Drain Regions of Polycrystalline Silicon Based in One Transistor Dynamic Random Access Memory. <i>Journal of Nanoscience and Nanotechnology</i> , 2021 , 21, 4258-4267	1.3	
160	Design and Analysis of DC/DC Boost Converter Using Vertical GaN Power Device. <i>Journal of Nanoscience and Nanotechnology</i> , 2021 , 21, 4320-4324	1.3	
159	Design of a Capacitorless Dynamic Random Access Memory Based on Junctionless Dual-Gate Field-Effect Transistor with a Silicon-Germanium/Silicon Nanotube. <i>Journal of Nanoscience and Nanotechnology</i> , 2021 , 21, 4235-4242	1.3	0
158	Influence of thickness of poly(3-hexylthiophene-2,5-diyl) hole transport layer on electrical characteristics of lead sulfide quantum dot-based shortwave infrared photodiodes. <i>Journal of the Korean Physical Society</i> , 2021 , 79, 512-520	0.6	1
157	Extremely bias stress stable enhancement mode sol-gel-processed SnO ₂ thin-film transistors with Y ₂ O ₃ passivation layers. <i>Applied Surface Science</i> , 2021 , 559, 149971	6.7	7
156	Carbon Nano Tube-Polymer Hybrid Nanocomposite Electrodes for Porous Polydimethylsiloxane Sponge-Based Flexible Triboelectric Nanogenerators. <i>Journal of Nanoscience and Nanotechnology</i> , 2021 , 21, 4680-4684	1.3	
155	Molecular subtractive surface-energy engineering of crosslinked Poly(4-vinylphenol) insulators for a solution-processed organic thin-film transistor. <i>Organic Electronics</i> , 2021 , 99, 106345	3.5	1
154	Fluoropolymer-based organic memristor with multifunctionality for flexible neural network system. <i>Npj Flexible Electronics</i> , 2021 , 5,	10.7	6
153	Numerical Study of Sub-Gap Density of States Dependent Electrical Characteristics in Amorphous In-Ga-Zn-O Thin-Film Transistors. <i>Electronics (Switzerland)</i> , 2020 , 9, 1652	2.6	4
152	Effect of High-Speed Blade Coating on Electrical Characteristics in Polymer Based Transistors. <i>Journal of Nanoscience and Nanotechnology</i> , 2020 , 20, 5486-5490	1.3	2
151	Effect of Mg Doping on the Electrical Performance of a Sol-Gel-Processed SnO ₂ Thin-Film Transistor. <i>Electronics (Switzerland)</i> , 2020 , 9, 523	2.6	9
150	Multi-level resistive write-once-read-many memory device based on CdSe/ZnS quantum dots and ZnO nanoparticles. <i>Thin Solid Films</i> , 2020 , 709, 138120	2.2	3
149	Organic Thin Film Transistors Fabricated by a Solution Process Using Direct Patterned Single-Layer Graphene Electrodes. <i>Journal of Nanoscience and Nanotechnology</i> , 2020 , 20, 6435-6440	1.3	0
148	Organic tandem solar cells under indoor light illumination. <i>Progress in Photovoltaics: Research and Applications</i> , 2020 , 28, 946-955	6.8	11
147	Fabrication of AlGa _N /Ga _N MISHEMT with dual-metal gate electrode and its performances. <i>Applied Physics A: Materials Science and Processing</i> , 2020 , 126, 1	2.6	6
146	Enhancement Mode Flexible SnO ₂ Thin Film Transistors Via a UV/Ozone-Assisted Sol-Gel Approach. <i>IEEE Access</i> , 2020 , 8, 123013-123018	3.5	5

145	Recessed-Gate GaN Metal-Insulator-Semiconductor High-Electron-Mobility Transistor Using a Dual Gate-Insulator Employing TiO ₂ /SiN. <i>Journal of Nanoscience and Nanotechnology</i> , 2020 , 20, 4678-4683	1.3	1
144	Analysis of Logic Inverter Based on Polycrystalline Silicon with Single Grain Boundary. <i>Journal of Nanoscience and Nanotechnology</i> , 2020 , 20, 6616-6621	1.3	
143	Sol-Gel Processed Yttrium-Doped SnO ₂ Thin Film Transistors. <i>Electronics (Switzerland)</i> , 2020 , 9, 254	2.6	12
142	Highly conductive and thermally stable nanoparticle-conjugated polymer compounds through environmentally friendly in situ synthesis. <i>Progress in Organic Coatings</i> , 2020 , 142, 105606	4.8	5
141	Compact vari-focal augmented reality display based on ultrathin, polarization-insensitive, and adaptive liquid crystal lens. <i>Optics and Lasers in Engineering</i> , 2020 , 128, 106006	4.6	14
140	Numerical Analysis on Effective Mass and Traps Density Dependence of Electrical Characteristics of a-IGZO Thin-Film Transistors. <i>Electronics (Switzerland)</i> , 2020 , 9, 119	2.6	7
139	High performance of solution-processed SnO ₂ thin-film transistors by promotion of photo-exposure time-dependent carrier transport during the pre-annealing stage. <i>Semiconductor Science and Technology</i> , 2020 , 35, 065019	1.8	2
138	Application of Genetic Algorithm for More Efficient Multi-Layer Thickness Optimization in Solar Cells. <i>Energies</i> , 2020 , 13, 1726	3.1	5
137	Analysis of CMOS Logic Inverter Based on Gate-All-Around Field-Effect Transistors with the Strained-Silicon Layer for Improving the Switching Performances. <i>Journal of Nanoscience and Nanotechnology</i> , 2020 , 20, 6632-6637	1.3	
136	Design and Analysis of Metal-Oxide-Semiconductor Field-Effect Transistor-Based Capacitorless One-Transistor Embedded Dynamic Random-Access Memory with Double-Polysilicon Layer Using Grain Boundary for Hole Storage. <i>Journal of Nanoscience and Nanotechnology</i> , 2020 , 20, 6596-6602	1.3	
135	Theoretical Analysis of Prospects of Organic Photovoltaics as a Multi-Functional Solar Cell and Laser Power Converter for Wireless Power Transfer. <i>Journal of Nanoscience and Nanotechnology</i> , 2020 , 20, 4878-4883	1.3	
134	Improved negative bias stability of sol-gel processed Ti-doped SnO ₂ thin-film transistors. <i>Semiconductor Science and Technology</i> , 2020 , 35, 115023	1.8	5
133	Versatile use of ZnO interlayer in hybrid solar cells for self-powered near infra-red photo-detecting application. <i>Journal of Alloys and Compounds</i> , 2020 , 813, 152202	5.7	13
132	Contact line curvature-induced molecular misorientation of a surface energy patterned organic semiconductor in meniscus-guided coating. <i>Applied Surface Science</i> , 2020 , 504, 144362	6.7	7
131	Polycrystalline silicon metal-oxide-semiconductor field-effect transistor-based stacked multi-layer one-transistor dynamic random-access memory with double-gate structure for the embedded systems. <i>Japanese Journal of Applied Physics</i> , 2020 , 59, SGGB01	1.4	3
130	Control of silver nanowire-elastomer nanocomposite networks through elaborate direct printing for ultrathin and stretchable strain sensors. <i>Composites Science and Technology</i> , 2020 , 200, 108471	8.6	5
129	Improved Output Voltage of a Nanogenerator with 3D Fabric. <i>Journal of Nanoscience and Nanotechnology</i> , 2020 , 20, 4666-4670	1.3	2
128	Simulation of capacitorless dynamic random access memory based on junctionless FinFETs using grain boundary of polycrystalline silicon. <i>Applied Physics A: Materials Science and Processing</i> , 2020 , 126, 1	2.6	2

127	Expeditious and eco-friendly solution-free self-patterning of sol-gel oxide semiconductor thin films. <i>Materials and Design</i> , 2020 , 194, 108949	8.1	1
126	Structural modification of poly(4-vinylphenol) insulators in pentacene transistors by using dimethyl ketone. <i>Molecular Crystals and Liquid Crystals</i> , 2020 , 704, 145-152	0.5	1
125	Effect of trap-assisted tunneling on off-current property of a-InGaZnO thin-film transistors. <i>Molecular Crystals and Liquid Crystals</i> , 2020 , 705, 1-6	0.5	
124	Stable perovskite solar cells with efficiency exceeding 24.8% and 0.3-V voltage loss. <i>Science</i> , 2020 , 369, 1615-1620	33.3	629
123	Enhanced output voltage of nano energy harvester with diverse textiles. <i>Molecular Crystals and Liquid Crystals</i> , 2019 , 687, 113-117	0.5	3
122	Comparative Study of Triboelectric Nanogenerators with Differently Woven Cotton Textiles for Wearable Electronics. <i>Polymers</i> , 2019 , 11,	4.5	10
121	Ultra-thick semi-crystalline photoactive donor polymer for efficient indoor organic photovoltaics. <i>Nano Energy</i> , 2019 , 58, 466-475	17.1	59
120	The Crucial Role of Quaternary Mixtures of Active Layer in Organic Indoor Solar Cells. <i>Energies</i> , 2019 , 12, 1838	3.1	10
119	Dimethyl Ketone Treatment of Cross-linked Poly(4-vinylphenol) Insulators for Pentacene Thin-film Transistors. <i>Journal of the Korean Physical Society</i> , 2019 , 74, 280-285	0.6	2
118	Characterization of a Ferroelectric-Gated Graphene Memory Device Fabricated on a Flexible Substrate by Transfer Process. <i>Journal of Nanoscience and Nanotechnology</i> , 2019 , 19, 4803-4806	1.3	1
117	Pyridine-based additive optimized P3HT:PC61BM nanomorphology for improved performance and stability in polymer solar cells. <i>Applied Surface Science</i> , 2019 , 484, 825-834	6.7	14
116	Al atomistic surface modulation on colloidal gradient quantum dots for high-brightness and stable light-emitting devices. <i>Scientific Reports</i> , 2019 , 9, 6357	4.9	4
115	Densification Control as a Method of Improving the Ambient Stability of Sol-Gel-Processed SnO ₂ Thin-Film Transistors. <i>IEEE Electron Device Letters</i> , 2019 , 40, 905-908	4.4	10
114	Stable hybrid organic/inorganic multiple-read quantum-dot memory device based on a PVK/QDs solution. <i>Applied Surface Science</i> , 2019 , 481, 25-32	6.7	3
113	Synthesis and Charge Transport of Polymer Nanocomposite of Polyaniline: Polystyrene Sulfonate. <i>Journal of Nanoscience and Nanotechnology</i> , 2019 , 19, 4638-4642	1.3	4
112	Improved ferroelectric properties of P(VDF-TrFE) and P(VDF-HFP) blends for organic memory FETs. <i>Molecular Crystals and Liquid Crystals</i> , 2019 , 679, 48-57	0.5	2
111	Effects of thermal annealing conditions on the electrical characteristics of TES-ADT thin-film transistors. <i>Molecular Crystals and Liquid Crystals</i> , 2019 , 679, 58-64	0.5	
110	High-Detectivity Flexible Near-Infrared Photodetector Based on Chalcogenide Ag ₂ Se Nanoparticles. <i>Advanced Optical Materials</i> , 2019 , 7, 1900812	8.1	19

109	Optimization of Cd ²⁺ partial electrolyte treatment on the absorber layer for high-efficiency Cu ₂ ZnSnSe ₄ solar cells. <i>Journal of Industrial and Engineering Chemistry</i> , 2019 , 80, 122-129	6.3	1
108	Importance of Blade-Coating Temperature for Diketopyrrolopyrrole-based Thin-Film Transistors. <i>Crystals</i> , 2019 , 9, 346	2.3	4
107	Brightness-enhanced, highly stable quantum dot light-emitting devices using butylated hydroxytoluene. <i>Organic Electronics</i> , 2019 , 74, 166-171	3.5	3
106	Uncooled Short-Wave Infrared Sensor Based on PbS Quantum Dots Using ZnO NPs. <i>Nanomaterials</i> , 2019 , 9,	5.4	10
105	Solvent-Dependent Electrical Characteristics and Mechanical Stability of Flexible Organic Ferroelectric Field-Effect Transistors. <i>Micromachines</i> , 2019 , 10,	3.3	2
104	Effect of PVP-Capped ZnO Nanoparticles with Enhanced Charge Transport on the Performance of P3HT/PCBM Polymer Solar Cells. <i>Polymers</i> , 2019 , 11,	4.5	11
103	Effect of Annealing Ambient on SnO ₂ Thin Film Transistors Fabricated via An Ethanol-based Sol-gel Route. <i>Electronics (Switzerland)</i> , 2019 , 8, 955	2.6	9
102	Hysteresis Reduction for Organic Thin Film Transistors with Multiple Stacked Functional Zirconia Polymeric Films. <i>Crystals</i> , 2019 , 9, 634	2.3	4
101	Design and Optimization of Germanium-Based Gate-Metal-Core Vertical Nanowire Tunnel FET. <i>Micromachines</i> , 2019 , 10,	3.3	5
100	Effect of UV and Water on Electrical Properties at Pre- and Post-Annealing Processes in Solution-Processed InGaZnO Transistors. <i>Journal of Nanoscience and Nanotechnology</i> , 2019 , 19, 2240-2246	1.3	1
99	Quaternary indoor organic photovoltaic device demonstrating panchromatic absorption and power conversion efficiency of 10%. <i>Dyes and Pigments</i> , 2019 , 163, 48-54	4.6	25
98	Electrical Stability of Solution-Processed Indium Oxide Thin-Film Transistors. <i>Journal of Nanoscience and Nanotechnology</i> , 2019 , 19, 2371-2374	1.3	1
97	Reduction of hysteresis in solution-processed InGaZnO thin-film transistors through uni-directional pre-annealing. <i>Journal of the Korean Physical Society</i> , 2018 , 72, 270-275	0.6	1
96	Operational stability of solution-processed indium-oxide thin-film transistors: Environmental condition and electrical stress. <i>Journal of the Korean Physical Society</i> , 2018 , 72, 151-158	0.6	1
95	Surface Modification of Solution-Processed ZrO ₂ Films through Double Coating for Pentacene Thin-Film Transistors. <i>Journal of the Korean Physical Society</i> , 2018 , 72, 570-576	0.6	1
94	Sol-Gel Processed p-Type CuO Phototransistor for a Near-Infrared Sensor. <i>IEEE Electron Device Letters</i> , 2018 , 39, 47-50	4.4	31
93	Towards maximizing the haze effect of electrodes for high efficiency hybrid tandem solar cell. <i>Applied Surface Science</i> , 2018 , 432, 262-265	6.7	10
92	Importance of active layer positioning on gate electrode in organic thin-film transistors. <i>Molecular Crystals and Liquid Crystals</i> , 2018 , 660, 72-78	0.5	1

91	Optimizing the efficiency of organic solar cell under indoor light via controlling optical absorption. <i>Molecular Crystals and Liquid Crystals</i> , 2018 , 660, 85-89	0.5	8
90	Correlating the nanoparticle size dependent refractive index of ZnO optical spacer layer and the efficiency of hybrid solar cell through optical modelling. <i>Thin Solid Films</i> , 2018 , 660, 558-563	2.2	5
89	Electrical stability of solution-processed indium oxide thin-film transistors under illumination stress. <i>Molecular Crystals and Liquid Crystals</i> , 2018 , 662, 46-52	0.5	1
88	Indoor-type photovoltaics with organic solar cells through optimal design. <i>Dyes and Pigments</i> , 2018 , 159, 306-313	4.6	54
87	Structural Modification of Organic Thin-Film Transistors for Photosensor Application. <i>Journal of the Korean Physical Society</i> , 2018 , 72, 1254-1263	0.6	0
86	Bias stress effects in pentacene thin-film transistors with poly(methyl methacrylate) gate insulator. <i>Molecular Crystals and Liquid Crystals</i> , 2017 , 645, 36-42	0.5	
85	Self-alignment of 6,13-bis(triisopropylsilylethynyl)pentacene molecules through magnetic flux-affected nanoparticle motion in solution-processed transistors. <i>Organic Electronics</i> , 2017 , 47, 44-50	3.5	4
84	Improvement in the Performance of Solution Processed In ₂ O ₃ Thin-Film Transistor Depending on Sb Dopant Concentration. <i>IEEE Electron Device Letters</i> , 2017 , 38, 1027-1030	4.4	12
83	Functional solid additive modified PEDOT:PSS as an anode buffer layer for enhanced photovoltaic performance and stability in polymer solar cells. <i>Scientific Reports</i> , 2017 , 7, 45079	4.9	75
82	All-solution-processed high-brightness hybrid white quantum-dot light-emitting devices utilizing polymer modified quantum dots. <i>Organic Electronics</i> , 2017 , 42, 393-398	3.5	19
81	Enhancing the Photovoltaic Performance of Polymer Solar Cells by Manipulating Photoactive/Metal Interface. <i>Journal of Nanoscience and Nanotechnology</i> , 2017 , 17, 8024-8030	1.3	9
80	Importance of angular mismatch on anisotropic field-effect mobility in solution-processed organic thin-film transistors. <i>AIP Advances</i> , 2017 , 7, 035319	1.5	2
79	Dependence of the hybrid solar cell efficiency on the thickness of ZnO nanoparticle optical spacer interlayer. <i>Molecular Crystals and Liquid Crystals</i> , 2017 , 653, 254-259	0.5	5
78	Hole Injection in N-Type Organic Semiconductors by Tuning Metal Work Function with Functional Self-Assembled Monolayers. <i>Journal of Nanoscience and Nanotechnology</i> , 2017 , 17, 3378-3381	1.3	2
77	Simultaneous improvement of on- and off-current features in organic transistors via dual-targeted hydrophobic adhesion. <i>Organic Electronics</i> , 2017 , 49, 94-99	3.5	
76	Relationship between initial and time-dependent cracks in charge transport of solution-processed organic thin-film transistor. <i>Molecular Crystals and Liquid Crystals</i> , 2017 , 653, 238-242	0.5	
75	Optically Proved Molecular Alignment Behavior of Organic Semiconductor and Its Application for Organic Transistor with Enhanced Electrical Characteristics. <i>Journal of Nanoscience and Nanotechnology</i> , 2017 , 17, 4239-4242	1.3	2
74	Roughness Reduction of PVDF-TrFE Insulator by Reverse Transfer Printing for Enhanced Performance of Ferroelectric Organic Memory Transistors. <i>Journal of Nanoscience and Nanotechnology</i> , 2017 , 17, 4149-4152	1.3	3

73	Triangular Geometry Assisted Spontaneous Molecular Alignment on Patterned Layer in Solution-Processed Transistors. <i>Journal of Nanoscience and Nanotechnology</i> , 2017 , 17, 7609-7613	1.3	
72	Electron Clouding Effect for Improvement of Electron Injection in a Solution-Processed Organic Diode with Dipolar Self-Assembled Monolayers. <i>Journal of Nanoscience and Nanotechnology</i> , 2017 , 17, 7275-7279	1.3	
71	Efficient exciton generation in atomic passivated CdSe/ZnS quantum dots light-emitting devices. <i>Scientific Reports</i> , 2016 , 6, 34659	4.9	45
70	Importance of the inherent and the relative surface energies in generating patterned layer in a solution process. <i>Journal of the Korean Physical Society</i> , 2016 , 68, 786-791	0.6	2
69	Understanding of air influenced poly (3-hexylthiophene) film characteristics in a transistor structure. <i>Molecular Crystals and Liquid Crystals</i> , 2016 , 635, 74-79	0.5	
68	Stability Study of Flexible 6,13-Bis(triisopropylsilylethynyl)pentacene Thin-Film Transistors with a Cross-Linked Poly(4-vinylphenol)/Yttrium Oxide Nanocomposite Gate Insulator. <i>Polymers</i> , 2016 , 8,	4.5	12
67	Influence of structural defects in solution-processed InZnO semiconductors on the electrical stability of thin-film transistors. <i>Journal of the Korean Physical Society</i> , 2016 , 69, 1688-1693	0.6	2
66	Solvent-assisted reduction in the lateral leakage current in solution-processed organic transistors. <i>Journal of the Korean Physical Society</i> , 2016 , 69, 226-230	0.6	1
65	Promising Rise of Optimum Efficiency in Double Junction Organic Tandem Solar Cells. <i>Journal of Nanoscience and Nanotechnology</i> , 2016 , 16, 12827-12830	1.3	
64	Numerical study on off-current features in an organic transistor by controlling electrode-overlap area. <i>Molecular Crystals and Liquid Crystals</i> , 2016 , 635, 67-73	0.5	1
63	Efficiently-designed hybrid tandem photovoltaic with organic and inorganic single cells. <i>Journal of the Korean Physical Society</i> , 2016 , 68, 1094-1098	0.6	2
62	Low dark current and improved detectivity of hybrid ultraviolet photodetector based on carbon-quantum-dots/zinc-oxide-nanorod composites. <i>Organic Electronics</i> , 2016 , 39, 250-257	3.5	37
61	Leakage current behavior in MIM capacitors and MISM organic capacitors with a thin AlO _x insulator. <i>Electronic Materials Letters</i> , 2015 , 11, 241-245	2.9	2
60	Observation of irreversible current path in polymer dielectric using conductive atomic force microscope. <i>Electronic Materials Letters</i> , 2015 , 11, 246-251	2.9	4
59	Transfer printing of poly(vinylidene fluoride-trifluoroethylene) films for low-voltage ferroelectric field-effect transistors. <i>Journal of the Korean Physical Society</i> , 2015 , 66, 1013-1019	0.6	1
58	Characterisation of ferroelectric poly(vinylidene fluoride-trifluoroethylene) film prepared by Langmuir-Blodgett deposition. <i>Micro and Nano Letters</i> , 2015 , 10, 384-388	0.9	3
57	Effects of Au source/drain thickness on electrical characteristics of pentacene thin-film transistors. <i>Journal of the Korean Physical Society</i> , 2015 , 67, 1609-1614	0.6	1
56	Influence of Pentacene Film Thickness on Environmental Stability of Pentacene Thin-Film Transistors. <i>Molecular Crystals and Liquid Crystals</i> , 2015 , 620, 10-20	0.5	

55	Charge Injection-Assisted Current Efficiency Improvement in Roll-Off Characteristic of OLEDs by Device Modeling. <i>Journal of Nanoelectronics and Optoelectronics</i> , 2015 , 10, 578-581	1.3	2
54	Low-voltage Organic Thin-film Transistors with Polymeric High-k Gate Insulator on a Flexible Substrates. <i>Journal of Sensor Science and Technology</i> , 2015 , 24, 165-168	0.3	
53	Formation of solution-processed multistacked ferroelectric layers for performance improvement of ferroelectric-gated pentacene field-effect transistors. <i>Electronic Materials Letters</i> , 2014 , 10, 763-766	2.9	2
52	Effects of negative gate-bias stress on the performance of solution-processed zinc-oxide transistors. <i>Journal of the Korean Physical Society</i> , 2014 , 65, 330-335	0.6	
51	Highly enhanced charge injection and bulk transport in organic gap-type diodes via one-pot treatment process: experiment and simulation. <i>Micro and Nano Letters</i> , 2014 , 9, 887-890	0.9	
50	Heteromaterial gate tunneling field-effect transistor for high-speed and radio-frequency applications. <i>Journal of Nanoscience and Nanotechnology</i> , 2014 , 14, 8136-40	1.3	3
49	Design of a recessed-gate GaN-based MOSFET using a dual gate dielectric for high-power applications. <i>Journal of the Korean Physical Society</i> , 2014 , 65, 1579-1584	0.6	2
48	Influence of the active layer pattern on the electrical characteristics of organic inverters. <i>Journal of the Korean Physical Society</i> , 2014 , 65, 1965-1968	0.6	1
47	Evaluation of the density of the charge trapped in organic ferroelectric capacitors based on the Mott-Schottky model. <i>Journal of the Korean Physical Society</i> , 2014 , 65, 745-750	0.6	2
46	Solvent-Tolerant Patterning of Poly(3-hexylthiophene) Film by Subtractive Photolithography. <i>Molecular Crystals and Liquid Crystals</i> , 2014 , 599, 36-42	0.5	
45	Effects of Polystyrene Gate Dielectrics with Various Molecular Weights on Electrical Characteristics of Pentacene Thin-Film Transistors. <i>Molecular Crystals and Liquid Crystals</i> , 2014 , 598, 129-134	0.5	1
44	Improvement of Current Efficiency at High Field Regime Via Description of Roll-off Characteristic in Model Device of OLEDs. <i>Molecular Crystals and Liquid Crystals</i> , 2014 , 599, 79-85	0.5	2
43	Analysis of Structural and Electrical Properties of Solution-Processed Zinc Oxide Films for Thin-Film Transistor Application. <i>Molecular Crystals and Liquid Crystals</i> , 2014 , 600, 28-34	0.5	1
42	Optimal design of organic/organic hybrid tandem solar cell based on a-Si:H and organic photovoltaics for high efficiency. <i>Micro and Nano Letters</i> , 2014 , 9, 881-883	0.9	4
41	Fabrication and Characterization of GaN-based Light-emitting Diode (LED) with Triangle-type Structure. <i>Molecular Crystals and Liquid Crystals</i> , 2014 , 599, 163-169	0.5	1
40	Changes in the cutting efficiency of different types of dental diamond rotary instrument with repeated cuts and disinfection. <i>Journal of Prosthetic Dentistry</i> , 2014 , 111, 64-70	4	7
39	Evaluation of Radio-Frequency Performance of Gate-All-Around Ge/GaAs Heterojunction Tunneling Field-Effect Transistor with Hetero-Gate-Dielectric by Mixed-Mode Simulation. <i>Journal of Electrical Engineering and Technology</i> , 2014 , 9, 2070-2078	1.4	1
38	Effects of the solvent polarity of a polymeric insulator on field-effect mobility in an organic thin-film transistor. <i>Solid-State Electronics</i> , 2013 , 81, 140-143	1.7	7

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30	Fringe Field Effect on Electrical Characteristics of Pentacene Thin-Film Transistors. <i>Japanese Journal of Applied Physics</i> , 2013 , 52, 111602	1.4	7
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11	The surface energy-dictated initial growth of a pentacene film on a polymeric adhesion layer for field-effect transistors. <i>Solid-State Electronics</i> , 2010 , 54, 1650-1656	1.7	20
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