

# Jenny Nelson

## List of Publications by Citations

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349  
papers

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386  
ext. papers

40,148  
ext. citations

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L-index

#	Paper	IF	Citations
349	A strong regioregularity effect in self-organizing conjugated polymer films and high-efficiency polythiophene:fullerene solar cells. <i>Nature Materials</i> , <b>2006</b> , 5, 197-203	27	2097
348	Morphology evolution via self-organization and lateral and vertical diffusion in polymer:fullerene solar cell blends. <i>Nature Materials</i> , <b>2008</b> , 7, 158-64	27	1331
347	The Physics of Solar Cells <b>2003</b> ,		992
346	Reversible Hydration of CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> in Films, Single Crystals, and Solar Cells. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 3397-3407	9.6	888
345	Reducing the efficiency-stability-cost gap of organic photovoltaics with highly efficient and stable small molecule acceptor ternary solar cells. <i>Nature Materials</i> , <b>2017</b> , 16, 363-369	27	807
344	Degradation of organic solar cells due to air exposure. <i>Solar Energy Materials and Solar Cells</i> , <b>2006</b> , 90, 3520-3530	6.4	593
343	Charge carrier formation in polythiophene/fullerene blend films studied by transient absorption spectroscopy. <i>Journal of the American Chemical Society</i> , <b>2008</b> , 130, 3030-42	16.4	576
342	Continuous-time random-walk model of electron transport in nanocrystalline TiO <sub>2</sub> electrodes. <i>Physical Review B</i> , <b>1999</b> , 59, 15374-15380	3.3	558
341	Device annealing effect in organic solar cells with blends of regioregular poly(3-hexylthiophene) and soluble fullerene. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 063502	3.4	543
340	Hybrid polymer/zinc oxide photovoltaic devices with vertically oriented ZnO nanorods and an amphiphilic molecular interface layer. <i>Journal of Physical Chemistry B</i> , <b>2006</b> , 110, 7635-9	3.4	492
339	Factors limiting device efficiency in organic photovoltaics. <i>Advanced Materials</i> , <b>2013</b> , 25, 1847-58	24	489
338	Evidence for ion migration in hybrid perovskite solar cells with minimal hysteresis. <i>Nature Communications</i> , <b>2016</b> , 7, 13831	17.4	477
337	Efficient organic solar cells with solution-processed silver nanowire electrodes. <i>Advanced Materials</i> , <b>2011</b> , 23, 4371-5	24	469
336	Influence of blend microstructure on bulk heterojunction organic photovoltaic performance. <i>Chemical Society Reviews</i> , <b>2011</b> , 40, 1185-99	58.5	463
335	The dynamics of methylammonium ions in hybrid organic-inorganic perovskite solar cells. <i>Nature Communications</i> , <b>2015</b> , 6, 7124	17.4	446
334	Experimental determination of the rate law for charge carrier decay in a polythiophene: Fullerene solar cell. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 093311	3.4	428
333	A rhodanine flanked nonfullerene acceptor for solution-processed organic photovoltaics. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 898-904	16.4	407

332	An Alkylated Indacenodithieno[3,2-b]thiophene-Based Nonfullerene Acceptor with High Crystallinity Exhibiting Single Junction Solar Cell Efficiencies Greater than 13% with Low Voltage Losses. <i>Advanced Materials</i> , <b>2018</b> , 30, 1705209	24	399
331	Quantifying Losses in Open-Circuit Voltage in Solution-Processable Solar Cells. <i>Physical Review Applied</i> , <b>2015</b> , 4,	4.3	373
330	Polymer:fullerene bulk heterojunction solar cells. <i>Materials Today</i> , <b>2011</b> , 14, 462-470	21.8	369
329	Bimolecular recombination losses in polythiophene: Fullerene solar cells. <i>Physical Review B</i> , <b>2008</b> , 78,	3.3	364
328	Trap-limited recombination in dye-sensitized nanocrystalline metal oxide electrodes. <i>Physical Review B</i> , <b>2001</b> , 63,	3.3	357
327	Recombination dynamics as a key determinant of open circuit voltage in organic bulk heterojunction solar cells: a comparison of four different donor polymers. <i>Advanced Materials</i> , <b>2010</b> , 22, 4987-92	24	343
326	Binary Organic Photovoltaic Blends: A Simple Rationale for Optimum Compositions. <i>Advanced Materials</i> , <b>2008</b> , 20, 3510-3515	24	342
325	Organic photovoltaic films. <i>Current Opinion in Solid State and Materials Science</i> , <b>2002</b> , 6, 87-95	12	333
324	Diffusion-limited recombination in polymer-fullerene blends and its influence on photocurrent collection. <i>Physical Review B</i> , <b>2003</b> , 67,	3.3	321
323	Recombination via tail states in polythiophene:fullerene solar cells. <i>Physical Review B</i> , <b>2011</b> , 83,	3.3	312
322	Molecular control of recombination dynamics in dye-sensitized nanocrystalline TiO <sub>2</sub> films: free energy vs distance dependence. <i>Journal of the American Chemical Society</i> , <b>2004</b> , 126, 5225-33	16.4	305
321	Hybrid polymer/metal oxide thin films for photovoltaic applications. <i>Journal of Materials Chemistry</i> , <b>2007</b> , 17, 3141		304
320	The nature of in-plane skeleton Raman modes of P3HT and their correlation to the degree of molecular order in P3HT:PCBM blend thin films. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 9834-43	16.4	295
319	Nondispersive hole transport in amorphous films of methoxy-spirofluorene-arylamine organic compound. <i>Journal of Applied Physics</i> , <b>2003</b> , 93, 341-346	2.5	289
318	Experimental and theoretical optical properties of methylammonium lead halide perovskites. <i>Nanoscale</i> , <b>2016</b> , 8, 6317-27	7.7	287
317	Random walk models of charge transfer and transport in dye sensitized systems. <i>Coordination Chemistry Reviews</i> , <b>2004</b> , 248, 1181-1194	23.2	272
316	Economic assessment of solar electricity production from organic-based photovoltaic modules in a domestic environment. <i>Energy and Environmental Science</i> , <b>2011</b> , 4, 3741	35.4	258
315	Photocurrent enhancement from diketopyrrolopyrrole polymer solar cells through alkyl-chain branching point manipulation. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 11537-40	16.4	248

- 314 Free Energy Control of Charge Photogeneration in Polythiophene/Fullerene Solar Cells: The Influence of Thermal Annealing on P3HT/PCBM Blends. *Advanced Functional Materials*, **2008**, 18, 4029-4035<sup>15.6</sup> 247
- 313 Hybrid polymer/metal oxide solar cells based on ZnO columnar structures. *Journal of Materials Chemistry*, **2006**, 16, 2088 244
- 312 Charge-density-based analysis of the current-voltage response of polythiophene/fullerene photovoltaic devices. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 16448-52 11.5 243
- 311 Formation of a Ground-State Charge-Transfer Complex in Polyfluorene//[6,6]-Phenyl-C61 Butyric Acid Methyl Ester (PCBM) Blend Films and Its Role in the Function of Polymer/PCBM Solar Cells. *Advanced Functional Materials*, **2007**, 17, 451-457 15.6 234
- 310 Using Self-Assembling Dipole Molecules to Improve Charge Collection in Molecular Solar Cells. *Advanced Functional Materials*, **2006**, 16, 95-100 15.6 234
- 309 The Effect of Poly(3-hexylthiophene) Molecular Weight on Charge Transport and the Performance of Polymer:Fullerene Solar Cells. *Advanced Functional Materials*, **2008**, 18, 2373-2380 15.6 233
- 308 Exploring the origin of high optical absorption in conjugated polymers. *Nature Materials*, **2016**, 15, 746-537 233
- 307 Environmental and economic assessment of ITO-free electrodes for organic solar cells. *Solar Energy Materials and Solar Cells*, **2012**, 97, 14-21 6.4 229
- 306 Ambipolar Charge Transport in Films of Methanofullerene and Poly(phenylenevinylene)/Methanofullerene Blends. *Advanced Functional Materials*, **2005**, 15, 1171-1182<sup>15.6</sup> 220
- 305 The impact of molecular weight on microstructure and charge transport in semicrystalline polymer semiconductors poly(3-hexylthiophene), a model study. *Progress in Polymer Science*, **2013**, 38, 1978-1989<sup>29.6</sup> 219
- 304 Competition between the charge transfer state and the singlet states of donor or acceptor limiting the efficiency in polymer:fullerene solar cells. *Journal of the American Chemical Society*, **2012**, 134, 685-92<sup>16.4</sup> 219
- 303 Modeling charge transport in organic photovoltaic materials. *Accounts of Chemical Research*, **2009**, 42, 1768-78 24.3 215
- 302 Organic Photovoltaic Devices Based on Blends of Regioregular Poly(3-hexylthiophene) and Poly(9,9-dioctylfluorene-co-benzothiadiazole). *Chemistry of Materials*, **2004**, 16, 4812-4818 9.6 211
- 301 Effect of Crystallization on the Electronic Energy Levels and Thin Film Morphology of P3HT:PCBM Blends. *Macromolecules*, **2011**, 44, 2944-2952 5.5 208
- 300 Iodide Electron Transfer Kinetics in Dye-Sensitized Nanocrystalline TiO<sub>2</sub> Films. *Journal of Physical Chemistry B*, **2002**, 106, 12203-12210 3.4 206
- 299 Sensitivity of the Mott-Schottky Analysis in Organic Solar Cells. *Journal of Physical Chemistry C*, **2012**, 116, 7672-7680 3.8 202
- 298 Real-Time Investigation of Crystallization and Phase-Segregation Dynamics in P3HT:PCBM Solar Cells During Thermal Annealing. *Advanced Functional Materials*, **2011**, 21, 1701-1708 15.6 197
- 297 Understanding the Thickness-Dependent Performance of Organic Bulk Heterojunction Solar Cells: The Influence of Mobility, Lifetime, and Space Charge. *Journal of Physical Chemistry Letters*, **2012**, 3, 3470-4<sup>6.4</sup> 196

296	A round robin study of flexible large-area roll-to-roll processed polymer solar cell modules. <i>Solar Energy Materials and Solar Cells</i> , <b>2009</b> , 93, 1968-1977	6.4	194
295	High ambipolar and balanced carrier mobility in regioregular poly(3-hexylthiophene). <i>Applied Physics Letters</i> , <b>2004</b> , 85, 3890-3892	3.4	194
294	Charge Recombination in Conjugated Polymer/Fullerene Blended Films Studied by Transient Absorption Spectroscopy. <i>Journal of Physical Chemistry B</i> , <b>2003</b> , 107, 1567-1573	3.4	190
293	Hybridization of Local Exciton and Charge-Transfer States Reduces Nonradiative Voltage Losses in Organic Solar Cells. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 6362-6374	16.4	188
292	Transient optical studies of charge recombination dynamics in a polymer/fullerene composite at room temperature. <i>Applied Physics Letters</i> , <b>2002</b> , 81, 3001-3003	3.4	179
291	On the Differences between Dark and Light Ideality Factor in Polymer:Fullerene Solar Cells. <i>Journal of Physical Chemistry Letters</i> , <b>2013</b> , 4, 2371-2376	6.4	178
290	Composition and annealing effects in polythiophene/fullerene solar cells. <i>Journal of Materials Science</i> , <b>2005</b> , 40, 1371-1376	4.3	177
289	Meaning of reaction orders in polymer:fullerene solar cells. <i>Physical Review B</i> , <b>2012</b> , 86,	3.3	174
288	Dynamics of Crystallization and Disorder during Annealing of P3HT/PCBM Bulk Heterojunctions. <i>Macromolecules</i> , <b>2011</b> , 44, 2725-2734	5.5	171
287	Hybrid nanocrystalline TiO <sub>2</sub> solar cells with a fluorene-thiophene copolymer as a sensitizer and hole conductor. <i>Journal of Applied Physics</i> , <b>2004</b> , 95, 1473-1480	2.5	171
286	Charge mobility of discotic mesophases: a multiscale quantum and classical study. <i>Physical Review Letters</i> , <b>2007</b> , 98, 227402	7.4	167
285	Modeling Nongeminate Recombination in P3HT:PCBM Solar Cells. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 9806-9813	3.8	163
284	Predicting synthesizability. <i>Journal Physics D: Applied Physics</i> , <b>2019</b> , 52,	3	161
283	Organic photovoltaic greenhouses: a unique application for semi-transparent PV?. <i>Energy and Environmental Science</i> , <b>2015</b> , 8, 1317-1328	35.4	159
282	Effects of thickness and thermal annealing of the PEDOT:PSS layer on the performance of polymer solar cells. <i>Organic Electronics</i> , <b>2009</b> , 10, 205-209	3.5	158
281	Factors limiting the efficiency of molecular photovoltaic devices. <i>Physical Review B</i> , <b>2004</b> , 69,	3.3	158
280	Single-junction organic solar cells with over 19% efficiency enabled by a refined double-fibril network morphology.. <i>Nature Materials</i> , <b>2022</b> ,	27	157
279	Simulating charge transport in tris(8-hydroxyquinoline) aluminium (Alq(3)). <i>Physical Chemistry Chemical Physics</i> , <b>2008</b> , 10, 1852-8	3.6	155

278	The Effect of Polymer Optoelectronic Properties on the Performance of Multilayer Hybrid Polymer/TiO <sub>2</sub> Solar Cells. <i>Advanced Functional Materials</i> , <b>2005</b> , 15, 609-618	15.6	153
277	Understanding structure-activity relationships in linear polymer photocatalysts for hydrogen evolution. <i>Nature Communications</i> , <b>2018</b> , 9, 4968	17.4	153
276	Defect chemistry, surface structures, and lithium insertion in anatase TiO <sub>2</sub> . <i>Journal of Physical Chemistry B</i> , <b>2006</b> , 110, 9995-10001	3.4	150
275	Electron Transfer Dynamics in Dye Sensitized Nanocrystalline Solar Cells Using a Polymer Electrolyte. <i>Journal of Physical Chemistry B</i> , <b>2001</b> , 105, 7517-7524	3.4	148
274	Studies of Highly Regioregular Poly(3-hexylselenophene) for Photovoltaic Applications. <i>Advanced Materials</i> , <b>2007</b> , 19, 4544-4547	24	147
273	Measurement of Charge-Density Dependence of Carrier Mobility in an Organic Semiconductor Blend. <i>Advanced Functional Materials</i> , <b>2010</b> , 20, 698-702	15.6	145
272	Transient Optoelectronic Analysis of Charge Carrier Losses in a Selenophene/Fullerene Blend Solar Cell. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 5947-5957	3.8	141
271	Recombination in Annealed and Nonannealed Polythiophene/Fullerene Solar Cells: Transient Photovoltage Studies versus Numerical Modeling. <i>Journal of Physical Chemistry Letters</i> , <b>2010</b> , 1, 1432-1436	6.4	141
270	A History and Perspective of Non-Fullerene Electron Acceptors for Organic Solar Cells. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2003570	21.8	141
269	Visualizing charge separation in bulk heterojunction organic solar cells. <i>Nature Communications</i> , <b>2013</b> , 4, 2334	17.4	140
268	Electron Collection as a Limit to Polymer:PCBM Solar Cell Efficiency: Effect of Blend Microstructure on Carrier Mobility and Device Performance in PTB7:PCBM. <i>Advanced Energy Materials</i> , <b>2014</b> , 4, 1400311	21.8	139
267	Temperature and field dependence of hole mobility in poly(9,9-dioctylfluorene). <i>Physical Review B</i> , <b>2006</b> , 73,	3.3	138
266	Non-Geminate Recombination as the Primary Determinant of Open-Circuit Voltage in Polythiophene:Fullerene Blend Solar Cells: an Analysis of the Influence of Device Processing Conditions. <i>Advanced Functional Materials</i> , <b>2011</b> , 21, 2744-2753	15.6	137
265	Investigation of transport properties in polymer/fullerene blends using time-of-flight photocurrent measurements. <i>Applied Physics Letters</i> , <b>2003</b> , 83, 3812-3814	3.4	137
264	Models of charge pair generation in organic solar cells. <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 2311-2325	3.6	135
263	Using Self-Assembling Dipole Molecules to Improve Hole Injection in Conjugated Polymers. <i>Advanced Functional Materials</i> , <b>2004</b> , 14, 1205-1210	15.6	133
262	Hybrid Solar Cells from a Blend of Poly(3-hexylthiophene) and Ligand-Capped TiO <sub>2</sub> Nanorods. <i>Advanced Functional Materials</i> , <b>2008</b> , 18, 622-633	15.6	132
261	Extracting Microscopic Device Parameters from Transient Photocurrent Measurements of P3HT:PCBM Solar Cells. <i>Advanced Energy Materials</i> , <b>2012</b> , 2, 662-669	21.8	129

260	The Role of the Side Chain on the Performance of N-type Conjugated Polymers in Aqueous Electrolytes. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 2945-2953	9.6	124
259	Electron Dynamics in Nanocrystalline ZnO and TiO <sub>2</sub> Films Probed by Potential Step Chronoamperometry and Transient Absorption Spectroscopy. <i>Journal of Physical Chemistry B</i> , <b>2002</b> , 106, 7605-7613	3.4	123
258	Understanding the Reduced Efficiencies of Organic Solar Cells Employing Fullerene Multiadducts as Acceptors. <i>Advanced Energy Materials</i> , <b>2013</b> , 3, 744-752	21.8	115
257	. <i>IEEE Journal of Quantum Electronics</i> , <b>1993</b> , 29, 1460-1468	2	113
256	Gravure printing for three subsequent solar cell layers of inverted structures on flexible substrates. <i>Solar Energy Materials and Solar Cells</i> , <b>2011</b> , 95, 731-734	6.4	110
255	Solar energy. Solar cells by self-assembly?. <i>Science</i> , <b>2001</b> , 293, 1059-60	33.3	110
254	Short-circuit current and energy efficiency enhancement in a low-dimensional structure photovoltaic device. <i>Applied Physics Letters</i> , <b>1991</b> , 59, 135-137	3.4	109
253	A polymer/fullerene based photodetector with extremely low dark current for x-ray medical imaging applications. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 203305	3.4	108
252	Quantum well solar cells. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2002</b> , 14, 27-36	3	107
251	Ionic-to-electronic current amplification in hybrid perovskite solar cells: ionically gated transistor-interface circuit model explains hysteresis and impedance of mixed conducting devices. <i>Energy and Environmental Science</i> , <b>2019</b> , 12, 1296-1308	35.4	102
250	Ohmic hole injection in poly(9,9-dioctylfluorene) polymer light-emitting diodes. <i>Applied Physics Letters</i> , <b>2003</b> , 83, 707-709	3.4	102
249	Photochemical reduction of oxygen adsorbed to nanocrystalline TiO <sub>2</sub> films: a transient absorption and oxygen scavenging study of different TiO <sub>2</sub> preparations. <i>Journal of Physical Chemistry B</i> , <b>2006</b> , 110, 23255-63	3.4	101
248	Dependence of Charge Separation Efficiency on Film Microstructure in Poly(3-hexylthiophene-2,5-diyl):[6,6]-Phenyl-C <sub>61</sub> Butyric Acid Methyl Ester Blend Films. <i>Journal of Physical Chemistry Letters</i> , <b>2010</b> , 1, 734-738	6.4	98
247	Effects of Photo-oxidation on the Performance of Poly[2-methoxy-5-(3,7-dimethyloctyloxy)-1,4-phenylene vinylene]:[6,6]-Phenyl C <sub>61</sub> -Butyric Acid Methyl Ester Solar Cells. <i>Advanced Functional Materials</i> , <b>2006</b> , 16, 2117-2126	15.6	95
246	Limits on the Fill Factor in Organic Photovoltaics: Distinguishing Nongeminate and Geminate Recombination Mechanisms. <i>Journal of Physical Chemistry Letters</i> , <b>2013</b> , 4, 803-8	6.4	91
245	Influence of polymer-blend morphology on charge transport and photocurrent generation in donor-acceptor polymer blends. <i>Nano Letters</i> , <b>2006</b> , 6, 1674-81	11.5	91
244	Emergent Properties of an Organic Semiconductor Driven by its Molecular Chirality. <i>ACS Nano</i> , <b>2017</b> , 11, 8329-8338	16.7	90
243	Investigation of a Conjugated Polyelectrolyte Interlayer for Inverted Polymer:Fullerene Solar Cells. <i>Advanced Energy Materials</i> , <b>2013</b> , 3, 718-723	21.8	87

242	Hybrid Bulk Heterojunction Solar Cells Based on P3HT and Porphyrin-Modified ZnO Nanorods. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 11273-11278	3.8	87
241	Effect of the End Group of Regioregular Poly(3-hexylthiophene) Polymers on the Performance of Polymer/Fullerene Solar Cells. <i>Journal of Physical Chemistry C</i> , <b>2007</b> , 111, 8137-8141	3.8	87
240	Modeling the spectral response of the quantum well solar cell. <i>Journal of Applied Physics</i> , <b>1993</b> , 74, 614-621	3.4	87
239	Understanding the Influence of Morphology on Poly(3-hexylselenothiophene):PCBM Solar Cells. <i>Macromolecules</i> , <b>2010</b> , 43, 1169-1174	5.5	86
238	Field-Independent Charge Photogeneration in PCPDTBT/PC70BM Solar Cells. <i>Journal of Physical Chemistry Letters</i> , <b>2010</b> , 1, 3306-3310	6.4	84
237	Transient absorption studies and numerical modeling of iodine photoreduction by nanocrystalline TiO <sub>2</sub> films. <i>Journal of Physical Chemistry B</i> , <b>2005</b> , 109, 142-50	3.4	83
236	Photoconductivity and charge trapping in porous nanocrystalline titanium dioxide. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2002</b> , 148, 25-31	4.7	83
235	Factors Controlling Open-Circuit Voltage Losses in Organic Solar Cells. <i>Trends in Chemistry</i> , <b>2019</b> , 1, 49-62	4.8	82
234	Gravure printing inverted organic solar cells: The influence of ink properties on film quality and device performance. <i>Solar Energy Materials and Solar Cells</i> , <b>2012</b> , 105, 77-85	6.4	82
233	Energetic disorder in higher fullerene adducts: a quantum chemical and voltammetric study. <i>Advanced Materials</i> , <b>2010</b> , 22, 4881-4	2.4	82
232	Relating Recombination, Density of States, and Device Performance in an Efficient Polymer:Fullerene Organic Solar Cell Blend. <i>Advanced Energy Materials</i> , <b>2013</b> , 3, 1201-1209	21.8	81
231	Influence of crystallinity and energetics on charge separation in polymer-inorganic nanocomposite films for solar cells. <i>Scientific Reports</i> , <b>2013</b> , 3, 1531	4.9	81
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229	The role of fullerenes in the environmental stability of polymer:fullerene solar cells. <i>Energy and Environmental Science</i> , <b>2018</b> , 11, 417-428	35.4	79
228	A numerical study of mobility in thin films of fullerene derivatives. <i>Journal of Chemical Physics</i> , <b>2010</b> , 132, 064904	3.9	79
227	Charge transport in porous nanocrystalline titanium dioxide. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2002</b> , 14, 197-202	3	79
226	Composition dependence of electron and hole transport in polyfluorene:[6,6]-phenyl C <sub>61</sub> -butyric acid methyl ester blend films. <i>Applied Physics Letters</i> , <b>2003</b> , 83, 4764-4766	3.4	79
225	Efficient charge collection in hybrid polymer/TiO <sub>2</sub> solar cells using poly(ethylenedioxythiophene)/polystyrene sulphonate as hole collector. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 143101	3.4	78



224	Predictive study of charge transport in disordered semiconducting polymers. <i>Nano Letters</i> , <b>2007</b> , 7, 1785-1788	18.5	77
223	Design and evaluation of conjugated polymers with polar side chains as electrode materials for electrochemical energy storage in aqueous electrolytes. <i>Energy and Environmental Science</i> , <b>2019</b> , 12, 1349-1357	35.4	74
222	Controlling microstructure of pentacene derivatives by solution processing: impact of structural anisotropy on optoelectronic properties. <i>ACS Nano</i> , <b>2013</b> , 7, 7983-91	16.7	73
221	Progress in Poly (3-Hexylthiophene) Organic Solar Cells and the Influence of Its Molecular Weight on Device Performance. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1801001	21.8	72
220	Influence of polar medium on the reorganization energy of charge transfer between dyes in a dye sensitized film. <i>Physical Chemistry Chemical Physics</i> , <b>2013</b> , 15, 4804-14	3.6	71
219	The role of alkane dithiols in controlling polymer crystallization in small band gap polymer:Fullerene solar cells. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2011</b> , 49, 717-724	2.6	71
218	Influence of Surface Recombination on Charge-Carrier Kinetics in Organic Bulk Heterojunction Solar Cells with Nickel Oxide Interlayers. <i>Physical Review Applied</i> , <b>2015</b> , 4,	4.3	70
217	Organic semiconductor:insulator polymer ternary blends for photovoltaics. <i>Advanced Materials</i> , <b>2011</b> , 23, 4093-7	24	70
216	The effect of morphology on electron field-effect mobility in disordered c60 thin films. <i>Nano Letters</i> , <b>2009</b> , 9, 1085-90	11.5	70
215	Electron transport in quantum dot solids: Monte Carlo simulations of the effects of shell filling, Coulomb repulsions, and site disorder. <i>Physical Review B</i> , <b>2007</b> , 75,	3.3	70
214	Analysis of the Relationship between Linearity of Corrected Photocurrent and the Order of Recombination in Organic Solar Cells. <i>Journal of Physical Chemistry Letters</i> , <b>2011</b> , 2, 2407-2411	6.4	68
213	Quantum well solar cells. <i>Applied Surface Science</i> , <b>1997</b> , 113-114, 722-733	6.7	68
212	Influence of energetic disorder on electroluminescence emission in polymer:fullerene solar cells. <i>Physical Review B</i> , <b>2012</b> , 86,	3.3	67
211	High-Performance Metal-Free Solar Cells Using Stamp Transfer Printed Vapor Phase Polymerized Poly(3,4-Ethylenedioxythiophene) Top Anodes. <i>Advanced Functional Materials</i> , <b>2012</b> , 22, 1454-1460	15.6	66
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