Asif Ali Tahir

List of Publications by Year
in descending order

110	5,992	76294	74108
papers	citations	40 h-index	75 g-index

114	114	114	7543
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Perovskite-type lanthanum ferrite based photocatalysts: Preparation, properties, and applications. Journal of Energy Chemistry, 2022, 66, 314-338.	7.1	88
2	Improved Photoelectrochemical Performance of Chemically Grown Pristine Hematite Thin Films. Journal of Electronic Materials, 2022, 51, 652-669.	1.0	2
3	Effect of MXene Loaded on g-C3N4 Photocatalyst for the Photocatalytic Degradation of Methylene Blue. Energies, 2022, 15, 955.	1.6	29
4	Superior photoelectrochemical performance by antimony-doped ZnO thin films by AACVD approach. Bulletin of Materials Science, 2022, 45, 1.	0.8	2
5	RF Sputtered Nb-Doped MoS₂ Thin Film for Effective Detection of NO₂ Gas Molecules: Theoretical and Experimental Studies. ACS Omega, 2022, 7, 10492-10501.	1.6	13
6	Performance improvement of a desiccant based cooling system by mitigation of non-uniform illumination on the coupled low concentrating photovoltaic thermal units. Energy Conversion and Management, 2022, 257, 115438.	4.4	9
7	Smart glazing thermal comfort improvement through near-infrared shielding paraffin incorporated SnO2-Al2O3 composite. Construction and Building Materials, 2022, 331, 127319.	3.2	10
8	Au surface plasmon resonance promoted charge transfer in Z-scheme system enables exceptional photocatalytic hydrogen evolution. Applied Catalysis B: Environmental, 2022, 310, 121322.	10.8	37
9	Building energy analysis using EC and PDLC based smart switchable window in Oman. Solar Energy, 2022, 237, 301-312.	2.9	26
10	Development of Morphologically engineered Flower-like Hafnium-Doped ZnO with Experimental and DFT Validation for Low-Temperature and Ultrasensitive Detection of NO_X Gas. Industrial & Engineering Chemistry Research, 2022, 61, 5885-5897.	1.8	7
11	Synergistic Effect of Paraffin-Incorporated In₂O₃/ZnO Multifold Smart Glazing Composite for the Self-Cleaning and Energy-Saving Built Environment. ACS Sustainable Chemistry and Engineering, 2022, 10, 6609-6621.	3.2	11
12	Bandgap Engineering in Novel Fluoriteâ€Type Rare Earth Highâ€Entropy Oxides (REâ€HEOs) with Computational and Experimental Validation for Photocatalytic Water Splitting Applications. Advanced Sustainable Systems, 2022, 6, .	2.7	22
13	Superior photoelectrocatalytic performance of ternary structural BiVO4/GQD/g-C3N4 heterojunction. Journal of Colloid and Interface Science, 2021, 586, 785-796.	5.0	32
14	Temperature regulation of concentrating photovoltaic window using argon gas and polymer dispersed liquid crystal films. Renewable Energy, 2021, 164, 96-108.	4.3	36
15	Preparation, Functionalization, Modification, and Applications of Nanostructured Gold: A Critical Review. Energies, 2021, 14, 1278.	1.6	42
16	An Overview of the Recent Progress in Polymeric Carbon Nitride Based Photocatalysis. Chemical Record, 2021, 21, 1811-1844.	2.9	29
17	Bismuth-Graphene Nanohybrids: Synthesis, Reaction Mechanisms, and Photocatalytic Applicationsâ€”A Review. Energies, 2021, 14, 2281.	1.6	51
18	Structural Characteristics and Environmental Applications of Covalent Organic Frameworks. Energies, 2021, 14, 2267.	1.6	24

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19	Role of Hafnium Doping on Wetting Transition Tuning the Wettability Properties of ZnO and Doped Thin Films: Self-Cleaning Coating for Solar Application. ACS Applied Materials & Interfaces, 2021, 13, 25540-25552.	4.0	28
20	Performance Improvement of a CPV System: Experimental Investigation into Passive Cooling with Phase Change Materials. Energies, 2021, 14, 3550.	1.6	5
21	Fabrication of Mnâ€“ZnO photoanodes for photoelectrochemical water splitting applications. Journal of Materials Science: Materials in Electronics, 2021, 32, 20946-20954.	1.1	2
22	Understanding the Semi-Switchable Thermochromic Behavior of Mixed Halide Hybrid Perovskite Nanorods. Journal of Physical Chemistry C, 2021, 125, 18058-18070.	1.5	21
23	Electrochemical Reduction of CO2: A Review of Cobalt Based Catalysts for Carbon Dioxide Conversion to Fuels. Nanomaterials, 2021, 11, 2029.	1.9	60
24	Reinforcement Learning for Energy-Storage Systems in Grid-Connected Microgrids: An Investigation of Online vs. Offline Implementation. Energies, 2021, 14, 5688.	1.6	8
25	Reduced graphene oxide (rGO) aerogel: Efficient adsorbent for the elimination of antimony (III) and (V) from wastewater. Journal of Hazardous Materials, 2021, 420, 126554.	6.5	51
26	Plasmon Assisted Highly Efficient Visible Light Catalytic CO2 Reduction Over the Noble Metal Decorated Sr-Incorporated g-C3N4. Nano-Micro Letters, 2021, 13, 209.	14.4	53
27	A Review of Supercapacitors: Materials Design, Modification, and Applications. Energies, 2021, 14, 7779.	1.6	94
28	WTa₃₇O_{95.487} Nanocatalyst for Pollutant Degradation. Journal of Physical Chemistry C, 2021, 125, 27148-27158.	1.5	2
29	Superior visible-light assisted water splitting performance by Fe incorporated ZnO photoanodes. Materials Research Bulletin, 2020, 122, 110627.	2.7	14
30	Fe3+ @ ZnO/polyester based solar photocatalytic membrane reactor for abatement of RB5 dye. Journal of Cleaner Production, 2020, 246, 119010.	4.6	44
31	Experimental and DFT Studies of Au Deposition Over WO3/g-C3N4 Z-Scheme Heterojunction. Nano-Micro Letters, 2020, 12, 7.	14.4	57
32	A poly(styrene-co-acrylonitrile) gel electrolyte for dye-sensitized solar cells with improved photoelectrochemical performance. New Journal of Chemistry, 2020, 44, 20212-20221.	1.4	2
33	Photoelectrochemical Water Splitting Using a Concentrated Solar Flux-Assisted LaFeO₃ Photocathode. ACS Applied Energy Materials, 2020, 3, 9002-9009.	2.5	12
34	Electronic Tuning of Zinc Oxide by Direct Fabrication of Chromium (Cr) incorporated photoanodes for Visible-light driven Water Splitting Applications. Scientific Reports, 2020, 10, 9707.	1.6	12
35	A hysteresis-free perovskite transistor with exceptional stability through molecular cross-linking and amine-based surface passivation. Nanoscale, 2020, 12, 7641-7650.	2.8	40
36	Kinetic and thermodynamic evaluation of effective combined promoters for CO2 hydrate formation. Journal of Natural Gas Science and Engineering, 2020, 78, 103313.	2.1	61

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37	Efficient photocatalysis through conductive polymer coated FTO counter electrode in platinum free dye sensitized solar cells. Electrochimica Acta, 2019, 320, 134544.	2.6	39
38	Porous ZnO/Carbon nanocomposites derived from metal organic frameworks for highly efficient photocatalytic applications: A correlational study. Carbon, 2019, 146, 348-363.	5.4	89
39	Highly Efficient Nanostructured Bi2WO6 Thin Film Electrodes for Photoelectrochemical and Environment Remediation. Nanomaterials, 2019, 9, 755.	1.9	10
40	Fabrication of Ni2+ incorporated ZnO photoanode for efficient overall water splitting. Applied Surface Science, 2019, 490, 302-308.	3.1	17
41	Chemically vaporized cobalt incorporated wurtzite as photoanodes for efficient photoelectrochemical water splitting. Materials Science in Semiconductor Processing, 2019, 101, 223-229.	1.9	12
42	Fabrication of Bi2WO6 photoelectrodes with enhanced photoelectrochemical and photocatalytic performance. Solar Energy Materials and Solar Cells, 2019, 195, 134-141.	3.0	49
43	Computational investigations into the structural and electronic properties of Cd_nTe_n (n = 1â€“17) quantum dots. RSC Advances, 2019, 9, 5091-5099.	1.7	11
44	Plasmonic nickel nanoparticles decorated on to LaFeO3 photocathode for enhanced solar hydrogen generation. International Journal of Hydrogen Energy, 2019, 44, 578-586.	3.8	33
45	Softâ€template synthesis of high surface area mesoporous titanium dioxide for dyeâ€sensitized solar cells. International Journal of Energy Research, 2019, 43, 523-534.	2.2	35
46	Unbiased Spontaneous Solar Fuel Production using Stable LaFeO3 Photoelectrode. Scientific Reports, 2018, 8, 3501.	1.6	61
47	Enhanced photoelectrochemical performance of Z-scheme g-C3N4/BiVO4 photocatalyst. Applied Catalysis B: Environmental, 2018, 234, 296-310.	10.8	301
48	Electronic properties of Î²-TaON and its surfaces for solar water splitting. Applied Catalysis B: Environmental, 2018, 229, 24-31.	10.8	52
49	Structural and electronic properties of oxygen defective and Se-doped p-type BiVO4(001) thin film for the applications of photocatalysis. Applied Catalysis B: Environmental, 2018, 224, 895-903.	10.8	104
50	Enhanced Photoactivity and Hydrogen Generation of LaFeO₃ Photocathode by Plasmonic Silver Nanoparticle Incorporation. ACS Applied Energy Materials, 2018, 1, 3449-3456.	2.5	36
51	Photoelectrochemical solar water splitting: From basic principles to advanced devices. , 2018, 2, BDJOC3.		53
52	New Insights into Se/BiVO₄ Heterostructure for Photoelectrochemical Water Splitting: A Combined Experimental and DFT Study. Journal of Physical Chemistry C, 2017, 121, 6218-6228.	1.5	96
53	Donor-acceptor polymer for the design of All-Solid-State dye-sensitized solar cells. Journal of Alloys and Compounds, 2017, 696, 914-922.	2.8	28
54	Nano-enhanced Phase Change Material for thermal management of BICPV. Applied Energy, 2017, 208, 719-733.	5.1	164

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55	The Pseudocapacitive Nature of CoFe2O4 Thin Films. Electrochimica Acta, 2017, 246, 870-878.	2.6	96
56	Polypyrrole/TiO2 composites for the application of photocatalysis. Sensors and Actuators B: Chemical, 2017, 241, 1161-1169.	4.0	92
57	Multinuclear (Sn/Pd) complexes with disodium 2,2â€²-(dithiocarboxyazanediyl)diacetate hydrate; Synthesis, characterization and biological activities. Journal of Coordination Chemistry, 2017, 70, 4070-4092.	0.8	2
58	The Application of Graphene and Its Derivatives to Energy Conversion, Storage, and Environmental and Biosensing Devices. Chemical Record, 2016, 16, 1591-1634.	2.9	58
59	Density Functional Theory Study of Selenium-Substituted Low-Bandgap Donorâ€“Acceptorâ€“Donor Polymer. Journal of Physical Chemistry C, 2016, 120, 27200-27211.	1.5	21
60	Performance enhancement of a Building-Integrated Concentrating Photovoltaic system using phase change material. Solar Energy Materials and Solar Cells, 2016, 149, 29-39.	3.0	158
61	Enhancing the performance of BICPV systems using phase change materials. AIP Conference Proceedings, 2015, , .	0.3	17
62	Phytochemical, spectroscopic and density functional theory study of Diospyrin, and non-bonding interactions of Diospyrin with atmospheric gases. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 141, 71-79.	2.0	60
63	Combined experimental and theoretical study of poly(aniline-co-pyrrole) oligomer. Polymer, 2015, 72, 30-39.	1.8	46
64	Molecular and Electronic Structure Elucidation of Polypyrrole Gas Sensors. Journal of Physical Chemistry C, 2015, 119, 15994-16003.	1.5	94
65	Density functional theory and phytochemical study of 8-hydroxyisodiospyrin. Journal of Molecular Structure, 2015, 1095, 69-78.	1.8	53
66	Dâ€“Ï€â€“A system based on zinc porphyrin dyes for dye-sensitized solar cells: Combined experimental and DFTâ€“TDDFT study. Polyhedron, 2015, 100, 313-320.	1.0	29
67	Photoelectrochemical properties of textureâ€controlled nanostructured Î±â€Fe₂O₃ thin films prepared by AACVD. Physica Status Solidi - Rapid Research Letters, 2014, 8, 976-981.	1.2	26
68	Temperature-controlled Deposition of Copper(I) Oxide and Metallic Copper Nanostructures from Single-source Molecular Precursor. Australian Journal of Chemistry, 2014, 67, 757.	0.5	4
69	Fabrication of NiO photoelectrodes by aerosolâ€assisted chemical vapour deposition (AACVD). Physica Status Solidi - Rapid Research Letters, 2014, 8, 982-986.	1.2	16
70	A new route to control texture of materials: Nanostructured ZnFe2O4 photoelectrodes. International Journal of Hydrogen Energy, 2013, 38, 4315-4323.	3.8	39
71	Synthesis and characterization of silver diethyldithiocarbamate cluster for the deposition of acanthite (Ag2S) thin films for photoelectrochemical applications. Thin Solid Films, 2013, 536, 124-129.	0.8	30
72	Kinetics of light-driven oxygen evolution at Î±-Fe₂O₃electrodes. Faraday Discussions, 2012, 155, 309-322.	1.6	278

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73	New Insights into Water Splitting at Mesoporous Î±-Fe₂O₃ Films: A Study by Modulated Transmittance and Impedance Spectroscopies. Journal of the American Chemical Society, 2012, 134, 1228-1234.	6.6	162
74	Kinetics and mechanism of light-driven oxygen evolution at thin film Î±-Fe2O3 electrodes. Chemical Communications, 2012, 48, 2027.	2.2	207
75	Nanostructured ZnO Thin Films for Optical, Electrical, and Photoelectrochemical Applications from a New Zn Complex. Industrial & Engineering Chemistry Research, 2012, 51, 16361-16368.	1.8	11
76	Hexanuclear copperâ€“nickel and copperâ€“cobalt complexes for thin film deposition of ceramic oxide composites. New Journal of Chemistry, 2012, 36, 911.	1.4	14
77	Silver(i) complexes of 9-anthracenecarboxylic acid and imidazoles: synthesis, structure and antimicrobial activity. Dalton Transactions, 2012, 41, 6516.	1.6	45
78	A Waterâ€Stable Porphyrinâ€Based Metalâ€“Organic Framework Active for Visibleâ€Light Photocatalysis. Angewandte Chemie - International Edition, 2012, 51, 7440-7444.	7.2	680
79	Cobalt titanateâ€“cobalt oxide composite thin films deposited from heterobimetallic precursor. Applied Organometallic Chemistry, 2012, 26, 493-498.	1.7	18
80	Enhancement of Photoelectrochemical Performance of AACVDâ€produced TiO₂ Electrodes by Microwave Irradiation while Preserving the Nanostructure. Chemical Vapor Deposition, 2012, 18, 107-111.	1.4	28
81	Fluoro Substituted Monomeric and Uni-Dimensional Polymeric Organotin(IV) Esters of vitro Inhibitory Studies. Journal of Inorganic and Organometallic Polymers and Materials, 2012, 22, 699-708.	1.9	6
82	Isostructural copperâ€“zinc mixed metal complexes for single source deposition of Cuâ€“ZnO composite thin films. Dalton Transactions, 2011, 40, 7889.	1.6	13
83	Single Step Growth and Characterization of Zinc Oxide, Tin Oxide, and Composite (Zn_xSn_{1â^'x}O_y) Nanoplate and Nanocolumn Electrodes. Journal of the American Ceramic Society, 2011, 94, 3540-3546.	1.9	18
84	Deposition of iron titanate/titania ceramic composite thin films from a single molecular precursor. Inorganica Chimica Acta, 2011, 376, 189-194.	1.2	18
85	Effects of AACVD and Electrodeposited ZnO Seed Layer on the Growth and Alignment of ZnO Nanorods by Chemical Bath Deposition. Nanoscience and Nanotechnology Letters, 2011, 3, 674-678.	0.4	7
86	ZnOâ€“SnO2 composite anodes in extremely thin absorber layer (ETA) solar cells. Journal of Electroanalytical Chemistry, 2010, 646, 124-132.	1.9	18
87	New tetrahedral, square-pyramidal, trigonal-bipyramidal and octahedral organotin(IV) 4-ethoxycarbonylpiperazine-1-carbodithioates: Synthesis, structural properties and biological applications. Journal of Organometallic Chemistry, 2010, 695, 1526-1532.	0.8	17
88	Photoelectrochemical water splitting at nanostructured ZnFe2O4 electrodes. Journal of Photochemistry and Photobiology A: Chemistry, 2010, 216, 119-125.	2.0	164
89	ZnFe2O4 thin films from a single source precursor by aerosol assisted chemical vapour deposition. Thin Solid Films, 2010, 518, 3664-3668.	0.8	49
90	Photoelectrochemical and Photoresponsive Properties of Bi₂S₃Nanotube and Nanoparticle Thin Films. Chemistry of Materials, 2010, 22, 5084-5092.	3.2	205

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91	Fabrication of nanostructured Î±-Fe2O3 electrodes using ferrocene for solar hydrogen generation. Materials Letters, 2009, 63, 523-526.	1.3	50
92	Copper(II) Oligomeric Derivatives for Deposition of Copper Thin Films. European Journal of Inorganic Chemistry, 2009, 2009, 1043-1050.	1.0	10
93	Nanostructured Î±-Fe₂O₃ Electrodes for Solar Driven Water Splitting: Effect of Doping Agents on Preparation and Performance. Journal of Physical Chemistry C, 2009, 113, 4768-4778.	1.5	147
94	Nanostructured Î±-Fe₂O₃ Thin Films for Photoelectrochemical Hydrogen Generation. Chemistry of Materials, 2009, 21, 3763-3772.	3.2	317
95	Heterobimetallic copperâ€“barium complexes for deposition of composite oxide thin films. New Journal of Chemistry, 2009, 33, 1535.	1.4	16
96	Photooxidation of water by NiTiO3 deposited from single source precursor [Ni2Ti2(OEt)2(Î¼-OEt)6(acac)4] by AACVD. Dalton Transactions, 2009, , 3674.	1.6	45
97	Copperâ€“cobalt heterobimetallic ceramic oxide thin film deposition: Synthesis, characterization and application of precursor. Inorganic Chemistry Communication, 2008, 11, 1159-1161.	1.8	22
98	Deposition and characterization of ZnO thin films from a novel hexanuclear zinc precursor. Inorganica Chimica Acta, 2008, 361, 188-194.	1.2	23
99	Single source heterobimetallic precursors for the deposition of Cuâ€“Ti mixed metal oxide thin films. Dalton Transactions, 2008, , 1224.	1.6	15
100	Heterobimetallic Molecular Cages for the Deposition of Cu/Ti and Cu/Zn Mixed-Metal Oxides. Inorganic Chemistry, 2007, 46, 4120-4127.	1.9	42
101	Bis(Î¼-acetylacetonato-Îº2O:Oâ€²)bis[(acetylacetonato-Îº2O,Oâ€²)aquanickel(II)] hemihydrate. Acta Crystallographica Section E: Structure Reports Online, 2007, 63, m272-m274.	0.2	2
102	Chloro[2-(N,N-dimethylamino)ethanol-ÎºN][2-(N,N-dimethylamino)ethanolato-Îº2 N,O]palladium(II). Acta Crystallographica Section E: Structure Reports Online, 2007, 63, m728-m730.	0.2	0
103	Bis(cinnamato-ÎºO)bis[2-(dimethylamino)ethanol-Îº2N,O]copper(II). Acta Crystallographica Section E: Structure Reports Online, 2007, 63, m1243-m1245.	0.2	2
104	Synthesis of Isostructural Cage Complexes of Copper with Cobalt and Nickel for Deposition of Mixed Ceramic Oxide Materials. Inorganic Chemistry, 2006, 45, 10457-10466.	1.9	48
105	Dioxobis(pentane-2,4-dionato)(tetrahydrofuran)uranium(VI). Acta Crystallographica Section E: Structure Reports Online, 2006, 62, m1780-m1781.	0.2	6
106	Bis(acetato-O)bis[2-(dimethylamino)ethanol-Îº2N,O]cobalt(II). Acta Crystallographica Section E: Structure Reports Online, 2006, 62, m1974-m1976.	0.2	1
107	Redetermination of bis(2,4-pentanedionato)palladium(II). Acta Crystallographica Section E: Structure Reports Online, 2005, 61, m2181-m2183.	0.2	16
108	Synthesis and Structural Characterization of a New Heterobimetallic Coordination Complex of Barium and Cobalt for Use as a Precursor for Chemical Vapor Deposition. Inorganic Chemistry, 2005, 44, 9207-9212.	1.9	31

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109	Penetrating arrow injuries of the maxillofacial region. British Journal of Oral and Maxillofacial Surgery, 2005, 43, 329-332.	0.4	23
110	Impact of dopant ratio on the energy harvesting activity of polyaniline modified counter electrodes for Ptâ€free dyeâ€sensitized solar cells. Electrochemical Science Advances, 0, , .	1.2	0