# Shahin Homaeigohar

## List of Publications by Citations



| 75 | 2,885 | 26 | 53 |
|---|---|---|---|
| papers | citations | h-index | g-index |
| 82 | 3,425 | 7.2 | 6.33 |
| ext. papers | ext. citations | avg, IF | L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 75 | Design of a perfect black absorber at visible frequencies using plasmonic metamaterials. *Advanced Materials*, **2011**, 23, 5410-4 | 24 | 360 |
| 74 | Graphene membranes for water desalination. *NPG Asia Materials*, **2017**, 9, e427-e427 | 10.3 | 214 |
| 73 | Antibacterial biohybrid nanofibers for wound dressings. *Acta Biomaterialia*, **2020**, 107, 25-49 | 10.8 | 203 |
| 72 | Metal-Polymer Nanocomposites for Functional Applications. *Advanced Engineering Materials*, **2010**, 12, 1177-1190 | 3.5 | 183 |
| 71 | Nanocomposite Electrospun Nanofiber Membranes for Environmental Remediation. *Materials*, **2014**, 7, 1017-1045 | 3.5 | 166 |
| 70 | Polyethersulfone electrospun nanofibrous composite membrane for liquid filtration. *Journal of Membrane Science*, **2010**, 365, 68-77 | 9.6 | 162 |
| 69 | Review of Plasmonic Nanocomposite Metamaterial Absorber. *Materials*, **2014**, 7, 1221-1248 | 3.5 | 122 |
| 68 | Green chemistry and nanofabrication in a levitated Leidenfrost drop. *Nature Communications*, **2013**, 4, 2400 | 17.4 | 95 |
| 67 | Antireflective Coatings: Conventional Stacking Layers and Ultrathin Plasmonic Metasurfaces, A Mini-Review. *Materials*, **2016**, 9, | 3.5 | 86 |
| 66 | Review of Metasurface Plasmonic Structural Color. *Plasmonics*, **2017**, 12, 1463-1479 | 2.4 | 83 |
| 65 | Novel compaction resistant and ductile nanocomposite nanofibrous microfiltration membranes. *Journal of Colloid and Interface Science*, **2012**, 372, 6-15 | 9.3 | 73 |
| 64 | The Nanosized Dye Adsorbents for Water Treatment. *Nanomaterials*, **2020**, 10, | 5.4 | 66 |
| 63 | Tunable broadband plasmonic perfect absorber at visible frequency. *Applied Physics A: Materials Science and Processing*, **2012**, 109, 769-773 | 2.6 | 65 |
| 62 | An electroactive alginate hydrogel nanocomposite reinforced by functionalized graphite nanofilaments for neural tissue engineering. *Carbohydrate Polymers*, **2019**, 224, 115112 | 10.3 | 53 |
| 61 | The solvent induced interfiber adhesion and its influence on the mechanical and filtration properties of polyethersulfone electrospun nanofibrous microfiltration membranes. *Separation and Purification Technology*, **2012**, 98, 456-463 | 8.3 | 53 |
| 60 | A Novel Nanohybrid Nanofibrous Adsorbent for Water Purification from Dye Pollutants. *Materials*, **2016**, 9, | 3.5 | 53 |
| 59 | Effective Optical Properties of Plasmonic Nanocomposites. *Materials*, **2014**, 7, 727-741 | 3.5 | 44 |

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| 58 | Extraordinarily water permeable sol-gel formed nanocomposite nanofibrous membranes. *Journal of Colloid and Interface Science*, **2012**, 366, 51-56 | 9.3 | 43 |
| 57 | An omnidirectional transparent conducting-metal-based plasmonic nanocomposite. *Advanced Materials*, **2011**, 23, 1993-7 | 24 | 42 |
| 56 | The Electrospun Ceramic Hollow Nanofibers. *Nanomaterials*, **2017**, 7, | 5.4 | 35 |
| 55 | The effect of reinforcement volume fraction and particle size on the mechanical properties of β-tricalcium phosphate–high density polyethylene composites. *Journal of the European Ceramic Society*, **2006**, 26, 273-278 | 6 | 35 |
| 54 | Plasmonic Metaparticles on a Blackbody Create Vivid Reflective Colors for Naked-Eye Environmental and Clinical Biodetection. *Advanced Materials*, **2018**, 30, 1704442 | 24 | 33 |
| 53 | Photo-driven Super Absorber as an Active Metamaterial with a Tunable Molecular-Plasmonic Coupling. *Advanced Optical Materials*, **2014**, 2, 705-710 | 8.1 | 28 |
| 52 | Ups and Downs of Water Photodecolorization by Nanocomposite Polymer Nanofibers. *Nanomaterials*, **2019**, 9, | 5.4 | 27 |
| 51 | Biofunctionalized nanofibrous membranes as super separators of protein and enzyme from water. *Journal of Colloid and Interface Science*, **2013**, 406, 86-93 | 9.3 | 27 |
| 50 | Smart Metal–Polymer Bionanocomposites as Omnidirectional Plasmonic Black Absorber Formed by Nanofluid Filtration. *Advanced Functional Materials*, **2012**, 22, 4771-4777 | 15.6 | 27 |
| 49 | An Overview of the Water Remediation Potential of Nanomaterials and Their Ecotoxicological Impacts. *Water (Switzerland)*, **2020**, 12, 1150 | 3 | 26 |
| 48 | Plasmon-Mediated Embedding of Nanoparticles in a Polymer Matrix: Nanocomposites Patterning, Writing, and Defect Healing. *Journal of Physical Chemistry C*, **2012**, 116, 17204-17209 | 3.8 | 25 |
| 47 | Switchable Plasmonic Nanocomposites. *Advanced Optical Materials*, **2019**, 7, 1801101 | 8.1 | 25 |
| 46 | An Amphiphilic, Graphitic Buckypaper Capturing Enzyme Biomolecules from Water. *Water (Switzerland)*, **2019**, 11, 2 | 3 | 23 |
| 45 | A hierarchical Ca/TiO/NH-MIL-125 nanocomposite photocatalyst for solar visible light induced photodegradation of organic dye pollutants in water.. *RSC Advances*, **2020**, 10, 29808-29820 | 3.7 | 22 |
| 44 | Synthesis of nano β-TCP and the effects on the mechanical and biological properties of β-TCP/HDPE/UHMWPE nanocomposites. *Polymer Composites*, **2010**, 31, 1745-1753 | 3 | 21 |
| 43 | In vitro evaluation of biocompatibility of beta-tricalcium phosphate-reinforced high-density polyethylene; an orthopedic composite. *Journal of Biomedical Materials Research - Part A*, **2005**, 75, 14-22 | 5.4 | 20 |
| 42 | The effect of partially stabilized zirconia on the mechanical properties of the hydroxyapatite-polyethylene composites. *Journal of Materials Science: Materials in Medicine*, **2004**, 15, 853-8 | 4.5 | 18 |
| 41 | A Flexible Oxygenated Carbographite Nanofilamentous Buckypaper as an Amphiphilic Membrane. *Advanced Materials Interfaces*, **2018**, 5, 1800001 | 4.6 | 17 |

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| 40 | Photocatalytic and Antibacterial Properties of Ag-CuFeO@WO Magnetic Nanocomposite. *Nanomaterials*, **2021**, 11, | 5.4 | 17 |
| 39 | Photoswitchable molecular dipole antennas with tailored coherent coupling in glassy composite. *Light: Science and Applications*, **2015**, 4, e316-e316 | 16.7 | 16 |
| 38 | Light-Triggered Control of Plasmonic Refraction and Group Delay by Photochromic Molecular Switches. *ACS Photonics*, **2015**, 2, 1327-1332 | 6.3 | 16 |
| 37 | In vitro biological evaluation of beta-TCP/HDPE--A novel orthopedic composite: a survey using human osteoblast and fibroblast bone cells. *Journal of Biomedical Materials Research - Part A*, **2008**, 84, 491-9 | 5.4 | 16 |
| 36 | Underwater Leidenfrost nanochemistry for creation of size-tailored zinc peroxide cancer nanotherapeutics. *Nature Communications*, **2017**, 8, 15319 | 17.4 | 15 |
| 35 | Electrospinning of Poly[acrylonitrile-co-(glycidyl methacrylate)] Nanofibrous Mats for the Immobilization of Candida Antarctica Lipase B. *Macromolecular Chemistry and Physics*, **2011**, 212, 319-327 | 2.6 | 15 |
| 34 | Biological evaluation of partially stabilized zirconia added HA/HDPE composites with osteoblast and fibroblast cell lines. *Journal of Materials Science: Materials in Medicine*, **2008**, 19, 2359-65 | 4.5 | 15 |
| 33 | Effect of reinforcement particle size on in vitro behavior of beta-tricalcium phosphate-reinforced high-density polyethylene: a novel orthopedic composite. *Journal of Biomedical Materials Research - Part A*, **2006**, 78, 129-38 | 5.4 | 15 |
| 32 | Bovine Serum Albumin (BSA)/polyacrylonitrile (PAN) biohybrid nanofibers coated with a biomineralized calcium deficient hydroxyapatite (HA) shell for wound dressing. *Materials Science and Engineering C*, **2020**, 116, 111248 | 8.3 | 14 |
| 31 | 3D printing of alginate dialdehyde-gelatin (ADA-GEL) hydrogels incorporating phytotherapeutic icariin loaded mesoporous SiO-CaO nanoparticles for bone tissue engineering. *Materials Science and Engineering C*, **2021**, 131, 112470 | 8.3 | 14 |
| 30 | A shape tailored gold-conductive polymer nanocomposite as a transparent electrode with extraordinary insensitivity to volatile organic compounds (VOCs). *Scientific Reports*, **2016**, 6, 33895 | 4.9 | 13 |
| 29 | Photoresponsive transparent conductive metal with a photobleaching nose. *Advanced Materials*, **2011**, 23, 4243-7 | 24 | 13 |
| 28 | Broadband Anti-Reflective Coating Based on Plasmonic Nanocomposite. *Materials*, **2016**, 9, | 3.5 | 13 |
| 27 | Biofunctionalized nanofibrous membranes mimicking carnivorous plants. *Bioinspired, Biomimetic and Nanobiomaterials*, **2013**, 2, 186-193 | 1.3 | 11 |
| 26 | The effect of partially stabilized zirconia on the biological properties of HA/HDPE composites in vitro. *Journal of Materials Science: Materials in Medicine*, **2006**, 17, 407-12 | 4.5 | 10 |
| 25 | Bi/SnO/TiO-graphene nanocomposite photocatalyst for solar visible light-induced photodegradation of pentachlorophenol. *Environmental Science and Pollution Research*, **2021**, 28, 15236-15247 | 5.1 | 10 |
| 24 | Nanotheranostics: A Possible Solution for Drug-Resistant and their Biofilms?. *Nanomaterials*, **2021**, 11, | 5.4 | 9 |
| 23 | Amphiphilic Oxygenated Amorphous Carbon-Graphite Buckypapers with Gas Sensitivity to Polar and Non-Polar VOCs. *Nanomaterials*, **2019**, 9, | 5.4 | 8 |

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| 22 | Innovative Education and Active Teaching with the Leidenfrost Nanochemistry. *Journal of Chemical Education*, **2018**, 95, 1966-1974 | 2.4 | 7 |
| 21 | Biomimetic transferable surface for a real time control over wettability and photoerasable writing with water drop lens. *Scientific Reports*, **2014**, 4, 7407 | 4.9 | 7 |
| 20 | Thermo-Plasmonics for Localized Graphitization and Welding of Polymeric Nanofibers. *Materials*, **2014**, 7, 323-332 | 3.5 | 6 |
| 19 | Biomimetic biohybrid nanofibers containing bovine serum albumin as a bioactive moiety for wound dressing. *Materials Science and Engineering C*, **2021**, 123, 111965 | 8.3 | 6 |
| 18 | Solar Aluminum Kitchen Foils with Omnidirectional Vivid Polarizonic Colors. *Advanced Optical Materials*, **2019**, 7, 1900737 | 8.1 | 5 |
| 17 | Transflective Mesoscopic Nanoparticles Synthesized in the Leidenfrost Droplet as Black Absorbers. *Advanced Materials Interfaces*, **2019**, 6, 1801610 | 4.6 | 5 |
| 16 | Biosynthesis of the ZnO/SnO2 nanoparticles and characterization of their photocatalytic potential for removal of organic water pollutants. *Journal of Photochemistry and Photobiology A: Chemistry*, **2021**, 113662 | 4.7 | 4 |
| 15 | Selective Regulation of Neurons, Glial Cells, and Neural Stem/Precursor Cells by Poly(allylguanidine)-Coated Surfaces. *ACS Applied Materials & Interfaces*, **2019**, 11, 48381-48392 | 9.5 | 4 |
| 14 | Size-Tailored Physicochemical Properties of Monodisperse Polystyrene Nanoparticles and the Nanocomposites Made Thereof. *Scientific Reports*, **2020**, 10, 5191 | 4.9 | 3 |
| 13 | Nachhaltige Nanochemie Zwei einfache Green Chemistry-Synthesen f den Chemieunterricht. *Chemkon - Chemie Konkret, Forum Fuer Unterricht Und Didaktik*, **2017**, 24, 178-184 | 0.3 | 3 |
| 12 | Nature-Derived and Synthetic Additives to poly(e-Caprolactone) Nanofibrous Systems for Biomedicine; an Updated Overview.. *Frontiers in Chemistry*, **2021**, 9, 809676 | 5 | 3 |
| 11 | Switchable Plasmonics: Switchable Plasmonic Nanocomposites (Advanced Optical Materials 1/2019). *Advanced Optical Materials*, **2019**, 7, 1970004 | 8.1 | 1 |
| 10 | Reawakening of plasmonic nanocomposites with the polarizonic reflective coloration: from metal to molecules. *Frontiers of Nanoscience*, **2020**, 185-214 | 0.7 | 1 |
| 9 | Reflective Coloration from Structural Plasmonic to Disordered Polarizonic. *Advanced Photonics Research*, **2021**, 2, 2100009 | 1.9 | 1 |
| 8 | Biomedical Applications of Antiviral Nanohybrid Materials Relating to the COVID-19 Pandemic and Other Viral Crises. *Polymers*, **2021**, 13, | 4.5 | 1 |
| 7 | Comment on Synthesizing Gold Nanoparticles Using Honey in Basic Solution under Leidenfrost Conditions To Aid Students in Reliably Reproducing Observable Color Changes *Journal of Chemical Education*, **2020**, 97, 878-879 | 2.4 | |
| 6 | Specular Reflections: Plasmonic Metaparticles on a Blackbody Create Vivid Reflective Colors for Naked-Eye Environmental and Clinical Biodetection (Adv. Mater. 4/2018). *Advanced Materials*, **2018**, 30, 1870026 | 24 | |
| 5 | Carbographite Buckypaper: A Flexible Oxygenated Carbographite Nanofilamentous Buckypaper as an Amphiphilic Membrane (Adv. Mater. Interfaces 8/2018). *Advanced Materials Interfaces*, **2018**, 5, 1870036 | 4.6 | |

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| 4 | Solar Colored Kitchen Foil: Solar Aluminum Kitchen Foils with Omnidirectional Vivid Polarizonic Colors (Advanced Optical Materials 15/2019). *Advanced Optical Materials*, **2019**, 7, 1970058 | 8.1 |
| 3 | Bionanocomposites: Smart Metal–Polymer Bionanocomposites as Omnidirectional Plasmonic Black Absorber Formed by Nanofluid Filtration (Adv. Funct. Mater. 22/2012). *Advanced Functional Materials*, **2012**, 22, 4626-4626 | 15.6 |
| 2 | Reflective Coloration from Structural Plasmonic to Disordered Polarizonic. *Advanced Photonics Research*, **2021**, 2, 2170022 | 1.9 |
| 1 | Crossing Phylums: Butterfly Wing as a Natural Perfusable Three-Dimensional (3D) Bioconstruct for Bone Tissue Engineering. *Journal of Functional Biomaterials*, **2022**, 13, 68 | 4.8 |