

C Daniel Frisbie

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237
papers

24,831
citations

80
h-index

154
g-index

245
ext. papers

26,598
ext. citations

10.4
avg, IF

7.21
L-index

#	Paper	IF	Citations
237	Introduction to Organic Thin Film Transistors and Design of n-Channel Organic Semiconductors. <i>Chemistry of Materials</i> , 2004 , 16, 4436-4451	9.5	1149
236	Printable ion-gel gate dielectrics for low-voltage polymer thin-film transistors on plastic. <i>Nature Materials</i> , 2008 , 7, 900-6	26.5	945
235	Functional group imaging by chemical force microscopy. <i>Science</i> , 1994 , 265, 2071-4	32.2	880
234	Electrolyte-gated transistors for organic and printed electronics. <i>Advanced Materials</i> , 2013 , 25, 1822-46	23.6	623
233	Electrical resistance of long conjugated molecular wires. <i>Science</i> , 2008 , 320, 1482-6	32.2	580
232	Fabrication and characterization of metal-molecule-metal junctions by conducting probe atomic force microscopy. <i>Journal of the American Chemical Society</i> , 2001 , 123, 5549-56	16	489
231	Chemical Force Microscopy: Exploiting Chemically-Modified Tips To Quantify Adhesion, Friction, and Functional Group Distributions in Molecular Assemblies. <i>Journal of the American Chemical Society</i> , 1995 , 117, 7943-7951	16	471
230	Length-dependent transport in molecular junctions based on SAMs of alkanethiols and alkanedithiols: effect of metal work function and applied bias on tunneling efficiency and contact resistance. <i>Journal of the American Chemical Society</i> , 2004 , 126, 14287-96	16	461
229	Transition from direct tunneling to field emission in metal-molecule-metal junctions. <i>Physical Review Letters</i> , 2006 , 97, 026801	7.3	434
228	Distance Dependence of Electron Tunneling through Self-Assembled Monolayers Measured by Conducting Probe Atomic Force Microscopy: Unsaturated versus Saturated Molecular Junctions. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 2813-2816	3.3	424
227	Electrostatic modification of novel materials. <i>Reviews of Modern Physics</i> , 2006 , 78, 1185-1212	39.7	418
226	Critical assessment of charge mobility extraction in FETs. <i>Nature Materials</i> , 2017 , 17, 2-7	26.5	415
225	Structural characterization of a pentacene monolayer on an amorphous SiO ₂ substrate with grazing incidence x-ray diffraction. <i>Journal of the American Chemical Society</i> , 2004 , 126, 4084-5	16	390
224	Organic Thin Film Transistors Based on N-Alkyl Perylene Diimides: Charge Transport Kinetics as a Function of Gate Voltage and Temperature. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 19281-19292	3.3	384
223	Ion gel gated polymer thin-film transistors. <i>Journal of the American Chemical Society</i> , 2007 , 129, 4532-3	16	380
222	Contact resistance in metal-molecule-metal junctions based on aliphatic SAMs: effects of surface linker and metal work function. <i>Journal of the American Chemical Society</i> , 2002 , 124, 11268-9	16	338
221	"Cut and stick" rubbery ion gels as high capacitance gate dielectrics. <i>Advanced Materials</i> , 2012 , 24, 4457-63	23.6	323

220	High-resolution patterning of graphene by screen printing with a silicon stencil for highly flexible printed electronics. <i>Advanced Materials</i> , 2015 , 27, 109-15	23.6	315
219	Printed, sub-3V digital circuits on plastic from aqueous carbon nanotube inks. <i>ACS Nano</i> , 2010 , 4, 4388-956.4	56.4	323
218	Electronic impurity doping in CdSe nanocrystals. <i>Nano Letters</i> , 2012 , 12, 2587-94	11.3	294
217	Ion Gel-Gated Polymer Thin-Film Transistors: Operating Mechanism and Characterization of Gate Dielectric Capacitance, Switching Speed, and Stability. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 8972-8981	37	282
216	Effect of dielectric roughness on performance of pentacene TFTs and restoration of performance with a polymeric smoothing layer. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 10574-7	3.3	274
215	Formation of Metal-Molecule-Metal Tunnel Junctions: Microcontacts to Alkanethiol Monolayers with a Conducting AFM Tip. <i>Journal of the American Chemical Society</i> , 2000 , 122, 2970-2971	16	271
214	Gated four-probe measurements on pentacene thin-film transistors: Contact resistance as a function of gate voltage and temperature. <i>Journal of Applied Physics</i> , 2004 , 96, 7312-7324	2.4	266
213	Surface potential profiling and contact resistance measurements on operating pentacene thin-film transistors by Kelvin probe force microscopy. <i>Applied Physics Letters</i> , 2003 , 83, 5539-5541	3.3	258
212	Correlation between HOMO alignment and contact resistance in molecular junctions: aromatic thiols versus aromatic isocyanides. <i>Journal of the American Chemical Society</i> , 2006 , 128, 4970-1	16	255
211	A pi-stacking terthiophene-based quinodimethane is an n-channel conductor in a thin film transistor. <i>Journal of the American Chemical Society</i> , 2002 , 124, 4184-5	16	252
210	Gravure printing of graphene for large-area flexible electronics. <i>Advanced Materials</i> , 2014 , 26, 4533-8	23.6	239
209	Measuring relative barrier heights in molecular electronic junctions with transition voltage spectroscopy. <i>ACS Nano</i> , 2008 , 2, 827-32	16.4	226
208	Polymer electrolyte-gated organic field-effect transistors: low-voltage, high-current switches for organic electronics and testbeds for probing electrical transport at high charge carrier density. <i>Journal of the American Chemical Society</i> , 2007 , 129, 6599-607	16	223
207	Molecular rectification in a metal-insulator-metal junction based on self-assembled monolayers. <i>Journal of the American Chemical Society</i> , 2002 , 124, 11730-6	16	217
206	Molecular tunnel junctions based on π -conjugated oligoacene thiols and dithiols between Ag, Au, and Pt contacts: effect of surface linking group and metal work function. <i>Journal of the American Chemical Society</i> , 2011 , 133, 19864-77	16	213
205	Systems for orthogonal self-assembly of electroactive monolayers on Au and ITO: an approach to molecular electronics. <i>Journal of the American Chemical Society</i> , 1995 , 117, 6927-6933	16	211
204	Field Effect Transport and Trapping in Regioregular Polythiophene Nanofibers. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 19169-19179	3.3	211
203	Optimization of aerosol jet printing for high-resolution, high-aspect ratio silver lines. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 4856-64	9.4	205

202	Transition from tunneling to hopping transport in long, conjugated oligo-imine wires connected to metals. <i>Journal of the American Chemical Society</i> , 2010 , 132, 4358-68	16	197
201	Low-voltage operation of a pentacene field-effect transistor with a polymer electrolyte gate dielectric. <i>Applied Physics Letters</i> , 2005 , 86, 103503	3.3	190
200	p-Channel organic semiconductors based on hybrid acene-thiophene molecules for thin-film transistor applications. <i>Journal of the American Chemical Society</i> , 2005 , 127, 3997-4009	16	189
199	Imaging of features on surfaces by condensation figures. <i>Science</i> , 1993 , 260, 647-9	32.2	190
198	Aerosol jet printed, low voltage, electrolyte gated carbon nanotube ring oscillators with sub-5 ns stage delays. <i>Nano Letters</i> , 2013 , 13, 954-60	11.3	185
197	Variable temperature film and contact resistance measurements on operating n-channel organic thin film transistors. <i>Journal of Applied Physics</i> , 2004 , 95, 6396-6405	2.4	182
196	Solution Processable, Electrochromic Ion Gels for Sub-1 V, Flexible Displays on Plastic. <i>Chemistry of Materials</i> , 2015 , 27, 1420-1425	9.5	179
195	Solution-processable electrochemiluminescent ion gels for flexible, low-voltage, emissive displays on plastic. <i>Journal of the American Chemical Society</i> , 2014 , 136, 3705-12	16	175
194	Nanoporous Poly(3-alkylthiophene) Thin Films Generated from Block Copolymer Templates. <i>Macromolecules</i> , 2008 , 41, 67-75	5.4	171
193	Polymer electrolyte gate dielectric reveals finite windows of high conductivity in organic thin film transistors at high charge carrier densities. <i>Journal of the American Chemical Society</i> , 2005 , 127, 6960-1	16	168
192	Ionic Conductivity, Capacitance, and Viscoelastic Properties of Block Copolymer-Based Ion Gels. <i>Macromolecules</i> , 2011 , 44, 940-949	5.4	160
191	Printed Sub-2 V Gel-Electrolyte-Gated Polymer Transistors and Circuits. <i>Advanced Functional Materials</i> , 2010 , 20, 587-594	15.4	160
190	Temperature and Length Dependence of Charge Transport in Redox-Active Molecular Wires Incorporating Ruthenium(II) Bis(Ethylacetylidene) Complexes. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 7521-7526	3.7	154
189	Multicolored, Low-Power, Flexible Electrochromic Devices Based on Ion Gels. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 6252-60	9.4	154
188	High toughness, high conductivity ion gels by sequential triblock copolymer self-assembly and chemical cross-linking. <i>Journal of the American Chemical Society</i> , 2013 , 135, 9652-5	16	153
187	Probing Hopping Conduction in Conjugated Molecular Wires Connected to Metal Electrodes. <i>Chemistry of Materials</i> , 2011 , 23, 631-645	9.5	149
186	Correlation of Phase Behavior and Charge Transport in Conjugated Polymer/Fullerene Blends. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 17726-17736	3.7	149
185	Direct Force Measurements at Polymer Brush Surfaces by Atomic Force Microscopy. <i>Macromolecules</i> , 1998 , 31, 4297-4300	5.4	146

184	Electrical impedance of spin-coatable ion gel films. <i>Journal of Physical Chemistry B</i> , 2011 , 115, 3315-21	3.3	139
183	Photosensitive Self-Assembled Monolayers on Gold: Photochemistry of Surface-Confined Aryl Azide and Cyclopentadienylmanganese Tricarbonyl. <i>Journal of the American Chemical Society</i> , 1994 , 116, 4395-4404	16	136
182	Scalable, Self-Aligned Printing of Flexible Graphene Micro-Supercapacitors. <i>Advanced Energy Materials</i> , 2017 , 7, 1700285	21.6	134
181	Field effect conductance of conducting polymer nanofibers. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2003 , 41, 2674-2680	2.6	131
180	Gate Voltage Dependent Resistance of a Single Organic Semiconductor Grain Boundary. <i>Journal of Physical Chemistry B</i> , 2001 , 105, 4538-4540	3.3	131
179	Hopping transport and the Hall effect near the insulator-metal transition in electrochemically gated poly(3-hexylthiophene) transistors. <i>Nature Communications</i> , 2012 , 3, 1210	16.9	126
178	Comparison of the Mobility-Carrier Density Relation in Polymer and Single-Crystal Organic Transistors Employing Vacuum and Liquid Gate Dielectrics. <i>Advanced Materials</i> , 2009 , 21, 2174-2179	23.6	123
177	Printed, sub-2V ZnO electrolyte gated transistors and inverters on plastic. <i>Advanced Materials</i> , 2013 , 25, 3413-8	23.6	119
176	Temperature and gate voltage dependent transport across a single organic semiconductor grain boundary. <i>Journal of Applied Physics</i> , 2001 , 90, 1342-1349	2.4	118
175	Electrolyte gate-controlled Kondo effect in SrTiO ₃ . <i>Physical Review Letters</i> , 2011 , 107, 256601	7.3	119
174	Rubrene-Based Single-Crystal Organic Semiconductors: Synthesis, Electronic Structure, and Charge-Transport Properties. <i>Chemistry of Materials</i> , 2013 , 25, 2254-2263	9.5	119
173	Experimental and Theoretical Analysis of Nanotransport in Oligophenylene Dithiol Junctions as a Function of Molecular Length and Contact Work Function. <i>ACS Nano</i> , 2015 , 9, 8022-36	16.4	118
172	All-Printed, Foldable Organic Thin-Film Transistors on Glassine Paper. <i>Advanced Materials</i> , 2015 , 27, 7058-66	25.6	115
171	Size-dependent electrical transport in CdSe nanocrystal thin films. <i>Nano Letters</i> , 2010 , 10, 3727-32	11.3	114
170	Temperature-independent transport in high-mobility dinaphtho-thieno-thiophene (DNNT) single crystal transistors. <i>Advanced Materials</i> , 2013 , 25, 3478-84	23.6	111
169	Potentiometry of an operating organic semiconductor field-effect transistor. <i>Applied Physics Letters</i> , 2001 , 78, 993-995	3.3	109
168	High carrier densities achieved at low voltages in Ambipolar PbSe nanocrystal thin-film transistors. <i>Nano Letters</i> , 2009 , 9, 3848-52	11.3	104
167	Size- and temperature-dependent charge transport in PbSe nanocrystal thin films. <i>Nano Letters</i> , 2011 , 11, 3887-92	11.3	102

166	Length and Temperature Dependent Conduction of Ruthenium-Containing Redox-Active Molecular Wires. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 19955-19961	3.7	99
165	Performance and stability of aerosol-jet-printed electrolyte-gated transistors based on poly(3-hexylthiophene). <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 6580-5	9.4	98
164	Viscoelastic Properties, Ionic Conductivity, and Materials Design Considerations for Poly(styrene-b-ethylene oxide-b-styrene)-Based Ion Gel Electrolytes. <i>Macromolecules</i> , 2011 , 44, 8981-8989	5.4	91
163	Vibrational spectroscopy reveals electrostatic and electrochemical doping in organic thin film transistors gated with a polymer electrolyte dielectric. <i>Journal of the American Chemical Society</i> , 2007 , 129, 7824-30	16	89
162	Screen Printing of Highly Loaded Silver Inks on Plastic Substrates Using Silicon Stencils. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 12619-24	9.4	87
161	Analysis of the causes of variance in resistance measurements on metal-molecule-metal junctions formed by conducting-probe atomic force microscopy. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 16801-10	3.7	88
160	High charge carrier densities and conductance maxima in single-crystal organic field-effect transistors with a polymer electrolyte gate dielectric. <i>Applied Physics Letters</i> , 2006 , 88, 203504	3.3	87
159	Ultralow contact resistance in electrolyte-gated organic thin film transistors. <i>Applied Physics Letters</i> , 2010 , 97, 193311	3.3	79
158	Field Effect Conductance Measurements on Thin Crystals of Sexithiophene. <i>Journal of Physical Chemistry B</i> , 1999 , 103, 8842-8849	3.3	78
157	Single ion conducting, polymerized ionic liquid triblock copolymer films: high capacitance electrolyte gates for n-type transistors. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 7294-302	9.4	78
156	High-Resolution Transfer Printing of Graphene Lines for Fully Printed, Flexible Electronics. <i>ACS Nano</i> , 2017 , 11, 7431-7439	16.4	79
155	Grain Orientation Mapping of Polycrystalline Organic Semiconductor Films by Transverse Shear Microscopy. <i>Advanced Materials</i> , 2008 , 20, 4033-4039	23.6	76
154	Dependence of Conductivity on Charge Density and Electrochemical Potential in Polymer Semiconductors Gated with Ionic Liquids. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 3132-3141	3.7	74
153	Length-dependent conductance of conjugated molecular wires synthesized by stepwise "click" chemistry. <i>Journal of the American Chemical Society</i> , 2010 , 132, 8854-5	16	75
152	Aerosol jet printed, sub-2 V complementary circuits constructed from P- and N-type electrolyte gated transistors. <i>Advanced Materials</i> , 2014 , 26, 7032-7	23.6	71
151	Enhanced hopping conductivity in low band gap donor-acceptor molecular wires Up to 20 nm in length. <i>Journal of the American Chemical Society</i> , 2010 , 132, 16191-201	16	73
150	Tetracene air-gap single-crystal field-effect transistors. <i>Applied Physics Letters</i> , 2007 , 90, 162106	3.3	76
149	Synergistic Increase in Ionic Conductivity and Modulus of Triblock Copolymer Ion Gels. <i>Macromolecules</i> , 2015 , 48, 4942-4950	5.4	71

148	Field Effect Transport Measurements on Single Grains of Sexithiophene: Role of the Contacts. <i>Journal of Physical Chemistry B</i> , 2000 , 104, 12202-12209	3.3	71
147	Organic Electrical Double Layer Transistors Based on Rubrene Single Crystals: Examining Transport at High Surface Charge Densities above 10^{13} cm $^{-2}$. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 14360-14368	3.7	71
146	Length-Dependent Nanotransport and Charge Hopping Bottlenecks in Long Thiophene-Containing Conjugated Molecular Wires. <i>Journal of the American Chemical Society</i> , 2015 , 137, 15732-41	16	69
145	Surface potential mapping of SAM-functionalized organic semiconductors by Kelvin probe force microscopy. <i>Advanced Materials</i> , 2011 , 23, 502-7	23.6	69
144	Investigation of Charge Transport in Thin, Doped Sexithiophene Crystals by Conducting Probe Atomic Force Microscopy. <i>Journal of Physical Chemistry B</i> , 1998 , 102, 1679-1688	3.3	68
143	Carrier localization on surfaces of organic semiconductors gated with electrolytes. <i>Physical Review Letters</i> , 2010 , 105, 036802	7.3	66
142	Electrostatic versus Electrochemical Doping and Control of Ferromagnetism in Ion-Gel-Gated Ultrathin La $_{0.5}$ Sr $_{0.5}$ CoO $_3$. <i>ACS Nano</i> , 2016 , 10, 7799-810	16.4	63
141	High-Mobility Transistors Based on Single Crystals of Isotopically Substituted Rubrene-d $_{28}$. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 11522-11529	3.7	63
140	Enhancement of the Morphology and Open Circuit Voltage in Bilayer Polymer/Fullerene Solar Cells. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 11408-11415	3.7	60
139	Transport properties of single-crystal tetracene field-effect transistors with silicon dioxide gate dielectric. <i>Applied Physics Letters</i> , 2004 , 85, 422-424	3.3	61
138	Aerosol jet printed p- and n-type electrolyte-gated transistors with a variety of electrode materials: exploring practical routes to printed electronics. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 18704-18714	9.4	59
137	Scanning electron microscopy for imaging photopatterned self-assembled monolayers on gold. <i>Langmuir</i> , 1993 , 9, 1517-1520	3.9	60
136	Strain effects on the work function of an organic semiconductor. <i>Nature Communications</i> , 2016 , 7, 10270	16.9	55
135	N- and P-channel transport behavior in thin film transistors based on tricyanovinyl-capped oligothiophenes. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 14590-7	3.3	57
134	Label-free DNA sensing platform with low-voltage electrolyte-gated transistors. <i>Analytical Chemistry</i> , 2015 , 87, 1861-6	7.7	54
133	High-Transconductance Organic Thin-Film Electrochemical Transistors for Driving Low-Voltage Red-Green-Blue Active Matrix Organic Light-Emitting Devices. <i>Advanced Functional Materials</i> , 2012 , 22, 1623-1631	15.4	51
132	Synthesis, Optical Properties, and Microstructure of a Fullerene-Terminated Poly(3-hexylthiophene). <i>Macromolecules</i> , 2009 , 42, 4118-4126	5.4	50
131	Correlation of on-state conductance with referenced electrochemical potential in ion gel gated polymer transistors. <i>Applied Physics Letters</i> , 2009 , 94, 013304	3.3	51

130	Uncovering a law of corresponding states for electron tunneling in molecular junctions. <i>Nanoscale</i> , 2015 , 7, 10465-71	7.5	50
129	A pedagogical perspective on ambipolar FETs. <i>ChemPhysChem</i> , 2013 , 14, 1547-52	3.1	50
128	Hydrostatic-pressure dependence of the photoconductivity of single-crystal pentacene and tetracene. <i>Applied Physics Letters</i> , 2001 , 79, 2731-2733	3.3	49
127	Charge Transport in 4 nm Molecular Wires with Interrupted Conjugation: Combined Experimental and Computational Evidence for Thermally Assisted Polaron Tunneling. <i>ACS Nano</i> , 2016 , 10, 4372-83	16.4	49
126	Influence of silver doping on electron transport in thin films of PbSe nanocrystals. <i>Advanced Materials</i> , 2013 , 25, 725-31	23.6	49
125	Relationship between Diode Saturation Current and Open Circuit Voltage in Poly(3-alkylthiophene) Solar Cells as a Function of Device Architecture, Processing Conditions, and Alkyl Side Chain Length. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 20806-20816	3.7	48
124	Direct detection by atomic force microscopy of single bond forces associated with the rupture of discrete charge-transfer complexes. <i>Journal of the American Chemical Society</i> , 2002 , 124, 15125-33	16	47
123	Transfer printing of thermoreversible ion gels for flexible electronics. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 9522-7	9.4	46
122	DC-Driven, Sub-2 V Solid-State Electrochemiluminescent Devices by Incorporating Redox Coreactants into Emissive Ion Gels. <i>Chemistry of Materials</i> , 2014 , 26, 5358-5364	9.5	47
121	Low Band Gap Poly(thienylene vinylene)/Fullerene Bulk Heterojunction Photovoltaic Cells. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 10790-10797	3.7	47
120	Hydrostatic pressure dependence of charge carrier transport in single-crystal rubrene devices. <i>Applied Physics Letters</i> , 2005 , 86, 123501	3.3	46
119	Diastereoselectivity of Enolate Anion Protonation. H/D Exchange of β -Substituted Ethyl Butanoates in Ethanol-d. <i>Journal of the American Chemical Society</i> , 1997 , 119, 479-486	16	47
118	Comparison of DC and AC Transport in 1.5-7.5 nm Oligophenylene Imine Molecular Wires across Two Junction Platforms: Eutectic Ga-In versus Conducting Probe Atomic Force Microscope Junctions. <i>Journal of the American Chemical Society</i> , 2016 , 138, 7305-14	16	46
117	Effects of Olefin Content and Alkyl Chain Placement on Optoelectronic and Morphological Properties in Poly(thienylene vinylenes). <i>Macromolecules</i> , 2013 , 46, 5184-5194	5.4	44
116	Utilizing carbon nanotube electrodes to improve charge injection and transport in bis(trifluoromethyl)-dimethyl-rubrene ambipolar single crystal transistors. <i>ACS Nano</i> , 2013 , 7, 10245-56	16.4	45
115	Detection of Discrete Interactions upon Rupture of Au Microcontacts to Self-Assembled Monolayers Terminated with β (CO)CH ₃ or β H. <i>Journal of the American Chemical Society</i> , 2000 , 122, 9750-9760	16	45
114	Rupture of Hydrophobic Microcontacts in Water: \square Correlation of Pull-Off Force with AFM Tip Radius. <i>Langmuir</i> , 2000 , 16, 6294-6297	3.9	43
113	Determination of Energy-Level Alignment in Molecular Tunnel Junctions by Transport and Spectroscopy: Self-Consistency for the Case of Oligophenylene Thiols and Dithiols on Ag, Au, and Pt Electrodes. <i>Journal of the American Chemical Society</i> , 2019 , 141, 3670-3681	16	42

112	Operating and Sensing Mechanism of Electrolyte-Gated Transistors with Floating Gates: Building a Platform for Amplified Biodetection. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 108-117	3-7	40
111	Effect of Heteroatom Substitution on Transport in Alkanedithiol-Based Molecular Tunnel Junctions: Evidence for Universal Behavior. <i>ACS Nano</i> , 2017 , 11, 569-578	16.4	39
110	Growth of ultrathin pentacene films on polymeric substrates. <i>Physical Review B</i> , 2009 , 80,	3-3	38
109	Observation of Unusual Homoepitaxy in Ultrathin Pentacene Films and Correlation with Surface Electrostatic Potential. <i>Advanced Materials</i> , 2009 , 21, 3092-3098	23.6	38
108	Simultaneous nanoindentation and electron tunneling through alkanethiol self-assembled monolayers. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 10011-20	3-3	39
107	An ADMET Route to Low-Band-Gap Poly(3-hexadecylthienylene vinylene): A Systematic Study of Molecular Weight on Photovoltaic Performance. <i>Macromolecules</i> , 2012 , 45, 2190-2199	5-4	37
106	A Self-Aligned Strategy for Printed Electronics: Exploiting Capillary Flow on Microstructured Plastic Surfaces. <i>Advanced Electronic Materials</i> , 2015 , 1, 1500137	6	37
105	Electrochemiluminescent displays based on ion gels: correlation between device performance and choice of electrolyte. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 8448-8453	7	37
104	Band Gap and HOMO Level Control in Poly(thienylene vinylene)s Prepared by ADMET Polymerization. <i>ACS Macro Letters</i> , 2012 , 1, 986-990	6.5	36
103	Poly(lactide)-Poly(thiophene)-Poly(lactide) Triblock Copolymers. <i>Macromolecules</i> , 2010 , 43, 3566-3569	5-4	37
102	Current-Voltage Hysteresis and Memory Effects in Ambipolar Organic Thin Film Transistors Based on a Substituted Oligothiophene. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 452-456	3-7	37
101	Rapid, Selective, Label-Free Aptameric Capture and Detection of Ricin in Potable Liquids Using a Printed Floating Gate Transistor. <i>ACS Sensors</i> , 2016 , 1, 1213-1216	9	36
100	Exceptionally Small Statistical Variations in the Transport Properties of Metal-Molecule-Metal Junctions Composed of 80 Oligophenylene Dithiol Molecules. <i>Journal of the American Chemical Society</i> , 2017 , 139, 5696-5699	16	36
99	High-resolution, high-aspect ratio conductive wires embedded in plastic substrates. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 1841-7	9-4	34
98	High conductance 2D transport around the Hall mobility peak in electrolyte-gated rubrene crystals. <i>Physical Review Letters</i> , 2014 , 113, 246602	7-3	35
97	Determination of quasi-Fermi levels across illuminated organic donor/acceptor heterojunctions by Kelvin probe force microscopy. <i>Journal of the American Chemical Society</i> , 2011 , 133, 13802-5	16	35
96	Pentacene organic field-effect transistor on metal substrate with spin-coated smoothing layer. <i>Applied Physics Letters</i> , 2004 , 85, 4406	3-3	34
95	Use of high lateral resolution secondary-ion mass spectrometry to characterize self-assembled monolayers on microfabricated structures. <i>Journal of the American Chemical Society</i> , 1992 , 114, 7142-7145	16	34

94	HOMO Level Pinning in Molecular Junctions: Joint Theoretical and Experimental Evidence. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 2394-2403	6.3	33
93	Work function and temperature dependence of electron tunneling through an N-type perylene diimide molecular junction with isocyanide surface linkers. <i>Nanoscale</i> , 2018 , 10, 964-975	7.5	33
92	Crystal step edges can trap electrons on the surfaces of n-type organic semiconductors. <i>Nature Communications</i> , 2018 , 9, 2141	16.9	31
91	2D Insulator-Metal Transition in Aerosol-Jet-Printed Electrolyte-Gated Indium Oxide Thin Film Transistors. <i>Advanced Electronic Materials</i> , 2017 , 3, 1600369	6	30
90	Conducting channel formation and annihilation in organic field-effect structures. <i>Journal of Applied Physics</i> , 2009 , 105, 024514	2.4	31
89	Hopping Transport and Rectifying Behavior in Long Donor-Acceptor Molecular Wires. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 26485-26497	3.7	31
88	Aerosol-jet-printed, 1 volt H-bridge drive circuit on plastic with integrated electrochromic pixel. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 13198-206	9.4	30
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