

Mark D Symes

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.

69 papers	5,807 citations	31 h-index	76 g-index
77 ext. papers	6,903 ext. citations	11.9 avg, IF	6.68 L-index

#	Paper	IF	Citations
69	Recent progress in CO2 reduction using bimetallic electrodes containing copper. <i>Electrochemistry Communications</i> , 2022 , 135, 107212	5.1	1
68	Predicting the efficiency of oxygen-evolving electrolysis on the Moon and Mars.. <i>Nature Communications</i> , 2022 , 13, 583	17.4	0
67	Lower temperature electrochemical reduction of lunar regolith simulants in molten salts. <i>Planetary and Space Science</i> , 2022 , 211, 105408	2	0
66	Towards the application of 2D metal dichalcogenides as hydrogen evolution electrocatalysts in proton exchange membrane electrolyzers. <i>Current Opinion in Electrochemistry</i> , 2022 , 101001	7.2	1
65	Sonoelectrochemical processes for the degradation of persistent organic pollutants. <i>Chemical Engineering Journal</i> , 2022 , 444, 136573	14.7	0
64	Synthesis, spectroscopic, electrochemical and photophysical properties of high band gap polymers for potential applications in semi-transparent solar cells. <i>BMC Chemistry</i> , 2021 , 15, 25	3.7	2
63	Decoupled electrolysis for water splitting. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2021 , 29, 100453	7.9	2
62	An Investigation of a (Vinylbenzyl) Trimethylammonium and -Vinylimidazole-Substituted Poly (Vinylidene Fluoride-Co-Hexafluoropropylene) Copolymer as an Anion-Exchange Membrane in a Lignin-Oxidising Electrolyser. <i>Membranes</i> , 2021 , 11,	3.8	2
61	Characterising the cavitation activity generated by an ultrasonic horn at varying tip-vibration amplitudes. <i>Ultrasonics Sonochemistry</i> , 2021 , 70, 105273	8.9	14
60	Selective aldehyde reductions in neutral water catalysed by encapsulation in a supramolecular cage. <i>Chemical Science</i> , 2021 , 12, 5082-5090	9.4	3
59	Hierarchically Fractal PtPdCu Sponges and their Directed Mass- and Electron-Transfer Effects. <i>Nano Letters</i> , 2021 , 21, 7870-7878	11.5	10
58	Attempted characterisation of phenanthrene-4,5-quinone and electrochemical synthesis of violanthrone-16,17-quinone. How does the stability of bay quinones correlate with structural and electronic parameters?. <i>RSC Advances</i> , 2020 , 10, 38004-38012	3.7	1
57	Host-Guest-Induced Electron Transfer Triggers Radical-Cation Catalysis. <i>Journal of the American Chemical Society</i> , 2020 , 142, 2134-2139	16.4	44
56	Decoupled electrolysis using a silicotungstic acid electron-coupled-proton buffer in a proton exchange membrane cell. <i>Electrochimica Acta</i> , 2020 , 331, 135255	6.7	13
55	Decoupled Electrochemical Water Splitting: From Fundamentals to Applications. <i>Advanced Energy Materials</i> , 2020 , 10, 2002453	21.8	56
54	Proving the viability of an electrochemical process for the simultaneous extraction of oxygen and production of metal alloys from lunar regolith. <i>Planetary and Space Science</i> , 2020 , 180, 104748	2	34
53	The Effects of Ultrasound on the Electro-Oxidation of Sulfate Solutions at Low pH. <i>ChemPhysChem</i> , 2019 , 20, 3134-3140	3.2	3

52	Water-Splitting Electrocatalysts Synthesized Using Ionic Liquids. <i>Trends in Chemistry</i> , 2019 , 1, 247-258	14.8	9
51	Towards a better understanding of the electrosynthesis of 2,5-dicarboxy-2,5-dihydrofurans: structure, mechanism and influence over stereochemistry. <i>Royal Society Open Science</i> , 2019 , 6, 190336	3.3	2
50	Crystal structure of -poly[[[(E)-{[bis-(pyridin-2-ylmeth-yl)amino]-meth-yl}pyridine-2-carboxyl-ato)copper(II)] perchlorate aceto-nitrile monosolvate]. <i>Acta Crystallographica Section E: Crystallographic Communications</i> , 2019 , 75, 789-793	0.7	
49	The rapid electrochemical activation of MoTe for the hydrogen evolution reaction. <i>Nature Communications</i> , 2019 , 10, 4916	17.4	48
48	Supercapacitors: Design and Performance of Rechargeable Sodium Ion Batteries, and Symmetrical Li-Ion Batteries with Supercapacitor-Like Power Density Based upon Polyoxovanadates (Adv. Energy Mater. 6/2018). <i>Advanced Energy Materials</i> , 2018 , 8, 1870024	21.8	1
47	Proton-Coupled Electron Transfer Enhances the Electrocatalytic Reduction of Nitrite to NO in a Bioinspired Copper Complex. <i>ACS Catalysis</i> , 2018 , 8, 5070-5084	13.1	23
46	Selective hydrogenation of nitroarenes using an electrogenerated polyoxometalate redox mediator. <i>Chemical Communications</i> , 2018 , 54, 1093-1096	5.8	27
45	Molybdenum Ditelluride Rendered into an Efficient and Stable Electrocatalyst for the Hydrogen Evolution Reaction by Polymorphic Control. <i>Energy Technology</i> , 2018 , 6, 345-350	3.5	27
44	Probing the effects of steric bulk on the solution-phase behaviour and redox chemistry of cobalt-diimine complexes. <i>Supramolecular Chemistry</i> , 2018 , 30, 742-750	1.8	3
43	Highly reduced and protonated aqueous solutions of [PWO] for on-demand hydrogen generation and energy storage. <i>Nature Chemistry</i> , 2018 , 10, 1042-1047	17.6	113
42	Design and Performance of Rechargeable Sodium Ion Batteries, and Symmetrical Li-Ion Batteries with Supercapacitor-Like Power Density Based upon Polyoxovanadates. <i>Advanced Energy Materials</i> , 2018 , 8, 1701021	21.8	36
41	Decoupling Strategies in Electrochemical Water Splitting and Beyond. <i>Joule</i> , 2018 , 2, 1390-1395	27.8	47
40	Recent progress towards the electrosynthesis of ammonia from sustainable resources. <i>Catalysis Today</i> , 2017 , 286, 57-68	5.3	432
39	Earth-abundant catalysts for electrochemical and photoelectrochemical water splitting. <i>Nature Reviews Chemistry</i> , 2017 , 1,	34.6	1885
38	Silver Leakage from Ag/AgCl Reference Electrodes as a Potential Cause of Interference in the Electrocatalytic Hydrogen Evolution Reaction. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 472-478	9.5	21
37	The direct hydrothermal deposition of cobalt-doped MoS ₂ onto fluorine-doped SnO ₂ substrates for catalysis of the electrochemical hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 1472-1480	13	33
36	An investigation into the unusual linkage isomerization and nitrite reduction activity of a novel tris(2-pyridyl) copper complex. <i>Royal Society Open Science</i> , 2017 , 4, 170593	3.3	5
35	Ligand-directed synthesis of {Mn} twisted bow-ties. <i>Dalton Transactions</i> , 2017 , 46, 11201-11207	4.3	9

34	Unprecedented Inequivalent Metal Coordination Environments in a Mixed-Ligand Dicobalt Complex. <i>European Journal of Inorganic Chemistry</i> , 2017 , 2017, 3707-3713	2.3	3
33	A re-evaluation of Sn(II) phthalocyanine as a catalyst for the electrosynthesis of ammonia. <i>Electrochimica Acta</i> , 2017 , 258, 618-622	6.7	20
32	First row transition metal catalysts for solar-driven water oxidation produced by electrodeposition. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 6724-6741	13	73
31	The Artificial Leaf: Recent Progress and Remaining Challenges. <i>Makara Journal of Science</i> , 2016 , 20,	0.6	2
30	Solar-Driven Water Oxidation and Decoupled Hydrogen Production Mediated by an Electron-Coupled-Proton Buffer. <i>Journal of the American Chemical Society</i> , 2016 , 138, 6707-10	16.4	64
29	The electronic and solvatochromic properties of [Co(L)(bipyridine)] (L = o-catecholato, o-benzenedithiolato) species: a combined experimental and computational study. <i>Dalton Transactions</i> , 2016 , 45, 15575-15585	4.3	10
28	Converting between the oxides of nitrogen using metal-ligand coordination complexes. <i>Chemical Society Reviews</i> , 2015 , 44, 6708-22	58.5	49
27	Electronically Stabilized Nonplanar Phenalenyl Radical and Its Planar Isomer. <i>Journal of the American Chemical Society</i> , 2015 , 137, 14944-51	16.4	32
26	Efficient Electrocatalytic Water Oxidation at Neutral and High pH by Adventitious Nickel at Nanomolar Concentrations. <i>Journal of the American Chemical Society</i> , 2015 , 137, 13980-8	16.4	75
25	Versatile control of the submolecular motion of di(acylamino)pyridine-based [2]rotaxanes. <i>Chemical Science</i> , 2015 , 6, 3087-3094	9.4	29
24	High-Performance Polyoxometalate-Based Cathode Materials for Rechargeable Lithium-Ion Batteries. <i>Advanced Materials</i> , 2015 , 27, 4649-54	24	113
23	Quantification of ion binding using electrospray mass spectrometry. <i>Inorganic Chemistry Frontiers</i> , 2014 , 1, 49	6.8	5
22	Toward metal complexes that can directionally walk along tracks: controlled stepping of a molecular biped with a palladium(II) foot. <i>Journal of the American Chemical Society</i> , 2014 , 136, 2094-100	16.4	41
21	Decoupled catalytic hydrogen evolution from a molecular metal oxide redox mediator in water splitting. <i>Science</i> , 2014 , 345, 1326-30	33.3	425
20	Low pH electrolytic water splitting using earth-abundant metastable catalysts that self-assemble in situ. <i>Journal of the American Chemical Society</i> , 2014 , 136, 3304-11	16.4	123
19	A bioelectrochemical approach to characterize extracellular electron transfer by <i>Synechocystis</i> sp. PCC6803. <i>PLoS ONE</i> , 2014 , 9, e91484	3.7	52
18	A bio-inspired, small molecule electron-coupled-proton buffer for decoupling the half-reactions of electrolytic water splitting. <i>Journal of the American Chemical Society</i> , 2013 , 135, 13656-9	16.4	87
17	Designing artificial photosynthetic devices using hybrid organic-inorganic modules based on polyoxometalates. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2013 , 371, 20110411	3	11

16	Photo-active cobalt cubane model of an oxygen-evolving catalyst. <i>ChemSusChem</i> , 2013 , 6, 65-9	8.3	31
15	Decoupling hydrogen and oxygen evolution during electrolytic water splitting using an electron-coupled-proton buffer. <i>Nature Chemistry</i> , 2013 , 5, 403-9	17.6	341
14	Naphthoxanthenyl, a new stable phenalenyl type radical stabilized by electronic effects. <i>Organic Letters</i> , 2013 , 15, 2970-3	6.2	23
13	Combining 3D printing and liquid handling to produce user-friendly reactionware for chemical synthesis and purification. <i>Chemical Science</i> , 2013 , 4, 3099-3103	9.4	136
12	Insights into the Self-Assembly Mechanism of the Modular Polyoxometalate Keggin-Net Family of Framework Materials and Their Electronic Properties. <i>Crystal Growth and Design</i> , 2012 , 12, 902-908	3.5	15
11	Directed assembly of nanoscale Co(II)-substituted {Co ₉ [P ₂ W ₁₅] ₃ } and {Co ₁₄ [P ₂ W ₁₅] ₄ } polyoxometalates. <i>Chemical Communications</i> , 2012 , 48, 9819-21	5.8	46
10	Integrated 3D-printed reactionware for chemical synthesis and analysis. <i>Nature Chemistry</i> , 2012 , 4, 349-354	17.6	481
9	Active-Metal Template Synthesis of a Molecular Trefoil Knot. <i>Angewandte Chemie</i> , 2011 , 123, 12488-12492	3.6	37
8	Reaktitelbild: Active-Metal Template Synthesis of a Molecular Trefoil Knot (Angew. Chem. 51/2011). <i>Angewandte Chemie</i> , 2011 , 123, 12574-12574	3.6	
7	Active-metal template synthesis of a molecular trefoil knot. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 12280-4	16.4	125
6	Back Cover: Active-Metal Template Synthesis of a Molecular Trefoil Knot (Angew. Chem. Int. Ed. 51/2011). <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 12366-12366	16.4	
5	Bidirectional and unidirectional PCET in a molecular model of a cobalt-based oxygen-evolving catalyst. <i>Journal of the American Chemical Society</i> , 2011 , 133, 5174-7	16.4	119
4	Improved dynamics and positional bias with a second generation palladium(II)-complexed molecular shuttle. <i>Chemical Communications</i> , 2010 , 46, 2382-4	5.8	21
3	Active metal template synthesis of [2]catenanes. <i>Journal of the American Chemical Society</i> , 2009 , 131, 15924-9	16.4	114
2	Cadiot-Chodkiewicz active template synthesis of rotaxanes and switchable molecular shuttles with weak intercomponent interactions. <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 4392-6	16.4	92
1	A switchable palladium-complexed molecular shuttle and its metastable positional isomers. <i>Journal of the American Chemical Society</i> , 2007 , 129, 15085-90	16.4	90