

Takhee Lee

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333
papers

13,786
citations

61
h-index

106
g-index

384
ext. papers

15,183
ext. citations

8.1
avg, IF

6.53
L-index

#	Paper	IF	Citations
333	Molecular-Scale Electronics: From Concept to Function. <i>Chemical Reviews</i> , 2016 , 116, 4318-440	68.1	746
332	Observation of molecular orbital gating. <i>Nature</i> , 2009 , 462, 1039-43	50.4	617
331	Mechanism of electron conduction in self-assembled alkanethiol monolayer devices. <i>Physical Review B</i> , 2003 , 68,	3.3	504
330	Organic Resistive Memory Devices: Performance Enhancement, Integration, and Advanced Architectures. <i>Advanced Functional Materials</i> , 2011 , 21, 2806-2829	15.6	383
329	Single molecule electronic devices. <i>Advanced Materials</i> , 2011 , 23, 1583-608	24	380
328	Inelastic Electron Tunneling Spectroscopy of an Alkanedithiol Self-Assembled Monolayer. <i>Nano Letters</i> , 2004 , 4, 643-646	11.5	335
327	The application of graphene as electrodes in electrical and optical devices. <i>Nanotechnology</i> , 2012 , 23, 112001	3.4	265
326	Evolution of nanomorphology and anisotropic conductivity in solvent-modified PEDOT:PSS films for polymeric anodes of polymer solar cells. <i>Journal of Materials Chemistry</i> , 2009 , 19, 9045		255
325	Large-scale patterned multi-layer graphene films as transparent conducting electrodes for GaN light-emitting diodes. <i>Nanotechnology</i> , 2010 , 21, 175201	3.4	233
324	Tunable electronic transport characteristics of surface-architecture-controlled ZnO nanowire field effect transistors. <i>Nano Letters</i> , 2008 , 8, 950-6	11.5	216
323	Three-dimensional integration of organic resistive memory devices. <i>Advanced Materials</i> , 2010 , 22, 5048-52		184
322	Rewritable switching of one diode-one resistor nonvolatile organic memory devices. <i>Advanced Materials</i> , 2010 , 22, 1228-32	24	157
321	Flexible multilevel resistive memory with controlled charge trap B- and N-doped carbon nanotubes. <i>Nano Letters</i> , 2012 , 12, 2217-21	11.5	156
320	Electric stress-induced threshold voltage instability of multilayer MoS ₂ field effect transistors. <i>ACS Nano</i> , 2013 , 7, 7751-8	16.7	155
319	Electrical and Optical Characterization of MoS ₂ with Sulfur Vacancy Passivation by Treatment with Alkanethiol Molecules. <i>ACS Nano</i> , 2015 , 9, 8044-53	16.7	151
318	A new approach for molecular electronic junctions with a multilayer graphene electrode. <i>Advanced Materials</i> , 2011 , 23, 755-60	24	150
317	Stable switching characteristics of organic nonvolatile memory on a bent flexible substrate. <i>Advanced Materials</i> , 2010 , 22, 3071-5	24	148

316	Mechanically controllable break junctions for molecular electronics. <i>Advanced Materials</i> , 2013 , 25, 4845-67	14.7	147
315	Flexible molecular-scale electronic devices. <i>Nature Nanotechnology</i> , 2012 , 7, 438-42	28.7	144
314	All-Inkjet-Printed Organic Thin-Film Transistor Inverter on Flexible Plastic Substrate. <i>IEEE Electron Device Letters</i> , 2011 , 32, 1134-1136	4.4	137
313	Oxygen environmental and passivation effects on molybdenum disulfide field effect transistors. <i>Nanotechnology</i> , 2013 , 24, 095202	3.4	134
312	Direct Observation of Ag Filamentary Paths in Organic Resistive Memory Devices. <i>Advanced Functional Materials</i> , 2011 , 21, 3976-3981	15.6	128
311	Flexible organic memory devices with multilayer graphene electrodes. <i>ACS Nano</i> , 2011 , 5, 5995-6000	16.7	119
310	Comparison of Electronic Transport Characterization Methods for Alkanethiol Self-Assembled Monolayers. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 8742-8750	3.4	115
309	Electron tunnelling in self-assembled monolayers. <i>Reports on Progress in Physics</i> , 2005 , 68, 523-544	14.4	115
308	Enhanced charge injection in pentacene field-effect transistors with graphene electrodes. <i>Advanced Materials</i> , 2011 , 23, 100-5	24	112
307	Recent Progress in Inkjet-Printed Thin-Film Transistors. <i>Advanced Science</i> , 2019 , 6, 1801445	13.6	109
306	Flexible organic solar cells composed of P3HT:PCBM using chemically doped graphene electrodes. <i>Nanotechnology</i> , 2012 , 23, 344013	3.4	109
305	Conductance and vibrational states of single-molecule junctions controlled by mechanical stretching and material variation. <i>Physical Review Letters</i> , 2011 , 106, 196804	7.4	106
304	Efficient bulk-heterojunction photovoltaic cells with transparent multi-layer graphene electrodes. <i>Organic Electronics</i> , 2010 , 11, 1864-1869	3.5	106
303	Photoelectron spectroscopic imaging and device applications of large-area patternable single-layer MoS ₂ synthesized by chemical vapor deposition. <i>ACS Nano</i> , 2014 , 8, 4961-8	16.7	105
302	Statistical analysis of electronic properties of alkanethiols in metal-molecule-metal junctions. <i>Nanotechnology</i> , 2007 , 18, 315204	3.4	105
301	Elastic and Inelastic Electron Tunneling in Alkane Self-Assembled Monolayers. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 18398-18407	3.4	105
300	Electronic skins for soft, compact, reversible assembly of wirelessly activated fully soft robots. <i>Science Robotics</i> , 2018 , 3,	18.6	104
299	Biogenic formation of photoactive arsenic-sulfide nanotubes by <i>Shewanella</i> sp. strain HN-41. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007 , 104, 20410-5	11.5	100

298	Organic resistive nonvolatile memory materials. <i>MRS Bulletin</i> , 2012 , 37, 144-149	3.2	96
297	One Transistor/One Resistor Devices for Polymer Non-Volatile Memory Applications. <i>Advanced Materials</i> , 2009 , 21, 2497-2500	24	96
296	High-Yield Functional Molecular Electronic Devices. <i>ACS Nano</i> , 2017 , 11, 6511-6548	16.7	95
295	Unipolar nonvolatile memory devices with composites of poly(9-vinylcarbazole) and titanium dioxide nanoparticles. <i>Organic Electronics</i> , 2009 , 10, 473-477	3.5	91
294	Substrate thermal conductivity effect on heat dissipation and lifetime improvement of organic light-emitting diodes. <i>Applied Physics Letters</i> , 2009 , 94, 253302	3.4	89
293	Passivation effects on ZnO nanowire field effect transistors under oxygen, ambient, and vacuum environments. <i>Applied Physics Letters</i> , 2008 , 92, 263109	3.4	88
292	Tuning of a graphene-electrode work function to enhance the efficiency of organic bulk heterojunction photovoltaic cells with an inverted structure. <i>Applied Physics Letters</i> , 2010 , 97, 213301	3.4	87
291	Novel nonvolatile memory with multibit storage based on a ZnO nanowire transistor. <i>Nano Letters</i> , 2010 , 10, 4316-20	11.5	87
290	Morphology- and orientation-controlled gallium arsenide nanowires on silicon substrates. <i>Nano Letters</i> , 2007 , 7, 39-44	11.5	86
289	Intermolecular chain-to-chain tunneling in metal-alkanethiol-metal junctions. <i>Journal of the American Chemical Society</i> , 2007 , 129, 3806-7	16.4	86
288	Structural and electrical characterization of a block copolymer-based unipolar nonvolatile memory device. <i>Advanced Materials</i> , 2012 , 24, 385-90	24	85
287	Three-terminal single-molecule junctions formed by mechanically controllable break junctions with side gating. <i>Nano Letters</i> , 2013 , 13, 2809-13	11.5	85
286	Inkjet-printed stretchable silver electrode on wave structured elastomeric substrate. <i>Applied Physics Letters</i> , 2011 , 98, 153110	3.4	84
285	Irradiation effects of high-energy proton beams on MoS ₂ field effect transistors. <i>ACS Nano</i> , 2014 , 8, 2774-81	16.7	82
284	Enhancement of photodetection characteristics of MoS ₂ field effect transistors using surface treatment with copper phthalocyanine. <i>Nanoscale</i> , 2015 , 7, 18780-8	7.7	76
283	Surface relief gratings on poly(3-hexylthiophene) and fullerene blends for efficient organic solar cells. <i>Applied Physics Letters</i> , 2007 , 91, 173509	3.4	76
282	Piezoelectric Effect on the Electronic Transport Characteristics of ZnO Nanowire Field-Effect Transistors on Bent Flexible Substrates. <i>Advanced Materials</i> , 2008 , 20, 4557-4562	24	75
281	Graphene-Conducting Polymer Hybrid Transparent Electrodes for Efficient Organic Optoelectronic Devices. <i>Advanced Functional Materials</i> , 2014 , 24, 1847-1856	15.6	69

280	Enhancement of field emission transport by molecular tilt configuration in metal-molecule-metal junctions. <i>Journal of the American Chemical Society</i> , 2009 , 131, 5980-5	16.4	69
279	Organic nonvolatile memory devices with charge trapping multilayer graphene film. <i>Nanotechnology</i> , 2012 , 23, 105202	3.4	67
278	High-performance compliant thermoelectric generators with magnetically self-assembled soft heat conductors for self-powered wearable electronics. <i>Nature Communications</i> , 2020 , 11, 5948	17.4	67
277	Fabrication of TiO ₂ nanotubes by using electrodeposited ZnO nanorod template and their application to hybrid solar cells. <i>Electrochimica Acta</i> , 2008 , 53, 2560-2566	6.7	65
276	High-Performance Solution-Processed Organo-Metal Halide Perovskite Unipolar Resistive Memory Devices in a Cross-Bar Array Structure. <i>Advanced Materials</i> , 2019 , 31, e1804841	24	64
275	Reversible switching characteristics of polyfluorene-derivative single layer film for nonvolatile memory devices. <i>Applied Physics Letters</i> , 2008 , 92, 253308	3.4	64
274	Influence of metal-molecule contacts on decay coefficients and specific contact resistances in molecular junctions. <i>Physical Review B</i> , 2007 , 76,	3.3	63
273	Flexible molecular-scale electronic devices composed of diarylethene photoswitching molecules. <i>Advanced Materials</i> , 2014 , 26, 3968-73	24	61
272	Redox-Induced Asymmetric Electrical Characteristics of Ferrocene-Alkanethiolate Molecular Devices on Rigid and Flexible Substrates. <i>Advanced Functional Materials</i> , 2014 , 24, 2472-2480	15.6	59
271	Electrical Properties of Synthesized Large-Area MoS ₂ Field-Effect Transistors Fabricated with Inkjet-Printed Contacts. <i>ACS Nano</i> , 2016 , 10, 2819-26	16.7	58
270	P-type CuO and Cu ₂ O transistors derived from a sol-gel copper (II) acetate monohydrate precursor. <i>Thin Solid Films</i> , 2016 , 600, 157-161	2.2	58
269	Coherent Tunneling Transport in Molecular Junctions. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 20431-20435	3.8	58
268	Mechanism of electron conduction in self-assembled alkanethiol monolayer devices. <i>Annals of the New York Academy of Sciences</i> , 2003 , 1006, 21-35	6.5	57
267	Tuning of the electronic characteristics of ZnO nanowire field effect transistors by proton irradiation. <i>ACS Nano</i> , 2010 , 4, 811-8	16.7	56
266	Enhanced electron mobility in epitaxial (Ba,Lu)SnO ₃ films on BaSnO ₃ (001) substrates. <i>Applied Physics Letters</i> , 2016 , 108, 082105	3.4	55
265	Solution-processed reduced graphene oxide films as electronic contacts for molecular monolayer junctions. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 108-12	16.4	54
264	Effects of Metal-Molecule Contact and Molecular Structure on Molecular Electronic Conduction in Nonresonant Tunneling Regime: Alkyl versus Conjugated Molecules. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 13010-13016	3.8	52
263	Realization of highly reproducible ZnO nanowire field effect transistors with n-channel depletion and enhancement modes. <i>Applied Physics Letters</i> , 2007 , 90, 243103	3.4	51

262	Enhancement of the light output of GaN-based ultraviolet light-emitting diodes by a one-dimensional nanopatterning process. <i>Applied Physics Letters</i> , 2006 , 88, 103505	3-4	51
261	Inkjet-printed stretchable single-walled carbon nanotube electrodes with excellent mechanical properties. <i>Applied Physics Letters</i> , 2014 , 104, 113103	3-4	50
260	Transient reverse current phenomenon in a p-n heterojunction comprised of poly(3,4-ethylene-dioxythiophene):poly(styrene-sulfonate) and ZnO nanowall. <i>Applied Physics Letters</i> , 2008 , 93, 123109	3-4	50
259	Radiation hardness of the electrical properties of carbon nanotube network field effect transistors under high-energy proton irradiation. <i>Nanotechnology</i> , 2006 , 17, 5675-80	3-4	50
258	Transparent Large-Area MoS Phototransistors with Inkjet-Printed Components on Flexible Platforms. <i>ACS Nano</i> , 2017 , 11, 10273-10280	16.7	49
257	Flexible high-performance all-inkjet-printed inverters: organo-compatible and stable interface engineering. <i>Advanced Materials</i> , 2013 , 25, 4773-7	24	49
256	Low frequency noise characterizations of ZnO nanowire field effect transistors. <i>Journal of Applied Physics</i> , 2007 , 101, 044313	2.5	49
255	A robust, gravure-printed, silver nanowire/metal oxide hybrid electrode for high-throughput patterned transparent conductors. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 3248-3255	7.1	47
254	Enhancement of the light output of GaN-based light-emitting diodes with surface-patterned ITO electrodes by maskless wet-etching. <i>Solid-State Electronics</i> , 2007 , 51, 793-796	1.7	47
253	Enhancement in the photodetection of ZnO nanowires by introducing surface-roughness-induced traps. <i>Nanotechnology</i> , 2011 , 22, 205204	3-4	46
252	Electrical properties of ZnO nanowire field effect transistors by surface passivation. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2008 , 313-314, 378-382	5.1	46
251	Trap-mediated electronic transport properties of gate-tunable pentacene/MoS p-n heterojunction diodes. <i>Scientific Reports</i> , 2016 , 6, 36775	4.9	45
250	Recent Advances in Interface Engineering of Transition-Metal Dichalcogenides with Organic Molecules and Polymers. <i>ACS Nano</i> , 2019 , 13, 9713-9734	16.7	45
249	Thermal stability of multilayer graphene films synthesized by chemical vapor deposition and stained by metallic impurities. <i>Nanotechnology</i> , 2012 , 23, 075702	3-4	45
248	Hydrogen-induced morphotropic phase transformation of single-crystalline vanadium dioxide nanobeams. <i>Nano Letters</i> , 2013 , 13, 1822-8	11.5	45
247	Diameter-engineered SnO ₂ nanowires over contact-printed gold nanodots using size-controlled carbon nanopost array stamps. <i>ACS Nano</i> , 2010 , 4, 1829-36	16.7	45
246	Influence of surface structure on the phonon-assisted emission process in the ZnO nanowires grown on homoepitaxial films. <i>Applied Physics Letters</i> , 2009 , 94, 043103	3-4	44
245	Electrical transport characteristics through molecular layers. <i>Journal of Materials Chemistry</i> , 2011 , 21, 18117		43

244	Investigation of the Transition Voltage Spectra of Molecular Junctions Considering Frontier Molecular Orbitals and the Asymmetric Coupling Effect. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 17979-17983	3.8	43
243	Electrical Properties of Surface-Tailored ZnO Nanowire Field-Effect Transistors. <i>IEEE Transactions on Electron Devices</i> , 2008 , 55, 3020-3029	2.9	43
242	Au nanoparticle-decorated graphene electrodes for GaN-based optoelectronic devices. <i>Applied Physics Letters</i> , 2012 , 101, 031115	3.4	42
241	Resistive switching characteristics of polymer non-volatile memory devices in a scalable via-hole structure. <i>Nanotechnology</i> , 2009 , 20, 025201	3.4	42
240	Enhanced Charge Injection Properties of Organic Field-Effect Transistor by Molecular Implantation Doping. <i>Advanced Materials</i> , 2019 , 31, e1806697	24	41
239	Electrical characterization of organic resistive memory with interfacial oxide layers formed by O ₂ plasma treatment. <i>Applied Physics Letters</i> , 2010 , 97, 063305	3.4	41
238	Graphene/Pentacene Barristor with Ion-Gel Gate Dielectric: Flexible Ambipolar Transistor with High Mobility and On/Off Ratio. <i>ACS Nano</i> , 2015 , 9, 7515-22	16.7	40
237	Contact-Engineered Electrical Properties of MoS Field-Effect Transistors via Selectively Deposited Thiol-Molecules. <i>Advanced Materials</i> , 2018 , 30, e1705540	24	39
236	Nonvolatile memory functionality of ZnO nanowire transistors controlled by mobile protons. <i>ACS Nano</i> , 2011 , 5, 558-64	16.7	38
235	Electrical characterization of unipolar organic resistive memory devices scaled down by a direct metal-transfer method. <i>Advanced Materials</i> , 2011 , 23, 2104-7	24	38
234	Noise characteristics of charge tunneling via localized states in metal-molecule-metal junctions. <i>ACS Nano</i> , 2010 , 4, 4426-30	16.7	38
233	The effect of excimer laser annealing on ZnO nanowires and their field effect transistors. <i>Nanotechnology</i> , 2009 , 20, 095203	3.4	38
232	Electronic Properties of Metallic Nanoclusters on Semiconductor Surfaces: Implications for Nanoelectronic Device Applications. <i>Journal of Nanoparticle Research</i> , 2000 , 2, 345-362	2.3	38
231	Electronic transport in self-assembled alkanethiol monolayers. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2003 , 19, 117-125	3	36
230	Gate-bias stress-dependent photoconductive characteristics of multi-layer MoS ₂ field-effect transistors. <i>Nanotechnology</i> , 2014 , 25, 155201	3.4	35
229	Reversible Switching Phenomenon in Diarylethene Molecular Devices with Reduced Graphene Oxide Electrodes on Flexible Substrates. <i>Advanced Functional Materials</i> , 2015 , 25, 5918-5923	15.6	34
228	Vibrational spectra of metal-molecule-metal junctions in electromigrated nanogap electrodes by inelastic electron tunneling. <i>Applied Physics Letters</i> , 2009 , 94, 103110	3.4	34
227	Fabrication, structural and electrical characterization of VO ₂ nanowires. <i>Materials Research Bulletin</i> , 2008 , 43, 1649-1656	5.1	33

- 226 Graphene films show stable cell attachment and biocompatibility with electrogenic primary cardiac cells. *Molecules and Cells*, **2013**, 36, 577-82 3.5 32
- 225 InGaN-Based p-i-n Solar Cells with Graphene Electrodes. *Applied Physics Express*, **2011**, 4, 052302 2.4 32
- 224 Single-Atom Switches and Single-Atom Gaps Using Stretched Metal Nanowires. *ACS Nano*, **2016**, 10, 9695-9702 32
- 223 Resistive Switching Characteristics of Solution-Processed Transparent TiO_x for Nonvolatile Memory Application. *Journal of the Electrochemical Society*, **2010**, 157, H1042 3.9 31
- 222 Logic inverters composed of controlled depletion-mode and enhancement-mode ZnO nanowire transistors. *Applied Physics Letters*, **2009**, 94, 173118 3.4 31
- 221 Nanoscale Resistive Switching of a Copper-Carbon-Mixed Layer for Nonvolatile Memory Applications. *IEEE Electron Device Letters*, **2009**, 30, 302-304 4.4 31
- 220 Hierarchical Porous Film with Layer-by-Layer Assembly of 2D Copper Nanosheets for Ultimate Electromagnetic Interference Shielding. *ACS Nano*, **2021**, 15, 829-839 16.7 31
- 219 One-Step Interface Engineering for All-Inkjet-Printed, All-Organic Components in Transparent, Flexible Transistors and Inverters: Polymer Binding. *ACS Applied Materials & Interfaces*, **2017**, 9, 8819-8829²⁹ 8.5
- 218 Hybrid Complementary Logic Circuits of One-Dimensional Nanomaterials with Adjustment of Operation Voltage. *Advanced Materials*, **2009**, 21, 2156-2160 24 29
- 217 Structural and electrical characterization of intrinsic n-type In₂O₃ nanowires. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2008**, 313-314, 308-311 5.1 29
- 216 Investigation of Time-Dependent Resistive Switching Behaviors of Unipolar Nonvolatile Organic Memory Devices. *Advanced Functional Materials*, **2018**, 28, 1801162 15.6 28
- 215 Effect of gate bias sweep rate on the electronic properties of ZnO nanowire field-effect transistors under different environments. *Applied Physics Letters*, **2008**, 92, 233120 3.4 28
- 214 Random telegraph signals in n-type ZnO nanowire field effect transistors at low temperature. *Applied Physics Letters*, **2007**, 91, 053107 3.4 28
- 213 Intrinsic Optoelectronic Characteristics of MoS₂ Phototransistors a Fully Transparent van der Waals Heterostructure. *ACS Nano*, **2019**, 13, 9638-9646 16.7 27
- 212 Effect of PEDOT:PSS-molecule interface on the charge transport characteristics of the large-area molecular electronic junctions. *Organic Electronics*, **2012**, 13, 771-777 3.5 27
- 211 Origin of discrete current fluctuations in a single molecule junction. *Nanoscale*, **2014**, 6, 13396-401 7.7 27
- 210 Contact Resistance of Inkjet-Printed Silver Source-Drain Electrodes in Bottom-Contact OTFTs. *Journal of Display Technology*, **2012**, 8, 48-53 27
- 209 A self-assembled Ag nanoparticle agglomeration process on graphene for enhanced light output in GaN-based LEDs. *Nanotechnology*, **2012**, 23, 255201 3.4 27

208	Electrical conduction through self-assembled monolayers in molecular junctions: Au/molecules/Au versus Au/molecule/PEDOT:PSS/Au. <i>Thin Solid Films</i> , 2009 , 518, 824-828	2.2	27
207	Effects of channel-length scaling on In ₂ O ₃ nanowire field effect transistors studied by conducting atomic force microscopy. <i>Applied Physics Letters</i> , 2007 , 90, 173106	3.4	27
206	Effects of surface roughness on the electrical characteristics of ZnO nanowire field effect transistors. <i>Applied Surface Science</i> , 2008 , 254, 7559-7564	6.7	27
205	Resistive switching characteristics of solution-processed TiO _x for next-generation non-volatile memory application; transparency, flexibility, and nano-scale memory feasibility. <i>Microelectronic Engineering</i> , 2011 , 88, 1143-1147	2.5	26
204	High-performance organic charge trap flash memory devices based on ink-jet printed 6,13-bis(triisopropylsilylethynyl) pentacene transistors. <i>Applied Physics Letters</i> , 2010 , 96, 213107	3.4	25
203	Channel-length and gate-bias dependence of contact resistance and mobility for In ₂ O ₃ nanowire field effect transistors. <i>Journal of Applied Physics</i> , 2007 , 102, 084508	2.5	25
202	Layer-by-Layer Structural Identification of 2D Ruddlesden-Popper Hybrid Lead Iodide Perovskites by Solid-State NMR Spectroscopy. <i>Chemistry of Materials</i> , 2021 , 33, 370-377	9.6	25
201	Electrical properties of ZnO nanowire field effect transistors with varying high-k Al ₂ O ₃ dielectric thickness. <i>Journal of Applied Physics</i> , 2010 , 107, 034504	2.5	24
200	A study of graphene films synthesized on nickel substrates: existence and origin of small-base-area peaks. <i>Nanotechnology</i> , 2011 , 22, 045706	3.4	24
199	Controlled assembly of In ₂ O ₃ nanowires on electronic circuits using scanning optical tweezers. <i>Optics Express</i> , 2009 , 17, 17491-501	3.3	24
198	High-fidelity formation of a molecular-junction device using a thickness-controlled bilayer architecture. <i>Small</i> , 2008 , 4, 1399-405	11	24
197	All-Inkjet-Printed Organic Thin-Film Transistors with Silver Gate, Source/Drain Electrodes. <i>Japanese Journal of Applied Physics</i> , 2011 , 50, 03CB05	1.4	24
196	Enhanced characteristics of pentacene field-effect transistors with graphene electrodes and substrate treatments. <i>Applied Physics Letters</i> , 2011 , 99, 083306	3.4	23
195	Electronic Transport in Molecular Self-Assembled Monolayer Devices. <i>Proceedings of the IEEE</i> , 2005 , 93, 1815-1824	14.3	23
194	An ohmic nanocontact to GaAs. <i>Applied Physics Letters</i> , 1999 , 74, 2869-2871	3.4	23
193	1/f Noise Scaling Analysis in Unipolar-Type Organic Nanocomposite Resistive Memory. <i>ACS Nano</i> , 2015 , 9, 7697-703	16.7	22
192	Two-Dimensional Thickness-Dependent Avalanche Breakdown Phenomena in MoS ₂ Field-Effect Transistors under High Electric Fields. <i>ACS Nano</i> , 2018 , 12, 7109-7116	16.7	22
191	Twistable nonvolatile organic resistive memory devices. <i>Organic Electronics</i> , 2013 , 14, 2087-2092	3.5	22

190	Near-ultraviolet light-emitting diodes with transparent conducting layer of gold-doped multi-layer graphene. <i>Journal of Applied Physics</i> , 2013 , 113, 113102	2.5	22
189	Electronic properties associated with conformational changes in azobenzene-derivative molecular junctions. <i>Organic Electronics</i> , 2011 , 12, 2144-2150	3.5	22
188	The influence of surface chemical dynamics on electrical and optical properties of ZnO nanowire field effect transistors. <i>Nanotechnology</i> , 2009 , 20, 505202	3.4	21
187	Transient drain current characteristics of ZnO nanowire field effect transistors. <i>Applied Physics Letters</i> , 2009 , 95, 123101	3.4	21
186	Effect of metal ions on the switching performance of polyfluorene-based organic non-volatile memory devices. <i>Organic Electronics</i> , 2010 , 11, 109-114	3.5	21
185	Improved photoswitching response times of MoS ₂ field-effect transistors by stacking p-type copper phthalocyanine layer. <i>Applied Physics Letters</i> , 2016 , 109, 183502	3.4	21
184	Electrical and structural properties of antimony-doped p-type ZnO nanorods with self-corrugated surfaces. <i>Nanotechnology</i> , 2012 , 23, 495712	3.4	20
183	Intrinsic charge transport of conjugated organic molecules in electromigrated nanogap junctions. <i>Journal of Applied Physics</i> , 2011 , 109, 102419	2.5	20
182	Removal of cetyltrimethylammonium bromide to enhance the biocompatibility of Au nanorods synthesized by a modified seed mediated growth process. <i>Journal of Nanoscience and Nanotechnology</i> , 2008 , 8, 4670-4	1.3	20
181	Inkjet-Printed Silver Gate Electrode and Organic Dielectric Materials for Bottom-Gate Pentacene Thin-Film Transistors. <i>Journal of the Korean Physical Society</i> , 2009 , 54, 518-522	0.6	20
180	Characterization of PI:PCBM organic nonvolatile resistive memory devices under thermal stress. <i>Organic Electronics</i> , 2016 , 33, 48-54	3.5	20
179	Large scale MoS ₂ nanosheet logic circuits integrated by photolithography on glass. <i>2D Materials</i> , 2016 , 3, 044001	5.9	20
178	Highly Reliable Superhydrophobic Protection for Organic Field-Effect Transistors by Fluoroalkylsilane-Coated TiO Nanoparticles. <i>ACS Nano</i> , 2018 , 12, 11062-11069	16.7	20
177	High-performance inkjet-printed four-terminal microelectromechanical relays and inverters. <i>Nano Letters</i> , 2015 , 15, 3261-6	11.5	19
176	Shaping the Atomic-Scale Geometries of Electrodes to Control Optical and Electrical Performance of Molecular Devices. <i>Small</i> , 2018 , 14, e1703815	11	19
175	Tuning of operation mode of ZnO nanowire field effect transistors by solvent-driven surface treatment. <i>Nanotechnology</i> , 2009 , 20, 475702	3.4	19
174	Templated assembly of metal nanoparticles in nanoimprinted patterns for metal nanowire fabrication. <i>Nanotechnology</i> , 2009 , 20, 355302	3.4	19
173	A direct metal transfer method for cross-bar type polymer non-volatile memory applications. <i>Nanotechnology</i> , 2008 , 19, 405201	3.4	19

172	A statistical method for determining intrinsic electronic transport properties of self-assembled alkanethiol monolayer devices. <i>Applied Physics Letters</i> , 2007 , 91, 253116	3.4	19
171	Origin of multi-level switching and telegraphic noise in organic nanocomposite memory devices. <i>Scientific Reports</i> , 2016 , 6, 33967	4.9	18
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