Jason Scott

List of Publications by Citations

175 papers	6,506 citations	49 h-index	70 g-index
187 ext. papers	7,997 ext. citations	9.9 avg, IF	6.32 L-index

#	Paper	IF	Citations
175	Progress in Heterogeneous Photocatalysis: From Classical Radical Chemistry to Engineering Nanomaterials and Solar Reactors. *Journal of Physical Chemistry Letters*, **2012**, 3, 629-39	6.4	344
174	Recent advances in ordered meso/macroporous metal oxides for heterogeneous catalysis: a review. *Journal of Materials Chemistry A*, **2017**, 5, 8825-8846	13	196
173	Industrial carbon dioxide capture and utilization: state of the art and future challenges. *Chemical Society Reviews*, **2020**, 49, 8584-8686	58.5	184
172	Hybrid PV/T enhancement using selectively absorbing Ag□iO 2 /carbon nanofluids. *Solar Energy Materials and Solar Cells*, **2016**, 147, 281-287	6.4	153
171	The effect of preparation method on the photoactivity of crystalline titanium dioxide particles. *Chemical Engineering Journal*, **2003**, 95, 213-220	14.7	132
170	TiO/porous adsorbents: Recent advances and novel applications. *Journal of Hazardous Materials*, **2018**, 341, 404-423	12.8	129
169	Improving the photo-oxidative capability of BiOBr via crystal facet engineering. *Journal of Materials Chemistry A*, **2017**, 5, 8117-8124	13	124
168	Photocatalytic and Photoelectrochemical Systems: Similarities and Differences. *Advanced Materials*, **2020**, 32, e1904717	24	124
167	High Performance Au□d Supported on 3D Hybrid Strontium-Substituted Lanthanum Manganite Perovskite Catalyst for Methane Combustion. *ACS Catalysis*, **2016**, 6, 6935-6947	13.1	117
166	Photocorrosion of Cuprous Oxide in Hydrogen Production: Rationalising Self-Oxidation or Self-Reduction. *Angewandte Chemie - International Edition*, **2018**, 57, 13613-13617	16.4	112
165	A review on photo-thermal catalytic conversion of carbon dioxide. *Green Energy and Environment*, **2017**, 2, 204-217	5.7	110
164	Flame-Synthesized Ceria-Supported Copper Dimers for Preferential Oxidation of CO. *Advanced Functional Materials*, **2009**, 19, 369-377	15.6	103
163	Photocatalytic oxidation of toluene and trichloroethylene in the gas-phase by metallised (Pt, Ag) titanium dioxide. *Applied Catalysis B: Environmental*, **2008**, 78, 1-10	21.8	95
162	Understanding Plasmon and Band Gap Photoexcitation Effects on the Thermal-Catalytic Oxidation of Ethanol by TiO2-Supported Gold. *ACS Catalysis*, **2016**, 6, 1870-1879	13.1	89
161	Elucidating the impact of Ni and Co loading on the selectivity of bimetallic NiCo catalysts for dry reforming of methane. *Chemical Engineering Journal*, **2018**, 352, 572-580	14.7	85
160	The influence of La-doping on the activity and stability of Cu/ZnO catalyst for the low-temperature water□as shift reaction. *Journal of Catalysis*, **2010**, 273, 73-81	7.3	81
159	Modelling the leaching of Pb, Cd, As, and Cr from cementitious waste using PHREEQC. *Journal of Hazardous Materials*, **2005**, 125, 45-61	12.8	81

158	TiO2-supported copper nanoparticles prepared via ion exchange for photocatalytic hydrogen production. *Journal of Materials Chemistry A*, **2014**, 2, 6432-6438	13	79
157	Stimuli-responsive functionalized mesoporous silica nanoparticles for drug release in response to various biological stimuli. *Biomaterials Science*, **2014**, 2, 121-130	7.4	75
156	Temperature-induced evolution of reaction sites and mechanisms during preferential oxidation of CO. *Journal of Catalysis*, **2011**, 277, 64-71	7.3	75
155	Landfill Management, Leachate Generation, and Leach Testing of Solid Wastes in Australia and Overseas. *Critical Reviews in Environmental Science and Technology*, **2005**, 35, 239-332	11.1	75
154	Evaluating the applicability of a modified toxicity characteristic leaching procedure (TCLP) for the classification of cementitious wastes containing lead and cadmium. *Journal of Hazardous Materials*, **2003**, 103, 125-40	12.8	74
153	CO2 reforming of methane over MCM-41-supported nickel catalysts: altering support acidity by one-pot synthesis at room temperature. *Applied Catalysis A: General*, **2014**, 473, 51-58	5.1	66
152	Large-Scale Fabrication of Three-Dimensional Surface Patterns Using Template-Defined Electrochemical Deposition. *Advanced Functional Materials*, **2013**, 23, 720-730	15.6	65
151	Clarifying the role of silver deposits on titania for the photocatalytic mineralisation of organic compounds. *Journal of Photochemistry and Photobiology A: Chemistry*, **2006**, 183, 41-52	4.7	65
150	Recent advances in suppressing the photocorrosion of cuprous oxide for photocatalytic and photoelectrochemical energy conversion. *Journal of Photochemistry and Photobiology C: Photochemistry Reviews*, **2019**, 40, 191-211	16.4	65
149	Understanding Hydrothermal Titanate Nanoribbon Formation. *Crystal Growth and Design*, **2010**, 10, 3618-3625	3.9	63
148	Photoelectrochemical water oxidation using a Bi2MoO6/MoO3 heterojunction photoanode synthesised by hydrothermal treatment of an anodised MoO3 thin film. *Journal of Materials Chemistry A*, **2016**, 4, 6964-6971	13	62
147	Comparison between acetic acid and landfill leachates for the leaching of Pb(II), Cd(II), As(V), and Cr(VI) from cementitious wastes. *Environmental Science & Technology*, **2004**, 38, 3977-83	10.3	62
146	Insight towards the role of platinum in the photocatalytic mineralisation of organic compounds. *Journal of Molecular Catalysis A*, **2007**, 263, 93-102		61
145	In Situ Exsolution of Bimetallic Rh-Ni Nanoalloys: a Highly Efficient Catalyst for CO Methanation. *ACS Applied Materials & Interfaces*, **2018**, 10, 16352-16357	9.5	60
144	Zeolite synthesis from coal fly ash for the removal of lead ions from aqueous solution. *Journal of Chemical Technology and Biotechnology*, **2002**, 77, 63-69	3.5	60
143	Implications of the structure of cementitious wastes containing Pb(II), Cd(II), As(V), and Cr(VI) on the leaching of metals. *Cement and Concrete Research*, **2004**, 34, 1093-1102	10.3	59
142	Hydrothermally synthesized titanate nanostructures: impact of heat treatment on particle characteristics and photocatalytic properties. *ACS Applied Materials & Interfaces*, **2011**, 3, 3988-96	9.5	58
141	Boosting Visible-Light-Driven Photo-oxidation of BiOCl by Promoted Charge Separation via Vacancy Engineering. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 3010-3017	8.3	57

140	Single Atom and Nanoclustered Pt Catalysts for Selective CO2 Reduction. *ACS Applied Energy Materials*, **2018**, 1, 6781-6789	6.1	56
139	Exploring Cu oxidation state on TiO2 and its transformation during photocatalytic hydrogen evolution. *Applied Catalysis A: General*, **2016**, 521, 190-201	5.1	55
138	Meso-Molding Three-Dimensional Macroporous Perovskites: A New Approach to Generate High-Performance Nanohybrid Catalysts. *ACS Applied Materials & Interfaces*, **2016**, 8, 2457-63	9.5	55
137	Enhancing Ni-SiO2 catalysts for the carbon dioxide reforming of methane: Reduction-oxidation-reduction pre-treatment. *Applied Catalysis B: Environmental*, **2016**, 199, 155-165	21.8	53
136	Influence of MoO3(110) crystalline plane on its self-charging photoelectrochemical properties. *Scientific Reports*, **2014**, 4, 7428	4.9	53
135	Tungsten trioxide as a visible light photocatalyst for volatile organic carbon removal. *Molecules*, **2014**, 19, 17747-62	4.8	53
134	The controlled disassembly of mesostructured perovskites as an avenue to fabricating high performance nanohybrid catalysts. *Nature Communications*, **2017**, 8, 15553	17.4	52
133	Bio-oil upgrading with catalytic pyrolysis of biomass using Copper/zeolite-Nickel/zeolite and Copper-Nickel/zeolite catalysts. *Bioresource Technology*, **2019**, 279, 404-409	11	51
132	Light-Induced Formation of MoOS Clusters on CdS Nanorods as Cocatalyst for Enhanced Hydrogen Evolution. *ACS Applied Materials & Interfaces*, **2020**, 12, 8324-8332	9.5	51
131	CFD modelling for a TiO2-coated glass-bead photoreactor irradiated by optical fibres: Photocatalytic degradation of oxalic acid. *Chemical Engineering Science*, **2009**, 64, 1695-1706	4.4	51
130	Ni/TiO2 for low temperature steam reforming of methane. *Chemical Engineering Science*, **2016**, 140, 161-170	4.4	50
129	Ni-SiO□catalysts for the carbon dioxide reforming of methane: varying support properties by flame spray pyrolysis. *Molecules*, **2015**, 20, 4594-609	4.8	50
128	CuO x dispersion and reducibility on TiO 2 and its impact on photocatalytic hydrogen evolution. *International Journal of Hydrogen Energy*, **2014**, 39, 12499-12506	6.7	49
127	Studies on the Preparation of Magnetic Photocatalysts. *Journal of Nanoparticle Research*, **2005**, 7, 691-705	2.3	49
126	An investigation of thermal stability of carbon nanofluids for solar thermal applications. *Solar Energy Materials and Solar Cells*, **2016**, 157, 652-659	6.4	49
125	Experimental and numerical investigation of volumetric versus surface solar absorbers for a concentrated solar thermal collector. *Solar Energy*, **2016**, 136, 349-364	6.8	48
124	Design and analysis of a medium-temperature, concentrated solar thermal collector for air-conditioning applications. *Applied Energy*, **2017**, 190, 1159-1173	10.7	47
123	Mobile Polaronic States in □MoO3: An ab Initio Investigation of the Role of Oxygen Vacancies and Alkali Ions. *ACS Applied Materials & Interfaces*, **2016**, 8, 10911-7	9.5	40

122	Photocorrosion of Cuprous Oxide in Hydrogen Production: Rationalising Self-Oxidation or Self-Reduction. *Angewandte Chemie*, **2018**, 130, 13801-13805	3.6	39
121	Nanosized metal deposits on titanium dioxide for augmenting gas-phase toluene photooxidation. *Journal of Nanoparticle Research*, **2009**, 11, 209-219	2.3	39
120	Preparation of Bi-based photocatalysts in the form of powdered particles and thin films: a review. *Journal of Materials Chemistry A*, **2020**, 8, 15302-15318	13	38
119	The impact of ruthenium, lanthanum and activation conditions on the methanation activity of alumina-supported cobalt catalysts. *Catalysis Today*, **2011**, 164, 297-301	5.3	38
118	Synergistic ultraviolet and visible light photo-activation enables intensified low-temperature methanol synthesis over copper/zinc oxide/alumina. *Nature Communications*, **2020**, 11, 1615	17.4	37
117	Exploring the effects of heat and UV exposure on glycerol-based Ag-SiO2 nanofluids for PV/T applications. *Renewable Energy*, **2018**, 120, 266-274	8.1	37
116	Effect of film thickness and agglomerate size on the superwetting and fog-free characteristics of TiO2 films. *Thin Solid Films*, **2009**, 517, 5425-5430	2.2	36
115	Transformation of Cuprous Oxide into Hollow Copper Sulfide Cubes for Photocatalytic Hydrogen Generation. *Journal of Physical Chemistry C*, **2018**, 122, 14072-14081	3.8	35
114	Enhancing the catalytic oxidation capacity of Pt/TiO2 using a light pre-treatment approach. *Applied Catalysis B: Environmental*, **2015**, 164, 10-17	21.8	34
113	Improving the Photo-Oxidative Performance of BiMoO by Harnessing the Synergy between Spatial Charge Separation and Rational Co-Catalyst Deposition. *ACS Applied Materials & Interfaces*, **2018**, 10, 9342-9352	9.5	34
112	Coal-packed methane biofilter for mitigation of green house gas emissions from coal mine ventilation air. *PLoS ONE*, **2014**, 9, e94641	3.7	34
111	Construction of a Bi2MoO6:Bi2Mo3O12 heterojunction for efficient photocatalytic oxygen evolution. *Chemical Engineering Journal*, **2018**, 353, 636-644	14.7	33
110	Advancing photoreforming of organics: highlights on photocatalyst and system designs for selective oxidation reactions. *Energy and Environmental Science*, **2021**, 14, 1140-1175	35.4	33
109	Hydrogen evolution via glycerol photoreforming over Cu□t nanoalloys on TiO2. *Applied Catalysis A: General*, **2016**, 518, 221-230	5.1	32
108	Harvesting, storing and utilising solar energy using MoO3 : modulating structural distortion through pH adjustment. *ChemSusChem*, **2014**, 7, 1934-41	8.3	32
107	Challenges to Developing Methane Biofiltration for Coal Mine Ventilation Air: A Review. *Water, Air, and Soil Pollution*, **2013**, 224, 1	2.6	32
106	Understanding selective enhancement by silver during photocatalytic oxidation. *Photochemical and Photobiological Sciences*, **2005**, 4, 565-7	4.2	32
105	Spherical Murray-Type Assembly of Co-N-C Nanoparticles as a High-Performance Trifunctional Electrocatalyst. *ACS Applied Materials & Interfaces*, **2019**, 11, 9925-9933	9.5	31

104	Flame spray pyrolysis-designed silica/ceria-zirconia supports for the carbon dioxide reforming of methane. *Applied Catalysis A: General*, **2017**, 546, 47-57	5.1	30
103	An Alumina-Supported Ni-La-Based Catalyst for Producing Synthetic Natural Gas. *Catalysts*, **2016**, 6, 170	4	30
102	Enhanced bio-oil deoxygenation activity by Cu/zeolite and Ni/zeolite catalysts in combined in-situ and ex-situ biomass pyrolysis. *Journal of Analytical and Applied Pyrolysis*, **2019**, 140, 148-160	6	29
101	C Cleavage by Au/TiO2 during Ethanol Oxidation: Understanding Bandgap Photoexcitation and Plasmonically Mediated Charge Transfer via Quantitative in Situ DRIFTS. *ACS Catalysis*, **2016**, 6, 8021-8029	13.1	29
100	Understanding photocatalytic metallization of preadsorbed ionic gold on titania, ceria, and zirconia. *Langmuir*, **2010**, 26, 2099-106	4	29
99	The Importance of the Interfacial Contact: Is Reduced Graphene Oxide Always an Enhancer in Photo(Electro)Catalytic Water Oxidation?. *ACS Applied Materials & Interfaces*, **2019**, 11, 23125-23134	8.5	28
98	Photocatalysis of heat treated sodium- and hydrogen-titanate nanoribbons for water splitting, H2/O2 generation and oxalic acid oxidation. *Chemical Engineering Science*, **2013**, 93, 341-349	4.4	28
97	Unlocking the potential of the formate pathway in the photo-assisted Sabatier reaction. *Nature Catalysis*, **2020**, 3, 1034-1043	36.5	28
96	Hierarchically Porous Biocatalytic MOF Microreactor as a Versatile Platform towards Enhanced Multienzyme and Cofactor-Dependent Biocatalysis. *Angewandte Chemie - International Edition*, **2021**, 60, 5421-5428	16.4	28
95	Role of support in photothermal carbon dioxide hydrogenation catalysed by Ni/CexTiyO2. *Progress in Natural Science: Materials International*, **2018**, 28, 168-177	3.6	27
94	Integrated photocatalytic filtration array for indoor air quality control. *Environmental Science & Technology*, **2010**, 44, 5558-63	10.3	27
93	Channelled optical fibre photoreactor for improved air quality control. *Chemical Engineering Science* , **2010**, 65, 882-889	4.4	27
92	Light-Induced Synergistic Multidefect Sites on TiO2/SiO2 Composites for Catalytic Dehydrogenation. *ACS Catalysis*, **2019**, 9, 2674-2684	13.1	27
91	Mixed-Metal MOF-74 Templated Catalysts for Efficient Carbon Dioxide Capture and Methanation. *Advanced Functional Materials*, **2021**, 31, 2007624	15.6	27
90	Hierarchically Porous Network-Like Ni/Co3O4: Noble Metal-Free Catalysts for Carbon Dioxide Methanation. *Advanced Sustainable Systems*, **2018**, 2, 1700119	5.9	26
89	Preparation of high porous PtV2O5WO3/TiO2/SiC filter for simultaneous removal of NO and particulates. *Powder Technology*, **2008**, 180, 79-85	5.2	26
88	Low-Temperature CO2 Methanation: Synergistic Effects in Plasma-Ni Hybrid Catalytic System. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 1888-1898	8.3	26
87	An Operando Mechanistic Evaluation of a Solar-Rechargeable Sodium-Ion Intercalation Battery. *Advanced Energy Materials*, **2017**, 7, 1700545	21.8	25

86	Harnessing the Beneficial Attributes of Ceria and Titania in a Mixed-Oxide Support for Nickel-Catalyzed Photothermal CO 2 Methanation. *Engineering*, **2017**, 3, 393-401	9.7	25
85	Exploring the relationship between surface structure and photocatalytic activity of flame-made TiO2-based catalysts. *Applied Catalysis B: Environmental*, **2012**, 126, 290-297	21.8	25
84	Arsenic speciation in municipal landfill leachate. *Chemosphere*, **2010**, 79, 794-801	8.4	25
83	Pyrophoricity and stability of copper and platinum based water-gas shift catalysts during oxidative shut-down/start-up operation. *Chemical Engineering Science*, **2010**, 65, 6461-6470	4.4	25
82	Evaluating the applicability of regulatory leaching tests for assessing the hazards of Pb-contaminated soils. *Journal of Hazardous Materials*, **2005**, 120, 101-11	12.8	25
81	Plasmonic effects on CO2 reduction over bimetallic Ni-Au catalysts. *Chemical Engineering Science*, **2019**, 194, 94-104	4.4	25
80	Thermal analysis of a micro solar thermal collector designed for methanol reforming. *Solar Energy*, **2015**, 113, 189-198	6.8	23
79	Valence Alignment of Mixed Ni-Fe Hydroxide Electrocatalysts through Preferential Templating on Graphene Edges for Enhanced Oxygen Evolution. *ACS Nano*, **2020**, 14, 11327-11340	16.7	23
78	Inducing synergy in bimetallic RhNi catalysts for CO2 methanation by galvanic replacement. *Applied Catalysis B: Environmental*, **2020**, 277, 119029	21.8	22
77	Promoting surface oxygen vacancies on ceria via light pretreatment to enhance catalytic ozonation. *Catalysis Science and Technology*, **2019**, 9, 5979-5990	5.5	22
76	Photogenerated charge dynamics of CdS nanorods with spatially distributed MoS2 for photocatalytic hydrogen generation. *Chemical Engineering Journal*, **2021**, 420, 127709	14.7	22
75	Design and synthesis of CeO2 nanowire/MnO2 nanosheet heterogeneous structure for enhanced catalytic properties. *Materials Today Communications*, **2017**, 11, 103-111	2.5	21
74	Enhancing bimetallic synergy with light: the effect of UV light pre-treatment on catalytic oxygen activation by bimetallic AuPt nanoparticles on a TiO2 support. *Catalysis Science and Technology*, **2017**, 7, 4792-4805	5.5	21
73	Energy concentration limits in solar thermal heating applications. *Energy*, **2016**, 96, 253-267	7.9	21
72	Pt-V2O5-WO3/TiO2 catalysts supported on SiC filter for NO reduction at low temperature. *Korean Journal of Chemical Engineering*, **2005**, 22, 844-851	2.8	21
71	From passivation to activation - tunable nickel/nickel oxide for hydrogen evolution electrocatalysis. *Chemical Communications*, **2020**, 56, 1709-1712	5.8	21
70	The role of adsorbed oxygen in formic acid oxidation by Pt/TiO2 facilitated by light pre-treatment. *Catalysis Science and Technology*, **2016**, 6, 6679-6687	5.5	20
69	Coordination Polymer to Atomically Thin, Holey, Metal-Oxide Nanosheets for Tuning Band Alignment. *Advanced Materials*, **2019**, 31, e1905288	24	20

68	Microbial transformation of arsenic species in municipal landfill leachate. *Journal of Hazardous Materials*, **2011**, 188, 140-7	12.8	20
67	Core/Shell NiFe Nanoalloy with a Discrete N-doped Graphitic Carbon Cover for Enhanced Water Oxidation. *ChemElectroChem*, **2018**, 5, 732-736	4.3	19
66	Revealing the key oxidative species generated by Pt-loaded metal oxides under dark and light conditions. *Applied Catalysis B: Environmental*, **2018**, 223, 216-227	21.8	19
65	Microbial reduction of hexavalent chromium by landfill leachate. *Journal of Hazardous Materials*, **2007**, 142, 153-9	12.8	19
64	Light-Enhanced CO2 Reduction to CH4 using Nonprecious Transition-Metal Catalysts. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 5056-5066	8.3	18
63	Manipulating ceria-titania binary oxide features and their impact as nickel catalyst supports for low temperature steam reforming of methane. *Applied Catalysis A: General*, **2017**, 530, 111-124	5.1	18
62	Low energy photosynthesis of gold-titania catalysts. *Photochemical and Photobiological Sciences*, **2007**, 6, 829-32	4.2	18
61	Light, Catalyst, Activation: Boosting Catalytic Oxygen Activation Using a Light Pretreatment Approach. *ACS Catalysis*, **2017**, 7, 3644-3653	13.1	17
60	Asymmetrical Double Flame Spray Pyrolysis-Designed SiO/CeZrO for the Dry Reforming of Methane. *ACS Applied Materials & Interfaces*, **2019**, 11, 25766-25777	9.5	17
59	Probing Surface Properties and Reaction Intermediates During Heterogeneous Catalytic Oxidation of Acetaldehyde. *ChemCatChem*, **2009**, 1, 286-294	5.2	17
58	Photocatalysis in TiO2 aqueous suspension: Effects of mono- or di-hydroxyl substitution of butanedioic acid on the disappearance and mineralisation rates. *Catalysis Today*, **2011**, 178, 51-57	5.3	15
57	Emerging material engineering strategies for amplifying photothermal heterogeneous CO2 catalysis. *Journal of Energy Chemistry*, **2021**, 59, 108-125	12	15
56	Correlating morphology and doping effects with the carbon monoxide catalytic activity of Zn doped CeO2 nanocrystals. *Catalysis Science and Technology*, **2018**, 8, 134-138	5.5	15
55	Photo-driven synthesis of polymer-coated platinized ZnO nanoparticles with enhanced photoelectrochemical charge transportation. *Journal of Materials Chemistry A*, **2017**, 5, 4568-4575	13	14
54	Tailoring the multi-functionalities of one-dimensional ceria nanostructures via oxygen vacancy modulation. *Journal of Colloid and Interface Science*, **2017**, 504, 305-314	9.3	14
53	Shock Exfoliation of Graphene Fluoride in Microwave. *Small*, **2020**, 16, e1903397	11	14
52	Effect of Metal-Support Interactions in Mixed Co/Al Catalysts for Dry Reforming of Methane. *ChemCatChem*, **2019**, 11, 3432-3440	5.2	13
51	Silver-Based Plasmonic Catalysts for Carbon Dioxide Reduction. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 1879-1887	8.3	13

50	Unifying double flame spray pyrolysis with lanthanum doping to restrict cobalt aluminate formation in Co/Al2O3 catalysts for the dry reforming of methane. *Catalysis Science and Technology* , **2019**, 9, 4970-4980	5.5	13
49	Ternary MnO/CoMn alloy@N-doped graphitic composites derived from a bi-metallic pigment as bi-functional electrocatalysts. *Journal of Materials Chemistry A*, **2019**, 7, 20649-20657	13	13
48	The effect of support and synthesis method on the methanation activity of alumina-supported cobalt ruthenium lanthana catalysts. *Catalysis Today*, **2011**, 178, 79-84	5.3	13
47	Relationship between mineralization kinetics and mechanistic pathway during malic acid photodegradation. *Journal of Molecular Catalysis A*, **2011**, 335, 151-157		13
46	Experimental Results for Tailored Spectrum Splitting Metallic Nanofluids for c-Si, GaAs, and Ge Solar Cells. *IEEE Journal of Photovoltaics*, **2019**, 9, 385-390	3.7	13
45	Hierarchically Porous Biocatalytic MOF Microreactor as a Versatile Platform towards Enhanced Multienzyme and Cofactor-Dependent Biocatalysis. *Angewandte Chemie*, **2021**, 133, 5481-5488	3.6	13
44	Plasmon enhanced selective electronic pathways in TiO2 supported atomically ordered bimetallic Au-Cu alloys. *Journal of Catalysis*, **2017**, 352, 638-648	7.3	12
43	The Impact of La Doping on Dry Reforming Ni-Based Catalysts Loaded on FSP-Alumina. *Topics in Catalysis*, **2018**, 61, 1842-1855	2.3	12
42	Assembly of cerium-based coordination polymer into variant polycrystalline 2D 3D CeO2 nanostructures. *Journal of Materials Chemistry A*, **2020**, 8, 4753-4763	13	11
41	A comparison of carbon footprints of magnesium oxide and magnesium hydroxide produced from conventional processes. *Journal of Cleaner Production*, **2018**, 202, 1035-1044	10.3	11
40	The Dependence of Bi2MoO6 Photocatalytic Water Oxidation Capability on Crystal Facet Engineering. *ChemPhotoChem*, **2019**, 3, 1246-1253	3.3	11
39	The role of iron in hexavalent chromium reduction by municipal landfill leachate. *Journal of Hazardous Materials*, **2009**, 161, 657-62	12.8	11
38	Decoupling the Impacts of Engineering Defects and Band Gap Alignment Mechanism on the Catalytic Performance of Holey 2D CeO2 -Based Heterojunctions. *Advanced Functional Materials*, **2021**, 31, 2103171	15.6	11
37	Inducing Ni phyllosilicate formation over a carbon fiber support as a catalyst for the CO2 reforming of methane. *Applied Catalysis A: General*, **2020**, 592, 117418	5.1	10
36	Tuning the Selectivity of LaNiO3 Perovskites for CO2 Hydrogenation through Potassium Substitution. *Catalysts*, **2020**, 10, 409	4	10
35	Synthesis of 2D MFI zeolites in the form of self-interlocked nanosheet stacks with tuneable structural and chemical properties for catalysis. *Applied Materials Today*, **2018**, 11, 22-33	6.6	10
34	Concentration-Mediated Band Gap Reduction of Bi2MoO6 Photoanodes Prepared by Bi3+ Cation Insertions into Anodized MoO3 Thin Films: Structural, Optical, and Photoelectrochemical Properties. *ACS Applied Energy Materials*, **2018**, 1, 3955-3964	6.1	10
33	Cooperative defect-enriched SiO2 for oxygen activation and organic dehydrogenation. *Journal of Catalysis*, **2019**, 376, 168-179	7.3	10

32	Computational fluid dynamics modelling and optimal configuring of a channelled optical fibre photoreactor. *Chemical Engineering Science*, **2010**, 65, 5029-5040	4.4	10
31	Plasma Treating Mixed Metal Oxides to Improve Oxidative Performance via Defect Generation. *Materials*, **2019**, 12,	3.5	9
30	2D versus 3D MFI zeolite: The effect of Si/Al ratio on the accessibility of acid sites and catalytic performance. *Materials Today Chemistry*, **2018**, 8, 1-12	6.2	9
29	Investigating the effect of UV light pre-treatment on the oxygen activation capacity of Au/TiO2. *Catalysis Science and Technology*, **2016**, 6, 8188-8199	5.5	9
28	Promoting Catalytic Oxygen Activation by Localized Surface Plasmon Resonance: Effect of Visible Light Pre-treatment and Bimetallic Interactions. *ChemCatChem*, **2018**, 10, 287-295	5.2	8
27	Selective oxidation of methacrolein to methacrylic acid over HPMoVO/CN-SBA-15.. *RSC Advances*, **2019**, 9, 34065-34075	3.7	7
26	Multipronged Validation of Oxalate C Bond Cleavage Driven by Au-TiO2 Interfacial Charge Transfer Using Operando DRIFTS. *ACS Catalysis*, **2018**, 8, 7158-7163	13.1	6
25	Experimental investigation of a nanofluid absorber employed in a low-profile, concentrated solar thermal collector **2015**,		6
24	Cu2O photocatalyst: Activity enhancement driven by concave surface. *Materials Today Energy*, **2020**, 16, 100422	7	6
23	Manipulation of planar oxygen defect arrangements in multifunctional magn titanium oxide hybrid systems: from energy conversion to water treatment. *Energy and Environmental Science*, **2020**, 13, 5080-5096	35.4	6
22	Ethylene oligomerisation over Co/SiO2 in the presence of trace carbon monoxide: The Eidus reaction revisited. *Catalysis Today*, **2013**, 215, 267-275	5.3	5
21	Highly catalytically active CeO-based heterojunction nanostructures with mixed micro/meso-porous architectures. *Nanoscale*, **2021**, 13, 6764-6771	7.7	5
20	Selective Solar Absorption of Nanofluids for Photovoltaic/Thermal Collector Enhancement. *Materials Research Society Symposia Proceedings*, **2015**, 1779, 53-58		4
19	A mesoporous SiO2 intermediate layer for improving light propagation in a bundled tube photoreactor. *Chemical Engineering Science*, **2011**, 66, 3641-3647	4.4	4
18	Facet-dependent carrier dynamics of cuprous oxide regulating the photocatalytic hydrogen generation. *Materials Advances*,	3.3	3
17	A winged solar biomass reactor for producing 5-hydroxymethylfurfural (5-HMF). *Solar Energy*, **2021**, 218, 455-468	6.8	3
16	Ligand-Promoted Cooperative Electrochemical Oxidation of Bio-Alcohol on Distorted Cobalt Hydroxides for Bio-Hydrogen Extraction. *ChemSusChem*, **2021**, 14, 2612-2620	8.3	3
15	Photoenhanced CO2 methanation over La2O3 promoted Co/TiO2 catalysts. *Applied Catalysis B: Environmental*, **2021**, 294, 120248	21.8	3

14	Doping-Mediated Metal–Support Interaction Promotion toward Light-Assisted Methanol Production over Cu/ZnO/Al2O3. *ACS Catalysis*, **2021**, 11, 5818-5828	13.1	2
13	Spectrum splitting using gold and silver nanofluids for photovoltaic/thermal collectors **2016**,		2
12	2D Materials: Coordination Polymer to Atomically Thin, Holey, Metal-Oxide Nanosheets for Tuning Band Alignment (Adv. Mater. 52/2019). *Advanced Materials*, **2019**, 31, 1970370	24	2
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