

Abdalmohsen Ali Alshehri

List of Publications by Year in descending order

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4,432
citations

93792

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all docs

100
docs citations

100
times ranked

4283
citing authors

#	ARTICLE	IF	CITATIONS
1	Improving the intrinsic electronic conductivity of NiMoO ₄ anodes by phosphorous doping for high lithium storage. Nano Research, 2022, 15, 186-194.	5.8	94
2	N-doped carbon nanotubes supported CoSe ₂ nanoparticles: A highly efficient and stable catalyst for H ₂ O ₂ electrosynthesis in acidic media. Nano Research, 2022, 15, 304-309.	5.8	90
3	Ambient ammonia production via electrocatalytic nitrite reduction catalyzed by a CoP nanoarray. Nano Research, 2022, 15, 972-977.	5.8	98
4	CoFe-LDH nanowire arrays on graphite felt: A high-performance oxygen evolution electrocatalyst in alkaline media. Chinese Chemical Letters, 2022, 33, 890-892.	4.8	110
5	MnO ₂ nanoarray with oxygen vacancies: An efficient catalyst for NO electroreduction to NH ₃ at ambient conditions. Materials Today Physics, 2022, 22, 100586.	2.9	54
6	High-efficiency ammonia electrosynthesis via selective reduction of nitrate on ZnCo ₂ O ₄ nanosheet array. Materials Today Physics, 2022, 23, 100619.	2.9	72
7	A gradient hexagonal-prism Fe ₃ Se ₄ @SiO ₂ @C configuration as a highly reversible sodium conversion anode. Journal of Materials Chemistry A, 2022, 10, 4087-4099.	5.2	46
8	Efficient nitric oxide electroreduction toward ambient ammonia synthesis catalyzed by a CoP nanoarray. Inorganic Chemistry Frontiers, 2022, 9, 1366-1372.	3.0	58
9	Ambient Ammonia Synthesis via Electrochemical Reduction of Nitrate Enabled by NiCo ₂ O ₄ Nanowire Array. Small, 2022, 18, e2106961.	5.2	171
10	In situ grown Fe ₃ O ₄ particle on stainless steel: A highly efficient electrocatalyst for nitrate reduction to ammonia. Nano Research, 2022, 15, 3050-3055.	5.8	108
11	Co@NCNT nanohybrid as a highly active catalyst for the electroreduction of nitrate to ammonia. Chemical Communications, 2022, 58, 3787-3790.	2.2	15
12	Ambient electrochemical N ₂ -to-NH ₃ conversion catalyzed by TiO ₂ decorated juncus effusus-derived carbon microtubes. Inorganic Chemistry Frontiers, 2022, 9, 1514-1519.	3.0	100
13	Co nanoparticle-decorated pomelo-peel-derived carbon enabled high-efficiency electrocatalytic nitrate reduction to ammonia. Chemical Communications, 2022, 58, 4259-4262.	2.2	40
14	A FeCo ₂ O ₄ nanowire array enabled electrochemical nitrate conversion to ammonia. Chemical Communications, 2022, 58, 4480-4483.	2.2	34
15	Coupling denitrification and ammonia synthesis <i>via</i> selective electrochemical reduction of nitric oxide over Fe ₂ O ₃ nanorods. Journal of Materials Chemistry A, 2022, 10, 6454-6462.	5.2	52
16	FeP nanorod array: A high-efficiency catalyst for electroreduction of NO to NH ₃ under ambient conditions. Nano Research, 2022, 15, 4008-4013.	5.8	61
17	Bi nanoparticles/carbon nanosheet composite: A high-efficiency electrocatalyst for NO reduction to NH ₃ . Nano Research, 2022, 15, 5032-5037.	5.8	32
18	Amorphous Boron Carbide on Titanium Dioxide Nanobelt Arrays for High-Efficiency Electrocatalytic NO Reduction to NH ₃ . Angewandte Chemie - International Edition, 2022, 61, .	7.2	121

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19	High-efficiency NO electroreduction to NH ₃ over honeycomb carbon nanofiber at ambient conditions. <i>Journal of Colloid and Interface Science</i> , 2022, 616, 261-267.	5.0	26
20	CoO nanoparticle decorated N-doped carbon nanotubes: a high-efficiency catalyst for nitrate reduction to ammonia. <i>Chemical Communications</i> , 2022, 58, 5901-5904.	2.2	28
21	Conductive Two-Dimensional Magnesium Metal-Organic Frameworks for High-Efficiency O ₂ Electroreduction to H ₂ O ₂ . <i>ACS Catalysis</i> , 2022, 12, 6092-6099.	5.5	78
22	Ambient N ₂ -to-NH ₃ fixation over a CeO ₂ nanoparticle decorated three-dimensional carbon skeleton. <i>Sustainable Energy and Fuels</i> , 2022, 6, 3344-3348.	2.5	50
23	High-performance electrochemical nitrate reduction to ammonia under ambient conditions using NiFe ₂ O ₄ nanosheet arrays. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 3392-3397.	3.0	25
24	Enhanced N ₂ -to-NH ₃ conversion efficiency on Cu ₃ P nanoribbon electrocatalyst. <i>Nano Research</i> , 2022, 15, 7134-7138.	5.8	72
25	High-Efficiency Electrosynthesis of Ammonia with Selective Reduction of Nitrate in Neutral Media Enabled by Self-Supported Mn ₂ CoO ₄ Nanoarray. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 33242-33247.	4.0	27
26	Antimony Substituted Ammonium 12-Molybdophosphoric Acid Catalysts for Gas Phase Chlorobenzene Oxidation. <i>Catalysis Letters</i> , 2021, 151, 1025-1037.	1.4	2
27	CuS concave polyhedral superstructures enabled efficient N ₂ electroreduction to NH ₃ at ambient conditions. <i>Inorganic Chemistry Frontiers</i> , 2021, 8, 3105-3110.	3.0	54
28	Bioengineered <i>Matricaria recutita</i> Extract-Assisted Palladium Nanoparticles for the Congo Red Dye Degradation and Catalytic Reduction of 4-Nitrophenol to 4-Aminophenol. <i>Toxics</i> , 2021, 9, 103.	1.6	26
29	High-Performance Electrochemical NO Reduction into NH ₃ by MoS ₂ Nanosheet. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 25263-25268.	7.2	180
30	Recent advances in strategies for highly selective electrocatalytic N ₂ reduction toward ambient NH ₃ synthesis. <i>Current Opinion in Electrochemistry</i> , 2021, 29, 100766.	2.5	147
31	High-efficiency electrochemical nitrite reduction to ammonium using a Cu ₃ P nanowire array under ambient conditions. <i>Green Chemistry</i> , 2021, 23, 5487-5493.	4.6	73
32	A Ni-MOF nanosheet array for efficient oxygen evolution electrocatalysis in alkaline media. <i>Inorganic Chemistry Frontiers</i> , 2021, 8, 3007-3011.	3.0	143
33	Effect of adiphenine hydrochloride on the structure of bovine serum albumin: Spectroscopic and docking study. <i>Journal of Molecular Structure</i> , 2020, 1201, 127168.	1.8	21
34	Electrochemical Synthesis of Ammonia Based on a Perovskite LaCrO ₃ Catalyst. <i>ChemCatChem</i> , 2020, 12, 731-735.	1.8	22
35	FeOOH quantum dots decorated graphene sheet: An efficient electrocatalyst for ambient N ₂ reduction. <i>Nano Research</i> , 2020, 13, 209-214.	5.8	48
36	Bioinspired Electrocatalyst for Electrochemical Reduction of N ₂ to NH ₃ in Ambient Conditions. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 2445-2451.	4.0	39

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37	DyF ₃ : An Efficient Electrocatalyst for N ₂ Fixation to NH ₃ under Ambient Conditions. Chemistry - an Asian Journal, 2020, 15, 487-489.	1.7	36
38	Green synthesis of silver nanoparticles from Delonix regia leaf extracts: In-vitro cytotoxicity and interaction studies with bovine serum albumin. Materials Chemistry and Physics, 2020, 242, 122493.	2.0	55
39	Facile One-Pot Biogenic Synthesis of Cu-Co-Ni Trimetallic Nanoparticles for Enhanced Photocatalytic Dye Degradation. Catalysts, 2020, 10, 1138.	1.6	30
40	Photodegradation Activity of Poly(ethylene oxide-b- μ -caprolactone)-Templated Mesoporous TiO ₂ Coated with Au and Pt. Journal of Nanoscience and Nanotechnology, 2020, 20, 5276-5281.	0.9	4
41	Phytomediated Photo-Induced Green Synthesis of Silver Nanoparticles Using Matricaria chamomilla L. and Its Catalytic Activity against Rhodamine B. Biomolecules, 2020, 10, 1604.	1.8	42
42	The synthesis of highly active carbon dot-coated gold nanoparticles <i>via</i> the room-temperature <i>in situ</i> carbonization of organic ligands for 4-nitrophenol reduction. RSC Advances, 2020, 10, 19419-19424.	1.7	10
43	Establishing High Photocatalytic H ₂ Evolution from Multiwalled Titanate Nanotubes. ChemCatChem, 2020, 12, 2951-2956.	1.8	15
44	Hierarchical Tubular Architecture Constructed by Vertically Aligned CoS ₂ @MoS ₂ Nanosheets for Hydrogen Evolution Electrocatalysis. Chemistry - A European Journal, 2020, 26, 6195-6204.	1.7	18
45	Bi nanodendrites for efficient electrocatalytic N ₂ fixation to NH ₃ under ambient conditions. Chemical Communications, 2020, 56, 2107-2110.	2.2	71
46	Ceria-reduced graphene oxide nanocomposite as an efficient electrocatalyst towards artificial N ₂ conversion to NH ₃ under ambient conditions. Chemical Communications, 2019, 55, 10717-10720.	2.2	33
47	Iron phosphide anchored nanoporous carbon as an efficient electrode for supercapacitors and the oxygen reduction reaction. RSC Advances, 2019, 9, 25240-25247.	1.7	16
48	Nanoarchitected peroxidase-mimetic nanozymes: mesoporous nanocrystalline γ - or β -iron oxide?. Journal of Materials Chemistry B, 2019, 7, 5412-5422.	2.9	72
49	Biogenic fabrication of ZnO nanoparticles using <i>Trigonella foenum-graecum</i> (Fenugreek) for proficient photocatalytic degradation of methylene blue under UV irradiation. Journal of Materials Science: Materials in Electronics, 2019, 30, 16156-16173.	1.1	79
50	Synthesis of Mesoporous TiO ₂ -B Nanobelts with Highly Crystallized Walls toward Efficient H ₂ Evolution. Nanomaterials, 2019, 9, 919.	1.9	10
51	Effect of rifampicin on the interfacial properties of imidazolium ionic liquids and its solubility therein. Journal of Molecular Liquids, 2019, 292, 111347.	2.3	33
52	Enhanced constraint and catalysed conversion of lithium polysulfides <i>via</i> composite oxides from spent layered cathodes. Journal of Materials Chemistry A, 2019, 7, 17867-17875.	5.2	28
53	In-situ formation of Cu@Ni cyano-bridged coordination polymer on graphene oxide nanosheets and their thermal conversion. Microporous and Mesoporous Materials, 2019, 290, 109670.	2.2	5
54	Photocatalytic H ₂ Evolution: Dealloying as Efficient Tool for the Fabrication of Rh-decorated TiO ₂ Nanotubes. ChemCatChem, 2019, 11, 6258-6262.	1.8	12

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55	Improving the electrocatalytic N ₂ reduction activity of Pd nanoparticles through surface modification. <i>Journal of Materials Chemistry A</i> , 2019, 7, 21674-21677.	5.2	118
56	Cr ₃ C ₂ Nanoparticle-Embedded Carbon Nanofiber for Artificial Synthesis of NH ₃ through N ₂ Fixation under Ambient Conditions. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 35764-35769.	4.0	43
57	Influence of synthesis route on physico-chemical and catalytic properties of nanosized K-LTL zeolites. <i>Molecular Catalysis</i> , 2019, 475, 110458.	1.0	0
58	TiS ₂ nanosheets for efficient electrocatalytic N ₂ fixation to NH ₃ under ambient conditions. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 1986-1989.	3.0	19
59	Core-shell structured metal-organic framework-derived carbon with redox-active polydopamine nanothin film. <i>Materials Letters</i> , 2019, 253, 178-182.	1.3	12
60	Ni ₂ P Nanosheets on Carbon Cloth: An Efficient Flexible Electrode for Sodium-Ion Batteries. <i>Inorganic Chemistry</i> , 2019, 58, 6579-6583.	1.9	35
61	Soft-templated Synthesis of Sheet-Like Nanoporous Nitrogen-Doped Carbons for Electrochemical Supercapacitors. <i>ChemElectroChem</i> , 2019, 6, 1901-1907.	1.7	7
62	Synthesis, characterization and mixed micellization study of benzene sulphonate based gemini surfactant with sodium dodecyl sulphate. <i>Journal of Molecular Liquids</i> , 2019, 285, 270-278.	2.3	28
63	Ultrasmall V ₈ C ₇ nanoparticles embedded in conductive carbon for efficient electrocatalytic N ₂ reduction toward ambient NH ₃ production. <i>Journal of Materials Chemistry A</i> , 2019, 7, 26227-26230.	5.2	25
64	Gold nanoparticles supported on mesoporous iron oxide for enhanced CO oxidation reaction. <i>Nanoscale</i> , 2018, 10, 4779-4785.	2.8	54
65	Three-Dimensional Macroporous Graphitic Carbon for Supercapacitor Application. <i>ChemistrySelect</i> , 2018, 3, 4522-4526.	0.7	15
66	Direct fabrication of tri-metallic PtPdCu tripods with branched exteriors for the oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2018, 6, 8662-8668.	5.2	117
67	Few-layer graphitic shells networked by low temperature pyrolysis of zeolitic imidazolate frameworks. <i>Materials Chemistry Frontiers</i> , 2018, 2, 520-529.	3.2	9
68	Facile Synthesis of Palladium-Nanoparticle-Embedded N-Doped Carbon Fibers for Electrochemical Sensing. <i>ChemPlusChem</i> , 2018, 83, 401-406.	1.3	8
69	Nafion®-coated mesoporous Pd film toward remarkably enhanced detection of lactic acid. <i>RSC Advances</i> , 2018, 8, 10446-10449.	1.7	6
70	Synthesis of CdS/ZnO Hybrid Nanoarchitected Films with Visible Photocatalytic Activity. <i>Bulletin of the Chemical Society of Japan</i> , 2018, 91, 1556-1560.	2.0	15
71	Strategic design of triphenylamine- and triphenyltriazine-based two-dimensional covalent organic frameworks for CO ₂ uptake and energy storage. <i>Journal of Materials Chemistry A</i> , 2018, 6, 19532-19541.	5.2	184
72	Mesoporous Manganese Phosphonate Nanorods as a Prospective Anode for Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 19739-19745.	4.0	38

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73	Soft-templated synthesis of mesoporous nickel oxide using poly(styrene-block-acrylic) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 74	2.2	22
74	High performance capacitive deionization using modified ZIF-8-derived, N-doped porous carbon with improved conductivity. <i>Nanoscale</i> , 2018, 10, 14852-14859.	2.8	97
75	Electrochemical Synthesis of Mesoporous Au@Cu Alloy Films with Vertically Oriented Mesochannels Using Block Copolymer Micelles. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 23783-23791.	4.0	27
76	Graphene@C-Wrapped Nanoporous Nickel@Cobalt Oxide Flakes for Electrochemical Supercapacitors. <i>ChemistrySelect</i> , 2018, 3, 8505-8510.	0.7	11
77	Effects of morphology of Mg powder precursor on phase formation and superconducting properties of Mg ₁₁ B ₂ low activation superconductor. <i>Journal of Materials Chemistry C</i> , 2018, 6, 8069-8075.	2.7	5
78	Magnetic coupling in Mn ₃ O ₄ -coated γ -MnOOH nanowires. <i>Surface Innovations</i> , 2018, 6, 250-257.	1.4	3
79	Synthesis of nanoporous calcium carbonate spheres using double hydrophilic block copolymer poly(acrylic acid-b-N-isopropylacrylamide). <i>Materials Letters</i> , 2018, 230, 143-147.	1.3	11
80	Synthesis of Hollow Co@Fe Prussian Blue Analogue Cubes by using Silica Spheres as a Sacrificial Template. <i>ChemistryOpen</i> , 2018, 7, 599-603.	0.9	27
81	Synthesis and Characterization of Dendritic Pt Nanoparticles by Using Cationic Surfactant. <i>Bulletin of the Chemical Society of Japan</i> , 2018, 91, 1333-1336.	2.0	15
82	Confined Synthesis of Coordination Frameworks inside Double-Network Hydrogel for Fabricating Hydrogel-Based Water Pipes with High Adsorption Capacity for Cesium Ions. <i>Bulletin of the Chemical Society of Japan</i> , 2018, 91, 1357-1363.	2.0	12
83	Controlled synthesis of mesoporous nitrogen-doped carbons with highly ordered two-dimensional hexagonal mesostructures and their chemical activation. <i>Nanoscale</i> , 2018, 10, 12398-12406.	2.8	32
84	Inversion Calculation of the Interatomic Potentials for Ni _{0.75} Al _x Mo _{0.25} @x Alloy Employing Microscopic Phase-Field Model. <i>Science of Advanced Materials</i> , 2018, 10, 904-912.	0.1	2
85	Biofabrication of Fe nanoparticles in aqueous extract of <i>Hibiscus sabdariffa</i> with enhanced photocatalytic activities. <i>RSC Advances</i> , 2017, 7, 25149-25159.	1.7	85
86	Hydrazine sensors development based on a glassy carbon electrode modified with a nanostructured TiO ₂ films by electrochemical approach. <i>Mikrochimica Acta</i> , 2017, 184, 2123-2129.	2.5	53
87	Micellization and Thermodynamic Properties of Cationic Surfactant Cetyltrimethylammonium Bromide in non-Aqueous Mixture of Lauric Acid. <i>International Journal of Electrochemical Science</i> , 2017, 12, 4528-4542.	0.5	19
88	A Simulation Study for Trimetallic Nanosized Alloy (Ni, Cu, and Ag) in Hydrogenation of Organic Compounds: A Case Study of Nitrophenols. <i>Journal of Nanomaterials</i> , 2017, 2017, 1-8.	1.5	1
89	Low Temperature Oxidation of Carbon Monoxide over Mesoporous Au-Fe ₂ O ₃ Catalysts. <i>Journal of Nanomaterials</i> , 2017, 2017, 1-14.	1.5	11
90	In Situ Infrared Study of the Electrooxidation of Ethanol and Acetaldehyde in Acid Electrolyte. <i>ChemElectroChem</i> , 2016, 3, 1072-1083.	1.7	16

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91	Anodic TiO ₂ nanotube arrays directly grown on quartz glass used in front and backside irradiation configuration for photocatalytic H ₂ generation. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 2733-2740.	0.8	10
92	Photocatalytic H ₂ Generation Using Dewetted Pt-Decorated TiO ₂ Nanotubes: Optimized Dewetting and Oxide Crystallization by a Multiple Annealing Process. Journal of Physical Chemistry C, 2016, 120, 15884-15892.	1.5	43
93	Evidences of the presence of different types of active sites for the oxygen reduction reaction with Fe/N/C based catalysts. Journal of Power Sources, 2016, 327, 204-211.	4.0	28
94	High-temperature annealing of TiO ₂ nanotube membranes for efficient dye-sensitized solar cells. Semiconductor Science and Technology, 2016, 31, 014010.	1.0	25
95	Room temperature stable ClPrNTf ₂ ionic liquid utilizing for chemical sensor development. Journal of Organometallic Chemistry, 2016, 811, 74-80.	0.8	4
96	Single-Walled TiO ₂ Nanotubes: Enhanced Carrier Transport Properties by TiCl ₄ Treatment. Chemistry - A European Journal, 2015, 21, 9204-9208.	1.7	25
97	Use of Anodic TiO ₂ Nanotube Layers as Mesoporous Scaffolds for Fabricating CH ₃ NH ₃ PbI ₃ Perovskite-Based Solid-State Solar Cells. ChemElectroChem, 2015, 2, 824-828.	1.7	39
98	On the relationship between N content, textural properties and catalytic performance for the oxygen reduction reaction of N/CNT. Applied Catalysis B: Environmental, 2015, 162, 420-429.	10.8	44
99	Influence of the electrolyte for the oxygen reduction reaction with Fe/N/C and Fe/N/CNT electrocatalysts. Journal of Power Sources, 2014, 271, 87-96.	4.0	40
100	Amorphous Boron Carbide on Titanium Dioxide Nanobelt Arrays for High-Efficiency Electrocatalytic NO Reduction to NH ₃ . Angewandte Chemie, 0, , .	1.6	6