

Jegadesan Subbiah

List of Publications by Year in descending order

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papers

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docs citations

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8416
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| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | One-Pot Synthesis of Fully Conjugated Amphiphilic Block Copolymers Using Asymmetrically Functionalized Push-Pull Monomers. <i>Macromolecules</i> , 2022, 55, 2872-2881. | 4.8 | 1 |
| 2 | Power losses in conventional and inverted non-polymeric donor:fullerene bulk heterojunction solar cells - The role of vertical phase separation in BQR:PC71BM blends. <i>Organic Electronics</i> , 2022, 108, 106594. | 2.6 | 0 |
| 3 | Effect of Side-Chain Modification on the Active Layer Morphology and Photovoltaic Performance of Liquid Crystalline Molecular Materials. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 1086-1093. | 8.0 | 13 |
| 4 | Pyridine End-Capped Polymer to Stabilize Organic Nanoparticle Dispersions for Solar Cell Fabrication through Reversible Pyridinium Salt Formation. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 36044-36052. | 8.0 | 7 |
| 5 | Reduced Recombination and Capacitor-like Charge Buildup in an Organic Heterojunction. <i>Journal of the American Chemical Society</i> , 2020, 142, 2562-2571. | 13.7 | 27 |
| 6 | A structural study of p-type A ² A oligothiophenes: effects of regioregular alkyl sidechains on annealing processes and photovoltaic performances. <i>Journal of Materials Chemistry C</i> , 2020, 8, 567-580. | 5.5 | 4 |
| 7 | Experimental Evidence Relating Charge-Transfer-State Kinetics and Strongly Reduced Bimolecular Recombination in Organic Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 10519-10525. | 4.6 | 6 |
| 8 | High-Performance Large-Area Luminescence Solar Concentrator Incorporating a Donor-Emitter Fluorophore System. <i>ACS Energy Letters</i> , 2019, 4, 1839-1844. | 17.4 | 42 |
| 9 | Flexible ITO-Free Organic Photovoltaics on Ultra-Thin Flexible Glass Substrates with High Efficiency and Improved Stability. <i>Solar Rrl</i> , 2019, 3, 1800286. | 5.8 | 5 |
| 10 | Naphthalimide end-capped diphenylacetylene: a versatile organic semiconductor for blue light emitting diodes and a donor or an acceptor for solar cells. <i>New Journal of Chemistry</i> , 2019, 43, 9243-9254. | 2.8 | 15 |
| 11 | Graphene-Based Transparent Conducting Electrodes for High Efficiency Flexible Organic Photovoltaics: Elucidating the Source of the Power Losses. <i>Solar Rrl</i> , 2019, 3, 1900042. | 5.8 | 13 |
| 12 | Solubilizing core modifications on high-performing benzodithiophene-based molecular semiconductors and their influences on film nanostructure and photovoltaic performance. <i>Journal of Materials Chemistry A</i> , 2019, 7, 6312-6326. | 10.3 | 16 |
| 13 | A Novel Epigenetic Drug-Eluting Balloon Angioplasty Device: Evaluation in a Large Animal Model of Neointimal Hyperplasia. <i>Cardiovascular Drugs and Therapy</i> , 2019, 33, 687-692. | 2.6 | 3 |
| 14 | Phthalimide and naphthalimide: Effect of end-capping groups on molecular properties and photovoltaic performance of 9-fluorenone based acceptors for organic solar cells. <i>Organic Electronics</i> , 2018, 62, 12-20. | 2.6 | 10 |
| 15 | Beyond Fullerenes: Indacenodithiophene-Based Organic Charge-Transport Layer toward Upscaling of Low-Cost Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 22143-22155. | 8.0 | 27 |
| 16 | A Green Route to Conjugated Polyelectrolyte Interlayers for High-Performance Solar Cells. <i>Angewandte Chemie</i> , 2017, 129, 8551-8554. | 2.0 | 10 |
| 17 | A Green Route to Conjugated Polyelectrolyte Interlayers for High-Performance Solar Cells. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 8431-8434. | 13.8 | 37 |
| 18 | Printing-friendly sequential deposition via intra-additive approach for roll-to-roll process of perovskite solar cells. <i>Nano Energy</i> , 2017, 41, 443-451. | 16.0 | 91 |

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|----|--|------|-----------|
| 19 | Morphological and Device Evaluation of an Amphiphilic Block Copolymer for Organic Photovoltaic Applications. <i>Macromolecules</i> , 2017, 50, 4942-4951. | 4.8 | 22 |
| 20 | High performance molecular donors for organic solar cells, materials design and device optimization. , 2017, , . | | 0 |
| 21 | Separation and identification of indeneâ€C₇₀ bisadduct isomers. <i>Beilstein Journal of Organic Chemistry</i> , 2016, 12, 903-911. | 2.2 | 6 |
| 22 | High performance p-type molecular electron donors for OPV applications via alkylthiophene catenation chromophore extension. <i>Beilstein Journal of Organic Chemistry</i> , 2016, 12, 2298-2314. | 2.2 | 25 |
| 23 | Development of a High-Performance Donorâ€“Acceptor Conjugated Polymer: Synergy in Materials and Device Optimization. <i>Chemistry of Materials</i> , 2016, 28, 3481-3487. | 6.7 | 35 |
| 24 | Reduced Recombination in High Efficiency Molecular Nematic Liquid Crystalline: Fullerene Solar Cells. <i>Advanced Energy Materials</i> , 2016, 6, 1600939. | 19.5 | 68 |
| 25 | Efficient, square-centimetre inverted organic solar cell using a metal grid coated transparent electrode (Conference Presentation). , 2016, , . | | 0 |
| 26 | Controlled Synthesis of Wellâ€“Defined Semiconducting Brush Polymers. <i>Macromolecular Chemistry and Physics</i> , 2016, 217, 403-413. | 2.2 | 9 |
| 27 | Fullerene peapod nanoparticles as an organic semiconductorâ€“electrode interface layer. <i>Chemical Communications</i> , 2016, 52, 3356-3359. | 4.1 | 17 |
| 28 | Reverse gravure coating for roll-to-roll production of organic photovoltaics. <i>Solar Energy Materials and Solar Cells</i> , 2016, 149, 154-161. | 6.2 | 46 |
| 29 | Plasma deposition of organic polymer films for solar cell applications. <i>Organic Electronics</i> , 2016, 32, 78-82. | 2.6 | 13 |
| 30 | One-pot selective synthesis of a fullerene bisadduct for organic solar cell applications. <i>Chemical Communications</i> , 2015, 51, 9837-9840. | 4.1 | 20 |
| 31 | Toward Large Scale Rollâ€“toâ€“Roll Production of Fully Printed Perovskite Solar Cells. <i>Advanced Materials</i> , 2015, 27, 1241-1247. | 21.0 | 785 |
| 32 | Effect of molecular weight on the properties and organic solar cell device performance of a donorâ€“acceptor conjugated polymer. <i>Polymer Chemistry</i> , 2015, 6, 2312-2318. | 3.9 | 70 |
| 33 | A molecular nematic liquid crystalline material for high-performance organic photovoltaics. <i>Nature Communications</i> , 2015, 6, 6013. | 12.8 | 541 |
| 34 | Organic Solar Cells Using a Highâ€“Molecularâ€“Weight Benzodithiopheneâ€“Benzothiadiazole Copolymer with an Efficiency of 9.4%. <i>Advanced Materials</i> , 2015, 27, 702-705. | 21.0 | 188 |
| 35 | Solution Processed Polymer Near-Infrared Photodiode With Electron and Hole Blockers. <i>IEEE Transactions on Electron Devices</i> , 2014, 61, 3852-3857. | 3.0 | 11 |
| 36 | Polymer Spraying for Aerosol Jet Etching of Dielectrics for 156-mm Silicon Wafers. <i>Materials Research Society Symposia Proceedings</i> , 2014, 1630, 1. | 0.1 | 1 |

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|----|--|------|-----------|
| 37 | Understanding the chemical origin of improved thin-film device performance from photodoped ZnO nanoparticles. <i>Solar Energy Materials and Solar Cells</i> , 2014, 124, 211-216. | 6.2 | 20 |
| 38 | Thiazolyl substituted benzodithiophene copolymers: synthesis, properties and photovoltaic applications. <i>Journal of Materials Chemistry C</i> , 2014, 2, 1306-1313. | 5.5 | 25 |
| 39 | Highly ordered anodized Nb ₂ O ₅ nanochannels for dye-sensitized solar cells. <i>Electrochemistry Communications</i> , 2014, 40, 20-23. | 4.7 | 61 |
| 40 | Benzotriazole-based donor-acceptor conjugated polymers with a broad absorption in the visible range. <i>Polymer Chemistry</i> , 2014, 5, 1258-1263. | 3.9 | 26 |
| 41 | Synthesis and photovoltaic properties of thieno[3,2-b]thiophenyl substituted benzo[1,2-b:4,5-b']dithiophene copolymers. <i>Polymer Chemistry</i> , 2014, 5, 6710-6717. | 3.9 | 10 |
| 42 | Single Isomer of Indene-C ₇₀ Bisadduct Isolation and Performance in Bulk Heterojunction Solar Cells. <i>Chemistry of Materials</i> , 2014, 26, 1686-1689. | 6.7 | 55 |
| 43 | Hydrogen bonding in bulk heterojunction solar cells: A case study. <i>Scientific Reports</i> , 2014, 4, 5701. | 3.3 | 25 |
| 44 | Transparent metal electrodes from ordered nanosphere arrays. <i>Journal of Applied Physics</i> , 2013, 114, . | 2.5 | 38 |
| 45 | Organic photovoltaic modules fabricated by an industrial gravure printing proofer. <i>Solar Energy Materials and Solar Cells</i> , 2013, 109, 47-55. | 6.2 | 103 |
| 46 | Enhanced photovoltaic efficiency via light-triggered self-assembly. <i>Chemical Communications</i> , 2013, 49, 6552. | 4.1 | 42 |
| 47 | Bulk Heterojunction Nanomorphology of Fluorenyl Hexa-peri-hexabenzocoronene Fullerene Blend Films. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 11554-11562. | 8.0 | 12 |
| 48 | Electron deficient conjugated polymers based on benzotriazole. <i>Polymer Chemistry</i> , 2013, 4, 1077-1083. | 3.9 | 36 |
| 49 | Interlayers for Efficient Electron Injection in Polymer LEDs. <i>Journal of Display Technology</i> , 2013, 9, 469-475. | 1.2 | 3 |
| 50 | Loss Mechanisms in Thick-Film Low-Bandgap Polymer Solar Cells. <i>Advanced Energy Materials</i> , 2013, 3, 909-916. | 19.5 | 52 |
| 51 | Enhancement of efficiency in organic photovoltaic devices containing self-complementary hydrogen-bonding domains. <i>Beilstein Journal of Organic Chemistry</i> , 2013, 9, 1102-1110. | 2.2 | 20 |
| 52 | Controlled synthesis of poly(3-hexylthiophene) in continuous flow. <i>Beilstein Journal of Organic Chemistry</i> , 2013, 9, 1492-1500. | 2.2 | 34 |
| 53 | High-performance polymer solar cells with a conjugated zwitterion by solution processing or thermal deposition as the electron-collection interlayer. <i>Journal of Materials Chemistry</i> , 2012, 22, 24155. | 6.7 | 76 |
| 54 | Aesthetically Pleasing Conjugated Polymer:Fullerene Blends for Blue-Green Solar Cells Via Roll-to-Roll Processing. <i>ACS Applied Materials & Interfaces</i> , 2012, 4, 1847-1853. | 8.0 | 50 |

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|----|---|------|-----------|
| 55 | Liquid crystalline hexa-peri-hexabenzocoronene-diketopyrrolopyrrole organic dyes for photovoltaic applications. <i>Journal of Materials Chemistry</i> , 2012, 22, 21131. | 6.7 | 55 |
| 56 | High-efficiency inverted dithienogermole-thienopyrrolodione-based polymer solar cells. <i>Nature Photonics</i> , 2012, 6, 115-120. | 31.4 | 903 |
| 57 | An isoindigo and dithieno[3,2-b:2',3'-d]silole copolymer for polymer solar cells. <i>Polymer Chemistry</i> , 2012, 3, 89-92. | 3.9 | 84 |
| 58 | High-Efficiency Inverted Polymer Solar Cells with Double Interlayer. <i>ACS Applied Materials & Interfaces</i> , 2012, 4, 866-870. | 8.0 | 63 |
| 59 | Inverted Polymer Solar Cells with Reduced Interface Recombination. <i>Advanced Energy Materials</i> , 2012, 2, 1333-1337. | 19.5 | 210 |
| 60 | Synthetic Principles Directing Charge Transport in Low-Band-Gap Dithienosilole-Benzothiadiazole Copolymers. <i>Journal of the American Chemical Society</i> , 2012, 134, 8944-8957. | 13.7 | 124 |
| 61 | Effect of vertical morphology on the performance of silole-containing low-bandgap inverted polymer solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2012, 97, 97-101. | 6.2 | 23 |
| 62 | n-Type Conjugated Polyisoindigos. <i>Macromolecules</i> , 2011, 44, 6303-6310. | 4.8 | 156 |
| 63 | Dithienogermole As a Fused Electron Donor in Bulk Heterojunction Solar Cells. <i>Journal of the American Chemical Society</i> , 2011, 133, 10062-10065. | 13.7 | 693 |
| 64 | Organic and Inorganic Blocking Layers for Solution-Processed Colloidal PbSe Nanocrystal Infrared Photodetectors. <i>Advanced Functional Materials</i> , 2011, 21, 167-171. | 14.9 | 88 |
| 65 | Photo-Carrier Recombination in Polymer Solar Cells Based on P3HT and Silole-Based Copolymer. <i>Advanced Energy Materials</i> , 2011, 1, 963-969. | 19.5 | 52 |
| 66 | Understanding the performance and loss-mechanisms in donor-acceptor polymer based solar cells: Photocurrent generation, charge separation and carrier transport. <i>Solar Energy Materials and Solar Cells</i> , 2011, 95, 2502-2510. | 6.2 | 16 |
| 67 | Color Tunable π -Conjugated Polymers for Solar-Cell Applications: Engineering of Bandgap, Interface, and Charge Transport Properties. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2010, 16, 1792-1800. | 2.9 | 5 |
| 68 | Combined effects of MoO ₃ interlayer and PC70BM on polymer photovoltaic device performance. <i>Organic Electronics</i> , 2010, 11, 955-958. | 2.6 | 25 |
| 69 | Effect of TiO ₂ Nanoparticles on Properties of Silica Refractory. <i>Journal of the American Ceramic Society</i> , 2010, 93, 2236-2243. | 3.8 | 38 |
| 70 | Energy level evolution of molybdenum trioxide interlayer between indium tin oxide and organic semiconductor. <i>Applied Physics Letters</i> , 2010, 96, 073304. | 3.3 | 114 |
| 71 | MoO ₃ /poly(9,9-dioctylfluorene-co-N-[4-(3-methylpropyl)]-diphenylamine) double-interlayer effect on polymer solar cells. <i>Applied Physics Letters</i> , 2010, 96, . | 3.3 | 63 |
| 72 | Nanolithography of Organic Films Using Scanning Probe Microscopy. , 2010, , 223-254. | | 0 |

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|----|---|------|-----------|
| 73 | Green Dioxythiophene-Benzothiadiazole Donor- Acceptor Copolymers for Photovoltaic Device Applications. Chemistry of Materials, 2010, 22, 2093-2106. | 6.7 | 73 |
| 74 | Energy level evolution of air and oxygen exposed molybdenum trioxide films. Applied Physics Letters, 2010, 96, . | 3.3 | 189 |
| 75 | The effect of molybdenum oxide interlayer on organic photovoltaic cells. Applied Physics Letters, 2009, 95, . | 3.3 | 190 |
| 76 | Efficient Green Solar Cells via a Chemically Polymerizable Donor- Acceptor Heterocyclic Pentamer. ACS Applied Materials & Interfaces, 2009, 1, 1154-1158. | 8.0 | 23 |
| 77 | The effect of molybdenum oxide interlayer on organic photovoltaic cells. , 2009, , . | | 1 |
| 78 | The effect of molybdenum trioxide inter-layer between indium tin oxide (ITO) and organic semiconductor on the energy level alignment. Materials Research Society Symposia Proceedings, 2009, 1212, 1. | 0.1 | 2 |
| 79 | Conformational degree and molecular orientation in rubrene film by in situ x-ray absorption spectroscopy. Journal of Applied Physics, 2007, 102, 063504. | 2.5 | 14 |
| 80 | Fabrication of Nanostructure on a Polymer Film Using Atomic Force Microscope. Journal of Nanoscience and Nanotechnology, 2007, 7, 2172-2175. | 0.9 | 3 |
| 81 | Synthesis and Patterning of Luminescent CaCO ₃ -Poly(p-phenylene) Hybrid Materials and Thin Films. Advanced Functional Materials, 2007, 17, 1698-1704. | 14.9 | 19 |
| 82 | Electrochemically Nanopatterned Conducting Coronas of a Conjugated Polymer Precursor: SPM Parameters and Polymer Composition. Langmuir, 2006, 22, 3807-3811. | 3.5 | 28 |
| 83 | Direct Electrochemical Nanopatterning of Polycarbazole Monomer and Precursor Polymer Films: Ambient Formation of Thermally Stable Conducting Nanopatterns. Langmuir, 2006, 22, 780-786. | 3.5 | 50 |
| 84 | Morphosynthesis of Mixed Metal Carbonates Using Micellar Aggregation. Crystal Growth and Design, 2006, 6, 1537-1541. | 3.0 | 9 |
| 85 | Easy Writing of Nanopatterns on a Polymer Film Using Electrostatic Nanolithography. Small, 2006, 2, 481-484. | 10.0 | 18 |
| 86 | Synthesis and characterization of ferrite nanocomposite spheres from hydroxylated polymers. Journal of Magnetism and Magnetic Materials, 2006, 296, 104-113. | 2.3 | 45 |
| 87 | Sol-gel-coated oligomers as novel stationary phases for solid-phase microextraction. Journal of Chromatography A, 2005, 1087, 252-258. | 3.7 | 45 |
| 88 | Nanolithographic Electropolymerization of a Precursor Polymer Film to Form Conducting Nanopatterns. Advanced Materials, 2005, 17, 1282-1285. | 21.0 | 44 |
| 89 | Design of Novel Nanocomposites through Interfacial Engineering. Journal of Metastable and Nanocrystalline Materials, 2005, 23, 327-330. | 0.1 | 0 |
| 90 | Morphology and Polymorph Selectivity Control in Calcium Carbonate Mineralization. Materials Research Society Symposia Proceedings, 2004, 847, 508. | 0.1 | 0 |

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|----|--|-----|-----------|
| 91 | Dielectric properties of rubber ferrite composites containing mixed ferrites. Journal Physics D: Applied Physics, 1999, 32, 1801-1810. | 2.8 | 99 |
| 92 | On the magnetic properties of ultra-fine zinc ferrites. Journal of Magnetism and Magnetic Materials, 1998, 189, 83-88. | 2.3 | 108 |