

Bumjoon J Kim

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.

275
papers

13,701
citations

62
h-index

105
g-index

294
ext. papers

15,823
ext. citations

11.5
avg, IF

6.81
L-index

| # | Paper | IF | Citations |
|-----|--|------|-----------|
| 275 | Flexible, highly efficient all-polymer solar cells. <i>Nature Communications</i> , 2015 , 6, 8547 | 17.4 | 638 |
| 274 | Control of nanoparticle location in block copolymers. <i>Journal of the American Chemical Society</i> , 2005 , 127, 5036-7 | 16.4 | 523 |
| 273 | The influence of poly(3-hexylthiophene) regioregularity on fullerene-composite solar cell performance. <i>Journal of the American Chemical Society</i> , 2008 , 130, 16324-9 | 16.4 | 378 |
| 272 | Recent Advances, Design Guidelines, and Prospects of All-Polymer Solar Cells. <i>Chemical Reviews</i> , 2019 , 119, 8028-8086 | 68.1 | 367 |
| 271 | From Fullerene-Polymer to All-Polymer Solar Cells: The Importance of Molecular Packing, Orientation, and Morphology Control. <i>Accounts of Chemical Research</i> , 2016 , 49, 2424-2434 | 24.3 | 351 |
| 270 | Determining the role of polymer molecular weight for high-performance all-polymer solar cells: its effect on polymer aggregation and phase separation. <i>Journal of the American Chemical Society</i> , 2015 , 137, 2359-65 | 16.4 | 311 |
| 269 | Effect of Areal Chain Density on the Location of Polymer-Modified Gold Nanoparticles in a Block Copolymer Template. <i>Macromolecules</i> , 2006 , 39, 4108-4114 | 5.5 | 275 |
| 268 | High-performance all-polymer solar cells via side-chain engineering of the polymer acceptor: the importance of the polymer packing structure and the nanoscale blend morphology. <i>Advanced Materials</i> , 2015 , 27, 2466-71 | 24 | 259 |
| 267 | Photocrosslinkable Polythiophenes for Efficient, Thermally Stable, Organic Photovoltaics. <i>Advanced Functional Materials</i> , 2009 , 19, 2273-2281 | 15.6 | 233 |
| 266 | Nanoparticle-Induced Phase Transitions in Diblock-Copolymer Films. <i>Advanced Materials</i> , 2005 , 17, 2618-2622 | 24 | 210 |
| 265 | Hybrid particle-field simulations of polymer nanocomposites. <i>Physical Review Letters</i> , 2006 , 96, 250601 | 7.4 | 203 |
| 264 | Striped, ellipsoidal particles by controlled assembly of diblock copolymers. <i>Journal of the American Chemical Society</i> , 2013 , 135, 6649-57 | 16.4 | 180 |
| 263 | Creating surfactant nanoparticles for block copolymer composites through surface chemistry. <i>Langmuir</i> , 2007 , 23, 12693-703 | 4 | 174 |
| 262 | Effect of Addition of a Diblock Copolymer on Blend Morphology and Performance of Poly(3-hexylthiophene):Perylene Diimide Solar Cells. <i>Chemistry of Materials</i> , 2009 , 21, 1775-1777 | 9.6 | 166 |
| 261 | Tuning Mechanical and Optoelectrical Properties of Poly(3-hexylthiophene) through Systematic Regioregularity Control. <i>Macromolecules</i> , 2015 , 48, 4339-4346 | 5.5 | 156 |
| 260 | Nanoparticle surfactants as a route to bicontinuous block copolymer morphologies. <i>Langmuir</i> , 2007 , 23, 7804-9 | 4 | 154 |
| 259 | Effects of Solubilizing Group Modification in Fullerene Bis-Adducts on Normal and Inverted Type Polymer Solar Cells. <i>Chemistry of Materials</i> , 2012 , 24, 2373-2381 | 9.6 | 144 |

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|-----|--|------|-----|
| 258 | Design of terpolymers as electron donors for highly efficient polymer solar cells. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 15252 | 13 | 143 |
| 257 | Solvent-Resistant Organic Transistors and Thermally Stable Organic Photovoltaics Based on Cross-linkable Conjugated Polymers. <i>Chemistry of Materials</i> , 2012 , 24, 215-221 | 9.6 | 140 |
| 256 | Distribution of Nanoparticles in Lamellar Domains of Block Copolymers. <i>Macromolecules</i> , 2007 , 40, 3361-3365 | 5.3 | 137 |
| 255 | Controlling Molecular Orientation of Naphthalenediimide-Based Polymer Acceptors for High Performance All-Polymer Solar Cells. <i>Advanced Energy Materials</i> , 2016 , 6, 1600504 | 21.8 | 136 |
| 254 | Importance of Optimal Composition in Random Terpolymer-Based Polymer Solar Cells. <i>Macromolecules</i> , 2013 , 46, 6806-6813 | 5.5 | 133 |
| 253 | Efficient colorimetric pH sensor based on responsive polymer-quantum dot integrated graphene oxide. <i>ACS Nano</i> , 2014 , 8, 2848-56 | 16.7 | 132 |
| 252 | Side Chain Optimization of Naphthalenediimide-Bithiophene-Based Polymers to Enhance the Electron Mobility and the Performance in All-Polymer Solar Cells. <i>Advanced Functional Materials</i> , 2016 , 26, 1543-1553 | 15.6 | 130 |
| 251 | Determining Optimal Crystallinity of Diketopyrrolopyrrole-Based Terpolymers for Highly Efficient Polymer Solar Cells and Transistors. <i>Chemistry of Materials</i> , 2014 , 26, 6963-6970 | 9.6 | 123 |
| 250 | Site isolation in phosphorescent bichromophoric block copolymers designed for white electroluminescence. <i>Advanced Materials</i> , 2010 , 22, 77-82 | 24 | 122 |
| 249 | Effect of Polymer Ligand Molecular Weight on Polymer-Coated Nanoparticle Location in Block Copolymers. <i>Macromolecules</i> , 2008 , 41, 436-447 | 5.5 | 118 |
| 248 | Importance of Electron Transport Ability in Naphthalene Diimide-Based Polymer Acceptors for High-Performance, Additive-Free, All-Polymer Solar Cells. <i>Chemistry of Materials</i> , 2015 , 27, 5230-5237 | 9.6 | 115 |
| 247 | High-Performance Long-Term-Stable Dopant-Free Perovskite Solar Cells and Additive-Free Organic Solar Cells by Employing Newly Designed Multirole Conjugated Polymers. <i>Advanced Materials</i> , 2017 , 29, 1700183 | 24 | 113 |
| 246 | Size-controlled nanoparticle-guided assembly of block copolymers for convex lens-shaped particles. <i>Journal of the American Chemical Society</i> , 2014 , 136, 9982-9 | 16.4 | 109 |
| 245 | New Thermally Cross-Linkable Polymer and Its Application as a Hole-Transporting Layer for Solution Processed Multilayer Organic Light Emitting Diodes. <i>Chemistry of Materials</i> , 2007 , 19, 4827-4832 | 9.6 | 107 |
| 244 | Comparative Study of Thermal Stability, Morphology, and Performance of All-Polymer, Fullerene Polymer, and Ternary Blend Solar Cells Based on the Same Polymer Donor. <i>Macromolecules</i> , 2017 , 50, 6861-6871 | 5.5 | 103 |
| 243 | Effect of Humidity on the Ordering of PEO-Based Copolymer Thin Films. <i>Macromolecules</i> , 2007 , 40, 7019-7025 | 5.3 | 103 |
| 242 | Side-Chain Fluorination: An Effective Approach to Achieving High-Performance All-Polymer Solar Cells with Efficiency Exceeding 7. <i>Advanced Materials</i> , 2016 , 28, 10016-10023 | 24 | 103 |
| 241 | High-Performance All-Polymer Solar Cells Based on Face-On Stacked Polymer Blends with Low Interfacial Tension. <i>ACS Macro Letters</i> , 2014 , 3, 1009-1014 | 6.6 | 101 |

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| 240 | Facile Synthesis of o-Xylenyl Fullerene Multiadducts for High Open Circuit Voltage and Efficient Polymer Solar Cells. <i>Chemistry of Materials</i> , 2011 , 23, 5090-5095 | 9.6 | 101 |
| 239 | Influence of Alkyl Substitution Pattern in Thiophene Copolymers on Composite Fullerene Solar Cell Performance. <i>Macromolecules</i> , 2007 , 40, 7425-7428 | 5.5 | 93 |
| 238 | Multidimensional Design of Anisotropic Polymer Particles from Solvent-Evaporative Emulsion. <i>Advanced Functional Materials</i> , 2018 , 28, 1802961 | 15.6 | 90 |
| 237 | Morphological Evolution of Block Copolymer Particles: Effect of Solvent Evaporation Rate on Particle Shape and Morphology. <i>ACS Nano</i> , 2017 , 11, 2133-2142 | 16.7 | 88 |
| 236 | Sequentially Fluorinated PTAA Polymers for Enhancing VOC of High-Performance Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2018 , 8, 1801668 | 21.8 | 87 |
| 235 | Controlling number of indene solubilizing groups in multiadduct fullerenes for tuning optoelectronic properties and open-circuit voltage in organic solar cells. <i>ACS Applied Materials & Interfaces</i> , 2012 , 4, 110-6 | 9.5 | 86 |
| 234 | Architectural engineering of rod-coil compatibilizers for producing mechanically and thermally stable polymer solar cells. <i>ACS Nano</i> , 2014 , 8, 10461-70 | 16.7 | 80 |
| 233 | Correlation between Phase-Separated Domain Sizes of Active Layer and Photovoltaic Performances in All-Polymer Solar Cells. <i>Macromolecules</i> , 2016 , 49, 5051-5058 | 5.5 | 80 |
| 232 | Free-standing nanocomposite multilayers with various length scales, adjustable internal structures, and functionalities. <i>Journal of the American Chemical Society</i> , 2009 , 131, 2579-87 | 16.4 | 76 |
| 231 | Fluorescent and pH-responsive diblock copolymer-coated core-shell CdSe/ZnS particles for a color-displaying, ratiometric pH sensor. <i>Chemical Communications</i> , 2011 , 47, 10272-4 | 5.8 | 72 |
| 230 | Particles with Tunable Porosity and Morphology by Controlling Interfacial Instability in Block Copolymer Emulsions. <i>ACS Nano</i> , 2016 , 10, 5243-51 | 16.7 | 72 |
| 229 | Precise control of quantum dot location within the P3HT-b-P2VP/QD nanowires formed by crystallization-driven 1D growth of hybrid dimeric seeds. <i>Journal of the American Chemical Society</i> , 2014 , 136, 2767-74 | 16.4 | 69 |
| 228 | Influence of intermolecular interactions of electron donating small molecules on their molecular packing and performance in organic electronic devices. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 14538 | 13 | 68 |
| 227 | Controlled Ordering of Block Copolymer Thin Films by the Addition of Hydrophilic Nanoparticles. <i>Macromolecules</i> , 2007 , 40, 8119-8124 | 5.5 | 68 |
| 226 | Bipolar Copolymers as Host for Electroluminescent Devices: Effects of Molecular Structure on Film Morphology and Device Performance. <i>Macromolecules</i> , 2007 , 40, 8156-8161 | 5.5 | 67 |
| 225 | Gold-decorated block copolymer microspheres with controlled surface nanostructures. <i>ACS Nano</i> , 2012 , 6, 2750-7 | 16.7 | 66 |
| 224 | Multifunctional Crosslinkable Iridium Complexes as Hole Transporting/Electron Blocking and Emitting Materials for Solution-Processed Multilayer Organic Light-Emitting Diodes. <i>Advanced Functional Materials</i> , 2009 , 19, 1024-1031 | 15.6 | 66 |
| 223 | Eco-Friendly Polymer Solar Cells: Advances in Green-Solvent Processing and Material Design. <i>ACS Nano</i> , 2020 , 14, 14493-14527 | 16.7 | 66 |

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|-----|--|------|----|
| 222 | Comparative Study of the Mechanical Properties of All-Polymer and Fullerene Polymer Solar Cells: The Importance of Polymer Acceptors for High Fracture Resistance. <i>Chemistry of Materials</i> , 2018 , 30, 2102-2111 | 9.6 | 65 |
| 221 | Proximity injection of plasticizing molecules to self-assembling polymers for large-area, ultrafast nanopatterning in the sub-10-nm regime. <i>ACS Nano</i> , 2013 , 7, 6747-57 | 16.7 | 65 |
| 220 | Effect of fullerene tris-adducts on the photovoltaic performance of P3HT:fullerene ternary blends. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 4401-8 | 9.5 | 65 |
| 219 | Facile Synthesis of Thermally Stable Core-Shell Gold Nanoparticles via Photo-Cross-Linkable Polymeric Ligands. <i>Macromolecules</i> , 2010 , 43, 3570-3575 | 5.5 | 65 |
| 218 | 100th Anniversary of Macromolecular Science Viewpoint: Block Copolymer Particles: Tuning Shape, Interfaces, and Morphology. <i>ACS Macro Letters</i> , 2020 , 9, 306-317 | 6.6 | 64 |
| 217 | Au@polymer core-shell nanoparticles for simultaneously enhancing efficiency and ambient stability of organic optoelectronic devices. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 16956-65 | 9.5 | 64 |
| 216 | Influence of Acceptor Type and Polymer Molecular Weight on the Mechanical Properties of Polymer Solar Cells. <i>Chemistry of Materials</i> , 2019 , 31, 9057-9069 | 9.6 | 63 |
| 215 | Soft Patchy Particles of Block Copolymers from Interface-Engineered Emulsions. <i>ACS Nano</i> , 2015 , 9, 11338-41 | 7.4 | 62 |
| 214 | Controlling Energy Levels and Blend Morphology for All-Polymer Solar Cells via Fluorination of a Naphthalene Diimide-Based Copolymer Acceptor. <i>Macromolecules</i> , 2016 , 49, 6374-6383 | 5.5 | 62 |
| 213 | Facile Au catalyst loading on the inner shell of hollow SnO ₂ spheres using Au-decorated block copolymer sphere templates and their selective H ₂ S sensing characteristics. <i>Nanoscale</i> , 2014 , 6, 11898-903 | 7.7 | 62 |
| 212 | Engineering the Shape of Block Copolymer Particles by Surface-Modulated Graphene Quantum Dots. <i>Chemistry of Materials</i> , 2016 , 28, 830-837 | 9.6 | 61 |
| 211 | Efficient, Thermally Stable, and Mechanically Robust All-Polymer Solar Cells Consisting of the Same Benzodithiophene Unit-Based Polymer Acceptor and Donor with High Molecular Compatibility. <i>Advanced Energy Materials</i> , 2021 , 11, 2003367 | 21.8 | 61 |
| 210 | Importance of Critical Molecular Weight of Semicrystalline n-Type Polymers for Mechanically Robust, Efficient Electroactive Thin Films. <i>Chemistry of Materials</i> , 2019 , 31, 3163-3173 | 9.6 | 60 |
| 209 | Multicolor Emitting Block Copolymer-Integrated Graphene Quantum Dots for Colorimetric, Simultaneous Sensing of Temperature, pH, and Metal Ions. <i>Chemistry of Materials</i> , 2015 , 27, 5288-5294 | 9.6 | 60 |
| 208 | Design of Cyanovinylene-Containing Polymer Acceptors with Large Dipole Moment Change for Efficient Charge Generation in High-Performance All-Polymer Solar Cells. <i>Advanced Energy Materials</i> , 2018 , 8, 1701436 | 21.8 | 59 |
| 207 | Surface engineering of graphene quantum dots and their applications as efficient surfactants. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 8615-21 | 9.5 | 59 |
| 206 | Shift of the Branching Point of the Side-Chain in Naphthalenediimide (NDI)-Based Polymer for Enhanced Electron Mobility and All-Polymer Solar Cell Performance. <i>Advanced Functional Materials</i> , 2018 , 28, 1803613 | 15.6 | 58 |
| 205 | Importance of 2D Conjugated Side Chains of Benzodithiophene-Based Polymers in Controlling Polymer Packing, Interfacial Ordering, and Composition Variations of All-Polymer Solar Cells. <i>Chemistry of Materials</i> , 2017 , 29, 9407-9415 | 9.6 | 57 |

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| 204 | Impact of the photo-induced degradation of electron acceptors on the photophysics, charge transport and device performance of all-polymer and fullerene polymer solar cells. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 22170-22179 | 13 | 57 |
| 203 | Light-Responsive, Shape-Switchable Block Copolymer Particles. <i>Journal of the American Chemical Society</i> , 2019 , 141, 15348-15355 | 16.4 | 57 |
| 202 | Shape-Tunable Biphasic Janus Particles as pH-Responsive Switchable Surfactants. <i>Macromolecules</i> , 2017 , 50, 9276-9285 | 5.5 | 57 |
| 201 | Freestanding and Arrayed Nanoporous Microcylinders for Highly Active 3D SERS Substrate. <i>Chemistry of Materials</i> , 2013 , 25, 2421-2426 | 9.6 | 57 |
| 200 | One-step fermentative production of aromatic polyesters from glucose by metabolically engineered <i>Escherichia coli</i> strains. <i>Nature Communications</i> , 2018 , 9, 79 | 17.4 | 56 |
| 199 | Photoinduced charge transfer in donor-acceptor (DA) copolymer: fullerene bis-adduct polymer solar cells. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 861-8 | 9.5 | 56 |
| 198 | Size-Controlled Polymer-Coated Nanoparticles as Efficient Compatibilizers for Polymer Blends. <i>Macromolecules</i> , 2011 , 44, 9852-9862 | 5.5 | 55 |
| 197 | Tailoring Core-Shell Polymer-Coated Nanoparticles as Block Copolymer Surfactants. <i>Macromolecules</i> , 2009 , 42, 6193-6201 | 5.5 | 55 |
| 196 | Multicolor emission of hybrid block copolymer-quantum dot microspheres by controlled spatial isolation of quantum dots. <i>Small</i> , 2013 , 9, 2667-72, 2654 | 11 | 54 |
| 195 | Facile Photo-Crosslinking of Azide-Containing Hole-Transporting Polymers for Highly Efficient, Solution-Processed, Multilayer Organic Light Emitting Devices. <i>Advanced Functional Materials</i> , 2014 , 24, 7588-7596 | 15.6 | 54 |
| 194 | Importance of End-Group Structure in Controlling the Interfacial Activity of Polymer-Coated Nanoparticles. <i>Macromolecules</i> , 2007 , 40, 1796-1798 | 5.5 | 54 |
| 193 | Monodisperse Nanostructured Spheres of Block Copolymers and Nanoparticles via Cross-Flow Membrane Emulsification. <i>Chemistry of Materials</i> , 2015 , 27, 6314-6321 | 9.6 | 53 |
| 192 | Controlling the Orientation of Block Copolymer Thin Films using Thermally-Stable Gold Nanoparticles with Tuned Surface Chemistry. <i>Macromolecules</i> , 2011 , 44, 9356-9365 | 5.5 | 53 |
| 191 | High-crystalline medium-band-gap polymers consisting of benzodithiophene and benzotriazole derivatives for organic photovoltaic cells. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 12820-31 | 9.5 | 52 |
| 190 | Novel Templating Route Using Pt Infiltrated Block Copolymer Microparticles for Catalytic Pt Functionalized Macroporous WO ₃ Nanofibers and Its Application in Breath Pattern Recognition. <i>ACS Sensors</i> , 2016 , 1, 1124-1131 | 9.2 | 52 |
| 189 | Regioregular Narrow-Bandgap n-Type Polymers with High Electron Mobility Enabling Highly Efficient All-Polymer Solar Cells. <i>Advanced Materials</i> , 2021 , 33, e2102635 | 24 | 51 |
| 188 | Shape and Color Switchable Block Copolymer Particles by Temperature and pH Dual Responses. <i>ACS Nano</i> , 2019 , 13, 4230-4237 | 16.7 | 50 |
| 187 | Ethanol-Processable, Highly Crystalline Conjugated Polymers for Eco-Friendly Fabrication of Organic Transistors and Solar Cells. <i>Macromolecules</i> , 2017 , 50, 4415-4424 | 5.5 | 49 |

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| 186 | Interfacial Roughening Induced by the Reaction of End-Functionalized Polymers at a PS/P2VP Interface: Quantitative Analysis by DSIMS. <i>Macromolecules</i> , 2005 , 38, 6106-6114 | 5.5 | 49 |
| 185 | The effect of side-chain length on regioregular poly[3-(4-n-alkyl)phenylthiophene]/PCBM and ICBA polymer solar cells. <i>Journal of Materials Chemistry</i> , 2012 , 22, 14236 | | 48 |
| 184 | Stimuli-Responsive, Shape-Transforming Nanostructured Particles. <i>Advanced Materials</i> , 2017 , 29, 1700604 | 5.4 | 48 |
| 183 | Highly sensitive and selective liquid-phase sensors based on a solvent-resistant organic-transistor platform. <i>Advanced Materials</i> , 2015 , 27, 1540-6 | 24 | 47 |
| 182 | Naphthalene Diimide-Based Terpolymers with Controlled Crystalline Properties for Producing High Electron Mobility and Optimal Blend Morphology in All-Polymer Solar Cells. <i>Chemistry of Materials</i> , 2020 , 32, 2572-2582 | 9.6 | 46 |
| 181 | Effect of Incorporated Nitrogens on the Planarity and Photovoltaic Performance of Donor-Acceptor Copolymers. <i>Macromolecules</i> , 2012 , 45, 6415-6423 | 5.5 | 46 |
| 180 | Synthesis of thermally stable Au-core/Pt-shell nanoparticles and their segregation behavior in diblock copolymer mixtures. <i>Soft Matter</i> , 2011 , 7, 6255 | 3.6 | 45 |
| 179 | Elastomeric electrolytes for high-energy solid-state lithium batteries.. <i>Nature</i> , 2022 , 601, 217-222 | 50.4 | 45 |
| 178 | Hierarchically Structured Colloids of Diblock Copolymers and Au Nanoparticles. <i>Chemistry of Materials</i> , 2009 , 21, 3739-3741 | 9.6 | 44 |
| 177 | Mechanically robust and high-performance ternary solar cells combining the merits of all-polymer and fullerene blends. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 4494-4503 | 13 | 43 |
| 176 | Bicontinuous Block Copolymer Morphologies Produced by Interfacially Active, Thermally Stable Nanoparticles. <i>Macromolecules</i> , 2011 , 44, 9366-9373 | 5.5 | 42 |
| 175 | Click-Synthesis of thermally stable au nanoparticles with highly grafted polymer shell and control of their behavior in polymer matrix. <i>Journal of Polymer Science Part A</i> , 2011 , 49, 3464-3474 | 2.5 | 42 |
| 174 | Ionic Liquid-Carbon Nanotube Sensor Arrays for Human Breath Related Volatile Organic Compounds. <i>ACS Sensors</i> , 2018 , 3, 2432-2437 | 9.2 | 42 |
| 173 | The Impact of Sequential Fluorination of Conjugated Polymers on Charge Generation in All-Polymer Solar Cells. <i>Advanced Functional Materials</i> , 2017 , 27, 1701256 | 15.6 | 41 |
| 172 | Switchable Full-Color Reflective Photonic Ellipsoidal Particles. <i>Journal of the American Chemical Society</i> , 2020 , 142, 10424-10430 | 16.4 | 41 |
| 171 | Efficient temperature sensing platform based on fluorescent block copolymer-functionalized graphene oxide. <i>Nanoscale</i> , 2013 , 5, 5720-4 | 7.7 | 41 |
| 170 | Colorimetric Thermometer from Graphene Oxide Platform Integrated with Red, Green, and Blue Emitting, Responsive Block Copolymers. <i>Chemistry of Materials</i> , 2016 , 28, 3446-3453 | 9.6 | 40 |
| 169 | Poly(benzodithiophene) Homopolymer for High-Performance Polymer Solar Cells with Open-Circuit Voltage of Near 1 V: A Superior Candidate To Substitute for Poly(3-hexylthiophene) as Wide Bandgap Polymer. <i>Chemistry of Materials</i> , 2015 , 27, 2653-2658 | 9.6 | 39 |

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|-----|---|------|----|
| 168 | Controlling side-chain density of electron donating polymers for improving their packing structure and photovoltaic performance. <i>Chemical Communications</i> , 2011 , 47, 3577-9 | 5.8 | 39 |
| 167 | Microcapsules Containing pH-Responsive, Fluorescent Polymer-Integrated MoS: An Effective Platform for in Situ pH Sensing and Photothermal Heating. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 9023-9031 | 9.5 | 38 |
| 166 | Donor-Acceptor Random versus Alternating Copolymers for Efficient Polymer Solar Cells: Importance of Optimal Composition in Random Copolymers. <i>Macromolecules</i> , 2016 , 49, 2096-2105 | 5.5 | 38 |
| 165 | Origin of the High Donor-Acceptor Composition Tolerance in Device Performance and Mechanical Robustness of All-Polymer Solar Cells. <i>Chemistry of Materials</i> , 2020 , 32, 582-594 | 9.6 | 38 |
| 164 | Metal Halide Regulated Photophysical Tuning of Zero-Dimensional Organic Metal Halide Hybrids: From Efficient Phosphorescence to Ultralong Afterglow. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 23067-23071 | 16.4 | 37 |
| 163 | Shape-Anisotropic Diblock Copolymer Particles from Evaporative Emulsions: Experiment and Theory. <i>Macromolecules</i> , 2019 , 52, 1150-1157 | 5.5 | 36 |
| 162 | Highly Luminescent Polymer Particles Driven by Thermally Reduced Graphene Quantum Dot Surfactants. <i>ACS Macro Letters</i> , 2014 , 3, 985-990 | 6.6 | 36 |
| 161 | Aspect ratio effect of nanorod surfactants on the shape and internal morphology of block copolymer particles. <i>Journal of Polymer Science Part A</i> , 2015 , 53, 188-192 | 2.5 | 36 |
| 160 | Rationally Designed Donor-Acceptor Random Copolymers with Optimized Complementary Light Absorption for Highly Efficient All-Polymer Solar Cells. <i>Advanced Functional Materials</i> , 2017 , 27, 1703070 | 15.6 | 35 |
| 159 | Molecular Design of Graft-Assembly for Ordered Microphase Separation of P3HT-Based Rod-Coil Copolymers. <i>Macromolecules</i> , 2013 , 46, 8472-8478 | 5.5 | 34 |
| 158 | Asymmetric Electron-Donating 4-Alkyl-8-alkoxybenzo[1,2-b:4,5-b']dithiophene Unit for Use in High-Efficiency Bulk Heterojunction Polymer Solar Cells. <i>Macromolecules</i> , 2015 , 48, 3918-3927 | 5.5 | 34 |
| 157 | Flexible-spacer incorporated polymer donors enable superior blend miscibility for high-performance and mechanically-robust polymer solar cells. <i>Energy and Environmental Science</i> , 2021 , 14, 4067-4076 | 35.4 | 34 |
| 156 | Efficient and Air-Stable Aqueous-Processed Organic Solar Cells and Transistors: Impact of Water Addition on Processability and Thin-Film Morphologies of Electroactive Materials. <i>Advanced Energy Materials</i> , 2018 , 8, 1802674 | 21.8 | 34 |
| 155 | Fluorescent Block Copolymer-MoS ₂ Nanocomposites for Real-Time Photothermal Heating and Imaging. <i>Advanced Functional Materials</i> , 2017 , 27, 1604403 | 15.6 | 33 |
| 154 | Improved Internal Quantum Efficiency and Light-Extraction Efficiency of Organic Light-Emitting Diodes via Synergistic Doping with Au and Ag Nanoparticles. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 27911-27919 | 9.5 | 33 |
| 153 | Surface Intaglio Nanostructures on Microspheres of Gold-Cored Block Copolymer Spheres. <i>Chemistry of Materials</i> , 2013 , 25, 4416-4422 | 9.6 | 31 |
| 152 | Development of Shape-Tuned, Monodisperse Block Copolymer Particles through Solvent-Mediated Particle Restructuring. <i>Chemistry of Materials</i> , 2019 , 31, 1066-1074 | 9.6 | 31 |
| 151 | Aqueous-Soluble Naphthalene Diimide-Based Polymer Acceptors for Efficient and Air-Stable All-Polymer Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 45038-45047 | 9.5 | 30 |

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|-----|--|------|----|
| 150 | Naphthalene-, anthracene-, and pyrene-substituted fullerene derivatives as electron acceptors in polymer-based solar cells. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 20776-85 | 9.5 | 30 |
| 149 | Nanosphere templated continuous PEDOT:PSS films with low percolation threshold for application in efficient polymer solar cells. <i>ACS Nano</i> , 2012 , 6, 7902-9 | 16.7 | 30 |
| 148 | Synthesis and Photovoltaic Performance of Low-Bandgap Polymers on the Basis of 9,9-Dialkyl-3,6-dialkyloxysilafluorene. <i>Macromolecules</i> , 2011 , 44, 502-511 | 5.5 | 30 |
| 147 | Prediction of Lower Limb Kinetics and Kinematics during Walking by a Single IMU on the Lower Back Using Machine Learning. <i>Sensors</i> , 2019 , 20, | 3.8 | 30 |
| 146 | Achieving highly efficient all-polymer solar cells by green-solvent-processing under ambient atmosphere. <i>Energy and Environmental Science</i> , | 35.4 | 30 |
| 145 | Nanoimprinting-induced nanomorphological transition in polymer solar cells: enhanced electrical and optical performance. <i>ACS Nano</i> , 2015 , 9, 2773-82 | 16.7 | 29 |
| 144 | Creating opal-templated continuous conducting polymer films with ultralow percolation thresholds using thermally stable nanoparticles. <i>ACS Nano</i> , 2011 , 5, 9017-27 | 16.7 | 29 |
| 143 | Low-Temperature Processable High-Performance D _A -Type Random Copolymers for Nonfullerene Polymer Solar Cells and Application to Flexible Devices. <i>Advanced Energy Materials</i> , 2018 , 8, 1801601 | 21.8 | 29 |
| 142 | Aspect Ratio-Controlled Synthesis of Uniform Colloidal Block Copolymer Ellipsoids from Evaporative Emulsions. <i>Chemistry of Materials</i> , 2018 , 30, 6277-6288 | 9.6 | 28 |
| 141 | 'Click' preparation of CuPt nanorod-anchored graphene oxide as a catalyst in water. <i>Small</i> , 2012 , 8, 3161-8 | 11.8 | 28 |
| 140 | Highly durable fuel cell catalysts using crosslinkable block copolymer-based carbon supports with ultralow Pt loadings. <i>Energy and Environmental Science</i> , 2020 , 13, 4921-4929 | 35.4 | 28 |
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