

Takhee Lee

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.

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	Enhanced Thermoelectric Power Factor in Carrier-Type-Controlled Platinum Diselenide Nanosheets by Molecular Charge-Transfer Doping.. <i>Small</i> , 2022 , e2200818	11	
332	Introduction to Molecular Interface Engineering of Transition Metal Dichalcogenide-based Devices 2021 , 43-91		
331	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
330	Perovskite Photodetector Devices: Tailored Design-of-Experiments Approach for Device Performance Prediction and Optimization of Flash-Evaporated Organic/Inorganic Halide Perovskite-Based Photodetectors (Adv. Mater. Technol. 5/2021). <i>Advanced Materials Technologies</i> , 2021 , 6, 2170029	6.8	
329	Reversible Rectification of Microscale Ferroelectric Junctions Employing Liquid Metal Electrodes. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 29885-29893	9.5	2
328	Crystallinity-dependent device characteristics of polycrystalline 2D n = 4 Ruddlesden-Popper perovskite photodetectors. <i>Nanotechnology</i> , 2021 , 32, 185203	3.4	6
327	Tailored Design-of-Experiments Approach for Device Performance Prediction and Optimization of Flash-Evaporated Organic/Inorganic Halide Perovskite-Based Photodetectors. <i>Advanced Materials Technologies</i> , 2021 , 6, 2001131	6.8	1
326	Temperature-Dependent Low-Frequency Noise Analysis of ZnO Nanowire Field-Effect Transistors. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 3532-3536	2.9	0
325	Ultrasensitive Photodetection in MoS Avalanche Phototransistors. <i>Advanced Science</i> , 2021 , 8, e2102437	13.6	11
324	In-situ control of on-chip angstrom gaps, atomic switches, and molecular junctions by light irradiation. <i>Nano Today</i> , 2021 , 39, 101226	17.9	5
323	Inkjet-Printing-Based Density Profile Engineering of Single-Walled Carbon Nanotube Networks for Conformable High-On/Off-Performance Thin-Film Transistors. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 43163-43173	9.5	2
322	Molecular Dopant-Dependent Charge Transport in Surface-Charge-Transfer-Doped Tungsten Diselenide Field Effect Transistors. <i>Advanced Materials</i> , 2021 , 33, e2101598	24	5
321	Hierarchical Porous Film with Layer-by-Layer Assembly of 2D Copper Nanosheets for Ultimate Electromagnetic Interference Shielding. <i>ACS Nano</i> , 2021 , 15, 829-839	16.7	31
320	Enhanced Output Performance of All-Solution-Processed Organic Thermoelectrics: Spray Printing and Interface Engineering. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 26250-26257	9.5	4
319	Solution-Processed Transparent Superhydrophobic Protection Layers for Enhancing the Device Reliability of Flexible Organic Optoelectronics. <i>Advanced Materials Technologies</i> , 2020 , 5, 2000449	6.8	3
318	Tunable rectification in a molecular heterojunction with two-dimensional semiconductors. <i>Nature Communications</i> , 2020 , 11, 1412	17.4	10
317	All-Solid-State Organic Schmitt Trigger Implemented by Twin Two-in-One Ferroelectric Memory Transistors. <i>Advanced Electronic Materials</i> , 2020 , 6, 1901263	6.4	2

316	Electrical Characteristics of Molecular Junctions Fabricated by Inverted Self-Assembled Monolayer Method. <i>Journal of Nanoscience and Nanotechnology</i> , 2020 , 20, 4648-4651	1.3	
315	Towards flexible CMOS circuits. <i>Nature Nanotechnology</i> , 2020 , 15, 11-12	28.7	7
314	Stretchable strain-tolerant soft printed circuit board: a systematic approach for the design rules of stretchable interconnects. <i>Journal of Information Display</i> , 2020 , 21, 41-47	4.1	9
313	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
312	Crystal Size Effect on Carrier Transport of Microscale Perovskite Junctions via Soft Contact. <i>Nano Letters</i> , 2020 , 20, 8640-8646	11.5	5
311	Controllable deposition of organic metal halide perovskite films with wafer-scale uniformity by single source flash evaporation. <i>Scientific Reports</i> , 2020 , 10, 18781	4.9	4
310	Highly Stable Contact Doping in Organic Field Effect Transistors by Dopant-Blockade Method. <i>Advanced Functional Materials</i> , 2020 , 30, 2000058	15.6	17
309	Enhanced Charge Injection Properties of Organic Field-Effect Transistor by Molecular Implantation Doping. <i>Advanced Materials</i> , 2019 , 31, e1806697	24	41
308	Organic Field-Effect Transistors: Enhanced Charge Injection Properties of Organic Field-Effect Transistor by Molecular Implantation Doping (Adv. Mater. 10/2019). <i>Advanced Materials</i> , 2019 , 31, 1970073	24	2
307	Recent Progress in Inkjet-Printed Thin-Film Transistors. <i>Advanced Science</i> , 2019 , 6, 1801445	13.6	109
306	Atomic switches of metallic point contacts by plasmonic heating. <i>Light: Science and Applications</i> , 2019 , 8, 34	16.7	17
305	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
304	Enhanced Photo-Response of Mos2 Photodetectors by a Laterally Aligned SiO2 Nanoribbon Array Substrate. <i>ChemNanoMat</i> , 2019 , 5, 1272-1279	3.5	2
303	Highly uniform monolayer graphene synthesis a facile pretreatment of copper catalyst substrates using an ammonium persulfate solution.. <i>RSC Advances</i> , 2019 , 9, 20871-20878	3.7	4
302	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
301	Intrinsic Optoelectronic Characteristics of MoS Phototransistors a Fully Transparent van der Waals Heterostructure. <i>ACS Nano</i> , 2019 , 13, 9638-9646	16.7	27
300	Dose-dependent effect of proton irradiation on electrical properties of WSe ambipolar field effect transistors. <i>Nanoscale</i> , 2019 , 11, 13961-13967	7.7	2
299	Fabrication of a MoS2/Graphene Nanoribbon Heterojunction Network for Improved Thermoelectric Properties. <i>Advanced Materials Interfaces</i> , 2019 , 6, 1901333	4.6	14

298	Effect of Facile p-Doping on Electrical and Optoelectronic Characteristics of Ambipolar WSe Field-Effect Transistors. <i>Nanoscale Research Letters</i> , 2019 , 14, 313	5	6
297	Unidirectional Real-Time Photoswitching of Diarylethene Molecular Monolayer Junctions with Multilayer Graphene Electrodes. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 11645-11653	9.5	16
296	Trapped charge modulation at the MoS ₂ /SiO ₂ interface by a lateral electric field in MoS ₂ field-effect transistors. <i>Nano Futures</i> , 2019 , 3, 011002	3.6	6
295	Electrical modulation of a photonic crystal band-edge laser with a graphene monolayer. <i>Nanoscale</i> , 2018 , 10, 8496-8502	7.7	5
294	Contact-Engineered Electrical Properties of MoS Field-Effect Transistors via Selectively Deposited Thiol-Molecules. <i>Advanced Materials</i> , 2018 , 30, e1705540	24	39
293	An on-chip hybrid plasmonic light steering concentrator with ~96% coupling efficiency. <i>Nanoscale</i> , 2018 , 10, 5097-5104	7.7	6
292	Peltier cooling at molecular scale. <i>Nature Nanotechnology</i> , 2018 , 13, 97-99	28.7	3
291	Field-Effect Transistors: Contact-Engineered Electrical Properties of MoS ₂ Field-Effect Transistors via Selectively Deposited Thiol-Molecules (Adv. Mater. 18/2018). <i>Advanced Materials</i> , 2018 , 30, 1870129 ²⁴	24	1
290	Shaping the Atomic-Scale Geometries of Electrodes to Control Optical and Electrical Performance of Molecular Devices. <i>Small</i> , 2018 , 14, e1703815	11	19
289	Two-Dimensional Thickness-Dependent Avalanche Breakdown Phenomena in MoS Field-Effect Transistors under High Electric Fields. <i>ACS Nano</i> , 2018 , 12, 7109-7116	16.7	22
288	Correlational Effects of the Molecular-Tilt Configuration and the Intermolecular van der Waals Interaction on the Charge Transport in the Molecular Junction. <i>Nano Letters</i> , 2018 , 18, 4322-4330	11.5	6
287	Investigation of Time-Dependent Resistive Switching Behaviors of Unipolar Nonvolatile Organic Memory Devices. <i>Advanced Functional Materials</i> , 2018 , 28, 1801162	15.6	28
286	Single-molecule devices reveal step-by-step dynamics of hydrogen bonds. <i>Science China Chemistry</i> , 2018 , 61, 639-640	7.9	
285	Miniaturization and Integration of Organic Resistive Memory Devices. <i>Journal of the Korean Physical Society</i> , 2018 , 73, 479-487	0.6	1
284	Resistive-Switching Memory: Investigation of Time-Dependent Resistive Switching Behaviors of Unipolar Nonvolatile Organic Memory Devices (Adv. Funct. Mater. 35/2018). <i>Advanced Functional Materials</i> , 2018 , 28, 1870249	15.6	3
283	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
282	Nanoscale enhancement of photoconductivity by localized charge traps in the grain structures of monolayer MoS. <i>Scientific Reports</i> , 2018 , 8, 15822	4.9	6
281	Molecular Orbital Gating Surface-Enhanced Raman Scattering. <i>ACS Nano</i> , 2018 , 12, 11229-11235	16.7	14

280	Effects of Electron Beam Irradiation and Thiol Molecule Treatment on the Properties of MoS ₂ Field Effect Transistors. <i>Journal of the Korean Physical Society</i> , 2018 , 72, 1203-1208	0.6	4
279	Molecular Devices: Shaping the Atomic-Scale Geometries of Electrodes to Control Optical and Electrical Performance of Molecular Devices (Small 15/2018). <i>Small</i> , 2018 , 14, 1870066	11	1
278	Near-Ultraviolet Structural Colors Generated by Aluminum Nanodisk Array for Bright Image Printing. <i>Advanced Optical Materials</i> , 2018 , 6, 1800231	8.1	5
277	Electronic skins for soft, compact, reversible assembly of wirelessly activated fully soft robots. <i>Science Robotics</i> , 2018 , 3,	18.6	104
276	One-Step Interface Engineering for All-Inkjet-Printed, All-Organic Components in Transparent, Flexible Transistors and Inverters: Polymer Binding. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 8819-8829 ²⁹	9.5	29
275	Attachable and flexible aluminum oxide resistive non-volatile memory arrays fabricated on tape as the substrate. <i>Nanotechnology</i> , 2017 , 28, 135201	3.4	4
274	Analysis of the interface characteristics of CVD-grown monolayer MoS by noise measurements. <i>Nanotechnology</i> , 2017 , 28, 145702	3.4	13
273	Nanoscience and Nanotechnology Cross Borders. <i>ACS Nano</i> , 2017 , 11, 1123-1126	16.7	3
272	Fabrication of Millimeter-Long Carbon Tubular Nanostructures Using the Self-Rolling Process Inherent in Elastic Protein Layers. <i>Advanced Materials</i> , 2017 , 29, 1701732	24	4
271	Analysis of noise generation and electric conduction at grain boundaries in CVD-grown MoS field effect transistors. <i>Nanotechnology</i> , 2017 , 28, 47LT01	3.4	6
270	Transparent p-CuI/n-BaSnO heterojunctions with a high rectification ratio. <i>Journal of Physics Condensed Matter</i> , 2017 , 29, 384004	1.8	10
269	Efficient Surface Treatment to Improve Contact Properties of Inkjet-Printed Short-Channel Organic Thin-Film Transistors. <i>Journal of Nanoscience and Nanotechnology</i> , 2017 , 17, 5718-5721	1.3	7
268	Comparative study for electrical transport characteristics of self-assembled monolayers formed by benzenethiol, cyclohexanethiol, and adamantanethiol. <i>Current Applied Physics</i> , 2017 , 17, 1459-1464	2.6	6
267	Transparent Large-Area MoS Phototransistors with Inkjet-Printed Components on Flexible Platforms. <i>ACS Nano</i> , 2017 , 11, 10273-10280	16.7	49
266	High-Yield Functional Molecular Electronic Devices. <i>ACS Nano</i> , 2017 , 11, 6511-6548	16.7	95
265	Solution-Processed Complementary Resistive Switching Arrays for Associative Memory. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 4310-4316	2.9	8
264	Interface-Engineered Charge-Transport Properties in Benzenedithiol Molecular Electronic Junctions via Chemically p-Doped Graphene Electrodes. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 42043-42049	9.5	7
263	Electronic noise analyses on organic electronic devices. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 7123-7141	7.4	13

262	A High-Speed Inkjet-Printed Microelectromechanical Relay With a Mechanically Enhanced Double-Clamped Channel-Beam. <i>Journal of Microelectromechanical Systems</i> , 2017 , 26, 95-101	2.5	6
261	Realization of an atomically flat BaSnO ₃ (001) substrate with SnO ₂ termination. <i>Applied Physics Letters</i> , 2017 , 111, 231604	3.4	5
260	Laser direct writing and inkjet printing for a sub-2 μm channel length MoS ₂ transistor with high-resolution electrodes. <i>Nanotechnology</i> , 2016 , 27, 405301	3.4	9
259	Trap-mediated electronic transport properties of gate-tunable pentacene/MoS p-n heterojunction diodes. <i>Scientific Reports</i> , 2016 , 6, 36775	4.9	45
258	Origin of multi-level switching and telegraphic noise in organic nanocomposite memory devices. <i>Scientific Reports</i> , 2016 , 6, 33967	4.9	18
257	Non-volatile aluminum oxide resistive memory devices on a wrapping paper substrate. <i>Flexible and Printed Electronics</i> , 2016 , 1, 034001	3.1	4
256	Gate-dependent asymmetric transport characteristics in pentacene barristors with graphene electrodes. <i>Nanotechnology</i> , 2016 , 27, 475201	3.4	1
255	Integration of Flexible and Microscale Organic Nonvolatile Resistive Memory Devices Using Orthogonal Photolithography. <i>Journal of Nanoscience and Nanotechnology</i> , 2016 , 16, 6350-4	1.3	3
254	Fully Inkjet-Printed Stress-Tolerant Microelectromechanical Reed Relays for Large-Area Electronics. <i>Advanced Electronic Materials</i> , 2016 , 2, 1500482	6.4	11
253	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
252	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
251	Molecular-Scale Electronics: From Concept to Function. <i>Chemical Reviews</i> , 2016 , 116, 4318-440	68.1	746
250	Statistical investigation of the length-dependent deviations in the electrical characteristics of molecular electronic junctions fabricated using the direct metal transfer method. <i>Journal of Physics Condensed Matter</i> , 2016 , 28, 094003	1.8	6
249	An In-Depth Study of Redox-Induced Conformational Changes in Charge Transport Characteristics of a Ferrocene-Alkanethiolate Molecular Electronic Junction: Temperature-Dependent Transition Voltage Spectroscopy Analysis. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 3564-3572	3.8	15
248	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
247	Electrical characterization of benzenedithiolate molecular electronic devices with graphene electrodes on rigid and flexible substrates. <i>Nanotechnology</i> , 2016 , 27, 145301	3.4	10
246	Introduction to research of atomically thin MoS ₂ and its electrical properties. <i>Vacuum Magazine</i> , 2016 , 3, 9-15		
245	Electrical Characteristics of Benzenedithiol versus Methylbenzenethiol Self-Assembled Monolayers in Multilayer Graphene-Electrode Molecular Junctions. <i>Journal of Nanoscience and Nanotechnology</i> , 2016 , 16, 8565-8568	1.3	1

244	Tailoring the electrical properties of MoS ₂ field effect transistors by depositing Au nanoparticles and alkanethiol molecules. <i>Journal of Physics Condensed Matter</i> , 2016 , 28, 184003	1.8	1
243	The development of fluorinated photolithographic materials and their applications to achieve flexible organic electronic devices. <i>Flexible and Printed Electronics</i> , 2016 , 1, 023001	3.1	12
242	71-2: Invited Paper: Printed Transistors and MEMS for Large-Area Electronics. <i>Digest of Technical Papers SID International Symposium</i> , 2016 , 47, 956-959	0.5	1
241	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
240	Fully inkjet-printed short-channel organic thin-film transistors and inverter arrays on flexible substrates. <i>Flexible and Printed Electronics</i> , 2016 , 1, 045003	3.1	14
239	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
238	Characterization of PI:PCBM organic nonvolatile resistive memory devices under thermal stress. <i>Organic Electronics</i> , 2016 , 33, 48-54	3.5	20
237	Catalyst-free bottom-up growth of graphene nanofeatures along with molecular templates on dielectric substrates. <i>Nanoscale</i> , 2016 , 8, 17022-17029	7.7	13
236	Single-Atom Switches and Single-Atom Gaps Using Stretched Metal Nanowires. <i>ACS Nano</i> , 2016 , 10, 9695-9703	10.7	32
235	Large scale MoS ₂ nanosheet logic circuits integrated by photolithography on glass. <i>2D Materials</i> , 2016 , 3, 044001	5.9	20
234	1/f Noise Scaling Analysis in Unipolar-Type Organic Nanocomposite Resistive Memory. <i>ACS Nano</i> , 2015 , 9, 7697-703	16.7	22
233	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
232	Facile anionic synthesis of a well-controlled thermally cross-linkable block copolymer for polymer-based resistive memory device applications. <i>Polymer Chemistry</i> , 2015 , 6, 4264-4270	4.9	11
231	Vertically stacked microscale organic nonvolatile memory devices toward three-dimensional high integration. <i>Organic Electronics</i> , 2015 , 21, 198-202	3.5	8
230	Hydrogen plasma-mediated modification of the electrical transport properties of ZnO nanowire field effect transistors. <i>Nanotechnology</i> , 2015 , 26, 125202	3.4	11
229	High-performance inkjet-printed four-terminal microelectromechanical relays and inverters. <i>Nano Letters</i> , 2015 , 15, 3261-6	11.5	19
228	Investigation of inelastic electron tunneling spectra of metal-molecule-metal junctions fabricated using direct metal transfer method. <i>Applied Physics Letters</i> , 2015 , 106, 063110	3.4	15
227	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

226	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
225	A new approach for high-yield metal-molecule-metal junctions by direct metal transfer method. <i>Nanotechnology</i> , 2015 , 26, 025601	3.4	16
224	4K-bit and microlithographic integration of organic nonvolatile resistive memory devices. <i>Organic Electronics</i> , 2015 , 17, 192-197	3.5	16
223	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
222	Energy Consumption Estimation of Organic Nonvolatile Memory Devices on a Flexible Plastic Substrate. <i>Advanced Electronic Materials</i> , 2015 , 1, 1500186	6.4	10
221	Interface effect in pentacene field-effect transistors from high energy proton beam irradiation. <i>Organic Electronics</i> , 2015 , 27, 240-246	3.5	6
220	Flexible molecular-scale electronic devices composed of diarylethene photoswitching molecules. <i>Advanced Materials</i> , 2014 , 26, 3968-73	24	61
219	Organic Electronics: Graphene-Conducting Polymer Hybrid Transparent Electrodes for Efficient Organic Optoelectronic Devices (Adv. Funct. Mater. 13/2014). <i>Advanced Functional Materials</i> , 2014 , 24, 1960-1960	15.6	1
218	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
217	The application of orthogonal photolithography to micro-scale organic field effect transistors and complementary inverters on flexible substrate. <i>Applied Physics Letters</i> , 2014 , 104, 053301	3.4	17
216	Analysis of surface states in ZnO nanowire field effect transistors. <i>Applied Surface Science</i> , 2014 , 301, 2-8	6.7	5
215	Graphene-Conducting Polymer Hybrid Transparent Electrodes for Efficient Organic Optoelectronic Devices. <i>Advanced Functional Materials</i> , 2014 , 24, 1847-1856	15.6	69
214	Molecular Electronics: Redox-Induced Asymmetric Electrical Characteristics of Ferrocene-Alkanethiolate Molecular Devices on Rigid and Flexible Substrates (Adv. Funct. Mater. 17/2014). <i>Advanced Functional Materials</i> , 2014 , 24, 2564-2564	15.6	1
213	Gate-bias stress-dependent photoconductive characteristics of multi-layer MoS ₂ field-effect transistors. <i>Nanotechnology</i> , 2014 , 25, 155201	3.4	35
212	Micro-scale twistable organic field effect transistors and complementary inverters fabricated by orthogonal photolithography on flexible polyimide substrate. <i>Organic Electronics</i> , 2014 , 15, 2822-2829	3.5	13
211	Irradiation effects of high-energy proton beams on MoS ₂ field effect transistors. <i>ACS Nano</i> , 2014 , 8, 2774-81	16.7	82
210	Facile anionic synthesis of well-defined block copolymers with pendent triphenylamine and ethynylpyridine for nonvolatile memory device applications with high performances. <i>Journal of Polymer Science Part A</i> , 2014 , 52, 2625-2632	2.5	11
209	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

208	Temperature Dependence of Electron Transport in ZnO Nanowire Field Effect Transistors. <i>IEEE Transactions on Electron Devices</i> , 2014 , 61, 625-630	2.9	3
207	Effect of molecular desorption on the electronic properties of self-assembled polarizable molecular monolayers. <i>Journal of Colloid and Interface Science</i> , 2014 , 419, 39-45	9.3	9
206	Inelastic electron tunneling spectroscopy of molecular transport junctions. <i>Journal of the Korean Physical Society</i> , 2014 , 64, 1539-1544	0.6	3
205	Study on the origin of amorphous carbon peaks on graphene films synthesized on nickel catalysts. <i>Journal of Nanoscience and Nanotechnology</i> , 2014 , 14, 4982-7	1.3	3
204	Exploitation of the coffee-ring effect to realize mechanically enhanced inkjet-printed microelectromechanical relays with U-bar-shaped cantilevers. <i>Applied Physics Letters</i> , 2014 , 105, 261901	3.4	14
203	Origin of discrete current fluctuations in a single molecule junction. <i>Nanoscale</i> , 2014 , 6, 13396-401	7.7	27
202	Well-Defined Block Copolymers with Triphenylamine and Isocyanate Moieties Synthesized via Living Anionic Polymerization for Polymer-Based Resistive Memory Applications: Effect of Morphological Structures on Nonvolatile Memory Performances. <i>Macromolecules</i> , 2014 , 47, 8625-8633	5.5	10
201	Inkjet-printed stretchable single-walled carbon nanotube electrodes with excellent mechanical properties. <i>Applied Physics Letters</i> , 2014 , 104, 113103	3.4	50
200	Molecular Transistors 2014 , 194-226		1
199	Mechanically controllable break junctions for molecular electronics. <i>Advanced Materials</i> , 2013 , 25, 4845-67	6.7	147
198	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
197	Graphene films show stable cell attachment and biocompatibility with electrogenic primary cardiac cells. <i>Molecules and Cells</i> , 2013 , 36, 577-82	3.5	32
196	Electric stress-induced threshold voltage instability of multilayer MoS ₂ field effect transistors. <i>ACS Nano</i> , 2013 , 7, 7751-8	16.7	155
195	Demonstration of Addressable Organic Resistive Memory Utilizing a PC-Interface Memory Cell Tester. <i>IEEE Electron Device Letters</i> , 2013 , 34, 51-53	4.4	10
194	Corrections to Demonstration of Addressable Organic Resistive Memory Utilizing a PC-Interface Memory Cell Tester [Jan 13 51-53]. <i>IEEE Electron Device Letters</i> , 2013 , 34, 468-468	4.4	
193	Twistable nonvolatile organic resistive memory devices. <i>Organic Electronics</i> , 2013 , 14, 2087-2092	3.5	22
192	Performance enhancement of triisopropylsilylethynyl pentacene organic field effect transistors with inkjet-printed silver source/drain electrodes achieved via dispersible reduced graphene oxide. <i>Thin Solid Films</i> , 2013 , 542, 327-331	2.2	5
191	Hydrogen-induced morphotropic phase transformation of single-crystalline vanadium dioxide nanobeams. <i>Nano Letters</i> , 2013 , 13, 1822-8	11.5	45

190	Non-volatile memory characteristics of polyimide layers embedded with ZnO nanowires. <i>Current Applied Physics</i> , 2013 , 13, 1237-1240	2.6	6
189	Large-area fabrication of periodic sub-15 nm-width single-layer graphene nanorings. <i>Advanced Materials</i> , 2013 , 25, 199-204	24	18
188	Flexible High-Performance All-Inkjet-Printed Inverters: Organo-Compatible and Stable Interface Engineering (Adv. Mater. 34/2013). <i>Advanced Materials</i> , 2013 , 25, 4772-4772	24	3
187	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
186	Oxygen environmental and passivation effects on molybdenum disulfide field effect transistors. <i>Nanotechnology</i> , 2013 , 24, 095202	3-4	134
185	Strain effects in a single ZnO microwire with wavy configurations. <i>Nanotechnology</i> , 2013 , 24, 455703	3-4	4
184	Molecular Electronics: Mechanically Controllable Break Junctions for Molecular Electronics (Adv. Mater. 35/2013). <i>Advanced Materials</i> , 2013 , 25, 4818-4818	24	2
183	Flexible high-performance all-inkjet-printed inverters: organo-compatible and stable interface engineering. <i>Advanced Materials</i> , 2013 , 25, 4773-7	24	49
182	Characteristics of light-induced electron transport from P3HT to ZnO-nanowire field-effect transistors. <i>Applied Physics Letters</i> , 2013 , 103, 223305	3-4	9
181	UV photoconductivity characteristics of ZnO nanowire field effect transistor treated by proton irradiation. <i>Thin Solid Films</i> , 2012 , 520, 3624-3628	2.2	4
180	Effect of PEDOT:PSS/molecule interface on the charge transport characteristics of the large-area molecular electronic junctions. <i>Organic Electronics</i> , 2012 , 13, 771-777	3-5	27
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14	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
13	Inelastic Electron Tunneling Spectroscopy of an Alkanedithiol Self-Assembled Monolayer. <i>Nano Letters</i> , 2004 , 4, 643-646	11.5	335
12	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
11	Electronic transport in self-assembled alkanethiol monolayers. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2003 , 19, 117-125	3	36

10	Mechanism of electron conduction in self-assembled alkanethiol monolayer devices. <i>Physical Review B</i> , 2003 , 68,	3.3	504
9	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
8	Self-assembled metal/molecule/semiconductor nanostructures for electronic device and contact applications. <i>Journal of Electronic Materials</i> , 2000 , 29, 565-569	1.9	11
7	Ohmic nanocontacts to GaAs using undoped and p-doped layers of low-temperature-grown GaAs. <i>Applied Physics Letters</i> , 2000 , 76, 212-214	3.4	16
6	An ohmic nanocontact to GaAs. <i>Applied Physics Letters</i> , 1999 , 74, 2869-2871	3.4	23
5	High density silicon nanocrystal embedded in Si prepared by low energy (1
4	Resistive Switching by Percolative Conducting Filaments in Organometal Perovskite Unipolar Memory Devices Analyzed Using Current Noise Spectra. <i>Advanced Functional Materials</i> , 2107727	15.6	0
3	Photo-Responsive Molecular Junctions Activated by Perovskite/Graphene Heterostructure Electrode. <i>Advanced Optical Materials</i> , 2200049	8.1	3
2	Highly Integrated, Wearable Carbon-Nanotube-Yarn-Based Thermoelectric Generators Achieved by Selective Inkjet-Printed Chemical Doping. <i>Advanced Energy Materials</i> , 2200256	21.8	3
1	Stretchable hybrid electronics: combining rigid electronic devices with stretchable interconnects into high-performance on-skin electronics. <i>Journal of Information Display</i> , 1-22	4.1	0