# Gi-Hwan Kim

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/11974099/publications.pdf

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|---|---|---|---|
| 50 papers | 4,988 citations | 186265 28 h-index | 182427 51 g-index |
| 51 all docs | 51 docs citations | 51 times ranked | 7195 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Methylammonium Chloride Induces Intermediate Phase Stabilization for Efficient Perovskite Solar Cells. Joule, 2019, 3, 2179-2192. | 24.0 | 1,228 |
| 2 | Cesium-doped methylammonium lead iodide perovskite light absorber for hybrid solar cells. Nano Energy, 2014, 7, 80-85. | 16.0 | 459 |
| 3 | Spectra stable blue perovskite light-emitting diodes. Nature Communications, 2019, 10, 1868. | 12.8 | 344 |
| 4 | Passivation Using Molecular Halides Increases Quantum Dot Solar Cell Performance. Advanced Materials, 2016, 28, 299-304. | 21.0 | 312 |
| 5 | Combination of Titanium Oxide and a Conjugated Polyelectrolyte for Highâ€Performance Invertedâ€Type Organic Optoelectronic Devices. Advanced Materials, 2011, 23, 2759-2763. | 21.0 | 242 |
| 6 | Pure Cubicâ€Phase Hybrid Iodobismuthates AgBi<sub>2</sub>I<sub>7</sub> for Thinâ€Film Photovoltaics. Angewandte Chemie - International Edition, 2016, 55, 9586-9590. | 13.8 | 201 |
| 7 | High-Efficiency Colloidal Quantum Dot Photovoltaics via Robust Self-Assembled Monolayers. Nano Letters, 2015, 15, 7691-7696. | 9.1 | 198 |
| 8 | Colloidal Quantum Dot Photovoltaics Enhanced by Perovskite Shelling. Nano Letters, 2015, 15, 7539-7543. | 9.1 | 173 |
| 9 | High-Temperatureâ€“Short-Time Annealing Process for High-Performance Large-Area Perovskite Solar Cells. ACS Nano, 2017, 11, 6057-6064. | 14.6 | 142 |
| 10 | Development of perovskite solar cells with >25% conversion efficiency. Joule, 2021, 5, 1033-1035. | 24.0 | 137 |
| 11 | Enhanced electrical properties of Li-salts doped mesoporous TiO2 in perovskite solar cells. Joule, 2021, 5, 659-672. | 24.0 | 127 |
| 12 | Doubleâ€Sided Junctions Enable Highâ€Performance Colloidalâ€Quantumâ€Dot Photovoltaics. Advanced Materials, 2016, 28, 4142-4148. | 21.0 | 121 |
| 13 | Colloidal CdSe<sub>1â€“x</sub>S<sub>x</sub> Nanoplatelets with Narrow and Continuously-Tunable Electroluminescence. Nano Letters, 2015, 15, 4611-4615. | 9.1 | 114 |
| 14 | Fluorine Functionalized Graphene Nano Platelets for Highly Stable Inverted Perovskite Solar Cells. Nano Letters, 2017, 17, 6385-6390. | 9.1 | 106 |
| 15 | Semicrystalline Dâ€“A Copolymers with Different Chain Curvature for Applications in Polymer Optoelectronic Devices. Macromolecules, 2014, 47, 1604-1612. | 4.8 | 95 |
| 16 | Synthesis of PCDTBT-Based Fluorinated Polymers for High Open-Circuit Voltage in Organic Photovoltaics: Towards an Understanding of Relationships between Polymer Energy Levels Engineering and Ideal Morphology Control. ACS Applied Materials & Interfaces, 2014, 6, 7523-7534. | 8.0 | 88 |
| 17 | Field-emission from quantum-dot-in-perovskite solids. Nature Communications, 2017, 8, 14757. | 12.8 | 83 |
| 18 | Reversible, Full-Color Luminescence by Post-treatment of Perovskite Nanocrystals. Joule, 2018, 2, 2105-2116. | 24.0 | 61 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Vivid and Fully Saturated Blue Light-Emitting Diodes Based on Ligand-Modified Halide Perovskite Nanocrystals. ACS Applied Materials & Interfaces, 2019, 11, 23401-23409. | 8.0 | 60 |
| 20 | Inverted Colloidal Quantum Dot Solar Cells. Advanced Materials, 2014, 26, 3321-3327. | 21.0 | 59 |
| 21 | Ladder-type heteroacenepolymers bearing carbazole and thiophene ring units and their use in field-effect transistors and photovoltaic cells. Journal of Materials Chemistry, 2011, 21, 843-850. | 6.7 | 48 |
| 22 | Photocurrent Extraction Efficiency near Unity in a Thick Polymer Bulk Heterojunction. Advanced Functional Materials, 2016, 26, 3324-3330. | 14.9 | 48 |
| 23 | Pure Cubicâ€Phase Hybrid Iodobismuthates AgBi<sub>2</sub>I<sub>7</sub> for Thinâ€Film Photovoltaics. Angewandte Chemie, 2016, 128, 9738-9742. | 2.0 | 42 |
| 24 | Effects of Ionic Liquid Molecules in Hybrid PbS Quantum Dotâ€“Organic Solar Cells. ACS Applied Materials & Interfaces, 2013, 5, 1757-1760. | 8.0 | 39 |
| 25 | The effect of introducing a buffer layer to polymer solar cells on cell efficiency. Solar Energy Materials and Solar Cells, 2011, 95, 1119-1122. | 6.2 | 37 |
| 26 | A thermally stable, barium-stabilized Î±-CsPbI<sub>3</sub> perovskite for optoelectronic devices. Journal of Materials Chemistry A, 2019, 7, 21740-21746. | 10.3 | 37 |
| 27 | Highly Stable Bulk Perovskite for Blue LEDs with Anion-Exchange Method. Nano Letters, 2021, 21, 3473-3479. | 9.1 | 36 |
| 28 | Towards optimization of P3HT:bisPCBM composites for highly efficient polymer solar cells. Journal of Materials Chemistry, 2010, 20, 7710. | 6.7 | 31 |
| 29 | Functionalized PFN-X (X = Cl, Br, or I) for Balanced Charge Carriers of Highly Efficient Blue Light-Emitting Diodes. ACS Applied Materials & Interfaces, 2020, 12, 35740-35747. | 8.0 | 31 |
| 30 | Replacing 2,1,3-benzothiadiazole with 2,1,3-naphthothiadiazole in PCDTBT: towards a low bandgap polymer with deep HOMO energy level. Polymer Chemistry, 2012, 3, 3276. | 3.9 | 27 |
| 31 | Optimal top electrodes for inverted polymer solar cells. Physical Chemistry Chemical Physics, 2015, 17, 2152-2159. | 2.8 | 27 |
| 32 | Ternary Halide Perovskites for Highly Efficient Solution-Processed Hybrid Solar Cells. ACS Energy Letters, 2016, 1, 712-718. | 17.4 | 24 |
| 33 | High-Performance Perovskite Light-Emitting Diodes with Surface Passivation of CsPbBr<sub>x</sub>I<sub>3â€“x</sub> Nanocrystals via Antisolvent-Triggered Ion-Exchange. ACS Applied Materials & Interfaces, 2020, 12, 31582-31590. | 8.0 | 22 |
| 34 | Solution-processed CdS transistors with high electron mobility. RSC Advances, 2014, 4, 3153-3157. | 3.6 | 19 |
| 35 | Synergistic photocurrent addition in hybrid quantum dot: Bulk heterojunction solar cells. Nano Energy, 2015, 13, 491-499. | 16.0 | 18 |
| 36 | Effects of cation size and concentration of cationic chlorides on the properties of formamidinium lead iodide based perovskite solar cells. Sustainable Energy and Fuels, 2020, 4, 3753-3763. | 4.9 | 17 |

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|---|---|---|---|
| 37 | Origin of the luminescence spectra width in perovskite nanocrystals with surface passivation. Nanoscale, 2020, 12, 21695-21702. | 5.6 | 16 |
| 38 | Ambient-Stable Cubic-Phase Hybrid Perovskite Reaching the Shockleyâ€“Queisser Fill Factor Limit via Inorganic Additive-Assisted Process. ACS Applied Energy Materials, 2018, 1, 5865-5871. | 5.1 | 13 |
| 39 | Observation of ambipolar field-effect behavior in donorâ€“acceptor conjugated copolymers. Journal of Materials Chemistry, 2012, 22, 21238. | 6.7 | 12 |
| 40 | The introduction of a perovskite seed layer for high performance perovskite solar cells. Journal of Materials Chemistry A, 2018, 6, 20138-20144. | 10.3 | 12 |
| 41 | Suppression of halide migration and immobile ionic surface passivation for blue perovskite light-emitting diodes. Journal of Materials Chemistry C, 2022, 10, 2060-2066. | 5.5 | 12 |
| 42 | Clean thermal decomposition of tertiary-alkyl metal thiolates to metal sulfides: environmentally-benign, non-polar inks for solution-processed chalcopyrite solar cells. Scientific Reports, 2016, 6, 36608. | 3.3 | 11 |
| 43 | Fast vaporizing anti-solvent for high crystalline perovskite to achieve high performance perovskite solar cells. Thin Solid Films, 2018, 661, 122-127. | 1.8 | 11 |
| 44 | Formamidinium-based planar heterojunction perovskite solar cells with alkali carbonate-doped zinc oxide layer. RSC Advances, 2018, 8, 24110-24115. | 3.6 | 10 |
| 45 | Dithieno[3,2â€b:2â€²,3â€²â€d]pyrrole and Benzothiadiazoleâ€Based Semicrystalline Copolymer for Photovoltaic Devices with Indeneâ€C<sub>60</sub> Bisadduct. Macromolecular Chemistry and Physics, 2013, 214, 2083-2090. | 2.2 | 7 |
| 46 | Molecular engineering of conjugated polymers for solar cells and fieldâ€effect transistors: Sideâ€chain versus mainâ€chain electron acceptors. Journal of Polymer Science Part A, 2012, 50, 271-279. | 2.3 | 6 |
| 47 | The optimization of intermediate semiâ€“bonding structure using solvent vapor annealing for high performance p-i-n structure perovskite solar cells. Organic Electronics, 2019, 65, 300-304. | 2.6 | 5 |
| 48 | Synthesis and photovoltaic properties of conjugated copolymers based on benzimidazole and various thiophene. Journal of Polymer Science Part A, 2011, 49, 3751-3758. | 2.3 | 4 |
| 49 | Vapor Coating Method Using Small-Molecule Organic Surface Modifiers to Replace N-Type Metal Oxide Layers in Inverted Polymer Solar Cells. ACS Applied Materials & Interfaces, 2014, 6, 6504-6509. | 8.0 | 4 |
| 50 | An intermediate phase stability for high performance of perovskite solar cells. Matter, 2021, 4, 3377-3378. | 10.0 | 2 |