# Paul W M Blom

## List of Publications by Citations



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|---|---|---|---|
| 173 papers | 14,999 citations | 56 h-index | 121 g-index |
| 175 ext. papers | 16,377 ext. citations | 8.5 avg, IF | 6.73 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 173 | Light intensity dependence of open-circuit voltage of polymer:fullerene solar cells. *Applied Physics Letters*, **2005**, 86, 123509 | 3.4 | 914 |
| 172 | High-performance solution-processed polymer ferroelectric field-effect transistors. *Nature Materials*, **2005**, 4, 243-248 | 27 | 809 |
| 171 | Unified description of charge-carrier mobilities in disordered semiconducting polymers. *Physical Review Letters*, **2005**, 94, 206601 | 7.4 | 755 |
| 170 | Device model for the operation of polymer/fullerene bulk heterojunction solar cells. *Physical Review B*, **2005**, 72, | 3.3 | 752 |
| 169 | Electric-field and temperature dependence of the hole mobility in poly(p-phenylene vinylene). *Physical Review B*, **1997**, 55, R656-R659 | 3.3 | 707 |
| 168 | Electron and hole transport in poly(p-phenylene vinylene) devices. *Applied Physics Letters*, **1996**, 68, 3308-3310 | 3.4 | 698 |
| 167 | Cathode dependence of the open-circuit voltage of polymer:fullerene bulk heterojunction solar cells. *Journal of Applied Physics*, **2003**, 94, 6849-6854 | 2.5 | 697 |
| 166 | Unification of the hole transport in polymeric field-effect transistors and light-emitting diodes. *Physical Review Letters*, **2003**, 91, 216601 | 7.4 | 630 |
| 165 | Fullerene Bisadducts for Enhanced Open-Circuit Voltages and Efficiencies in Polymer Solar Cells. *Advanced Materials*, **2008**, 20, 2116-2119 | 24 | 546 |
| 164 | Exciton diffusion in organic semiconductors. *Energy and Environmental Science*, **2015**, 8, 1867-1888 | 35.4 | 497 |
| 163 | Unification of trap-limited electron transport in semiconducting polymers. *Nature Materials*, **2012**, 11, 882-7 | 27 | 348 |
| 162 | Bottom-up organic integrated circuits. *Nature*, **2008**, 455, 956-959 | 50.4 | 331 |
| 161 | Origin of the dark-current ideality factor in polymer:fullerene bulk heterojunction solar cells. *Applied Physics Letters*, **2011**, 99, 153506 | 3.4 | 231 |
| 160 | Trap-assisted recombination in disordered organic semiconductors. *Physical Review Letters*, **2011**, 107, 256805 | 7.4 | 215 |
| 159 | Fluoride-Free Synthesis of Two-Dimensional Titanium Carbide (MXene) Using A Binary Aqueous System. *Angewandte Chemie - International Edition*, **2018**, 57, 15491-15495 | 16.4 | 195 |
| 158 | Optimum charge carrier mobility in organic solar cells. *Applied Physics Letters*, **2007**, 90, 133504 | 3.4 | 186 |
| 157 | Exciton diffusion length in narrow bandgap polymers. *Energy and Environmental Science*, **2012**, 5, 6960 | 35.4 | 185 |

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| 156 | Hybrid Silver Nanowire and Graphene-Based Solution-Processed Transparent Electrode for Organic Optoelectronics. *Advanced Functional Materials*, **2018**, 28, 1706010 | 15.6 | 183 |
| 155 | Switch-on voltage in disordered organic field-effect transistors. *Applied Physics Letters*, **2002**, 80, 3838-3840 | 3.4 | 173 |
| 154 | Simultaneous enhancement of charge transport and exciton diffusion in poly(p-phenylene vinylene) derivatives. *Physical Review B*, **2005**, 72, | 3.3 | 171 |
| 153 | Organic complementary-like inverters employing methanofullerene-based ambipolar field-effect transistors. *Applied Physics Letters*, **2004**, 85, 4205-4207 | 3.4 | 167 |
| 152 | Simultaneous measurement of electron and hole mobilities in polymer light-emitting diodes. *Applied Physics Letters*, **2000**, 77, 1852 | 3.4 | 162 |
| 151 | Temperature dependent electron-hole recombination in polymer light-emitting diodes. *Applied Physics Letters*, **1997**, 71, 930-932 | 3.4 | 160 |
| 150 | 25th anniversary article: charge transport and recombination in polymer light-emitting diodes. *Advanced Materials*, **2014**, 26, 512-31 | 24 | 158 |
| 149 | Ambipolar charge transport in organic field-effect transistors. *Physical Review B*, **2006**, 73, | 3.3 | 152 |
| 148 | Dispersive Hole Transport in Poly( p-Phenylene Vinylene). *Physical Review Letters*, **1998**, 80, 3819-3822 | 7.4 | 149 |
| 147 | Origin of the enhanced space-charge-limited current in poly(p-phenylene vinylene). *Physical Review B*, **2004**, 70, | 3.3 | 146 |
| 146 | Temperature dependence of exciton diffusion in conjugated polymers. *Journal of Physical Chemistry B*, **2008**, 112, 11601-4 | 3.4 | 137 |
| 145 | Dual-Gate Organic Field-Effect Transistors as Potentiometric Sensors in Aqueous Solution. *Advanced Functional Materials*, **2010**, 20, 898-905 | 15.6 | 122 |
| 144 | Controllable Molecular Doping and Charge Transport in Solution-Processed Polymer Semiconducting Layers. *Advanced Functional Materials*, **2009**, 19, 1901-1905 | 15.6 | 121 |
| 143 | Universal strategy for Ohmic hole injection into organic semiconductors with high ionization energies. *Nature Materials*, **2018**, 17, 329-334 | 27 | 119 |
| 142 | Trap-assisted and Langevin-type recombination in organic light-emitting diodes. *Physical Review B*, **2011**, 83, | 3.3 | 115 |
| 141 | All-polymer ferroelectric transistors. *Applied Physics Letters*, **2005**, 87, 092903 | 3.4 | 113 |
| 140 | Trap-limited exciton diffusion in organic semiconductors. *Advanced Materials*, **2014**, 26, 1912-7 | 24 | 111 |
| 139 | Trap-limited electron transport in disordered semiconducting polymers. *Physical Review B*, **2007**, 75, | 3.3 | 111 |

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|---|---|---|---|
| 138 | Validity of the Einstein relation in disordered organic semiconductors. *Physical Review Letters*, **2011**, 107, 066605 | 7.4 | 104 |
| 137 | Trap-free electron transport in poly(p-phenylene vinylene) by deactivation of traps with n-type doping. *Physical Review B*, **2010**, 81, | 3.3 | 103 |
| 136 | Elimination of charge carrier trapping in diluted semiconductors. *Nature Materials*, **2016**, 15, 628-33 | 27 | 103 |
| 135 | Manipulation of charge carrier injection into organic field-effect transistors by self-assembled monolayers of alkanethiols. *Journal of Materials Chemistry*, **2007**, 17, 1947 | | 97 |
| 134 | Single-Layer Pentacene Field-Effect Transistors Using Electrodes Modified With Self-assembled Monolayers. *Advanced Materials*, **2009**, 21, 4109-4114 | 24 | 92 |
| 133 | Electron traps in semiconducting polymers: Exponential versus Gaussian trap distribution. *Physical Review B*, **2011**, 83, | 3.3 | 88 |
| 132 | Combined optical and electrical modeling of polymer:fullerene bulk heterojunction solar cells. *Journal of Applied Physics*, **2008**, 103, 084502 | 2.5 | 87 |
| 131 | Beyond the Nernst-limit with dual-gate ZnO ion-sensitive field-effect transistors. *Applied Physics Letters*, **2011**, 98, 043502 | 3.4 | 86 |
| 130 | Identifying the Nature of Charge Recombination in Organic Solar Cells from Charge-Transfer State Electroluminescence. *Advanced Energy Materials*, **2012**, 2, 1232-1237 | 21.8 | 85 |
| 129 | A window to trap-free charge transport in organic semiconducting thin films. *Nature Materials*, **2019**, 18, 1182-1186 | 27 | 82 |
| 128 | Efficient and stable single-layer organic light-emitting diodes based on thermally activated delayed fluorescence. *Nature Photonics*, **2019**, 13, 765-769 | 33.9 | 80 |
| 127 | Dynamics of exciton diffusion in poly(p-phenylene vinylene)/fullerene heterostructures. *Physical Review B*, **2005**, 72, | 3.3 | 79 |
| 126 | Diffusion-limited current in organic metal-insulator-metal diodes. *Physical Review Letters*, **2013**, 111, 186801 | 7.4 | 76 |
| 125 | Simultaneous Open-Circuit Voltage Enhancement and Short-Circuit Current Loss in Polymer: Fullerene Solar Cells Correlated by Reduced Quantum Efficiency for Photoinduced Electron Transfer. *Advanced Energy Materials*, **2013**, 3, 85-94 | 21.8 | 72 |
| 124 | Solution-processed organic tandem solar cells with embedded optical spacers. *Journal of Applied Physics*, **2007**, 102, 074506 | 2.5 | 71 |
| 123 | Electron and hole transport in poly(fluorene-benzothiadiazole). *Applied Physics Letters*, **2011**, 98, 143504 | 3.4 | 70 |
| 122 | A Delamination Strategy for Thinly Layered Defect-Free High-Mobility Black Phosphorus Flakes. *Angewandte Chemie - International Edition*, **2018**, 57, 4677-4681 | 16.4 | 68 |
| 121 | High-sensitivity ion detection at low voltages with current-driven organic electrochemical transistors. *Nature Communications*, **2018**, 9, 1441 | 17.4 | 67 |

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|---|---|---|---|
| 120 | Space-charge-limited electron and hole currents in hybrid organic-inorganic perovskites. *Nature Communications*, **2020**, 11, 4023 | 17.4 | 60 |
| 119 | Asymmetric electron and hole transport in a high-mobility n-type conjugated polymer. *Physical Review B*, **2012**, 86, | 3.3 | 58 |
| 118 | Multiscale real time and high sensitivity ion detection with complementary organic electrochemical transistors amplifier. *Nature Communications*, **2020**, 11, 3743 | 17.4 | 57 |
| 117 | Quantifying Bimolecular Recombination in Organic Solar Cells in Steady State. *Advanced Energy Materials*, **2013**, 3, 1130-1134 | 21.8 | 56 |
| 116 | Crossbar memory array of organic bistable rectifying diodes for nonvolatile data storage. *Applied Physics Letters*, **2010**, 97, 193308 | 3.4 | 56 |
| 115 | Increasing the noise margin in organic circuits using dual gate field-effect transistors. *Applied Physics Letters*, **2008**, 92, 143304 | 3.4 | 56 |
| 114 | Diffusion-enhanced hole transport in thin polymer light-emitting diodes. *Physical Review B*, **2008**, 77, | 3.3 | 55 |
| 113 | Hole trap formation in polymer light-emitting diodes under current stress. *Nature Materials*, **2018**, 17, 557-562 | 27 | 50 |
| 112 | Integrated circuits based on conjugated polymer monolayer. *Nature Communications*, **2018**, 9, 451 | 17.4 | 50 |
| 111 | Role of balanced charge carrier transport in low band gap polymer:Fullerene bulk heterojunction solar cells. *Journal of Polymer Science, Part B: Polymer Physics*, **2011**, 49, 708-711 | 2.6 | 50 |
| 110 | Determination of the trap-assisted recombination strength in polymer light emitting diodes. *Applied Physics Letters*, **2011**, 98, 093301 | 3.4 | 49 |
| 109 | Device Physics of White Polymer Light-Emitting Diodes. *Advanced Functional Materials*, **2012**, 22, 2040-2047 | 15.6 | 47 |
| 108 | Migration-assisted energy transfer at conjugated polymer/metal interfaces. *Physical Review B*, **2005**, 72, | 3.3 | 46 |
| 107 | Effect of thermal annealing on exciton diffusion in a diketopyrrolopyrrole derivative. *Physical Chemistry Chemical Physics*, **2012**, 14, 14196-201 | 3.6 | 44 |
| 106 | Electron Trapping in Conjugated Polymers. *Chemistry of Materials*, **2019**, 31, 6380-6386 | 9.6 | 42 |
| 105 | Origin of the efficiency enhancement in ferroelectric functionalized organic solar cells. *Applied Physics Letters*, **2011**, 98, 183301 | 3.4 | 41 |
| 104 | Enhancement of the hole injection into regioregular poly(3-hexylthiophene) by molecular doping. *Applied Physics Letters*, **2010**, 97, 083303 | 3.4 | 41 |
| 103 | Solution-Processable High-Quality Graphene for Organic Solar Cells. *ACS Applied Materials & Interfaces*, **2017**, 9, 25412-25417 | 9.5 | 40 |

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| 102 | Charge dissociation in polymer:fullerene bulk heterojunction solar cells with enhanced permittivity. *Journal of Applied Physics*, **2008**, 104, 114517 | 2.5 | 40 |
| 101 | Physics of organic ferroelectric field-effect transistors. *Journal of Polymer Science, Part B: Polymer Physics*, **2012**, 50, 47-54 | 2.6 | 38 |
| 100 | Switching dynamics in ferroelectric P(VDF-TrFE) thin films. *Physical Review B*, **2015**, 92, | 3.3 | 37 |
| 99 | Exciton quenching in poly(phenylene vinylene) polymer light-emitting diodes. *Applied Physics Letters*, **2005**, 87, 233511 | 3.4 | 37 |
| 98 | The Effect of Ketone Defects on the Charge Transport and Charge Recombination in Polyfluorenes. *Advanced Functional Materials*, **2011**, 21, 4502-4509 | 15.6 | 36 |
| 97 | Diffusion-driven currents in organic-semiconductor diodes. *NPG Asia Materials*, **2014**, 6, e110-e110 | 10.3 | 33 |
| 96 | Unified description of potential profiles and electrical transport in unipolar and ambipolar organic field-effect transistors. *Physical Review B*, **2007**, 76, | 3.3 | 30 |
| 95 | Charge injection across a polymeric heterojunction. *Physical Review B*, **2005**, 71, | 3.3 | 29 |
| 94 | Electrical characteristics of conjugated self-assembled monolayers in large-area molecular junctions. *Applied Physics Letters*, **2010**, 97, 173302 | 3.4 | 27 |
| 93 | Crystallization Control of Organic Semiconductors during Meniscus-Guided Coating by Blending with Polymer Binder. *Advanced Functional Materials*, **2018**, 28, 1805594 | 15.6 | 27 |
| 92 | Origin of Negative Capacitance in Bipolar Organic Diodes. *Physical Review Letters*, **2018**, 120, 116602 | 7.4 | 26 |
| 91 | Effect of non-ohmic contacts on the light-intensity dependence of the open-circuit voltage in organic solar cells. *Applied Physics Letters*, **2016**, 109, 053302 | 3.4 | 26 |
| 90 | Oligothiophene quinoids containing a benzo[c]thiophene unit for the stabilization of the quinoidal electronic structure. *Journal of Materials Chemistry C*, **2018**, 6, 7493-7500 | 7.1 | 26 |
| 89 | Solution-Processable 2D Materials Applied in Light-Emitting Diodes and Solar Cells. *Advanced Materials Technologies*, **2020**, 5, 1900972 | 6.8 | 25 |
| 88 | Influence of the isomeric composition of the acceptor on the performance of organic bulk heterojunction P3HT:bis-PCBM solar cells. *Journal of Materials Chemistry*, **2012**, 22, 15412 | | 25 |
| 87 | Charge transport in dual-gate organic field-effect transistors. *Applied Physics Letters*, **2012**, 100, 023308 | 3.4 | 24 |
| 86 | Effect of DMSO Solvent Treatments on the Performance of PEDOT:PSS Based Organic Electrochemical Transistors. *Advanced Electronic Materials*, **2019**, 5, 1800804 | 6.4 | 23 |
| 85 | Modeling of Electrical Characteristics of Degraded Polymer Light-Emitting Diodes. *Advanced Electronic Materials*, **2016**, 2, 1600103 | 6.4 | 23 |

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| 84 | Organic field-effect transistor-based biosensors functionalized with protein receptors. *Journal of Applied Physics*, **2010**, 108, 124501 | 2.5 | 23 |
| 83 | N-type doping of poly(p-phenylene vinylene) with air-stable dopants. *Applied Physics Letters*, **2011**, 99, 173302 | 3.4 | 23 |
| 82 | Absence of ferroelectricity in methylammonium lead iodide perovskite. *AIP Advances*, **2017**, 7, 095110 | 1.5 | 22 |
| 81 | Charge Transport and Recombination in Polyspirobifluorene Blue Light-Emitting Diodes. *Advanced Functional Materials*, **2011**, 21, 1505-1510 | 15.6 | 21 |
| 80 | Hysteresis-free electron currents in poly(p-phenylene vinylene) derivatives. *Journal of Applied Physics*, **2010**, 107, 124504 | 2.5 | 21 |
| 79 | Charge carrier trapping controlled by polymer blend phase dynamics. *Journal of Materials Chemistry C*, **2017**, 5, 3042-3048 | 7.1 | 20 |
| 78 | Electron and hole transport in the organic small molecule □NPD. *Applied Physics Letters*, **2017**, 110, 073301 | 3.4 | 20 |
| 77 | Probing the Impedance of a Biological Tissue with PEDOT:PSS-Coated Metal Electrodes: Effect of Electrode Size on Sensing Efficiency. *Advanced Healthcare Materials*, **2019**, 8, e1901215 | 10.1 | 20 |
| 76 | A deeper Insight into the Dithiocarbamate Precursor Route: Synthesis of Soluble Poly(thienylene vinylene) Derivatives for Photovoltaic Applications. *Macromolecules*, **2010**, 43, 10231-10240 | 5.5 | 20 |
| 75 | Luminescent Poly(p-phenylenevinylene) Hole-Transport Layers with Adjustable Solubility. *Advanced Functional Materials*, **2005**, 15, 2011-2015 | 15.6 | 20 |
| 74 | Rigorous Characterization and Predictive Modeling of Hole Transport in Amorphous Organic Semiconductors. *Advanced Electronic Materials*, **2018**, 4, 1800366 | 6.4 | 20 |
| 73 | Functional Connectivity of Organic Neuromorphic Devices by Global Voltage Oscillations. *Advanced Intelligent Systems*, **2019**, 1, 1900013 | 6 | 19 |
| 72 | Doping kinetics of organic semiconductors investigated by field-effect transistors. *Applied Physics Letters*, **2010**, 97, 043302 | 3.4 | 19 |
| 71 | Polymer Electronics: To Be or Not to Be?. *Advanced Materials Technologies*, **2020**, 5, 2000144 | 6.8 | 18 |
| 70 | Exciton quenching at PEDOT:PSS anode in polymer blue-light-emitting diodes. *Journal of Applied Physics*, **2014**, 116, 224508 | 2.5 | 18 |
| 69 | Monitoring of Cell Layer Integrity with a Current-Driven Organic Electrochemical Transistor. *Advanced Healthcare Materials*, **2019**, 8, e1900128 | 10.1 | 17 |
| 68 | Formation of inversion layers in organic field-effect transistors. *Physical Review B*, **2012**, 85, | 3.3 | 17 |
| 67 | Influence of Energetic Disorder on Exciton Lifetime and Photoluminescence Efficiency in Conjugated Polymers. *Journal of Physical Chemistry B*, **2017**, 121, 1405-1412 | 3.4 | 16 |

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| 66 | Key role of the meniscus shape in crystallization of organic semiconductors during meniscus-guided coating. *Materials Horizons*, **2020**, 7, 1631-1640 | 14.4 | 16 |
| 65 | Monolayer dual gate transistors with a single charge transport layer. *Applied Physics Letters*, **2010**, 96, 143304 | 3.4 | 16 |
| 64 | Quantifying the Kinetics of the Gilch Polymerization toward Alkoxy-Substituted Poly(p-phenylene vinylene). *Macromolecules*, **2017**, 50, 4952-4961 | 5.5 | 15 |
| 63 | Spectroscopic evidence for trap-dominated magnetic field effects in organic semiconductors. *Physical Review B*, **2014**, 90, | 3.3 | 15 |
| 62 | Efficient electron injection from solution-processed cesium stearate interlayers in organic light-emitting diodes. *Applied Physics Letters*, **2013**, 102, 053301 | 3.4 | 15 |
| 61 | Hole transport in blue and white emitting polymers. *Journal of Applied Physics*, **2008**, 103, 113711 | 2.5 | 15 |
| 60 | Optical detection of deep electron traps in poly(p-phenylene vinylene) light-emitting diodes. *Applied Physics Letters*, **2011**, 99, 183305 | 3.4 | 14 |
| 59 | Organic Semiconductor/Insulator Blends for Elastic Field-Effect Transistors and Sensors. *Advanced Functional Materials*,2105456 | 15.6 | 14 |
| 58 | Improved Hole Injection into Perovskite Light-Emitting Diodes Using A Black Phosphorus Interlayer. *Advanced Electronic Materials*, **2019**, 5, 1800687 | 6.4 | 14 |
| 57 | Temperature dependence of the photo- and electroluminescence of poly(p-phenylene vinylene) based polymers. *Journal of Materials Chemistry C*, **2018**, 6, 10569-10579 | 7.1 | 13 |
| 56 | Solution-processed multilayer polymer light-emitting diode without intermixing. *Applied Physics Letters*, **2017**, 110, 023302 | 3.4 | 12 |
| 55 | Carrier-density dependence of the hole mobility in doped and undoped regioregular poly(3-hexylthiophene). *Physica Status Solidi (B): Basic Research*, **2012**, 249, 138-141 | 1.3 | 12 |
| 54 | Organic neuromorphic electronics for sensorimotor integration and learning in robotics. *Science Advances*, **2021**, 7, eabl5068 | 14.3 | 11 |
| 53 | Efficient Blue Polymer Light-Emitting Diodes with Electron-Dominated Transport Due to Trap Dilution. *Advanced Electronic Materials*, **2016**, 2, 1500406 | 6.4 | 11 |
| 52 | Efficiency enhancement of polyfluorene: Polystyrene blend light-emitting diodes by simultaneous trap dilution and Ɛphase formation. *Applied Physics Letters*, **2019**, 114, 093301 | 3.4 | 10 |
| 51 | Effects of fluorine substitution in quinoidal oligothiophenes for use as organic semiconductors. *Journal of Materials Chemistry C*, **2020**, 8, 3580-3588 | 7.1 | 10 |
| 50 | Filling the Green Gap of a Megadalton Photosystem I Complex by Conjugation of Organic Dyes. *Bioconjugate Chemistry*, **2016**, 27, 36-41 | 6.3 | 10 |
| 49 | Current-Driven Organic Electrochemical Transistors for Monitoring Cell Layer Integrity with Enhanced Sensitivity. *Advanced Healthcare Materials*, **2021**, 10, e2100845 | 10.1 | 10 |

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| 48 | Open-circuit voltage loss in annealed P3HT:perylene diimide bulk heterojunction solar cells. *Applied Physics Letters*, **2017**, 110, 163301 | 3.4 | 9 |
| 47 | Solution-Processed Organic Transistors with Excellent Electrical Stability under Ambient Conditions. *Advanced Electronic Materials*, **2019**, 5, 1900295 | 6.4 | 9 |
| 46 | Visualization of trap dilution in polyfluorene based light-emitting diodes. *AIP Advances*, **2017**, 7, 075209 | 1.5 | 9 |
| 45 | Sensitive triplet exciton detection in polyfluorene using Pd-coordinated porphyrin. *Physical Chemistry Chemical Physics*, **2011**, 13, 14453-6 | 3.6 | 9 |
| 44 | Origin of the Efficiency Roll-Off in Single-Layer Organic Light-Emitting Diodes Based on Thermally Activated Delayed Fluorescence. *Advanced Optical Materials*, **2021**, 9, 2100249 | 8.1 | 9 |
| 43 | A PMMA-based heterogeneous photocatalyst for visible light-promoted [4 + 2] cycloaddition. *Catalysis Science and Technology*, **2020**, 10, 2092-2099 | 5.5 | 8 |
| 42 | Microcontact printing of self-assembled monolayers to pattern the light-emission of polymeric light-emitting diodes. *Applied Physics A: Materials Science and Processing*, **2009**, 95, 1-5 | 2.6 | 8 |
| 41 | Quantitative analysis of the guest-concentration dependence of the mobility in a disordered fluorene-arylamine host-guest system in the guest-to-guest regime. *Applied Physics Letters*, **2011**, 99, 203303 | 3.4 | 8 |
| 40 | Green and stable processing of organic light-emitting diodes from aqueous nanodispersions. *Journal of Materials Chemistry C*, **2020**, 8, 6528-6535 | 7.1 | 7 |
| 39 | Transient electroluminescence on pristine and degraded phosphorescent blue OLEDs. *Journal of Applied Physics*, **2017**, 122, 185502 | 2.5 | 7 |
| 38 | Polymer perovskite blend light-emitting diodes using a self-compensated heavily doped polymeric anode. *APL Materials*, **2020**, 8, 021101 | 5.7 | 7 |
| 37 | Molecular library of OLED host materials Evaluating the multiscale simulation workflow. *Chemical Physics Reviews*, **2021**, 2, 031304 | 4.4 | 7 |
| 36 | Suppression of electron trapping by quantum dot emitters using a grafted polystyrene shell. *Materials Horizons*, **2019**, 6, 2024-2031 | 14.4 | 6 |
| 35 | Quantification of hole-trap concentration in degraded polymer light-emitting diodes using impedance spectroscopy. *Applied Physics Letters*, **2019**, 114, 163301 | 3.4 | 6 |
| 34 | Effect of n-type doping on the hole transport in poly(p-phenylene vinylene). *Journal of Polymer Science, Part B: Polymer Physics*, **2011**, 49, 1745-1749 | 2.6 | 6 |
| 33 | Substituted Polyfluorene-Based Hole Transport Layer with Tunable Solubility. *Journal of Physical Chemistry C*, **2010**, 114, 10559-10564 | 3.8 | 6 |
| 32 | Optical Outcoupling Efficiency of Organic Light-Emitting Diodes with a Broad Recombination Profile. *Advanced Optical Materials*, **2021**, 9, 2001812 | 8.1 | 6 |
| 31 | Monitoring Reversible Tight Junction Modulation with a Current-Driven Organic Electrochemical Transistor. *Advanced Materials Technologies*, **2021**, 6, 2000940 | 6.8 | 6 |

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| 30 | Molecular Origin of Balanced Bipolar Transport in Neat Layers of the Emitter CzDBA. *Advanced Materials Technologies*, **2021**, 6, 2000120 | 6.8 | 6 |
| 29 | Solubility and Charge Transport in Blends of Poly-dialkoxy-p-phenylene Vinylene and UV-Cross-Linkable Matrices. *Advanced Electronic Materials*, **2017**, 3, 1600519 | 6.4 | 5 |
| 28 | Integrated Complementary-Like Circuits Based on Organic Ambipolar Transistors. *Materials Research Society Symposia Proceedings*, **2005**, 871, 1 | | 5 |
| 27 | Selective Ion Detection with Integrated Organic Electrochemical Transistors. *Advanced Materials Technologies*,2100591 | 6.8 | 5 |
| 26 | Efficient Gating of Organic Electrochemical Transistors with In-Plane Gate Electrodes. *Advanced Materials Technologies*,2100732 | 6.8 | 5 |
| 25 | Exciton Quenching due to Hole Trap Formation in Aged Polymer Light-Emitting Diodes. *Advanced Electronic Materials*, **2020**, 6, 1700643 | 6.4 | 4 |
| 24 | Efficiency of solution-processed multilayer polymer light-emitting diodes using charge blocking layers. *Journal of Applied Physics*, **2018**, 123, 024504 | 2.5 | 4 |
| 23 | Tuning of Metal Work Functions with Self-Assembled Monolayers. *Materials Research Society Symposia Proceedings*, **2005**, 871, 1 | | 4 |
| 22 | Effect of arylamine hole-transport units on the performance of blue polyspirobifulorene light-emitting diodes. *Physical Review B*, **2014**, 90, | 3.3 | 3 |
| 21 | Efficiency of Polymer Light-Emitting Diodes: A Perspective. *Advanced Materials*, **2021**, e2108887 | 24 | 3 |
| 20 | Optimized Charge Transport in Molecular Semiconductors by Control of Fluid Dynamics and Crystallization in Meniscus-Guided Coating. *Advanced Functional Materials*,2107976 | 15.6 | 3 |
| 19 | Relation between Spherulitic Growth, Molecular Organization, and Charge Carrier Transport in Meniscus-Guided Coated Organic Semiconducting Films. *Advanced Electronic Materials*, **2021**, 7, 2100397 | 6.4 | 3 |
| 18 | Virtual Screening of TADF Emitters for Single-Layer OLEDs.. *Frontiers in Chemistry*, **2021**, 9, 800027 | 5 | 3 |
| 17 | High-Performance Bioelectronic Circuits Integrated on Biodegradable and Compostable Substrates with Fully Printed Mask-Less Organic Electrochemical Transistors. *Small*,2108077 | 11 | 3 |
| 16 | Trap-Assisted Triplet Emission in Ladder-Polymer-Based Light-Emitting Diodes. *Advanced Electronic Materials*, **2020**, 6, 2000082 | 6.4 | 2 |
| 15 | Optical Outcoupling Efficiency in Polymer Light-Emitting Diodes. *Advanced Electronic Materials*, **2021**, 7, 2100155 | 6.4 | 2 |
| 14 | Universal Electroluminescence at Voltages below the Energy Gap in Organic Light-Emitting Diodes. *Advanced Optical Materials*,2101149 | 8.1 | 2 |
| 13 | De Novo Simulation of Charge Transport through Organic Single-Carrier Devices. *Journal of Chemical Theory and Computation*, **2021**, 17, 6416-6422 | 6.4 | 2 |

# List of Publications

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|---|---|---|---|
| 12 | Self-Aligned Bilayers for Flexible Free-Standing Organic Field-Effect Transistors. *ACS Applied Materials & Interfaces*, **2021**, | 9.5 | 2 |
| 11 | Electron Trap Dynamics in Polymer Light-Emitting Diodes. *Advanced Functional Materials*,2106185 | 15.6 | 2 |
| 10 | Hole-transport comparison between solution-processed and vacuum-deposited organic semiconductors. *APL Materials*, **2019**, 7, 011105 | 5.7 | 1 |
| 9 | Polymer light-emitting diodes with doped hole-transport layers. *Physica Status Solidi (A) Applications and Materials Science*, **2011**, 208, 2482-2487 | 1.6 | 1 |
| 8 | Charge transport in disordered organic field-effect transistors. *Materials Research Society Symposia Proceedings*, **2002**, 725, 1 | | 1 |
| 7 | Role of Singlet and Triplet Excitons on the Electrical Stability of Polymer Light-Emitting Diodes. *Advanced Electronic Materials*, **2020**, 6, 2000367 | 6.4 | 1 |
| 6 | Quantifying Exciton Annihilation Effects in Thermally Activated Delayed Fluorescence Materials. *Advanced Optical Materials*, **2022**, 10, 2101784 | 8.1 | 1 |
| 5 | Numerical Device Model for Organic Light-Emitting Diodes Based on Thermally Activated Delayed Fluorescence. *Advanced Electronic Materials*,2101261 | 6.4 | 0 |
| 4 | Role of Linker Functionality in Polymers Exhibiting Main-Chain Thermally Activated Delayed Fluorescence.. *Advanced Science*, **2022**, e2200056 | 13.6 | 0 |
| 3 | Charge Carrier Density Dependence of the Hole Mobility in Poly(p-phenylene vinylene) **2006**, 305-318 | | |
| 2 | Performance of Injection-Limited Polymer Light-Emitting Diodes. *Materials Research Society Symposia Proceedings*, **2002**, 725, 1 | | |
| 1 | Admittance Spectroscopy on Polymer Light-Emitting Diodes. *Materials Research Society Symposia Proceedings*, **2001**, 665, 1 | | |