

# Sooncheol Kwon

## List of Publications by Year in descending order

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Version: 2024-02-01

40  
papers

1,741  
citations

471509

17  
h-index

276875

41  
g-index

43  
all docs

43  
docs citations

43  
times ranked

3343  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | The Role of Long-alkyl-Group Spacers in Glycolated Copolymers for High-Performance Organic Electrochemical Transistors. <i>Advanced Materials</i> , 2022, 34, e2202574.   | 21.0 | 21        |
| 2  | Enhancing hole carrier injection <i>via</i> low electrochemical doping on circularly polarized polymer light-emitting diodes. <i>Journal of Materials Chemistry C</i> , 2022, 10, 9512-9520.  | 5.5  | 11        |
| 3  | Anion-Induced Catalytic Reaction in a Solution-Processed Molybdenum Oxide for Efficient Inverted Ternary Organic Photovoltaics. <i>Advanced Functional Materials</i> , 2022, 32, .  | 14.9 | 3         |
| 4  | One-Step Sixfold Cyanation of Benzothiadiazole Acceptor Units for Air-Stable High-Performance n-Type Organic Field-Effect Transistors. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 5970-5977.                        | 13.8 | 34        |
| 5  | One-Step Sixfold Cyanation of Benzothiadiazole Acceptor Units for Air-Stable High-Performance n-Type Organic Field-Effect Transistors. <i>Angewandte Chemie</i> , 2021, 133, 6035-6042.   | 2.0  | 2         |
| 6  | Selenium-Substituted Non-Fullerene Acceptors: A Route to Superior Operational Stability for Organic Bulk Heterojunction Solar Cells. <i>ACS Nano</i> , 2021, 15, 7700-7712.   | 14.6 | 36        |
| 7  | Solid-State Ionic Liquid: Key to Efficient Detection and Discrimination in Organic Semiconductor Gas Sensors. <i>ACS Applied Electronic Materials</i> , 2021, 3, 2152-2163.   | 4.3  | 4         |
| 8  | Direct Observation of Confinement Effects of Semiconducting Polymers in Polymer Blend Electronic Systems. <i>Advanced Science</i> , 2021, 8, 2100332.   | 11.2 | 12        |
| 9  | Reversible Polymorphic Transition and Hysteresis-Driven Phase Selectivity in Single-Crystalline C8-BTBT Rods. <i>Small</i> , 2020, 16, e1906109.  | 10.0 | 16        |
| 10 | Bias-Modulated Multicolor Discrimination Enabled by an Organic-Inorganic Hybrid Perovskite Photodetector with a p-i-n Configuration. <i>Laser and Photonics Reviews</i> , 2020, 14, 2000305.  | 8.7  | 21        |
| 11 | Molecular-level electrochemical doping for fine discrimination of volatile organic compounds in organic chemiresistors. <i>Journal of Materials Chemistry A</i> , 2020, 8, 16884-16891.   | 10.3 | 8         |
| 12 | Large-Area Nonfullerene Organic Solar Cell Modules Fabricated by a Temperature-Independent Printing Method. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 41877-41885.  | 8.0  | 30        |
| 13 | Molecular understanding of a $\pi$ -conjugated polymer/solid-state ionic liquid complex as a highly sensitive and selective gas sensor. <i>Journal of Materials Chemistry C</i> , 2020, 8, 15268-15276.                               | 5.5  | 25        |
| 14 | Direct observation of continuous networks of $\pi$ -sol-gel processed metal oxide thin film for organic and perovskite photovoltaic modules with long-term stability. <i>Journal of Materials Chemistry A</i> , 2020, 8, 18659-18667. | 10.3 | 6         |
| 15 | Spirobifluorene-based non-fullerene acceptors for the environmentally benign process. <i>Dyes and Pigments</i> , 2020, 180, 108369.   | 3.7  | 4         |
| 16 | Efficient Charge Carrier Injection and Balance Achieved by Low Electrochemical Doping in Solution-Processed Polymer Light-Emitting Diodes. <i>Advanced Functional Materials</i> , 2019, 29, 1904092.                                  | 14.9 | 18        |
| 17 | Enhanced Photo-Response of Mos 2 Photodetectors by a Laterally Aligned SiO 2 Nanoribbon Array Substrate. <i>ChemNanoMat</i> , 2019, 5, 1272-1279.   | 2.8  | 2         |
| 18 | Impact of Initial Bulk-Heterojunction Morphology on Operational Stability of Polymer:Fullerene Photovoltaic Cells. <i>Advanced Materials Interfaces</i> , 2019, 6, 1801763.   | 3.7  | 12        |

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|----|---|------|-----------|
| 19 | Improvement of perovskite crystallinity by omnidirectional heat transfer via radiative thermal annealing. RSC Advances, 2019, 9, 14868-14875.   | 3.6  | 6         |
| 20 | Enhanced p-Type Work Function Tunability Induced by Electrostatic Molecular Alignment and Surface Coverage in Conjugated Small-Molecule Electrolyte. ACS Applied Electronic Materials, 2019, 1, 2566-2573.  | 4.3  | 2         |
| 21 | Effect of Processing Additives on Organic Photovoltaics: Recent Progress and Future Prospects. Advanced Energy Materials, 2017, 7, 1601496.   | 19.5 | 71        |
| 22 | Bulkâ€Heterojunction Organic Solar Cells: Five Core Technologies for Their Commercialization. Advanced Materials, 2016, 28, 7821-7861.  | 21.0 | 404       |
| 23 | Highâ€Performance Integrated Perovskite and Organic Solar Cells with Enhanced Fill Factors and Nearâ€Infrared Harvesting. Advanced Materials, 2016, 28, 3159-3165.  | 21.0 | 84        |
| 24 | Dâ€Aâ€D-type narrow-bandgap small-molecule photovoltaic donors: pre-synthesis virtual screening using density functional theory. Physical Chemistry Chemical Physics, 2016, 18, 15054-15059.                | 2.8  | 15        |
| 25 | Optimized phase separation in low-bandgap polymer:fullerene bulk heterojunction solar cells with criteria of solvent additives. Nano Energy, 2016, 30, 200-207.   | 16.0 | 18        |
| 26 | Controlling Molecular Ordering in Aqueous Conducting Polymers Using Ionic Liquids. Advanced Materials, 2016, 28, 8625-8631.   | 21.0 | 149       |
| 27 | Optically transparent semiconducting polymer nanonetwork for flexible and transparent electronics. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 14261-14266. | 7.1  | 67        |
| 28 | Organic Singleâ€Crystal Semiconductor Films on a Millimeter Domain Scale. Advanced Materials, 2015, 27, 6870-6877.  | 21.0 | 59        |
| 29 | Efficient bulk heterojunction organic solar cell with antireflective subwavelength structure. Applied Surface Science, 2015, 332, 716-719.  | 6.1  | 9         |
| 30 | In situ studies of the molecular packing dynamics of bulk-heterojunction solar cells induced by the processing additive 1-chloronaphthalene. Journal of Materials Chemistry A, 2015, 3, 7719-7726.          | 10.3 | 24        |
| 31 | Efficient Charge Extraction in Thick Bulk Heterojunction Solar Cells through Infiltrated Diffusion Doping. Advanced Energy Materials, 2014, 4, 1301502.   | 19.5 | 17        |
| 32 | Semiconducting Polymers with Nanocrystallites Interconnected via Boron-Doped Carbon Nanotubes. Nano Letters, 2014, 14, 7100-7106.   | 9.1  | 17        |
| 33 | Efficient planar-heterojunction perovskite solar cells achieved via interfacial modification of a solâ€gel ZnO electron collection layer. Journal of Materials Chemistry A, 2014, 2, 17291-17296.           | 10.3 | 274       |
| 34 | Template-mediated nano-crystallite networks in semiconducting polymers. Nature Communications, 2014, 5, 4183.   | 12.8 | 31        |
| 35 | Self-assembly of interfacial and photoactive layers via one-step solution processing for efficient inverted organic solar cells. Nanoscale, 2013, 5, 11587.   | 5.6  | 48        |
| 36 | Synergistic Effect of Processing Additives and Optical Spacers in Bulkâ€Heterojunction Solar Cells. Advanced Energy Materials, 2012, 2, 1420-1424.  | 19.5 | 27        |

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|----|---|-----|-----------|
| 37 | Synthesis and photovoltaic property of copolymers with phenanthrothiadiazole moiety. Solar Energy Materials and Solar Cells, 2012, 105, 229-236.  | 6.2 | 8         |
| 38 | Synthesis and characterization of phenanthrothiadiazole-based conjugated polymer for photovoltaic device. Synthetic Metals, 2012, 162, 1936-1943.   | 3.9 | 5         |
| 39 | Syntheses and characterization of carbazole based new low-band gap copolymers containing highly soluble benzimidazole derivatives for solar cell application. Journal of Polymer Science Part A, 2011, 49, 369-380. | 2.3 | 23        |
| 40 | Synthesis and Photovoltaic Properties of Cyclopentadithiophene-Based Low-Bandgap Copolymers That Contain Electron-Withdrawing Thiazole Derivatives. Chemistry - A European Journal, 2010, 16, 3743-3752.            | 3.3 | 112       |