

Yunqi Liu

List of Publications by Citations

Source: <https://exaly.com/author-pdf/249218/yunqi-liu-publications-by-citations.pdf>

Version: 2024-04-26

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.

329
papers

29,198
citations

73
h-index

167
g-index

362
ext. papers

32,558
ext. citations

12.2
avg, IF

7.21
L-index

#	Paper	IF	Citations
329	Aggregation-induced emission of 1-methyl-1,2,3,4,5-pentaphenylsilole. <i>Chemical Communications</i> , 2001 , 1740-1	5.8	5057
328	Semiconducting π -conjugated systems in field-effect transistors: a material odyssey of organic electronics. <i>Chemical Reviews</i> , 2012 , 112, 2208-67	68.1	2738
327	Synthesis of N-doped graphene by chemical vapor deposition and its electrical properties. <i>Nano Letters</i> , 2009 , 9, 1752-8	11.5	2513
326	Chemical doping of graphene. <i>Journal of Materials Chemistry</i> , 2011 , 21, 3335-3345		1227
325	A stable solution-processed polymer semiconductor with record high-mobility for printed transistors. <i>Scientific Reports</i> , 2012 , 2, 754	4.9	733
324	Highly π -extended copolymers with diketopyrrolopyrrole moieties for high-performance field-effect transistors. <i>Advanced Materials</i> , 2012 , 24, 4618-22	24	649
323	25th anniversary article: recent advances in n-type and ambipolar organic field-effect transistors. <i>Advanced Materials</i> , 2013 , 25, 5372-91	24	541
322	Efficient blue emission from siloles. <i>Journal of Materials Chemistry</i> , 2001 , 11, 2974-2978		514
321	Functional organic field-effect transistors. <i>Advanced Materials</i> , 2010 , 22, 4427-47	24	481
320	Advances in organic field-effect transistors. <i>Journal of Materials Chemistry</i> , 2005 , 15, 53		372
319	Uniform hexagonal graphene flakes and films grown on liquid copper surface. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 7992-6	11.5	351
318	Patterned Graphene as Source/Drain Electrodes for Bottom-Contact Organic Field-Effect Transistors. <i>Advanced Materials</i> , 2008 , 20, 3289-3293	24	339
317	Controllable synthesis of graphene and its applications. <i>Advanced Materials</i> , 2010 , 22, 3225-41	24	337
316	Facile Synthesis of 3D MnO ₂ /Graphene and Carbon Nanotube/Graphene Composite Networks for High-Performance, Flexible, All-Solid-State Asymmetric Supercapacitors. <i>Advanced Energy Materials</i> , 2014 , 4, 1400064	21.8	330
315	Design of High-Mobility Diketopyrrolopyrrole-Based π -Conjugated Copolymers for Organic Thin-Film Transistors. <i>Advanced Materials</i> , 2015 , 27, 3589-606	24	304
314	Interface engineering: an effective approach toward high-performance organic field-effect transistors. <i>Accounts of Chemical Research</i> , 2009 , 42, 1573-83	24.3	285
313	Scalable Production of a Few-Layer MoS ₂ /WS ₂ Vertical Heterojunction Array and Its Application for Photodetectors. <i>ACS Nano</i> , 2016 , 10, 573-80	16.7	283

312	Super-Hydrophobicity of Large-Area Honeycomb-Like Aligned Carbon Nanotubes. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 9274-9276	3.4	267
311	Core-expanded naphthalene diimides fused with 2-(1,3-dithiol-2-ylidene)malonitrile groups for high-performance, ambient-stable, solution-processed n-channel organic thin film transistors. <i>Journal of the American Chemical Society</i> , 2010 , 132, 3697-9	16.4	255
310	New Series of Blue-Emitting and Electron-Transporting Copolymers Based on Fluorene. <i>Macromolecules</i> , 2002 , 35, 2529-2537	5.5	222
309	Experimental techniques for the fabrication and characterization of organic thin films for field-effect transistors. <i>Chemical Reviews</i> , 2011 , 111, 3358-406	68.1	215
308	A Solution-Processable Small Molecule Based on Benzodithiophene and Diketopyrrolopyrrole for High-Performance Organic Solar Cells. <i>Advanced Energy Materials</i> , 2013 , 3, 1166-1170	21.8	195
307	A Ferroelectric/Electrochemical Modulated Organic Synapse for Ultraflexible, Artificial Visual-Perception System. <i>Advanced Materials</i> , 2018 , 30, e1803961	24	191
306	Monolayer hexagonal boron nitride films with large domain size and clean interface for enhancing the mobility of graphene-based field-effect transistors. <i>Advanced Materials</i> , 2014 , 26, 1559-64	24	178
305	Insight into High-Performance Conjugated Polymers for Organic Field-Effect Transistors. <i>Chem</i> , 2018 , 4, 2748-2785	16.2	176
304	All-solution-processed, high-performance n-channel organic transistors and circuits: toward low-cost ambient electronics. <i>Advanced Materials</i> , 2011 , 23, 2448-53	24	164
303	Multibit Storage of Organic Thin-Film Field-Effect Transistors. <i>Advanced Materials</i> , 2009 , 21, 1954-1959	24	164
302	Equiangular hexagon-shape-controlled synthesis of graphene on copper surface. <i>Advanced Materials</i> , 2011 , 23, 3522-5	24	162
301	High-Performance, Air-Stable Field-Effect Transistors Based on Heteroatom-Substituted Naphthalenediimide-Benzothiadiazole Copolymers Exhibiting Ultrahigh Electron Mobility up to 8.5 cm ² V ⁻¹ s. <i>Advanced Materials</i> , 2017 , 29, 1602410	24	158
300	Immobilization of tetra-tert-butylphthalocyanines on carbon nanotubes: a first step towards the development of new nanomaterials. <i>Journal of Materials Chemistry</i> , 2002 , 12, 1636-1639		146
299	Inkjet printing high-resolution, large-area graphene patterns by coffee-ring lithography. <i>Advanced Materials</i> , 2012 , 24, 436-40	24	138
298	Organic Solar Cells Based on a 2D Benzo[1,2-b:4,5-b']difuran-Conjugated Polymer with High-Power Conversion Efficiency. <i>Advanced Materials</i> , 2015 , 27, 6969-75	24	137
297	Self-organized graphene crystal patterns. <i>NPG Asia Materials</i> , 2013 , 5, e36-e36	10.3	137
296	Core-Expanded Naphthalene Diimides Fused with Sulfur Heterocycles and End-Capped with Electron-Withdrawing Groups for Air-Stable Solution-Processed n-Channel Organic Thin Film Transistors. <i>Chemistry of Materials</i> , 2011 , 23, 1204-1215	9.6	136
295	Scalable synthesis of freestanding sandwich-structured graphene/polyaniline/graphene nanocomposite paper for flexible all-solid-state supercapacitor. <i>Scientific Reports</i> , 2015 , 5, 9359	4.9	135

- 294 Organic printed photonics: From microring lasers to integrated circuits. *Science Advances*, **2015**, 1, e1500253 131
- 293 Novel functional conjugative hyperbranched polymers with aggregation-induced emission: synthesis through one-pot "A₂+B₄" polymerization and application as explosive chemsensors and PLEDs. *Macromolecular Rapid Communications*, **2012**, 33, 164-71 4.8 129
- 292 A conjugated hyperbranched polymer constructed from carbazole and tetraphenylethylene moieties: convenient synthesis through one-pot A₂ + B₄Suzuki polymerization, aggregation-induced enhanced emission, and application as explosive chemosensors and PLEDs. *Journal of Materials Chemistry*, **2012**, 22, 6374 129
- 291 Engineering of the dielectric/semiconductor interface in organic field-effect transistors. *Journal of Materials Chemistry*, **2010**, 20, 2599 128
- 290 Reduction of graphene oxide to highly conductive graphene by Lawesson's reagent and its electrical applications. *Journal of Materials Chemistry C*, **2013**, 1, 3104 7.1 127
- 289 High-Performance Air-Stable Bipolar Field-Effect Transistors of Organic Single-Crystalline Ribbons with an Air-Gap Dielectric. *Advanced Materials*, **2008**, 20, 1511-1515 24 126
- 288 Fractal etching of graphene. *Journal of the American Chemical Society*, **2013**, 135, 6431-4 16.4 123
- 287 High-Performance Phototransistors Based on Organic Microribbons Prepared by a Solution Self-Assembly Process. *Advanced Functional Materials*, **2010**, 20, 1019-1024 15.6 116
- 286 Near-equilibrium chemical vapor deposition of high-quality single-crystal graphene directly on various dielectric substrates. *Advanced Materials*, **2014**, 26, 1348-53 24 115
- 285 Graphene-coated silica as a highly efficient sorbent for residual organophosphorus pesticides in water. *Journal of Materials Chemistry A*, **2013**, 1, 1875-1884 13 114
- 284 Naphthalenediimide-Based Copolymers Incorporating Vinyl-Linkages for High-Performance Ambipolar Field-Effect Transistors and Complementary-Like Inverters under Air. *Chemistry of Materials*, **2013**, 25, 3589-3596 9.6 111
- 283 The Intramolecular Junctions of Carbon Nanotubes. *Advanced Materials*, **2008**, 20, 2815-2841 24 111
- 282 Black Arsenic: A Layered Semiconductor with Extreme In-Plane Anisotropy. *Advanced Materials*, **2018**, 30, e1800754 24 109
- 281 Controllable unzipping for intramolecular junctions of graphene nanoribbons and single-walled carbon nanotubes. *Nature Communications*, **2013**, 4, 1374 17.4 109
- 280 Synthesis of large-area, few-layer graphene on iron foil by chemical vapor deposition. *Nano Research*, **2011**, 4, 1208-1214 10 106
- 279 Exploration of Near-Infrared Organic Photodetectors. *Chemistry of Materials*, **2019**, 31, 6359-6379 9.6 101
- 278 Encapsulating Pd nanoparticles in double-shelled graphene@carbon hollow spheres for excellent chemical catalytic property. *Scientific Reports*, **2014**, 4, 4053 4.9 97
- 277 Flexible, low-voltage and high-performance polymer thin-film transistors and their application in photo/thermal detectors. *Advanced Materials*, **2014**, 26, 3631-6 24 97

276	Low bandgap π -conjugated copolymers based on fused thiophenes and benzothiadiazole: Synthesis and structure-property relationship study. <i>Journal of Polymer Science Part A</i> , 2009 , 47, 5498-5508	2.5	97
275	Isoindigo-Based Polymers with Small Effective Masses for High-Mobility Ambipolar Field-Effect Transistors. <i>Advanced Materials</i> , 2017 , 29, 1702115	24	91
274	Substrate-free ultra-flexible organic field-effect transistors and five-stage ring oscillators. <i>Advanced Materials</i> , 2013 , 25, 5455-60	24	91
273	Asymmetrical Small Molecule Acceptor Enabling Nonfullerene Polymer Solar Cell with Fill Factor Approaching 79%. <i>ACS Energy Letters</i> , 2018 , 3, 1760-1768	20.1	90
272	First synthesis of 2,3,6,7-tetrabromonaphthalene diimide. <i>Organic Letters</i> , 2007 , 9, 3917-20	6.2	86
271	High-Performance Organic Field-Effect Transistors with Low-Cost Copper Electrodes. <i>Advanced Materials</i> , 2008 , 20, 1286-1290	24	85
270	Small-Molecule Solar Cells with Fill Factors up to 0.75 via a Layer-by-Layer Solution Process. <i>Advanced Energy Materials</i> , 2014 , 4, 1300626	21.8	84
269	Large-area, flexible imaging arrays constructed by light-charge organic memories. <i>Scientific Reports</i> , 2013 , 3, 1080	4.9	84
268	High-Mobility Conjugated Polymers Based on Fused-Thiophene Building Blocks. <i>Macromolecular Chemistry and Physics</i> , 2011 , 212, 428-443	2.6	84
267	Regioregular Bis-Pyridal[2,1,3]thiadiazole-Based Semiconducting Polymer for High-Performance Ambipolar Transistors. <i>Journal of the American Chemical Society</i> , 2017 , 139, 17735-17738	16.4	83
266	Bis-Diketopyrrolopyrrole Moiety as a Promising Building Block to Enable Balanced Ambipolar Polymers for Flexible Transistors. <i>Advanced Materials</i> , 2017 , 29, 1606162	24	82
265	Controllable chemical vapor deposition growth of few layer graphene for electronic devices. <i>Accounts of Chemical Research</i> , 2013 , 46, 106-15	24.3	82
264	Electrical assembly and reduction of graphene oxide in a single solution step for use in flexible sensors. <i>Advanced Materials</i> , 2011 , 23, 4626-30	24	81
263	Design and effective synthesis methods for high-performance polymer semiconductors in organic field-effect transistors. <i>Materials Chemistry Frontiers</i> , 2017 , 1, 2423-2456	7.8	80
262	Improvements in Stability and Performance of N,N'-Dialkyl Perylene Diimide-Based n-Type Thin-Film Transistors. <i>Advanced Materials</i> , 2009 , 21, 1631-1635	24	80
261	Phase dependence of single crystalline transistors of tetrathiafulvalene. <i>Applied Physics Letters</i> , 2007 , 91, 123505	3.4	79
260	New Donor-Acceptor-Donor Molecules with Pechmann Dye as the Core Moiety for Solution-Processed Good-Performance Organic Field-Effect Transistors. <i>Chemistry of Materials</i> , 2013 , 25, 471-478	9.6	76
259	Growth and Etching of Monolayer Hexagonal Boron Nitride. <i>Advanced Materials</i> , 2015 , 27, 4858-64	24	75

258	When Flexible Organic Field-Effect Transistors Meet Biomimetics: A Prospective View of the Internet of Things. <i>Advanced Materials</i> , 2020 , 32, e1901493	24	75
257	Diketopyrrolopyrrole-Based EConjugated Copolymer Containing EUnsubstituted Quintetthiophene Unit: A Promising Material Exhibiting High Hole-Mobility for Organic Thin-Film Transistors. <i>Chemistry of Materials</i> , 2012 , 24, 4350-4356	9.6	74
256	A Retina-Like Dual Band Organic Photosensor Array for Filter-Free Near-Infrared-to-Memory Operations. <i>Advanced Materials</i> , 2017 , 29, 1701772	24	73
255	Van der Waals Epitaxial Growth of Atomic Layered HfS Crystals for Ultrasensitive Near-Infrared Phototransistors. <i>Advanced Materials</i> , 2017 , 29, 1700439	24	73
254	Solution processed organic field-effect transistors and their application in printed logic circuits. <i>Journal of Materials Chemistry</i> , 2010 , 20, 7059		73
253	High-Performance Organic Transistor Memory Elements with Steep Flanks of Hysteresis. <i>Advanced Functional Materials</i> , 2008 , 18, 2593-2601	15.6	73
252	Wide-Energy-Gap Host Materials for Blue Phosphorescent Organic Light-Emitting Diodes. <i>Chemistry of Materials</i> , 2009 , 21, 1333-1342	9.6	72
251	Hierarchy of graphene wrinkles induced by thermal strain engineering. <i>Applied Physics Letters</i> , 2013 , 103, 251610	3.4	71
250	Ultrasensitive and selective sensing of heavy metal ions with modified graphene. <i>Chemical Communications</i> , 2013 , 49, 6492-4	5.8	71
249	Sequence of Silicon Monolayer Structures Grown on a Ru Surface: from a Herringbone Structure to Silicene. <i>Nano Letters</i> , 2017 , 17, 1161-1166	11.5	67
248	Organic thin-film transistors of phthalocyanines. <i>Pure and Applied Chemistry</i> , 2008 , 80, 2231-2240	2.1	66
247	Novel global-like second-order nonlinear optical dendrimers: convenient synthesis through powerful click chemistry and large NLO effects achieved by using simple azo chromophore. <i>Chemical Science</i> , 2012 , 3, 1256	9.4	65
246	Heteroatom substituted organic/polymeric semiconductors and their applications in field-effect transistors. <i>Advanced Materials</i> , 2014 , 26, 6898-904	24	64
245	Anthra[2,3-b]benzo[d]thiophene: An Air-Stable Asymmetric Organic Semiconductor with High Mobility at Room Temperature. <i>Chemistry of Materials</i> , 2008 , 20, 4188-4190	9.6	64
244	Conjugated Polymers of Rylene Diimide and Phenothiazine for n-Channel Organic Field-Effect Transistors. <i>Macromolecules</i> , 2012 , 45, 4115-4121	5.5	63
243	Organic thin film transistors based on stable amorphous ladder tetraazapentacenes semiconductors. <i>Journal of Materials Chemistry</i> , 2005 , 15, 4894		61
242	New tetrathiafulvalene fused-naphthalene diimides for solution-processible and air-stable p-type and ambipolar organic semiconductors. <i>Chemical Science</i> , 2012 , 3, 2530	9.4	60
241	Control Synthesis of Silver Nanosheets, Chainlike Sheets, and Microwires via a Simple SolventThermal Method. <i>Crystal Growth and Design</i> , 2007 , 7, 900-904	3.5	60

240	Governing Rule for Dynamic Formation of Grain Boundaries in Grown Graphene. <i>ACS Nano</i> , 2015 , 9, 5792-5807	6.7	59
239	An Acetylene-Containing Perylene Diimide Copolymer for High Mobility n-Channel Transistor in Air. <i>Macromolecules</i> , 2013 , 46, 2152-2158	5.5	58
238	Monolayer Two-dimensional Molecular Crystals for an Ultrasensitive OFET-based Chemical Sensor. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 4380-4384	16.4	57
237	New Azo Chromophore-Containing Conjugated Polymers: Facile Synthesis by Using Click Chemistry and Enhanced Nonlinear Optical Properties Through the Introduction of Suitable Isolation Groups. <i>Macromolecular Rapid Communications</i> , 2008 , 29, 136-141	4.8	57
236	The ultrafast intramolecular dynamics of phthalocyanine and porphyrin derivatives. <i>Journal of Chemical Physics</i> , 1996 , 105, 5377-5379	3.9	55
235	Hierarchical nanoporous gold-platinum with heterogeneous interfaces for methanol electrooxidation. <i>Scientific Reports</i> , 2014 , 4, 4370	4.9	54
234	Solvent-assisted re-annealing of polymer films for solution-processable organic field-effect transistors. <i>Advanced Materials</i> , 2010 , 22, 1273-7	24	51
233	A novel air-stable n-type organic semiconductor: 4,4'-bis[(6,6'-diphenyl)-2,2-difluoro-1,3,2-dioxaborine] and its application in organic ambipolar field-effect transistors. <i>Journal of Materials Chemistry</i> , 2006 , 16, 4499-4503		51
232	Free radical sensors based on inner-cutting graphene field-effect transistors. <i>Nature Communications</i> , 2019 , 10, 1544	17.4	49
231	Phenyl-substituted fluorene-dimer cored anthracene derivatives: highly fluorescent and stable materials for high performance organic blue- and white-light-emitting diodes. <i>Journal of Materials Chemistry</i> , 2010 , 20, 3186		49
230	Direct Four-Probe Measurement of Grain-Boundary Resistivity and Mobility in Millimeter-Sized Graphene. <i>Nano Letters</i> , 2017 , 17, 5291-5296	11.5	48
229	One-pot microbial method to synthesize dual-doped graphene and its use as high-performance electrocatalyst. <i>Scientific Reports</i> , 2013 , 3, 3499	4.9	48
228	Linear benzene-fused bis(tetrathiafulvalene) compounds for solution processed organic field-effect transistors. <i>Journal of Materials Chemistry</i> , 2007 , 17, 736-743		48
227	Dielectric Engineering of a Boron Nitride/Hafnium Oxide Heterostructure for High-Performance 2D Field Effect Transistors. <i>Advanced Materials</i> , 2016 , 28, 2062-9	24	48
226	Fast Deposition of Aligning Edge-On Polymers for High-Mobility Ambipolar Transistors. <i>Advanced Materials</i> , 2019 , 31, e1805761	24	48
225	Novel copolymers incorporating dithieno[3,2-b:2',3'-d]thiophene moieties for air-stable and high performance organic field-effect transistors. <i>Journal of Materials Chemistry</i> , 2008 , 18, 3426		47
224	Field dependent and high light sensitive organic phototransistors based on linear asymmetric organic semiconductor. <i>Applied Physics Letters</i> , 2009 , 94, 143303	3.4	46
223	Active Morphology Control for Concomitant Long Distance Spin Transport and Photoresponse in a Single Organic Device. <i>Advanced Materials</i> , 2016 , 28, 2609-15	24	46

222	Design and synthesis of high performance π -conjugated materials through antiaromaticity and quinoid strategy for organic field-effect transistors. <i>Materials Science and Engineering Reports</i> , 2019 , 136, 13-26	30.9	45
221	Synthesis and electroluminescence of poly(aryleneethynylene)s based on fluorene containing hole-transport units. <i>Journal of Materials Chemistry</i> , 2001 , 11, 1606-1611		44
220	Self-Aligned Single-Crystal Graphene Grains. <i>Advanced Functional Materials</i> , 2014 , 24, 1664-1670	15.6	43
219	Effect of the Longer π -Unsubstituted Oligothiophene Unit (6T and 7T) on the Organic Thin-Film Transistor Performances of Diketopyrrolopyrrole-Oligothiophene Copolymers. <i>Chemistry of Materials</i> , 2013 , 25, 4290-4296	9.6	43
218	Novel Functionalized Conjugated Polythiophene with Oxetane Substituents: Synthesis, Optical, Electrochemical, and Field-Effect Properties. <i>Macromolecules</i> , 2009 , 42, 3222-3226	5.5	43
217	Large Femtosecond Third-Order Nonlinear Optical Response in a Novel Donor-Acceptor Copolymer Consisting of Ethynylfluorene and Tetraphenyldiaminobiphenyl Units. <i>Chemistry of Materials</i> , 2001 , 13, 1540-1544	9.6	43
216	Three-Component Integrated Ultrathin Organic Photosensors for Plastic Optoelectronics. <i>Advanced Materials</i> , 2016 , 28, 624-30	24	43
215	Monolayer organic field-effect transistors. <i>Science China Chemistry</i> , 2019 , 62, 313-330	7.9	42
214	New series of AB ₂ -type hyperbranched polytriazoles derived from the same polymeric intermediate: Different endcapping spacers with adjustable bulk and convenient syntheses via click chemistry under copper(I) catalysis. <i>Journal of Polymer Science Part A</i> , 2011 , 49, 1977-1987	2.5	42
213	High-mobility thin-film transistors based on aligned carbon nanotubes. <i>Applied Physics Letters</i> , 2003 , 83, 150-152	3.4	42
212	Graphene: learning from carbon nanotubes. <i>Journal of Materials Chemistry</i> , 2011 , 21, 919-929		41
211	Effects of structure-manipulated molecular stacking on solid-state optical properties and device performances. <i>Polymer Chemistry</i> , 2012 , 3, 2832	4.9	40
210	Synthesis and properties of fluorene or carbazole-based and dicyanovinyl-capped n-type organic semiconductors. <i>Journal of Materials Chemistry</i> , 2008 , 18, 1131		40
209	Controllable preparation of patterns of aligned carbon nanotubes on metals and metal-coated silicon substrates. <i>Journal of Materials Chemistry</i> , 2003 , 13, 1124-1126		39
208	Highly Organized Epitaxy of Dirac Semimetallic PtTe Crystals with Extrahigh Conductivity and Visible Surface Plasmons at Edges. <i>ACS Nano</i> , 2018 , 12, 9405-9411	16.7	38
207	New air-stable solution-processed organic n-type semiconductors based on sulfur-rich core-expanded naphthalene diimides. <i>Journal of Materials Chemistry</i> , 2011 , 21, 18042		38
206	A Flexible Acetylcholinesterase-Modified Graphene for Chiral Pesticide Sensor. <i>Journal of the American Chemical Society</i> , 2019 , 141, 14643-14649	16.4	36
205	An acceptor-acceptor conjugated copolymer based on perylene diimide for high mobility n-channel transistor in air. <i>Journal of Polymer Science Part A</i> , 2012 , 50, 4266-4271	2.5	35

204	Design, Synthesis, and Properties of Asymmetrical Heteroacene and Its Application in Organic Electronics. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 10565-10571	3.8	35
203	Growth and Grain Boundaries in 2D Materials. <i>ACS Nano</i> , 2020 , 14, 9320-9346	16.7	35
202	Chemical Formation and Multiple Applications of Organic-Inorganic Hybrid Perovskite Materials. <i>Journal of the American Chemical Society</i> , 2019 , 141, 1406-1414	16.4	35
201	Narrow band gap D _A copolymer of indacenodithiophene and diketopyrrolopyrrole with deep HOMO level: Synthesis and application in field-effect transistors and polymer solar cells. <i>Journal of Polymer Science Part A</i> , 2012 , 50, 371-377	2.5	34
200	New semiconductors based on triphenylamine with macrocyclic architecture: synthesis, properties and applications in OFETs. <i>Journal of Materials Chemistry</i> , 2007 , 17, 4483		34
199	An Alternative Approach to Constructing Solution Processable Multifunctional Materials: Their Structure, Properties, and Application in High-Performance Organic Light-Emitting Diodes. <i>Advanced Functional Materials</i> , 2010 , 20, 3125-3135	15.6	33
198	Synthesis and characterization of a quinoxaline compound containing polyphenylphenyl and strong electron-accepting groups, and its multiple applications in electroluminescent devices. <i>Journal of Materials Chemistry</i> , 2008 , 18, 299-305		33
197	Engineering of Amorphous Polymeric Insulators for Organic Field-Effect Transistors. <i>Advanced Electronic Materials</i> , 2017 , 3, 1700157	6.4	32
196	Photophysical properties of polyphenylphenyl compounds in aqueous solutions and application of their nanoparticles for nucleobase sensing. <i>Journal of Materials Chemistry</i> , 2008 , 18, 2555		32
195	Advances in flexible organic field-effect transistors and their applications for flexible electronics. <i>Npj Flexible Electronics</i> , 2022 , 6,	10.7	32
194	Effect of polymer chain conformation on field-effect transistor performance: synthesis and properties of two arylene imide based D _A copolymers. <i>Journal of Materials Chemistry</i> , 2012 , 22, 14639		31
193	Phthalocyanine Monolayer-Modified Gold Substrates as Efficient Anodes for Organic Light-Emitting Diodes. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 12639-12642	3.4	31
192	Electrochemical Synthesis of Large Area Two-Dimensional Metal-Organic Framework Films on Copper Anodes. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 2887-2891	16.4	31
191	Layer-stacking growth and electrical transport of hierarchical graphene architectures. <i>Advanced Materials</i> , 2014 , 26, 3218-24	24	30
190	Regioselective Deposition Method to Pattern Silver Electrodes Facilely and Efficiently with High Resolution: Towards All-Solution-Processed, High-Performance, Bottom-Contacted, Flexible, Polymer-Based Electronics. <i>Advanced Functional Materials</i> , 2014 , 24, 3783-3789	15.6	29
189	Polyurethanes Containing Indole-Based Non-Linear Optical Chromophores: from Linear Chromophore to H-Type. <i>Macromolecular Rapid Communications</i> , 2008 , 29, 798-803	4.8	29
188	Synthesis, Structure, Electronic State, and Luminescent Properties of Novel Blue-Light-Emitting Aryl-Substituted 9,9-Di(4-(di-p-tolyl)aminophenyl)fluorenes. <i>Advanced Functional Materials</i> , 2008 , 18, 2335-2347	15.6	29
187	Solution-processed core-extended naphthalene diimides toward organic n-type and ambipolar semiconductors. <i>Journal of Materials Chemistry C</i> , 2013 , 1, 2688	7.1	28

- 186 Benzodifuran-containing well-defined π -conjugated polymers for photovoltaic cells. *Journal of Polymer Science Part A*, **2012**, 50, 2935-2943 2.5 28
- 185 A non-planar pentaphenylbenzene functionalized benzo[2,1,3]thiadiazole derivative as a novel red molecular emitter for non-doped organic light-emitting diodes. *Journal of Materials Chemistry*, **2008**, 18, 2709 28
- 184 Multiwall nanotubes with intramolecular junctions (CN_x/C): Preparation, rectification, logic gates, and application. *Applied Physics Letters*, **2004**, 84, 4932-4934 3.4 28
- 183 Synthesis and properties of crown ether containing poly(p-phenylenevinylene). *Journal of Materials Chemistry*, **2001**, 11, 3063-3067 28
- 182 Synthesis and characterization of a novel unsymmetrical metal-free phthalocyanine with donor-acceptor substituents. *Journal of Heterocyclic Chemistry*, **1994**, 31, 1017-1020 1.9 28
- 181 Water-assisted growth of large-sized single crystal hexagonal boron nitride grains. *Materials Chemistry Frontiers*, **2017**, 1, 1836-1840 7.8 27
- 180 Wide band gap copolymers based on phthalimide: synthesis, characterization, and photovoltaic properties with 3.70% efficiency. *Polymer Chemistry*, **2013**, 4, 2174 4.9 27
- 179 π -Extended Isoindigo-Based Derivative: A Promising Electron-Deficient Building Block for Polymer Semiconductors. *ACS Applied Materials & Interfaces*, **2017**, 9, 40549-40555 9.5 26
- 178 Inkjet-Printed Organic Electrodes for Bottom-Contact Organic Field-Effect Transistors. *Advanced Functional Materials*, **2011**, 21, 786-791 15.6 26
- 177 Poly(thienylene-vinylene-thienylene) with cyano substituent: Synthesis and application in field-effect transistor and polymer solar cell. *Journal of Polymer Science Part A*, **2009**, 47, 4028-4036 2.5 26
- 176 Highly efficient blue electrophosphorescent devices with a new series of host materials: polyphenylene-dendronized oxadiazole derivatives. *Journal of Materials Chemistry*, **2007**, 17, 3788 26
- 175 Improving the Electronic Transporting Property for Flexible Field-Effect Transistors with Naphthalene Diimide-Based Conjugated Polymer through Branching/Linear Side-Chain Engineering Strategy. *ACS Applied Materials & Interfaces*, **2019**, 11, 15837-15844 9.5 25
- 174 Low Band Gap Donor-Acceptor Conjugated Polymers with Indanone-Condensed Thiadiazolo[3,4-g]quinoxaline Acceptors. *Macromolecules*, **2019**, 52, 6149-6159 5.5 25
- 173 Synthesis, structure, optoelectronic properties of novel zinc Schiff-base complexes. *Science Bulletin*, **2013**, 58, 2733-2740 25
- 172 Controlling Fundamental Fluctuations for Reproducible Growth of Large Single-Crystal Graphene. *ACS Nano*, **2018**, 12, 1778-1784 16.7 24
- 171 Phenanthro[1,10,9,8-cdefg]carbazole-containing copolymer for high performance thin-film transistors and polymer solar cells. *Journal of Materials Chemistry*, **2012**, 22, 3696 24
- 170 Synthesis and charge-transporting properties of electron-deficient CN₂fluorene based D π A copolymers. *Polymer Chemistry*, **2012**, 3, 2170 4.9 24
- 169 High-Mobility Organic Light-Emitting Semiconductors and Its Optoelectronic Devices. *Small Structures*, **2021**, 2, 2000083 8.7 24

168	Synthesis and morphology transformation of single-crystal graphene domains based on activated carbon dioxide by chemical vapor deposition. <i>Journal of Materials Chemistry C</i> , 2013 , 1, 2990	7.1	23
167	Solution-processable π -conjugated dendrimers with hole-transporting, electroluminescent and fluorescent pattern properties. <i>Journal of Materials Chemistry</i> , 2011 , 21, 14663		22
166	High performance field-effect transistors made of a multiwall CNx/C nanotube intramolecular junction. <i>Applied Physics Letters</i> , 2003 , 83, 4824-4826	3.4	22
165	Rapid and ultrasensitive electromechanical detection of ions, biomolecules and SARS-CoV-2 RNA in unamplified samples.. <i>Nature Biomedical Engineering</i> , 2022 ,	19	22
164	Solid-Solid interface growth of conductive metal-organic framework nanowire arrays and their supercapacitor application. <i>Materials Chemistry Frontiers</i> , 2020 , 4, 243-251	7.8	22
163	Organic Synaptic Transistors: The Evolutionary Path from Memory Cells to the Application of Artificial Neural Networks. <i>Advanced Functional Materials</i> , 2021 , 31, 2101951	15.6	22
162	Plasma-Enhanced Chemical Vapor Deposition of Two-Dimensional Materials for Applications. <i>Accounts of Chemical Research</i> , 2021 , 54, 1011-1022	24.3	22
161	Triple Acceptors in a Polymeric Architecture for Balanced Ambipolar Transistors and High-Gain Inverters. <i>Advanced Materials</i> , 2018 , 30, e1801951	24	22
160	Highly sensitive thin film phototransistors based on a copolymer of benzodithiophene and diketopyrrolopyrrole. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 1942-1948	7.1	21
159	A Generalized Method for Evaluating the Metallic-to-Semiconducting Ratio of Separated Single-Walled Carbon Nanotubes by UV-Vis-IR Characterization. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 12095-12098	3.8	21
158	Copolyfluorenes containing bridged triphenylamine or triphenylamine: Synthesis, characterization, and optoelectronic properties. <i>Journal of Polymer Science Part A</i> , 2009 , 47, 3651-3661	2.5	21
157	Epitaxial Growth of h-BN on Templates of Various Dimensionalities in h-BN-Graphene Material Systems. <i>Advanced Materials</i> , 2019 , 31, e1805582	24	20
156	Sub-5 nm single crystalline organic p-n heterojunctions. <i>Nature Communications</i> , 2021 , 12, 2774	17.4	20
155	Novel benzo[c][1,2,5]oxadiazole-naphthalenediimide based copolymer for high-performance air-stable n-type field-effect transistors exhibiting high electron mobility of 2.43 cm ² V ⁻¹ s ⁻¹ . <i>Journal of Materials Chemistry C</i> , 2017 , 5, 2892-2898	7.1	19
154	A two-dimensional molecule with a large conjugation degree: synthesis, two-photon absorption and charge transport ability. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 5199-5206	7.1	19
153	Copolymers of Bis-Diketopyrrolopyrrole and Benzothiadiazole Derivatives for High-Performance Ambipolar Field-Effect Transistors on Flexible Substrates. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 25858-25865	9.5	19
152	Synthesis, Structural Characterization, and Field-Effect Transistor Properties of n-Channel Semiconducting Polymers Containing Five-Membered Heterocyclic Acceptors: Superiority of Thiadiazole Compared with Oxadiazole. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 33051-33059	9.5	19
151	Perylene diimide copolymers with dithienothiophene and dithienopyrrole: Use in n-channel and ambipolar field-effect transistors. <i>Journal of Polymer Science Part A</i> , 2013 , 51, 1550-1558	2.5	19

150	Pillar-shaped structures and patterns of three-dimensional carbon nanotube alignments. <i>Chemical Communications</i> , 2001 , 751-752	5.8	19
149	Dual-Mode Learning of Ambipolar Synaptic Phototransistor Based on 2D Perovskite/Organic Heterojunction for Flexible Color Recognizable Visual System. <i>Small</i> , 2021 , 17, e2102820	11	19
148	NIR polymers and phototransistors. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 13049-13058	7.1	19
147	A polythiophene derivative with octyl diphenylamine-vinylene side chains: synthesis and its applications in field-effect transistors and solar cells. <i>Polymer Chemistry</i> , 2010 , 1, 678	4.9	18
146	Organic field-effect transistors based on tetrathiafulvalene derivatives. <i>Pure and Applied Chemistry</i> , 2008 , 80, 2405-2423	2.1	18
145	Synthesis and Device Integration of Carbon Nanotube/Silica Core/Shell Nanowires. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 7661-7665	3.8	18
144	The effect of thickness on the optoelectronic properties of organic field-effect transistors: towards molecular crystals at monolayer limit. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 13154-13168	7.1	18
143	Face-to-Face Growth of Wafer-Scale 2D Semiconducting MOF Films on Dielectric Substrates. <i>Advanced Materials</i> , 2021 , 33, e2007741	24	18
142	Enhancing the organic thin-film transistor performance of diketopyrrolopyrrole/benzodithiophene copolymers via the modification of both conjugated backbone and side chain. <i>Polymer Chemistry</i> , 2015 , 6, 5369-5375	4.9	17
141	Application of organic field-effect transistors in memory. <i>Materials Chemistry Frontiers</i> , 2020 , 4, 2845-2862	7.2	17
140	Production of graphene nanospheres by annealing of graphene oxide in solution. <i>Nano Research</i> , 2011 , 4, 705-711	10	17
139	Synthesis and characterization of a new conjugated polymer containing cyano substituents for light-emitting diodes. <i>Journal of Materials Chemistry</i> , 2001 , 11, 1327-1331		17
138	n-Type organic light-emitting transistors with high mobility and improved air stability. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 535-540	7.1	16
137	Synthesis and characterization of phenanthrocarbazole/diketopyrrolopyrrole copolymer for high-performance field-effect transistors. <i>Journal of Polymer Science Part A</i> , 2013 , 51, 2208-2215	2.5	16
136	Fabrication and characterization of molecular scale field-effect transistors. <i>Journal of Materials Chemistry</i> , 2010 , 20, 2305		16
135	Polymer gate dielectrics with self-assembled monolayers for high-mobility organic thin-film transistors based on copper phthalocyanine. <i>Applied Physics A: Materials Science and Processing</i> , 2009 , 95, 777-780	2.6	16
134	Synthesis and properties of new orange red light-emitting hyperbranched and linear polymers derived from 3,5-dicyano-2,4,6-tristyrylpyridine. <i>Journal of Polymer Science Part A</i> , 2005 , 43, 493-504	2.5	16
133	High-Performance Ambipolar Polymers Based on Electron-Withdrawing Group Substituted Bay-Annulated Indigo. <i>Advanced Functional Materials</i> , 2019 , 29, 1804839	15.6	16

132	High-performance near-infrared polymeric phototransistors realized by combining cross-linked polymeric semiconductors and bulk heterojunction bilayer structures. <i>Applied Materials Today</i> , 2021 , 22, 100899	6.6	16
131	High-mobility, air stable bottom-contact n-channel thin film transistors based on N,N'-ditridecyl perylene diimide. <i>Applied Physics Letters</i> , 2013 , 103, 203303	3.4	15
130	Substrate-Induced Synthesis of Nitrogen-Doped Holey Graphene Nanocapsules for Advanced Metal-Free Bifunctional Electrocatalysts. <i>Particle and Particle Systems Characterization</i> , 2017 , 34, 1600207 ¹	3.1	15
129	Ultrahigh density modulation of aligned single-walled carbon nanotube arrays. <i>Nano Research</i> , 2011 , 4, 931-937	10	15
128	Synthesis and properties of new poly(terfluorene) derivatives containing spirobifluorene and electron transport groups for stable blue electroluminescence. <i>Journal of Polymer Science Part A</i> , 2005 , 43, 4517-4529	2.5	15
127	Preparation and electrical conductivity of Langmuir-Blodgett films of poly(3-alkylthiophene)s. <i>Journal of Applied Polymer Science</i> , 1998 , 69, 1-6	2.9	14
126	Direct SARS-CoV-2 Nucleic Acid Detection by Y-Shaped DNA Dual-Probe Transistor Assay. <i>Journal of the American Chemical Society</i> , 2021 , 143, 17004-17014	16.4	14
125	N-Alkylation vs O-Alkylation: Influence on the Performance of a Polymeric Field-Effect Transistors Based on a Tetracyclic Lactam Building Block. <i>Macromolecules</i> , 2017 , 50, 8497-8504	5.5	13
124	Self-Controlled Growth of Covalent Organic Frameworks by Repolymerization. <i>Chemistry of Materials</i> , 2020 , 32, 5634-5640	9.6	13
123	Tuning reaction processes for the synthesis of micron and nanometer sized, single crystalline lamellae of copper 7,7,8,8-tetracyano-p-quinodimethane (Phase II) with large area. <i>Nano Research</i> , 2009 , 2, 630-637	10	13
122	High performance polymer field-effect transistors based on polythiophene derivative with conjugated side chain. <i>Journal of Polymer Science Part A</i> , 2009 , 47, 5304-5312	2.5	13
121	Alignment of linear polymeric grains for highly stable N-type thin-film transistors. <i>Chem</i> , 2021 , 7, 1258-1270	12.0	13
120	Ultrasensitive Detection of SARS-CoV-2 Antibody by Graphene Field-Effect Transistors. <i>Nano Letters</i> , 2021 , 21, 7897-7904	11.5	13
119	Antifouling Field-Effect Transistor Sensing Interface Based on Covalent Organic Frameworks. <i>Advanced Electronic Materials</i> , 2020 , 6, 1901169	6.4	12
118	Organostannane-free polycondensation and eco-friendly processing strategy for the design of semiconducting polymers in transistors. <i>Materials Horizons</i> , 2020 , 7, 1955-1970	14.4	12
117	Organozinc Compounds as Effective Dielectric Modification Layers for Polymer Field-Effect Transistors. <i>Advanced Functional Materials</i> , 2012 , 22, 4139-4148	15.6	12
116	Minimizing purification-induced defects in single-walled carbon nanotubes gives films with improved conductivity. <i>Nano Research</i> , 2009 , 2, 865-871	10	12
115	Greenish-yellow electroluminescent devices using a novel dihydroquinazolinone derivative as emitting layer. <i>Journal of Materials Chemistry</i> , 2001 , 11, 2971-2973		12

114	Tailoring Graphene layer-to-layer growth. <i>Nanotechnology</i> , 2017 , 28, 265101	3.4	11
113	Recent progress in stretchable organic field-effect transistors. <i>Science China Technological Sciences</i> , 2019 , 62, 1255-1276	3.5	11
112	Graphene/Silicon Layered Structures on Single-Crystalline Ir(111) Thin Films. <i>Advanced Materials Interfaces</i> , 2015 , 2, 1400543	4.6	11
111	Synthesis and characterization of fullerene derivatives with perfluoroalkyl groups. <i>Journal of Materials Chemistry</i> , 2009 , 19, 3258		11
110	New Carbazole-Based Hyperbranched Conjugated Polymer with Good Hole-Transporting Properties. <i>Macromolecular Chemistry and Physics</i> , 2010 , 211, 1820-1825	2.6	11
109	Electrochemistry and Electrogenerated Chemiluminescence of Quinoxaline Derivatives. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 20027-20032	3.8	11
108	Low Bandgap Donor-Acceptor Conjugated Polymers From Diarylcyclopentadienone-Fused Naphthalimides. <i>Frontiers in Chemistry</i> , 2019 , 7, 362	5	10
107	Naphthodithieno[3,2-b]thiophene-based semiconductors: synthesis, characterization, and device performance of field-effect transistors. <i>Organic Chemistry Frontiers</i> , 2014 , 1, 333-337	5.2	10
106	Two-Dimensional Metal-Organic Framework Film for Realizing Optoelectronic Synaptic Plasticity. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 17440-17445	16.4	10
105	An isoindigo-bithiazole-based acceptor-acceptor copolymer for balanced ambipolar organic thin-film transistors. <i>Science China Chemistry</i> , 2016 , 59, 679-683	7.9	10
104	Recent progress in organic field-effect transistor-based integrated circuits. <i>Journal of Polymer Science</i> ,	2.4	10
103	Low temperature growth of clean single layer hexagonal boron nitride flakes and film for graphene-based field-effect transistors. <i>Science China Materials</i> , 2019 , 62, 1218-1225	7.1	9
102	Linking polythiophene chains with vinylene-bridges: A way to improve charge transport in polymer field-effect transistors. <i>Journal of Polymer Science Part A</i> , 2009 , 47, 1381-1392	2.5	9
101	The design and synthesis of fused thiophenes and their applications in organic field-effect transistors. <i>Science China Chemistry</i> , 2010 , 53, 779-791	7.9	9
100	Rheological Behavior of Spinning Dope of Multiwalled Carbon Nanotube/Polyacrylonitrile Composites. <i>Macromolecular Symposia</i> , 2004 , 216, 189-194	0.8	9
99	Methoxylation of quinoidal bithiophene as a single regioisomer building block for narrow-bandgap conjugated polymers and high-performance organic field-effect transistors. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 15168-15174	7.1	9
98	One-pot homopolymerization of thiophene-fused isoindigo for ambient-stable ambipolar organic field-effect transistors. <i>RSC Advances</i> , 2017 , 7, 25009-25018	3.7	8
97	Nano-Subsidence-Assisted Precise Integration of Patterned Two-Dimensional Materials for High-Performance Photodetector Arrays. <i>ACS Nano</i> , 2019 , 13, 2654-2662	16.7	8

96	Distinctive Performance of Terahertz Photodetection Driven by Charge-Density-Wave Order in CVD-Grown Tantalum Diselenide. <i>Advanced Functional Materials</i> , 2019 , 29, 1905057	15.6	8
95	Synthesis and properties of a series of quinoxaline-based copolymers: an example to understand the effect of the structure of the mainchain and sidechain on the charge transport ability of the polymers. <i>Materials Chemistry Frontiers</i> , 2017 , 1, 2085-2093	7.8	8
94	Advancing conjugated polymers into nanometer-scale devices. <i>Pure and Applied Chemistry</i> , 2006 , 78, 1803-1822	2.1	8
93	Ultraprecise Antigen 10-in-1 Pool Testing by Multiantibodies Transistor Assay. <i>Journal of the American Chemical Society</i> , 2021 , 143, 19794-19801	16.4	8
92	A sulfur-containing hetero-octulene: synthesis, host-guest properties, and transistor applications. <i>Chemical Communications</i> , 2020 , 56, 9990-9993	5.8	8
91	Ultrafast Synthesis of Large-Area Conductive Metal-Organic Frameworks on Substrates for Flexible Chemiresistive Sensing. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 57235-57244	9.5	8
90	Ultrafast Growth of Thin Hexagonal and Pyramidal Molybdenum Nitride Crystals and Films 2019 , 1, 383-388		7
89	Benzothieno[2,3-b]thiophene semiconductors: synthesis, characterization and applications in organic field-effect transistors. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 8804-8810	7.1	7
88	Polymer light-emitting electrochemical cell based on a novel poly(aryleneethynylene) consisting of ethynylfluorene and tetraphenyldiaminobiphenyl units. <i>Polymers for Advanced Technologies</i> , 2004 , 15, 70-74	3.2	7
87	Ultrahigh-Performance Optoelectronic Skin Based on Intrinsically Stretchable Perovskite-Polymer Heterojunction Transistors. <i>Advanced Materials</i> , 2021 , e2107304	24	7
86	Electrochemical Synthesis of Large Area Two-Dimensional Metal-Organic Framework Films on Copper Anodes. <i>Angewandte Chemie</i> , 2021 , 133, 2923-2927	3.6	7
85	Bitrialkylsilylethynyl thienoacenes: synthesis, molecular conformation and crystal packing, and their field-effect properties. <i>Journal of Materials Chemistry C</i> , 2013 , 1, 6403	7.1	6
84	Photosensors: A Retina-Like Dual Band Organic Photosensor Array for Filter-Free Near-Infrared-to-Memory Operations (Adv. Mater. 32/2017). <i>Advanced Materials</i> , 2017 , 29,	24	6
83	Optical-limiting properties of poly(arylene ethynylenes) containing thiophene ring. <i>Journal of Applied Polymer Science</i> , 2004 , 93, 131-135	2.9	6
82	Capillary Confinement Crystallization for Monolayer Molecular Crystal Arrays. <i>Advanced Materials</i> , 2021 , e2107574	24	6
81	Bottom-Up-Etching Mediated Synthesis of Large-Scale Pure Monolayer Graphene on Cyclic-Polishing-Annealed Cu(111). <i>Advanced Materials</i> , 2021 , e2108608	24	6
80	Acceptor Modulation Strategies for Improving the Electron Transport in High-Performance Organic Field-Effect Transistors. <i>Advanced Materials</i> , 2021 , e2104325	24	6
79	A comprehensive nano-interpenetrating semiconducting photoresist toward all-photolithography organic electronics. <i>Science Advances</i> , 2021 , 7,	14.3	6

78	A cyclopenta-fused dibenzo[,]thiophene--phenanthrene macrocyclic tetradicaloid. <i>Chemical Science</i> , 2021 , 12, 3952-3957	9.4	6
77	Two-dimensional covalent organic framework films prepared on various substrates through vapor induced conversion.. <i>Nature Communications</i> , 2022 , 13, 1411	17.4	6
76	Tunable planar focusing based on hyperbolic phonon polaritons in HfMoO ₄ . <i>Advanced Materials</i> , 2022 , e2105590	24	6
75	Catalyst-Free Growth of Two-Dimensional BCN Materials on Dielectrics by Temperature-Dependent Plasma-Enhanced Chemical Vapor Deposition. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 33113-33120	9.5	5
74	Strain-Sensitive Fluorescence from Two-Dimensional Organic Crystal. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 1909-1914	6.4	5
73	Monolayer Two-dimensional Molecular Crystals for an Ultrasensitive OFET-based Chemical Sensor. <i>Angewandte Chemie</i> , 2020 , 132, 4410-4414	3.6	5
72	Investigation of Abnormal Long-Wavelength Fluorescence Emissions Occurring in Binary Organic Nanoparticle Films. <i>Particle and Particle Systems Characterization</i> , 2015 , 32, 962-969	3.1	5
71	A structurally ordered thiophene-thiazole copolymer for organic thin-film transistors. <i>Science China Chemistry</i> , 2012 , 55, 760-765	7.9	5
70	Two-dimensional copolymers with DA type side chains for organic thin-film transistors: Synthesis and properties. <i>Polymer Chemistry</i> , 2011 , 2, 2842	4.9	5
69	Coordination induced monolayer formation and fabrication of a novel conductive Langmuir-Schaefer film of benzimidazole-containing Schiff bases without a substituted alkyl chain. <i>Journal of Materials Chemistry</i> , 2001 , 11, 1924-1927		5
68	An Organic Field-Effect-Transistor Based on Langmuir-Blodgett Films of a New Asymmetrically Substituted Phthalocyanine, 1,8-Naphthaimide-Tri-Tert-Butylphthalocyanine. <i>Molecular Crystals and Liquid Crystals</i> , 1999 , 337, 511-514		5
67	Toward Efficient Charge Transport of Polymer-Based Organic Field-Effect Transistors: Molecular Design, Processing, and Functional Utilization. <i>Accounts of Materials Research</i> ,	7.5	5
66	Thiadiazoloquinoline-Fused Acenaphthenequinone imide: A Highly Electron-Withdrawing Acceptor for Ambipolar Semiconducting Polymers with Strong Near-Infrared Absorption. <i>Macromolecules</i> , 2021 , 54, 3120-3129	5.5	5
65	Crystal Engineering of Angular-Shaped Heteroarenes Based on Cyclopenta[,]thiopyran for Controlling the Charge Carrier Mobility. <i>Journal of the American Chemical Society</i> , 2021 , 143, 11088-11101	16.4	5
64	Neuromorphic Devices: A Ferroelectric/Electrochemical Modulated Organic Synapse for Ultraflexible, Artificial Visual-Perception System (Adv. Mater. 46/2018). <i>Advanced Materials</i> , 2018 , 30, 1870349	24	5
63	A two-dimensional cross-linked polythiophene network. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 9362-9368	7.68	4
62	Aldol Polymerization to Construct Half-Fused Semiconducting Polymers. <i>Macromolecules</i> ,	5.5	4
61	Rapid SARS-CoV-2 Nucleic Acid Testing and Pooled Assay by Tetrahedral DNA Nanostructure Transistor. <i>Nano Letters</i> , 2021 , 21, 9450-9457	11.5	4

60	Organic photodiodes for near-infrared light detection. <i>Semiconductor Science and Technology</i> , 2020 , 35, 114001	1.8	4
59	Anisotropic Charge-Carrier Transport in High-Mobility Donor-Acceptor Conjugated Polymer Semiconductor Films. <i>Chemistry - an Asian Journal</i> , 2016 , 11, 2725-2729	4.5	4
58	Studying the adsorption mechanisms of nanoplastics on covalent organic frameworks via molecular dynamics simulations. <i>Journal of Hazardous Materials</i> , 2022 , 421, 126796	12.8	4
57	Bis-acenaphthoquinone diimides with high electron deficiency and good coplanar conformation. <i>Chemical Communications</i> , 2021 , 57, 7822-7825	5.8	4
56	Ultralow-Power and Multisensory Artificial Synapse Based on Electrolyte-Gated Vertical Organic Transistors. <i>Advanced Functional Materials</i> , 2020 , 2200959	15.6	4
55	Graphene Field-Effect Transistors on Hexagonal-Boron Nitride for Enhanced Interfacial Thermal Dissipation. <i>Advanced Electronic Materials</i> , 2020 , 6, 2000059	6.4	3
54	Visualization of Crystallographic Orientation and Twist Angles in Two-Dimensional Crystals with an Optical Microscope. <i>Nano Letters</i> , 2020 , 20, 6059-6066	11.5	3
53	Inner-Evaporator Modification of Low-Cost Metal Electrodes of Organic Field-Effect Transistors by 2D Polyporphyrin. <i>Advanced Electronic Materials</i> , 2019 , 5, 1900447	6.4	3
52	Organic Electronics: Regioselective Deposition Method to Pattern Silver Electrodes Facilely and Efficiently with High Resolution: Towards All-Solution-Processed, High-Performance, Bottom-Contacted, Flexible, Polymer-Based Electronics (Adv. Funct. Mater. 24/2014). <i>Advanced Functional Materials</i> , 2014 , 24, 3782-3782	15.6	3
51	Graphene: Controlled Synthesis of Large-Scale, Uniform, Vertically Standing Graphene for High-Performance Field Emitters (Adv. Mater. 2/2013). <i>Advanced Materials</i> , 2013 , 25, 292-292	24	3
50	Synthesis and characterization of novel phenyl-substituted poly(p-phenylene vinylene) derivatives. <i>Journal of Applied Polymer Science</i> , 2005 , 96, 1259-1266	2.9	3
49	Electron structures and non-linear optical properties of tert-butyl-nitro-phthalocyanines. <i>Science Bulletin</i> , 1999 , 44, 694-698		3
48	Perovskite photodetectors and their application in artificial photonic synapses. <i>Chemical Communications</i> , 2021 , 57, 11429-11442	5.8	3
47	Multifunctional neurosynaptic devices for human perception systems. <i>Journal of Semiconductors</i> , 2022 , 43, 051201	2.3	3
46	Air-Stable Symmetric Ambipolar Field-Effect Transistors Based on Reduced Graphene Oxide-OTS Self-Assembled Monolayer Heterostructure. <i>ChemNanoMat</i> , 2019 , 5, 472-478	3.5	2
45	Synthesis and Characterization of N,N'-Substituted 15,15,16,16-Tetracyano-6,13-pentacenequinodimethane-2,3,9,10-tetracarboxylic Diimide Derivatives. <i>Asian Journal of Organic Chemistry</i> , 2013 , 2, 220-224	3	2
44	Growth and Etching Kinetics: Growth and Etching of Monolayer Hexagonal Boron Nitride (Adv. Mater. 33/2015). <i>Advanced Materials</i> , 2015 , 27, 4948-4948	24	2
43	Field-Effect Transistors: Monolayer Hexagonal Boron Nitride Films with Large Domain Size and Clean Interface for Enhancing the Mobility of Graphene-Based Field-Effect Transistors (Adv. Mater. 10/2014). <i>Advanced Materials</i> , 2014 , 26, 1474-1474	24	2

42	Synthesis and Characterization of a 2,4,6-Tri(2-thienyl)pyridine-Based Conjugated Polymer for OFET Applications. <i>Macromolecular Chemistry and Physics</i> , 2012 , 213, 917-923	2.6	2
41	Graphene: Two-Stage Metal-Catalyst-Free Growth of High-Quality Polycrystalline Graphene Films on Silicon Nitride Substrates (Adv. Mater. 7/2013). <i>Advanced Materials</i> , 2013 , 25, 938-938	24	2
40	Photoconductivity of poly(N-vinylcarbazole) (PVK) doped with the metallofullerene Dy@C82 and the fullerenes C84 and C60. <i>Israel Journal of Chemistry</i> , 2001 , 41, 45-50	3.4	2
39	Langmuir-Blodgett Films and Second-Order Nonlinear Optical Property of a Phthalocyanine-Fullerene Dyad. <i>Molecular Crystals and Liquid Crystals</i> , 1999 , 337, 429-432		2
38	Stable Diarylamine Substituted Tris(2,4,6-trichloro-phenyl)methyl Radicals: One-Step Synthesis, Near-Infrared Emission, and Redox Chemistry. <i>CCS Chemistry</i> , 1-35	7.2	2
37	Integrated ionic sieving channels from engineering ordered monolayer two-dimensional crystallite structures. <i>Science Bulletin</i> , 2020 , 65, 1356-1362	10.6	2
36	Nonchlorinated Solubility Enhanced by Lipophilicity: An Effective Strategy for Environmentally Benign Processing of Rigidly Regular n-type Polymeric Semiconductors. <i>Advanced Electronic Materials</i> , 2021 , 7, 2100526	6.4	2
35	Theoretical Study of Chemical Vapor Deposition Synthesis of Graphene and Beyond: Challenges and Perspectives. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 7942-7963	6.4	2
34	A nonchlorinated solvent-processed polymer semiconductor for high-performance ambipolar transistors.. <i>National Science Review</i> , 2022 , 9, nwab145	10.8	2
33	Self-Assembly 3-D Penetrating Nanonetwork for High-Performance Intrinsically Stretchable Polymer Light-Emitting Diodes.. <i>Advanced Materials</i> , 2022 , e2201844	24	2
32	A thriving decade: rational design, green synthesis, and cutting-edge applications of isoindigo-based conjugated polymers in organic field-effect transistors. <i>Science China Chemistry</i> , 7-9	7.9	2
31	2D Materials: Epitaxial Growth of h-BN on Templates of Various Dimensionalities in h-BN/Graphene Material Systems (Adv. Mater. 12/2019). <i>Advanced Materials</i> , 2019 , 31, 1970088	24	1
30	Benzopyrazinoisoindigo or Its Reduced Form? Synthesis, Clarification, and Application in Field-Effect Transistors. <i>European Journal of Organic Chemistry</i> , 2016 , 2016, 2603-2607	3.2	1
29	Graphene: Near-Equilibrium Chemical Vapor Deposition of High-Quality Single-Crystal Graphene Directly on Various Dielectric Substrates (Adv. Mater. 9/2014). <i>Advanced Materials</i> , 2014 , 26, 1471-1471	24	1
28	Multilayer Graphene-Coated Atomic Force Microscopy Tips for Molecular Junctions (Adv. Mater. 26/2012). <i>Advanced Materials</i> , 2012 , 24, 3481-3481	24	1
27	Unusual tubular organization with crystal stacks from a new cyclic thiophene compound., <i>CrytEngComm</i> , 2009 , 11, 2288	3.3	1
26	Progresses in organic field-effect transistors and molecular electronics. <i>Frontiers of Chemistry in China: Selected Publications From Chinese Universities</i> , 2006 , 1, 357-363		1
25	Multilayer Organic Light-Emitting Diodes with Phthalocyanine Film as Hole-Injection Layer. <i>Molecular Crystals and Liquid Crystals</i> , 1999 , 337, 93-96		1

24	Isomeric Acceptor-Acceptor Polymers: Enabling Electron Transport with Strikingly Different Semiconducting Properties in n-Channel Organic Thin-Film Transistors. <i>Chemistry of Materials</i> , 2022 , 34, 1403-1413	9.6	1
23	Realizing Diketopyrrolopyrrole Polymer-Based Uniform Large-Area Transistors for Active Circuit via Protonic Acid Mediated Molecular Self-Assembly. <i>Advanced Electronic Materials</i> , 2100881	6.4	1
22	Constrain Effect of Charge Traps in Organic Field-Effect Transistors with Ferroelectric Polymer as a Dielectric Interfacial Layer.. <i>ACS Applied Materials & Interfaces</i> , 2022 ,	9.5	1
21	Electrically Conductive Metal-Organic Framework Thin Film-Based On-Chip Micro-Biosensor: A Platform to Unravel Surface Morphology-Dependent Biosensing. <i>Advanced Functional Materials</i> , 2102855	15.6	1
20	The Impact of Benzothiadiazole on the Optoelectronic Performance of Polymer/PC 71 BM Blend Films and Their Application in NIR Phototransistors. <i>Advanced Electronic Materials</i> , 2101297	6.4	1
19	Engineering of Chemical Vapor Deposition Graphene Layers: Growth, Characterization, and Properties. <i>Advanced Functional Materials</i> , 2202584	15.6	1
18	Surface Catalytic Modification of Conjugated Polymer on Low-Cost Bottom Contact for Improved Injection Efficiency of Organic Transistors. <i>Advanced Electronic Materials</i> , 2019 , 5, 1900028	6.4	0
17	Transistors: Inkjet Printing Short-Channel Polymer Transistors with High-Performance and Ultrahigh Photoresponsivity (Adv. Mater. 27/2014). <i>Advanced Materials</i> , 2014 , 26, 4752-4752	24	0
16	Two-Dimensional Metal-Organic Framework Film for Realizing Optoelectronic Synaptic Plasticity. <i>Angewandte Chemie</i> , 2021 , 133, 17580-17585	3.6	0
15	Ultra-sensitive boscalid sensors based on a Cyclodextrin modified perfluorinated copper phthalocyanine field-effect transistor. <i>Journal of Materials Chemistry C</i> , 2021 , 9, 12877-12883	7.1	0
14	Short-wavelength ultraviolet dosimeters based on DNA nanostructure-modified graphene field-effect transistors. <i>Chemical Communications</i> , 2021 , 57, 5071-5074	5.8	0
13	Synthesis of Two-Dimensional C-C Bonded Truxene-Based Covalent Organic Frameworks by Irreversible Brønsted Acid-Catalyzed Aldol Cyclotrimerization. <i>Research</i> , 2021 , 2021, 9790705	7.8	0
12	Organic Semiconductors for Room-Temperature Spin Valves	805-814	0
11	Organic Field-Effect Transistors: Triple Acceptors in a Polymeric Architecture for Balanced Ambipolar Transistors and High-Gain Inverters (Adv. Mater. 32/2018). <i>Advanced Materials</i> , 2018 , 30, 1870241	24	1
10	Graphene: Layer-Stacking Growth and Electrical Transport of Hierarchical Graphene Architectures (Adv. Mater. 20/2014). <i>Advanced Materials</i> , 2014 , 26, 3355-3355	24	
9	Field-Effect Transistors: Heteroatom Substituted Organic/Polymeric Semiconductors and their Applications in Field-Effect Transistors (Adv. Mater. 40/2014). <i>Advanced Materials</i> , 2014 , 26, 6802-6802	24	
8	Graphene Sheets: Gram-Scale Synthesis of Graphene Sheets by a Catalytic Arc-Discharge Method (Small 8/2013). <i>Small</i> , 2013 , 9, 1329-1329	11	
7	Nanoscale Materials: A General Approach for Fast Detection of Charge Carrier Type and Conductivity Difference in Nanoscale Materials (Adv. Mater. 48/2013). <i>Advanced Materials</i> , 2013 , 25, 6916-6916	24	

- 6 Organic Thin-Film Transistors: Interfacial Heterogeneity of Surface Energy in Organic Field-Effect Transistors (Adv. Mater. 8/2011). *Advanced Materials*, **2011**, 23, 1008-1008 24
- 5 Study on LB Films of Novel Fullerene Derivatives. *Molecular Crystals and Liquid Crystals*, **1997**, 294, 7-10
- 4 Second Harmonic Generation in Langmuir-Blodgett Films of a Novel Phenylhydrazone Dye. *Molecular Crystals and Liquid Crystals*, **1999**, 337, 425-428
- 3 Ultrahigh-Performance Optoelectronic Skin Based on Intrinsically Stretchable Perovskite-Polymer Heterojunction Transistors (Adv. Mater. 4/2022). *Advanced Materials*, **2022**, 34, 2270028 24
- 2 Vapor-solid interfacial reaction and polymerization for wafer-scale uniform and ultrathin two-dimensional organic films. *Science China Materials*, 1 7:1
- 1 Bottom-Up-Etching-Mediated Synthesis of Large-Scale Pure Monolayer Graphene on Cyclic-Polishing-Annealed Cu(111) (Adv. Mater. 8/2022). *Advanced Materials*, **2022**, 34, 2270063 24