# Ren Aj Janssen

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| #   | Paper   | IF   | Citations |
|-----|---|------|-----------|
| 580 | Two-dimensional charge transport in self-organized, high-mobility conjugated polymers. <i>Nature</i> , <b>1999</b> , 401, 685-688   | 50.4 | 3980      |
| 579 | Nanoscale morphology of high-performance polymer solar cells. <i>Nano Letters</i> , <b>2005</b> , 5, 579-83   | 11.5 | 1424      |
| 578 | Efficient methano[70]fullerene/MDMO-PPV bulk heterojunction photovoltaic cells. <i>Angewandte Chemie - International Edition</i> , <b>2003</b> , 42, 3371-5   | 16.4 | 1012      |
| 577 | Materials interface engineering for solution-processed photovoltaics. <i>Nature</i> , <b>2012</b> , 488, 304-12   | 50.4 | 905       |
| 576 | The Energy of Charge-Transfer States in Electron DonorAcceptor Blends: Insight into the Energy Losses in Organic Solar Cells. <i>Advanced Functional Materials</i> , <b>2009</b> , 19, 1939-1948                                    | 15.6 | 861       |
| 575 | Efficient Hybrid Solar Cells from Zinc Oxide Nanoparticles and a Conjugated Polymer. <i>Advanced Materials</i> , <b>2004</b> , 16, 1009-1013  | 24   | 822       |
| 574 | Thieno[3,2-b]thiophene-diketopyrrolopyrrole-containing polymers for high-performance organic field-effect transistors and organic photovoltaic devices. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 3272-5 | 16.4 | 809       |
| 573 | Hybrid zinc oxide conjugated polymer bulk heterojunction solar cells. <i>Journal of Physical Chemistry B</i> , <b>2005</b> , 109, 9505-16   | 3.4  | 769       |
| 572 | Poly(diketopyrrolopyrrole-terthiophene) for ambipolar logic and photovoltaics. <i>Journal of the American Chemical Society</i> , <b>2009</b> , 131, 16616-7   | 16.4 | 685       |
| 571 | Narrow-Bandgap Diketo-Pyrrolo-Pyrrole Polymer Solar Cells: The Effect of Processing on the Performance. <i>Advanced Materials</i> , <b>2008</b> , 20, 2556-2560   | 24   | 639       |
| 570 | Relating the Morphology of Poly(p-phenylene vinylene)/Methanofullerene Blends to Solar-Cell Performance. <i>Advanced Functional Materials</i> , <b>2004</b> , 14, 425-434   | 15.6 | 596       |
| 569 | Electron Transport in a Methanofullerene. Advanced Functional Materials, 2003, 13, 43-46  | 15.6 | 551       |
| 568 | Conductivity, work function, and environmental stability of PEDOT:PSS thin films treated with sorbitol. <i>Organic Electronics</i> , <b>2008</b> , 9, 727-734   | 3.5  | 536       |
| 567 | Compositional and electric field dependence of the dissociation of charge transfer excitons in alternating polyfluorene copolymer/fullerene blends. <i>Journal of the American Chemical Society</i> , <b>2008</b> , 130, 7721-35    | 16.4 | 521       |
| 566 | Hybrid Solar Cells from Regioregular Polythiophene and ZnO Nanoparticles. <i>Advanced Functional Materials</i> , <b>2006</b> , 16, 1112-1116  | 15.6 | 508       |
| 565 | Factors limiting device efficiency in organic photovoltaics. <i>Advanced Materials</i> , <b>2013</b> , 25, 1847-58  | 24   | 489       |
| 564 | The effect of three-dimensional morphology on the efficiency of hybrid polymer solar cells. <i>Nature Materials</i> , <b>2009</b> , 8, 818-24   | 27   | 485       |

## (2002-2002)

| 563 | A Low-Bandgap Semiconducting Polymer for Photovoltaic Devices and Infrared Emitting Diodes. <i>Advanced Functional Materials</i> , <b>2002</b> , 12, 709-712                                       | 15.6 | 483 |
|-----|--|------|-----|
| 562 | Efficient tandem and triple-junction polymer solar cells. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 5529-32   | 16.4 | 472 |
| 561 | Microscopic Understanding of the Anisotropic Conductivity of PEDOT:PSS Thin Films. <i>Advanced Materials</i> , <b>2007</b> , 19, 1196-1200   | 24   | 425 |
| 560 | Deep absorbing porphyrin small molecule for high-performance organic solar cells with very low energy losses. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 7282-5          | 16.4 | 396 |
| 559 | Diketopyrrolopyrrole Polymers for Organic Solar Cells. <i>Accounts of Chemical Research</i> , <b>2016</b> , 49, 78-85  | 24.3 | 385 |
| 558 | Supramolecular p-n-heterojunctions by co-self-organization of oligo(p-phenylene vinylene) and perylene bisimide dyes. <i>Journal of the American Chemical Society</i> , <b>2004</b> , 126, 10611-8 | 16.4 | 383 |
| 557 | High-molecular-weight regular alternating diketopyrrolopyrrole-based terpolymers for efficient organic solar cells. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 8341-4    | 16.4 | 377 |
| 556 | The Importance of Moisture in Hybrid Lead Halide Perovskite Thin Film Fabrication. <i>ACS Nano</i> , <b>2015</b> , 9, 9380-93  | 16.7 | 366 |
| 555 | Compositional Dependence of the Performance of Poly(p-phenylene vinylene):Methanofullerene Bulk-Heterojunction Solar Cells. <i>Advanced Functional Materials</i> , <b>2005</b> , 15, 795-801       | 15.6 | 363 |
| 554 | High Performance All-Polymer Solar Cells by Synergistic Effects of Fine-Tuned Crystallinity and Solvent Annealing. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 10935-44   | 16.4 | 362 |
| 553 | Circularly Polarized Electroluminescence from a Polymer Light-Emitting Diode. <i>Journal of the American Chemical Society</i> , <b>1997</b> , 119, 9909-9910                                       | 16.4 | 352 |
| 552 | Efficient solar cells based on an easily accessible diketopyrrolopyrrole polymer. <i>Advanced Materials</i> , <b>2010</b> , 22, E242-6   | 24   | 350 |
| 551 | High quantum efficiencies in polymer solar cells at energy losses below 0.6 eV. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 2231-4  | 16.4 | 334 |
| 550 | Morphology and Thermal Stability of the Active Layer in Poly(p-phenylenevinylene)/Methanofullerene Plastic Photovoltaic Devices. <i>Macromolecules</i> , <b>2004</b> , 37, 2151-2158               | 5.5  | 325 |
| 549 | The use of ZnO as optical spacer in polymer solar cells: Theoretical and experimental study. <i>Applied Physics Letters</i> , <b>2007</b> , 91, 113520   | 3.4  | 316 |
| 548 | Double and triple junction polymer solar cells processed from solution. <i>Applied Physics Letters</i> , <b>2007</b> , 90, 143512  | 3.4  | 306 |
| 547 | A Morphological Model for the Solvent-Enhanced Conductivity of PEDOT:PSS Thin Films. <i>Advanced Functional Materials</i> , <b>2008</b> , 18, 865-871  | 15.6 | 293 |
| 546 | Spectroscopic Studies of Photoexcitations in Regioregular and Regiorandom Polythiophene Films.  Advanced Functional Materials, 2002, 12, 587-597   | 15.6 | 290 |

| 545 | Universal correlation between fibril width and quantum efficiency in diketopyrrolopyrrole-based polymer solar cells. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 18942-8   | 16.4              | 285 |
|-----|---|-------------------|-----|
| 544 | Multicomponent semiconducting polymer systems with low crystallization-induced percolation threshold. <i>Nature Materials</i> , <b>2006</b> , 5, 950-6  | 27                | 276 |
| 543 | Efficient small bandgap polymer solar cells with high fill factors for 300 nm thick films. <i>Advanced Materials</i> , <b>2013</b> , 25, 3182-6   | 24                | 275 |
| 542 | Quantifying bimolecular recombination losses in organic bulk heterojunction solar cells. <i>Advanced Materials</i> , <b>2011</b> , 23, 1670-4   | 24                | 258 |
| 541 | Enhancing the photocurrent in diketopyrrolopyrrole-based polymer solar cells via energy level control. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 13787-95  | 16.4              | 249 |
| 540 | Circular Dichroism and Circular Polarization of Photoluminescence of Highly Ordered Poly{3,4-di[(S)-2-methylbutoxy]thiophene}. <i>Journal of the American Chemical Society</i> , <b>1996</b> , 118, 4908-49   | 969.4             | 249 |
| 539 | Solution-Processed Organic Tandem Solar Cells. <i>Advanced Functional Materials</i> , <b>2006</b> , 16, 1897-1903   | 15.6              | 247 |
| 538 | A real-time study of the benefits of co-solvents in polymer solar cell processing. <i>Nature Communications</i> , <b>2015</b> , 6, 6229   | 17.4              | 244 |
| 537 | Two-Dimensional Crystals of Poly(3-Alkyl- thiophene)s: Direct Visualization of Polymer Folds in Submolecular Resolution This work was supported by the European Union in the framework of Frequent-Esprit 24793. <i>Angewandte Chemie - International Edition</i> , <b>2000</b> , 39, 2679-2684 | 16.4              | 238 |
| 536 | Photoinduced Electron Transfer and Photovoltaic Response of a MDMO-PPV:TiO2 Bulk-Heterojunction. <i>Advanced Materials</i> , <b>2003</b> , 15, 118-121  | 24                | 233 |
| 535 | Small-bandgap semiconducting polymers with high near-infrared photoresponse. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 12130-6   | 16.4              | 230 |
| 534 | Redox States of Long Oligothiophenes: Two Polarons on a Single Chain. <i>Chemistry - A European Journal</i> , <b>1998</b> , 4, 1509-1522  | 4.8               | 228 |
| 533 | Predicting morphologies of solution processed polymer:fullerene blends. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 12057-67   | 16.4              | 224 |
| 532 | Polymer solar cells with diketopyrrolopyrrole conjugated polymers as the electron donor and electron acceptor. <i>Advanced Materials</i> , <b>2014</b> , 26, 3304-9   | 24                | 221 |
| 531 | Photoinduced electron transfer and photovoltaic devices of a conjugated polymer with pendant fullerenes. <i>Journal of the American Chemical Society</i> , <b>2001</b> , 123, 6714-5  | 16.4              | 216 |
| 530 | Influence of Chain Length and Derivatization on the Lowest Singlet and Triplet States and Intersystem Crossing in Oligothiophenes. <i>Journal of the American Chemical Society</i> , <b>1996</b> , 118, 6453-646  | 51 <sup>6.4</sup> | 214 |
| 529 | Synthesis, Photophysical Properties, and Photovoltaic Devices of Oligo(p-phenylene vinylene)-fullerene Dyads?. <i>Journal of Physical Chemistry B</i> , <b>2000</b> , 104, 10174-10190  | 3.4               | 211 |
| 528 | Optimizing polymer tandem solar cells. <i>Advanced Materials</i> , <b>2010</b> , 22, E67-71   | 24                | 210 |

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| 527 | Functionalized 3D oligothiophene dendrons and dendrimersnovel macromolecules for organic electronics. <i>Angewandte Chemie - International Edition</i> , <b>2007</b> , 46, 1679-83  | 16.4 | 210 |
|-----|---|------|-----|
| 526 | Solution-Processed Bulk-Heterojunction Solar Cells Based on Monodisperse Dendritic Oligothiophenes. <i>Advanced Functional Materials</i> , <b>2008</b> , 18, 3323-3331  | 15.6 | 209 |
| 525 | A unifying model for the operation of light-emitting electrochemical cells. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 13776-81   | 16.4 | 207 |
| 524 | 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 |
| 523 | On the origin of optical activity in polythiophenes. <i>Journal of Molecular Structure</i> , <b>2000</b> , 521, 285-301   | 3.4  | 194 |
| 522 | Hybrid Solar Cells Using a Zinc Oxide Precursor and a Conjugated Polymer. <i>Advanced Functional Materials</i> , <b>2005</b> , 15, 1703-1707  | 15.6 | 190 |
| 521 | Effect of the fibrillar microstructure on the efficiency of high molecular weight diketopyrrolopyrrole-based polymer solar cells. <i>Advanced Materials</i> , <b>2014</b> , 26, 1565-70   | 24   | 186 |
| 520 | Alternating oligo(p-phenylene vinylene)perylene bisimide copolymers: synthesis, photophysics, and photovoltaic properties of a new class of donoracceptor materials. <i>Journal of the American Chemical Society</i> , <b>2003</b> , 125, 8625-38 | 16.4 | 184 |
| 519 | Low-band gap poly(di-2-thienylthienopyrazine):fullerene solar cells. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 153511  | 3.4  | 182 |
| 518 | 9.0% power conversion efficiency from ternary all-polymer solar cells. <i>Energy and Environmental Science</i> , <b>2017</b> , 10, 2212-2221  | 35.4 | 179 |
| 517 | Tough, Semiconducting Polyethylene-poly(3-hexylthiophene) Diblock Copolymers. <i>Advanced Functional Materials</i> , <b>2007</b> , 17, 2674-2679  | 15.6 | 176 |
| 516 | A high dielectric constant non-fullerene acceptor for efficient bulk-heterojunction organic solar cells. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 395-403   | 13   | 173 |
| 515 | Morphology Optimization via Side Chain Engineering Enables All-Polymer Solar Cells with Excellent Fill Factor and Stability. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 8934-8943                                       | 16.4 | 171 |
| 514 | Solution processed polymer tandem solar cell using efficient small and wide bandgap polymer:fullerene blends. <i>Advanced Materials</i> , <b>2012</b> , 24, 2130-4  | 24   | 166 |
| 513 | Anisotropic hopping conduction in spin-coated PEDOT:PSS thin films. <i>Physical Review B</i> , <b>2007</b> , 76,  | 3.3  | 166 |
| 512 | Polymer-Fullerene Bulk Heterojunction Solar Cells. <i>MRS Bulletin</i> , <b>2005</b> , 30, 33-36  | 3.2  | 158 |
| 511 | Influence of intermolecular orientation on the photoinduced charge transfer kinetics in self-assembled aggregates of donor-acceptor arrays. <i>Journal of the American Chemical Society</i> , <b>2006</b> , 128, 649-57                           | 16.4 | 156 |
| 510 | Optical and redox properties of a series of 3,4-ethylenedioxythiophene oligomers. <i>Chemistry - A European Journal</i> , <b>2002</b> , 8, 2384-96  | 4.8  | 156 |

| 509 | The Effect of H- and J-Aggregation on the Photophysical and Photovoltaic Properties of Small Thiophene <b>B</b> yridine <b>D</b> PP Molecules for Bulk-Heterojunction Solar Cells. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1605779 | 15.6              | 154 |
|-----|---|-------------------|-----|
| 508 | Red, green, and blue quantum dot LEDs with solution processable ZnO nanocrystal electron injection layers. <i>Journal of Materials Chemistry</i> , <b>2008</b> , 18, 1889   |                   | 152 |
| 507 | Highly luminescent CdTe/CdSe colloidal heteronanocrystals with temperature-dependent emission color. <i>Journal of the American Chemical Society</i> , <b>2007</b> , 129, 14880-6   | 16.4              | 152 |
| 506 | Efficient Methano[70]fullerene/MDMO-PPV Bulk Heterojunction Photovoltaic Cells. <i>Angewandte Chemie</i> , <b>2003</b> , 115, 3493-3497   | 3.6               | 147 |
| 505 | Small band gap polymers based on diketopyrrolopyrrole. <i>Journal of Materials Chemistry</i> , <b>2010</b> , 20, 2240   |                   | 146 |
| 504 | Crystalline-crystalline block copolymers of regioregular poly(3-hexylthiophene) and polyethylene by ring-opening metathesis polymerization. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 12502-                             | <sub>3</sub> 16.4 | 146 |
| 503 | Small band gap copolymers based on furan and diketopyrrolopyrrole for field-effect transistors and photovoltaic cells. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 1600-1606  |                   | 145 |
| 502 | Homocoupling defects in diketopyrrolopyrrole-based copolymers and their effect on photovoltaic performance. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 11128-33   | 16.4              | 143 |
| 501 | Improved film morphology reduces charge carrier recombination into the triplet excited state in a small bandgap polymer-fullerene photovoltaic cell. <i>Advanced Materials</i> , <b>2010</b> , 22, 4321-4   | 24                | 140 |
| 500 | Absence of Strong Gate Effects in Electrical Measurements on Phenylene-Based Conjugated Molecules. <i>Nano Letters</i> , <b>2003</b> , 3, 113-117   | 11.5              | 140 |
| 499 | Principles of Majority Rules and Soldiers Applied to the Aggregation of Optically Active Polythiophenes: Evidence for a Multichain Phenomenon. <i>Macromolecules</i> , <b>1999</b> , 32, 227-230  | 5.5               | 139 |
| 498 | Copolymers of Cyclopentadithiophene and Electron-Deficient Aromatic Units Designed for Photovoltaic Applications. <i>Advanced Functional Materials</i> , <b>2009</b> , 19, 3262-3270  | 15.6              | 136 |
| 497 | Triplet-state photoexcitations of oligothiophene films and solutions. <i>Journal of Chemical Physics</i> , <b>1994</b> , 101, 1787-1798   | 3.9               | 136 |
| 496 | A Polystyrene©ligothiophenePolystyrene Triblock Copolymer. <i>Journal of the American Chemical Society</i> , <b>1998</b> , 120, 2798-2804   | 16.4              | 135 |
| 495 | Inversion of Optical Activity of Chiral Polythiophene Aggregates by a Change of Solvent. <i>Macromolecules</i> , <b>1998</b> , 31, 6702-6704  | 5.5               | 134 |
| 494 | Photoinduced Energy and Electron Transfer in Fullerene©ligothiopheneEullerene Triads. <i>Journal of Physical Chemistry A</i> , <b>2000</b> , 104, 5974-5988   | 2.8               | 133 |
| 493 | Charge Trapping at the Dielectric of Organic Transistors Visualized in Real Time and Space. <i>Advanced Materials</i> , <b>2008</b> , 20, 975-979   | 24                | 130 |
| 492 | Electronic memory effects in diodes from a zinc oxide nanoparticle-polystyrene hybrid material. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 102103   | 3.4               | 130 |

#### (1997-2005)

| 491 | Selective oxidation of benzene to phenol with nitrous oxide over MFI zeolites1. On the role of iron and aluminum. <i>Journal of Catalysis</i> , <b>2005</b> , 233, 123-135  | 7.3                | 130 |  |
|-----|---|--------------------|-----|--|
| 490 | Conjugation-length dependence of spin-dependent exciton formation rates in pi-conjugated oligomers and polymers. <i>Physical Review Letters</i> , <b>2002</b> , 88, 197401  | 7.4                | 129 |  |
| 489 | Photoinduced Electron Transfer from Conjugated Polymers to TiO2. <i>Journal of Physical Chemistry B</i> , <b>1999</b> , 103, 4352-4359  | 3.4                | 129 |  |
| 488 | Hybrid polymer solar cells based on zinc oxide. <i>Journal of Materials Chemistry</i> , <b>2005</b> , 15, 2985  |                    | 128 |  |
| 487 | Asymmetric Diketopyrrolopyrrole Conjugated Polymers for Field-Effect Transistors and Polymer Solar Cells Processed from a Nonchlorinated Solvent. <i>Advanced Materials</i> , <b>2016</b> , 28, 943-50            | 24                 | 128 |  |
| 486 | Substituted 2,1,3-Benzothiadiazole- And Thiophene-Based Polymers for Solar Cells Introducing a New Thermocleavable Precursor. <i>Chemistry of Materials</i> , <b>2009</b> , 21, 4669-4675                         | 9.6                | 127 |  |
| 485 | Characterization of polymer solar cells by TOF-SIMS depth profiling. <i>Applied Surface Science</i> , <b>2003</b> , 203-204, 547-550  | 6.7                | 126 |  |
| 484 | Photovoltaic performance of an ultrasmall band gap polymer. <i>Organic Letters</i> , <b>2009</b> , 11, 903-6  | 6.2                | 123 |  |
| 483 | Chiroptical Properties of Regioregular Chiral Polythiophenes. <i>Molecular Crystals and Liquid Crystals</i> , <b>1994</b> , 256, 439-448  |                    | 123 |  |
| 482 | Exciplex dynamics in a blend of £conjugated polymers with electron donating and accepting properties: MDMO-PPV and PCNEPV. <i>Physical Review B</i> , <b>2005</b> , 72,   | 3.3                | 122 |  |
| 481 | Singlet and triplet excitations of chiral dialkoxy-p-phenylene vinylene oligomers. <i>Journal of Chemical Physics</i> , <b>2000</b> , 112, 9445-9454  | 3.9                | 121 |  |
| 480 | Organic Photodetectors and their Application in Large Area and Flexible Image Sensors: The Role of Dark Current. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 1904205                                 | 15.6               | 120 |  |
| 479 | Mechanistic Aspects of the Suzuki Polycondensation of Thiophenebisboronic Derivatives and Diiodobenzenes Analyzed by MALDI <b>II</b> OF Mass Spectrometry. <i>Macromolecules</i> , <b>2001</b> , 34, 5386-5393    | 5.5                | 118 |  |
| 478 | Microstructurehobility correlation in self-organised, conjugated polymer field-effect transistors. <i>Synthetic Metals</i> , <b>2000</b> , 111-112, 129-132   | 3.6                | 116 |  |
| 477 | Monolayer coverage and channel length set the mobility in self-assembled monolayer field-effect transistors. <i>Nature Nanotechnology</i> , <b>2009</b> , 4, 674-80   | 28.7               | 115 |  |
| 476 | Functionalized dendritic oligothiophenes: ruthenium phthalocyanine complexes and their application in bulk heterojunction solar cells. <i>Journal of the American Chemical Society</i> , <b>2009</b> , 131, 8669. | -76 <sup>6.4</sup> | 115 |  |
| 475 | Morphological device model for organic bulk heterojunction solar cells. <i>Nano Letters</i> , <b>2009</b> , 9, 3032-7   | 11.5               | 115 |  |
| 474 | High-Spin Cation Radicals ofMetaBaraAniline Oligomers. <i>Journal of the American Chemical Society</i> , <b>1997</b> , 119, 4492-4501   | 16.4               | 114 |  |

| 473 | Polymer Solar Cells: Solubility Controls Fiber Network Formation. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 11783-94   | 16.4         | 113 |
|-----|---|--------------|-----|
| 472 | Reproducible resistive switching in nonvolatile organic memories. <i>Applied Physics Letters</i> , <b>2007</b> , 91, 192  | 1 <u>9.3</u> | 113 |
| 471 | Real versus measured surface potentials in scanning Kelvin probe microscopy. ACS Nano, 2008, 2, 622-6   | 16.7         | 110 |
| 47° | Realization of large area flexible fullerene Itonjugated polymer photocells: A route to plastic solar cells. <i>Synthetic Metals</i> , <b>1999</b> , 102, 861-864   | 3.6          | 110 |
| 469 | Self-Assembling Thiophene Dendrimers with a Hexa-peri-hexabenzocoronene CoreBynthesis, Characterization and Performance in Bulk Heterojunction Solar Cells. <i>Chemistry of Materials</i> , <b>2010</b> , 22, 457-466   | 9.6          | 106 |
| 468 | Influence of the Position of the Side Chain on Crystallization and Solar Cell Performance of DPP-Based Small Molecules. <i>Chemistry of Materials</i> , <b>2014</b> , 26, 916-926   | 9.6          | 104 |
| 467 | Origin of Work Function Modification by Ionic and Amine-Based Interface Layers. <i>Advanced Materials Interfaces</i> , <b>2014</b> , 1, 1400189   | 4.6          | 104 |
| 466 | Investigation of Exciton Coupling in Oligothiophenes by Circular Dichroism Spectroscopy. <i>Advanced Materials</i> , <b>1998</b> , 10, 1343-1348  | 24           | 104 |
| 465 | Supramolecular Hydrogen-Bonded Oligo(p-phenylene vinylene) Polymers This work was supported by Netherlands Organization for Scientific Research (NWO) and the Royal Netherlands Academy of Arts and Sciences. The authors thank Michel Fransen for the synthesis of the starting materials, | 16.4         | 103 |
| 464 | Intra- and Intermolecular Photoinduced Energy and Electron Transfer between Oligothienylenevinylenes and N-Methylfulleropyrrolidine. <i>Journal of Physical Chemistry A</i> , <b>2002</b> , 106, 21-31  | 2.8          | 103 |
| 463 | Advances in Solution-Processed Multijunction Organic Solar Cells. <i>Advanced Materials</i> , <b>2019</b> , 31, e18064  | 1 <u>99</u>  | 103 |
| 462 | Efficient Inverted Tandem Polymer Solar Cells with a Solution-Processed Recombination Layer. <i>Advanced Energy Materials</i> , <b>2012</b> , 2, 945-949  | 21.8         | 102 |
| 461 | Photoluminescence of Self-organized Perylene Bisimide Polymers. <i>Macromolecular Chemistry and Physics</i> , <b>2004</b> , 205, 217-222  | 2.6          | 102 |
| 460 | Synthesis and structure-property relationship of new donor (acceptor-type conjugated monomers and polymers on the basis of thiophene and benzothiadiazole. <i>Journal of Polymer Science Part A</i> , <b>2002</b> , 40, 251-261   | 2.5          | 100 |
| 459 | Photochemical Fulleroid to Methanofullerene Conversion via the Dipimethane (Zimmerman) Rearrangement. <i>Journal of the American Chemical Society</i> , <b>1995</b> , 117, 544-545  | 16.4         | 99  |
| 458 | Scanning Kelvin Probe Microscopy on Bulk Heterojunction Polymer Blends. <i>Advanced Functional Materials</i> , <b>2009</b> , 19, 1379-1386  | 15.6         | 96  |
| 457 | Hole transport in polyfluorene-based sandwich-type devices: Quantitative analysis of the role of energetic disorder. <i>Physical Review B</i> , <b>2008</b> , 78,   | 3.3          | 96  |
| 456 | Wide-Bandgap Benzodithiophene-Benzothiadiazole Copolymers for Highly Efficient Multijunction Polymer Solar Cells. <i>Advanced Materials</i> , <b>2015</b> , 27, 4461-4468   | 24           | 95  |

#### (2009-2008)

| 455 | Triplet formation involving a polar transition state in a well-defined intramolecular perylenediimide dimeric aggregate. <i>Journal of Physical Chemistry A</i> , <b>2008</b> , 112, 5846-57                      | 2.8                | 95 |  |
|-----|---|--------------------|----|--|
| 454 | Optical properties of oligothiophene substituted diketopyrrolopyrrole derivatives in the solid phase: joint J- and H-type aggregation. <i>Journal of Physical Chemistry A</i> , <b>2012</b> , 116, 7927-36        | 2.8                | 94 |  |
| 453 | Highly luminescent ultranarrow Mn doped ZnSe nanowires. <i>Nano Letters</i> , <b>2009</b> , 9, 745-50   | 11.5               | 94 |  |
| 452 | High Open-Circuit Voltage Poly(ethynylene bithienylene):Fullerene Solar Cells. <i>Chemistry of Materials</i> , <b>2006</b> , 18, 5832-5834  | 9.6                | 93 |  |
| 451 | Revealing buried interfaces to understand the origins of threshold voltage shifts in organic field-effect transistors. <i>Advanced Materials</i> , <b>2010</b> , 22, 5105-9                                       | 24                 | 92 |  |
| 450 | Discriminating between bilayer and bulk heterojunction polymer:fullerene solar cells using the external quantum efficiency. <i>ACS Applied Materials &amp; amp; Interfaces</i> , <b>2011</b> , 3, 3252-5          | 9.5                | 91 |  |
| 449 | Toward Practical Useful Polymers for Highly Efficient Solar Cells via a Random Copolymer Approach. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 10782-5                                   | 16.4               | 90 |  |
| 448 | Low band gap polymer bulk heterojunction solar cells. <i>Chemical Physics Letters</i> , <b>2006</b> , 422, 488-491  | 2.5                | 90 |  |
| 447 | Monte-Carlo simulations of geminate electronfiole pair dissociation in a molecular heterojunction: a two-step dissociation mechanism. <i>Chemical Physics</i> , <b>2005</b> , 308, 125-133                        | 2.3                | 90 |  |
| 446 | Mechanism for Efficient Photoinduced Charge Separation at Disordered Organic Heterointerfaces. <i>Advanced Functional Materials</i> , <b>2012</b> , 22, 2700-2708   | 15.6               | 89 |  |
| 445 | Redox States of Well-Defined EConjugated Oligothiophenes Functionalized with Poly(benzyl ether) Dendrons. <i>Journal of the American Chemical Society</i> , <b>2000</b> , 122, 7042-7051                          | 16.4               | 89 |  |
| 444 | Polymer Photovoltaic Devices from Stratified Multilayers of Donor Acceptor Blends. <i>Advanced Materials</i> , <b>2000</b> , 12, 1367-1370  | 24                 | 88 |  |
| 443 | Direct evidence of photoinduced electron transfer in conducting-polymer-C60 composites by infrared photoexcitation spectroscopy. <i>Physical Review B</i> , <b>1994</b> , 49, 5781-5784                           | 3.3                | 87 |  |
| 442 | High-performance all-polymer solar cells based on fluorinated naphthalene diimide acceptor polymers with fine-tuned crystallinity and enhanced dielectric constants. <i>Nano Energy</i> , <b>2018</b> , 45, 368-3 | 79 <sup>17.1</sup> | 86 |  |
| 441 | "Double-Cable" Conjugated Polymers with Linear Backbone toward High Quantum Efficiencies in Single-Component Polymer Solar Cells. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 18647-186  | 55 <sup>66.4</sup> | 86 |  |
| 440 | Synthesis and photovoltaic performance of a series of small band gap polymers. <i>Journal of Materials Chemistry</i> , <b>2009</b> , 19, 5336   |                    | 86 |  |
| 439 | The Role of the Axial Substituent in Subphthalocyanine Acceptors for Bulk-Heterojunction Solar Cells. <i>Angewandte Chemie - International Edition</i> , <b>2017</b> , 56, 148-152                                | 16.4               | 85 |  |
| 438 | Electroluminescent Cu-doped CdS Quantum Dots. <i>Advanced Materials</i> , <b>2009</b> , 21, 2916-2920   | 24                 | 85 |  |

| 437 | Helical aromatic oligoamide foldamers as organizational scaffolds for photoinduced charge transfer. <i>Journal of the American Chemical Society</i> , <b>2009</b> , 131, 4819-29  | 16.4          | 85 |
|-----|---|---------------|----|
| 436 | 6.pi. Aromaticity in four-membered rings. <i>Journal of the American Chemical Society</i> , <b>1990</b> , 112, 4155-416   | <b>54</b> 6.4 | 84 |
| 435 | Description of the Morphology Dependent Charge Transport and Performance of Polymer:Fullerene Bulk Heterojunction Solar Cells. <i>Advanced Functional Materials</i> , <b>2011</b> , 21, 261-269                                     | 15.6          | 83 |
| 434 | Modeling the temperature induced degradation kinetics of the short circuit current in organic bulk heterojunction solar cells. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 163301  | 3.4           | 82 |
| 433 | Electronic memory effects in diodes of zinc oxide nanoparticles in a matrix of polystyrene or poly(3-hexylthiophene). <i>Journal of Applied Physics</i> , <b>2007</b> , 102, 083701   | 2.5           | 82 |
| 432 | Photoinduced electron transfer in a mesogenic donor-acceptor-donor system. <i>Chemistry - A European Journal</i> , <b>2002</b> , 8, 4470-4  | 4.8           | 81 |
| 431 | Measuring the External Quantum Efficiency of Two-Terminal Polymer Tandem Solar Cells. <i>Advanced Functional Materials</i> , <b>2010</b> , 20, 3904-3911  | 15.6          | 80 |
| 430 | The relationship between nanoscale architecture and function in photovoltaic multichromophoric arrays as visualized by Kelvin probe force microscopy. <i>Journal of the American Chemical Society</i> , <b>2008</b> , 130, 14605-14 | 16.4          | 80 |
| 429 | Energy and Electron Transfer in a Poly(fluorene-alt-phenylene) Bearing Perylenediimides as Pendant Electron Acceptor Groups. <i>Macromolecules</i> , <b>2007</b> , 40, 2760-2772  | 5.5           | 80 |
| 428 | Orientational effect on the photophysical properties of quaterthiophene-C60 dyads. <i>Chemistry - A European Journal</i> , <b>2002</b> , 8, 5415-29   | 4.8           | 80 |
| 427 | Copolymers of diketopyrrolopyrrole and thienothiophene for photovoltaic cells. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 9224   |               | 79 |
| 426 | Controlling the Morphology and Efficiency of Hybrid ZnO:Polythiophene Solar Cells Via Side Chain Functionalization. <i>Advanced Energy Materials</i> , <b>2011</b> , 1, 90-96   | 21.8          | 78 |
| 425 | High-Performance and Stable All-Polymer Solar Cells Using Donor and Acceptor Polymers with Complementary Absorption. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1602722  | 21.8          | 77 |
| 424 | 8.0% Efficient All-Polymer Solar Cells with High Photovoltage of 1.1 V and Internal Quantum Efficiency near Unity. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1700908  | 21.8          | 76 |
| 423 | Synthesis and properties of small band gap thienoisoindigo based conjugated polymers. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 20387   |               | 76 |
| 422 | Unusual thermoelectric behavior indicating a hopping to bandlike transport transition in pentacene. <i>Physical Review Letters</i> , <b>2012</b> , 109, 016601  | 7.4           | 76 |
| 421 | Electrically Rewritable Memory Cells from Poly(3-hexylthiophene) Schottky Diodes. <i>Advanced Materials</i> , <b>2005</b> , 17, 1169-1173   | 24            | 76 |
| 420 | Efficient Polymer Solar Cells on Opaque Substrates with a Laminated PEDOT:PSS Top Electrode.  Advanced Energy Materials, 2013, 3, 782-787   | 21.8          | 75 |

| 419 | Diketopyrrolopyrroles as acceptor materials in organic photovoltaics. <i>Macromolecular Rapid Communications</i> , <b>2010</b> , 31, 1554-9   | 4.8  | 75 |
|-----|---|------|----|
| 418 | Negative capacitances in low-mobility solids. <i>Physical Review B</i> , <b>2005</b> , 72,  | 3.3  | 75 |
| 417 | An Electron-Deficient Discotic Liquid-Crystalline Material. <i>Chemistry of Materials</i> , <b>2001</b> , 13, 2675-2679   | 9.6  | 75 |
| 416 | Insights into Fullerene Passivation of SnO2 Electron Transport Layers in Perovskite Solar Cells. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1905883   | 15.6 | 74 |
| 415 | Measuring the light emission profile in organic light-emitting diodes with nanometre spatial resolution. <i>Nature Photonics</i> , <b>2010</b> , 4, 329-335   | 33.9 | 74 |
| 414 | Kinetic Monte Carlo Study of the Sensitivity of OLED Efficiency and Lifetime to Materials Parameters. <i>Advanced Functional Materials</i> , <b>2015</b> , 25, 2024-2037  | 15.6 | 73 |
| 413 | Concentration-Dependent Thermochromism and Supramolecular Aggregation in Solution of Triblock Copolymers Based on Lengthy Oligothiophene Cores and Poly(benzyl ether) Dendrons. <i>Macromolecules</i> , <b>2000</b> , 33, 7038-7043                   | 5.5  | 73 |
| 412 | Simultaneous Open-Circuit Voltage Enhancement and Short-Circuit Current Loss in Polymer: Fullerene Solar Cells Correlated by Reduced Quantum Efficiency for Photoinduced Electron Transfer. <i>Advanced Energy Materials</i> , <b>2013</b> , 3, 85-94 | 21.8 | 72 |
| 411 | Donor-functionalized polydentate pyrylium salts and phosphinines: synthesis, structural characterization, and photophysical properties. <i>Chemistry - A European Journal</i> , <b>2007</b> , 13, 4548-59   | 4.8  | 72 |
| 410 | Sensitization of low bandgap polymer bulk heterojunction solar cells. <i>Thin Solid Films</i> , <b>2002</b> , 403-404, 373-379  | 2.2  | 71 |
| 409 | Effect of Alkyl Side Chains of Conjugated Polymer Donors on the Device Performance of Non-Fullerene Solar Cells. <i>Macromolecules</i> , <b>2016</b> , 49, 6445-6454  | 5.5  | 70 |
| 408 | Comparing random and regular diketopyrrolopyrroleBithiopheneEhienopyrrolodione terpolymers for organic photovoltaics. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 17899-17905  | 13   | 70 |
| 407 | Charge recombination in a poly(para-phenylene vinylene)-fullerene derivative composite film studied by transient, nonresonant, hole-burning spectroscopy. <i>Journal of Chemical Physics</i> , <b>2003</b> , 119, 10924-10929                         | 3.9  | 70 |
| 406 | Hole transport in the organic small molecule material ENPD: evidence for the presence of correlated disorder. <i>Journal of Applied Physics</i> , <b>2010</b> , 107, 113710   | 2.5  | 69 |
| 405 | Comparison of the chain length dependence of the singlet- and triplet-excited states of oligofluorenes. <i>Chemical Physics Letters</i> , <b>2005</b> , 411, 273-277  | 2.5  | 69 |
| 404 | Electron and energy transfer processes of photoexcited oligothiophenes onto tetracyanoethylene and C60. <i>Journal of Chemical Physics</i> , <b>1994</b> , 101, 9519-9527   | 3.9  | 69 |
| 403 | 2-Methoxyethanol as a new solvent for processing methylammonium lead halide perovskite solar cells. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 2346-2354  | 13   | 68 |
| 402 | High Performance Polymer Nanowire Field-Effect Transistors with Distinct Molecular Orientations. <i>Advanced Materials</i> , <b>2015</b> , 27, 4963-8   | 24   | 68 |

| 401 | Salt Concentration Effects in Planar Light-Emitting Electrochemical Cells. <i>Advanced Functional Materials</i> , <b>2011</b> , 21, 1795-1802   | 15.6 | 66 |
|-----|---|------|----|
| 400 | Effect of side chain length on the charge transport, morphology, and photovoltaic performance of conjugated polymers in bulk heterojunction solar cells. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 1855- | 18g6 | 65 |
| 399 | Charge transport in amorphous InGaZnO thin-film transistors. <i>Physical Review B</i> , <b>2012</b> , 86,   | 3.3  | 65 |
| 398 | Effect of PCBM on the Photodegradation Kinetics of Polymers for Organic Photovoltaics. <i>Chemistry of Materials</i> , <b>2012</b> , 24, 4397-4405  | 9.6  | 65 |
| 397 | Influence of Photon Excess Energy on Charge Carrier Dynamics in a Polymer-Fullerene Solar Cell. <i>Advanced Energy Materials</i> , <b>2012</b> , 2, 1095-1099   | 21.8 | 65 |
| 396 | N2O Decomposition over Fe/ZSM-5: Effect of High-Temperature Calcination and Steaming. <i>Catalysis Letters</i> , <b>2002</b> , 81, 205-212  | 2.8  | 65 |
| 395 | Crowned dendrimers: pH-responsive pseudorotaxane formation. <i>Journal of Organic Chemistry</i> , <b>2003</b> , 68, 2385-9  | 4.2  | 65 |
| 394 | Five Generations of Nitroxyl-Functionalized Dendrimers. <i>Macromolecules</i> , <b>1997</b> , 30, 3606-3611   | 5.5  | 64 |
| 393 | An oligomer study on small band gap polymers. Journal of Physical Chemistry A, 2008, 112, 10764-73  | 2.8  | 64 |
| 392 | Dimers of End-Capped Oligopyrrole Cation Radicals. <i>Angewandte Chemie International Edition in English</i> , <b>1996</b> , 35, 638-640  |      | 64 |
| 391 | Diketopyrrolopyrrole-Based Conjugated Polymers with Perylene Bisimide Side Chains for Single-Component Organic Solar Cells. <i>Chemistry of Materials</i> , <b>2017</b> , 29, 7073-7077                                   | 9.6  | 63 |
| 390 | Wide band gap diketopyrrolopyrrole-based conjugated polymers incorporating biphenyl units applied in polymer solar cells. <i>Chemical Communications</i> , <b>2014</b> , 50, 679-81                                       | 5.8  | 62 |
| 389 | PbSe nanocrystal network formation during pyridine ligand displacement. <i>ACS Applied Materials &amp; Amp; Interfaces</i> , <b>2009</b> , 1, 244-50  | 9.5  | 62 |
| 388 | Phosphorescence and triplet state energies of oligothiophenes. <i>Journal of Physical Chemistry B</i> , <b>2005</b> , 109, 4410-5   | 3.4  | 62 |
| 387 | Singlet-energy transfer in quadruple hydrogen-bonded oligo(p-phenylenevinylene)fullerene dyads. <i>Journal of Materials Chemistry</i> , <b>2002</b> , 12, 2054-2060   |      | 62 |
| 386 | Low-bandgap polymer photovoltaic cells. <i>Synthetic Metals</i> , <b>2001</b> , 121, 1587-1588  | 3.6  | 62 |
| 385 | Concerning the Localization of End Groups in Dendrimers. <i>Journal of the American Chemical Society</i> , <b>1998</b> , 120, 8547-8548   | 16.4 | 62 |
| 384 | Monte Carlo study of efficiency roll-off of phosphorescent organic light-emitting diodes: Evidence for dominant role of triplet-polaron quenching. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 143303             | 3.4  | 61 |

## (2006-2013)

| 383 | Triple junction polymer solar cells for photoelectrochemical water splitting. <i>Advanced Materials</i> , <b>2013</b> , 25, 2932-6  | 24                | 61 |
|-----|---|-------------------|----|
| 382 | Relaxation of photo-excitations in films of oligo- and poly-(para-phenylene vinylene) derivatives. <i>Chemical Physics</i> , <b>2000</b> , 260, 415-439   | 2.3               | 61 |
| 381 | Photoinduced electron transfer reactions in mixed films of Econjugated polymers and a homologous series of tetracyano-p-quinodimethane derivatives. <i>Journal of Chemical Physics</i> , <b>1995</b> , 103, 8840-8845   | 3.9               | 61 |
| 380 | Electronic structure of small band gap oligomers based on cyclopentadithiophenes and acceptor units. <i>Journal of Materials Chemistry</i> , <b>2009</b> , 19, 5343   |                   | 59 |
| 379 | Enhanced intersystem crossing via a high energy charge transfer state in a perylenediimide-perylenemonoimide dyad. <i>Journal of Physical Chemistry A</i> , <b>2008</b> , 112, 8617-32  | 2.8               | 59 |
| 378 | Charge Separation and Recombination in Photoexcited Oligo(p-phenylene vinylene): Perylene Bisimide Arrays Close to the Marcus Inverted Region. <i>Journal of Physical Chemistry A</i> , <b>2004</b> , 108, 6933-6   | 9 <del>3</del> .8 | 59 |
| 377 | Electronic Memory Effects in a Sexithiophene <b>P</b> oly(ethylene oxide) Block Copolymer Doped with NaCl. Combined Diode and Resistive Switching Behavior. <i>Chemistry of Materials</i> , <b>2006</b> , 18, 2707-2712   | 9.6               | 58 |
| 376 | Donor-acceptor polymers: a conjugated oligo(p-phenylene vinylene) main chain with dangling perylene bisimides. <i>Chemistry - A European Journal</i> , <b>2004</b> , 10, 3907-18  | 4.8               | 58 |
| 375 | Photoinduced electron transfer from Econjugated polymers onto Buckminsterfullerene, fulleroids, and methanofullerenes. <i>Journal of Chemical Physics</i> , <b>1995</b> , 103, 788-793  | 3.9               | 58 |
| 374 | Formation of metastable charges as a first step in photoinduced degradation in Econjugated polymer:fullerene blends for photovoltaic applications. <i>Organic Electronics</i> , <b>2011</b> , 12, 1657-1662   | 3.5               | 57 |
| 373 | Thermal Stability of Poly[2-methoxy-5-(2?-phenylethoxy)-1,4-phenylenevinylene] (MPE-PPV):Fullerene Bulk Heterojunction Solar Cells. <i>Macromolecules</i> , <b>2011</b> , 44, 8470-8478   | 5.5               | 57 |
| 372 | Photoinduced energy and electron transfer in oligo(p-phenylene vinylene)-fullerene dyads. <i>Applied Physics A: Materials Science and Processing</i> , <b>2004</b> , 79, 41-46  | 2.6               | 57 |
| 371 | Supramolecular control over donor-acceptor photoinduced charge separation. <i>Journal of the American Chemical Society</i> , <b>2004</b> , 126, 9630-44   | 16.4              | 57 |
| 370 | The interfaces of poly(p-phenylene vinylene) and fullerene derivatives with Al, LiF, and Al/LiF studied by secondary ion mass spectroscopy and x-ray photoelectron spectroscopy: Formation of AlF3 disproved. <i>Journal of Chemical Physics</i> , <b>2002</b> , 117, 5031-5035 | 3.9               | 57 |
| 369 | Synthesis and Characterization of a Poly(1,3-dithienylisothianaphthene) Derivative for Bulk Heterojunction Photovoltaic Cells. <i>Journal of Physical Chemistry B</i> , <b>2001</b> , 105, 11106-11113  | 3.4               | 57 |
| 368 | Well-Defined Metallodendrimers by Site-Specific Complexation. <i>Chemische Berichte</i> , <b>1997</b> , 130, 725-728  | 3                 | 56 |
| 367 | Temperature-dependent built-in potential in organic semiconductor devices. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 192108  | 3.4               | 56 |
| 366 | The importance of nanoscopic ordering on the kinetics of photoinduced charge transfer in aggregated pi-conjugated hydrogen-bonded donor-acceptor systems. <i>Journal of Physical Chemistry B</i> , <b>2006</b> , 110, 16967-78  | 3.4               | 56 |

| 365 | Stable Triplet-State Di(Cation Radicals) of a MetaPara Aniline Oligomer by Acid Doping <i>Journal of the American Chemical Society</i> , <b>1996</b> , 118, 10626-10628  | 16.4 | 56 |
|-----|--|------|----|
| 364 | Device Performance of Emerging Photovoltaic Materials (Version 1). <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2002774  | 21.8 | 56 |
| 363 | Enhancement-Mode PEDOT:PSS Organic Electrochemical Transistors Using Molecular De-Doping. <i>Advanced Materials</i> , <b>2020</b> , 32, e2000270   | 24   | 55 |
| 362 | Full temporal resolution of the two-step photoinduced energyBlectron transfer in a fullereneBligothiopheneBullerene triad using sub-10 fs pumpBrobe spectroscopy. <i>Chemical Physics Letters</i> , <b>2001</b> , 345, 33-38 | 2.5  | 55 |
| 361 | Relating Frontier Orbital Energies from Voltammetry and Photoelectron Spectroscopy to the Open-Circuit Voltage of Organic Solar Cells. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1803677                           | 21.8 | 54 |
| 360 | Dynamic Processes in Sandwich Polymer Light-Emitting Electrochemical Cells. <i>Advanced Functional Materials</i> , <b>2012</b> , 22, 4547-4556   | 15.6 | 54 |
| 359 | Photogeneration and decay of charge carriers in hybrid bulk heterojunctions of ZnO nanoparticles and conjugated polymers. <i>Journal of Physical Chemistry B</i> , <b>2006</b> , 110, 10315-21                               | 3.4  | 54 |
| 358 | Dichotomous Role of Exciting the Donor or the Acceptor on Charge Generation in Organic Solar Cells. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 10026-31  | 16.4 | 53 |
| 357 | Diketopyrrolopyrrole-based acceptor polymers for photovoltaic application. <i>Physical Chemistry Chemical Physics</i> , <b>2011</b> , 13, 8931-9   | 3.6  | 52 |
| 356 | Fractal-like self-assembly of oligo(p-phenylene vinylene) capped gold nanoparticles. <i>Journal of the American Chemical Society</i> , <b>2006</b> , 128, 686-7  | 16.4 | 52 |
| 355 | Photoinduced electron transfer processes in oligothiophene/C60 composite films. <i>Journal of Chemical Physics</i> , <b>1995</b> , 102, 2628-2635  | 3.9  | 52 |
| 354 | Photoelectrochemical water splitting in an organic artificial leaf. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 23936-23945   | 13   | 51 |
| 353 | Synthesis and characterization of long perylenediimide polymer fibers: from bulk to the single-molecule level. <i>Journal of Physical Chemistry B</i> , <b>2006</b> , 110, 7803-12   | 3.4  | 51 |
| 352 | Carboxylate-Substituted Polythiophenes for Efficient Fullerene-Free Polymer Solar Cells: The Effect of Chlorination on Their Properties. <i>Macromolecules</i> , <b>2019</b> , 52, 4464-4474                                 | 5.5  | 50 |
| 351 | Effect of Extended Thiophene Segments in Small Band Gap Polymers with Thienopyrazine. <i>Chemistry of Materials</i> , <b>2009</b> , 21, 1663-1669  | 9.6  | 50 |
| 350 | Stability studies and degradation analysis of plastic solar cell materials by FTIR spectroscopy. <i>Synthetic Metals</i> , <b>1999</b> , 102, 1002-1003  | 3.6  | 50 |
| 349 | Fundamental Tradeoff between Emission Intensity and Efficiency in Light-Emitting Electrochemical Cells. <i>Advanced Functional Materials</i> , <b>2015</b> , 25, 3066-3073   | 15.6 | 49 |
| 348 | Designing Acceptor Polymers for Organic Photovoltaic Devices. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 3178-3187  | 3.8  | 49 |

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| 347 | Probing Charge Carrier Density in a Layer of Photodoped ZnO Nanoparticles by Spectroscopic Ellipsometry. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 14804-14810  | 3.8  | 49 |
|-----|---|------|----|
| 346 | The influence of side chains on solubility and photovoltaic performance of dithiophene <b>t</b> hienopyrazine small band gap copolymers. <i>Polymer</i> , <b>2009</b> , 50, 4564-4570   | 3.9  | 49 |
| 345 | High-resolution electronic spectra of ethylenedioxythiophene oligomers. <i>Journal of the American Chemical Society</i> , <b>2006</b> , 128, 17007-17   | 16.4 | 49 |
| 344 | Two-step mechanism for the photoinduced intramolecular electron transfer in oligo(p-phenylene vinylene)-fullerene dyads. <i>Physical Review B</i> , <b>2001</b> , 64,   | 3.3  | 49 |
| 343 | Organic electronic ratchets doing work. <i>Nature Materials</i> , <b>2011</b> , 10, 51-5  | 27   | 48 |
| 342 | Charge separation and (triplet) recombination in diketopyrrolopyrrole-fullerene triads. <i>Photochemical and Photobiological Sciences</i> , <b>2010</b> , 9, 1055-65  | 4.2  | 48 |
| 341 | Photoinduced Electron Transfer in Heterosupramolecular Assemblies of TiO2 Nanoparticles and Terthiophene Carboxylic Acid in Apolar Solvents. <i>Advanced Functional Materials</i> , <b>2002</b> , 12, 519                           | 15.6 | 48 |
| 340 | In-Situ Compositional and Structural Analysis of Plastic Solar Cells. <i>Advanced Functional Materials</i> , <b>2002</b> , 12, 665-669  | 15.6 | 48 |
| 339 | Monitoring Thermal Annealing of Perovskite Solar Cells with In Situ Photoluminescence. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1601822  | 21.8 | 47 |
| 338 | Conjugated oligothienyl dendrimers based on a pyrazino[2,3-g]quinoxaline core. <i>Organic Letters</i> , <b>2009</b> , 11, 4500-3  | 6.2  | 47 |
| 337 | Synthesis, Characterization, and Electrooptical Properties of a New Alternating N-Dodecylpyrrole <b>B</b> enzothiadiazole Copolymer. <i>Macromolecules</i> , <b>2001</b> , 34, 2495-2501  | 5.5  | 47 |
| 336 | EDimers of Prototype High-Spin Polaronic Oligomers. <i>Chemistry of Materials</i> , <b>1998</b> , 10, 1166-1175   | 9.6  | 47 |
| 335 | Chiroptical properties of poly{2, 5-bis[(S)-2-methylbutoxy]-1, 4-phenylene vinylene}. <i>Advanced Materials</i> , <b>1997</b> , 9, 493-496  | 24   | 46 |
| 334 | Relating Substitution to Single-Chain Conformation and Aggregation in Poly(p-phenylene Vinylene) Films. <i>Nano Letters</i> , <b>2003</b> , 3, 1191-1196  | 11.5 | 46 |
| 333 | End-group modification of regioregular poly(3-alkylthiophene)s. Chemical Communications, 2000, 81-82  | 5.8  | 46 |
| 332 | Photoinduced absorption of conjugated polymer/C60 solutions: Evidence of triplet-state photoexcitations and triplet-energy transfer in poly(3-alkylthiophene). <i>Journal of Chemical Physics</i> , <b>1994</b> , 100, 8641-8645    | 3.9  | 46 |
| 331 | Near-Infrared Tandem Organic Photodiodes for Future Application in Artificial Retinal Implants. <i>Advanced Materials</i> , <b>2018</b> , 30, e1804678  | 24   | 46 |
| 330 | Aqueous Nanoparticle Polymer Solar Cells: Effects of Surfactant Concentration and Processing on Device Performance. <i>ACS Applied Materials &amp; Device Performance</i> . <i>ACS Applied Materials &amp; Device Performance</i> . | 9.5  | 44 |

| 329 | Large-area soft-imprinted nanowire networks as light trapping transparent conductors. <i>Scientific Reports</i> , <b>2015</b> , 5, 11414   | 4.9                 | 44   |
|-----|--|---------------------|------|
| 328 | Highly Efficient Perovskite Solar Cells Using Non-Toxic Industry Compatible Solvent System. <i>Solar Rrl</i> , <b>2017</b> , 1, 1700091  | 7.1                 | 44   |
| 327 | A regioregular terpolymer comprising two electron-deficient and one electron-rich unit for ultra small band gap solar cells. <i>Chemical Communications</i> , <b>2015</b> , 51, 4290-3   | 5.8                 | 44   |
| 326 | Tetrafullerene conjugates for all-organic photovoltaics. <i>Journal of Organic Chemistry</i> , <b>2008</b> , 73, 3189-96   | 4.2                 | 44   |
| 325 | Field and temperature dependence of the photocurrent in polymer/fullerene bulk heterojunction solar cells. <i>Applied Physics Letters</i> , <b>2005</b> , 87, 122104   | 3.4                 | 44   |
| 324 | High-photovoltage all-polymer solar cells based on a diketopyrrolopyrroleßoindigo acceptor polymer. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 11693-11700   | 13                  | 43   |
| 323 | Controlling the Dominant Length Scale of Liquid Liquid Phase Separation in Spin-coated Organic Semiconductor Films. <i>Advanced Functional Materials</i> , <b>2015</b> , 25, 855-863   | 15.6                | 43   |
| 322 | Impact of polymorphism on the optoelectronic properties of a low-bandgap semiconducting polymer. <i>Nature Communications</i> , <b>2019</b> , 10, 2867   | 17.4                | 43   |
| 321 | Quasi-One Dimensional in-Plane Conductivity in Filamentary Films of PEDOT:PSS. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 5778-5786  | 15.6                | 43   |
| 320 | Energy transfer in hybrid quantum dot light-emitting diodes. <i>Journal of Applied Physics</i> , <b>2008</b> , 104, 0131   | <b>0:8</b> 5        | 43   |
| 319 | Singlet-energy transfer in quadruple hydrogen-bonded oligo(p-phenylenevinylene)perylene-diimide dyads. <i>Organic and Biomolecular Chemistry</i> , <b>2003</b> , 1, 198-20   | )3 <sup>.9</sup>    | 43   |
| 318 | Characterization of tandem organic solar cells. <i>Nature Photonics</i> , <b>2015</b> , 9, 478-479   | 33.9                | 42   |
| 317 | Thiophene Rings Improve the Device Performance of Conjugated Polymers in Polymer Solar Cells with Thick Active Layers. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1700519   | 21.8                | 42   |
| 316 | Quantification and Validation of the Efficiency Enhancement Reached by Application of a Retroreflective Light Trapping Texture on a Polymer Solar Cell. <i>Advanced Energy Materials</i> , <b>2013</b> , 3, 101  | 3 <del>2</del> 1817 | , 42 |
| 315 | Synthesis of regioregular poly(3-octylthiophene)s via Suzuki polycondensation and end-group analysis by matrix-assisted laser desorption/ionization time-of-flight mass spectrometry. <i>Journal of Polymer Science Part A</i> , <b>2005</b> , 43, 1454-1462 | 2.5                 | 42   |
| 314 | OddBven effect in optically active poly(3,4-dialkoxythiophene). Chemical Communications, 1999, 791-79  | <b>2</b> 5.8        | 42   |
| 313 | Maximizing the open-circuit voltage of polymer: Fullerene solar cells. <i>Applied Physics Letters</i> , <b>2010</b> , 97, 073304   | 3.4                 | 41   |
| 312 | Open-Circuit Voltage Limitation in Low-Bandgap Diketopyrrolopyrrole-Based Polymer Solar Cells<br>Processed from Different Solvents. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 15075-15080  | 3.8                 | 41   |

#### (2009-2002)

| 311 | The use of the focused ion beam technique to prepare cross-sectional transmission electron microscopy specimen of polymer solar cells deposited on glass. <i>Polymer</i> , <b>2002</b> , 43, 7493-7496        | 3.9          | 41 |  |
|-----|---|--------------|----|--|
| 310 | Interchain Delocalization of Photoinduced Neutral and Charged States in Nanoaggregates of Lengthy Oligothiophenes. <i>Journal of the American Chemical Society</i> , <b>2001</b> , 123, 6916-6924             | 16.4         | 41 |  |
| 309 | On the Origin of Dark Current in Organic Photodiodes. Advanced Optical Materials, 2020, 8, 1901568  | 8.1          | 41 |  |
| 308 | C(60)-exTTF-C(60) Dumbbells: cooperative effects stemming from two C(60)s on the radical ion pair stabilization. <i>Organic Letters</i> , <b>2005</b> , 7, 1691-4   | 6.2          | 40 |  |
| 307 | Synthesis, optical, and electrochemical properties of novel copolymers on the basis of benzothiadiazole and electron-rich arene units. <i>Journal of Polymer Science Part A</i> , <b>2002</b> , 40, 2360-2372 | 2.5          | 40 |  |
| 306 | Surface Directed Phase Separation of Semiconductor Ferroelectric Polymer Blends and their Use in Non-Volatile Memories. <i>Advanced Functional Materials</i> , <b>2015</b> , 25, 278-286                      | 15.6         | 39 |  |
| 305 | Fast ambipolar integrated circuits with poly(diketopyrrolopyrrole-terthiophene). <i>Applied Physics Letters</i> , <b>2011</b> , 98, 203301  | 3.4          | 39 |  |
| 304 | Photoinduced Multistep Energy and Electron Transfer in an Oligoaniline©ligo(p-phenylene vinylene) Hullerene Triad. <i>Journal of Physical Chemistry A</i> , <b>2003</b> , 107, 9269-9283                      | 2.8          | 37 |  |
| 303 | Injection-limited electron current in a methanofullerene. Journal of Applied Physics, 2003, 94, 4477-447  | 92.5         | 37 |  |
| 302 | Nanoscale Organic Ferroelectric Resistive Switches. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 3305-33   | <b>13</b> .8 | 36 |  |
| 301 | Electron transport in polyfluorene-based sandwich-type devices: Quantitative analysis of the effects of disorder and electron traps. <i>Physical Review B</i> , <b>2009</b> , 80,                             | 3.3          | 36 |  |
| 300 | Resistive Switching in Organic Memories with a Spin-Coated Metal Oxide Nanoparticle Layer.<br>Journal of Physical Chemistry C, <b>2008</b> , 112, 5254-5257   | 3.8          | 36 |  |
| 299 | Spacer length dependence of photoinduced electron transfer in heterosupramolecular assemblies of TiO2 nanoparticles and terthiophene. <i>Journal of Materials Chemistry</i> , <b>2004</b> , 14, 2795          |              | 36 |  |
| 298 | Scanning tunneling spectroscopy on organic semiconductors: Experiment and model. <i>Physical Review B</i> , <b>2004</b> , 70,   | 3.3          | 36 |  |
| 297 | Doping dynamics in light-emitting electrochemical cells. <i>Organic Electronics</i> , <b>2011</b> , 12, 1746-1753   | 3.5          | 35 |  |
| 296 | A novel high-contrast ratio electrochromic material from spiro[cyclododecane-1,9?-fluorene]bicarbazole. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2011</b> , 49, 333-341                | 2.6          | 35 |  |
| 295 | On the origin of small band gaps in alternating thiophene-thienopyrazine oligomers. <i>Journal of Physical Chemistry A</i> , <b>2009</b> , 113, 10343-50  | 2.8          | 35 |  |
| 294 | Analysis of hole transport in a polyfluorene-based copolymerlevidence for the absence of correlated disorder. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 163307                                       | 3.4          | 35 |  |

| 293         | Dual-emissive quantum dots for multispectral intraoperative fluorescence imaging. <i>Biomaterials</i> , <b>2010</b> , 31, 6823-32  | 15.6 | 35 |
|-------------|--|------|----|
| 292         | Light harvesting tetrafullerene nanoarray for organic solar cells. Chemical Communications, 2006, 514-6  | 5.8  | 35 |
| 291         | Polymerpolymer solar cells with a near-infrared spectral response. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 6756-6760  | 13   | 34 |
| <b>2</b> 90 | Highly Efficient Hybrid Polymer and Amorphous Silicon Multijunction Solar Cells with Effective Optical Management. <i>Advanced Materials</i> , <b>2016</b> , 28, 2170-7  | 24   | 34 |
| 289         | Effect of structure on the solubility and photovoltaic properties of bis-diketopyrrolopyrrole molecules. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 15150  | 13   | 34 |
| 288         | Depositing Fullerenes in Swollen Polymer Layers via Sequential Processing of Organic Solar Cells. <i>Advanced Energy Materials</i> , <b>2015</b> , 5, 1500464  | 21.8 | 34 |
| 287         | The effect of bias light on the spectral responsivity of organic solar cells. <i>Organic Electronics</i> , <b>2012</b> , 13, 3284-3290   | 3.5  | 34 |
| 286         | High-Molecular-Weight Regular Alternating Diketopyrrolopyrrole-based Terpolymers for Efficient Organic Solar Cells. <i>Angewandte Chemie</i> , <b>2013</b> , 125, 8499-8502  | 3.6  | 34 |
| 285         | Shape-persistent oligothienylene-ethynylene-based dendrimers: synthesis, spectroscopy and electrochemical characterization. <i>Chemistry - A European Journal</i> , <b>2009</b> , 15, 13521-34   | 4.8  | 34 |
| 284         | Charge Transfer Kinetics in Fullerene Dligomer Bullerene Triads Containing Alkylpyrrole Units. <i>Journal of Physical Chemistry A</i> , <b>2003</b> , 107, 6218-6224   | 2.8  | 34 |
| 283         | Ferromagnetic spin alignment in head-to-tail coupled oligo(1, 4-phenyleneethynylene)s and Oligo(1,4-phenylenevinylene)s bearing pendant p-phenylenediamine radical cations. <i>Journal of Organic Chemistry</i> , <b>2000</b> , 65, 5712-9 | 4.2  | 34 |
| 282         | Photoluminescence quenching in films of conjugated polymers by electrochemical doping. <i>Physical Review B</i> , <b>2014</b> , 89,  | 3.3  | 33 |
| 281         | All-solution-processed organic solar cells with conventional architecture. <i>Solar Energy Materials and Solar Cells</i> , <b>2013</b> , 117, 267-272  | 6.4  | 33 |
| 280         | Preferential hetero-dimer formation and equilibrium dynamics of self-complementary bifunctional oligo(p-phenylenevinylene) and C60 ureido-pyrimidinone derivatives in solution. <i>Chemical Communications</i> , <b>2002</b> , 2888-9      | 5.8  | 33 |
| 279         | Polarized photoluminescence of oligothiophenes in nematic liquid crystalline matrices. <i>Advanced Materials</i> , <b>1996</b> , 8, 651-654  | 24   | 33 |
| 278         | Ambipolar Organic Tri-Gate Transistor for Low-Power Complementary Electronics. <i>Advanced Materials</i> , <b>2016</b> , 28, 284-90  | 24   | 33 |
| 277         | High balanced ambipolar charge carrier mobility in benzodipyrrolidone conjugated polymers. <i>Journal of Materials Chemistry C</i> , <b>2014</b> , 2, 731-735  | 7.1  | 32 |
| 276         | Phosphorescent resonant energy transfer between iridium complexes. <i>Journal of Physical Chemistry A</i> , <b>2007</b> , 111, 1381-8  | 2.8  | 32 |

# (2006-2004)

| 275 | Photoinduced Multistep Electron Transfer in an OligoanilineDligo(p-phenylene Vinylene)Perylene Diimide Molecular Array. <i>Journal of Physical Chemistry A</i> , <b>2004</b> , 108, 8201-8211              | 2.8  | 32 |  |
|-----|--|------|----|--|
| 274 | Controlling the Microstructure of Conjugated Polymers in High-Mobility Monolayer Transistors via the Dissolution Temperature. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 846-852 | 16.4 | 32 |  |
| 273 | Accurate description of charge transport in organic field effect transistors using an experimentally extracted density of states. <i>Physical Review B</i> , <b>2012</b> , 85,                             | 3.3  | 31 |  |
| 272 | Influence of injected charge carriers on photocurrents in polymer solar cells. <i>Physical Review B</i> , <b>2012</b> , 85,  | 3.3  | 31 |  |
| 271 | Band Gap Control in Diketopyrrolopyrrole-Based Polymer Solar Cells Using Electron Donating Side Chains. <i>Advanced Energy Materials</i> , <b>2013</b> , 3, 674-679  | 21.8 | 31 |  |
| 270 | Fused ring thiophene-based poly(heteroarylene ethynylene)s for organic solar cells. <i>Solar Energy Materials and Solar Cells</i> , <b>2010</b> , 94, 1759-1766  | 6.4  | 31 |  |
| 269 | Circular differential scattering of light in films of chiral polyfluorene. <i>Journal of Physical Chemistry B</i> , <b>2007</b> , 111, 5124-31   | 3.4  | 31 |  |
| 268 | On the efficiency of polymer solar cells. <i>Nature Materials</i> , <b>2007</b> , 6, 704; author reply 704-5   | 27   | 31 |  |
| 267 | Solvent mediated intramolecular photoinduced electron transfer in a fluorene-perylene bisimide derivative. <i>Journal of Physical Chemistry A</i> , <b>2006</b> , 110, 12363-71                            | 2.8  | 31 |  |
| 266 | TiO2 sensitized with an oligo(p-phenylenevinylene) carboxylic acid: a new model compound for a hybrid solar cell. <i>Journal of Materials Chemistry</i> , <b>2003</b> , 13, 1054-1057                      |      | 31 |  |
| 265 | Conjugated Polymers Based on Difluorobenzoxadiazole toward Practical Application of Polymer Solar Cells. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1702033                                       | 21.8 | 30 |  |
| 264 | Small band gap oligothieno[3,4-b]pyrazines. <i>Organic Letters</i> , <b>2008</b> , 10, 3513-6  | 6.2  | 30 |  |
| 263 | Photoinduced charge and energy transfer in dye-doped conjugated polymers. <i>Thin Solid Films</i> , <b>2006</b> , 511-512, 581-586   | 2.2  | 30 |  |
| 262 | True ferroelectric switching in thin films of trialkylbenzene-1,3,5-tricarboxamide (BTA). <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 23663-72  | 3.6  | 30 |  |
| 261 | Pulse-modulated multilevel data storage in an organic ferroelectric resistive memory diode. <i>Scientific Reports</i> , <b>2016</b> , 6, 24407   | 4.9  | 29 |  |
| 260 | Broadening the absorption of conjugated polymers by "click" functionalization with phthalocyanines. <i>Dalton Transactions</i> , <b>2011</b> , 40, 3979-88   | 4.3  | 29 |  |
| 259 | On the width of the recombination zone in ambipolar organic field effect transistors. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 033312  | 3.4  | 29 |  |
| 258 | Side chain mediated electronic contact between a tetrahydro-4H-thiopyran-4-ylidene-appended polythiophene and CdTe quantum dots. <i>Chemistry - A European Journal</i> , <b>2006</b> , 12, 8075-83         | 4.8  | 29 |  |

| 257 | Substitution and Preparation Effects on the Molecular-Scale Morphology of PPV Films. <i>Macromolecules</i> , <b>2005</b> , 38, 7784-7792  | 5.5            | 29 |
|-----|---|----------------|----|
| 256 | Thermally Induced Transient Absorption of Light by Poly(3,4-ethylenedioxythiophene):Poly(styrene sulfonic acid) (PEDOT:PSS) Films: A Way to Probe Charge-Carrier Thermalization Processes. <i>Advanced Functional Materials</i> , <b>2003</b> , 13, 805-810 | 15.6           | 29 |
| 255 | Effect of Fister-mediated triplet-polaron quenching and triplet-triplet annihilation on the efficiency roll-off of organic light-emitting diodes. <i>Journal of Applied Physics</i> , <b>2016</b> , 119, 163102   | 2.5            | 29 |
| 254 | Morphology and Efficiency: The Case of Polymer/ZnO Solar Cells. <i>Advanced Energy Materials</i> , <b>2013</b> , 3, 615-621   | 21.8           | 28 |
| 253 | Relation between the built-in voltage in organic light-emitting diodes and the zero-field voltage as measured by electroabsorption. <i>Physical Review B</i> , <b>2010</b> , 81,  | 3.3            | 28 |
| 252 | Sub-Micrometer Structure Formation during Spin Coating Revealed by Time-Resolved In Situ Laser and X-Ray Scattering. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1702516   | 15.6           | 27 |
| 251 | Electron transport in the organic small-molecule material BAlq Ithe role of correlated disorder and traps. <i>Organic Electronics</i> , <b>2010</b> , 11, 1408-1413   | 3.5            | 27 |
| 250 | Triplet formation from the charge-separated state in blends of MDMO-PPV with cyano-containing acceptor polymers. <i>Thin Solid Films</i> , <b>2006</b> , 511-512, 333-337   | 2.2            | 27 |
| 249 | Structureproperty relationships for bis-diketopyrrolopyrrole molecules in organic photovoltaics.<br>Journal of Materials Chemistry A, <b>2016</b> , 4, 10532-10541  | 13             | 26 |
| 248 | Surface Modification of Zinc Oxide Nanoparticles Influences the Electronic Memory Effects in ZnOBolystyrene Diodes. <i>Journal of Physical Chemistry C</i> , <b>2007</b> , 111, 10150-10153   | 3.8            | 26 |
| 247 | High aspect ratio surface relief structures by photoembossing. <i>Applied Physics Letters</i> , <b>2007</b> , 91, 174103  | 3.4            | 26 |
| 246 | Control of Film Morphology by Folding Hydrogen-Bonded Oligo(p-phenylenevinylene) Polymers in Solution. <i>Macromolecules</i> , <b>2006</b> , 39, 784-788  | 5.5            | 26 |
| 245 | Photoinduced intermolecular electron transfer between oligo(p-phenylene vinylene)s and N-methylfulleropyrrolidine in a polar solvent. <i>Chemical Physics Letters</i> , <b>2000</b> , 328, 403-408  | 2.5            | 26 |
| 244 | Triplet radical pairs of 3-carboxyproxyl encapsulated in a dendritic box. <i>Advanced Materials</i> , <b>1995</b> , 7, 56   | 1 <u>-5</u> 64 | 26 |
| 243 | Effects of Cross-Conjugation on the Optical Absorption and Frontier Orbital Levels of Donor Acceptor Polymers. <i>Macromolecules</i> , <b>2015</b> , 48, 2435-2443  | 5.5            | 25 |
| 242 | All-Oxide MoOx/SnOx Charge Recombination Interconnects for Inverted Organic Tandem Solar Cells. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1702533   | 21.8           | 25 |
| 241 | The effect of oxygen on the efficiency of planar p-i-n metal halide perovskite solar cells with a PEDOT:PSS hole transport layer. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 6882-6890  | 13             | 25 |
| 240 | High open circuit voltage polymer solar cells enabled by employing thiazoles in semiconducting polymers. <i>Polymer Chemistry</i> , <b>2016</b> , 7, 5730-5738  | 4.9            | 25 |

#### (2001-2014)

| 239 | Charge transfer state energy in ternary bulk-heterojunction polymerfullerene solar cells. <i>Journal of Photonics for Energy</i> , <b>2014</b> , 5, 057203  | 1.2  | 25 |
|-----|---|------|----|
| 238 | Energy Transfer and Polarized Emission in Cadmium Selenide Nanocrystal Solids with Mixed Dimensionality. <i>Advanced Functional Materials</i> , <b>2007</b> , 17, 3829-3835   | 15.6 | 25 |
| 237 | Manipulating the Local Light Emission in Organic Light-Emitting Diodes by using Patterned Self-Assembled Monolayers. <i>Advanced Materials</i> , <b>2008</b> , 20, 2703-6   | 24   | 25 |
| 236 | Pathways for Resonant Energy Transfer in Oligo(phenylenevinylene) <b>E</b> ullerene Dyads: An Atomistic Model. <i>Advanced Materials</i> , <b>2006</b> , 18, 1301-1306  | 24   | 25 |
| 235 | Structure of 6.pielectron four-membered rings containing second-row atoms. <i>The Journal of Physical Chemistry</i> , <b>1993</b> , 97, 6384-6397   |      | 25 |
| 234 | Precise Control of Phase Separation Enables 12% Efficiency in All Small Molecule Solar Cells. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 2001589  | 21.8 | 25 |
| 233 | Perfluoroalkyl-substituted conjugated polymers as electron acceptors for all-polymer solar cells: the effect of diiodoperfluoroalkane additives. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 7736-7745 | 13   | 25 |
| 232 | Redox states and associated interchain processes of thienylenevinylene oligomers. <i>Chemistry - A European Journal</i> , <b>2000</b> , 6, 1698-707   | 4.8  | 25 |
| 231 | Simulating Phase Separation during Spin Coating of a Polymer <b>H</b> ullerene Blend: A Joint Computational and Experimental Investigation. <i>ACS Applied Energy Materials</i> , <b>2018</b> , 1, 725-735            | 6.1  | 24 |
| 230 | Synthesis and Photovoltaic Performance of Pyrazinoquinoxaline Containing Conjugated Thiophene-Based Dendrimers and Polymers. <i>Macromolecules</i> , <b>2013</b> , 46, 2141-2151                                      | 5.5  | 24 |
| 229 | Predictive modeling of the current density and radiative recombination in blue polymer-based light-emitting diodes. <i>Journal of Applied Physics</i> , <b>2011</b> , 109, 064502                                     | 2.5  | 24 |
| 228 | Core-functionalized dendritic oligothiophenesBovel donorBcceptor systems. <i>Journal of Materials Chemistry</i> , <b>2009</b> , 19, 4784  |      | 24 |
| 227 | Time delayed collection field experiments on polymer: Fullerene bulk-heterojunction solar cells.<br>Journal of Applied Physics, <b>2006</b> , 100, 074509   | 2.5  | 24 |
| 226 | Stable triplet-state di(cation radical)s of a N-phenylaniline oligomer. <i>Chemical Communications</i> , <b>1996</b> , 267  | 5.8  | 24 |
| 225 | Structure of C3v phosphoranyl and C4v phosphorane anion radicals. A quantum-chemical study.<br>Journal of the American Chemical Society, <b>1984</b> , 106, 3429-3437   | 16.4 | 24 |
| 224 | Multi-bit organic ferroelectric memory. <i>Organic Electronics</i> , <b>2013</b> , 14, 3399-3405  | 3.5  | 23 |
| 223 | Synthesis and optical properties of pyrrolo[3,2-b]pyrrole-2,5(1H,4H)-dione (iDPP)-based molecules.<br>Journal of Physical Chemistry A, <b>2013</b> , 117, 2782-9  | 2.8  | 23 |
| 222 | A poly(p-phenylene ethynylene vinylene) with pendant fullerenes. <i>Synthetic Metals</i> , <b>2001</b> , 119, 171-172   | 3.6  | 23 |

| 221 | Optimized light-driven electrochemical water splitting with tandem polymer solar cells. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 5107-5114  | 13            | 22 |
|-----|---|---------------|----|
| 220 | Light Emission in the Unipolar Regime of Ambipolar Organic Field-Effect Transistors. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 4133-4139   | 15.6          | 22 |
| 219 | The Role of the Axial Substituent in Subphthalocyanine Acceptors for Bulk-Heterojunction Solar Cells. <i>Angewandte Chemie</i> , <b>2017</b> , 129, 154-158   | 3.6           | 22 |
| 218 | Intramolecular excimer formation between 3,6-di(thiophen-2-yl)pyrrolo[3,4-c]pyrrole-1,4(2H,5H)-dione chromophoric groups linked by a flexible alkyl spacer. <i>Journal of Physical Chemistry A</i> , <b>2013</b> , 117, 4828-37           | 2.8           | 22 |
| 217 | The Curious Out-of-Plane Conductivity of PEDOT:PSS. Advanced Functional Materials, 2013, 23, 5787-57  | <b>93</b> 5.6 | 22 |
| 216 | Determination of the exciton singlet-to-triplet ratio in single-layer organic light-emitting diodes. <i>Physical Review B</i> , <b>2011</b> , 83,   | 3.3           | 22 |
| 215 | Cluster synthesis of branched CdTe nanocrystals for use in light-emitting diodes. <i>Nanotechnology</i> , <b>2008</b> , 19, 205602  | 3.4           | 22 |
| 214 | Electro-optical Properties of Neutral and Radical Ion Thienosquaraines. <i>Chemistry - A European Journal</i> , <b>2016</b> , 22, 10179-86  | 4.8           | 22 |
| 213 | The Impact of Device Polarity on the Performance of Polymer <b>B</b> ullerene Solar Cells. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1800550  | 21.8          | 22 |
| 212 | Ester-functionalized poly(3-alkylthiophene) copolymers: Synthesis, physicochemical characterization and performance in bulk heterojunction organic solar cells. <i>Organic Electronics</i> , <b>2013</b> , 14, 523-534                    | 3.5           | 21 |
| 211 | Connecting scanning tunneling spectroscopy to device performance for polymer:fullerene organic solar cells. <i>ACS Nano</i> , <b>2010</b> , 4, 1385-92  | 16.7          | 21 |
| 210 | Synthesis and photophysical properties of conjugated polymers with pendant 9,10-anthraquinone units. <i>Journal of Physical Chemistry B</i> , <b>2008</b> , 112, 4953-60  | 3.4           | 21 |
| 209 | Synthesis and characterization of new copolymers of thiophene and vinylene: Poly(thienylenevinylene)s and poly(terthienylenevinylene)s with thioether side chains. <i>Journal of Polymer Science Part A</i> , <b>1999</b> , 37, 4629-4639 | 2.5           | 21 |
| 208 | Photoinduced electron transfer from conjugated polymers onto TiO2. Synthetic Metals, 1999, 101, 265-  | 266           | 21 |
| 207 | The chiroptical properties of chiral substituted poly[3-((3S)-3,7-dimethyloctyl)thiophene] as a function of film thickness. <i>Chemical Physics Letters</i> , <b>2007</b> , 437, 193-197  | 2.5           | 20 |
| 206 | Efficient Electron Transport Layer Free Small-Molecule Organic Solar Cells with Superior Device Stability. <i>Advanced Materials</i> , <b>2021</b> , 33, e2008429   | 24            | 20 |
| 205 | A New Approach to Model-Based Simulation of Disordered Polymer Blend Solar Cells. <i>Advanced Functional Materials</i> , <b>2012</b> , 22, 1236-1244  | 15.6          | 19 |
| 204 | Dihydropyrroloindoledione-based copolymers for organic electronics. <i>Journal of Materials Chemistry C</i> , <b>2013</b> , 1, 2711   | 7.1           | 19 |

## (2010-2009)

| 203 | Bimolecular recombination in ambipolar organic field effect transistors. <i>Organic Electronics</i> , <b>2009</b> , 10, 994-997   | 3.5  | 19 |  |
|-----|---|------|----|--|
| 202 | The effect of side-chain substitution and hot processing on diketopyrrolopyrrole-based polymers for organic solar cells. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 13748-13756   | 13   | 18 |  |
| 201 | Increasing the horizontal orientation of transition dipole moments in solution processed small molecular emitters. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 6555-6562   | 7.1  | 18 |  |
| 200 | Solution-Processed Tin Oxide-PEDOT:PSS Interconnecting Layers for Efficient Inverted and Conventional Tandem Polymer Solar Cells. <i>Solar Rrl</i> , <b>2019</b> , 3, 1800366   | 7.1  | 18 |  |
| 199 | Conjugated polymers with deep LUMO levels for field-effect transistors and polymer polymer solar cells. <i>Journal of Materials Chemistry C</i> , <b>2015</b> , 3, 8255-8261  | 7.1  | 18 |  |
| 198 | Conjugated polymer with ternary electron-deficient units for ambipolar nanowire field-effect transistors. <i>Journal of Polymer Science Part A</i> , <b>2016</b> , 54, 34-38  | 2.5  | 18 |  |
| 197 | Ultrafast Charge and Triplet State Formation in Diketopyrrolopyrrole Low Band Gap Polymer/Fullerene Blends: Influence of Nanoscale Morphology of Organic Photovoltaic Materials on Charge Recombination to the Triplet State. <i>Journal of Spectroscopy</i> , <b>2017</b> , 2017, 1-16 | 1.5  | 18 |  |
| 196 | Hybrid Polymer Solar Cells from Zinc Oxide and Poly(3-hexylselenophene). <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 18901-18908  | 3.8  | 18 |  |
| 195 | Intensive chiroptical properties of chiral polyfluorenes associated with fibril formation. <i>Journal of Physical Chemistry B</i> , <b>2009</b> , 113, 14047-51   | 3.4  | 18 |  |
| 194 | Polymer solar cells and infrared light emitting diodes: Dual function low bandgap polymer. <i>Molecular Crystals and Liquid Crystals</i> , <b>2002</b> , 385, 93-100  | 0.5  | 18 |  |
| 193 | Unexpected Dimerization of Oxidized Fullerene Dligothiophene Bullerene Triads. <i>Advanced Materials</i> , <b>2000</b> , 12, 908-911  | 24   | 18 |  |
| 192 | Design and synthesis of new processible donor-acceptor dyad and triads. <i>Synthetic Metals</i> , <b>2001</b> , 119, 519-522  | 3.6  | 18 |  |
| 191 | A thin and flexible scanner for fingerprints and documents based on metal halide perovskites. <i>Nature Electronics</i> ,   | 28.4 | 18 |  |
| 190 | Understanding the Film Formation Kinetics of Sequential Deposited Narrow-Bandgap Pb\( \textstyle n\) Hybrid Perovskite Films. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 2000566  | 21.8 | 18 |  |
| 189 | Efficient Thick-Film Polymer Solar Cells with Enhanced Fill Factors via Increased Fullerene Loading. <i>ACS Applied Materials &amp; Discourse (Materials &amp; Discourse)</i> 11, 10794-10800   | 9.5  | 17 |  |
| 188 | Subnaphthalocyanines as Electron Acceptors in Polymer Solar Cells: Improving Device Performance by Modifying Peripheral and Axial Substituents. <i>Chemistry - A European Journal</i> , <b>2018</b> , 24, 6339-6343   | 4.8  | 17 |  |
| 187 | Evidence for space-charge-limited conduction in organic photovoltaic cells at open-circuit conditions. <i>Physical Review B</i> , <b>2013</b> , 87,   | 3.3  | 17 |  |
| 186 | Charge separation and recombination in small band gap oligomer-fullerene triads. <i>Journal of Physical Chemistry B</i> , <b>2010</b> , 114, 14149-56   | 3.4  | 17 |  |

| 185 | Copolymers of Polyethylene and Perylenediimides through Ring-Opening Metathesis Polymerization. <i>Macromolecules</i> , <b>2008</b> , 41, 1094-1103   | 5.5               | 17 |
|-----|---|-------------------|----|
| 184 | Characterization of poly(p-phenylene vinylene)/methanofullerene blends of polymer solar cells by time-of-flight secondary ion mass spectrometry. <i>Applied Surface Science</i> , <b>2004</b> , 231-232, 274-277    | 6.7               | 17 |
| 183 | Efficient synthesis of high-spin meta-para-oligoanilines. Synthetic Metals, 1999, 103, 2287-2290  | 3.6               | 17 |
| 182 | Transparent highly-oxidized conjugated polymer films from solution. Synthetic Metals, 1999, 101, 417-4  | 1296              | 17 |
| 181 | Persistent photoinduced electron transfer from functionalized dendrimers to Buckminsterfullerene. <i>Advanced Materials</i> , <b>1996</b> , 8, 494-497  | 24                | 17 |
| 180 | Device Performance of Emerging Photovoltaic Materials (Version 2). Advanced Energy Materials,210252   | <b>26</b> 1.8     | 17 |
| 179 | The Mechanism of Dedoping PEDOT:PSS by Aliphatic Polyamines. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 24328-24337  | 3.8               | 16 |
| 178 | High-Accuracy Photoplethysmography Array Using Near-Infrared Organic Photodiodes with Ultralow Dark Current. <i>Advanced Optical Materials</i> , <b>2020</b> , 8, 1901989   | 8.1               | 16 |
| 177 | Transition dipole moment orientation in films of solution processed fluorescent oligomers: investigating the influence of molecular anisotropy. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 6302-630 | 18 <sup>7.1</sup> | 16 |
| 176 | High-Spin Cation Radicals of Methylenephosphoranes. <i>Journal of the American Chemical Society</i> , <b>1997</b> , 119, 5398-5403  | 16.4              | 16 |
| 175 | Electro-optical studies on MDMO-PPV:PCBM bulk-heterojunction solar cells on the millisecond time scale: Trapped carriers. <i>Organic Electronics</i> , <b>2006</b> , 7, 213-221                                     | 3.5               | 16 |
| 174 | Charge transfer in supramolecular coaggregates of oligo(p-phenylene vinylene) and perylene bisimide in water. <i>ChemPhysChem</i> , <b>2005</b> , 6, 2029-31  | 3.2               | 16 |
| 173 | Langmuir Films of an Oligo(p-phenylene vinylene) Functionalized with a Diaminotriazine Headgroup. <i>Langmuir</i> , <b>2001</b> , 17, 3281-3285   | 4                 | 16 |
| 172 | Lithium fluoride injection layers can form quasi-Ohmic contacts for both holes and electrons. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 123302  | 3.4               | 15 |
| 171 | Time-resolved microwave measurements of the polarizability of photoexcitons on conjugated polymer chains <b>1997</b> ,  |                   | 15 |
| 170 | Metallo-supramolecular oligo(p-phenylene vinylene)/[60]fullerene architectures: towards functional materials. <i>Thin Solid Films</i> , <b>2002</b> , 403-404, 97-101   | 2.2               | 15 |
| 169 | Radical cations in mixtures of phosphorus trichloride and dimethyl sulfide. A combined ESR and quantum chemical study. <i>The Journal of Physical Chemistry</i> , <b>1992</b> , 96, 614-623                         |                   | 15 |
| 168 | 16.8% Monolithic all-perovskite triple-junction solar cells via a universal two-step solution process.  Nature Communications, 2020, 11, 5254   | 17.4              | 15 |

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| 167 | BilayerTernary Polymer Solar Cells Fabricated Using Spontaneous Spreading on Water. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1802197  | 21.8           | 15 |  |
|-----|--|----------------|----|--|
| 166 | Data retention in organic ferroelectric resistive switches. <i>Organic Electronics</i> , <b>2016</b> , 31, 56-62   | 3.5            | 14 |  |
| 165 | Indium tin oxide-free tandem polymer solar cells on opaque substrates with top illumination. <i>ACS Applied Materials &amp; Discourse (Materials &amp; Discourse)</i> Interfaces, <b>2014</b> , 6, 13937-44  | 9.5            | 14 |  |
| 164 | Spatial modeling of the 3D morphology of hybrid polymer-ZnO solar cells, based on electron tomography data. <i>Annals of Applied Statistics</i> , <b>2011</b> , 5,   | 2.1            | 14 |  |
| 163 | Trapping of electrons in metal oxide-polymer memory diodes in the initial stage of electroforming. <i>Applied Physics Letters</i> , <b>2010</b> , 97, 222106   | 3.4            | 14 |  |
| 162 | Biaxially oriented CdSe nanorods. <i>Langmuir</i> , <b>2009</b> , 25, 10970-4  | 4              | 14 |  |
| 161 | Measuring the current density Doltage characteristics of individual subcells in two-terminal polymer tandem solar cells. <i>Organic Electronics</i> , <b>2011</b> , 12, 660-665  | 3.5            | 14 |  |
| 160 | Resolution and circular dichroism of an asymmetrically cage-opened [60]fullerene derivative. <i>Chemical Communications</i> , <b>1998</b> , 281-282  | 5.8            | 14 |  |
| 159 | Aggregation of perylenebisimid-polytetrahydrofuran copolymers. Synthetic Metals, 2001, 121, 1283-12  | 2 <b>84</b> .6 | 14 |  |
| 158 | The effect of side-chain substitution on the aggregation and photovoltaic performance of diketopyrrolopyrrole-alt-dicarboxylic ester bithiophene polymers. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 20904-20915                      | 13             | 14 |  |
| 157 | Ultralow dark current in near-infrared perovskite photodiodes by reducing charge injection and interfacial charge generation <i>Nature Communications</i> , <b>2021</b> , 12, 7277   | 17.4           | 14 |  |
| 156 | The effect of branching in a semiconducting polymer on the efficiency of organic photovoltaic cells. <i>Chemical Communications</i> , <b>2016</b> , 52, 92-5   | 5.8            | 13 |  |
| 155 | Stochastic modeling and predictive simulations for the microstructure of organic semiconductor films processed with different spin coating velocities. <i>Modelling and Simulation in Materials Science and Engineering</i> , <b>2015</b> , 23, 045003 | 2              | 13 |  |
| 154 | Fundamental limitations for electroluminescence in organic dual-gate field-effect transistors. <i>Advanced Materials</i> , <b>2014</b> , 26, 4450-5  | 24             | 13 |  |
| 153 | Excitation energy shuttling in oligothiophene-diketopyrrolopyrrole-fullerene triads. <i>Journal of Physical Chemistry A</i> , <b>2012</b> , 116, 1146-50   | 2.8            | 13 |  |
| 152 | Chain Length Dependence in Diketopyrrolopyrrole/Thiophene Oligomers. <i>Macromolecular Chemistry and Physics</i> , <b>2011</b> , 212, 515-520  | 2.6            | 13 |  |
| 151 | Photoinduced singlet and triplet energy transfer in fullereneßligothiopheneßullerene triads. <i>Synthetic Metals</i> , <b>2001</b> , 116, 123-127  | 3.6            | 13 |  |
| 150 | Design and synthesis of processible functional copolymers. <i>Synthetic Metals</i> , <b>2001</b> , 119, 169-170  | 3.6            | 13 |  |
|     |  |                |    |  |

| 149                      | The nature of three-electron P? S bonds studied by ESR. Chemical Physics Letters, 1990, 171, 127-130   | 2.5                              | 13                   |
|--------------------------|--|----------------------------------|----------------------|
| 148                      | A single-crystal ESR study on radicals derived from rac- and meso-1,2-dimethyl-1,2-diphenyldiphosphine disulfide: stereochemical selection in radical formation. <i>Journal of the American Chemical Society</i> , <b>1988</b> , 110, 6001-6   | 16.4                             | 13                   |
| 147                      | The .sigma.* and TBP-e radicals obtained by electron capture of four-coordinated phosphorus compounds. A single-crystal ESR study. <i>Journal of the American Chemical Society</i> , <b>1986</b> , 108, 6145-6149  | 16.4                             | 13                   |
| 146                      | Improving Performance of All-Polymer Solar Cells Through Backbone Engineering of Both Donors and Acceptors. <i>Solar Rrl</i> , <b>2018</b> , 2, 1800247  | 7.1                              | 13                   |
| 145                      | Failure analysis in ITO-free all-solution processed organic solar cells. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 20567-20578  | 13                               | 12                   |
| 144                      | Quadruple Junction Polymer Solar Cells with Four Complementary Absorber Layers. <i>Advanced Materials</i> , <b>2018</b> , 30, e1803836   | 24                               | 12                   |
| 143                      | The Role of Photon Energy in Free Charge Generation in Bulk Heterojunction Solar Cells. <i>Advanced Energy Materials</i> , <b>2014</b> , 4, 1400416  | 21.8                             | 12                   |
| 142                      | Accurate Characterization of Triple-Junction Polymer Solar Cells. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1701664  | 21.8                             | 12                   |
| 141                      | 3D-morphology reconstruction of nanoscale phase-separation in polymer memory blends. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2015</b> , 53, 1231-1237  | 2.6                              | 12                   |
|                          |  |                                  |                      |
| 140                      | High-efficiency dielectrophoretic ratchet. <i>Physical Review E</i> , <b>2012</b> , 86, 041106   | 2.4                              | 12                   |
| 140                      | High-efficiency dielectrophoretic ratchet. <i>Physical Review E</i> , <b>2012</b> , 86, 041106  Supramolecular Hydrogen-Bonded Oligo(p-phenylene vinylene) Polymers. <i>Angewandte Chemie</i> , <b>2001</b> , 113, 3772-3775   | 2.4                              | 12                   |
|                          | Supramolecular Hydrogen-Bonded Oligo(p-phenylene vinylene) Polymers. <i>Angewandte Chemie</i> ,  |                                  | 12                   |
| 139                      | Supramolecular Hydrogen-Bonded Oligo(p-phenylene vinylene) Polymers. <i>Angewandte Chemie</i> , <b>2001</b> , 113, 3772-3775  Enantioselective inversion of a chiral phosphinyl radical. A single-crystal ESR analysis of x-irradiated bis(2,4,6-tri-tert-butylphenyl)phosphinic chloride. <i>Journal of the American Chemical Society</i> , <b>1991</b> ,   | 3.6                              | 12                   |
| 139                      | Supramolecular Hydrogen-Bonded Oligo(p-phenylene vinylene) Polymers. <i>Angewandte Chemie</i> , <b>2001</b> , 113, 3772-3775  Enantioselective inversion of a chiral phosphinyl radical. A single-crystal ESR analysis of x-irradiated bis(2,4,6-tri-tert-butylphenyl)phosphinic chloride. <i>Journal of the American Chemical Society</i> , <b>1991</b> , 113, 9471-9479  Electron capture phosphoranyl radicals in x-irradiated diphosphine disulfides. A single crystal ESR   | 3.6                              | 12                   |
| 139<br>138<br>137        | Supramolecular Hydrogen-Bonded Oligo(p-phenylene vinylene) Polymers. <i>Angewandte Chemie</i> , <b>2001</b> , 113, 3772-3775  Enantioselective inversion of a chiral phosphinyl radical. A single-crystal ESR analysis of x-irradiated bis(2,4,6-tri-tert-butylphenyl)phosphinic chloride. <i>Journal of the American Chemical Society</i> , <b>1991</b> , 113, 9471-9479  Electron capture phosphoranyl radicals in x-irradiated diphosphine disulfides. A single crystal ESR and ab initio quantum chemical study. <i>Journal of Chemical Physics</i> , <b>1986</b> , 84, 3694-3708  Effect of Light-Induced Halide Segregation on the Performance of Mixed-Halide Perovskite Solar  | 3.6<br>16.4<br>3.9               | 12                   |
| 139<br>138<br>137<br>136 | Supramolecular Hydrogen-Bonded Oligo(p-phenylene vinylene) Polymers. <i>Angewandte Chemie</i> , <b>2001</b> , 113, 3772-3775  Enantioselective inversion of a chiral phosphinyl radical. A single-crystal ESR analysis of x-irradiated bis(2,4,6-tri-tert-butylphenyl)phosphinic chloride. <i>Journal of the American Chemical Society</i> , <b>1991</b> , 113, 9471-9479  Electron capture phosphoranyl radicals in x-irradiated diphosphine disulfides. A single crystal ESR and ab initio quantum chemical study. <i>Journal of Chemical Physics</i> , <b>1986</b> , 84, 3694-3708  Effect of Light-Induced Halide Segregation on the Performance of Mixed-Halide Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> , <b>2021</b> , 4, 6650-6658  Energy Level Tuning of Poly(phenylene-dithienobenzothiadiazole)s for Low Photon Energy Loss   | 3.6<br>16.4<br>3.9               | 12<br>12<br>12       |
| 139<br>138<br>137<br>136 | Supramolecular Hydrogen-Bonded Oligo(p-phenylene vinylene) Polymers. <i>Angewandte Chemie</i> , 2001, 113, 3772-3775  Enantioselective inversion of a chiral phosphinyl radical. A single-crystal ESR analysis of x-irradiated bis(2,4,6-tri-tert-butylphenyl)phosphinic chloride. <i>Journal of the American Chemical Society</i> , 1991, 113, 9471-9479  Electron capture phosphoranyl radicals in x-irradiated diphosphine disulfides. A single crystal ESR and ab initio quantum chemical study. <i>Journal of Chemical Physics</i> , 1986, 84, 3694-3708  Effect of Light-Induced Halide Segregation on the Performance of Mixed-Halide Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> , 2021, 4, 6650-6658  Energy Level Tuning of Poly(phenylene-dithienobenzothiadiazole)s for Low Photon Energy Loss Solar Cells. <i>Macromolecular Chemistry and Physics</i> , 2017, 218, 1600502 | 3.6<br>16.4<br>3.9<br>6.1<br>2.6 | 12<br>12<br>12<br>12 |

| 131 | Thermal behaviour of dicarboxylic ester bithiophene polymers exhibiting a high open-circuit voltage. <i>Journal of Materials Chemistry C</i> , <b>2018</b> , 6, 3731-3742   | 7.1              | 11   |
|-----|---|------------------|------|
| 130 | Large Electrically Induced Height and Volume Changes in Poly(3,4-ethylenedioxythiophene)/Poly(styrenesulfonate) Thin Films. <i>Chemistry of Materials</i> , <b>2010</b> , 22, 3670-3677   | 9.6              | 11   |
| 129 | Anisotropic dielectric tensor for chiral polyfluorene at optical frequencies. <i>Journal of Physical Chemistry B</i> , <b>2009</b> , 113, 14165-71  | 3.4              | 11   |
| 128 | Photoinduced absorption spectroscopy on MDMO-PPV:PCBM solar cells under operation. <i>Organic Electronics</i> , <b>2007</b> , 8, 325-335  | 3.5              | 11   |
| 127 | Switching dynamics in non-volatile polymer memories. <i>Organic Electronics</i> , <b>2008</b> , 9, 829-833  | 3.5              | 11   |
| 126 | Supramolecular fullerene architectures by quadruple hydrogen bonding. <i>Synthetic Metals</i> , <b>2003</b> , 135-136, 801-803  | 3.6              | 11   |
| 125 | Effect of Ion Coordination on the Conformational and Electronic Structure of 3,4-Bis(alkylthio)thiophenes. <i>European Journal of Inorganic Chemistry</i> , <b>2001</b> , 2001, 821-828   | 2.3              | 11   |
| 124 | Synthesis and Properties of Redox-Active Dendrimers Containing Phenothiazines. <i>European Journal of Organic Chemistry</i> , <b>2001</b> , 2001, 2123-2128   | 3.2              | 11   |
| 123 | Separation and characterization of oligomers by reversed-phase high-performance liquid chromatography: a study on well-defined oligothiphenes. <i>Journal of Chromatography A</i> , <b>2001</b> , 911, 13-2   | 6 <sup>4.5</sup> | 11   |
| 122 | Real-space measurement of the potential distribution inside organic semiconductors. <i>Physical Review Letters</i> , <b>2002</b> , 88, 096803   | 7.4              | 11   |
| 121 | Light-induced ESR studies in conjugated polymer-fullerene composites. <i>Synthetic Metals</i> , <b>1999</b> , 102, 124  | 43:424           | 1211 |
| 120 | Effect of intrachain order on the chiroptical properties of chiral poly(p-phenylene vinylenes). <i>Synthetic Metals</i> , <b>1999</b> , 102, 1105-1106  | 3.6              | 11   |
| 119 | Photoinduced absorption of Econjugated polymers in solution. Synthetic Metals, 1995, 69, 441-442  | 3.6              | 11   |
| 118 | Ferroelectric switching and electrochemistry of pyrrole substituted trialkylbenzene-1,3,5-tricarboxamides. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2017</b> , 55, 673   | 3-683            | 10   |
| 117 | A Self-Assembled Small-Molecule-Based Hole-Transporting Material for Inverted Perovskite Solar Cells. <i>Chemistry - A European Journal</i> , <b>2020</b> , 26, 10276-10282   | 4.8              | 10   |
| 116 | Carrier Recombination in Polymer Fullerene Solar Cells Probed by Reversible Exchange of Charge between the Active Layer and Electrodes Induced by a Linearly Varying Voltage. <i>Journal of Physical Chemistry C</i> , <b>2013</b> , 117, 3210-3220 | 3.8              | 10   |
| 115 | Role of Hole Injection in Electroforming of LiF-Polymer Memory Diodes. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 12443-12447  | 3.8              | 10   |
| 114 | Exciton formation and light emission near the organic@rganic interface in small-molecule based double-layer OLEDs. <i>Organic Electronics</i> , <b>2012</b> , 13, 2605-2614   | 3.5              | 10   |

| 113 | Photoluminescence enhancement in thin films of PbSe nanocrystals. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 121906   | 3.4  | 10 |
|-----|---|------|----|
| 112 | Side-Chain-Functionalized Polyacetylenes, 2. Photovoltaic Properties. <i>Macromolecular Rapid Communications</i> , <b>2002</b> , 23, 271-275  | 4.8  | 10 |
| 111 | Electrical transport study of phenylene-based pi-conjugated molecules in a three-terminal geometry. <i>Annals of the New York Academy of Sciences</i> , <b>2003</b> , 1006, 122-32  | 6.5  | 10 |
| 110 | Intermolecular effects on the radiogenic formation of electron-capture phosphorus-centered radicals. A single-crystal ESR study of diastereoisomeric precursors. <i>Journal of the American Chemical Society</i> , <b>1990</b> , 112, 938-944 | 16.4 | 10 |
| 109 | A single-crystal ESR and quantum chemical study of electron-capture trialkylphosphine sulfide and selenide radical anions with a three-electron bond. <i>Journal of the American Chemical Society</i> , <b>1988</b> , 110, 3018-3026          | 16.4 | 10 |
| 108 | 2D/3D Hybrid Cs2AgBiBr6 Double Perovskite Solar Cells: Improved Energy Level Alignment for Higher Contact-Selectivity and Large Open Circuit Voltage. <i>Advanced Energy Materials</i> ,2103215   | 21.8 | 10 |
| 107 | Controlling the Microstructure of Conjugated Polymers in High-Mobility Monolayer Transistors via the Dissolution Temperature. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 856-862   | 3.6  | 10 |
| 106 | The Bottlenecks of Cs2AgBiBr6 Solar Cells: How Contacts and Slow Transients Limit the Performance. <i>Advanced Optical Materials</i> , <b>2021</b> , 9, 2100202   | 8.1  | 10 |
| 105 | Adjusting Aggregation Modes and Photophysical and Photovoltaic Properties of Diketopyrrolopyrrole-Based Small Molecules by Introducing B<-N Bonds. <i>Chemistry - A European Journal</i> , <b>2019</b> , 25, 564-572                          | 4.8  | 10 |
| 104 | Extraction of the materials parameters that determine the mobility in disordered organic semiconductors from the current-voltage characteristics: Accuracy and limitations. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 114505     | 2.5  | 9  |
| 103 | Langmuir and Langmuir <b>B</b> lodgett films from the N-hexyl-pyrrole-thiophene (AB) semi-amphiphilic copolymer. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2002</b> , 198-200, 45-51                       | 5.1  | 9  |
| 102 | Stimulation of electrical conductivity in a Etonjugated polymeric conductor with infrared light. <i>Journal of Applied Physics</i> , <b>2002</b> , 92, 7041-7050  | 2.5  | 9  |
| 101 | Solvent effects on the Edimerization of cation radicals of conjugated oligomers. <i>Synthetic Metals</i> , <b>1999</b> , 101, 373-374   | 3.6  | 9  |
| 100 | Water Splitting with Series-Connected Polymer Solar Cells. <i>ACS Applied Materials &amp; Description</i> (2016, 8, 26972-26981)  | 9.5  | 9  |
| 99  | On the homocoupling of trialkylstannyl monomers in the synthesis of diketopyrrolopyrrole polymers and its effect on the performance of polymer-fullerene photovoltaic cells <i>RSC Advances</i> , <b>2019</b> , 9, 15703-15714                | 3.7  | 8  |
| 98  | The influence of siloxane side-chains on the photovoltaic performance of a conjugated polymer <i>RSC Advances</i> , <b>2019</b> , 9, 8740-8747  | 3.7  | 8  |
| 97  | Effect of Charge-Transfer State Energy on Charge Generation Efficiency via Singlet Fission in Pentacene-Fullerene Solar Cells. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 10253-10261  | 3.8  | 8  |
| 96  | The Effect of Branched Side Chains on the Structural and Opto-Electronic Properties of Poly(Diketopyrrolopyrrole-alt-Terthiophene). <i>Chemistry - A European Journal</i> , <b>2020</b> , 26, 14221-14228                                     | 4.8  | 8  |

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| 95 | Superheated high-temperature size-exclusion chromatography with chloroform as the mobile phase for Econjugated polymers. <i>Polymer Chemistry</i> , <b>2014</b> , 5, 558-561  | 4.9            | 8 |
|----|---|----------------|---|
| 94 | A MULTISCALE APPROACH TO THE REPRESENTATION OF 3D IMAGES, WITH APPLICATION TO POLYMER SOLAR CELLS. <i>Image Analysis and Stereology</i> , <b>2011</b> , 30, 19  | 1              | 8 |
| 93 | A convergent synthesis of (diphenylvinyl)benzene (DPVB) star-shaped compounds with tunable redox, photo- and electroluminescent properties. <i>Journal of Materials Chemistry</i> , <b>2007</b> , 17, 4274                              |                | 8 |
| 92 | . Chemistry - A European Journal, <b>2000</b> , 6, 1698-1707  | 4.8            | 8 |
| 91 | Photoluminescence of supramolecular oligothiophene assemblies. <i>Synthetic Metals</i> , <b>2001</b> , 121, 1259-12   | 2 <b>690</b> 6 | 8 |
| 90 | Photoinduced energy and electron transfer in a C60BTL 60 triad. Synthetic Metals, 2001, 121, 1597-1598  | 3.6            | 8 |
| 89 | Exciton coupling in oligothiophenes: A combined experimental/theoretical study. <i>Synthetic Metals</i> , <b>1999</b> , 102, 912-913  | 3.6            | 8 |
| 88 | CW-Photocurrent measurements of conjugated polymers and fullerenes blended into a conventional polymer matrix. <i>Synthetic Metals</i> , <b>1999</b> , 102, 1285-1286   | 3.6            | 8 |
| 87 | Intermolecular-directed reactivity in solid media. Radiogenic formation of phosphorus-centered radicals in chiral diphosphine disulfides studied by ESR. <i>Journal of the American Chemical Society</i> , <b>1990</b> , 112, 5432-5447 | 16.4           | 8 |
| 86 | Influence of Regioregularity on the Optoelectronic Properties of Conjugated Diketopyrrolopyrrole Polymers Comprising Asymmetric Monomers. <i>Macromolecules</i> , <b>2020</b> , 53, 7749-7758   | 5.5            | 8 |
| 85 | Relation between the Electronic Properties of Regioregular Donor-Acceptor Terpolymers and Their Binary Copolymers. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 3503-3516  | 3.8            | 7 |
| 84 | Spatial resolution of methods for measuring the light-emission profile in organic light-emitting diodes. <i>Journal of Applied Physics</i> , <b>2011</b> , 110, 084512  | 2.5            | 7 |
| 83 | Design and synthesis of side-chain functionalized regioregular poly(3-hexylthiophene)-based copolymers and application in polymer:fullerene bulk heterojunction solar cells <b>2009</b> ,   |                | 7 |
| 82 | Hybrid Polymer-Inorganic Photovoltaic Cells <b>2009</b> , 321-385   |                | 7 |
| 81 | Picosecond energy transfer in oligo(p-phenylene vinylene) capped gold nanoparticles. <i>Chemical Physics Letters</i> , <b>2007</b> , 433, 340-344   | 2.5            | 7 |
| 80 | Photoinduced ft-ir spectroscopy of conjugated polymer/fullerene composites embedded into conventional host polymer matrices. <i>Synthetic Metals</i> , <b>1999</b> , 101, 192-193   | 3.6            | 7 |
| 79 | Revealing defective interfaces in perovskite solar cells from highly sensitive sub-bandgap photocurrent spectroscopy using optical cavities <i>Nature Communications</i> , <b>2022</b> , 13, 349  | 17.4           | 7 |
| 78 | Structural design of asymmetric diketopyrrolopyrrole polymers for organic solar cells processed from a non-halogenated solvent. <i>Organic Electronics</i> , <b>2020</b> , 86, 105914   | 3.5            | 7 |

| 77 | Effect of main and side chain chlorination on the photovoltaic properties of benzodithiophene-alt-benzotriazole polymers. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 15426-15435                           | 7.1                     | 7 |
|----|--|-------------------------|---|
| 76 | Noncovalent semiconducting polymer monolayers for high-performance field-effect transistors. <i>Progress in Polymer Science</i> , <b>2021</b> , 117, 101394  | 29.6                    | 7 |
| 75 | Tuning the Optical Characteristics of Diketopyrrolopyrrole Molecules in the Solid State by Alkyl Side Chains. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 25229-25238                                      | 3.8                     | 6 |
| 74 | New n-Type Solution Processable All Conjugated Polymer Network: Synthesis, Optoelectronic Characterization, and Application in Organic Solar Cells. <i>Macromolecular Rapid Communications</i> , <b>2018</b> , 39, 1700629 | 4.8                     | 6 |
| 73 | Probing Electric Fields in Polymer Tandem and Single Junction Cells with Electroabsorption Spectroscopy. <i>Journal of Physical Chemistry C</i> , <b>2013</b> , 117, 4374-4382   | 3.8                     | 6 |
| 72 | Diffusion enhancement in on/off ratchets. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 073104   | 3.4                     | 6 |
| 71 | Large photoinduced circular dichroism in chiral polyfluorene. <i>Journal of Physical Chemistry A</i> , <b>2009</b> , 113, 10891-4  | 2.8                     | 6 |
| 70 | An ESR study on electron-capture phosphorus-centred radicals in solid matrices of alkyl/phenyl phosphine sulfides and selenides. <i>Recueil Des Travaux Chimiques Des Pays-Bas</i> , <b>2010</b> , 108, 262-267            |                         | 6 |
| 69 | The synthesis and photovoltaic performance of regioregular poly[3-(n-butoxymethyl)thiophene]. <i>Thin Solid Films</i> , <b>2008</b> , 516, 7176-7180   | 2.2                     | 6 |
| 68 | Synthesis and characterization of novel regioregular polythiophenes. Synthetic Metals, 2001, 119, 369-3  | 3 <i>7</i> 5 <b>0</b> 6 | 6 |
| 67 | Ab initio study of isotropic and anisotropic hyperfine interactions in phosphoranyl and phosphorane anion radicals. <i>Computational and Theoretical Chemistry</i> , <b>1984</b> , 110, 139-153                            |                         | 6 |
| 66 | Monolithic All-Perovskite Tandem Solar Cells with Minimized Optical and Energetic Losses <i>Advanced Materials</i> , <b>2021</b> , e2110053  | 24                      | 6 |
| 65 | Effect of Co-Solvents on the Crystallization and Phase Distribution of Mixed-Dimensional Perovskites. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2102144   | 21.8                    | 6 |
| 64 | Impact of EConjugated Linkers on the Effective Exciton Binding Energy of Diketopyrrolopyrrole-Dithienopyrrole Copolymers. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 27403-27                             | 7418                    | 6 |
| 63 | Dielectric interface-dependent spatial charge distribution in ambipolar polymer semiconductors embedded in dual-gate field-effect transistors. <i>Applied Physics Letters</i> , <b>2016</b> , 109, 043301                  | 3.4                     | 6 |
| 62 | Analysis of the Performance of Narrow-Bandgap Organic Solar Cells Based on a Diketopyrrolopyrrole Polymer and a Nonfullerene Acceptor. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 5505-5517               | 3.8                     | 6 |
| 61 | Electrical conduction of LiF interlayers in organic diodes. <i>Journal of Applied Physics</i> , <b>2015</b> , 117, 155502  | 2.5                     | 5 |
| 60 | Bis(arylimidazole) Iridium Picolinate Emitters and Preferential Dipole Orientation in Films. <i>ACS Omega</i> , <b>2018</b> , 3, 2673-2682   | 3.9                     | 5 |

| 59 | Scaling of characteristic frequencies of organic electronic ratchets. <i>Physical Review B</i> , <b>2012</b> , 85,   | 3.3  | 5 |
|----|--|------|---|
| 58 | The performance of organic electronic ratchets. AIP Advances, 2012, 2, 012106  | 1.5  | 5 |
| 57 | Non-linearity in the IIV characteristic of poly(3,4-ethylenedioxythiophene):poly(styrenesulfonic acid) (PEDOT:PSS) due to Joule heating. <i>Organic Electronics</i> , <b>2004</b> , 5, 207-211   | 3.5  | 5 |
| 56 | Thermochromism in the triplet excited state of poly(3-octylthiophene). Synthetic Metals, 1999, 101, 177  | 3.6  | 5 |
| 55 | Triplet-state phosphinyl diradicals. <i>Chemical Communications</i> , <b>1996</b> , 1919   | 5.8  | 5 |
| 54 | Photoinduced Electron Transfer Between Conjugated Polymers and a Homologous Series of TCNQ<br>Derivatives. <i>Journal De Physique, I</i> , <b>1996</b> , 6, 2151-2158  |      | 5 |
| 53 | Reactivity in molecular crystals: Radical formation in chiral phosphorus compounds. <i>Heteroatom Chemistry</i> , <b>1991</b> , 2, 39-43   | 1.2  | 5 |
| 52 | Radical cations of bis(diphenylphosphino) derivatives (Ph2P-R-PPh2): the formation of localized, cyclic, and dimeric configurations; an ESR and quantum chemical study. <i>The Journal of Physical Chemistry</i> , <b>1991</b> , 95, 9256-9263 |      | 5 |
| 51 | The SPCl2F- phosphoranyl radical. <i>Chemical Physics Letters</i> , <b>1986</b> , 132, 459-463   | 2.5  | 5 |
| 50 | Development of a Perovskite Solar Cell Architecture for Opaque Substrates. Solar Rrl, 2020, 4, 2000385   | 7.1  | 5 |
| 49 | Photochromic organic solar cells based on diarylethenes RSC Advances, 2020, 10, 30176-30185  | 3.7  | 5 |
| 48 | Synthesis, characterization and device optimisation of new poly(benzo[1,2-b:4,5-b?]dithiophene-alt-thieno[3,4-d]thiazole) derivatives for solar cell applications. <i>Polymer Chemistry</i> , <b>2015</b> , 6, 3956-3961                       | 4.9  | 4 |
| 47 | Reply to 'Tandem organic solar cells revisited'. <i>Nature Photonics</i> , <b>2016</b> , 10, 355-355   | 33.9 | 4 |
| 46 | Delayed fluorescence in perhydrotriphenylene-oligothiophene inclusion compounds: evidence for molecular oxygen-related excited States. <i>Journal of Physical Chemistry A</i> , <b>2011</b> , 115, 7966-71                                     | 2.8  | 4 |
| 45 | Organoselenium-substituted poly(p-phenylenevinylene). Heteroatom Chemistry, 2005, 16, 656-662  | 1.2  | 4 |
| 44 | Photoinduced absorption spectroscopy of oligothiophene/C60 mixtures in films and solutions. <i>Synthetic Metals</i> , <b>1995</b> , 70, 1345-1346  | 3.6  | 4 |
| 43 | Study of the morphology of organic ferroelectric diodes with combined scanning force and scanning transmission X-ray microscopy. <i>Organic Electronics</i> , <b>2018</b> , 53, 242-248  | 3.5  | 4 |
| 42 | Light-Driven Electrochemical Carbon Dioxide Reduction to Carbon Monoxide and Methane Using Perovskite Photovoltaics. <i>Cell Reports Physical Science</i> , <b>2020</b> , 1, 100058  | 6.1  | 4 |

| 41 | Effects of fluorination and thermal annealing on charge recombination processes in polymer bulk-heterojunction solar cells. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 19520-19531             | 13  | 4 |
|----|--|-----|---|
| 40 | The Intrinsic Photoluminescence Spectrum of Perovskite Films. Advanced Optical Materials, 2102557  | 8.1 | 4 |
| 39 | Scanning tunnelling microscopy on organic field-effect transistors based on intrinsic pentacene. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 263301  | 3.4 | 3 |
| 38 | Relation between the electroforming voltage in alkali halide-polymer diodes and the bandgap of the alkali halide. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 233502                                   | 3.4 | 3 |
| 37 | Introduction to the Issue on Next-Generation Organic and Hybrid Solar Cells. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2010</b> , 16, 1512-1513                                       | 3.8 | 3 |
| 36 | Langmuir films from semi-amphiphilic sequence-controlled heterocyclic copolymers. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2002</b> , 198-200, 313-321                     | 5.1 | 3 |
| 35 | Relating the morphology of a poly(p-phenylene vinylene)/methanofullerene blend to bulk heterojunction solar cell performance <b>2004</b> ,   |     | 3 |
| 34 | Triplet-State Phosphoryl Diradicals. <i>The Journal of Physical Chemistry</i> , <b>1995</b> , 99, 9331-9336  |     | 3 |
| 33 | Triplet-state photoexcitations and triplet-energy transfer in poly(3-alkylthiophene)/C60 solutions. <i>Synthetic Metals</i> , <b>1995</b> , 70, 1343-1344  | 3.6 | 3 |
| 32 | Infrared Photoexcitation Spectroscopy of Conducting Polymer and C60 Composites: Direct Evidence of Photo-Induced Electron Transfer. <i>Molecular Crystals and Liquid Crystals</i> , <b>1994</b> , 256, 739-744 |     | 3 |
| 31 | Thin Thermally Evaporated Organic Hole Transport Layers for Reduced Optical Losses in Substrate-Configuration Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> , <b>2021</b> , 4, 3033-3043         | 6.1 | 3 |
| 30 | Contactless charge carrier mobility measurement in organic field-effect transistors. <i>Organic Electronics</i> , <b>2014</b> , 15, 2855-2861  | 3.5 | 2 |
| 29 | Langmuir film of regioregular poly(4-dodecyl-2,2?-bithiophene). <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2002</b> , 198-200, 323-330                                       | 5.1 | 2 |
| 28 | Hybrid ZnO:polymer bulk heterojunction solar cells from a ZnO precursor 2005,  |     | 2 |
| 27 | Triplet-state phosphoryl biradicals. Synthetic Metals, 1995, 71, 1833-1834   | 3.6 | 2 |
| 26 | Triplet State Photoexcitations in Frozen Solutions of Oligothiophenes. <i>Molecular Crystals and Liquid Crystals</i> , <b>1994</b> , 256, 487-492  |     | 2 |
| 25 | Absorbing infrared light in polymer solar cells. SPIE Newsroom, 2006,  |     | 2 |
| 24 | CHAPTER 11:Multi-Junction Polymer Solar Cells. <i>RSC Polymer Chemistry Series</i> , <b>2015</b> , 310-351   | 1.3 | 2 |

## (2006-2021)

| 23 | Polymorphism of a semi-crystalline diketopyrrolopyrrole-terthiophene polymer. <i>Journal of Polymer Science</i> , <b>2021</b> , 59, 1285-1292  | 2.4  | 2 |
|----|--|------|---|
| 22 | Imide-Based Multielectron Anolytes as High-Performance Materials in Nonaqueous Redox Flow Batteries. <i>ACS Applied Energy Materials</i> , <b>2021</b> , 4, 9248-9257  | 6.1  | 2 |
| 21 | Pyrene-Based Small-Molecular Hole Transport Layers for Efficient and Stable Narrow-Bandgap<br>Perovskite Solar Cells. <i>Solar Rrl</i> , <b>2021</b> , 5, 2100454  | 7.1  | 2 |
| 20 | Organic and Hybrid Solar Cells Based on Well-Defined Organic Semiconductors and Morphologies. <i>Advances in Polymer Science</i> , <b>2017</b> , 25-49   | 1.3  | 1 |
| 19 | 1000-Pixels per Inch Transistor Arrays Using Multi-Level Imprint Lithography. <i>IEEE Electron Device Letters</i> , <b>2020</b> , 41, 1217-1220  | 4.4  | 1 |
| 18 | Evidence for exciton quenching by hole polarons in thick P3HT:PCBM solar cells <b>2016</b> ,   |      | 1 |
| 17 | PLASTIC INFRARED DETECTORS BASED ON POLY(3,4-ETHYLENEDIOXYTHIOPHENE):POLY(STYRENE SULFONIC ACID). <i>Modern Physics Letters B</i> , <b>2004</b> , 18, 53-71  | 1.6  | 1 |
| 16 | Langmuir films from tailor-made semi-amphiphilic alternating (AB) heterocyclic copolymers. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2002</b> , 198-200, 331-338                  | 5.1  | 1 |
| 15 | Astramol polypropyleneimine dendrimers as norrish type II amine synergists. <i>Journal of Coatings Technology and Research</i> , <b>2000</b> , 83, 119-124   |      | 1 |
| 14 | PHOTOEXCITATIONS IN CONJUGATED OLIGOMERS <b>1998</b> , 524-558   |      | 1 |
| 13 | Electron Transfer and Energy Transfer Reactions in Photoexcited Nonathiophene/C60 Films and Solutions. <i>Molecular Crystals and Liquid Crystals</i> , <b>1994</b> , 256, 921-926                                    |      | 1 |
| 12 | Efficient organic solar cells with small energy losses based on a wide-bandgap trialkylsilyl-substituted donor polymer and a non-fullerene acceptor. <i>Chemical Engineering Journal</i> , <b>2022</b> , 435, 134878 | 14.7 | 1 |
| 11 | Investigation of Exciton Coupling in Oligothiophenes by Circular Dichroism Spectroscopy <b>1998</b> , 10, 134  | 3    | 1 |
| 10 | Controlling morphology and photovoltaic properties by chemical structure in copolymers of cyclopentadithiophene and thiophene segments. <i>Solar Energy Materials and Solar Cells</i> , <b>2010</b> , 94, 2218-      | 2222 | Ο |
| 9  | Perovskite Solar Cells on Polymer-Coated Smooth and Rough Steel Substrates. <i>Solar Rrl</i> ,2100898  | 7.1  | О |
| 8  | Use of Sodium Diethyldithiocarbamate to Enhance the Open-Circuit Voltage of CH3NH3PbI3<br>Perovskite Solar Cells. <i>Solar Rrl</i> , <b>2021</b> , 5, 2000811  | 7.1  | Ο |
| 7  | Metal Oxide <b>P</b> olymer Bulk Heterojunction Solar Cells357-398   |      |   |
| 6  | Electronic Memory Effects in Zinc Oxide Nanoparticle -Polystyrene Devices with a Calcium Top Electrode. <i>Materials Research Society Symposia Proceedings</i> , <b>2006</b> , 965, 1                                |      |   |

| 5 | Measuring the potential distribution inside soft organic semiconductors with a scanning-tunneling microscope. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2002</b> , 13, 1247-1250 | 3    |
|---|--|------|
| 4 | Stereochemical Selection in Phosphoranyl Radical Formation Using Ionizing Radiation. <i>Phosphorus, Sulfur and Silicon and the Related Elements</i> , <b>1990</b> , 51, 288-288                          | 1    |
| 3 | Effect of Co-Solvents on the Crystallization and Phase Distribution of Mixed-Dimensional Perovskites (Adv. Energy Mater. 42/2021). <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2170168          | 21.8 |
| 2 | Efficient Solar Cells Based on a Polymer Donor with Ebranching in Trialkylsilyl Side Chains. <i>Organic Materials</i> , <b>2021</b> , 03, 134-140  | 1.9  |
| 1 | The Intrinsic Photoluminescence Spectrum of Perovskite Films (Advanced Optical Materials 8/2022). Advanced Optical Materials, <b>2022</b> , 10, 2270032  | 8.1  |