

Alex K-Y Jen

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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|--------------------|--------------------------|-----------------|----------------|
| 610 papers | 51,788 citations | 119 h-index | 200 g-index |
| 631 ext. papers | 57,016 ext. citations | 11.5 avg, IF | 8 L-index |

| # | Paper | IF | Citations |
|-----|--|------|-----------|
| 610 | Non-fullerene acceptors for organic solar cells. <i>Nature Reviews Materials</i> , 2018 , 3, | 73.3 | 1634 |
| 609 | Molecular biomimetics: nanotechnology through biology. <i>Nature Materials</i> , 2003 , 2, 577-85 | 27 | 1353 |
| 608 | Additive enhanced crystallization of solution-processed perovskite for highly efficient planar-heterojunction solar cells. <i>Advanced Materials</i> , 2014 , 26, 3748-54 | 24 | 1242 |
| 607 | Recent advances in solution-processed interfacial materials for efficient and stable polymer solar cells. <i>Energy and Environmental Science</i> , 2012 , 5, 5994 | 35.4 | 903 |
| 606 | Design and synthesis of chromophores and polymers for electro-optic and photorefractive applications. <i>Nature</i> , 1997 , 388, 845-851 | 50.4 | 896 |
| 605 | Interface Engineering for Organic Electronics. <i>Advanced Functional Materials</i> , 2010 , 20, 1371-1388 | 15.6 | 806 |
| 604 | Air-stable inverted flexible polymer solar cells using zinc oxide nanoparticles as an electron selective layer. <i>Applied Physics Letters</i> , 2008 , 92, 253301 | 3.4 | 737 |
| 603 | High-performance and environmentally stable planar heterojunction perovskite solar cells based on a solution-processed copper-doped nickel oxide hole-transporting layer. <i>Advanced Materials</i> , 2015 , 27, 695-701 | 24 | 655 |
| 602 | Recent progress and perspective in solution-processed Interfacial materials for efficient and stable polymer and organometal perovskite solar cells. <i>Energy and Environmental Science</i> , 2015 , 8, 1160-1189 | 35.4 | 637 |
| 601 | Heterojunction modification for highly efficient organic-inorganic perovskite solar cells. <i>ACS Nano</i> , 2014 , 8, 12701-9 | 16.7 | 546 |
| 600 | High-performance perovskite-polymer hybrid solar cells via electronic coupling with fullerene monolayers. <i>Nano Letters</i> , 2013 , 13, 3124-8 | 11.5 | 545 |
| 599 | Efficient CdSe/CdS quantum dot light-emitting diodes using a thermally polymerized hole transport layer. <i>Nano Letters</i> , 2006 , 6, 463-7 | 11.5 | 448 |
| 598 | Polymer Solar Cells That Use Self-Assembled-Monolayer- Modified ZnO/Metals as Cathodes. <i>Advanced Materials</i> , 2008 , 20, 2376-2382 | 24 | 446 |
| 597 | Functional fullerenes for organic photovoltaics. <i>Journal of Materials Chemistry</i> , 2012 , 22, 4161 | | 417 |
| 596 | Fluoro-Substituted n-Type Conjugated Polymers for Additive-Free All-Polymer Bulk Heterojunction Solar Cells with High Power Conversion Efficiency of 6.71. <i>Advanced Materials</i> , 2015 , 27, 3310-7 | 24 | 400 |
| 595 | Dopant-Free Hole-Transporting Material with a C3h Symmetrical Truxene Core for Highly Efficient Perovskite Solar Cells. <i>Journal of the American Chemical Society</i> , 2016 , 138, 2528-31 | 16.4 | 395 |
| 594 | Pinhole-Free and Surface-Nanostructured NiOx Film by Room-Temperature Solution Process for High-Performance Flexible Perovskite Solar Cells with Good Stability and Reproducibility. <i>ACS Nano</i> , 2016 , 10, 1503-11 | 16.7 | 390 |

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|-----|--|------|-----|
| 593 | Enhanced Efficiency and Stability of Inverted Perovskite Solar Cells Using Highly Crystalline SnO ₂ Nanocrystals as the Robust Electron-Transporting Layer. <i>Advanced Materials</i> , 2016 , 28, 6478-84 | 24 | 382 |
| 592 | The role of spin in the kinetic control of recombination in organic photovoltaics. <i>Nature</i> , 2013 , 500, 435-9 | 30.4 | 379 |
| 591 | Integrated molecular, interfacial, and device engineering towards high-performance non-fullerene based organic solar cells. <i>Advanced Materials</i> , 2014 , 26, 5708-14 | 24 | 366 |
| 590 | A Low-Temperature, Solution-Processable, Cu-Doped Nickel Oxide Hole-Transporting Layer via the Combustion Method for High-Performance Thin-Film Perovskite Solar Cells. <i>Advanced Materials</i> , 2015 , 27, 7874-80 | 24 | 348 |
| 589 | Efficient Polymer Solar Cells Based on the Copolymers of Benzodithiophene and Thienopyrroledione. <i>Chemistry of Materials</i> , 2010 , 22, 2696-2698 | 9.6 | 334 |
| 588 | Role of chloride in the morphological evolution of organo-lead halide perovskite thin films. <i>ACS Nano</i> , 2014 , 8, 10640-54 | 16.7 | 328 |
| 587 | Interfacial modification to improve inverted polymer solar cells. <i>Journal of Materials Chemistry</i> , 2008 , 18, 5113 | | 323 |
| 586 | Dithienopicenocarbazole-Based Acceptors for Efficient Organic Solar Cells with Optoelectronic Response Over 1000 nm and an Extremely Low Energy Loss. <i>Journal of the American Chemical Society</i> , 2018 , 140, 2054-2057 | 16.4 | 322 |
| 585 | Improved charge transport and absorption coefficient in indacenodithieno[3,2-b]thiophene-based ladder-type polymer leading to highly efficient polymer solar cells. <i>Advanced Materials</i> , 2012 , 24, 6356-61 | 14 | 319 |
| 584 | Development of new conjugated polymers with donor-pi-bridge-acceptor side chains for high performance solar cells. <i>Journal of the American Chemical Society</i> , 2009 , 131, 13886-7 | 16.4 | 310 |
| 583 | Indacenodithiophene and Quinoxaline-Based Conjugated Polymers for Highly Efficient Polymer Solar Cells. <i>Chemistry of Materials</i> , 2011 , 23, 2289-2291 | 9.6 | 303 |
| 582 | Enhanced Environmental Stability of Planar Heterojunction Perovskite Solar Cells Based on Blade-Coating. <i>Advanced Energy Materials</i> , 2015 , 5, 1401229 | 21.8 | 278 |
| 581 | Semi-transparent polymer solar cells with 6% PCE, 25% average visible transmittance and a color rendering index close to 100 for power generating window applications. <i>Energy and Environmental Science</i> , 2012 , 5, 9551 | 35.4 | 278 |
| 580 | C60 as an Efficient n-Type Compact Layer in Perovskite Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 2399-405 | 6.4 | 271 |
| 579 | High performance ambient processed inverted polymer solar cells through interfacial modification with a fullerene self-assembled monolayer. <i>Applied Physics Letters</i> , 2008 , 93, 233304 | 3.4 | 271 |
| 578 | Broadband terahertz characterization of the refractive index and absorption of some important polymeric and organic electro-optic materials. <i>Journal of Applied Physics</i> , 2011 , 109, 043505-043505-5 | 2.5 | 269 |
| 577 | Ultralarge and thermally stable electro-optic activities from supramolecular self-assembled molecular glasses. <i>Journal of the American Chemical Society</i> , 2007 , 129, 488-9 | 16.4 | 266 |
| 576 | A Review on the Development of the Inverted Polymer Solar Cell Architecture. <i>Polymer Reviews</i> , 2010 , 50, 474-510 | 14 | 262 |

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|-----|---|------|-----|
| 575 | Binary-metal perovskites toward high-performance planar-heterojunction hybrid solar cells. <i>Advanced Materials</i> , 2014 , 26, 6454-60 | 24 | 259 |
| 574 | High-Performance Fully Printable Perovskite Solar Cells via Blade-Coating Technique under the Ambient Condition. <i>Advanced Energy Materials</i> , 2015 , 5, 1500328 | 21.8 | 257 |
| 573 | Roles of Fullerene-Based Interlayers in Enhancing the Performance of Organometal Perovskite Thin-Film Solar Cells. <i>Advanced Energy Materials</i> , 2015 , 5, 1402321 | 21.8 | 255 |
| 572 | The Important Role of Heteroaromatics in the Design of Efficient Second-Order Nonlinear Optical Molecules: Theoretical Investigation on PushPull Heteroaromatic Stilbenes. <i>Journal of the American Chemical Society</i> , 1996 , 118, 12443-12448 | 16.4 | 255 |
| 571 | Stable Low-Bandgap Pb-Sn Binary Perovskites for Tandem Solar Cells. <i>Advanced Materials</i> , 2016 , 28, 8990-8992 | 24 | 254 |
| 570 | Metal grid/conducting polymer hybrid transparent electrode for inverted polymer solar cells. <i>Applied Physics Letters</i> , 2010 , 96, 203301 | 3.4 | 254 |
| 569 | Toward Perovskite Solar Cell Commercialization: A Perspective and Research Roadmap Based on Interfacial Engineering. <i>Advanced Materials</i> , 2018 , 30, e1800455 | 24 | 244 |
| 568 | Highly Efficient Blue-Light-Emitting Diodes from Polyfluorene Containing Bipolar Pendant Groups. <i>Macromolecules</i> , 2003 , 36, 6698-6703 | 5.5 | 243 |
| 567 | Highly Efficient Organic Solar Cells with Improved Vertical Donor-Acceptor Compositional Gradient Via an Inverted Off-Center Spinning Method. <i>Advanced Materials</i> , 2016 , 28, 967-74 | 24 | 240 |
| 566 | Indium tin oxide-free semi-transparent inverted polymer solar cells using conducting polymer as both bottom and top electrodes. <i>Organic Electronics</i> , 2009 , 10, 1401-1407 | 3.5 | 239 |
| 565 | Mixed Cation FAPbI ₃ /PbI ₂ with Enhanced Phase and Ambient Stability toward High-Performance Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2017 , 7, 1601307 | 21.8 | 237 |
| 564 | Defect Passivation of Organic-Inorganic Hybrid Perovskites by Diammonium Iodide toward High-Performance Photovoltaic Devices. <i>ACS Energy Letters</i> , 2016 , 1, 757-763 | 20.1 | 237 |
| 563 | Over 12% Efficiency Nonfullerene All-Small-Molecule Organic Solar Cells with Sequentially Evolved Multilength Scale Morphologies. <i>Advanced Materials</i> , 2019 , 31, e1807842 | 24 | 228 |
| 562 | Rational Design of Advanced Thermoelectric Materials. <i>Advanced Energy Materials</i> , 2013 , 3, 549-565 | 21.8 | 225 |
| 561 | Increased open circuit voltage in fluorinated benzothiadiazole-based alternating conjugated polymers. <i>Chemical Communications</i> , 2011 , 47, 11026-8 | 5.8 | 225 |
| 560 | CuGaO : A Promising Inorganic Hole-Transporting Material for Highly Efficient and Stable Perovskite Solar Cells. <i>Advanced Materials</i> , 2017 , 29, 1604984 | 24 | 222 |
| 559 | Rigidifying Nonplanar Perylene Diimides by Ring Fusion Toward Geometry-Tunable Acceptors for High-Performance Fullerene-Free Solar Cells. <i>Advanced Materials</i> , 2016 , 28, 951-8 | 24 | 222 |
| 558 | Doping of fullerenes via anion-induced electron transfer and its implication for surfactant facilitated high performance polymer solar cells. <i>Advanced Materials</i> , 2013 , 25, 4425-30 | 24 | 220 |

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| 557 | Highly Efficient Fluorene- and Benzothiadiazole-Based Conjugated Copolymers for Polymer Light-Emitting Diodes. <i>Macromolecules</i> , 2002 , 35, 6094-6100 | 5.5 | 214 |
| 556 | Highly Efficient Perovskite-Perovskite Tandem Solar Cells Reaching 80% of the Theoretical Limit in Photovoltage. <i>Advanced Materials</i> , 2017 , 29, 1702140 | 24 | 210 |
| 555 | Highly efficient and thermally stable nonlinear optical dendrimer for electrooptics. <i>Journal of the American Chemical Society</i> , 2001 , 123, 986-7 | 16.4 | 207 |
| 554 | Divalent osmium complexes: synthesis, characterization, strong red phosphorescence, and electrophosphorescence. <i>Journal of the American Chemical Society</i> , 2002 , 124, 14162-72 | 16.4 | 200 |
| 553 | Suppressed charge recombination in inverted organic photovoltaics via enhanced charge extraction by using a conductive fullerene electron transport layer. <i>Advanced Materials</i> , 2014 , 26, 6262-7 | 24 | 198 |
| 552 | Enhancement of Aggregation-Induced Emission in Dye-Encapsulating Polymeric Micelles for Bioimaging. <i>Advanced Functional Materials</i> , 2010 , 20, 1413-1423 | 15.6 | 198 |
| 551 | Surface doping of conjugated polymers by graphene oxide and its application for organic electronic devices. <i>Advanced Materials</i> , 2011 , 23, 1903-8 | 24 | 190 |
| 550 | A Simple and Effective Way of Achieving Highly Efficient and Thermally Stable Bulk-Heterojunction Polymer Solar Cells Using Amorphous Fullerene Derivatives as Electron Acceptor. <i>Chemistry of Materials</i> , 2009 , 21, 2598-2600 | 9.6 | 185 |
| 549 | Regulating Surface Termination for Efficient Inverted Perovskite Solar Cells with Greater Than 23% Efficiency. <i>Journal of the American Chemical Society</i> , 2020 , 142, 20134-20142 | 16.4 | 185 |
| 548 | High-Performance Semitransparent Perovskite Solar Cells with 10% Power Conversion Efficiency and 25% Average Visible Transmittance Based on Transparent CuSCN as the Hole-Transporting Material. <i>Advanced Energy Materials</i> , 2015 , 5, 1500486 | 21.8 | 181 |
| 547 | Two-Dimensional Perovskite Solar Cells with 14.1% Power Conversion Efficiency and 0.68% External Radiative Efficiency. <i>ACS Energy Letters</i> , 2018 , 3, 2086-2093 | 20.1 | 180 |
| 546 | Enhanced Open-Circuit Voltage in High Performance Polymer/Fullerene Bulk-Heterojunction Solar Cells by Cathode Modification with a C60 Surfactant. <i>Advanced Energy Materials</i> , 2012 , 2, 82-86 | 21.8 | 180 |
| 545 | Tailor-Making Low-Cost Spiro[fluorene-9,9'-xanthene]-Based 3D Oligomers for Perovskite Solar Cells. <i>Chem</i> , 2017 , 2, 676-687 | 16.2 | 176 |
| 544 | High Performance Amorphous Metallated π -Conjugated Polymers for Field-Effect Transistors and Polymer Solar Cells. <i>Chemistry of Materials</i> , 2008 , 20, 5734-5736 | 9.6 | 175 |
| 543 | Significant Improved Performance of Photovoltaic Cells Made from a Partially Fluorinated Cyclopentadithiophene/Benzothiadiazole Conjugated Polymer. <i>Macromolecules</i> , 2012 , 45, 5427-5435 | 5.5 | 173 |
| 542 | Synthesis and Optoelectronic Properties of Starlike Polyfluorenes with a Silsesquioxane Core. <i>Macromolecules</i> , 2004 , 37, 2335-2341 | 5.5 | 172 |
| 541 | Novel Oxadiazole-Containing Polyfluorene with Efficient Blue Electroluminescence. <i>Chemistry of Materials</i> , 2003 , 15, 269-274 | 9.6 | 170 |
| 540 | Current Challenges and Prospective Research for Upscaling Hybrid Perovskite Photovoltaics. <i>Journal of Physical Chemistry Letters</i> , 2016 , 7, 811-9 | 6.4 | 165 |

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| 539 | Low-temperature processed high-performance flexible perovskite solar cells via rationally optimized solvent washing treatments. <i>RSC Advances</i> , 2014 , 4, 62971-62977 | 3.7 | 160 |
| 538 | Non-halogenated solvents for environmentally friendly processing of high-performance bulk-heterojunction polymer solar cells. <i>Energy and Environmental Science</i> , 2013 , 6, 3241 | 35.4 | 160 |
| 537 | Molecular Engineered Hole-Extraction Materials to Enable Dopant-Free, Efficient p-i-n Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2017 , 7, 1700012 | 21.8 | 159 |
| 536 | Interfacial engineering of ultrathin metal film transparent electrode for flexible organic photovoltaic cells. <i>Advanced Materials</i> , 2014 , 26, 3618-23 | 24 | 159 |
| 535 | Highly Efficient Organic Solar Cells Based on S,N-Heteroacene Non-Fullerene Acceptors. <i>Chemistry of Materials</i> , 2018 , 30, 5429-5434 | 9.6 | 158 |
| 534 | Effect of Chemical Modification of Fullerene-Based Self-Assembled Monolayers on the Performance of Inverted Polymer Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2010 , 2, 1892-1902 | 9.5 | 157 |
| 533 | Design of a Highly Crystalline Low-Band Gap Fused-Ring Electron Acceptor for High-Efficiency Solar Cells with Low Energy Loss. <i>Chemistry of Materials</i> , 2017 , 29, 8369-8376 | 9.6 | 156 |
| 532 | Stabilized Wide Bandgap Perovskite Solar Cells by Tin Substitution. <i>Nano Letters</i> , 2016 , 16, 7739-7747 | 11.5 | 155 |
| 531 | Systematic study of the structure-property relationship of a series of ferrocenyl nonlinear optical chromophores. <i>Journal of the American Chemical Society</i> , 2005 , 127, 2758-66 | 16.4 | 155 |
| 530 | Inorganic CsPb _{1-x} Sn _x IBr ₂ for Efficient Wide-Bandgap Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2018 , 8, 1800525 | 21.8 | 154 |
| 529 | Self-assembled monolayer modified ZnO/metal bilayer cathodes for polymer/fullerene bulk-heterojunction solar cells. <i>Applied Physics Letters</i> , 2008 , 92, 193313 | 3.4 | 153 |
| 528 | Functionalized thiophenes: second-order nonlinear optical materials. <i>Journal of the Chemical Society Chemical Communications</i> , 1993 , 90 | | 153 |
| 527 | Effects of formamidinium and bromide ion substitution in methylammonium lead triiodide toward high-performance perovskite solar cells. <i>Nano Energy</i> , 2016 , 22, 328-337 | 17.1 | 152 |
| 526 | Realizing Efficient Lead-Free Formamidinium Tin Triiodide Perovskite Solar Cells via a Sequential Deposition Route. <i>Advanced Materials</i> , 2018 , 30, 1703800 | 24 | 151 |
| 525 | Rational Design of Dipolar Chromophore as an Efficient Dopant-Free Hole-Transporting Material for Perovskite Solar Cells. <i>Journal of the American Chemical Society</i> , 2016 , 138, 11833-9 | 16.4 | 150 |
| 524 | 10.4% Power Conversion Efficiency of ITO-Free Organic Photovoltaics Through Enhanced Light Trapping Configuration. <i>Advanced Energy Materials</i> , 2015 , 5, 1500406 | 21.8 | 150 |
| 523 | Highly Efficient Polymer White-Light-Emitting Diodes Based on Lithium Salts Doped Electron Transporting Layer. <i>Advanced Materials</i> , 2009 , 21, 361-365 | 24 | 150 |
| 522 | Effective interfacial layer to enhance efficiency of polymer solar cells via solution-processed fullerene-surfactants. <i>Journal of Materials Chemistry</i> , 2012 , 22, 8574 | | 149 |

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| 521 | Highly Efficient Porphyrin-Based OPV/Perovskite Hybrid Solar Cells with Extended Photoresponse and High Fill Factor. <i>Advanced Materials</i> , 2017 , 29, 1703980 | 24 | 148 |
| 520 | Crosslinkable hole-transporting materials for solution processed polymer light-emitting diodes. <i>Journal of Materials Chemistry</i> , 2008 , 18, 4495 | | 147 |
| 519 | Large Electro-optic Activity and Enhanced Thermal Stability from Diarylaminophenyl-Containing High- π -Nonlinear Optical Chromophores. <i>Chemistry of Materials</i> , 2007 , 19, 1154-1163 | 9.6 | 147 |
| 518 | Nanoscale Architectural Control and Macromolecular Engineering of Nonlinear Optical Dendrimers and Polymers for Electro-Optics <i>Journal of Physical Chemistry B</i> , 2004 , 108, 8523-8530 | 3.4 | 146 |
| 517 | Toward All Room-Temperature, Solution-Processed, High-Performance Planar Perovskite Solar Cells: A New Scheme of Pyridine-Promoted Perovskite Formation. <i>Advanced Materials</i> , 2017 , 29, 1604695 | 24 | 142 |
| 516 | Flexible and twistable non-volatile memory cell array with all-organic one diode-one resistor architecture. <i>Nature Communications</i> , 2013 , 4, 2707 | 17.4 | 141 |
| 515 | Donor-Acceptor Thiolated Polyenic Chromophores Exhibiting Large Optical Nonlinearity and Excellent Photostability. <i>Chemistry of Materials</i> , 2008 , 20, 5047-5054 | 9.6 | 141 |
| 514 | Novel push-pull thiophenes for second order nonlinear optical applications. <i>Tetrahedron Letters</i> , 1993 , 34, 1747-1750 | 2 | 140 |
| 513 | A Non-fullerene Acceptor with Enhanced Intermolecular π -Core Interaction for High-Performance Organic Solar Cells. <i>Journal of the American Chemical Society</i> , 2020 , 142, 15246-15251 | 16.4 | 138 |
| 512 | Molecular Weight Effect on the Absorption, Charge Carrier Mobility, and Photovoltaic Performance of an Indacenodiselenophene-Based Ladder-Type Polymer. <i>Chemistry of Materials</i> , 2013 , 25, 3188-3195 | 9.6 | 137 |
| 511 | Adding a Third Component with Reduced Miscibility and Higher LUMO Level Enables Efficient Ternary Organic Solar Cells. <i>ACS Energy Letters</i> , 2020 , 5, 2711-2720 | 20.1 | 137 |
| 510 | The roles of alkyl halide additives in enhancing perovskite solar cell performance. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 9058-9062 | 13 | 135 |
| 509 | Current-Induced Phase Segregation in Mixed Halide Hybrid Perovskites and its Impact on Two-Terminal Tandem Solar Cell Design. <i>ACS Energy Letters</i> , 2017 , 2, 1841-1847 | 20.1 | 135 |
| 508 | Modulation of PEDOT:PSS pH for Efficient Inverted Perovskite Solar Cells with Reduced Potential Loss and Enhanced Stability. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 32068-32076 | 9.5 | 132 |
| 507 | Theory-guided design and synthesis of multichromophore dendrimers: an analysis of the electro-optic effect. <i>Journal of the American Chemical Society</i> , 2007 , 129, 7523-30 | 16.4 | 132 |
| 506 | Effect of Cyano Substituents on Electron Affinity and Electron-Transporting Properties of Conjugated Polymers. <i>Macromolecules</i> , 2002 , 35, 3532-3538 | 5.5 | 132 |
| 505 | π -Phosphonic Acid Organic Monolayer/Sol-Gel Hafnium Oxide Hybrid Dielectrics for Low-Voltage Organic Transistors. <i>Advanced Materials</i> , 2008 , 20, 3697-3701 | 24 | 129 |
| 504 | Triarylamine-Containing Poly(perfluorocyclobutane) as Hole-Transporting Material for Polymer Light-Emitting Diodes. <i>Macromolecules</i> , 2000 , 33, 3514-3517 | 5.5 | 128 |

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| 503 | Ag-Incorporated Organic-Inorganic Perovskite Films and Planar Heterojunction Solar Cells. <i>Nano Letters</i> , 2017 , 17, 3231-3237 | 11.5 | 127 |
| 502 | Facile Approach to Nonlinear Optical Side-Chain Aromatic Polyimides with Large Second-Order Nonlinearity and Thermal Stability. <i>Journal of the American Chemical Society</i> , 1995 , 117, 7295-7296 | 16.4 | 126 |
| 501 | Two-Step Synthesis of Side-Chain Aromatic Polyimides for Second-Order Nonlinear Optics. <i>Macromolecules</i> , 1996 , 29, 535-539 | 5.5 | 126 |
| 500 | Toward High-Performance Semi-Transparent Polymer Solar Cells: Optimization of Ultra-Thin Light Absorbing Layer and Transparent Cathode Architecture. <i>Advanced Energy Materials</i> , 2013 , 3, 417-423 | 21.8 | 123 |
| 499 | Ternary non-fullerene polymer solar cells with 13.51% efficiency and a record-high fill factor of 78.13%. <i>Energy and Environmental Science</i> , 2018 , 11, 3392-3399 | 35.4 | 122 |
| 498 | Rational molecular design and supramolecular assembly of highly efficient organic electro-optic materials. <i>Journal of Materials Chemistry</i> , 2009 , 19, 7410 | | 122 |
| 497 | Dramatically enhanced second-order nonlinear optical susceptibilities in tricyanovinylthiophene derivatives. <i>Journal of the Chemical Society Chemical Communications</i> , 1993 , 1118 | | 122 |
| 496 | Multifunctional phosphonic acid self-assembled monolayers on metal oxides as dielectrics, interface modification layers and semiconductors for low-voltage high-performance organic field-effect transistors. <i>Physical Chemistry Chemical Physics</i> , 2012 , 14, 14110-26 | 3.6 | 121 |
| 495 | Efficient Green-Light-Emitting Diodes from Silole-Containing Copolymers. <i>Chemistry of Materials</i> , 2003 , 15, 3496-3500 | 9.6 | 121 |
| 494 | Ascorbic acid as an effective antioxidant additive to enhance the efficiency and stability of Pb/Sn-based binary perovskite solar cells. <i>Nano Energy</i> , 2017 , 34, 392-398 | 17.1 | 120 |
| 493 | Highly Efficient Inverted Organic Solar Cells Through Material and Interfacial Engineering of Indacenodithieno[3,2-b]thiophene-Based Polymers and Devices. <i>Advanced Functional Materials</i> , 2014 , 24, 1465-1473 | 15.6 | 120 |
| 492 | SrCl Derived Perovskite Facilitating a High Efficiency of 16% in Hole-Conductor-Free Fully Printable Mesoscopic Perovskite Solar Cells. <i>Advanced Materials</i> , 2017 , 29, 1606608 | 24 | 119 |
| 491 | Synthesis and characterization of highly efficient and thermally stable diphenylamino-substituted thiophene stilbene chromophores for nonlinear optical applications. <i>Advanced Materials</i> , 1997 , 9, 132-135 | 24 | 119 |
| 490 | 2D metal-organic framework for stable perovskite solar cells with minimized lead leakage. <i>Nature Nanotechnology</i> , 2020 , 15, 934-940 | 28.7 | 119 |
| 489 | Effects of Self-Assembled Monolayer Modification of Nickel Oxide Nanoparticles Layer on the Performance and Application of Inverted Perovskite Solar Cells. <i>ChemSusChem</i> , 2017 , 10, 3794-3803 | 8.3 | 116 |
| 488 | Diels-Alder Click Chemistry for Highly Efficient Electrooptic Polymers. <i>Macromolecules</i> , 2006 , 39, 1676-1689 | 3.9 | 116 |
| 487 | Improved efficiency and stability of Pb/Sn binary perovskite solar cells by Cs substitution. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 17939-17945 | 13 | 115 |
| 486 | Optical design of transparent thin metal electrodes to enhance in-coupling and trapping of light in flexible polymer solar cells. <i>Advanced Materials</i> , 2012 , 24, 6362-7 | 24 | 115 |

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| 485 | Solution-processible highly conducting fullerenes. <i>Advanced Materials</i> , 2013 , 25, 2457-61 | 24 | 113 |
| 484 | A copper-doped nickel oxide bilayer for enhancing efficiency and stability of hysteresis-free inverted mesoporous perovskite solar cells. <i>Nano Energy</i> , 2017 , 40, 155-162 | 17.1 | 112 |
| 483 | High Efficiency (15.8%) All-Polymer Solar Cells Enabled by a Regioregular Narrow Bandgap Polymer Acceptor. <i>Journal of the American Chemical Society</i> , 2021 , 143, 2665-2670 | 16.4 | 112 |
| 482 | Systematic Nanoengineering of Soft Matter Organic Electro-optic Materials <i>Chemistry of Materials</i> , 2011 , 23, 430-445 | 9.6 | 111 |
| 481 | High-Efficiency Polymer Solar Cells Achieved by Doping Plasmonic Metallic Nanoparticles into Dual Charge Selecting Interfacial Layers to Enhance Light Trapping. <i>Advanced Energy Materials</i> , 2013 , 3, 666-673 | 21.8 | 109 |
| 480 | High-Performance Planar-Heterojunction Solar Cells Based on Ternary Halide Large-Band-Gap Perovskites. <i>Advanced Energy Materials</i> , 2015 , 5, 1400960 | 21.8 | 108 |
| 479 | CBr ₄ activation: making diketopyrrolopyrrole derivatives easily accessible. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 2795 | 13 | 108 |
| 478 | Binary Chromophore Systems in Nonlinear Optical Dendrimers and Polymers for Large Electrooptic Activities. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 8091-8098 | 3.8 | 108 |
| 477 | A General Route to Enhance Polymer Solar Cell Performance using Plasmonic Nanoprisms. <i>Advanced Energy Materials</i> , 2014 , 4, 1400206 | 21.8 | 106 |
| 476 | Influence of Molecular Geometry of Perylene Diimide Dimers and Polymers on Bulk Heterojunction Morphology Toward High-Performance Nonfullerene Polymer Solar Cells. <i>Advanced Functional Materials</i> , 2015 , 25, 5326-5332 | 15.6 | 106 |
| 475 | Synthesis, Characterization, Charge Transport, and Photovoltaic Properties of Dithienobenzoquinoxaline- and Dithienobenzopyridopyrazine-Based Conjugated Polymers. <i>Macromolecules</i> , 2011 , 44, 4752-4758 | 5.5 | 106 |
| 474 | Conjugated polymers based on C, Si and N-bridged dithiophene and thienopyrroledione units: synthesis, field-effect transistors and bulk heterojunction polymer solar cells. <i>Journal of Materials Chemistry</i> , 2011 , 21, 3895 | | 105 |
| 473 | Guest-Host Cooperativity in Organic Materials Greatly Enhances the Nonlinear Optical Response. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 4355-4363 | 3.8 | 105 |
| 472 | Anode modification of inverted polymer solar cells using graphene oxide. <i>Applied Physics Letters</i> , 2010 , 97, 203306 | 3.4 | 104 |
| 471 | Thermally Cross-Linkable Hole-Transporting Materials on Conducting Polymer: Synthesis, Characterization, and Applications for Polymer Light-Emitting Devices. <i>Chemistry of Materials</i> , 2008 , 20, 413-422 | 9.6 | 104 |
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