

# Faisal M Alamgir

## List of Publications by Year in descending order

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70  
papers

4,478  
citations

201385

27  
h-index

106150

65  
g-index

70  
all docs

70  
docs citations

70  
times ranked

6192  
citing authors

#	ARTICLE	IF	CITATIONS
1	Diffusion kinetics mechanism of oxygen ion in dense diffusion barrier limiting current oxygen sensors. <i>Journal of Alloys and Compounds</i> , 2021, 855, 157465.	2.8	54
2	Substoichiometric Tuning of the Electronic Properties of Titania. <i>Thin Solid Films</i> , 2021, 717, 138437.	0.8	6
3	Iron Phosphide Confined in Carbon Nanofibers as a Free-Standing Flexible Anode for High-Performance Lithium-Ion Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 34074-34083.	4.0	24
4	Density Functional Theory Study of Oxygen Reduction on Graphene and Platinum Surfaces of Pt@Graphene Hybrids. <i>ACS Applied Nano Materials</i> , 2021, 4, 1067-1075.	2.4	11
5	Immobilization of molecular catalysts on solid supports via atomic layer deposition for chemical synthesis in sustainable solvents. <i>Green Chemistry</i> , 2021, 23, 9523-9533.	4.6	6
6	Mono-disperse PdO nanoparticles prepared via microwave-assisted thermo-hydrolyzation with unexpectedly high activity for formic acid oxidation. <i>Electrochimica Acta</i> , 2020, 329, 135166.	2.6	11
7	Mixed conductivity evaluation and sensing characteristics of limiting current oxygen sensors. <i>Surfaces and Interfaces</i> , 2020, 21, 100762.	1.5	34

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#	ARTICLE	IF	CITATIONS
19	Epitaxial and atomically thin graphene-metal hybrid catalyst films: the dual role of graphene as the support and the chemically-transparent protective cap. <i>Energy and Environmental Science</i> , 2018, 11, 1610-1616.	15.6	34
20	Defect engineering in 1D Ti-W oxide nanotube arrays and their correlated photoelectrochemical performance. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 10258-10265.	1.3	13
21	Laser shock compression induced crystallization of Ce <sub>3</sub> Al metallic glass. <i>Journal of Applied Physics</i> , 2018, 124, 035904.	1.1	2
22	Effect of morphology evolution from nanotubes to concatenated nanoparticles of hierarchical TiO <sub>2</sub> nanostructures on power conversion efficiency of dye-sensitized solar cells. <i>Journal of Alloys and Compounds</i> , 2017, 708, 508-516.	2.8	1
23	Tuned optical transmittance in single-step-derived silica aerogels through pH-controlled microstructure. <i>International Nano Letters</i> , 2017, 7, 257-265.	2.3	11
24	In Situ Probing of the Mechanisms of Coking Resistance on Catalyst-Modified Anodes for Solid Oxide Fuel Cells. <i>Chemistry of Materials</i> , 2015, 27, 822-828.	3.2	54
25	Tuning of higher alcohol selectivity and productivity in CO hydrogenation reactions over K/MoS <sub>2</sub> domains supported on mesoporous activated carbon and mixed MgAl oxide. <i>Journal of Catalysis</i> , 2015, 324, 88-97.	3.1	80
26	Influence of annealing on ionic transfer and storage stability of Li <sub>2</sub> S-P <sub>2</sub> S <sub>5</sub> solid electrolyte. <i>Journal of Power Sources</i> , 2015, 294, 494-500.	4.0	41
27	Layer-by-Layer Evolution of Structure, Strain, and Activity for the Oxygen Evolution Reaction in Graphene-Templated Pt Monolayers. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 6180-6188.	4.0	40
28	Synchrotron X-ray Based <i>Operando</i> Studies of Atomic and Electronic Structure in Batteries. <i>Materials and Energy</i> , 2015, , 79-108.	2.5	0
29	Nanotubes: An Experimental Insight into the Structural and Electronic Characteristics of Strontium-Doped Titanium Dioxide Nanotube Arrays ( <i>Adv. Funct. Mater.</i> 43/2014). <i>Advanced Functional Materials</i> , 2014, 24, 6782-6782.	7.8	1
30	Elucidating the oxide growth mechanism on platinum at the cathode in PEM fuel cells. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 5301.	1.3	58
31	<i>Operando</i> and <i>In-situ</i> X-ray Spectroscopies of Degradation in La <sub>0.6</sub> Sr <sub>0.4</sub> Co <sub>0.2</sub> Fe <sub>0.8</sub> O <sub>3</sub> Thin Film Cathodes in Fuel Cells. <i>ChemSusChem</i> , 2014, 7, 3078-3087.	3.6	30
32	Synthesis of embedded iron nanoparticles in Fe <sub>3</sub> C-derived carbons. <i>Carbon</i> , 2014, 79, 74-84.	5.4	17
33	An Experimental Insight into the Structural and Electronic Characteristics of Strontium-Doped Titanium Dioxide Nanotube Arrays. <i>Advanced Functional Materials</i> , 2014, 24, 6783-6796.	7.8	49
34	Thermo-Active Behavior of Ethylene-Vinyl Acetate   Multiwall Carbon Nanotube Composites Examined by in Situ near-Edge X-ray Absorption Fine-Structure Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2014, 118, 3733-3741.	1.5	13
35	Polymer-carbon nanotube composites: electrospinning, alignment and interactions. , 2014, ,		0
36	Near Surface Phase Transition of Solute Derived Pt Monolayers. <i>Topics in Catalysis</i> , 2013, 56, 1065-1073.	1.3	8

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37	Bandgap bowing in Ta-W-O system for efficient solar energy conversion: Insights from density functional theory and X-ray diffraction. Applied Physics Letters, 2013, 103, 133905.	1.5	9
38	Towards a perfect system for solar hydrogen production: an example of synergy on the atomic scale. , 2013, , .		1
39	Synthesis and Growth Mechanism of Thin-Film TiO <sub>2</sub> Nanotube Arrays on Focused-Ion-Beam Micropatterned 3D Isolated Regions of Titanium on Silicon. ACS Applied Materials & Interfaces, 2013, 5, 9026-9033.	4.0	15
40	Near-Edge X-ray Absorption Fine Structure Studies of Electrospun Poly(dimethylsiloxane)/Poly(methyl Tj ETQq0 0 0 rgBT /Overlock 10 T	1.6	24
41	Electrical polarization of titanium surfaces for the enhancement of osteoblast differentiation. Bioelectromagnetics, 2013, 34, 599-612.	0.9	28
42	The effect of Platinum Oxide Growth on Platinum Stability in PEMFCs. ECS Transactions, 2013, 50, 1369-1376.	0.3	11
43	<i>In situ</i> investigation of the channel conductance of a Li <sup>x</sup> CoO <sub>2</sub> (0 ≤ x ≤ 0.5) ionic-electronic transistor. Applied Physics Letters, 2013, 102, .	1.5	18
44	<i>In-situ</i> oxygen x-ray absorption spectroscopy investigation of the resistance modulation mechanism in LiNbO <sub>2</sub> memristors. Applied Physics Letters, 2012, 100, .	1.5	31
45	Oxygen and transition metal involvement in the charge compensation mechanism of LiNi <sub>1/3</sub> Mn <sub>1/3</sub> Co <sub>1/3</sub> O <sub>2</sub> cathodes. Journal of Materials Chemistry, 2012, 22, 19993.	6.7	56
46	Architecture-Dependent Surface Chemistry for Pt Monolayers on Carbon-Supported Au. ACS Applied Materials & Interfaces, 2011, 3, 3948-3956.	4.0	30
47	Interface Architecture Determined Electrocatalytic Activity of Pt on Vertically Oriented TiO <sub>2</sub> Nanotubes. ACS Applied Materials & Interfaces, 2011, 3, 147-151.	4.0	53
48	Interactions of oxygen and ethylene with submonolayer Ag films supported on Ni(111). Physical Chemistry Chemical Physics, 2011, 13, 11034.	1.3	10
49	Nanostructured electrodes for lithium-ion and lithium-air batteries: the latest developments, challenges, and perspectives. Materials Science and Engineering Reports, 2011, 72, 203-252.	14.8	467
50	Rational SOFC material design: new advances and tools. Materials Today, 2011, 14, 534-546.	8.3	263
51	Comparative Study of the Capacity and Rate Capability of LiNi <sub>y</sub> Mn <sub>x</sub> Co <sub>1-y-x</sub> O <sub>2</sub> (y = 0.5, 0.45, 0.4, 0.33). Journal of the Electrochemical Society, 2011, 158, A516.	1.3	74
52	Ultrathin silver films on Ni(111). Physical Review B, 2010, 82, .	1.1	20
53	Enhanced Photoassisted Water Electrolysis Using Vertically Oriented Anodically Fabricated Ti <sup>z</sup> Nb <sup>w</sup> Zr <sup>v</sup> O Mixed Oxide Nanotube Arrays. ACS Nano, 2010, 4, 5819-5826.	7.3	85
54	Layer-by-Layer Pt Growth on Polycrystalline Au: Surface-Limited Redox Replacement of Overpotentially Deposited Ni Monolayers. Journal of the Electrochemical Society, 2009, 156, D513.	1.3	32

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55	Synthesis and Characterization of Monolayer Bimetallic Surfaces: A Synchrotron NEXAFS and XPS Study. ECS Transactions, 2009, 19, 97-106.	0.3	5
56	Soft X-ray characterization technique for Li batteries under operating conditions. Journal of Synchrotron Radiation, 2009, 16, 610-615.	1.0	14
57	Direct Spectroscopic Observation of the Structural Origin of Peroxide Generation from Co-Based Pyrolyzed Porphyrins for ORR Applications. Journal of Physical Chemistry C, 2008, 112, 8839-8849.	1.5	215
58	Nuclear Magnetic Resonance and X-Ray Absorption Spectroscopic Studies of Lithium Insertion in Silver Vanadium Oxide Cathodes. Journal of the Electrochemical Society, 2007, 154, A500.	1.3	25
59	Atomic packing and short-to-medium-range order in metallic glasses. Nature, 2006, 439, 419-425.	13.7	1,758
60	Cycling-induced degradation of LiCoO <sub>2</sub> thin-film cathodes at elevated temperature. Electrochimica Acta, 2006, 51, 3001-3007.	2.6	11
61	Polymeric $\text{MgCl}_2$ nanoribbons. Inorganica Chimica Acta, 2006, 359, 2513-2518.	1.2	39
62	X-ray Absorption Spectroscopy Investigation of the Sub-Nanoscale Strain in Thin-Film Lithium Ion Battery Cathodes. Materials Research Society Symposia Proceedings, 2004, 822, S2.3.1.	0.1	1
63	Icosahedral Short-Range Order in Amorphous Alloys. Physical Review Letters, 2004, 92, 145502.	2.9	216
64	Lithium-7 nuclear magnetic resonance and Ti K-edge X-ray absorption spectroscopic investigation of electrochemical lithium insertion in $\text{Li}_{4/3+x}\text{Ti}_5/3\text{O}_4$ . Journal of Power Sources, 2003, 119-121, 631-636.	4.0	17
65	The structure of a metallic glass system using EXELFS and EXAFS as complementary probes. Micron, 2003, 34, 433-439.	1.1	18
66	Measured and Calculated Electronic Structure of $\text{Ni}_{0.40}\text{Pd}_{0.40}\text{P}_{0.20}$ and $\text{Cu}_{0.40}\text{Pd}_{0.40}\text{P}_{0.20}$ . Materials Research Society Symposia Proceedings, 2002, 754, 1.	0.1	0
67	ExelFs and Exafs: Complementary Probes into the Structure of Metallic Glasses. Microscopy and Microanalysis, 2002, 8, 608-609.	0.2	0
68	Extended energy-loss fine structure analysis of 3d transition metals using L ionization edges. Philosophical Magazine Letters, 2001, 81, 213-222.	0.5	6
69	Electronic structure of Pd-based bulk metallic glasses. Journal of Non-Crystalline Solids, 2000, 274, 289-293.	1.5	24
70	The glass transition temperature of lithium borosilicate glasses related to atomic arrangements. Journal of Non-Crystalline Solids, 1994, 175, 137-144.	1.5	12