

# Maryam Borghei

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Biowaste-derived electrode and electrolyte materials for flexible supercapacitors. <i>Chemical Engineering Journal</i> , <b>2022</b> , 435, 135058	14.7	5
61	Systematic Analysis on the Effect of Sintering Temperature for Optimized Performance of Li <sub>0.15</sub> Ni <sub>0.45</sub> Zn <sub>0.4</sub> O <sub>2</sub> -Gd <sub>0.2</sub> Ce <sub>0.8</sub> O <sub>2</sub> -Li <sub>2</sub> CO <sub>3</sub> -Na <sub>2</sub> CO <sub>3</sub> -K <sub>2</sub> CO <sub>3</sub> Based 3D Printed Single-Layer Ceramic Fuel Cell. <i>Nanomaterials</i> , <b>2021</b> , 11, 2180	5.4	0
60	Bicomponent Cellulose Fibrils and Minerals Afford Wicking Channels Stencil-Printed on Paper for Rapid and Reliable Fluidic Platforms. <i>ACS Applied Polymer Materials</i> , <b>2021</b> , 3, 5536-5546	4.3	2
59	Lignin-Based Porous Supraparticles for Carbon Capture. <i>ACS Nano</i> , <b>2021</b> , 15, 6774-6786	16.7	13
58	Cross-Linked and Surface-Modified Cellulose Acetate as a Cover Layer for Paper-Based Electrochromic Devices. <i>ACS Applied Polymer Materials</i> , <b>2021</b> , 3, 2393-2401	4.3	0
57	New Opportunities in the Valorization of Technical Lignins. <i>ChemSusChem</i> , <b>2021</b> , 14, 1016-1036	8.3	31
56	Mesoporous Carbon Microfibers for Electroactive Materials Derived from Lignocellulose Nanofibrils. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2020</b> , 8, 8549-8561	8.3	5
55	Self-Assembly of Soft Cellulose Nanospheres into Colloidal Gel Layers with Enhanced Protein Adsorption Capability for Next-Generation Immunoassays. <i>Small</i> , <b>2020</b> , 16, e2004702	11	7
54	Microfibers synthesized by wet-spinning of chitin nanomaterials: mechanical, structural and cell proliferation properties.. <i>RSC Advances</i> , <b>2020</b> , 10, 29450-29459	3.7	9
53	Electrically Conductive Thin Films Based on Nanofibrillated Cellulose: Interactions with Water and Applications in Humidity Sensing. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 36437-36448	9.5	14
52	Immunosensors: Self-Assembly of Soft Cellulose Nanospheres into Colloidal Gel Layers with Enhanced Protein Adsorption Capability for Next-Generation Immunoassays (Small 50/2020). <i>Small</i> , <b>2020</b> , 16, 2070270	11	
51	Dataset for natural organic matter treatment by tailored. <i>Data in Brief</i> , <b>2019</b> , 25, 104353	1.2	2
50	High Axial Ratio Nanochitins for Ultrastrong and Shape-Recoverable Hydrogels and Cryogels via Ice Templating. <i>ACS Nano</i> , <b>2019</b> , 13, 2927-2935	16.7	41
49	Electrolyte membranes based on ultrafine fibers of acetylated cellulose for improved and long-lasting dye-sensitized solar cells. <i>Cellulose</i> , <b>2019</b> , 26, 6151-6163	5.5	10
48	Nanocellulose and Nanochitin Cryogels Improve the Efficiency of Dye Solar Cells. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7, 10257-10265	8.3	14
47	Machine Learning assisted design of tailor-made nanocellulose films: A combination of experimental and computational studies. <i>Polymer Composites</i> , <b>2019</b> , 40, 4013-4022	3	10
46	Conductive Carbon Microfibers Derived from Wet-Spun Lignin/Nanocellulose Hydrogels. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7, 6013-6022	8.3	36

45	Coupling Nanofibril Lateral Size and Residual Lignin to Tailor the Properties of Lignocellulose Films. <i>Advanced Materials Interfaces</i> , <b>2019</b> , 6, 1900770	4.6	25
44	Tailored mesoporous biochar sorbents from pinecone biomass for the adsorption of natural organic matter from lake water. <i>Journal of Molecular Liquids</i> , <b>2019</b> , 291, 111248	6	32
43	Effects of non-solvents and electrolytes on the formation and properties of cellulose I filaments. <i>Scientific Reports</i> , <b>2019</b> , 9, 16691	4.9	14
42	Two-Dimensional Antifouling Fluidic Channels on Nanopapers for Biosensing. <i>Biomacromolecules</i> , <b>2019</b> , 20, 1036-1044	6.9	8
41	Asymmetrical coffee rings from cellulose nanocrystals and prospects in art and design. <i>Cellulose</i> , <b>2019</b> , 26, 491-506	5.5	27
40	Solvent Welding and Imprinting Cellulose Nanofiber Films Using Ionic Liquids. <i>Biomacromolecules</i> , <b>2019</b> , 20, 502-514	6.9	19
39	Films based on crosslinked TEMPO-oxidized cellulose and predictive analysis via machine learning. <i>Scientific Reports</i> , <b>2018</b> , 8, 4748	4.9	18
38	Biobased aerogels with different surface charge as electrolyte carrier membranes in quantum dot-sensitized solar cell. <i>Cellulose</i> , <b>2018</b> , 25, 3363-3375	5.5	11
37	Effect of Anisotropy of Cellulose Nanocrystal Suspensions on Stratification, Domain Structure Formation, and Structural Colors. <i>Biomacromolecules</i> , <b>2018</b> , 19, 2931-2943	6.9	40
36	Salt-Induced Colloidal Destabilization, Separation, Drying, and Redispersion in Aqueous Phase of Cationic and Anionic Nanochitins. <i>Journal of Agricultural and Food Chemistry</i> , <b>2018</b> , 66, 9189-9198	5.7	13
35	Electrocatalysts: Advanced Biomass-Derived Electrocatalysts for the Oxygen Reduction Reaction (Adv. Mater. 24/2018). <i>Advanced Materials</i> , <b>2018</b> , 30, 1870171	24	5
34	Advanced Biomass-Derived Electrocatalysts for the Oxygen Reduction Reaction. <i>Advanced Materials</i> , <b>2018</b> , 30, e1703691	24	202
33	Electrocatalysis of oxygen reduction on heteroatom-doped nanocarbons and transition metal/Boron/Carbon catalysts for alkaline membrane fuel cells. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 776-804	13	257
32	Experimental and Computational Investigation of Hydrogen Evolution Reaction Mechanism on Nitrogen Functionalized Carbon Nanotubes. <i>ChemCatChem</i> , <b>2018</b> , 10, 3872-3882	5.2	11
31	Filaments with Affinity Binding and Wet Strength Can Be Achieved by Spinning Bifunctional Cellulose Nanofibrils. <i>Biomacromolecules</i> , <b>2017</b> , 18, 1803-1813	6.9	24
30	Retention of lysozyme activity by physical immobilization in nanocellulose aerogels and antibacterial effects. <i>Cellulose</i> , <b>2017</b> , 24, 2837-2848	5.5	25
29	Optical Properties of Self-Assembled Cellulose Nanocrystals Films Suspended at Planar-Symmetrical Interfaces. <i>Small</i> , <b>2017</b> , 13, 1702084	11	32
28	Microsphere-Assisted Robust Epidermal Strain Gauge for Static and Dynamic Gesture Recognition. <i>Small</i> , <b>2017</b> , 13, 1702108	11	16

27	Formulation and Composition Effects in Phase Transitions of Emulsions Costabilized by Cellulose Nanofibrils and an Ionic Surfactant. <i>Biomacromolecules</i> , <b>2017</b> , 18, 4393-4404	6.9	31
26	Temperature dependent performance and catalyst layer properties of PtRu supported on modified few-walled carbon nanotubes for the alkaline direct ethanol fuel cell. <i>Journal of Electroanalytical Chemistry</i> , <b>2017</b> , 793, 48-57	4.1	17
25	Porous N,P-doped carbon from coconut shells with high electrocatalytic activity for oxygen reduction: Alternative to Pt-C for alkaline fuel cells. <i>Applied Catalysis B: Environmental</i> , <b>2017</b> , 204, 394-402	21.8	239
24	Mesoporous carbon soft-templated from lignin nanofiber networks: microphase separation boosts supercapacitance in conductive electrodes. <i>RSC Advances</i> , <b>2016</b> , 6, 85802-85810	3.7	53
23	High-Throughput Synthesis of Lignin Particles (~30 nm to ~2 $\mu$ m) via Aerosol Flow Reactor: Size Fractionation and Utilization in Pickering Emulsions. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 23302-10	9.5	120
22	Activity and stability studies of platinized multi-walled carbon nanotubes as fuel cell electrocatalysts. <i>Applied Catalysis B: Environmental</i> , <b>2015</b> , 162, 289-299	21.8	32
21	Graphitized carbon nanofiber-Pt nanoparticle hybrids as sensitive tool for preparation of screen printing biosensors. Detection of lactate in wines and ciders. <i>Bioelectrochemistry</i> , <b>2015</b> , 101, 58-65	5.6	47
20	Enhanced performance of a silicon microfabricated direct methanol fuel cell with PtRu catalysts supported on few-walled carbon nanotubes. <i>Energy</i> , <b>2014</b> , 65, 612-620	7.9	35
19	Influence of different carbon nanostructures on the electrocatalytic activity and stability of Pt supported electrocatalysts. <i>International Journal of Hydrogen Energy</i> , <b>2014</b> , 39, 8215-8224	6.7	14
18	Interaction of multi-walled carbon nanotubes with perfluorinated sulfonic acid ionomers and surface treatment studies. <i>Carbon</i> , <b>2014</b> , 71, 218-228	10.4	27
17	Dissociation of oxygen on pristine and nitrogen-doped carbon nanotubes: a spin-polarized density functional study. <i>RSC Advances</i> , <b>2014</b> , 4, 15225-15235	3.7	31
16	Adsorption Behavior of Perfluorinated Sulfonic Acid Ionomer on Highly Graphitized Carbon Nanofibers and Their Thermal Stabilities. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 10814-10823	3.8	28
15	Nitrogen-doped graphene with enhanced oxygen reduction activity produced by pyrolysis of graphene functionalized with imidazole derivatives. <i>International Journal of Hydrogen Energy</i> , <b>2014</b> , 39, 12749-12756	6.7	22
14	Disposable amperometric biosensor based on lactate oxidase immobilised on platinum nanoparticle-decorated carbon nanofiber and poly(diallyldimethylammonium chloride) films. <i>Biosensors and Bioelectronics</i> , <b>2014</b> , 56, 345-51	11.8	65
13	High oxygen reduction activity of few-walled carbon nanotubes with low nitrogen content. <i>Applied Catalysis B: Environmental</i> , <b>2014</b> , 158-159, 233-241	21.8	56
12	Highly efficient cathode catalyst layer based on nitrogen-doped carbon nanotubes for the alkaline direct methanol fuel cell. <i>Applied Catalysis B: Environmental</i> , <b>2014</b> , 156-157, 341-349	21.8	28
11	High-concentration aqueous dispersions of graphene produced by exfoliation of graphite using cellulose nanocrystals. <i>Carbon</i> , <b>2014</b> , 70, 157-163	10.4	76
10	Highly catalytic carbon nanotube counter electrode on plastic for dye solar cells utilizing cobalt-based redox mediator. <i>Electrochimica Acta</i> , <b>2013</b> , 111, 206-209	6.7	20

9	Durability of carbon nanofiber (CNF) & carbon nanotube (CNT) as catalyst support for Proton Exchange Membrane Fuel Cells. <i>Solid State Ionics</i> , <b>2013</b> , 231, 94-101	3.3	98
8	Preparation Methods for Multi-Walled Carbon Nanotube Supported Palladium Catalysts. <i>ChemCatChem</i> , <b>2012</b> , 4, 2055-2061	5.2	18
7	The effect of Nafion content in a graphitized carbon nanofiber-based anode for the direct methanol fuel cell. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 19082-19091	6.7	23
6	Flexible metal-free counter electrode for dye solar cells based on conductive polymer and carbon nanotubes. <i>Journal of Electroanalytical Chemistry</i> , <b>2012</b> , 683, 70-74	4.1	21
5	Synthesis of carbon nanofibres over nanoporous Ni/MgO catalyst: influence of the bimetallic Ni(Cu, Co, Mo) MgO catalysts. <i>Journal of Experimental Nanoscience</i> , <b>2012</b> , 7, 160-173	1.9	11
4	Durability of different carbon nanomaterial supports with PtRu catalyst in a direct methanol fuel cell. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 3415-3424	6.7	62
3	Graphitised Carbon Nanofibres as Catalyst Support for PEMFC. <i>Fuel Cells</i> , <b>2011</b> , 11, 715-725	2.9	24
2	Atomic Layer Deposition Preparation of Pd Nanoparticles on a Porous Carbon Support for Alcohol Oxidation. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 23067-23073	3.8	74
1	Kinetics of methane decomposition to CO <sub>x</sub> -free hydrogen and carbon nanofiber over Ni/Cu/MgO catalyst. <i>International Journal of Hydrogen Energy</i> , <b>2010</b> , 35, 9479-9488	6.7	46