

Henning Sirringhaus

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291
papers

43,095
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89
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205
g-index

308
ext. papers

45,994
ext. citations

12.5
avg, IF

7.8
L-index

#	Paper	IF	Citations
291	Two-dimensional charge transport in self-organized, high-mobility conjugated polymers. <i>Nature</i> , 1999 , 401, 685-688	50.4	3980
290	High-resolution inkjet printing of all-polymer transistor circuits. <i>Science</i> , 2000 , 290, 2123-6	33.3	2847
289	Integrated optoelectronic devices based on conjugated polymers. <i>Science</i> , 1998 , 280, 1741-4	33.3	2436
288	General observation of n-type field-effect behaviour in organic semiconductors. <i>Nature</i> , 2005 , 434, 194-9	50.4	2032
287	Electron and ambipolar transport in organic field-effect transistors. <i>Chemical Reviews</i> , 2007 , 107, 1296-388.1	38.1	1846
286	25th anniversary article: organic field-effect transistors: the path beyond amorphous silicon. <i>Advanced Materials</i> , 2014 , 26, 1319-35	24	1758
285	Device Physics of Solution-Processed Organic Field-Effect Transistors. <i>Advanced Materials</i> , 2005 , 17, 2411-2425	24	1498
284	Low-temperature, high-performance solution-processed metal oxide thin-film transistors formed by a Bolgel on chip process. <i>Nature Materials</i> , 2011 , 10, 45-50	27	834
283	Enhanced Mobility of Poly(3-hexylthiophene) Transistors by Spin-Coating from High-Boiling-Point Solvents. <i>Chemistry of Materials</i> , 2004 , 16, 4772-4776	9.6	811
282	Thieno[3,2-b]thiophene-diketopyrrolopyrrole-containing polymers for high-performance organic field-effect transistors and organic photovoltaic devices. <i>Journal of the American Chemical Society</i> , 2011 , 133, 3272-5	16.4	809
281	Approaching disorder-free transport in high-mobility conjugated polymers. <i>Nature</i> , 2014 , 515, 384-8	50.4	692
280	A Zone-Casting Technique for Device Fabrication of Field-Effect Transistors Based on Discotic Hexa-peri-hexabenzocoronene. <i>Advanced Materials</i> , 2005 , 17, 684-689	24	576
279	Reliability of Organic Field-Effect Transistors. <i>Advanced Materials</i> , 2009 , 21, 3859-3873	24	503
278	High-performance ambipolar diketopyrrolopyrrole-thieno[3,2-b]thiophene copolymer field-effect transistors with balanced hole and electron mobilities. <i>Advanced Materials</i> , 2012 , 24, 647-52	24	488
277	Downscaling of self-aligned, all-printed polymer thin-film transistors. <i>Nature Nanotechnology</i> , 2007 , 2, 784-9	28.7	484
276	Self-aligned, vertical-channel, polymer field-effect transistors. <i>Science</i> , 2003 , 299, 1881-4	33.3	482
275	Spatial control of the recombination zone in an ambipolar light-emitting organic transistor. <i>Nature Materials</i> , 2006 , 5, 69-74	27	480

274	Close look at charge carrier injection in polymer field-effect transistors. <i>Journal of Applied Physics</i> , 2003 , 94, 6129-6137	2.5	458
273	Solution-processed zinc oxide field-effect transistors based on self-assembly of colloidal nanorods. <i>Nano Letters</i> , 2005 , 5, 2408-13	11.5	447
272	Critical assessment of charge mobility extraction in FETs. <i>Nature Materials</i> , 2017 , 17, 2-7	27	443
271	Meso-Epitaxial Solution-Growth of Self-Organizing Discotic Liquid-Crystalline Semiconductors. <i>Advanced Materials</i> , 2003 , 15, 495-499	24	429
270	Molecular origin of high field-effect mobility in an indacenodithiophene-benzothiadiazole copolymer. <i>Nature Communications</i> , 2013 , 4, 2238	17.4	384
269	A Highly π -Stacked Organic Semiconductor for Thin Film Transistors Based on Fused Thiophenes. <i>Journal of the American Chemical Society</i> , 1998 , 120, 2206-2207	16.4	378
268	Band-like temperature dependence of mobility in a solution-processed organic semiconductor. <i>Nature Materials</i> , 2010 , 9, 736-40	27	347
267	Critical role of alkyl chain branching of organic semiconductors in enabling solution-processed N-channel organic thin-film transistors with mobility of up to $3.50 \text{ cm}^2 \text{ V}^{-1} \text{ s}^{-1}$. <i>Journal of the American Chemical Society</i> , 2013 , 135, 2338-49	16.4	344
266	Chalcogenophene comonomer comparison in small band gap diketopyrrolopyrrole-based conjugated polymers for high-performing field-effect transistors and organic solar cells. <i>Journal of the American Chemical Society</i> , 2015 , 137, 1314-21	16.4	317
265	Efficient Top-Gate, Ambipolar, Light-Emitting Field-Effect Transistors Based on a Green-Light-Emitting Polyfluorene. <i>Advanced Materials</i> , 2006 , 18, 2708-2712	24	314
264	Noncontact potentiometry of polymer field-effect transistors. <i>Applied Physics Letters</i> , 2002 , 80, 2913-2915	34	306
263	Effects of packing structure on the optoelectronic and charge transport properties in poly(9,9-di-n-octylfluorene-alt-benzothiadiazole). <i>Journal of the American Chemical Society</i> , 2005 , 127, 12890-9	16.4	293
262	A selenophene-based low-bandgap donor-acceptor polymer leading to fast ambipolar logic. <i>Advanced Materials</i> , 2012 , 24, 1558-65	24	288
261	Understanding charge transport in lead iodide perovskite thin-film field-effect transistors. <i>Science Advances</i> , 2017 , 3, e1601935	14.3	284
260	Solution-processed perovskite light emitting diodes with efficiency exceeding 15% through additive-controlled nanostructure tailoring. <i>Nature Communications</i> , 2018 , 9, 3892	17.4	280
259	High operational and environmental stability of high-mobility conjugated polymer field-effect transistors through the use of molecular additives. <i>Nature Materials</i> , 2017 , 16, 356-362	27	276
258	Multicomponent semiconducting polymer systems with low crystallization-induced percolation threshold. <i>Nature Materials</i> , 2006 , 5, 950-6	27	276
257	Lithography-Free, Self-Aligned Inkjet Printing with Sub-Hundred-Nanometer Resolution. <i>Advanced Materials</i> , 2005 , 17, 997-1001	24	268

256	2D coherent charge transport in highly ordered conducting polymers doped by solid state diffusion. <i>Nature Materials</i> , 2016 , 15, 896-902	27	268
255	Ambipolar Transport in Organic Conjugated Materials. <i>Advanced Materials</i> , 2007 , 19, 1791-1799	24	253
254	Molecular-weight dependence of interchain polaron delocalization and exciton bandwidth in high-mobility conjugated polymers. <i>Physical Review B</i> , 2006 , 74,	3.3	244
253	Controllable Shifts in Threshold Voltage of Top-Gate Polymer Field-Effect Transistors for Applications in Organic Nano Floating Gate Memory. <i>Advanced Functional Materials</i> , 2010 , 20, 224-230	15.6	234
252	Analysis of the contact resistance in staggered, top-gate organic field-effect transistors. <i>Journal of Applied Physics</i> , 2007 , 102, 094510	2.5	231
251	Charge transport in high-mobility conjugated polymers and molecular semiconductors. <i>Nature Materials</i> , 2020 , 19, 491-502	27	227
250	Inkjet printing of polymer thin film transistors. <i>Thin Solid Films</i> , 2003 , 438-439, 279-287	2.2	225
249	A new thiophene substituted isoindigo based copolymer for high performance ambipolar transistors. <i>Chemical Communications</i> , 2012 , 48, 3939-41	5.8	208
248	Controlling Electron and Hole Charge Injection in Ambipolar Organic Field-Effect Transistors by Self-Assembled Monolayers. <i>Advanced Functional Materials</i> , 2009 , 19, 2407-2415	15.6	195
247	High-stability ultrathin spin-on benzocyclobutene gate dielectric for polymer field-effect transistors. <i>Applied Physics Letters</i> , 2004 , 84, 3400-3402	3.4	195
246	Polymer Blend Solar Cells Based on a High-Mobility Naphthalenediimide-Based Polymer Acceptor: Device Physics, Photophysics and Morphology. <i>Advanced Energy Materials</i> , 2011 , 1, 230-240	21.8	190
245	Ultrathin film organic transistors: precise control of semiconductor thickness via spin-coating. <i>Advanced Materials</i> , 2013 , 25, 1401-7	24	187
244	Tough, Semiconducting Polyethylene-poly(3-hexylthiophene) Diblock Copolymers. <i>Advanced Functional Materials</i> , 2007 , 17, 2674-2679	15.6	176
243	High mobility ambipolar charge transport in polyselenophene conjugated polymers. <i>Advanced Materials</i> , 2010 , 22, 2371-5	24	172
242	Influence of Backbone Fluorination in Regioregular Poly(3-alkyl-4-fluoro)thiophenes. <i>Journal of the American Chemical Society</i> , 2015 , 137, 6866-79	16.4	166
241	Observation of Field-Effect Transistor Behavior at Self-Organized Interfaces. <i>Advanced Materials</i> , 2004 , 16, 1609-1615	24	163
240	Structural and electronic properties of metastable epitaxial FeSi _{1+x} films on Si(111). <i>Physical Review B</i> , 1992 , 45, 13807-13810	3.3	161
239	Correlation between surface photovoltage and blend morphology in polyfluorene-based photodiodes. <i>Nano Letters</i> , 2005 , 5, 559-63	11.5	160

238	Charge transport physics of conjugated polymer field-effect transistors. <i>Advanced Materials</i> , 2010 , 22, 3893-8	24	159
237	Very Low Degree of Energetic Disorder as the Origin of High Mobility in an n-channel Polymer Semiconductor. <i>Advanced Functional Materials</i> , 2011 , 21, 3371-3381	15.6	153
236	Anisotropy of Charge Transport in a Uniaxially Aligned and Chain-Extended, High-Mobility, Conjugated Polymer Semiconductor. <i>Advanced Functional Materials</i> , 2011 , 21, 932-940	15.6	150
235	Dibenzothienobisbenzothiophene-a novel fused-ring oligomer with high field-effect mobility. <i>Journal of Materials Chemistry</i> , 1999 , 9, 2095-2101		150
234	Surface tension and fluid flow driven self-assembly of ordered ZnO nanorod films for high-performance field effect transistors. <i>Journal of the American Chemical Society</i> , 2006 , 128, 16231-7	16.4	149
233	Ultrathin Regioregular Poly(3-hexyl thiophene) Field-Effect Transistors. <i>Langmuir</i> , 2002 , 18, 10176-10184		148
232	Electronic Structure of Low-Temperature Solution-Processed Amorphous Metal Oxide Semiconductors for Thin-Film Transistor Applications. <i>Advanced Functional Materials</i> , 2015 , 25, 1873-1885	15.6	144
231	Integrated, high-mobility polymer field-effect transistors driving polymer light-emitting diodes. <i>Synthetic Metals</i> , 1999 , 102, 857-860	3.6	143
230	Solution-processed organic spin-charge converter. <i>Nature Materials</i> , 2013 , 12, 622-7	27	140
229	Polaron spin current transport in organic semiconductors. <i>Nature Physics</i> , 2014 , 10, 308-313	16.2	137
228	Charge Trapping in Intergrain Regions of Pentacene Thin Film Transistors. <i>Advanced Functional Materials</i> , 2008 , 18, 3907-3913	15.6	135
227	The entangled triplet pair state in acene and heteroacene materials. <i>Nature Communications</i> , 2017 , 8, 15953	17.4	133
226	Highly efficient single-layer polymer ambipolar light-emitting field-effect transistors. <i>Advanced Materials</i> , 2012 , 24, 2728-34	24	128
225	Air Stable Cross-Linked Cytop Ultrathin Gate Dielectric for High Yield Low-Voltage Top-Gate Organic Field-Effect Transistors. <i>Chemistry of Materials</i> , 2010 , 22, 1559-1566	9.6	128
224	Downscaling of Organic Field-Effect Transistors with a Polyelectrolyte Gate Insulator. <i>Advanced Materials</i> , 2008 , 20, 4708-4713	24	127
223	Two-dimensional carrier distribution in top-gate polymer field-effect transistors: correlation between width of density of localized states and Urbach energy. <i>Advanced Materials</i> , 2014 , 26, 728-33	24	123
222	Reducing dynamic disorder in small-molecule organic semiconductors by suppressing large-amplitude thermal motions. <i>Nature Communications</i> , 2016 , 7, 10736	17.4	120
221	Silaindacenodithiophene Semiconducting Polymers for Efficient Solar Cells and High-Mobility Ambipolar Transistors. <i>Chemistry of Materials</i> , 2011 , 23, 768-770	9.6	120

220	Spectroscopic investigation of oxygen- and water-induced electron trapping and charge transport instabilities in n-type polymer semiconductors. <i>Journal of the American Chemical Society</i> , 2012 , 134, 14877-89	16.4	118
219	Binary nanoparticle superlattices in the semiconductor-semiconductor system: CdTe and CdSe. <i>Journal of the American Chemical Society</i> , 2007 , 129, 15702-9	16.4	118
218	Microstructure-mobility correlation in self-organised, conjugated polymer field-effect transistors. <i>Synthetic Metals</i> , 2000 , 111-112, 129-132	3.6	116
217	Remarkable enhancement of charge carrier mobility of conjugated polymer field-effect transistors upon incorporating an ionic additive. <i>Science Advances</i> , 2016 , 2, e1600076	14.3	115
216	All-Inkjet-Printed, All-Air-Processed Solar Cells. <i>Advanced Energy Materials</i> , 2014 , 4, 1400432	21.8	112
215	Charge-Transport Anisotropy in a Uniaxially Aligned Diketopyrrolopyrrole-Based Copolymer. <i>Advanced Materials</i> , 2015 , 27, 7356-64	24	110
214	Ultra-thin polymer gate dielectrics for top-gate polymer field-effect transistors. <i>Organic Electronics</i> , 2009 , 10, 174-180	3.5	108
213	A quantitative analytical model for static dipolar disorder broadening of the density of states at organic heterointerfaces. <i>Journal of Chemical Physics</i> , 2008 , 128, 234905	3.9	108
212	Doping of Organic Semiconductors Using Molybdenum Trioxide: a Quantitative Time-Dependent Electrical and Spectroscopic Study. <i>Advanced Functional Materials</i> , 2011 , 21, 1432-1441	15.6	106
211	Integration of a Rib Waveguide Distributed Feedback Structure into a Light-Emitting Polymer Field-Effect Transistor. <i>Advanced Functional Materials</i> , 2009 , 19, 1360-1370	15.6	97
210	Hall-effect measurements probing the degree of charge-carrier delocalization in solution-processed crystalline molecular semiconductors. <i>Physical Review Letters</i> , 2011 , 107, 066601	7.4	94
209	Microstructure of polycrystalline PBTTT films: domain mapping and structure formation. <i>ACS Nano</i> , 2012 , 6, 1849-64	16.7	93
208	Polaron Localization at Interfaces in High-Mobility Microcrystalline Conjugated Polymers. <i>Advanced Materials</i> , 2009 , 21, 3759-3763	24	92
207	Fused electron deficient semiconducting polymers for air stable electron transport. <i>Nature Communications</i> , 2018 , 9, 416	17.4	91
206	Formation of Long-Lived Color Centers for Broadband Visible Light Emission in Low-Dimensional Layered Perovskites. <i>Journal of the American Chemical Society</i> , 2017 , 139, 18632-18639	16.4	90
205	Photovoltaic and field effect transistor performance of selenophene and thiophene diketopyrrolopyrrole co-polymers with dithienothiophene. <i>Journal of Materials Chemistry</i> , 2012 , 22, 12817		90
204	Influence of the Molecular Weight on the Thermotropic Alignment of Thin Liquid Crystalline Polyfluorene Copolymer Films. <i>Macromolecules</i> , 2003 , 36, 2838-2844	5.5	90
203	Phase transition from pseudomorphic FeSi ₂ to beta -FeSi ₂ /Si(111) studied by in situ scanning tunneling microscopy. <i>Physical Review B</i> , 1993 , 47, 10567-10577	3.3	90

202	Bottom-up growth of n-type monolayer molecular crystals on polymeric substrate for optoelectronic device applications. <i>Nature Communications</i> , 2018 , 9, 2933	17.4	88
201	High yield, single droplet electrode arrays for nanoscale printed electronics. <i>ACS Nano</i> , 2010 , 4, 1451-6	16.7	88
200	High-Mobility Aligned Pentacene Films Grown by Zone-Casting. <i>Chemistry of Materials</i> , 2008 , 20, 7252-7259	15.9	85
199	Charge extraction via graded doping of hole transport layers gives highly luminescent and stable metal halide perovskite devices. <i>Science Advances</i> , 2019 , 5, eaav2012	14.3	85
198	Enhanced Self-Assembly of Pyridine-Capped CdSe Nanocrystals on Individual Single-Walled Carbon Nanotubes. <i>Chemistry of Materials</i> , 2006 , 18, 164-168	9.6	83
197	Enabling high-mobility, ambipolar charge-transport in a DPP-benzotriazole copolymer by side-chain engineering. <i>Chemical Science</i> , 2015 , 6, 6949-6960	9.4	81
196	Charge Mobility Enhancement for Conjugated DPP-Selenophene Polymer by Simply Replacing One Bulky Branching Alkyl Chain with Linear One at Each DPP Unit. <i>Chemistry of Materials</i> , 2018 , 30, 3090-3100	8.6	80
195	Modulated Thermoelectric Properties of Organic Semiconductors Using Field-Effect Transistors. <i>Advanced Functional Materials</i> , 2015 , 25, 3004-3012	15.6	79
194	Charge-transport physics of high-mobility molecular semiconductors. <i>Physica Status Solidi (B): Basic Research</i> , 2012 , 249, 1655-1676	1.3	79
193	Relative importance of polaron activation and disorder on charge transport in high-mobility conjugated polymer field-effect transistors. <i>Physical Review B</i> , 2007 , 76,	3.3	78
192	(Hot-)Water-Proof Semiconducting, Platinum-Based Chain Structures: Processing, Products, and Properties. <i>Advanced Materials</i> , 2003 , 15, 125-129	24	78
191	Materials and Applications for Solution-Processed Organic Field-Effect Transistors. <i>Proceedings of the IEEE</i> , 2009 , 97, 1570-1579	14.3	76
190	Measurement of molecular motion in organic semiconductors by thermal diffuse electron scattering. <i>Nature Materials</i> , 2013 , 12, 1045-9	27	75
189	A microscopic view of charge transport in polymer transistors. <i>Synthetic Metals</i> , 2004 , 146, 297-309	3.6	75
188	Solution-Processed Zinc Oxide as High-Performance Air-Stable Electron Injector in Organic Ambipolar Light-Emitting Field-Effect Transistors. <i>Advanced Functional Materials</i> , 2010 , 20, 3457-3465	15.6	74
187	Chasing the "Killer" Phonon Mode for the Rational Design of Low-Disorder, High-Mobility Molecular Semiconductors. <i>Advanced Materials</i> , 2019 , 31, e1902407	24	73
186	A general approach for hysteresis-free, operationally stable metal halide perovskite field-effect transistors. <i>Science Advances</i> , 2020 , 6, eaaz4948	14.3	73
185	Quantum efficiency of ambipolar light-emitting polymer field-effect transistors. <i>Journal of Applied Physics</i> , 2008 , 103, 064517	2.5	73

184	High-performance electron-transporting polymers derived from a heteroaryl bis(trifluoroborate). <i>Journal of the American Chemical Society</i> , 2011 , 133, 9949-51	16.4	72
183	Efficient charge injection from a high work function metal in high mobility n-type polymer field-effect transistors. <i>Applied Physics Letters</i> , 2010 , 96, 183303	3.4	70
182	Self-aligned inkjet printing of highly conducting gold electrodes with submicron resolution. <i>Journal of Applied Physics</i> , 2007 , 101, 064513	2.5	66
181	Surface study of thin epitaxial CoSi ₂ /Si(100) layers by scanning tunneling microscopy and reflection high-energy electron diffraction. <i>Surface Science</i> , 1992 , 271, 355-375	1.8	66
180	High-Performance Solution-Deposited Ambipolar Organic Transistors Based on Terrylene Diimides. <i>Chemistry of Materials</i> , 2010 , 22, 2120-2124	9.6	65
179	Hot carrier scattering at interfacial dislocations observed by ballistic-electron-emission microscopy. <i>Physical Review Letters</i> , 1994 , 73, 577-580	7.4	65
178	Limits for Recombination in a Low Energy Loss Organic Heterojunction. <i>ACS Nano</i> , 2016 , 10, 10736-10744	16.7	64
177	Ink-jet printed ZnO nanowire field effect transistors. <i>Applied Physics Letters</i> , 2007 , 91, 043109	3.4	64
176	Conjugated-Polymer-Based Lateral Heterostructures Defined by High-Resolution Photolithography. <i>Advanced Functional Materials</i> , 2010 , 20, 2825-2832	15.6	63
175	Epitaxial silicides with the fluorite structure. <i>Applied Surface Science</i> , 1991 , 53, 196-205	6.7	63
174	Improved Performance and Stability of Inverted Organic Solar Cells with Solution Processed, Amorphous Mixed Metal Oxide Electron Extraction Layers Comprising Alkaline Earth Metals. <i>Advanced Energy Materials</i> , 2013 , 3, 1428-1436	21.8	62
173	High-mobility, trap-free charge transport in conjugated polymer diodes. <i>Nature Communications</i> , 2019 , 10, 2122	17.4	61
172	Dithiopheneindenofluorene (TIF) Semiconducting Polymers with Very High Mobility in Field-Effect Transistors. <i>Advanced Materials</i> , 2017 , 29, 1702523	24	61
171	High Performance, Low Temperature Solution-Processed Barium and Strontium Doped Oxide Thin Film Transistors. <i>Chemistry of Materials</i> , 2014 , 26, 1195-1203	9.6	60
170	Enhanced ambipolar charge injection with semiconducting polymer/carbon nanotube thin films for light-emitting transistors. <i>ACS Nano</i> , 2012 , 6, 539-48	16.7	60
169	Bias-stress induced contact and channel degradation in staggered and coplanar organic field-effect transistors. <i>Applied Physics Letters</i> , 2008 , 92, 023512	3.4	60
168	Photodoping through local charge carrier accumulation in alloyed hybrid perovskites for highly efficient luminescence. <i>Nature Photonics</i> , 2020 , 14, 123-128	33.9	60
167	X-ray stability and response of polymeric photodiodes for imaging applications. <i>Applied Physics Letters</i> , 2008 , 92, 023304	3.4	58

166	A Vertical Organic Transistor Architecture for Fast Nonvolatile Memory. <i>Advanced Materials</i> , 2017 , 29, 1604769	24	57
165	Local charge trapping in conjugated polymers resolved by scanning Kelvin probe microscopy. <i>Physical Review Letters</i> , 2009 , 103, 256803	7.4	56
164	Azaisoindigo conjugated polymers for high performance n-type and ambipolar thin film transistor applications. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 9704-9710	7.1	56
163	High-Performance Solution-Processed Amorphous-Oxide-Semiconductor TFTs with Organic Polymeric Gate Dielectrics. <i>Advanced Electronic Materials</i> , 2015 , 1, 1400024	6.4	55
162	Observation of misfit dislocations in epitaxial CoSi ₂ /Si (111) layers by scanning tunneling microscopy. <i>Applied Physics Letters</i> , 1991 , 59, 1960-1962	3.4	55
161	Modification of Indacenodithiophene-Based Polymers and Its Impact on Charge Carrier Mobility in Organic Thin-Film Transistors. <i>Journal of the American Chemical Society</i> , 2020 , 142, 652-664	16.4	55
160	Low-Temperature Sintering of In-Plane Self-Assembled ZnO Nanorods for Solution-Processed High-Performance Thin Film Transistors. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 18831-18835	3.8	53
159	Performance Improvements in Conjugated Polymer Devices by Removal of Water-Induced Traps. <i>Advanced Materials</i> , 2018 , 30, e1801874	24	52
158	A gate dielectric that enables high ambipolar mobilities in polymer light-emitting field-effect transistors. <i>Applied Physics Letters</i> , 2008 , 93, 023301	3.4	52
157	Formation of the accumulation layer in polymer field-effect transistors. <i>Applied Physics Letters</i> , 2003 , 82, 1482-1484	3.4	51
156	Donor-acceptor stacking arrangements in bulk and thin-film high-mobility conjugated polymers characterized using molecular modelling and MAS and surface-enhanced solid-state NMR spectroscopy. <i>Chemical Science</i> , 2017 , 8, 3126-3136	9.4	50
155	Tuning the effective spin-orbit coupling in molecular semiconductors. <i>Nature Communications</i> , 2017 , 8, 15200	17.4	50
154	Programmable logic circuits for functional integrated smart plastic systems. <i>Organic Electronics</i> , 2014 , 15, 3111-3119	3.5	50
153	Inkjet-printed resistors with a wide resistance range for printed read-only memory applications. <i>Organic Electronics</i> , 2013 , 14, 699-702	3.5	49
152	Simultaneous Optimization of Light Gain and Charge Transport in Ambipolar Light-Emitting Polymer Field-Effect Transistors. <i>Chemistry of Materials</i> , 2009 , 21, 4425-4433	9.6	49
151	Organic Thin Film Transistors with Polymer Brush Gate Dielectrics Synthesized by Atom Transfer Radical Polymerization. <i>Advanced Functional Materials</i> , 2008 , 18, 36-43	15.6	49
150	Optical absorptions of polyfluorene transistors. <i>Physical Review B</i> , 2005 , 72,	3.3	49
149	Investigation of Electrode Electrochemical Reactions in CH ₃ NH ₃ PbBr Perovskite Single-Crystal Field-Effect Transistors. <i>Advanced Materials</i> , 2019 , 31, e1902618	24	48

148	Local Versus Long-Range Diffusion Effects of Photoexcited States on Radiative Recombination in Organic-Inorganic Lead Halide Perovskites. <i>Advanced Science</i> , 2015 , 2, 1500136	13.6	47
147	Electron-Hole Recombination in Uniaxially Aligned Semiconducting Polymers. <i>Advanced Functional Materials</i> , 2008 , 18, 3630-3637	15.6	47
146	Detection of X-Rays by Solution-Processed Cesium-Containing Mixed Triple Cation Perovskite Thin Films. <i>Advanced Functional Materials</i> , 2019 , 29, 1902346	15.6	46
145	Epitaxial phase transitions in the iron/silicon system. <i>Applied Surface Science</i> , 1993 , 70-71, 559-563	6.7	46
144	High resolution optical spectroscopy of air-induced electrical instabilities in n-type polymer semiconductors. <i>Advanced Materials</i> , 2012 , 24, 3367-72	24	45
143	Influence of the Casting Solvent on the Thermotropic Alignment of Thin Liquid Crystalline Polyfluorene Copolymer Films. <i>Macromolecules</i> , 2004 , 37, 6079-6085	5.5	45
142	Epitaxy of cubic iron silicides on Si(111). <i>Applied Surface Science</i> , 1993 , 73, 124-130	6.7	45
141	A Thieno[2,3-b]pyridine-Flanked Diketopyrrolopyrrole Polymer as an n-Type Polymer Semiconductor for All-Polymer Solar Cells and Organic Field-Effect Transistors. <i>Macromolecules</i> , 2018 , 51, 71-79	5.5	44
140	Structure Influence on Charge Transport in Naphthalenediimide-Thiophene Copolymers. <i>Chemistry of Materials</i> , 2014 , 26, 6796-6804	9.6	44
139	Low-cost fabrication of submicron all polymer field effect transistors. <i>Applied Physics Letters</i> , 2006 , 88, 133502	3.4	44
138	Atomic-Scale Variations of the Tunneling Distribution in a Scanning Tunneling Microscope Observed by Ballistic-Electron-Emission Microscopy. <i>Physical Review Letters</i> , 1995 , 74, 3999-4002	7.4	44
137	Preparation of bis(dithienothiophene) derivatives for organic thin film transistors. <i>Synthetic Metals</i> , 1999 , 102, 987-988	3.6	43
136	A solvent-based surface cleaning and passivation technique for suppressing ionic defects in high-mobility perovskite field-effect transistors. <i>Nature Electronics</i> , 2020 , 3, 694-703	28.4	43
135	Enhanced Charge Injection Properties of Organic Field-Effect Transistor by Molecular Implantation Doping. <i>Advanced Materials</i> , 2019 , 31, e1806697	24	41
134	Sodium and Potassium Ion Selective Conjugated Polymers for Optical Ion Detection in Solution and Solid State. <i>Advanced Functional Materials</i> , 2016 , 26, 514-523	15.6	41
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