

Serge BeauprÃ©

List of Publications by Year in descending order

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papers

10,820
citations

81900

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docs citations

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times ranked

9234
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 1 | Bulk heterojunction solar cells with internal quantum efficiency approaching 100%. <i>Nature Photonics</i> , 2009, 3, 297-302. | 31.4 | 3,903 |
| 2 | Bulk Heterojunction Solar Cells Using Thieno[3,4- <i>c</i>]pyrrole-4,6-dione and Dithieno[3,2- <i>b</i> :2,3- <i>d'</i>]silole Copolymer with a Power Conversion Efficiency of 7.3%. <i>Journal of the American Chemical Society</i> , 2011, 133, 4250-4253. | 13.7 | 1,047 |
| 3 | A Thieno[3,4- <i>c</i>]pyrrole-4,6-dione-Based Copolymer for Efficient Solar Cells. <i>Journal of the American Chemical Society</i> , 2010, 132, 5330-5331. | 13.7 | 747 |
| 4 | Direct (Hetero)arylation Polymerization: Simplicity for Conjugated Polymer Synthesis. <i>Chemical Reviews</i> , 2016, 116, 14225-14274. | 47.7 | 402 |
| 5 | High Efficiency Polymer Solar Cells with Long Operating Lifetimes. <i>Advanced Energy Materials</i> , 2011, 1, 491-494. | 19.5 | 395 |
| 6 | Fused Benzothiadiazole: A Building Block for n-Type Organic Acceptor to Achieve High Performance Organic Solar Cells. <i>Advanced Materials</i> , 2019, 31, e1807577. | 21.0 | 297 |
| 7 | Light-Emitting Diodes from Fluorene-Based π -Conjugated Polymers. <i>Chemistry of Materials</i> , 2000, 12, 1931-1936. | 6.7 | 252 |
| 8 | Effects of the Molecular Weight and the Side Chain Length on the Photovoltaic Performance of Dithienosilole/Thienopyrrolodione Copolymers. <i>Advanced Functional Materials</i> , 2012, 22, 2345-2351. | 14.9 | 223 |
| 9 | Solar Energy Production and Energy Efficient Lighting: Photovoltaic Devices and White Light Emitting Diodes Using Poly(2,7-fluorene), Poly(2,7-carbazole), and Poly(2,7-dibenzosilole) Derivatives. <i>Advanced Materials</i> , 2010, 22, E6-E27. | 21.0 | 220 |
| 10 | Highly efficient organic solar cells based on a poly(2,7-carbazole) derivative. <i>Journal of Materials Chemistry</i> , 2009, 19, 5351. | 6.7 | 185 |
| 11 | Polycarbazoles for plastic electronics. <i>Polymer Chemistry</i> , 2010, 1, 127-136. | 3.9 | 172 |
| 12 | PCDTBT: en route for low cost plastic solar cells. <i>Journal of Materials Chemistry A</i> , 2013, 1, 11097. | 10.3 | 171 |
| 13 | Synthesis and Characterization of New Thieno[3,4- <i>c</i>]pyrrole-4,6-dione Derivatives for Photovoltaic Applications. <i>Advanced Functional Materials</i> , 2011, 21, 718-728. | 14.9 | 170 |
| 14 | A Thermally Stable Semiconducting Polymer. <i>Advanced Materials</i> , 2010, 22, 1253-1257. | 21.0 | 165 |
| 15 | Multicolored Electrochromic Cells Based On Poly(2,7-Carbazole) Derivatives For Adaptive Camouflage. <i>Chemistry of Materials</i> , 2009, 21, 1504-1513. | 6.7 | 158 |
| 16 | Theoretical and Experimental Investigations of the Spectroscopic and Photophysical Properties of Fluorene-Phenylene and Fluorene-Thiophene Derivatives: Precursors of Light-Emitting Polymers. <i>Journal of Physical Chemistry B</i> , 2000, 104, 9118-9125. | 2.6 | 151 |
| 17 | Toward the Development of New Textile/Plastic Electrochromic Cells Using Triphenylamine-Based Copolymers. <i>Chemistry of Materials</i> , 2006, 18, 4011-4018. | 6.7 | 143 |
| 18 | Highly-efficient charge separation and polaron delocalization in polymer-fullerene bulk-heterojunctions: a comparative multi-frequency EPR and DFT study. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 9562. | 2.8 | 135 |

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|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 19 | Charge carrier photogeneration and decay dynamics in the poly(2,7-carbazole) copolymer PCDTBT and in bulk heterojunction composites with $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \langle \text{mml:mrow} \langle \text{mml:msub} \langle \text{mml:mrow} \langle \text{mml:mtext} \text{PC} \langle \text{mml:mrow} \langle \text{mml:mn} \text{70} \langle \text{mml:mtext} \text{nm} \text{Physical Review B, 2010, 81, ...}$ | 3.2 | 117 |
| 20 | Molecular Design and Characterization of Chromic Polyfluorene Derivatives. <i>Macromolecules</i> , 2000, 33, 5874-5879. | 4.8 | 109 |
| 21 | Highly efficient polycarbazole-based organic photovoltaic devices. <i>Applied Physics Letters</i> , 2009, 95, 063304. | 3.3 | 107 |
| 22 | Control of the active layer nanomorphology by using co-additives towards high-performance bulk heterojunction solar cells. <i>Organic Electronics</i> , 2012, 13, 1736-1741. | 2.6 | 103 |
| 23 | Blue light-emitting devices from new conjugated poly(N-substituted-2,7-carbazole) derivatives. <i>Applied Physics Letters</i> , 2002, 80, 341-343. | 3.3 | 89 |
| 24 | High-efficiency inverted solar cells based on a low bandgap polymer with excellent air stability. <i>Solar Energy Materials and Solar Cells</i> , 2012, 96, 155-159. | 6.2 | 89 |
| 25 | Increasing Polymer Solar Cell Fill Factor by Trap Filling with F4TCNQ at Parts Per Thousand Concentration. <i>Advanced Materials</i> , 2016, 28, 6491-6496. | 21.0 | 85 |
| 26 | Effect of mixed solvents on PCDTBT:PC70BM based solar cells. <i>Organic Electronics</i> , 2011, 12, 1788-1793. | 2.6 | 82 |
| 27 | Thieno-, Furo-, and Selenopheno[3,4- <i>c</i>]pyrrole-4,6-dione Copolymers: Effect of the Heteroatom on the Electrooptical Properties. <i>Macromolecules</i> , 2012, 45, 6906-6914. | 4.8 | 79 |
| 28 | Impact of UV-Visible Light on the Morphological and Photochemical Behavior of a Low-Bandgap Poly(2,7-Carbazole) Derivative for Use in High-Performance Solar Cells. <i>Advanced Energy Materials</i> , 2013, 3, 478-487. | 19.5 | 75 |
| 29 | Direct heteroarylation polymerization: guidelines for defect-free conjugated polymers. <i>Chemical Science</i> , 2017, 8, 3913-3925. | 7.4 | 70 |
| 30 | Work Function Control of Interfacial Buffer Layers for Efficient and Air-Stable Inverted Low-Bandgap Organic Photovoltaics. <i>Advanced Energy Materials</i> , 2012, 2, 361-368. | 19.5 | 56 |
| 31 | New Fluorinated Dithienyldiketopyrrolopyrrole Monomers and Polymers for Organic Electronics. <i>Macromolecules</i> , 2017, 50, 7080-7090. | 4.8 | 50 |
| 32 | Spectroscopic and Photophysical Properties of Thiophene-Fluorene Oligomers as well as Their Corresponding Polyesters. <i>Macromolecules</i> , 2001, 34, 2288-2297. | 4.8 | 48 |
| 33 | Photoinduced Dynamics of Charge Separation: From Photosynthesis to Polymer-Fullerene Bulk Heterojunctions. <i>Journal of Physical Chemistry B</i> , 2015, 119, 7407-7416. | 2.6 | 48 |
| 34 | Direct heteroarylation of \hat{I}^2 -protected dithienosilole and dithienogermole monomers with thieno[3,4- <i>c</i>]pyrrole-4,6-dione and furo[3,4- <i>c</i>]pyrrole-4,6-dione. <i>Polymer Chemistry</i> , 2013, 4, 5252. | 3.9 | 47 |
| 35 | Conformational, optical and photophysical properties of a substituted terfluorene isolated and incorporated in a polyester. <i>Chemical Physics Letters</i> , 2000, 316, 101-107. | 2.6 | 45 |
| 36 | Ultrafast relaxation of charge-transfer excitons in low-bandgap conjugated copolymers. <i>Chemical Science</i> , 2012, 3, 2270. | 7.4 | 44 |

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|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 37 | Synthesis and characterization of a novel polyester derived from substituted terfluorene. <i>Macromolecular Rapid Communications</i> , 2000, 21, 1013-1018. | 3.9 | 42 |
| 38 | Highly efficient thieno[3,4-c]pyrrole-4,6-dione-based solar cells processed from non-chlorinated solvent. <i>Organic Electronics</i> , 2014, 15, 543-548. | 2.6 | 40 |
| 39 | How Photoinduced Crosslinking Under Operating Conditions Can Reduce PCDTBT-Based Solar Cell Efficiency and then Stabilize It. <i>Advanced Energy Materials</i> , 2014, 4, 1301530. | 19.5 | 39 |
| 40 | Is there a photostable conjugated polymer for efficient solar cells?. <i>Polymer Degradation and Stability</i> , 2015, 112, 175-184. | 5.8 | 38 |
| 41 | Optical and Electrical Properties of π -Conjugated Polymers Based on Electron-Rich 3,6-Dimethoxy-9,9-dihexylfluorene Unit. <i>Macromolecules</i> , 2003, 36, 8986-8991. | 4.8 | 34 |
| 42 | Direct (hetero)arylation polymerization: toward defect-free conjugated polymers. <i>Polymer Journal</i> , 2020, 52, 13-20. | 2.7 | 34 |
| 43 | Rational Design of Poly(2,7-Carbazole) Derivatives for Photovoltaic Applications. <i>Macromolecular Theory and Simulations</i> , 2011, 20, 13-18. | 1.4 | 31 |
| 44 | Electronic Structure of Fullerene Heterodimer in Bulk-Heterojunction Blends. <i>Advanced Energy Materials</i> , 2014, 4, 1301517. | 19.5 | 30 |
| 45 | A Study of the Degree of Fluorination in Regioregular Poly(3-hexylthiophene). <i>Macromolecules</i> , 2017, 50, 162-174. | 4.8 | 30 |
| 46 | Intensity Dependent Femtosecond Dynamics in a PBDTPD-Based Solar Cell Material. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 2952-2958. | 4.6 | 28 |
| 47 | Fluorinated Thiophene-Based Synthons: Polymerization of 1,4-Dialkoxybenzene and Fluorinated Dithieno-2,1,3-benzothiadiazole by Direct Heteroarylation. <i>Macromolecules</i> , 2017, 50, 4658-4667. | 4.8 | 28 |
| 48 | Elucidating the Impact of Molecular Packing and Device Architecture on the Performance of Nanostructured Perylene Diimide Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 8687-8698. | 8.0 | 26 |
| 49 | Donor-acceptor alternating copolymers containing thienopyrroledione electron accepting units: preparation, redox behaviour, and application to photovoltaic cells. <i>Polymer Chemistry</i> , 2012, 3, 2355. | 3.9 | 24 |
| 50 | Random A ₁ -A ₂ terpolymers based on benzodithiophene, thiadiazole[3,4-e]isoindole-5,7-dione and thieno[3,4-c]pyrrole-4,6-dione for efficient polymer solar cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 6638-6647. | 10.3 | 21 |
| 51 | Thieno, Furo, and Selenopheno[3,4- <i>i</i>]pyrrole-4,6-dione Copolymers: Air-Processed Polymer Solar Cells with Power Conversion Efficiency up to 7.1%. <i>Advanced Energy Materials</i> , 2015, 5, 1501213. | 19.5 | 20 |
| 52 | Electronic spectroscopy and photophysics of phenylene-fluorene derivatives as well as their corresponding polyesters. <i>Synthetic Metals</i> , 2002, 126, 43-51. | 3.9 | 19 |
| 53 | Slow geminate-charge-pair recombination dynamics at polymer: Fullerene heterojunctions in efficient organic solar cells. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2012, 50, 1395-1404. | 2.1 | 12 |
| 54 | High open-circuit voltage solar cells using a new thieno[3,4-c] pyrrole-4,6-dione based copolymer. <i>Synthetic Metals</i> , 2013, 182, 9-12. | 3.9 | 9 |

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|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 55 | Solution Processed Organic Tandem Solar Cells. Energy Procedia, 2012, 31, 159-166. | 1.8 | 7 |
| 56 | Photovoltaic device performance of highly regioregular fluorinated poly(3-hexylthiophene). Organic Electronics, 2017, 50, 115-120. | 2.6 | 7 |
| 57 | Theoretical Calculations for Highly Selective Direct Heteroarylation Polymerization: New Nitrile-Substituted Dithienyl-Diketopyrrolopyrrole-Based Polymers. Molecules, 2018, 23, 2324. | 3.8 | 7 |
| 58 | 2008 Macromolecular Science and Engineering Division Award Lecture "Conjugated polymers: From micro-electronics to genomics. Canadian Journal of Chemistry, 2009, 87, 1201-1208. | 1.1 | 6 |
| 59 | Design, Synthesis and Characterization of Polymers Derived from Fluorene for Application in RGB Polymer Light-Emitting-Diodes. Materials Research Society Symposia Proceedings, 2001, 665, 1. | 0.1 | 2 |
| 60 | Charge Transfer: Electronic Structure of Fullerene Heterodimer in Bulk Heterojunction Blends (Adv.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf | 19.5 | 2 |
| 61 | Bulk heterojunction solar cells with internal quantum efficiency approaching 100%. , 0, . | | 1 |