# Maryam Borghei

## List of Publications by Citations



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|---|---|---|---|
| 62 papers | 2,296 citations | 27 h-index | 47 g-index |
| 65 ext. papers | 2,722 ext. citations | 8.3 avg, IF | 5.34 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 62 | Electrocatalysis of oxygen reduction on heteroatom-doped nanocarbons and transition metal□nitrogen□carbon catalysts for alkaline membrane fuel cells. *Journal of Materials Chemistry A*, **2018**, 6, 776-804 | 13 | 257 |
| 61 | Porous N,P-doped carbon from coconut shells with high electrocatalytic activity for oxygen reduction: Alternative to Pt-C for alkaline fuel cells. *Applied Catalysis B: Environmental*, **2017**, 204, 394-402 | 21.8 | 239 |
| 60 | Advanced Biomass-Derived Electrocatalysts for the Oxygen Reduction Reaction. *Advanced Materials*, **2018**, 30, e1703691 | 24 | 202 |
| 59 | High-Throughput Synthesis of Lignin Particles (~30 nm to ~2 □m) via Aerosol Flow Reactor: Size Fractionation and Utilization in Pickering Emulsions. *ACS Applied Materials & Interfaces*, **2016**, 8, 23302-10 | 9.5 | 120 |
| 58 | Durability of carbon nanofiber (CNF) & carbon nanotube (CNT) as catalyst support for Proton Exchange Membrane Fuel Cells. *Solid State Ionics*, **2013**, 231, 94-101 | 3.3 | 98 |
| 57 | High-concentration aqueous dispersions of graphene produced by exfoliation of graphite using cellulose nanocrystals. *Carbon*, **2014**, 70, 157-163 | 10.4 | 76 |
| 56 | Atomic Layer Deposition Preparation of Pd Nanoparticles on a Porous Carbon Support for Alcohol Oxidation. *Journal of Physical Chemistry C*, **2011**, 115, 23067-23073 | 3.8 | 74 |
| 55 | Disposable amperometric biosensor based on lactate oxidase immobilised on platinum nanoparticle-decorated carbon nanofiber and poly(diallyldimethylammonium chloride) films. *Biosensors and Bioelectronics*, **2014**, 56, 345-51 | 11.8 | 65 |
| 54 | Durability of different carbon nanomaterial supports with PtRu catalyst in a direct methanol fuel cell. *International Journal of Hydrogen Energy*, **2012**, 37, 3415-3424 | 6.7 | 62 |
| 53 | High oxygen reduction activity of few-walled carbon nanotubes with low nitrogen content. *Applied Catalysis B: Environmental*, **2014**, 158-159, 233-241 | 21.8 | 56 |
| 52 | Mesoporous carbon soft-templated from lignin nanofiber networks: microphase separation boosts supercapacitance in conductive electrodes. *RSC Advances*, **2016**, 6, 85802-85810 | 3.7 | 53 |
| 51 | Graphitized carbon nanofiber-Pt nanoparticle hybrids as sensitive tool for preparation of screen printing biosensors. Detection of lactate in wines and ciders. *Bioelectrochemistry*, **2015**, 101, 58-65 | 5.6 | 47 |
| 50 | Kinetics of methane decomposition to COx-free hydrogen and carbon nanofiber over Ni□Cu/MgO catalyst. *International Journal of Hydrogen Energy*, **2010**, 35, 9479-9488 | 6.7 | 46 |
| 49 | High Axial Ratio Nanochitins for Ultrastrong and Shape-Recoverable Hydrogels and Cryogels via Ice Templating. *ACS Nano*, **2019**, 13, 2927-2935 | 16.7 | 41 |
| 48 | Effect of Anisotropy of Cellulose Nanocrystal Suspensions on Stratification, Domain Structure Formation, and Structural Colors. *Biomacromolecules*, **2018**, 19, 2931-2943 | 6.9 | 40 |
| 47 | Conductive Carbon Microfibers Derived from Wet-Spun Lignin/Nanocellulose Hydrogels. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 6013-6022 | 8.3 | 36 |
| 46 | Enhanced performance of a silicon microfabricated direct methanol fuel cell with PtRu catalysts supported on few-walled carbon nanotubes. *Energy*, **2014**, 65, 612-620 | 7.9 | 35 |

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| 45 | Optical Properties of Self-Assembled Cellulose Nanocrystals Films Suspended at Planar-Symmetrical Interfaces. *Small*, **2017**, 13, 1702084 | 11 | 32 |
| 44 | Activity and stability studies of platinized multi-walled carbon nanotubes as fuel cell electrocatalysts. *Applied Catalysis B: Environmental*, **2015**, 162, 289-299 | 21.8 | 32 |
| 43 | Tailored mesoporous biochar sorbents from pinecone biomass for the adsorption of natural organic matter from lake water. *Journal of Molecular Liquids*, **2019**, 291, 111248 | 6 | 32 |
| 42 | Dissociation of oxygen on pristine and nitrogen-doped carbon nanotubes: a spin-polarized density functional study. *RSC Advances*, **2014**, 4, 15225-15235 | 3.7 | 31 |
| 41 | Formulation and Composition Effects in Phase Transitions of Emulsions Costabilized by Cellulose Nanofibrils and an Ionic Surfactant. *Biomacromolecules*, **2017**, 18, 4393-4404 | 6.9 | 31 |
| 40 | New Opportunities in the Valorization of Technical Lignins. *ChemSusChem*, **2021**, 14, 1016-1036 | 8.3 | 31 |
| 39 | Adsorption Behavior of Perfluorinated Sulfonic Acid Ionomer on Highly Graphitized Carbon Nanofibers and Their Thermal Stabilities. *Journal of Physical Chemistry C*, **2014**, 118, 10814-10823 | 3.8 | 28 |
| 38 | Highly efficient cathode catalyst layer based on nitrogen-doped carbon nanotubes for the alkaline direct methanol fuel cell. *Applied Catalysis B: Environmental*, **2014**, 156-157, 341-349 | 21.8 | 28 |
| 37 | Interaction of multi-walled carbon nanotubes with perfluorinated sulfonic acid ionomers and surface treatment studies. *Carbon*, **2014**, 71, 218-228 | 10.4 | 27 |
| 36 | Asymmetrical coffee rings from cellulose nanocrystals and prospects in art and design. *Cellulose*, **2019**, 26, 491-506 | 5.5 | 27 |
| 35 | Retention of lysozyme activity by physical immobilization in nanocellulose aerogels and antibacterial effects. *Cellulose*, **2017**, 24, 2837-2848 | 5.5 | 25 |
| 34 | Coupling Nanofibril Lateral Size and Residual Lignin to Tailor the Properties of Lignocellulose Films. *Advanced Materials Interfaces*, **2019**, 6, 1900770 | 4.6 | 25 |
| 33 | Filaments with Affinity Binding and Wet Strength Can Be Achieved by Spinning Bifunctional Cellulose Nanofibrils. *Biomacromolecules*, **2017**, 18, 1803-1813 | 6.9 | 24 |
| 32 | Graphitised Carbon Nanofibres as Catalyst Support for PEMFC. *Fuel Cells*, **2011**, 11, 715-725 | 2.9 | 24 |
| 31 | The effect of Nafion content in a graphitized carbon nanofiber-based anode for the direct methanol fuel cell. *International Journal of Hydrogen Energy*, **2012**, 37, 19082-19091 | 6.7 | 23 |
| 30 | Nitrogen-doped graphene with enhanced oxygen reduction activity produced by pyrolysis of graphene functionalized with imidazole derivatives. *International Journal of Hydrogen Energy*, **2014**, 39, 12749-12756 | 6.7 | 22 |
| 29 | Flexible metal-free counter electrode for dye solar cells based on conductive polymer and carbon nanotubes. *Journal of Electroanalytical Chemistry*, **2012**, 683, 70-74 | 4.1 | 21 |
| 28 | Highly catalytic carbon nanotube counter electrode on plastic for dye solar cells utilizing cobalt-based redox mediator. *Electrochimica Acta*, **2013**, 111, 206-209 | 6.7 | 20 |

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| 27 | Solvent Welding and Imprinting Cellulose Nanofiber Films Using Ionic Liquids. *Biomacromolecules*, **2019**, 20, 502-514 | 6.9 | 19 |
| 26 | Films based on crosslinked TEMPO-oxidized cellulose and predictive analysis via machine learning. *Scientific Reports*, **2018**, 8, 4748 | 4.9 | 18 |
| 25 | Preparation Methods for Multi-Walled Carbon Nanotube Supported Palladium Catalysts. *ChemCatChem*, **2012**, 4, 2055-2061 | 5.2 | 18 |
| 24 | Temperature dependent performance and catalyst layer properties of PtRu supported on modified few-walled carbon nanotubes for the alkaline direct ethanol fuel cell. *Journal of Electroanalytical Chemistry*, **2017**, 793, 48-57 | 4.1 | 17 |
| 23 | Microsphere-Assisted Robust Epidermal Strain Gauge for Static and Dynamic Gesture Recognition. *Small*, **2017**, 13, 1702108 | 11 | 16 |
| 22 | Nanocellulose and Nanochitin Cryogels Improve the Efficiency of Dye Solar Cells. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 10257-10265 | 8.3 | 14 |
| 21 | Influence of different carbon nanostructures on the electrocatalytic activity and stability of Pt supported electrocatalysts. *International Journal of Hydrogen Energy*, **2014**, 39, 8215-8224 | 6.7 | 14 |
| 20 | Electrically Conductive Thin Films Based on Nanofibrillated Cellulose: Interactions with Water and Applications in Humidity Sensing. *ACS Applied Materials & Interfaces*, **2020**, 12, 36437-36448 | 9.5 | 14 |
| 19 | Effects of non-solvents and electrolytes on the formation and properties of cellulose I filaments. *Scientific Reports*, **2019**, 9, 16691 | 4.9 | 14 |
| 18 | Salt-Induced Colloidal Destabilization, Separation, Drying, and Redispersion in Aqueous Phase of Cationic and Anionic Nanochitins. *Journal of Agricultural and Food Chemistry*, **2018**, 66, 9189-9198 | 5.7 | 13 |
| 17 | Lignin-Based Porous Supraparticles for Carbon Capture. *ACS Nano*, **2021**, 15, 6774-6786 | 16.7 | 13 |
| 16 | Biobased aerogels with different surface charge as electrolyte carrier membranes in quantum dot-sensitized solar cell. *Cellulose*, **2018**, 25, 3363-3375 | 5.5 | 11 |
| 15 | Synthesis of carbon nanofibres over nanoporous Ni/MgO catalyst: influence of the bimetallic Ni(Cu, Co, Mo) MgO catalysts. *Journal of Experimental Nanoscience*, **2012**, 7, 160-173 | 1.9 | 11 |
| 14 | Experimental and Computational Investigation of Hydrogen Evolution Reaction Mechanism on Nitrogen Functionalized Carbon Nanotubes. *ChemCatChem*, **2018**, 10, 3872-3882 | 5.2 | 11 |
| 13 | Electrolyte membranes based on ultrafine fibers of acetylated cellulose for improved and long-lasting dye-sensitized solar cells. *Cellulose*, **2019**, 26, 6151-6163 | 5.5 | 10 |
| 12 | Machine Learning assisted design of tailor-made nanocellulose films: A combination of experimental and computational studies. *Polymer Composites*, **2019**, 40, 4013-4022 | 3 | 10 |
| 11 | Microfibers synthesized by wet-spinning of chitin nanomaterials: mechanical, structural and cell proliferation properties.. *RSC Advances*, **2020**, 10, 29450-29459 | 3.7 | 9 |
| 10 | Two-Dimensional Antifouling Fluidic Channels on Nanopapers for Biosensing. *Biomacromolecules*, **2019**, 20, 1036-1044 | 6.9 | 8 |

# List of Publications

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|---|---|---|---|
| 9 | Self-Assembly of Soft Cellulose Nanospheres into Colloidal Gel Layers with Enhanced Protein Adsorption Capability for Next-Generation Immunoassays. *Small*, **2020**, 16, e2004702 | 11 | 7 |
| 8 | Mesoporous Carbon Microfibers for Electroactive Materials Derived from Lignocellulose Nanofibrils. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 8549-8561 | 8.3 | 5 |
| 7 | Electrocatalysts: Advanced Biomass-Derived Electrocatalysts for the Oxygen Reduction Reaction (Adv. Mater. 24/2018). *Advanced Materials*, **2018**, 30, 1870171 | 24 | 5 |
| 6 | Biowaste-derived electrode and electrolyte materials for flexible supercapacitors. *Chemical Engineering Journal*, **2022**, 435, 135058 | 14.7 | 5 |
| 5 | Dataset for natural organic matter treatment by tailored. *Data in Brief*, **2019**, 25, 104353 | 1.2 | 2 |
| 4 | Bicomponent Cellulose Fibrils and Minerals Afford Wicking Channels Stencil-Printed on Paper for Rapid and Reliable Fluidic Platforms. *ACS Applied Polymer Materials*, **2021**, 3, 5536-5546 | 4.3 | 2 |
| 3 | Systematic Analysis on the Effect of Sintering Temperature for Optimized Performance of Li0.15Ni0.45Zn0.4O2-Gd0.2Ce0.8O2-Li2CO3-Na2CO3-K2CO3 Based 3D Printed Single-Layer Ceramic Fuel Cell. *Nanomaterials*, **2021**, 11, 2180 | 5.4 | 0 |
| 2 | Cross-Linked and Surface-Modified Cellulose Acetate as a Cover Layer for Paper-Based Electrochromic Devices. *ACS Applied Polymer Materials*, **2021**, 3, 2393-2401 | 4.3 | 0 |
| 1 | Immunosensors: Self-Assembly of Soft Cellulose Nanospheres into Colloidal Gel Layers with Enhanced Protein Adsorption Capability for Next-Generation Immunoassays (Small 50/2020). *Small*, **2020**, 16, 2070270 | 11 | |