

# Jian-Bin Xu

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/2549550/jian-bin-xu-publications-by-year.pdf>

**Version:** 2024-04-24

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

140  
papers

8,094  
citations

46  
h-index

87  
g-index

150  
ext. papers

9,548  
ext. citations

11.2  
avg, IF

6.24  
L-index

#	Paper	IF	Citations
140	Pushing the Efficiency of High Open-Circuit Voltage Binary Organic Solar Cells by Vertical Morphology Tuning.. <i>Advanced Science</i> , <b>2022</b> , e2200578	13.6	9
139	The compatibility of methylammonium and formamidinium in mixed cation perovskite: the optoelectronic and stability properties. <i>Nanotechnology</i> , <b>2021</b> , 32, 075406	3.4	5
138	Lead Halide Perovskites: Uncovering the Electron-Phonon Interplay and Dynamical Energy-Dissipation Mechanisms of Hot Carriers in Hybrid Lead Halide Perovskites (Adv. Energy Mater. 9/2021). <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2170036	21.8	
137	Control over Light Soaking Effect in All-Inorganic Perovskite Solar Cells. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2101287	15.6	10
136	Enhanced Electrochemical Stability by Alkyldiammonium in Dion-Jacobson Perovskite toward Ultrastable Light-Emitting Diodes. <i>Advanced Optical Materials</i> , <b>2021</b> , 9, 2100243	8.1	5
135	Controlled Synthesis of MoWTe Atomic Layers with Emergent Quantum States. <i>ACS Nano</i> , <b>2021</b> ,	16.7	2
134	Ultra-Narrowband Photodetector with High Responsivity Enabled by Integrating Monolayer J-Aggregate Organic Crystal with Graphene. <i>Advanced Optical Materials</i> , <b>2021</b> , 9, 2100158	8.1	5
133	Defect Etching of Phase-Transition-Assisted CVD-Grown 2H-MoTe. <i>Small</i> , <b>2021</b> , 17, e2102146	11	2
132	Enhancing light-matter interaction in 2D materials by optical micro/nano architectures for high-performance optoelectronic devices. <i>Information Materials</i> , <b>2021</b> , 3, 36-60	23.1	29
131	Uncovering the Electron-Phonon Interplay and Dynamical Energy-Dissipation Mechanisms of Hot Carriers in Hybrid Lead Halide Perovskites. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2003071	21.8	8
130	In Situ Ultrafast and Patterned Growth of Transition Metal Dichalcogenides from Inkjet-Printed Aqueous Precursors. <i>Advanced Materials</i> , <b>2021</b> , 33, e2100260	24	14
129	2D materials-based homogeneous transistor-memory architecture for neuromorphic hardware. <i>Science</i> , <b>2021</b> , 373, 1353-1358	33.3	46
128	Suppressed Phase Segregation in High-Humidity-Processed Dion-Jacobson Perovskite Solar Cells Toward High Efficiency and Stability. <i>Solar Rrl</i> , <b>2021</b> , 5, 2100555	7.1	2
127	Synthesis and Characterization of Metallic Janus MoSH Monolayer. <i>ACS Nano</i> , <b>2021</b> ,	16.7	5
126	Fully Biodegradable Water Droplet Energy Harvester Based on Leaves of Living Plants. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 56060-56067	9.5	23
125	High-speed infrared two-dimensional platinum diselenide photodetectors. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 211101	3.4	23
124	Bifunctional Effects of Trichloro(octyl)silane Modification on the Performance and Stability of a Perovskite Solar Cell via Microscopic Characterization Techniques. <i>ACS Applied Energy Materials</i> , <b>2020</b> , 3, 3302-3309	6.1	6

123	Efficient Electronic Transport in Partially Disordered Co <sub>3</sub> O <sub>4</sub> Nanosheets for Electrocatalytic Oxygen Evolution Reaction. <i>ACS Applied Energy Materials</i> , <b>2020</b> , 3, 3071-3081	6.1	14
122	Effects of Alkyl Chain Length on Crystal Growth and Oxidation Process of Two-Dimensional Tin Halide Perovskites. <i>ACS Energy Letters</i> , <b>2020</b> , 5, 1422-1429	20.1	62
121	Interlayer Cross-Linked 2D Perovskite Solar Cell with Uniform Phase Distribution and Increased Exciton Coupling. <i>Solar Rrl</i> , <b>2020</b> , 4, 1900578	7.1	24
120	Understanding Charge Transport in All-Inorganic Halide Perovskite Nanocrystal Thin-Film Field Effect Transistors. <i>ACS Energy Letters</i> , <b>2020</b> , 5, 2614-2623	20.1	15
119	Carbon Dot-Based Composite Films for Simultaneously Harvesting Raindrop Energy and Boosting Solar Energy Conversion Efficiency in Hybrid Cells. <i>ACS Nano</i> , <b>2020</b> , 14, 10359-10369	16.7	23
118	An Acoustic Meta-Skin Insulator. <i>Advanced Materials</i> , <b>2020</b> , 32, e2002251	24	14
117	Experimental Observation of Ultrahigh Mobility Anisotropy of Organic Semiconductors in the Two-Dimensional Limit. <i>ACS Applied Electronic Materials</i> , <b>2020</b> , 2, 2888-2894	4	1
116	Cascade Type-II 2D/3D Perovskite Heterojunctions for Enhanced Stability and Photovoltaic Efficiency. <i>Solar Rrl</i> , <b>2020</b> , 4, 2000282	7.1	9
115	Towards Scalable Fabrications and Applications of 2D Layered Material-based Vertical and Lateral Heterostructures. <i>Chemical Research in Chinese Universities</i> , <b>2020</b> , 36, 525-550	2.2	3
114	Size Modulation and Heterovalent Doping Facilitated Hybrid Organic and Perovskite Quantum Dot Bulk Heterojunction Solar Cells. <i>ACS Applied Energy Materials</i> , <b>2020</b> , 3, 11359-11367	6.1	10
113	Observation of Strong -Aggregate Light Emission in Monolayer Molecular Crystal on Hexagonal Boron Nitride. <i>Journal of Physical Chemistry A</i> , <b>2020</b> , 124, 7340-7345	2.8	4
112	Bound-States-in-Continuum Hybrid Integration of 2D Platinum Diselenide on Silicon Nitride for High-Speed Photodetectors. <i>ACS Photonics</i> , <b>2020</b> , 7, 2643-2649	6.3	13
111	Growth dynamics and photoresponse of the Wadsley phase V <sub>6</sub> O <sub>13</sub> crystals. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 6470-6477	7.1	4
110	Efficient Slantwise Aligned Dion-Jacobson Phase Perovskite Solar Cells Based on Trans-1,4-Cyclohexanediamine. <i>Small</i> , <b>2020</b> , 16, e2003098	11	20
109	Size and crystallinity control of dispersed VO <sub>2</sub> particles for modulation of metal-insulator transition temperature and hysteresis. <i>CrystEngComm</i> , <b>2019</b> , 21, 5749-5756	3.3	8
108	Ag-Doped Halide Perovskite Nanocrystals for Tunable Band Structure and Efficient Charge Transport. <i>ACS Energy Letters</i> , <b>2019</b> , 4, 534-541	20.1	63
107	Thermal and illumination effects on a PbI <sub>2</sub> nanoplate and its transformation to CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> perovskite. <i>CrystEngComm</i> , <b>2019</b> , 21, 736-740	3.3	3
106	Perovskite Bifunctional Device with Improved Electroluminescent and Photovoltaic Performance through Interfacial Energy-Band Engineering. <i>Advanced Materials</i> , <b>2019</b> , 31, e1902543	24	46

105	van der Waals Transition-Metal Oxide for Vis-MIR Broadband Photodetection via Intercalation Strategy. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 15741-15747	9.5	24
104	Interlayer Interaction Enhancement in Ruddlesden-Popper Perovskite Solar Cells toward High Efficiency and Phase Stability. <i>ACS Energy Letters</i> , <b>2019</b> , 4, 1025-1033	20.1	50
103	Thickness-Dependent Optical Properties and In-Plane Anisotropic Raman Response of the 2D $\text{In}_2\text{S}_3$ . <i>Advanced Optical Materials</i> , <b>2019</b> , 7, 1901085	8.1	25
102	An Interlayer with Strong Pb-Cl Bond Delivers Ultraviolet-Filter-Free, Efficient, and Photostable Perovskite Solar Cells. <i>iScience</i> , <b>2019</b> , 21, 217-227	6.1	28
101	Hybrid 2D-Material Photonics with Bound States in the Continuum. <i>Advanced Optical Materials</i> , <b>2019</b> , 7, 1901306	8.1	18
100	Direct Observation of Charge Injection of Graphene in the Graphene/WSe Heterostructure by Optical-Pump Terahertz-Probe Spectroscopy. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 47501-47506	9.5	11
99	A centrifugal microfluidic pressure regulator scheme for continuous concentration control in droplet-based microreactors. <i>Lab on A Chip</i> , <b>2019</b> , 19, 3870-3879	7.2	8
98	Guanidinium doping enabled low-temperature fabrication of high-efficiency all-inorganic $\text{CsPbI}_2\text{Br}$ perovskite solar cells. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 27640-27647	13	41
97	Strong optical response and light emission from a monolayer molecular crystal. <i>Nature Communications</i> , <b>2019</b> , 10, 5589	17.4	36
96	Tertiary Amines Differentiated from Primary and Secondary Amines by Active Ester-Functionalized Hexabenzoperylene in Field Effect Transistors. <i>Chemistry - an Asian Journal</i> , <b>2019</b> , 14, 1676-1680	4.5	8
95	Highly Confined and Tunable Hyperbolic Phonon Polaritons in Van Der Waals Semiconducting Transition Metal Oxides. <i>Advanced Materials</i> , <b>2018</b> , 30, e1705318	24	118
94	Recent Advances of Solution-Processed Metal Oxide Thin-Film Transistors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 25878-25901	9.5	114
93	Phonon Polaritons: Highly Confined and Tunable Hyperbolic Phonon Polaritons in Van Der Waals Semiconducting Transition Metal Oxides (Adv. Mater. 13/2018). <i>Advanced Materials</i> , <b>2018</b> , 30, 1870091	24	1
92	Deterministic and Etching-Free Transfer of Large-Scale 2D Layered Materials for Constructing Interlayer Coupled van der Waals Heterostructures. <i>Advanced Materials Technologies</i> , <b>2018</b> , 3, 1700282	6.8	20
91	Broadside Nanoantennas Made of Single Silver Nanorods. <i>ACS Nano</i> , <b>2018</b> , 12, 1720-1731	16.7	15
90	Fused-Ring Electron Acceptor ITIC-Th: A Novel Stabilizer for Halide Perovskite Precursor Solution. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1703399	21.8	80
89	Enhanced Photoresponse in Interfacial Gated Graphene Phototransistor With Ultrathin $\text{Al}_2\text{O}_3$ Dielectric. <i>IEEE Electron Device Letters</i> , <b>2018</b> , 39, 987-990	4.4	6
88	1T Transition Metal Telluride Atomic Layers for Plasmon-Free SERS at Femtomolar Levels. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 8696-8704	16.4	114

87	General Nondestructive Passivation by 4-Fluoroaniline for Perovskite Solar Cells with Improved Performance and Stability. <i>Small</i> , <b>2018</b> , 14, e1803350	11	52
86	Graphene/In <sub>2</sub> S <sub>3</sub> van der Waals Heterostructure for Ultrasensitive Photodetection. <i>ACS Photonics</i> , <b>2018</b> , 5, 4912-4919	6.3	28
85	Graphene controlled Brewster angle device for ultra broadband terahertz modulation. <i>Nature Communications</i> , <b>2018</b> , 9, 4909	17.4	79
84	Abnormal Synergetic Effect of Organic and Halide Ions on the Stability and Optoelectronic Properties of a Mixed Perovskite via In Situ Characterizations. <i>Advanced Materials</i> , <b>2018</b> , 30, e1801562	24	41
83	Improving the Quality of the Si/Cu <sub>2</sub> O Interface by Methyl-Group Passivation and Its Application in Photovoltaic Devices. <i>Advanced Materials Interfaces</i> , <b>2017</b> , 4, 1600833	4.6	4
82	Realization of vertical and lateral van der Waals heterojunctions using two-dimensional layered organic semiconductors. <i>Nano Research</i> , <b>2017</b> , 10, 1336-1344	10	23
81	Epitaxial Stitching and Stacking Growth of Atomically Thin Transition-Metal Dichalcogenides (TMDCs) Heterojunctions. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1603884	15.6	57
80	Controlled Electrochemical Deposition of Large-Area MoS <sub>2</sub> on Graphene for High-Responsivity Photodetectors. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1603998	15.6	39
79	Growth of Large-Scale, Large-Size, Few-Layered HfMoO on SiO and Its Photoresponse Mechanism. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 5543-5549	9.5	31
78	Large-Grain Formamidinium PbI <sub>3</sub> Br <sub>x</sub> for High-Performance Perovskite Solar Cells via Intermediate Halide Exchange. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1601882	21.8	61
77	A self-powered high-performance graphene/silicon ultraviolet photodetector with ultra-shallow junction: breaking the limit of silicon?. <i>Npj 2D Materials and Applications</i> , <b>2017</b> , 1,	8.8	144
76	Crystallinity Preservation and Ion Migration Suppression through Dual Ion Exchange Strategy for Stable Mixed Perovskite Solar Cells. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1700118	21.8	58
75	Highly Sensitive and Broadband Organic Photodetectors with Fast Speed Gain and Large Linear Dynamic Range at Low Forward Bias. <i>Small</i> , <b>2017</b> , 13, 1603260	11	79
74	Perovskite Solar Cells: Large-Grain Formamidinium PbI <sub>3</sub> Br <sub>x</sub> for High-Performance Perovskite Solar Cells via Intermediate Halide Exchange (Adv. Energy Mater. 12/2017). <i>Advanced Energy Materials</i> , <b>2017</b> , 7,	21.8	2
73	Graphene and related two-dimensional materials: Structure-property relationships for electronics and optoelectronics. <i>Applied Physics Reviews</i> , <b>2017</b> , 4, 021306	17.3	368
72	Flexible Piezoelectric-Induced Pressure Sensors for Static Measurements Based on Nanowires/Graphene Heterostructures. <i>ACS Nano</i> , <b>2017</b> , 11, 4507-4513	16.7	315
71	High-Performance Broadband Floating-Base Bipolar Phototransistor Based on WSe <sub>2</sub> /BP/MoS <sub>2</sub> Heterostructure. <i>ACS Photonics</i> , <b>2017</b> , 4, 823-829	6.3	66
70	Centimeter-Scale CVD Growth of Highly Crystalline Single-Layer MoS Film with Spatial Homogeneity and the Visualization of Grain Boundaries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 12073-12081	9.5	99

69	Synergistic Effects of Plasmonics and Electron Trapping in Graphene Short-Wave Infrared Photodetectors with Ultrahigh Responsivity. <i>ACS Nano</i> , <b>2017</b> , 11, 430-437	16.7	153
68	Graphene Based Terahertz Light Modulator in Total Internal Reflection Geometry. <i>Advanced Optical Materials</i> , <b>2017</b> , 5, 1600697	8.1	35
67	Analyzing the Carrier Mobility in Transition-Metal Dichalcogenide MoS <sub>2</sub> Field-Effect Transistors. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1604093	15.6	178
66	A Simple Method for Synthesis of High-Quality Millimeter-Scale 1T Transition-Metal Telluride and Near-Field Nanooptical Properties. <i>Advanced Materials</i> , <b>2017</b> , 29, 1700704	24	67
65	High-Quality Monolithic Graphene Films via Laterally Stitched Growth and Structural Repair of Isolated Flakes for Transparent Electronics. <i>Chemistry of Materials</i> , <b>2017</b> , 29, 7808-7815	9.6	35
64	Ultrahigh mobility and efficient charge injection in monolayer organic thin-film transistors on boron nitride. <i>Science Advances</i> , <b>2017</b> , 3, e1701186	14.3	115
63	Hybrid graphene tunneling photoconductor with interface engineering towards fast photoresponse and high responsivity. <i>Npj 2D Materials and Applications</i> , <b>2017</b> , 1,	8.8	62
62	Integration of inverse nanocone array based bismuth vanadate photoanodes and bandgap-tunable perovskite solar cells for efficient self-powered solar water splitting. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 19091-19097	13	33
61	Room temperature high-detectivity mid-infrared photodetectors based on black arsenic phosphorus. <i>Science Advances</i> , <b>2017</b> , 3, e1700589	14.3	269
60	Ultrathin efficient perovskite solar cells employing a periodic structure of a composite hole conductor for elevated plasmonic light harvesting and hole collection. <i>Nanoscale</i> , <b>2016</b> , 8, 6290-9	7.7	61
59	Nonstoichiometric acid-base reaction as reliable synthetic route to highly stable CH <sub>3NH<sub>3</sub>PbI<sub>3</sub></sub> perovskite film. <i>Nature Communications</i> , <b>2016</b> , 7, 13503	17.4	87
58	Facet-Dependent Property of Sequentially Deposited Perovskite Thin Films: Chemical Origin and Self-Annihilation. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 32366-32375	9.5	17
57	Epitaxial Ultrathin Organic Crystals on Graphene for High-Efficiency Phototransistors. <i>Advanced Materials</i> , <b>2016</b> , 28, 5200-5	24	109
56	Fibrous Epoxy Substrate with High Thermal Conductivity and Low Dielectric Property for Flexible Electronics. <i>Advanced Electronic Materials</i> , <b>2016</b> , 2, 1500485	6.4	45
55	Flexible dielectric papers based on biodegradable cellulose nanofibers and carbon nanotubes for dielectric energy storage. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 6037-6044	7.1	59
54	Unusual electronic and magnetic properties of lateral phosphorene/WSe <sub>2</sub> heterostructures. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 6657-6665	7.1	8
53	Rapid growth of high quality perovskite crystal by solvent mixing. <i>CrystEngComm</i> , <b>2016</b> , 18, 1184-1189	3.3	5
52	Near-Infrared Photodetector Based on MoS <sub>2</sub> /Black Phosphorus Heterojunction. <i>ACS Photonics</i> , <b>2016</b> , 3, 692-699	6.3	330

51	Quantitative Analysis of Scattering Mechanisms in Highly Crystalline CVD MoS <sub>2</sub> through a Self-Limited Growth Strategy by Interface Engineering. <i>Small</i> , <b>2016</b> , 12, 438-45	11	19
50	Electron Mobility Exceeding 10 cm <sup>2</sup> V <sup>-1</sup> s <sup>-1</sup> and Band-Like Charge Transport in Solution-Processed n-Channel Organic Thin-Film Transistors. <i>Advanced Materials</i> , <b>2016</b> , 28, 5276-83	24	149
49	Precise, Self-Limited Epitaxy of Ultrathin Organic Semiconductors and Heterojunctions Tailored by van der Waals Interactions. <i>Nano Letters</i> , <b>2016</b> , 16, 3754-9	11.5	81
48	Near-Infrared Photoresponse of One-Sided Abrupt MAPbI <sub>3</sub> /TiO <sub>2</sub> Heterojunction through a Tunneling Process. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 8545-8554	15.6	21
47	Observation of a giant two-dimensional band-piezoelectric effect on biaxial-strained graphene. <i>NPG Asia Materials</i> , <b>2015</b> , 7, e154-e154	10.3	46
46	Monolayer Field-Effect Transistors of Nonplanar Organic Semiconductors with Brickwork Arrangement. <i>Advanced Materials</i> , <b>2015</b> , 27, 3418-23	24	71
45	Hybrid halide perovskite solar cell precursors: colloidal chemistry and coordination engineering behind device processing for high efficiency. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 4460-8 <sup>16.4</sup>	16.4	481
44	A novel solid-to-solid electrocatalysis of graphene oxide reduction on copper electrode. <i>RSC Advances</i> , <b>2015</b> , 5, 87987-87992	3.7	6
43	Electronic Properties of MoS <sub>2</sub> -WS <sub>2</sub> Heterostructures Synthesized with Two-Step Lateral Epitaxial Strategy. <i>ACS Nano</i> , <b>2015</b> , 9, 9868-76	16.7	225
42	Variable electronic properties of lateral phosphorene-graphene heterostructures. <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 31685-92	3.6	14
41	Lateral Built-In Potential of Monolayer MoS <sub>2</sub> -WS <sub>2</sub> In-Plane Heterostructures by a Shortcut Growth Strategy. <i>Advanced Materials</i> , <b>2015</b> , 27, 6431-7	24	155
40	High Responsivity, Broadband, and Fast Graphene/Silicon Photodetector in Photoconductor Mode. <i>Advanced Optical Materials</i> , <b>2015</b> , 3, 1207-1214	8.1	111
39	Graphene photodetector integrated on silicon nitride waveguide. <i>Journal of Applied Physics</i> , <b>2015</b> , 117, 144504	2.5	39
38	Enhanced Performance of Polymeric Bulk Heterojunction Solar Cells via Molecular Doping with TFSA. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 13415-21	9.5	23
37	Aqueous Solution-Deposited Gallium Oxide Dielectric for Low-Temperature, Low-Operating-Voltage Indium Oxide Thin-Film Transistors: A Facile Route to Green Oxide Electronics. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 14720-5	9.5	55
36	Facile and environmentally friendly solution-processed aluminum oxide dielectric for low-temperature, high-performance oxide thin-film transistors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 5803-10	9.5	118
35	High-performance graphene-based hole conductor-free perovskite solar cells: Schottky junction enhanced hole extraction and electron blocking. <i>Small</i> , <b>2015</b> , 11, 2269-74	11	206
34	Nanoantenna-Sandwiched Graphene with Giant Spectral Tuning in the Visible-to-Near-Infrared Region. <i>Advanced Optical Materials</i> , <b>2014</b> , 2, 162-170	8.1	35

33	Configuration-dependent electronic and magnetic properties of graphene monolayers and nanoribbons functionalized with aryl groups. <i>Journal of Chemical Physics</i> , <b>2014</b> , 140, 044712	3.9	8
32	In-Plane Optical Absorption and Free Carrier Absorption in Graphene-on-Silicon Waveguides. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2014</b> , 20, 43-48	3.8	64
31	Low-temperature facile solution-processed gate dielectric for combustion derived oxide thin film transistors. <i>RSC Advances</i> , <b>2014</b> , 4, 54729-54739	3.7	42
30	Ternary Bulk Heterojunction Photovoltaic Cells Composed of Small Molecule Donor Additive as Cascade Material. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 20094-20099	3.8	26
29	The role of solution-processed high- $\kappa$ gate dielectrics in electrical performance of oxide thin-film transistors. <i>Journal of Materials Chemistry C</i> , <b>2014</b> , 2, 5389	7.1	119
28	Ternary blend bulk heterojunction photovoltaic cells with an ambipolar small molecule as the cascade material. <i>RSC Advances</i> , <b>2014</b> , 4, 1087-1092	3.7	20
27	Ultra-Low Work Function Transparent Electrodes Achieved by Naturally Occurring Biomaterials for Organic Optoelectronic Devices. <i>Advanced Materials Interfaces</i> , <b>2014</b> , 1, 1400215	4.6	30
26	Facile passivation of solution-processed InZnO thin-film transistors by octadecylphosphonic acid self-assembled monolayers at room temperature. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 173504	3.4	29
25	Two-dimensional quasi-freestanding molecular crystals for high-performance organic field-effect transistors. <i>Nature Communications</i> , <b>2014</b> , 5, 5162	17.4	270
24	Influence of Annealing on Raman Spectrum of Graphene in Different Gaseous Environments. <i>Spectroscopy Letters</i> , <b>2014</b> , 47, 465-470	1.1	7
23	Spectroscopic Study of Electron and Hole Polarons in a High-Mobility Donor-Acceptor Conjugated Copolymer. <i>Journal of Physical Chemistry C</i> , <b>2013</b> , 117, 6835-6841	3.8	28
22	High-responsivity graphene/silicon-heterostructure waveguide photodetectors. <i>Nature Photonics</i> , <b>2013</b> , 7, 888-891	33.9	584
21	Controllable modulation of the electronic properties of graphene and silicene by interface engineering and pressure. <i>Journal of Materials Chemistry C</i> , <b>2013</b> , 1, 4869	7.1	28
20	Low-voltage flexible pentacene thin film transistors with a solution-processed dielectric and modified copper source-drain electrodes. <i>Journal of Materials Chemistry C</i> , <b>2013</b> , 1, 2585	7.1	12
19	Properties and Devices of Single One-Dimensional Nanostructure: Application of Scanning Probe Microscopy <b>2013</b> , 339-358		
18	Self-Assembled Monolayers of Phosphonic Acids with Enhanced Surface Energy for High-Performance Solution-Processed N-Channel Organic Thin-Film Transistors. <i>Angewandte Chemie</i> , <b>2013</b> , 125, 6342-6347	3.6	15
17	Study of the electron standing wave states in scanning tunneling spectroscopy of Si(111) surface. <i>Surface and Interface Analysis</i> , <b>2013</b> , 45, 962-967	1.5	2
16	Induced crystallization of rubrene with diazapentacene as the template. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 4396		18

15	P-N Junction Formation in Electron-beam Irradiated Graphene Step. <i>Materials Research Society Symposia Proceedings</i> , <b>2012</b> , 1407, 224		
14	Derivitization of pristine graphene for bulk heterojunction polymeric photovoltaic devices. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 16723		15
13	The influence of gate dielectrics on a high-mobility n-type conjugated polymer in organic thin-film transistors. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 033301	3-4	37
12	Synthesis of Multishell Carbon Nanotube Composites via Template Method. <i>Chinese Journal of Chemical Physics</i> , <b>2011</b> , 24, 206-210	0.9	2
11	Highly Sensitive Glucose Biosensors Based on Organic Electrochemical Transistors Using Platinum Gate Electrodes Modified with Enzyme and Nanomaterials. <i>Advanced Functional Materials</i> , <b>2011</b> , 21, 2264-2272 <sup>156</sup> <sup>203</sup>		
10	Single crystal n-channel field effect transistors from solution-processed silylethynylated tetraazapentacene. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 15201		46
9	Stability Improvement of Polymer Based Solar Cells by Thermally Evaporated Cr2O3 Interfacial Layer. <i>Materials Research Society Symposia Proceedings</i> , <b>2011</b> , 1312, 1		
8	Electrical switching behavior from ultrathin potential barrier of self-assembly molecules tuned by interfacial charge trapping. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 133303	3-4	15
7	Performance and Stability Improvement of P3HT:PCBM-Based Solar Cells by Thermally Evaporated Chromium Oxide (CrOx) Interfacial Layer. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2010</b> , 2, 2699-2702	9-5	65
6	Induced Crystallization of Rubrene in Thin-Film Transistors (Adv. Mater. 30/2010). <i>Advanced Materials</i> , <b>2010</b> , 22, n/a-n/a	24	3
5	A Meaningful Analogue of Pentacene: Charge Transport, Polymorphs, and Electronic Structures of Dihydrodiazapentacene. <i>Chemistry of Materials</i> , <b>2009</b> , 21, 1400-1405	9.6	56
4	Stable field emission with low threshold field from amorphous carbon films due to layer-by-layer hydrogen plasma annealing. <i>Journal of Applied Physics</i> , <b>2002</b> , 91, 5434-5437	2.5	5
3	VERY LOW THRESHOLD ELECTRON FIELD EMISSION FROM AMORPHOUS CARBON FILMS WITH HYDROGEN DILUTION. <i>International Journal of Modern Physics B</i> , <b>2002</b> , 16, 988-992	1.1	
2	Vacuum electron emission with low turn-on electric field from hydrogenated amorphous carbon thin films. <i>Applied Physics Letters</i> , <b>2001</b> , 79, 141-143	3-4	19
1	Investigation on the Fano-Type Asymmetry in Atomic Semiconductor Coupled to the Plasmonic Lattice. <i>ACS Photonics</i> ,	6.3	1