

Mohammad Rezaul Karim

List of Publications by Year in descending order

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96
papers

3,736
citations

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docs citations

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| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Removal of cadmium ions from water using coaxially electrospun PAN/ZnO-encapsulated PVDF nanofiber membranes. <i>Polymer Bulletin</i> , 2022, 79, 2831-2850. | 3.3 | 17 |
| 2 | Carbon Nanodots-Embedded Pullulan Nanofibers for Sulfathiazole Removal from Wastewater Streams. <i>Membranes</i> , 2022, 12, 228. | 3.0 | 7 |
| 3 | Recent Progress, Challenges, and Opportunities of Membrane Distillation for Heavy Metals Removal. <i>Chemical Record</i> , 2022, 22, e202100323. | 5.8 | 19 |
| 4 | An In-Depth Analysis of CdTe Thin-Film Deposition on Ultra-Thin Glass Substrates via Close-Spaced Sublimation (CSS). <i>Coatings</i> , 2022, 12, 589. | 2.6 | 7 |
| 5 | Magnetic/Polyetherimide-Acrylonitrile Composite Nanofibers for Nickel Ion Removal from Aqueous Solution. <i>Membranes</i> , 2021, 11, 50. | 3.0 | 14 |
| 6 | Cadmium Selenide Quantum Dots for Solar Cell Applications: A Review. <i>Chemistry - an Asian Journal</i> , 2021, 16, 902-921. | 3.3 | 36 |
| 7 | A Study on the Interfacial Compatibility, Microstructure and Physico-Chemical Properties of Polyimide/Organically Modified Silica Nanocomposite Membrane. <i>Polymers</i> , 2021, 13, 1328. | 4.5 | 8 |
| 8 | Impact of CdCl ₂ Treatment in CdTe Thin Film Grown on Ultra-Thin Glass Substrate via Close Spaced Sublimation. <i>Crystals</i> , 2021, 11, 390. | 2.2 | 16 |
| 9 | Progress and Prospects on the Fabrication of Graphene-Based Nanostructures for Energy Storage, Energy Conversion and Biomedical Applications. <i>Chemistry - an Asian Journal</i> , 2021, 16, 1365-1381. | 3.3 | 7 |
| 10 | Ni and Co oxide water oxidation electrocatalysts: Effect of thermal treatment on catalytic activity and surface morphology. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 145, 111097. | 16.4 | 11 |
| 11 | Silver Micro-Nanoparticle-Based Nanoarchitectures: Synthesis Routes, Biomedical Applications, and Mechanisms of Action. <i>Polymers</i> , 2021, 13, 2870. | 4.5 | 13 |
| 12 | Optical Losses of Frontal Layers in Superstrate CdS/CdTe Solar Cells Using OPAL2. <i>Coatings</i> , 2021, 11, 943. | 2.6 | 3 |
| 13 | Effect of Compression Pressure and Coal Binding on the Fuel Properties of Biomass Pellet. <i>Solid Fuel Chemistry</i> , 2021, 55, 429-438. | 0.7 | 0 |
| 14 | Fabrication of Ni-Co-Based Heterometallo-Supramolecular Polymer Films and the Study of Electron Transfer Kinetics for the Nonenzymatic Electrochemical Detection of Nitrite. <i>ACS Applied Polymer Materials</i> , 2020, 2, 273-284. | 4.4 | 30 |
| 15 | High yield activated porous coal carbon nanosheets from Boropukuria coal mine as supercapacitor material: Investigation of the charge storing mechanism at the interfacial region. <i>Journal of Energy Storage</i> , 2020, 32, 101908. | 8.1 | 81 |
| 16 | The fabrication of a chemical sensor with PANI-TiO ₂ nanocomposites. <i>RSC Advances</i> , 2020, 10, 12224-12233. | 3.6 | 23 |
| 17 | Hollow Reticular Shaped Highly Ordered Rice Husk Carbon for the Simultaneous Determination of Dopamine and Uric Acid. <i>Electroanalysis</i> , 2020, 32, 1957-1970. | 2.9 | 15 |
| 18 | Computational Approach to Understanding the Electrocatalytic Reaction Mechanism for the Process of Electrochemical Oxidation of Nitrite at a Ni-Co-Based Heterometallo-Supramolecular Polymer. <i>ACS Omega</i> , 2020, 5, 12882-12891. | 3.5 | 14 |

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|----|---|------|-----------|
| 19 | Improved salt rejection, hydrophilicity and mechanical properties of novel thermoplastic polymer/chitosan nanofibre membranes. Journal of Engineered Fibers and Fabrics, 2020, 15, 155892502092317. | 1.0 | 2 |
| 20 | Facile and efficient 3-chlorophenol sensor development based on photoluminescent core-shell CdSe/ZnS quantum dots. Scientific Reports, 2020, 10, 557. | 3.3 | 33 |
| 21 | Electrospun Bilayer PAN/Chitosan Nanofiber Membranes Incorporated with Metal Oxide Nanoparticles for Heavy Metal Ion Adsorption. Coatings, 2020, 10, 285. | 2.6 | 35 |
| 22 | Air-stable perovskite photovoltaic cells with low temperature deposited NiOx as an efficient hole-transporting material. Optical Materials Express, 2020, 10, 1801. | 3.0 | 19 |
| 23 | Novel optimised highly aligned electrospun PEI-PAN nanofibre mats with excellent wettability. Polymer, 2019, 180, 121665. | 3.8 | 25 |
| 24 | Synthesis of new simple hole-transport materials bearing benzodithiazole based core for perovskite solar cells. Solar Energy, 2019, 194, 431-435. | 6.1 | 5 |
| 25 | Selective Detection of Dopamine at the AACVD Synthesized Palladium Nanoparticles and Understanding the Sensing Mechanism through Electrochemical and Computational Study. Journal of the Electrochemical Society, 2019, 166, B1528-B1542. | 2.9 | 14 |
| 26 | Addition of Graphite Filler to Enhance Electrical, Morphological, Thermal, and Mechanical Properties in Poly (Ethylene Terephthalate): Experimental Characterization and Material Modeling. Polymers, 2019, 11, 1411. | 4.5 | 40 |
| 27 | Impact of CdTe thin film thickness in ZnxCd1-xS/CdTe solar cell by RF sputtering. Solar Energy, 2019, 180, 559-566. | 6.1 | 37 |
| 28 | Effects of growth temperature on the photovoltaic properties of RF sputtered undoped NiO thin films. Results in Physics, 2019, 14, 102360. | 4.1 | 51 |
| 29 | Mixed Dyes for Dye-sensitized Solar Cells Applications. Current Nanoscience, 2019, >15, 501-505. | 1.2 | 6 |
| 30 | A comprehensive defect study of tungsten disulfide (WS2) as electron transport layer in perovskite solar cells by numerical simulation. Results in Physics, 2019, 12, 1097-1103. | 4.1 | 90 |
| 31 | Composite nanofibers membranes of poly(vinyl alcohol)/chitosan for selective lead(II) and cadmium(II) ions removal from wastewater. Ecotoxicology and Environmental Safety, 2019, 169, 479-486. | 6.0 | 217 |
| 32 | Fabrication of 1,4-dioxane sensor based on microwave assisted PANi-SiO2 nanocomposites. Talanta, 2019, 193, 64-69. | 5.5 | 53 |
| 33 | Efficient detection and adsorption of cadmium(II) ions using innovative nano-composite materials. Chemical Engineering Journal, 2018, 343, 118-127. | 12.7 | 363 |
| 34 | Fabrication of core-shell structured nanofibers of poly (lactic acid) and poly (vinyl alcohol) by coaxial electrospinning for tissue engineering. European Polymer Journal, 2018, 98, 483-491. | 5.4 | 64 |
| 35 | Study of CdTe film growth by CSS on three different types of CdS coated substrates. Materials Today: Proceedings, 2018, 5, 27833-27839. | 1.8 | 2 |
| 36 | Fabrication techniques and morphological analysis of perovskite absorber layer for high-efficiency perovskite solar cell: A review. Renewable and Sustainable Energy Reviews, 2018, 98, 469-488. | 16.4 | 46 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 37 | Preparation of TiO ₂ incorporated polyacrylonitrile electrospun nanofibers for adsorption of heavy metal ions. Journal of Polymer Research, 2018, 25, 1. | 2.4 | 30 |
| 38 | Inorganic-organic based novel nano-conjugate material for effective cobalt(II) ions capturing from wastewater. Chemical Engineering Journal, 2017, 324, 130-139. | 12.7 | 265 |
| 39 | Ligand field effect for Dysprosium(III) and Lutetium(III) adsorption and EXAFS coordination with novel composite nanomaterials. Chemical Engineering Journal, 2017, 320, 427-435. | 12.7 | 256 |
| 40 | Size-Dependent Effect of Nanoceria on Their Antibacterial Activity Towards <i>Escherichia coli</i> . Science of Advanced Materials, 2017, 9, 1248-1253. | 0.7 | 13 |
| 41 | Conducting polyaniline-rutile TiO ₂ nanocomposites for the development of high- κ dielectric materials. Soft Materials, 2016, 14, 238-243. | 1.7 | 3 |
| 42 | Conducting and Biopolymer Based Electrospun Nanofiber Membranes for Wound Healing Applications. Current Nanoscience, 2016, 12, 220-227. | 1.2 | 13 |
| 43 | Synthesis and characterization of highly organized crystalline rutile nanoparticles by low-temperature dissolution-precipitation process. Journal of Materials Research, 2015, 30, 1887-1893. | 2.6 | 4 |
| 44 | Biomolecule conjugated nanoparticle synthons for detection of food contaminants. Canadian Journal of Chemistry, 2015, 93, 925-928. | 1.1 | 1 |
| 45 | Corrosion inhibitory effect of thiourea on recrystallized E-34 microalloyed steels in acidic media. Anti-Corrosion Methods and Materials, 2015, 62, 212-219. | 1.5 | 1 |
| 46 | Laser from Optically Pumped Quantum Dot CdSe/ZnS in a Colloidal Liquid. Journal of Nanoscience and Nanotechnology, 2015, 15, 6710-6713. | 0.9 | 3 |
| 47 | Tuning of spectral response by co-sensitization in black-dye based dye-sensitized solar cell. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 651-656. | 1.8 | 14 |
| 48 | Thermoelectric Potential of Polymer-Scaffolded Ionic Liquid Membranes. Journal of Electronic Materials, 2014, 43, 1585-1589. | 2.2 | 5 |
| 49 | Effects of cobalt and cobalt oxide buffer layers on nucleation and growth of hot filament chemical vapor deposition diamond films on silicon (100). Korean Journal of Chemical Engineering, 2014, 31, 1271-1275. | 2.7 | 1 |
| 50 | Fabrication of electrospun aligned nanofibers from conducting polyaniline copolymer/polyvinyl alcohol/chitosan oligosaccharide in aqueous solutions. Synthetic Metals, 2013, 178, 34-37. | 3.9 | 17 |
| 51 | CdZnTe thin films growth by RF sputtering for CdTe solar cells. , 2013, , . | | 3 |
| 52 | Shape controllable preparation and characterization of submicron lamellar and rod clusters of zinc oxide via conventional and microwave accelerated reaction methods. Materials Letters, 2013, 92, 376-378. | 2.6 | 1 |
| 53 | Multiwall Carbon Nanotube Coated with Conducting Polyaniline Nanocomposites for Quasi-Solid-State Dye-Sensitized Solar Cells. Journal of Chemistry, 2013, 2013, 1-5. | 1.9 | 4 |
| 54 | A New Heteroleptic Biquinoline Ruthenium(II) Sensitizer for Near-IR Sensitization of Nanocrystalline TiO ₂ . Journal of Chemistry, 2013, 2013, 1-4. | 1.9 | 0 |

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| 55 | Effect of montmorillonite on wettability and microstructure properties of zein/montmorillonite nanocomposite nanofiber mats. Journal of Composite Materials, 2013, 47, 251-257. | 2.4 | 26 |
| 56 | Improving the Spectral Response of Black Dye by Cosensitization with a Simple Indoline Based Dye in Dye-Sensitized Solar Cell. Journal of Chemistry, 2013, 2013, 1-5. | 1.9 | 10 |
| 57 | Recent Developments of Flexible CdTe Solar Cells on Metallic Substrates: Issues and Prospects. International Journal of Photoenergy, 2012, 2012, 1-10. | 2.5 | 28 |
| 58 | Synthesis and Characterizations of Poly(3-hexylthiophene) and Modified Carbon Nanotube Composites. Journal of Nanomaterials, 2012, 2012, 1-8. | 2.7 | 22 |
| 59 | Effects of thermal annealing on structural and optical properties of sputtered CdS thin films for photovoltaic application. , 2012, , . | | 8 |
| 60 | Comparative study of ZnS thin films grown by chemical bath deposition and magnetron sputtering. , 2012, , . | | 10 |
| 61 | Synthesis and Characterization of a Poly[(3-hexylthiophene-co-3-octylthiophene)]â€“SWNT Composite for Solar Cell Applications. Journal of Nanoelectronics and Optoelectronics, 2012, 7, 466-470. | 0.5 | 4 |
| 62 | Thermal Behavior with Mechanical Property of Fluorinated Silane Functionalized Superhydrophobic Pullulan/Poly(vinyl alcohol) Blends by Electrospinning Method. Journal of Nanomaterials, 2011, 2011, 1-7. | 2.7 | 24 |
| 63 | Nanofibre Mats in Aqueous Solution for Anti-bacterial Exploits. Polymers and Polymer Composites, 2011, 19, 753-762. | 1.9 | 12 |
| 64 | Quasi Solid-State Dye-Sensitized Solar Cell Incorporating Highly Conducting Polythiophene-Coated Carbon Nanotube Composites in Ionic Liquid. Advances in OptoElectronics, 2011, 2011, 1-7. | 0.6 | 3 |
| 65 | Surface-enhanced Raman spectroscopy of Omethoate adsorbed on silver surface. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2011, 78, 179-184. | 3.9 | 14 |
| 66 | Amphiphilic Ruthenium(II) Terpyridine Sensitizers with Long Alkyl Chain Substituted Î²-Diketonato Ligands: An Efficient Coadsorbent-Free Dye-Sensitized Solar Cells. International Journal of Photoenergy, 2011, 2011, 1-7. | 2.5 | 6 |
| 67 | Optical and Transport Properties of Poly(3-Hexylthiophene)-Single-Walled-Carbon-Nanotube Composites. Journal of Nanoelectronics and Optoelectronics, 2011, 6, 288-292. | 0.5 | 5 |
| 68 | Conducting polyanilineâ€“titanium dioxide nanocomposites prepared by inverted emulsion polymerization. Polymer Composites, 2010, 31, 83-88. | 4.6 | 15 |
| 69 | Electrospinning fabrication and characterization of poly(vinyl alcohol)/montmorillonite/silver hybrid nanofibers for antibacterial applications. Colloid and Polymer Science, 2010, 288, 115-121. | 2.1 | 92 |
| 70 | Synthesis and characterization of poly(3â€“octylthiophene)/single wall carbon nanotube composites for photovoltaic applications. Journal of Applied Polymer Science, 2010, 118, 1386-1394. | 2.6 | 7 |
| 71 | Preparation of superhydrophobic membranes by electrospinning of fluorinated silane functionalized pullulan. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2010, 362, 117-120. | 4.7 | 40 |
| 72 | Fabrication and characterization of poly(vinyl alcohol)/alginate blend nanofibers by electrospinning method. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2010, 366, 135-140. | 4.7 | 196 |

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|----|--|------|-----------|
| 73 | Prospects of Back Surface Field Effect in Ultra-Thin High-Efficiency CdS/CdTe Solar Cells from Numerical Modeling. International Journal of Photoenergy, 2010, 2010, 1-8. | 2.5 | 32 |
| 74 | Poly(vinyl alcohol)-Fe ₃ O ₄ Nanocomposites Prepared by the Electrospinning Technique. Soft Materials, 2010, 8, 197-206. | 1.7 | 8 |
| 75 | A Comparison Method of Silver Nanoparticles Prepared by the Gamma Irradiation and in situ Reduction Methods. Bulletin of the Korean Chemical Society, 2010, 31, 1993-1996. | 1.9 | 15 |
| 76 | Electrospinning and Characterisation of Poly(vinyl alcohol) Blend Submicron Fibres in Aqueous Solutions. Polymers and Polymer Composites, 2009, 17, 47-54. | 1.9 | 15 |
| 77 | Poly(vinyl alcohol)/chitosan oligosaccharide blend submicrometer fibers prepared from aqueous solutions by the electrospinning method. Journal of Applied Polymer Science, 2009, 111, 132-140. | 2.6 | 39 |
| 78 | Electrospinning fabrication and characterization of poly(vinyl alcohol)/montmorillonite nanofiber mats. Journal of Applied Polymer Science, 2009, 113, 1860-1867. | 2.6 | 71 |
| 79 | Electrospinning and characterization of medium-molecular-weight poly(vinyl Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 507 Td (a | 2.1 | 45 |
| 80 | UV-curing synthesis of sulfonated polyaniline-silver nanocomposites by an <i>in situ</i> reduction method. Polymers for Advanced Technologies, 2009, 20, 639-644. | 3.2 | 26 |
| 81 | Preparation and characterization of electrospun pullulan/montmorillonite nanofiber mats in aqueous solution. Carbohydrate Polymers, 2009, 78, 336-342. | 10.2 | 88 |
| 82 | Sulfonated polyaniline-titanium dioxide nanocomposites synthesized by one-pot UV-curable polymerization method. Synthetic Metals, 2009, 159, 209-213. | 3.9 | 36 |
| 83 | <i>In situ</i> intercalative polymerization of conducting polypyrrole/montmorillonite nanocomposites. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 2279-2285. | 2.1 | 29 |
| 84 | Preparation of conducting polyaniline/TiO ₂ composite submicron-rods by the ⁶⁰ Co-radiolysis oxidative polymerization method. Reactive and Functional Polymers, 2008, 68, 1371-1376. | 4.1 | 61 |
| 85 | Synthesis of conducting polythiophene composites with multi-walled carbon nanotube by the ⁶⁰ Co-radiolysis polymerization method. Materials Chemistry and Physics, 2008, 112, 779-782. | 4.0 | 45 |
| 86 | Preparation of Buckyball-Shaped Conducting Polythiophene by the Gamma Radiation-Induced Polymerization Method. Macromolecular Symposia, 2007, 249-250, 234-240. | 0.7 | 3 |
| 87 | Preparation of Conducting Polyaniline/TiO ₂ Composite Nanorods by the Radiolysis Polymerization Method. , 2007, , . | | 0 |
| 88 | A facile synthesis of polythiophene nanowires. Synthetic Metals, 2007, 157, 1008-1012. | 3.9 | 60 |
| 89 | Synthesis and characterization of conducting polyaniline-activated carbon nanocomposites. Journal of Applied Polymer Science, 2007, 103, 1973-1977. | 2.6 | 22 |
| 90 | Comparison of the adsorption orientation for 2-mercaptobenzothiazole and 2-mercaptobenzoxazole by SERS spectroscopy. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2007, 68, 1313-1319. | 3.9 | 27 |

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|----|---|-----|-----------|
| 91 | Synthesis of conducting polypyrrole by radiolysis polymerization method. Polymers for Advanced Technologies, 2007, 18, 916-920. | 3.2 | 42 |
| 92 | Synthesis of core-shell silver-polyaniline nanocomposites by gamma radiolysis method. Journal of Polymer Science Part A, 2007, 45, 5741-5747. | 2.3 | 106 |
| 93 | Radiolytic synthesis of conducting polypyrrole/carbon nanotube composites. Materials Letters, 2007, 61, 1688-1692. | 2.6 | 77 |
| 94 | Synthesis and characterization of silver/thiophene nanocomposites by UV-irradiation method. Materials Letters, 2007, 61, 2675-2678. | 2.6 | 28 |
| 95 | Synthesis and characterization of conducting polythiophene/carbon nanotubes composites. Journal of Polymer Science Part A, 2006, 44, 5283-5290. | 2.3 | 168 |
| 96 | SWNTs coated by conducting polyaniline: Synthesis and modified properties. Synthetic Metals, 2005, 151, 131-135. | 3.9 | 114 |