

# Anil Kumar

## List of Publications by Year in descending order

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59  
papers

2,149  
citations

279798

23  
h-index

223800

46  
g-index

59  
all docs

59  
docs citations

59  
times ranked

2271  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Conducting Poly(3,4-alkylenedioxythiophene) Derivatives as Fast Electrochromics with High-Contrast Ratios. <i>Chemistry of Materials</i> , 1998, 10, 896-902.  | 6.7  | 462       |
| 2  | Soluble Alkyl-Substituted Poly(ethylenedioxythiophenes) as Electrochromic Materials. <i>Macromolecules</i> , 1996, 29, 7629-7630.  | 4.8  | 150       |
| 3  | ITO-Free Solution-Processed Flexible Electrochromic Devices Based on PEDOT:PSS as Transparent Conducting Electrode. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 19427-19435.  | 8.0  | 121       |
| 4  | Title is missing!. <i>Journal of Materials Chemistry</i> , 2001, 11, 2909-2911.  | 6.7  | 113       |
| 5  | Novel label-free DNA sensors based on poly(3,4-ethylenedioxythiophene) Electronic Supplementary Information (ESI) available: Experimental details and sensor response for various sensors listed in Table 2. Cyclic voltammograms confirming the increase in resistance due to the duplex formation between the probe and target DNA in conducting polymer matrix. See <a href="http://www.rsc.org/suppdata/cc/b3/b316794a/">http://www.rsc.org/suppdata/cc/b3/b316794a/</a> . <i>Chemical Communications</i> , 2004, , 820. | 4.1  | 87        |
| 6  | Hyperbranched polyurethanes with varying spacer segments between the branching points. <i>Journal of Polymer Science Part A</i> , 1996, 34, 839-848.   | 2.3  | 84        |
| 7  | A novel one-pot synthesis of hyperbranched polyurethanes. <i>Journal of the Chemical Society Chemical Communications</i> , 1993, , 1453.   | 2.0  | 73        |
| 8  | Single step reductive polymerization of functional 3,4-propylenedioxythiophenes via direct C-H arylation catalyzed by palladium acetate. <i>Polymer Chemistry</i> , 2010, 1, 286-288.  | 3.9  | 62        |
| 9  | Processable, Regioregular, and "Clickable" Monomer and Polymers Based on 3,4-Propylenedioxythiophene with Tunable Solubility. <i>Macromolecules</i> , 2009, 42, 2015-2022.   | 4.8  | 57        |
| 10 | Conductivity and Photoconductivity of a p-Type Organic Semiconductor under Ultrastrong Coupling. <i>ACS Nano</i> , 2020, 14, 10219-10225.  | 14.6 | 56        |
| 11 | Conductimetric immunosensor based on poly(3,4-ethylenedioxythiophene). <i>Chemical Communications</i> , 2002, , 680-681.   | 4.1  | 51        |
| 12 | Dendronized electrochromic polymer based on poly(3,4-ethylenedioxythiophene). <i>Polymer</i> , 2002, 43, 6465-6470.  | 3.8  | 49        |
| 13 | Synthesis and characterization of functionalized 3,4-propylenedioxythiophene and its derivatives. <i>Journal of Materials Chemistry</i> , 2004, 14, 1896.  | 6.7  | 49        |
| 14 | Explosive vapor sensor using poly (3-hexylthiophene) and CuII tetraphenylporphyrin composite based organic field effect transistors. <i>Applied Physics Letters</i> , 2008, 93, .  | 3.3  | 44        |
| 15 | Electrochromic polymer based on a rigid cyanobiphenyl substituted 3,4-ethylenedioxythiophene. <i>Synthetic Metals</i> , 2001, 124, 471-475.  | 3.9  | 43        |
| 16 | Synthesis and characterization of monosubstituted and disubstituted poly(3,4-propylenedioxythiophene) derivatives with high electrochromic contrast in the visible region. <i>Journal of Polymer Science Part A</i> , 2005, 43, 419-428.   | 2.3  | 40        |
| 17 | High contrast solid-state electrochromic devices from substituted 3,4-propylenedioxythiophenes using the dual conjugated polymer approach. <i>Synthetic Metals</i> , 2007, 157, 261-268.   | 3.9  | 38        |
| 18 | High mobility organic field-effect transistors based on defect-free regioregular poly(3-hexylthiophene-2,5-diyl). <i>Organic Electronics</i> , 2016, 38, 89-96.  | 2.6  | 34        |

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|----|--|-----|-----------|
| 19 | Novel hyperbranched polymer based on urea linkages. <i>Chemical Communications</i> , 1998, , 1629-1630.  | 4.1 | 33        |
| 20 | Correlation between Photovoltaic Performance and Interchain Ordering Induced Delocalization of Electronics States in Conjugated Polymer Blends. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 20243-20250.  | 8.0 | 31        |
| 21 | An efficient route for the synthesis of hyperbranched polymers and dendritic building blocks based on urea linkages. <i>Journal of Polymer Science Part A</i> , 2001, 39, 1295-1304.   | 2.3 | 26        |
| 22 | Ultra-high mobility in defect-free poly(3-hexylthiophene-2,5-diyl) field-effect transistors through supra-molecular alignment. <i>Organic Electronics</i> , 2017, 51, 94-102.  | 2.6 | 26        |
| 23 | Poly(vinyl alcohol) gate dielectric surface treatment with vitamin C for poly(3-hexylthiophene-2,5-diyl) based field effect transistors performance improvement. <i>Organic Electronics</i> , 2015, 17, 22-27.   | 2.6 | 25        |
| 24 | Solvent free chemical oxidative polymerization as a universal method for the synthesis of ultra high molecular weight conjugated polymers based on 3,4-propylenedioxythiophenes. <i>Chemical Communications</i> , 2012, 48, 4905.  | 4.1 | 23        |
| 25 | Spectral and optical performance of electrochromic poly(3,4-ethylenedioxythiophene) (PEDOT) deposited on transparent conducting oxide coated glass and polymer substrates. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2006, 132, 39-42. | 3.5 | 22        |
| 26 | Homochiral Stereochemistry: The Missing Link of Structure to Energetics in Protein Folding. <i>Journal of Physical Chemistry B</i> , 2009, 113, 16435-16442.   | 2.6 | 22        |
| 27 | Electrochemically polymerized electroactive poly(3,4-ethylenedioxythiophene) containing covalently bound dopant ions: poly{2-(3-sodiumsulfinoethyl)-2,3-dihydrothieno[3,4-b][1,4]dioxin}. <i>Synthetic Metals</i> , 2001, 125, 441-444.  | 3.9 | 21        |
| 28 | Synthesis and characterization of aromatic polyoxadiazoles containing 3,4-alkylenedioxythiophenes. <i>Synthetic Metals</i> , 2003, 132, 279-283.   | 3.9 | 20        |
| 29 | Synthesis and characterization of N-substituted hyperbranched polyureas. <i>Journal of Polymer Science Part A</i> , 2004, 42, 5134-5145.   | 2.3 | 20        |
| 30 | Effect of Branching and Molecular Weight on the Properties of Main Chain Thermotropic Liquid Crystalline Polymers Containing Flexible Spacers. <i>Macromolecules</i> , 1996, 29, 8551-8553.  | 4.8 | 17        |
| 31 | Optical, photophysical and magnetic behavior of GMP-templated binary ( $^{12}\text{-Fe}_{2}\text{O}_{3}/\text{CdS}$ ) and ternary ( $^{12}\text{-Fe}_{2}\text{O}_{3}/\text{Ag}/\text{CdS}$ ) nanohybrids. <i>Journal of Materials Chemistry</i> , 2011, 21, 481-496.                     | 6.7 | 16        |
| 32 | White Light Generation from a Self-Assembled Fluorogen-Surfactant Composite Light Harvesting Platform. <i>Journal of Physical Chemistry B</i> , 2020, 124, 7484-7493.  | 2.6 | 14        |
| 33 | High performance as-cast P3HT:PCBM devices: understanding the role of molecular weight in high regioregularity P3HT. <i>Materials Advances</i> , 2021, 2, 2045-2054.   | 5.4 | 14        |
| 34 | Thermotropic liquid-crystalline polyesters containing biphenyl mesogens in the main chain: The effect of connectivity. <i>Journal of Polymer Science Part A</i> , 2004, 42, 2734-2746.   | 2.3 | 13        |
| 35 | Syntheses and characterization of amplified fluorescence poly(aryleneethynylene)s based on 3,4-propylenedioxythiophenes and their application in TNT sensing. <i>Synthetic Metals</i> , 2010, 160, 2265-2272.  | 3.9 | 13        |
| 36 | Effect of regioregularity on recombination dynamics in inverted bulk heterojunction organic solar cells. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 015501.   | 2.8 | 13        |

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|----|--|-----|-----------|
| 37 | Synthesis of adenine mediated superparamagnetic colloidal $\hat{\Gamma}^2$ -FeOOH nanostructure(s): study of their morphological changes and magnetic behavior. <i>Journal of Nanoparticle Research</i> , 2013, 15, 1.   | 1.9 | 12        |
| 38 | Continuous-Flow Synthesis of Regioregular Poly(3-Hexylthiophene): Ultrafast Polymerization with High Throughput and Low Polydispersity Index. <i>Journal of Flow Chemistry</i> , 2014, 4, 206-210.   | 1.9 | 12        |
| 39 | Computational scrutiny of the effect of N-terminal proline and residue stereochemistry in the nucleation of $\hat{\Gamma}^{\pm}$ -helix fold. <i>RSC Advances</i> , 2016, 6, 74162-74176.  | 3.6 | 12        |
| 40 | High-Throughput Template-Free Continuous Flow Synthesis of Polyaniline Nanofibers. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 5864-5872.   | 3.7 | 12        |
| 41 | Synthesis of new thermotropic liquid crystalline polyurethanes containing biphenyl mesogens using a novel AB-type self-polycondensation<br>Electronic Supplementary Information (ESI) available: experimental details along with spectral data and DSC traces. See <a href="http://www.rsc.org/suppdata/cc/b3/b312826a/">http://www.rsc.org/suppdata/cc/b3/b312826a/</a> . <i>Chemical Communications</i> , 2004, . 154. | 4.1 | 11        |
| 42 | Novel high contrast electrochromic polymer materials based on 3,4-propylenedioxythiophene. <i>Optical Materials</i> , 2007, 30, 143-145.   | 3.6 | 11        |
| 43 | Organic-inorganic hybrid polymers containing 3,4-ethylenedioxythiophene and chalcogens in the main chain. <i>Journal of Materials Chemistry</i> , 2006, 16, 3297-3304.   | 6.7 | 10        |
| 44 | Polymer-dielectric molecular interactions in defect-free poly(3-hexylthiophene): dependence and consequences of regioregularity on transistor charge transport properties. <i>Semiconductor Science and Technology</i> , 2017, 32, 084003.   | 2.0 | 10        |
| 45 | Morphological Evolution of Strongly Fluorescent Water Soluble AIEEgen-Triblock Copolymer Mixed Aggregates with Shape-Dependent Cell Permeability. <i>Journal of Physical Chemistry B</i> , 2020, 124, 10282-10291.   | 2.6 | 10        |
| 46 | Scrutiny of chain-length and N-terminal effects in $\hat{\Gamma}^{\pm}$ -helix folding: a molecular dynamics study on polyalanine peptides. <i>Journal of Biomolecular Structure and Dynamics</i> , 2017, 35, 1923-1935.   | 3.5 | 9         |
| 47 | Main chain thermotropic liquid crystalline polyurethanes containing biphenyl mesogens based on novel AB-type self-polycondensation route: FT-IR and XRD studies. <i>Journal of Polymer Science Part A</i> , 2005, 43, 1903-1912.   | 2.3 | 8         |
| 48 | Design, syntheses, and characterization of new thermoplastic polyureas based on 3,4-ethylenedioxythiophene. <i>Journal of Polymer Science Part A</i> , 2005, 43, 5823-5830.  | 2.3 | 8         |
| 49 | Scrutiny of electrostatic-driven conformational ordering of polypeptide chains in DMSO: a study with a model oligopeptide. <i>RSC Advances</i> , 2017, 7, 27981-27991.   | 3.6 | 7         |
| 50 | Exceptional photoconductivity of poly(3-hexylthiophene) fibers through <i>in situ</i> encapsulation of molybdenum disulfide quantum dots. <i>Nanoscale</i> , 2018, 10, 10395-10402.  | 5.6 | 7         |
| 51 | Role of Molecular and Interchain Ordering in the Formation of a $\hat{\Gamma}$ -Hole-Transporting Layer in Organic Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 3806-3814.   | 8.0 | 6         |
| 52 | Effect of connectivity and terminal functionality on mesophase behaviour of thermotropic liquid crystals containing biphenyl units. <i>Liquid Crystals</i> , 2005, 32, 499-512.  | 2.2 | 4         |
| 53 | Design, synthesis, and characterization of main-chain, aromatic polyesters based on 3,4-ethylenedioxythiophene. <i>Journal of Polymer Science Part A</i> , 2006, 44, 3479-3486.  | 2.3 | 4         |
| 54 | Impact of Polymer Molecular Weight on Polymeric Photodiodes. <i>Advanced Optical Materials</i> , 2022, 10, 2101890.  | 7.3 | 4         |

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|----|--|------|-----------|
| 55 | Gate dielectric surface treatments for performance improvement of poly(3-hexylthiophene-2,5-diyl) based organic field-effect transistors. , 2015, , .  |      | 3         |
| 56 | Resolving the backbone tilt of crystalline poly(3-hexylthiophene) with resonant tender X-ray diffraction. Materials Horizons, 2022, 9, 1649-1657.  | 12.2 | 3         |
| 57 | Probing the role of electrostatics of polypeptide main-chain in protein folding by perturbing N-terminal residue stereochemistry: DFT study with oligoalanine models. RSC Advances, 2016, 6, 113611-113619.                              | 3.6  | 2         |
| 58 | Confinement highlights the different electrical transport mechanisms prevailing in conducting polymers. Physical Review Materials, 2022, 6, .  | 2.4  | 2         |
| 59 | A novel layer by layer (LBL) approach for the fabrication of highly transparent and conducting thin films for flexible electronics, based on poly (3,4-alkylenedioxythiophenes) (PEDOT), via the solution processable route. , 2012, , . |      | 0         |