

Dieter Neher

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336
papers

25,465
citations

85
h-index

148
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362
ext. papers

28,474
ext. citations

10.9
avg, IF

7.13
L-index

#	Paper	IF	Citations
336	Polyfluorene Homopolymers: Conjugated Liquid-Crystalline Polymers for Bright Blue Emission and Polarized Electroluminescence. <i>Macromolecular Rapid Communications</i> , 2001 , 22, 1365-1385	4.8	763
335	Improving carbon nitride photocatalysis by supramolecular preorganization of monomers. <i>Journal of the American Chemical Society</i> , 2013 , 135, 7118-21	16.4	650
334	Effect of Molecular Weight and Annealing of Poly(3-hexylthiophene)s on the Performance of Organic Field-Effect Transistors. <i>Advanced Functional Materials</i> , 2004 , 14, 757-764	15.6	612
333	Efficient charge generation by relaxed charge-transfer states at organic interfaces. <i>Nature Materials</i> , 2014 , 13, 63-8	27	584
332	Improving the performance of doped pi-conjugated polymers for use in organic light-emitting diodes. <i>Nature</i> , 2000 , 405, 661-5	50.4	496
331	Visualization and suppression of interfacial recombination for high-efficiency large-area pin perovskite solar cells. <i>Nature Energy</i> , 2018 , 3, 847-854	62.3	476
330	Monolithic perovskite/silicon tandem solar cell with >29% efficiency by enhanced hole extraction. <i>Science</i> , 2020 , 370, 1300-1309	33.3	438
329	Competition between recombination and extraction of free charges determines the fill factor of organic solar cells. <i>Nature Communications</i> , 2015 , 6, 7083	17.4	433
328	Intrinsic non-radiative voltage losses in fullerene-based organic solar cells. <i>Nature Energy</i> , 2017 , 2,	62.3	362
327	Novel approaches to polymer blends based on polymer nanoparticles. <i>Nature Materials</i> , 2003 , 2, 408-12	27	361
326	Blue Polarized Electroluminescence from a Liquid Crystalline Polyfluorene. <i>Advanced Materials</i> , 1999 , 11, 671-675	24	356
325	Effect of Molecular Weight on the Structure and Crystallinity of Poly(3-hexylthiophene). <i>Macromolecules</i> , 2006 , 39, 2162-2171	5.5	353
324	The impact of energy alignment and interfacial recombination on the internal and external open-circuit voltage of perovskite solar cells. <i>Energy and Environmental Science</i> , 2019 , 12, 2778-2788	35.4	348
323	Improving the Performance of Polyfluorene-Based Organic Light-Emitting Diodes via End-capping. <i>Advanced Materials</i> , 2001 , 13, 565-570	24	342
322	How to Make over 20% Efficient Perovskite Solar Cells in Regular (n-i-p) and Inverted (p-i-n) Architectures. <i>Chemistry of Materials</i> , 2018 , 30, 4193-4201	9.6	339
321	Fluorinated copolymer PCPDTBT with enhanced open-circuit voltage and reduced recombination for highly efficient polymer solar cells. <i>Journal of the American Chemical Society</i> , 2012 , 134, 14932-44	16.4	333
320	Aggregation in a high-mobility n-type low-bandgap copolymer with implications on semicrystalline morphology. <i>Journal of the American Chemical Society</i> , 2012 , 134, 18303-17	16.4	329

3 ¹⁹	Highly Efficient Polymeric Electrophosphorescent Diodes. <i>Advanced Materials</i> , 2006 , 18, 948-954	24	309
3 ¹⁸	Semiconducting Polymer Nanospheres in Aqueous Dispersion Prepared by a Miniemulsion Process. <i>Advanced Materials</i> , 2002 , 14, 651-655	24	306
3 ¹⁷	Relationship between energetic disorder and open-circuit voltage in bulk heterojunction organic solar cells. <i>Physical Review B</i> , 2011 , 84,	3.3	293
3 ¹⁶	Influence of Aggregation on the Performance of All-Polymer Solar Cells Containing Low-Bandgap Naphthalenediimide Copolymers. <i>Advanced Energy Materials</i> , 2012 , 2, 369-380	21.8	292
3 ¹⁵	Comprehensive picture of p-type doping of P3HT with the molecular acceptor F4TCNQ. <i>Physical Review B</i> , 2013 , 87,	3.3	253
3 ¹⁴	Circularly Polarized Electroluminescence from Liquid-Crystalline Chiral Polyfluorenes. <i>Advanced Materials</i> , 2000 , 12, 362-365	24	252
3 ¹³	Drastic Control of Texture in a High Performance n-Type Polymeric Semiconductor and Implications for Charge Transport. <i>Macromolecules</i> , 2011 , 44, 5246-5255	5.5	250
3 ¹²	Nongeminate Recombination and Charge Transport Limitations in Diketopyrrolopyrrole-Based Solution-Processed Small Molecule Solar Cells. <i>Advanced Functional Materials</i> , 2013 , 23, 3584-3594	15.6	235
3 ¹¹	Approaching the fill factor Shockley-Queisser limit in stable, dopant-free triple cation perovskite solar cells. <i>Energy and Environmental Science</i> , 2017 , 10, 1530-1539	35.4	233
3 ¹⁰	Mobility-controlled performance of thick solar cells based on fluorinated copolymers. <i>Journal of the American Chemical Society</i> , 2014 , 136, 15566-76	16.4	232
3 ⁰⁹	Nonradiative Recombination in Perovskite Solar Cells: The Role of Interfaces. <i>Advanced Materials</i> , 2019 , 31, e1902762	24	226
3 ⁰⁸	Polarized light emission from LEDs prepared by the Langmuir-Blodgett technique. <i>Advanced Materials</i> , 1996 , 8, 146-149	24	224
3 ⁰⁷	From anisotropic photo-fluidity towards nanomanipulation in the optical near-field. <i>Nature Materials</i> , 2005 , 4, 699-703	27	219
3 ⁰⁶	Moderate doping leads to high performance of semiconductor/insulator polymer blend transistors. <i>Nature Communications</i> , 2013 , 4, 1588	17.4	217
3 ⁰⁵	Highly Efficient Single-Layer Polymer Electrophosphorescent Devices. <i>Advanced Materials</i> , 2004 , 16, 161-166	24	206
3 ⁰⁴	Impact of charge transport on current-voltage characteristics and power-conversion efficiency of organic solar cells. <i>Nature Communications</i> , 2015 , 6, 6951	17.4	202
3 ⁰³	The role of regioregularity, crystallinity, and chain orientation on electron transport in a high-mobility n-type copolymer. <i>Journal of the American Chemical Society</i> , 2014 , 136, 4245-56	16.4	200
3 ⁰²	Efficient Polymer Solar Cells Based on M3EHBPV. <i>Chemistry of Materials</i> , 2005 , 17, 6532-6537	9.6	200

301	Liquid-based growth of polymeric carbon nitride layers and their use in a mesostructured polymer solar cell with V_{oc} exceeding 1 V. <i>Journal of the American Chemical Society</i> , 2014 , 136, 13486-9	16.4	190
300	Control of aggregate formation in poly(3-hexylthiophene) by solvent, molecular weight, and synthetic method. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2012 , 50, 442-453	2.6	181
299	Interplay of Thermochromicity and Liquid Crystalline Behavior in Poly(p-phenyleneethynylene): Interactions or Planarization of the Conjugated Backbone?. <i>Macromolecules</i> , 2000 , 33, 652-654	5.5	181
298	Control of color and efficiency of light-emitting diodes based on polyfluorenes blended with hole-transporting molecules. <i>Applied Physics Letters</i> , 2000 , 76, 1810-1812	3.4	176
297	Photogeneration and Recombination in P3HT/PCBM Solar Cells Probed by Time-Delayed Collection Field Experiments. <i>Journal of Physical Chemistry Letters</i> , 2011 , 2, 700-705	6.4	174
296	Band bending in conjugated polymer layers. <i>Physical Review Letters</i> , 2011 , 106, 216402	7.4	171
295	Barrierless Free Charge Generation in the High-Performance PM6:Y6 Bulk Heterojunction Non-Fullerene Solar Cell. <i>Advanced Materials</i> , 2020 , 32, e1906763	24	169
294	In Situ Formation of Heterojunctions in Modified Graphitic Carbon Nitride: Synthesis and Noble Metal Free Photocatalysis. <i>Chemistry of Materials</i> , 2014 , 26, 5812-5818	9.6	164
293	Reduced Interface-Mediated Recombination for High Open-Circuit Voltages in CH ₃ NH ₃ PbI ₃ Solar Cells. <i>Advanced Materials</i> , 2017 , 29, 1700159	24	163
292	Impact of interfacial molecular orientation on radiative recombination and charge generation efficiency. <i>Nature Communications</i> , 2017 , 8, 79	17.4	160
291	Third-harmonic generation in polyphenylacetylene: Exact determination of nonlinear optical susceptibilities in ultrathin films. <i>Chemical Physics Letters</i> , 1989 , 163, 116-122	2.5	149
290	On the Relation between the Open-Circuit Voltage and Quasi-Fermi Level Splitting in Efficient Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2019 , 9, 1901631	21.8	145
289	On the Field Dependence of Free Charge Carrier Generation and Recombination in Blends of PCPDTBT/PC70BM: Influence of Solvent Additives. <i>Journal of Physical Chemistry Letters</i> , 2012 , 3, 640-5	6.4	143
288	Localized Charge Transfer in a Molecularly Doped Conducting Polymer. <i>Advanced Materials</i> , 2007 , 19, 3257-3260	24	141
287	A History and Perspective of Non-Fullerene Electron Acceptors for Organic Solar Cells. <i>Advanced Energy Materials</i> , 2021 , 11, 2003570	21.8	141
286	Ordering, Graphoepitaxial Orientation, and Conformation of a Polyfluorene Derivative of the Blairy-Rod Type on an Oriented Substrate of Polyimide. <i>Macromolecules</i> , 2000 , 33, 4490-4495	5.5	140
285	Bulk electron transport and charge injection in a high mobility n-type semiconducting polymer. <i>Advanced Materials</i> , 2010 , 22, 2799-803	24	139
284	Chiroptical Properties of Chiral Substituted Polyfluorenes. <i>Macromolecules</i> , 2002 , 35, 6792-6798	5.5	139

283	A Nanoparticle Approach To Control the Phase Separation in Polyfluorene Photovoltaic Devices. <i>Macromolecules</i> , 2004 , 37, 4882-4890	5.5	137
282	Chiroptical properties of poly(p-phenyleneethynylene) copolymers in thin films: large g-values. <i>Journal of the American Chemical Society</i> , 2002 , 124, 6830-1	16.4	136
281	Polymer electrophosphorescence devices with high power conversion efficiencies. <i>Applied Physics Letters</i> , 2004 , 84, 2476-2478	3.4	133
280	Nongeminate and Geminate Recombination in PTB7:PCBM Solar Cells. <i>Advanced Functional Materials</i> , 2014 , 24, 1306-1311	15.6	130
279	Correlated Donor/Acceptor Crystal Orientation Controls Photocurrent Generation in All-Polymer Solar Cells. <i>Advanced Functional Materials</i> , 2014 , 24, 4068-4081	15.6	129
278	Quantitative Analysis of Bulk Heterojunction Films Using Linear Absorption Spectroscopy and Solar Cell Performance. <i>Advanced Functional Materials</i> , 2011 , 21, 4640-4652	15.6	126
277	Tuning the Work Function of Polar Zinc Oxide Surfaces using Modified Phosphonic Acid Self-Assembled Monolayers. <i>Advanced Functional Materials</i> , 2014 , 24, 7014-7024	15.6	120
276	Temperature-Resolved Local and Macroscopic Charge Carrier Transport in Thin P3HT Layers. <i>Advanced Functional Materials</i> , 2010 , 20, 2286-2295	15.6	115
275	"The Easier the Better" Preparation of Efficient Photocatalysts-Metastable Poly(heptazine imide) Salts. <i>Advanced Materials</i> , 2017 , 29, 1700555	24	110
274	Potassium Poly(heptazine imides) from Aminotetrazoles: Shifting Band Gaps of Carbon Nitride-like Materials for More Efficient Solar Hydrogen and Oxygen Evolution. <i>ChemCatChem</i> , 2017 , 9, 167-174	5.2	110
273	Solution processable organic field-effect transistors utilizing an alpha,alpha'-dihexylpentathiophene-based swivel cruciform. <i>Journal of the American Chemical Society</i> , 2006 , 128, 3914-5	16.4	109
272	Thickness Dependence of the Crystalline Structure and Hole Mobility in Thin Films of Low Molecular Weight Poly(3-hexylthiophene). <i>Macromolecules</i> , 2008 , 41, 6800-6808	5.5	107
271	Organic Light-Emitting Devices Fabricated from Semiconducting Nanospheres. <i>Advanced Materials</i> , 2003 , 15, 800-804	24	106
270	Reducing Voltage Losses in Cascade Organic Solar Cells while Maintaining High External Quantum Efficiencies. <i>Advanced Energy Materials</i> , 2017 , 7, 1700855	21.8	104
269	Effect of molecular p-doping on hole density and mobility in poly(3-hexylthiophene). <i>Applied Physics Letters</i> , 2012 , 100, 143303	3.4	104
268	Efficient White-Electrophosphorescent Devices Based on a Single Polyfluorene Copolymer. <i>Advanced Functional Materials</i> , 2007 , 17, 1085-1092	15.6	103
267	Electromechanical properties of an ultrathin layer of directionally aligned helical polypeptides. <i>Science</i> , 1998 , 279, 57-60	33.3	101
266	Charge Transport Anisotropy in Highly Oriented Thin Films of the Acceptor Polymer P(NDI2OD-T2). <i>Advanced Energy Materials</i> , 2014 , 4, 1301659	21.8	100

265	Dendronized Perylene Diimide Emitters: Synthesis, Luminescence, and Electron and Energy Transfer Studies. <i>Macromolecules</i> , 2004 , 37, 8297-8306	5.5	100
264	It Takes Two to Tango-Double-Layer Selective Contacts in Perovskite Solar Cells for Improved Device Performance and Reduced Hysteresis. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 17245-17255	9.5	99
263	Color-Tunable Photoluminescence and NIR Electroluminescence in Carbon Nitride Thin Films and Light-Emitting Diodes. <i>Advanced Optical Materials</i> , 2015 , 3, 913-917	8.1	94
262	On the efficiency of charge transfer state splitting in polymer:fullerene solar cells. <i>Advanced Materials</i> , 2014 , 26, 2533-9	24	94
261	Phase separation of binary blends in polymer nanoparticles. <i>Small</i> , 2007 , 3, 1041-8	11	93
260	A Conclusive View on Charge Generation, Recombination, and Extraction in As-Prepared and Annealed P3HT:PCBM Blends: Combined Experimental and Simulation Work. <i>Advanced Energy Materials</i> , 2014 , 4, 1301401	21.8	92
259	Swivel-cruciform oligothiophene dimers. <i>Journal of Materials Chemistry</i> , 2006 , 16, 3177		92
258	Photoaddressable Alignment Layers for Fluorescent Polymers in Polarized Electroluminescence Devices. <i>Advanced Functional Materials</i> , 2002 , 12, 49	15.6	91
257	Dispersion measurements of the third-order nonlinear susceptibility of polythiophene thin films. <i>Chemical Physics Letters</i> , 1990 , 175, 11-16	2.5	90
256	Emissive and charge-generating donor-acceptor interfaces for organic optoelectronics with low voltage losses. <i>Nature Materials</i> , 2019 , 18, 459-464	27	89
255	Upconversion-agent induced improvement of g-C3N4 photocatalyst under visible light. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 16481-6	9.5	89
254	Bimodal Temperature Behavior of Structure and Mobility in High Molecular Weight P3HT Thin Films. <i>Macromolecules</i> , 2009 , 42, 4651-4660	5.5	89
253	Effect of Solvent Additive on Generation, Recombination, and Extraction in PTB7:PCBM Solar Cells: A Conclusive Experimental and Numerical Simulation Study. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 8310-8320	3.8	87
252	Efficient blue light emitting devices based on rigid-rod polyelectrolytes. <i>Advanced Materials</i> , 1996 , 8, 585-588	24	86
251	Comparative Study of M3EHPV-Based Bilayer Photovoltaic Devices. <i>Macromolecules</i> , 2006 , 39, 4018-4023	3.5	85
250	Measuring Aging Stability of Perovskite Solar Cells. <i>Joule</i> , 2018 , 2, 1019-1024	27.8	83
249	Probing the pathways of free charge generation in organic bulk heterojunction solar cells. <i>Nature Communications</i> , 2018 , 9, 2038	17.4	82
248	Efficient Light Management by Textured Nanoimprinted Layers for Perovskite Solar Cells. <i>ACS Photonics</i> , 2017 , 4, 1232-1239	6.3	80

247	Sub-picosecond charge-transfer at near-zero driving force in polymer:non-fullerene acceptor blends and bilayers. <i>Nature Communications</i> , 2020 , 11, 833	17.4	80
246	A Compact Device for the Efficient, Electrically Driven Generation of Highly Circularly Polarized Light. <i>Advanced Materials</i> , 2001 , 13, 577-580	24	80
245	A New Figure of Merit for Organic Solar Cells with Transport-limited Photocurrents. <i>Scientific Reports</i> , 2016 , 6, 24861	4.9	79
244	Preparation of oriented multilayers of poly(silanes) by the Langmuir-Blodgett technique. <i>Macromolecules</i> , 1991 , 24, 5068-5075	5.5	79
243	On the Origin of the Ideality Factor in Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2020 , 10, 20005028	5.2	78
242	Quantifying Charge Extraction in Organic Solar Cells: The Case of Fluorinated PCPDTBT. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 1131-8	6.4	78
241	Light management in PCPDTBT:PC70BM solar cells: A comparison of standard and inverted device structures. <i>Organic Electronics</i> , 2012 , 13, 615-622	3.5	76
240	How To Quantify the Efficiency Potential of Neat Perovskite Films: Perovskite Semiconductors with an Implied Efficiency Exceeding 28. <i>Advanced Materials</i> , 2020 , 32, e2000080	24	75
239	The Optical, Electronic, and Electroluminescent Properties of Novel Poly(p-phenylene)-Related Polymers. <i>Macromolecules</i> , 1996 , 29, 7432-7445	5.5	75
238	Perfluorinated Self-Assembled Monolayers Enhance the Stability and Efficiency of Inverted Perovskite Solar Cells. <i>ACS Nano</i> , 2020 , 14, 1445-1456	16.7	74
237	Thermodynamic theory of light-induced material transport in amorphous azobenzene polymer films. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 19428-36	3.4	72
236	Optical Anisotropy in Films of Photoaddressable Polymers. <i>Macromolecules</i> , 1999 , 32, 8496-8503	5.5	72
235	Overcoming Geminate Recombination and Enhancing Extraction in Solution-Processed Small Molecule Solar Cells. <i>Advanced Energy Materials</i> , 2014 , 4, 1400230	21.8	69
234	Blue Solid-State Photoluminescence and Electroluminescence from Novel Poly(para-phenyleneethynylene) Copolymers. <i>Chemistry of Materials</i> , 2001 , 13, 2691-2696	9.6	69
233	Nonlinear optical response of C60 and C70. <i>Optics Letters</i> , 1992 , 17, 1491	3	69
232	Capacitive scanning dilatometry and frequency-dependent thermal expansion of polymer films. <i>Physical Review E</i> , 2000 , 61, 1755-64	2.4	68
231	Charge Transport Layers Limiting the Efficiency of Perovskite Solar Cells: How To Optimize Conductivity, Doping, and Thickness. <i>ACS Applied Energy Materials</i> , 2019 , 2, 6280-6287	6.1	67
230	Narrow-band emissions from conjugated-polymer films. <i>Chemical Physics Letters</i> , 1997 , 265, 320-326	2.5	67

229	Charge carrier photogeneration, trapping, and space-charge field formation in PVK-based photorefractive materials. <i>Physical Review B</i> , 2000 , 61, 13515-13527	3.3	67
228	Microcavity effects in single-layer light-emitting devices based on poly(p-phenylene vinylene). <i>Journal of Applied Physics</i> , 1996 , 79, 3299-3306	2.5	67
227	Dielectric and Mechanical Properties of Azobenzene Polymer Layers under Visible and Ultraviolet Irradiation. <i>Macromolecules</i> , 2005 , 38, 3894-3902	5.5	65
226	Reliable electron-only devices and electron transport in n-type polymers. <i>Journal of Applied Physics</i> , 2009 , 105, 064509	2.5	64
225	Substituted Rigid Rod-Like Polymers Building Blocks for Photonic Devices**. <i>Advanced Materials</i> , 1995 , 7, 691-702	24	63
224	Synthesis, Characterization, and Photophysical, Electrochemical, Electroluminescent, and Photovoltaic Properties of Yne-Containing CNBPVs. <i>Macromolecules</i> , 2004 , 37, 8863-8873	5.5	62
223	Interface Engineering of Solution-Processed Hybrid Organohalide Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 21681-21687	9.5	62
222	p-Type Doping of Poly(3-hexylthiophene) with the Strong Lewis Acid Tris(pentafluorophenyl)borane. <i>Advanced Electronic Materials</i> , 2016 , 2, 1600204	6.4	61
221	Correlation between the Open Circuit Voltage and the Energetics of Organic Bulk Heterojunction Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2013 , 4, 3865-3871	6.4	60
220	Efficient Polymer Electrophosphorescent Devices with Interfacial Layers. <i>Advanced Functional Materials</i> , 2006 , 16, 2156-2162	15.6	60
219	Comparative Study of the Field-Effect Mobility of a Copolymer and a Binary Blend Based on Poly(3-alkylthiophene)s. <i>Chemistry of Materials</i> , 2005 , 17, 781-786	9.6	59
218	The Role of Mobility on Charge Generation, Recombination, and Extraction in Polymer-Based Solar Cells. <i>Advanced Energy Materials</i> , 2018 , 8, 1703355	21.8	58
217	Direct determination of the emission zone in a polymer light-emitting diode. <i>Advanced Materials</i> , 1997 , 9, 964-968	24	57
216	Impact of molecular quadrupole moments on the energy levels at organic heterojunctions. <i>Nature Communications</i> , 2019 , 10, 2466	17.4	56
215	Charge Separation in PCPDTBT:PCBM Blends from an EPR Perspective. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 28482-28493	3.8	56
214	Controlled mineralization and assembly of hydrolysis-based nanoparticles in organic solvents combining polymer micelles and microwave techniques. <i>Advanced Materials</i> , 1998 , 10, 473-5	24	56
213	Absorption Tails of Donor:C Blends Provide Insight into Thermally Activated Charge-Transfer Processes and Polaron Relaxation. <i>Journal of the American Chemical Society</i> , 2017 , 139, 1699-1704	16.4	55
212	Microcavity devices based on a ladder-type poly(p-phenylene) emitting blue, green, and red light. <i>Applied Physics Letters</i> , 1996 , 69, 608-610	3.4	55

211	Constructing the Electronic Structure of CHNHPbI and CHNHPbBr Perovskite Thin Films from Single-Crystal Band Structure Measurements. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 601-609	6.4	55
210	Halide Segregation versus Interfacial Recombination in Bromide-Rich Wide-Gap Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2020 , 5, 2728-2736	20.1	54
209	Voltage-Dependent Photoluminescence and How It Correlates with the Fill Factor and Open-Circuit Voltage in Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2019 , 4, 2887-2892	20.1	53
208	Alkylated-C60 based soft materials: regulation of self-assembly and optoelectronic properties by chain branching. <i>Journal of Materials Chemistry C</i> , 2013 , 1, 1943	7.1	53
207	Layer-Thinning Effects on Ferroelectricity and the Ferroelectric-to-Paraelectric Phase Transition of Vinylidene Fluoride-Trifluoroethylene Copolymer Layers. <i>Macromolecules</i> , 2000 , 33, 8269-8279	5.5	53
206	Light-induced softening of azobenzene dye-doped polymer films probed with quartz crystal resonators. <i>Applied Physics Letters</i> , 2000 , 77, 963	3.4	52
205	Charge-Transfer Solvent Interaction Predefines Doping Efficiency in p-Doped P3HT Films. <i>Chemistry of Materials</i> , 2016 , 28, 4432-4439	9.6	51
204	SiO ₂ /carbon nitride composite materials: The role of surfaces for enhanced photocatalysis. <i>Catalysis Today</i> , 2014 , 225, 185-190	5.3	51
203	Charge Generation and Recombination in an Organic Solar Cell with Low Energetic Offsets. <i>Advanced Energy Materials</i> , 2018 , 8, 1701073	21.8	49
202	Odd-Even Effects and the Influence of Length and Specific Positioning of Alkoxy Side Chains on the Optical Properties of PPEBPV Polymers. <i>Chemistry of Materials</i> , 2005 , 17, 6022-6032	9.6	49
201	Influence of Glass-Transition Temperature and Chromophore Content on the Steady-State Performance of Poly(N-vinylcarbazole)-Based Photorefractive Polymers. <i>Advanced Materials</i> , 1999 , 11, 123-127	24	48
200	Alternating fluorene-di(thiophene)quinoxaline copolymers via microwave-supported suzuki cross-coupling reactions. <i>Journal of Polymer Science Part A</i> , 2008 , 46, 7794-7808	2.5	47
199	Suppression of the Keto-Emission in Polyfluorene Light-Emitting Diodes: Experiments and Models. <i>Advanced Functional Materials</i> , 2004 , 14, 1097-1104	15.6	47
198	How do disorder, reorganization, and localization influence the hole mobility in conjugated copolymers?. <i>Journal of the American Chemical Society</i> , 2013 , 135, 1772-82	16.4	46
197	Piezoelectricity and electrostriction of dye-doped polymer electrets. <i>Applied Physics Letters</i> , 1994 , 64, 1347-1349	3.4	46
196	Highly crystalline films of PCPDTBT with branched side chains by solvent vapor crystallization: influence on opto-electronic properties. <i>Advanced Materials</i> , 2015 , 27, 1223-8	24	45
195	On the Molecular Origin of Charge Separation at the Donor-Acceptor Interface. <i>Advanced Energy Materials</i> , 2018 , 8, 1702232	21.8	45
194	Efficient Red-Emitting Electrophosphorescent Polymers. <i>Chemistry of Materials</i> , 2008 , 20, 1629-1635	9.6	45

193	Dispersive Non-Geminate Recombination in an Amorphous Polymer: Fullerene Blend. <i>Scientific Reports</i> , 2016 , 6, 26832	4.9	45
192	Chain-growth polycondensation of perylene diimide-based copolymers: a new route to regio-regular perylene diimide-based acceptors for all-polymer solar cells and n-type transistors. <i>Polymer Chemistry</i> , 2014 , 5, 3404-3411	4.9	44
191	Mobility relaxation and electron trapping in a donor/acceptor copolymer. <i>Physical Review B</i> , 2013 , 87,	3.3	44
190	The Relationship between the Electric Field-Induced Dissociation of Charge Transfer Excitons and the Photocurrent in Small Molecular/Polymeric Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2010 , 1, 982-986	6.4	44
189	Extraordinarily long diffusion length in PM6:Y6 organic solar cells. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 7854-7860	13	43
188	Strong light-matter coupling for reduced photon energy losses in organic photovoltaics. <i>Nature Communications</i> , 2019 , 10, 3706	17.4	43
187	High open circuit voltages in pin-type perovskite solar cells through strontium addition. <i>Sustainable Energy and Fuels</i> , 2019 , 3, 550-563	5.8	42
186	Electronic properties of soluble poly(paraphenylene) derivatives. <i>Synthetic Metals</i> , 1997 , 84, 645-646	3.6	42
185	Synthesis and spectroscopic properties of phthalocyanine dimers in solution. <i>Chemical Physics Letters</i> , 1995 , 245, 23-29	2.5	42
184	Anomalous electrical characteristics, memory phenomena and microcavity effects in polymeric light-emitting diodes. <i>Synthetic Metals</i> , 1996 , 76, 125-128	3.6	41
183	Amphiphilic dyes for nonlinear optics: Dependence of second harmonic generation on functional group substitution. <i>Advanced Materials</i> , 1991 , 3, 54-58	24	40
182	25.1% High-Efficiency Monolithic Perovskite Silicon Tandem Solar Cell with a High Bandgap Perovskite Absorber. <i>Solar Rrl</i> , 2020 , 4, 2000152	7.1	39
181	Liquid crystalline polyfluorenes for blue polarized electroluminescence. <i>Macromolecular Symposia</i> , 2000 , 154, 139-148	0.8	39
180	Photogeneration and transport of charge carriers in hybrid materials of conjugated polymers and dye-sensitized TiO ₂ . <i>Journal of Applied Physics</i> , 1999 , 86, 6915-6923	2.5	39
179	Linear and non-linear optical properties of substituted polyphenylacetylene thin films. <i>Journal Physics D: Applied Physics</i> , 1991 , 24, 1193-1202	3	39
178	Fullerene-Free Polymer Solar Cells with Highly Reduced Bimolecular Recombination and Field-Independent Charge Carrier Generation. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 2815-22	6.4	38
177	Hybrid organic/inorganic thin-film multijunction solar cells exceeding 11% power conversion efficiency. <i>Advanced Materials</i> , 2015 , 27, 1262-7	24	38
176	Charge carrier recombination dynamics in perovskite and polymer solar cells. <i>Applied Physics Letters</i> , 2016 , 108, 113505	3.4	38

175	Tuning halide perovskite energy levels. <i>Energy and Environmental Science</i> , 2021 , 14, 1429-1438	35.4	38
174	Rationalizing the Molecular Design of Hole-Selective Contacts to Improve Charge Extraction in Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2019 , 9, 1900990	21.8	37
173	A water soluble fluorescent polymer as a dual colour sensor for temperature and a specific protein. <i>Journal of Materials Chemistry B</i> , 2013 , 1, 6373-6381	7.3	37
172	Efficient bulk photogeneration of charge carriers and photoconductivity gain in arylamino-PPV polymer sandwich cells. <i>Physical Review B</i> , 1999 , 59, 1964-1972	3.3	37
171	The Role of Bulk and Interface Recombination in High-Efficiency Low-Dimensional Perovskite Solar Cells. <i>Advanced Materials</i> , 2019 , 31, e1901090	24	36
170	Electric field-induced fluorescence quenching and transient fluorescence studies in poly(p-terphenylene vinylene) related polymers. <i>Chemical Physics</i> , 1998 , 227, 167-178	2.3	36
169	Elastic Properties of Well-Defined, High-Density Poly(methyl methacrylate) Brushes Studied by Electromechanical Interferometry. <i>Macromolecules</i> , 2002 , 35, 9459-9465	5.5	36
168	Optically driven diffusion and mechanical softening in azobenzene polymer layers. <i>Applied Physics Letters</i> , 2002 , 81, 4715-4717	3.4	36
167	Energy-Gap Law for Photocurrent Generation in Fullerene-Based Organic Solar Cells: The Case of Low-Donor-Content Blends. <i>Journal of the American Chemical Society</i> , 2019 , 141, 2329-2341	16.4	36
166	Unexpectedly high field-effect mobility of a soluble, low molecular weight oligoquaterthiophene fraction with low polydispersity. <i>Applied Physics A: Materials Science and Processing</i> , 2009 , 95, 67-72	2.6	35
165	Perovskite-organic tandem solar cells with indium oxide interconnect.. <i>Nature</i> , 2022 , 604, 280-286	50.4	35
164	Charge transfer in and conductivity of molecularly doped thiophene-based copolymers. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2015 , 53, 58-63	2.6	34
163	Mixed Domains Enhance Charge Generation and Extraction in Bulk-Heterojunction Solar Cells with Small-Molecule Donors. <i>Advanced Energy Materials</i> , 2018 , 8, 1702941	21.8	34
162	Role of Intrinsic Photogeneration in Single Layer and Bilayer Solar Cells with C60 and PCBM. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 25083-25091	3.8	34
161	Simultaneous extraction of charge density dependent mobility and variable contact resistance from thin film transistors. <i>Applied Physics Letters</i> , 2014 , 104, 193501	3.4	34
160	On the Question of the Need for a Built-In Potential in Perovskite Solar Cells. <i>Advanced Materials Interfaces</i> , 2020 , 7, 2000041	4.6	33
159	Impact of Triplet Excited States on the Open-Circuit Voltage of Organic Solar Cells. <i>Advanced Energy Materials</i> , 2018 , 8, 1800451	21.8	33
158	Charge Transfer Absorption and Emission at ZnO/Organic Interfaces. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 500-4	6.4	32

157	The Role of Space Charge Effects on the Competition between Recombination and Extraction in Solar Cells with Low-Mobility Photoactive Layers. <i>Journal of Physical Chemistry Letters</i> , 2016 , 7, 4716-4721	6.4	32
156	Tuning of the Excited-State Properties and Photovoltaic Performance in PPV-Based Polymer Blends. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 14607-14617	3.8	32
155	Electrical Conductivity of Highly Organized Langmuir-Blodgett Films of Phthalocyaninato-Polysiloxane. <i>Chemistry of Materials</i> , 1998 , 10, 2284-2292	9.6	32
154	2D/3D perovskite engineering eliminates interfacial recombination losses in hybrid perovskite solar cells. <i>Chem</i> , 2021 , 7, 1903-1916	16.2	32
153	Unraveling the Electronic Properties of Lead Halide Perovskites with Surface Photovoltage in Photoemission Studies. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 21578-21583	9.5	31
152	Cs _x FA _{1-x} Pb _{1-y} Br _y Perovskite Compositions: the Appearance of Wrinkled Morphology and its Impact on Solar Cell Performance. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 17123-17135	3.8	31
151	Direct measurement of the dipole moment of a metastable merocyanine by electromechanical interferometry. <i>Chemical Physics Letters</i> , 1997 , 277, 118-124	2.5	31
150	Improving the Performance of Organic Field Effect Transistor by Optimizing the Gate Insulator Surface. <i>Japanese Journal of Applied Physics</i> , 2005 , 44, 3721-3727	1.4	31
149	Electrodeless Measurement of the In-Plane Anisotropy in the Photoconductivity of an Aligned Polyfluorene Film. <i>Advanced Materials</i> , 2001 , 13, 1627-1630	24	31
148	Full electronic structure across a polymer heterojunction solar cell. <i>Journal of Materials Chemistry</i> , 2012 , 22, 4418		30
147	Photoconductivity of an inorganic/organic composite containing dye-sensitized nanocrystalline titanium dioxide. <i>Applied Physics Letters</i> , 1998 , 72, 650-652	3.4	30
146	Putting Order into PM6:Y6 Solar Cells to Reduce the Langevin Recombination in 400 nm Thick Junction. <i>Solar Rrl</i> , 2020 , 4, 2000498	7.1	30
145	Decoding Charge Recombination through Charge Generation in Organic Solar Cells. <i>Solar Rrl</i> , 2019 , 3, 1900184	7.1	29
144	Synthesis of High-Crystallinity DPP Polymers with Balanced Electron and Hole Mobility. <i>Chemistry of Materials</i> , 2017 , 29, 10220-10232	9.6	29
143	Organic Field-Effect Transistors Utilizing Solution-Deposited Oligothiophene-Based Swivel Cruciforms. <i>Chemistry of Materials</i> , 2007 , 19, 1267-1276	9.6	29
142	Charge carrier generation and electron blocking at interlayers in polymer solar cells. <i>Applied Physics Letters</i> , 2007 , 90, 133502	3.4	29
141	Efficiency-Limiting Processes in Low-Bandgap Polymer:Perylene Diimide Photovoltaic Blends. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 20077-20085	3.8	28
140	Blue Light-Emitting Devices Based on Novel Polymer Blends. <i>Advanced Materials</i> , 1998 , 10, 676-680	24	28

139	Diyne-Containing PPVs: Solid-State Properties and Comparison of Their Photophysical and Electrochemical Properties with Those of Their Yne-Containing Counterparts. <i>Macromolecules</i> , 2005 , 38, 6269-6275	5.5	28
138	Roadmap on organic/inorganic hybrid perovskite semiconductors and devices. <i>APL Materials</i> , 2021 , 9, 109202	5.7	28
137	Light-emitting devices based on solid electrolytes and polyelectrolytes. <i>Polymers for Advanced Technologies</i> , 1998 , 9, 461-475	3.2	27
136	The role of poly(3,4-ethylenedioxythiophene):poly(styrenesulphonate) as a hole injection layer in a blue-emitting polymer light-emitting diode. <i>Journal of Applied Physics</i> , 2008 , 104, 104506	2.5	27
135	Polarization-sensitive photoconductivity in aligned polyfluorene layers. <i>Applied Physics Letters</i> , 2002 , 80, 4699-4701	3.4	27
134	Large-Grain Double Cation Perovskites with 18 μ s Lifetime and High Luminescence Yield for Efficient Inverted Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2021 , 6, 1045-1054	20.1	27
133	Light-Tunable Plasmonic Nanoarchitectures Using Gold Nanoparticle/Azobenzene-Containing Cationic Surfactant Complexes. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 3762-3770	3.8	26
132	Comparison of the birefringence in an azobenzene-side-chain copolymer induced by pulsed and continuous-wave irradiation. <i>Applied Physics Letters</i> , 2002 , 81, 1228-1230	3.4	26
131	Efficient polarized light-emitting diodes utilizing ultrathin photoaddressable alignment layers. <i>Applied Physics Letters</i> , 2002 , 81, 2319-2321	3.4	26
130	Optical third-harmonic generation in substituted poly(phenylacetylenes) and poly(3-decylthiophenes). <i>Synthetic Metals</i> , 1990 , 37, 249-253	3.6	26
129	Thermoluminescence and electroluminescence of annealed polyfluorene layers. <i>Chemical Physics Letters</i> , 2003 , 371, 15-22	2.5	25
128	From Recombination Dynamics to Device Performance: Quantifying the Efficiency of Exciton Dissociation, Charge Separation, and Extraction in Bulk Heterojunction Solar Cells with Fluorine-Substituted Polymer Donors. <i>Advanced Energy Materials</i> , 2018 , 8, 1701678	21.8	24
127	Structure-related differences in the temperature-regulated fluorescence response of LCST type polymers. <i>Journal of Materials Chemistry C</i> , 2013 , 1, 6603	7.1	24
126	Energy transfer in a ladder-type methyl-poly(para-phenylene) doped by Pt(II)octaethylporphyrin. <i>Chemical Physics</i> , 2004 , 299, 11-16	2.3	24
125	Polymer electrophosphorescent devices utilizing a ladder-type poly(para-phenylene) host. <i>Journal of Applied Physics</i> , 2003 , 93, 4413-4419	2.5	24
124	On the polarization of the green emission of polyfluorenes. <i>Journal of Chemical Physics</i> , 2003 , 119, 6832-6839	3.9	24
123	Mechanism of Charge Transport in Anisotropic Layers of a Phthalocyanine Polymer. <i>Journal of Physical Chemistry B</i> , 1999 , 103, 3179-3186	3.4	24
122	Excitons Dominate the Emission from PM6:Y6 Solar Cells, but This Does Not Help the Open-Circuit Voltage of the Device. <i>ACS Energy Letters</i> , 2021 , 6, 557-564	20.1	24

121	Mixtures of Dopant-Free Spiro-OMeTAD and Water-Free PEDOT as a Passivating Hole Contact in Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 9172-9181	9.5	23
120	Modelling elasticity and memory effects in liquid crystalline elastomers by molecular dynamics simulations. <i>Soft Matter</i> , 2012 , 8, 11123	3.6	23
119	Molecular tracer diffusion in thin azobenzene polymer layers. <i>Applied Physics Letters</i> , 2006 , 89, 251902	3.4	23
118	Side-chain dilution effects on the optical properties of poly[3-alkylthiophene]s. <i>Optical Materials</i> , 1992 , 1, 65-70	3.3	23
117	Quantitative Analysis of Doping-Induced Polarons and Charge-Transfer Complexes of Poly(3-hexylthiophene) in Solution. <i>Journal of Physical Chemistry B</i> , 2020 , 124, 7694-7708	3.4	22
116	Photocurrent dynamics in a poly(phenylene vinylene)-based photorefractive composite. <i>Physical Review B</i> , 2004 , 69,	3.3	22
115	27.9% Efficient Monolithic Perovskite/Silicon Tandem Solar Cells on Industry Compatible Bottom Cells. <i>Solar Rrl</i> , 2021 , 5, 2100244	7.1	22
114	Effect of H- and J-Aggregation on the Photophysical and Voltage Loss of Boron Dipyrromethene Small Molecules in Vacuum-Deposited Organic Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 2684-2691	6.4	21
113	Investigations of the Viscoelastic Properties of Thin Polymer Films by Electromechanical Interferometry. <i>Macromolecules</i> , 1996 , 29, 6865-6871	5.5	21
112	Bi-functional interfaces by poly(ionic liquid) treatment in efficient pin and nip perovskite solar cells. <i>Energy and Environmental Science</i> ,	35.4	21
111	Boron dipyrromethene (BODIPY) with meso-perfluorinated alkyl substituents as near infrared donors in organic solar cells. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 18583-18591	13	21
110	Incorporating Fluorine Substitution into Conjugated Polymers for Solar Cells: Three Different Means, Same Results. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 2059-2068	3.8	20
109	Coulomb Enhanced Charge Transport in Semicrystalline Polymer Semiconductors. <i>Advanced Functional Materials</i> , 2016 , 26, 8011-8022	15.6	20
108	Dispersive and steady-state recombination in organic disordered semiconductors. <i>Physical Review B</i> , 2017 , 96,	3.3	20
107	Measurements of optical electric field intensities in microcavities using thin emissive polymer films. <i>Advanced Materials</i> , 1997 , 9, 395-398	24	20
106	Synthesis and Properties of Aromatic Main-Chain Polyesters Having Disperse Red 1 Nonlinear Optical Chromophores in the Side Chain. <i>Chemistry of Materials</i> , 1994 , 6, 2159-2166	9.6	20
105	The optical signatures of molecular-doping induced polarons in poly(3-hexylthiophene-2,5-diyl): individual polymer chains versus aggregates. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 2870-2879	7.1	19
104	High-Resolution Near-Field Optical Investigation of Crystalline Domains in Oligomeric PQT-12 Thin Films. <i>Advanced Functional Materials</i> , 2011 , 21, 860-868	15.6	18

103	On the solid state aggregation of chiral substituted poly(para-phenylene)s (PPPs). <i>Synthetic Metals</i> , 1999 , 102, 1457-1458	3.6	18
102	Relaxation of Polar Order in Poled Polymer Systems: A Comparison between an Isothermal and a Thermally Stimulated Experiment. <i>Macromolecules</i> , 1995 , 28, 2882-2885	5.5	18
101	Dual-Characteristic Transistors Based on Semiconducting Polymer Blends. <i>Advanced Electronic Materials</i> , 2016 , 2, 1600267	6.4	18
100	Recombination between Photogenerated and Electrode-Induced Charges Dominates the Fill Factor Losses in Optimized Organic Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 3473-3480	6.4	17
99	Probing the local optical properties of layers prepared from polymer nanoparticles. <i>Synthetic Metals</i> , 2005 , 152, 101-104	3.6	17
98	Electric Field and Wavelength Dependence of Charge Carrier Photogeneration in Soluble Poly(p-phenylenevinylene) Derivatives. <i>Advanced Materials</i> , 1999 , 11, 1274-1277	24	17
97	Synthesis and electroluminescent properties of quaterphenyl and sexiphenyl containing copolymers. <i>Macromolecular Chemistry and Physics</i> , 1996 , 197, 2511-2519	2.6	17
96	Impact of Bimolecular Recombination on the Fill Factor of Fullerene and Nonfullerene-Based Solar Cells: A Comparative Study of Charge Generation and Extraction. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 6823-6830	3.8	17
95	Photo-cross-linkable poly(p-phenylene)s. Synthesis, Langmuir-Blodgett multilayer film properties and pattern formation. <i>Macromolecular Chemistry and Physics</i> , 1997 , 198, 2551-2561	2.6	16
94	Energy and charge transfer in blends of dendronized perylenes with polyfluorene. <i>Journal of Chemical Physics</i> , 2008 , 129, 114901	3.9	16
93	Structure and internal dynamics of a side chain liquid crystalline polymer in various phases by molecular dynamics simulations: a step towards coarse graining. <i>Journal of Chemical Physics</i> , 2007 , 126, 174905	3.9	16
92	Defect/Interface Recombination Limited Quasi-Fermi Level Splitting and Open-Circuit Voltage in Mono- and Triple-Cation Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 37647-37656	9.5	16
91	Infrared Transition Moment Orientational Analysis on the Structural Organization of the Distinct Molecular Subunits in Thin Layers of a High Mobility n-Type Copolymer. <i>Journal of the American Chemical Society</i> , 2015 , 137, 6034-43	16.4	15
90	Influence of sintering on the structural and electronic properties of TiO ₂ nanoporous layers prepared via a non-sol-gel approach. <i>Colloid and Polymer Science</i> , 2012 , 290, 1843-1854	2.4	15
89	Polarized photoluminescence and spectral narrowing in an oriented polyfluorene thin film. <i>ChemPhysChem</i> , 2000 , 1, 142-6	3.2	15
88	Understanding and suppressing non-radiative losses in methylammonium-free wide-bandgap perovskite solar cells. <i>Energy and Environmental Science</i> ,	35.4	15
87	Pathways toward 30% Efficient Single-Junction Perovskite Solar Cells and the Role of Mobile Ions. <i>Solar Rrl</i> , 2021 , 5, 2100219	7.1	15
86	Equilibrated Charge Carrier Populations Govern Steady-State Nongeminate Recombination in Disordered Organic Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 1374-1381	6.4	14

85	Perovskite semiconductors for next generation optoelectronic applications. <i>APL Materials</i> , 2019 , 7, 080401	4.1	14
84	Intercalated vs Nonintercalated Morphologies in Donor-Acceptor Bulk Heterojunction Solar Cells: PBTTT:Fullerene Charge Generation and Recombination Revisited. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 4061-4068	6.4	14
83	Influence of the dopant concentration on the morphology of hole-transporting alignment layers based on a polyimide matrix. <i>Polymer</i> , 2002 , 43, 5235-5242	3.9	14
82	Dispersion of the electro-optical response in poled polymer films determined by Stark spectroscopy. <i>Thin Solid Films</i> , 1995 , 261, 241-247	2.2	14
81	Polarization dependent resonant THG on Langmuir-Blodgett multilayers of rod-like polysilanes during annealing. <i>Chemical Physics</i> , 1992 , 161, 289-297	2.3	14
80	Temperature-Regulated Fluorescence Characteristics of Supramolecular Assemblies Formed By a Smart Polymer and a Conjugated Polyelectrolyte. <i>Macromolecular Chemistry and Physics</i> , 2013 , 214, 435-445	2.6	13
79	Materials for polymer electronics applications: Semiconducting polymer thin films and nanoparticles. <i>Macromolecular Symposia</i> , 2004 , 212, 83-92	0.8	13
78	Photoconductivity in Langmuir-Blodgett multilayer structures of phthalocyaninato-polysiloxane. <i>Synthetic Metals</i> , 1996 , 83, 245-247	3.6	13
77	Rigid Rodlike Main Chain Polymers with Conformationally Restricted Nonlinear Optical Chromophores: Synthesis and Properties. <i>Macromolecules</i> , 1994 , 27, 6156-6162	5.5	13
76	Understanding Performance Limiting Interfacial Recombination in pin Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2022 , 2103567	21.8	13
75	Halogen-Bonded Hole-Transport Material Suppresses Charge Recombination and Enhances Stability of Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2021 , 11, 2101553	21.8	13
74	Surface Structure of Semicrystalline Naphthalene Diimide-Bithiophene Copolymer Films Studied with Atomic Force Microscopy. <i>Macromolecules</i> , 2016 , 49, 6549-6557	5.5	12
73	Electrical and optical simulations of a polymer-based phosphorescent organic light-emitting diode with high efficiency. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2012 , 50, 1567-1576	2.6	12
72	Investigations of ferroelectric-to-paraelectric phase transition of vinylidene fluoride trifluoroethylene copolymer thin films by electromechanical interferometry. <i>Journal of Applied Physics</i> , 1999 , 86, 6367-6375	2.5	12
71	Adjusting the energy of interfacial states in organic photovoltaics for maximum efficiency. <i>Nature Communications</i> , 2021 , 12, 1772	17.4	12
70	Nano-emitting Heterostructures Violate Optical Reciprocity and Enable Efficient Photoluminescence in Halide-Segregated Methylammonium-Free Wide Bandgap Perovskites. <i>ACS Energy Letters</i> , 2021 , 6, 419-428	20.1	12
69	Managing Phase Purities and Crystal Orientation for High-Performance and Photostable Cesium Lead Halide Perovskite Solar Cells. <i>Solar Rrl</i> , 2020 , 4, 2000213	7.1	11
68	Large Conduction Band Energy Offset Is Critical for High Fill Factors in Inorganic Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2020 , 5, 2343-2348	20.1	11

67	Sensing electron transport in a blue-emitting copolymer by transient electroluminescence. <i>Applied Physics Letters</i> , 2007 , 91, 143516	3.4	11
66	Free carrier generation and recombination in PbS quantum dot solar cells. <i>Applied Physics Letters</i> , 2016 , 108, 103102	3.4	11
65	Quantifying Quasi-Fermi Level Splitting and Open-Circuit Voltage Losses in Highly Efficient Nonfullerene Organic Solar Cells. <i>Solar Rrl</i> , 2021 , 5, 2000649	7.1	11
64	Position-locking of volatile reaction products by atmosphere and capping layers slows down photodecomposition of methylammonium lead triiodide perovskite.. <i>RSC Advances</i> , 2020 , 10, 17534-17542	3.7	10
63	The impact of molecular weight, air exposure and molecular doping on the charge transport properties and electronic defects in dithienyl-diketopyrrolopyrrole-thieno[3,2-b]thiophene copolymers. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 10827-10838	7.1	10
62	On the origin of open-circuit voltage losses in flexible perovskite solar cells. <i>Science and Technology of Advanced Materials</i> , 2019 , 20, 786-795	7.1	10
61	Inverted organic solar cells comprising low-temperature-processed ZnO films. <i>Applied Physics A: Materials Science and Processing</i> , 2014 , 115, 365-369	2.6	10
60	Relationship of photophysical properties and the device performance of novel hybrid small-molecular/polymeric solar cells. <i>Macromolecular Rapid Communications</i> , 2009 , 30, 1263-8	4.8	10
59	Sensitized phosphorescence of benzil-doped ladder-type methyl-poly(para-phenylene). <i>Journal of Chemical Physics</i> , 2004 , 121, 9178-83	3.9	10
58	Polymer Electrophosphorescence Devices 2005 , 333-367		10
57	Stark effect of hybrid charge transfer states at planar ZnO/organic interfaces. <i>Physical Review B</i> , 2018 , 98,	3.3	10
56	Universal Current Losses in Perovskite Solar Cells Due to Mobile Ions. <i>Advanced Energy Materials</i> , 2021 , 11, 2101447	21.8	10
55	Charge Generation and Mobility-Limited Performance of Bulk Heterojunction Solar Cells with a Higher Adduct Fullerene. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 10305-10316	3.8	9
54	Fluorination of Organic Spacer Impacts on the Structural and Optical Response of 2D Perovskites. <i>Frontiers in Chemistry</i> , 2019 , 7, 946	5	9
53	Spatial Orientation and Order of Structure-Defining Subunits in Thin Films of a High Mobility n-Type Copolymer. <i>Macromolecules</i> , 2016 , 49, 1798-1806	5.5	9
52	Charge transport and recombination in bulk heterojunction solar cells containing a dicyanoimidazole-based molecular acceptor. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2009 , 206, 2743-2749	1.6	9
51	Polymers films with indandione derivatives as alternatives to azobenzene polymers for optical patterning. <i>Thin Solid Films</i> , 2008 , 516, 8893-8898	2.2	9
50	Photoaddressable polymers for liquid crystal alignment. <i>Liquid Crystals</i> , 2003 , 30, 337-344	2.3	9

49	Reliability of charge carrier recombination data determined with charge extraction methods. <i>Journal of Applied Physics</i> , 2019 , 126, 205501	2.5	9
48	Alkyl Branching Position in Diketopyrrolopyrrole Polymers: Interplay between Fibrillar Morphology and Crystallinity and Their Effect on Photogeneration and Recombination in Bulk-Heterojunction Solar Cells. <i>Chemistry of Materials</i> , 2018 , 30, 6801-6809	9.6	9
47	Comparing the excited-state properties of a mixed-cation-mixed-halide perovskite to methylammonium lead iodide. <i>Journal of Chemical Physics</i> , 2020 , 152, 104703	3.9	8
46	P3HT-Based Solar Cells: Structural Properties and Photovoltaic Performance. <i>Advances in Polymer Science</i> , 2014 , 181-232	1.3	8
45	Rigid-Rod-Like Main Chain Polymers with Rigidly Attached Chromophores: A Novel Structural Concept for Electrooptical Materials. 2. Theory and Electrooptical Measurements. <i>Macromolecules</i> , 1996 , 29, 4697-4705	5.5	8
44	Revealing Fundamental Efficiency Limits of Monolithic Perovskite/Silicon Tandem Photovoltaics through Subcell Characterization. <i>ACS Energy Letters</i> , 3982-3991	20.1	8
43	Orders of Recombination in Complete Perovskite Solar Cells Linking Time-Resolved and Steady-State Measurements. <i>Advanced Energy Materials</i> , 2101823	21.8	8
42	New polymer matrix system for phosphorescent organic light-emitting diodes and the role of the small molecular co-host. <i>Journal of Polymer Science Part A</i> , 2013 , 51, 601-613	2.5	7
41	Temperature-regulated fluorescence and association of an oligo(ethyleneglycol)methacrylate-based copolymer with a conjugated polyelectrolyte--the effect of solution ionic strength. <i>Journal of Physical Chemistry B</i> , 2013 , 117, 14576-87	3.4	7
40	Organic transistors utilising highly soluble swivel-cruciform oligothiophenes. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2008 , 205, 440-448	1.6	7
39	The effect of hole traps on the performance of single layer polymer light emitting diodes. <i>Optical Materials</i> , 1999 , 12, 387-390	3.3	7
38	Nonlinear optical probes of conjugated polymers. <i>Synthetic Metals</i> , 1992 , 49, 21-35	3.6	7
37	Explaining the Fill-Factor and Photocurrent Losses of Nonfullerene Acceptor-Based Solar Cells by Probing the Long-Range Charge Carrier Diffusion and Drift Lengths. <i>Advanced Energy Materials</i> , 2021 , 11, 2100804	21.8	7
36	Effect of the RC time on photocurrent transients and determination of charge carrier mobilities. <i>Journal of Applied Physics</i> , 2017 , 122, 195501	2.5	5
35	Electronic transport in monolayers of phthalocyanine polymers. <i>Nanotechnology</i> , 2003 , 14, 1043-1050	3.4	5
34	Film formation of heterogeneous latex systems— comparative study by mechanical testing, electron microscopy, interferometry and solid state NMR. <i>Physical Chemistry Chemical Physics</i> , 1999 , 1, 3871-3878	3.6	5
33	Orientation and Dynamics of Chainlike Dipole Arrays: Donor-Acceptor-Substituted Oligophenylenevinylens in a Polymer Matrix. <i>Macromolecules</i> , 1999 , 32, 8551-8559	5.5	5
32	Determination of the two first non-trivial orientational order parameters in LB films of rod-like molecules by third-order sum frequency mixing. <i>Chemical Physics Letters</i> , 1993 , 202, 44-50	2.5	5

31	Organic Solar Cells with Large Insensitivity to Donor Polymer Molar Mass across All Acceptor Classes. <i>ACS Applied Polymer Materials</i> , 2020 , 2, 5300-5308	4.3	5
30	Lead Halide Perovskites as Charge Generation Layers for Electron Mobility Measurement in Organic Semiconductors. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 42011-42019	9.5	4
29	Solution Processed Organic Tandem Solar Cells. <i>Energy Procedia</i> , 2012 , 31, 159-166	2.3	4
28	An investigation of the photoinduced changes of absorption of high-performance photoaddressable polymers. <i>ChemPhysChem</i> , 2002 , 3, 335-42	3.2	4
27	Photogeneration of charge carriers in anisotropic multilayer structures of phthalocyaninato-polysiloxane. <i>Journal of Applied Physics</i> , 1998 , 84, 3731-3740	2.5	4
26	Structure-fluorescence properties of some naphthoylene-benzimidazole-based Langmuir-Blodgett films. <i>Thin Solid Films</i> , 1996 , 287, 232-236	2.2	4
25	Metal nanoparticle mediated space charge and its optical control in an organic hole-only device. <i>Applied Physics Letters</i> , 2016 , 108, 153302	3.4	4
24	Spin-spin interactions and spin delocalisation in a doped organic semiconductor probed by EPR spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2021 , 23, 13827-13841	3.6	4
23	General Rules for the Impact of Energetic Disorder and Mobility on Nongeminate Recombination in Phase-Separated Organic Solar Cells. <i>Physical Review Applied</i> , 2021 , 16,	4.3	4
22	Infrared spectroscopy depth profiling of organic thin films. <i>Materials Horizons</i> , 2021 , 8, 1461-1471	14.4	4
21	Direct observation of state-filling at hybrid tin oxide/organic interfaces. <i>Applied Physics Letters</i> , 2019 , 114, 183301	3.4	3
20	Fluorine-containing low-energy-gap organic dyes with low voltage losses for organic solar cells. <i>Synthetic Metals</i> , 2016 , 222, 232-239	3.6	3
19	The Analysis of Sensitive Materials Using EBSD: The Importance of Beam Conditions and Detector Sensitivity. <i>Microscopy and Microanalysis</i> , 2019 , 25, 2394-2395	0.5	3
18	Microcavity optical mode structure measurements via absorption and emission of polymer thin films. <i>Synthetic Metals</i> , 1997 , 84, 887-888	3.6	3
17	Assignment of the Optical Transitions in 1,3-Diethynylcyclobutadiene(cyclopentadienyl)cobalt Oligomers. <i>Journal of Physical Chemistry B</i> , 1999 , 103, 10335-10337	3.4	3
16	Donor-Acceptor substituted polyenes: Orientation in mono- and multilayers. <i>Advanced Materials</i> , 1992 , 4, 413-416	24	3
15	Inverse piezoelectricity of porous PTFE films with bipolar space charge		2
14	Conductivity Measurements of Electrochemically Oxidized Langmuir-Blodgett Films of Phthalocyaninato-Polysiloxane. <i>Journal of Physical Chemistry B</i> , 1999 , 103, 6858-6862	3.4	2

- 13 Nonlinear optical properties of thin organic films. *Makromolekulare Chemie Macromolecular Symposia*, **1990**, 37, 239-245 2
- 12 Understanding the Role of Order in Y-Series Non-Fullerene Solar Cells to Realize High Open-Circuit Voltages. *Advanced Energy Materials*, 2103422 21.8 2
- 11 23.5% efficient monolithic perovskite/organic tandem solar cells based on an ultra-thin metal-like metal-oxide interconnect. 2
- 10 Revealing the doping density in perovskite solar cells and its impact on device performance. *Applied Physics Reviews*, **2022**, 9, 021409 17.3 2
- 9 Exciton dynamics in ladder-type methyl-poly(para-phenylene) doped with phosphorescent dyes. *Journal of Luminescence*, **2005**, 112, 377-380 3.8 1
- 8 Photogeneration of charge carriers in segmented arylamino-PPV derivatives. *Optical Materials*, **1999**, 12, 373-378 3.3 1
- 7 Amphiphilic dyes for NLO in LB-films. *Makromolekulare Chemie Macromolecular Symposia*, **1991**, 46, 205-210 1
- 6 Quantification of Efficiency Losses Due to Mobile Ions in Perovskite Solar Cells via Fast Hysteresis Measurements. *Solar Rrl*, 2100772 7.1 1
- 5 Enhanced Charge Selectivity via Anodic-C Layer Reduces Nonradiative Losses in Organic Solar Cells. *ACS Applied Materials & Interfaces*, **2021**, 13, 12603-12609 9.5 1
- 4 Organic Solar Cells: On the Efficiency of Charge Transfer State Splitting in Polymer:Fullerene Solar Cells (Adv. Mater. 16/2014). *Advanced Materials*, **2014**, 26, 2607-2607 24
- 3 Morphology and Photovoltaic Properties of Polymer Polymer Blends **2014**, 861-892
- 2 Organic Transistors Utilising Highly Soluble Swivel-Cruciform Oligothiophenes 95-111
- 1 Organic Light Emitting Devices Fabricated from Semiconducting Nanospheres. *Materials Research Society Symposia Proceedings*, **2002**, 738, 8101