

Jin-Hyuk Bae

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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	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
179	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
178	Ultra-thick semi-crystalline photoactive donor polymer for efficient indoor organic photovoltaics. <i>Nano Energy</i> , 2019 , 58, 466-475	17.1	59
177	Thermal annealing effect on the crack development and the stability of 6,13-bis(triisopropylsilylethynyl)-pentacene field-effect transistors with a solution-processed polymer insulator. <i>Organic Electronics</i> , 2010 , 11, 784-788	3.5	58
176	Indoor-type photovoltaics with organic solar cells through optimal design. <i>Dyes and Pigments</i> , 2018 , 159, 306-313	4.6	54
175	Efficient exciton generation in atomic passivated CdSe/ZnS quantum dots light-emitting devices. <i>Scientific Reports</i> , 2016 , 6, 34659	4.9	45
174	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
173	Simulation study on effect of drain underlap in gate-all-around tunneling field-effect transistors. <i>Current Applied Physics</i> , 2013 , 13, 1143-1149	2.6	32
172	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
171	Surface modification of a ferroelectric polymer insulator for low-voltage readable nonvolatile memory in an organic field-effect transistor. <i>Journal of Applied Physics</i> , 2011 , 109, 024508	2.5	31
170	Large-area perovskite solar cells employing spiro-Naph hole transport material. <i>Nature Photonics</i> , 2022 , 16, 119-125	33.9	31
169	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
168	Solution-processed low leakage organic field-effect transistors with self-pattern registration based on patterned dielectric barrier. <i>Organic Electronics</i> , 2012 , 13, 778-783	3.5	24
167	Charge carrier injection and transport associated with thermally generated cracks in a 6,13-bis(triisopropylsilylethynyl) pentacene thin-film transistor. <i>Solid-State Electronics</i> , 2011 , 63, 163-166 ^{1.7}	1.7	24
166	Structural origin of the mobility enhancement in a pentacene thin-film transistor with a photocrosslinking insulator. <i>Journal of Applied Physics</i> , 2007 , 102, 063508	2.5	21
165	Environmental effects on the electrical behavior of pentacene thin-film transistors with a poly(methyl methacrylate) gate insulator. <i>Organic Electronics</i> , 2013 , 14, 2101-2107	3.5	20
164	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

163	Importance of the Functional Group Density of a Polymeric Gate Insulator for Organic Thin-Film-Transistors. <i>Japanese Journal of Applied Physics</i> , 2007 , 46, 385-389	1.4	20
162	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
161	High-Detectivity Flexible Near-Infrared Photodetector Based on Chalcogenide Ag ₂ Se Nanoparticles. <i>Advanced Optical Materials</i> , 2019 , 7, 1900812	8.1	19
160	Effects of Interfacial Charge Depletion in Organic Thin-Film Transistors with Polymeric Dielectrics on Electrical Stability. <i>Materials</i> , 2010 , 3, 3614-3624	3.5	18
159	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
158	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
157	Fabrication of Organic Thin-Film Transistors Based on High Dielectric Nanocomposite Insulators. <i>Molecular Crystals and Liquid Crystals</i> , 2007 , 471, 147-154	0.5	14
156	An effective method to minimize the leakage current in organic thin-film transistors by using blends of various molecular weights. <i>Organic Electronics</i> , 2012 , 13, 1255-1260	3.5	13
155	Optical anisotropy of aligned pentacene molecules on a rubbed polymer corresponding to the electrical anisotropy. <i>Current Applied Physics</i> , 2010 , 10, 64-67	2.6	13
154	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
153	Improvement in the Performance of Sol-Gel 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
152	Sol-Gel Processed Yttrium-Doped SnO ₂ Thin Film Transistors. <i>Electronics (Switzerland)</i> , 2020 , 9, 254	2.6	12
151	Control of the molecular order and cracks of the 6,13-bis(triisopropylsilylethynyl)-pentacene on a polymeric insulator by anisotropic solvent drying. <i>Solid-State Electronics</i> , 2013 , 89, 189-193	1.7	12
150	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
149	Organic tandem solar cells under indoor light illumination. <i>Progress in Photovoltaics: Research and Applications</i> , 2020 , 28, 946-955	6.8	11
148	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
147	Comparative Study of Triboelectric Nanogenerators with Differently Woven Cotton Textiles for Wearable Electronics. <i>Polymers</i> , 2019 , 11,	4.5	10
146	The Crucial Role of Quaternary Mixtures of Active Layer in Organic Indoor Solar Cells. <i>Energies</i> , 2019 , 12, 1838	3.1	10

145	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
144	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
143	Uncooled Short-Wave Infrared Sensor Based on PbS Quantum Dots Using ZnO NPs. <i>Nanomaterials</i> , 2019 , 9,	5.4	10
142	Deposition rate dependent mobility of an organic transistor with an anisotropic polymeric insulator. <i>Solid-State Electronics</i> , 2013 , 79, 98-103	1.7	10
141	Photo-assisted molecular engineering in solution-processed organic thin-film transistors with a blended semiconductor for high mobility anisotropy. <i>Applied Physics Letters</i> , 2013 , 102, 013306	3.4	10
140	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
139	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
138	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
137	Subthreshold characteristics of pentacene field-effect transistors influenced by grain boundaries. <i>Journal of Applied Physics</i> , 2012 , 111, 104512	2.5	9
136	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
135	Reduction of the trap density at the organic-organic interface and resultant gate-bias dependency of the mobility in an organic thin-film transistor. <i>Solid-State Electronics</i> , 2012 , 72, 44-47	1.7	8
134	Topography-guided spreading and drying of 6,13-bis(triisopropylsilylethynyl)-pentacene solution on a polymer insulator for the field-effect mobility enhancement. <i>Applied Physics Letters</i> , 2013 , 102, 193307	3.07	8
133	InGaAs/InP heterojunction-channel tunneling field-effect transistor for ultra-low operating and standby power application below supply voltage of 0.5V. <i>Current Applied Physics</i> , 2013 , 13, 2051-2054	2.6	8
132	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
131	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
130	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
129	Engineered interface using a hydroxyl group-free polymeric buffer layer onto a TiO ₂ nanocomposite film for improving the electrical properties in a low-voltage operated organic transistor. <i>Surface and Interface Analysis</i> , 2012 , 44, 445-449	1.5	7
128	Fringe Field Effect on Electrical Characteristics of Pentacene Thin-Film Transistors. <i>Japanese Journal of Applied Physics</i> , 2013 , 52, 111602	1.4	7

127	Solvent effect of the fibrillar morphology on the power conversion efficiency of a polymer photovoltaic cell in a diffusive heterojunction. <i>Semiconductor Science and Technology</i> , 2012 , 27, 125018	1.8	7
126	Effect of Thermo-gradient-assisted Solvent Evaporation on the Enhancement of the Electrical Properties of 6,13-Bis(triisopropylsilylethynyl)-Pentacene Thin-film Transistors. <i>Journal of the Korean Physical Society</i> , 2011 , 58, 1479-1482	0.6	7
125	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
124	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
123	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
122	Fluoropolymer-based organic memristor with multifunctionality for flexible neural network system. <i>Npj Flexible Electronics</i> , 2021 , 5,	10.7	6
121	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
120	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
119	Application of Genetic Algorithm for More Efficient Multi-Layer Thickness Optimization in Solar Cells. <i>Energies</i> , 2020 , 13, 1726	3.1	5
118	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
117	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
116	Control of interfacial charges of organic semiconductor by a surface polarized layer for high noise-margin inverters with full-swing capability. <i>Organic Electronics</i> , 2012 , 13, 2365-2371	3.5	5
115	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
114	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
113	Design and Optimization of Germanium-Based Gate-Metal-Core Vertical Nanowire Tunnel FET. <i>Micromachines</i> , 2019 , 10,	3.3	5
112	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
111	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
110	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

109	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
108	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
107	Importance of Blade-Coating Temperature for Diketopyrrolopyrrole-based Thin-Film Transistors. <i>Crystals</i> , 2019 , 9, 346	2.3	4
106	Photo-controlled molecular growth and electrical performances of a pentacene-based organic transistor with a photo-reactive insulator. <i>Solid-State Electronics</i> , 2012 , 68, 108-112	1.7	4
105	Optimal design of organic/inorganic 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
104	Textile Triboelectric Nanogenerators with Diverse 3D-Spacer Fabrics for Improved Output Voltage. <i>Electronics (Switzerland)</i> , 2021 , 10, 937	2.6	4
103	Hysteresis Reduction for Organic Thin Film Transistors with Multiple Stacked Functional Zirconia Polymeric Films. <i>Crystals</i> , 2019 , 9, 634	2.3	4
102	Enhanced output voltage of nano energy harvester with diverse textiles. <i>Molecular Crystals and Liquid Crystals</i> , 2019 , 687, 113-117	0.5	3
101	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
100	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
99	Brightness-enhanced, highly stable quantum dot light-emitting devices using butylated hydroxytoluene. <i>Organic Electronics</i> , 2019 , 74, 166-171	3.5	3
98	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
97	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
96	Chevron-type gate configuration of short channel top-contact organic thin-film transistors for large saturated drain current. <i>Journal Physics D: Applied Physics</i> , 2011 , 44, 145106	3	3
95	Preparation of poly(4-vinylphenol)/titanium dioxide composite and its application as a gate dielectric for organic thin-film transistors. <i>Journal of Nanoscience and Nanotechnology</i> , 2011 , 11, 4466-70	1.3	3
94	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
93	Fabrication and Characterization of a GaN Light-emitting Diode (LED) with a Centered Island Cathode. <i>Journal of the Optical Society of Korea</i> , 2012 , 16, 349-353		3
92	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, SGG01	1.4	3

91	Importance of Architectural Asymmetry for Improved Triboelectric Nanogenerators with 3D Spacer Fabrics. <i>Macromolecular Research</i> , 2021 , 29, 443-447	1.9	3
90	Influence of Active Channel Layer Thickness on SnO ₂ Thin-Film Transistor Performance. <i>Electronics (Switzerland)</i> , 2021 , 10, 200	2.6	3
89	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
88	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
87	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
86	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
85	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
84	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
83	Solvent-Dependent Electrical Characteristics and Mechanical Stability of Flexible Organic Ferroelectric Field-Effect Transistors. <i>Micromachines</i> , 2019 , 10,	3.3	2
82	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
81	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
80	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
79	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
78	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
77	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
76	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
75	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
74	Enhanced switching ratio of solution-processed Y ₂ O ₃ RRAM device by suppressing oxygen-vacancy formation at high annealing temperature. <i>Semiconductor Science and Technology</i> ,	1.8	2

73	Improved Output Voltage of a Nanogenerator with 3D Fabric. <i>Journal of Nanoscience and Nanotechnology</i> , 2020 , 20, 4666-4670	1.3	2
72	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
71	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
70	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
69	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
68	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
67	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
66	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
65	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
64	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
63	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
62	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
61	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
60	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
59	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
58	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
57	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
56	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

55	Reduction in the Threshold Voltage of a Polymer Light-Emitting Diode by High Molecular Density on a Photo-Crosslinking Layer. <i>Molecular Crystals and Liquid Crystals</i> , 2007 , 476, 125/[371]-132/[378]	0.5	1
54	The Photo Cross-Linking Effect of a Polymeric Insulator on an Organic Thin-Film Transistor. <i>Molecular Crystals and Liquid Crystals</i> , 2007 , 471, 155-162	0.5	1
53	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
52	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
51	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
50	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
49	Improving of Sensitivity of PbS Quantum Dot Based SWIR Photodetector Using P3HT. <i>Materials</i> , 2021 , 14,	3.5	1
48	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
47	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
46	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
45	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
44	Electrical Stability of Solution-Processed Indium Oxide Thin-Film Transistors. <i>Journal of Nanoscience and Nanotechnology</i> , 2019 , 19, 2371-2374	1.3	1
43	Polycrystalline-Silicon-MOSFET-Based Capacitorless DRAM With Grain Boundaries and Its Performances. <i>IEEE Access</i> , 2021 , 1-1	3.5	1
42	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
41	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
40	Flexible Sol-Gel-Processed YO RRAM Devices Obtained via UV/Ozone-Assisted Photochemical Annealing Process.. <i>Materials</i> , 2022 , 15,	3.5	1
39	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
38	Design of Capacitorless DRAM Based on Polycrystalline Silicon Nanotube Structure. <i>IEEE Access</i> , 2021 , 9, 163675-163685	3.5	0

37	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	○
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