Kenneth Davey

List of Publications by Year in Descending Order

63 papers	5,891 citations	34 h-index	72 g-index
72 ext. papers	8,032 ext. citations	15.8 avg, IF	6.65 L-index

#	Paper	IF	Citations
63	A statistical approach to boost soluble expression of E. coli-derived virus-like particles in shake-flask cultivation.. *Journal of Biotechnology*, **2022**, 347, 56-66	3.7	0
62	Main-group elements boost electrochemical nitrogen fixation. *CheM*, **2021**,	16.2	28
61	Catalytic Oxidation of KS via Atomic Co and Pyridinic N Synergy in Potassium-Sulfur Batteries. *Journal of the American Chemical Society*, **2021**, 143, 16902-16907	16.4	11
60	Molecular Cleavage of Metal-Organic Frameworks and Application to Energy Storage and Conversion. *Advanced Materials*, **2021**, e2104341	24	17
59	Molecular Scalpel to Chemically Cleave Metal-Organic Frameworks for Induced Phase Transition. *Journal of the American Chemical Society*, **2021**, 143, 6681-6690	16.4	26
58	Efficient Nitrogen Fixation to Ammonia through Integration of Plasma Oxidation with Electrocatalytic Reduction. *Angewandte Chemie - International Edition*, **2021**, 60, 14131-14137	16.4	56
57	Tailoring Acidic Oxygen Reduction Selectivity on Single-Atom Catalysts via Modification of First and Second Coordination Spheres. *Journal of the American Chemical Society*, **2021**, 143, 7819-7827	16.4	126
56	A critical review of ferritin as a drug nanocarrier: Structure, properties, comparative advantages and challenges. *Particuology*, **2021**, 64, 65-65	2.8	1
55	Efficient Nitrogen Fixation to Ammonia through Integration of Plasma Oxidation with Electrocatalytic Reduction. *Angewandte Chemie*, **2021**, 133, 14250-14256	3.6	15
54	ReS2 Nanosheets with In Situ Formed Sulfur Vacancies for Efficient and Highly Selective Photocatalytic CO2 Reduction. *Small Science*, **2021**, 1, 2000052		30
53	Spatial-confinement induced electroreduction of CO and CO to diols on densely-arrayed Cu nanopyramids. *Chemical Science*, **2021**, 12, 8079-8087	9.4	7
52	Mechanism for Zincophilic Sites on Zinc-Metal Anode Hosts in Aqueous Batteries. *Advanced Energy Materials*, **2021**, 11, 2003419	21.8	79
51	Boosting Zinc Electrode Reversibility in Aqueous Electrolytes by Using Low-Cost Antisolvents. *Angewandte Chemie*, **2021**, 133, 7442-7451	3.6	43
50	Boosting Zinc Electrode Reversibility in Aqueous Electrolytes by Using Low-Cost Antisolvents. *Angewandte Chemie - International Edition*, **2021**, 60, 7366-7375	16.4	161
49	Significantly Raised Visible-Light Photocatalytic H Evolution on a 2D/2D ReS /In ZnS van der Waals Heterostructure. *Small*, **2021**, 17, e2100296	11	9
48	Significantly Raised Visible-Light Photocatalytic H2 Evolution on a 2D/2D ReS2/In2ZnS4 van der Waals Heterostructure (Small 32/2021). *Small*, **2021**, 17, 2170168	11	1
47	Dual-Function Electrolyte Additive for Highly Reversible Zn Anode. *Advanced Energy Materials*, **2021**, 11, 2102010	21.8	47

46	Directing the selectivity of CO2 electroreduction to target C2 products via non-metal doping on Cu surfaces. *Journal of Materials Chemistry A*, **2021**, 9, 6345-6351	13	12
45	A MoN electrocatalyst for efficient NaS electrodeposition in room-temperature sodium-sulfur batteries. *Nature Communications*, **2021**, 12, 7195	17.4	9
44	Atomic Engineering Catalyzed MnO Electrolysis Kinetics for a Hybrid Aqueous Battery with High Power and Energy Density. *Advanced Materials*, **2020**, 32, e2001894	24	123
43	Photocatalysts for Hydrogen Evolution Coupled with Production of Value-Added Chemicals. *Small Methods*, **2020**, 4, 2000063	12.8	62
42	Unveiling the Advances of 2D Materials for Li/Na-S Batteries Experimentally and Theoretically. *Matter*, **2020**, 2, 323-344	12.7	78
41	Hybrid Aqueous Batteries: Atomic Engineering Catalyzed MnO2 Electrolysis Kinetics for a Hybrid Aqueous Battery with High Power and Energy Density (Adv. Mater. 25/2020). *Advanced Materials*, **2020**, 32, 2070191	24	2
40	Electron-State Confinement of Polysulfides for Highly Stable Sodium-Sulfur Batteries. *Advanced Materials*, **2020**, 32, e1907557	24	87
39	Rational Design of Spinel Cobalt Vanadate Oxide Co VO for Superior Electrocatalysis. *Advanced Materials*, **2020**, 32, e1907168	24	72
38	Atomic-Level Reactive Sites for Semiconductor-Based Photocatalytic CO2 Reduction. *Advanced Energy Materials*, **2020**, 10, 1903879	21.8	162
37	Revealing the Magnesium-Storage Mechanism in Mesoporous Bismuth via Spectroscopy and Ab-Initio Simulations. *Angewandte Chemie - International Edition*, **2020**, 59, 21728-21735	16.4	10
36	Revealing the Magnesium-Storage Mechanism in Mesoporous Bismuth via Spectroscopy and Ab-Initio Simulations. *Angewandte Chemie*, **2020**, 132, 21912-21919	3.6	3
35	Targeted Synergy between Adjacent Co Atoms on Graphene Oxide as an Efficient New Electrocatalyst for Li□O2 Batteries. *Advanced Functional Materials*, **2019**, 29, 1904206	15.6	49
34	A computational study on Pt and Ru dimers supported on graphene for the hydrogen evolution reaction: new insight into the alkaline mechanism. *Journal of Materials Chemistry A*, **2019**, 7, 3648-3654	13	86
33	Negative Charging of Transition-Metal Phosphides via Strong Electronic Coupling for Destabilization of Alkaline Water. *Angewandte Chemie*, **2019**, 131, 11922-11926	3.6	12
32	Negative Charging of Transition-Metal Phosphides via Strong Electronic Coupling for Destabilization of Alkaline Water. *Angewandte Chemie - International Edition*, **2019**, 58, 11796-11800	16.4	101
31	Advantageous crystalline□morphous phase boundary for enhanced electrochemical water oxidation. *Energy and Environmental Science*, **2019**, 12, 2443-2454	35.4	172
30	Electrocatalysis: Well-Dispersed Nickel- and Zinc-Tailored Electronic Structure of a Transition Metal Oxide for Highly Active Alkaline Hydrogen Evolution Reaction (Adv. Mater. 16/2019). *Advanced Materials*, **2019**, 31, 1970113	24	2
29	Well-Dispersed Nickel- and Zinc-Tailored Electronic Structure of a Transition Metal Oxide for Highly Active Alkaline Hydrogen Evolution Reaction. *Advanced Materials*, **2019**, 31, e1807771	24	149

28	An Electrolytic Zn–MnO2 Battery for High-Voltage and Scalable Energy Storage. *Angewandte Chemie*, **2019**, 131, 7905-7910	3.6	49
27	An Electrolytic Zn-MnO Battery for High-Voltage and Scalable Energy Storage. *Angewandte Chemie - International Edition*, **2019**, 58, 7823-7828	16.4	464
26	Transition-Metal-Doped RuIr Bifunctional Nanocrystals for Overall Water Splitting in Acidic Environments. *Advanced Materials*, **2019**, 31, e1900510	24	261
25	Sodium-Ion Batteries: 1T?-ReS2 Confined in 2D-Honeycombed Carbon Nanosheets as New Anode Materials for High-Performance Sodium-Ion Batteries (Adv. Energy Mater. 30/2019). *Advanced Energy Materials*, **2019**, 9, 1970117	21.8	3
24	1T?-ReS2 Confined in 2D-Honeycombed Carbon Nanosheets as New Anode Materials for High-Performance Sodium-Ion Batteries. *Advanced Energy Materials*, **2019**, 9, 1901146	21.8	32
23	Regulating Electrocatalysts via Surface and Interface Engineering for Acidic Water Electrooxidation. *ACS Energy Letters*, **2019**, 4, 2719-2730	20.1	124
22	Long-Life Room-Temperature Sodium–Sulfur Batteries by Virtue of Transition-Metal-Nanocluster–Sulfur Interactions. *Angewandte Chemie*, **2019**, 131, 1498-1502	3.6	50
21	Long-Life Room-Temperature Sodium-Sulfur Batteries by Virtue of Transition-Metal-Nanocluster-Sulfur Interactions. *Angewandte Chemie - International Edition*, **2019**, 58, 1484-1488	16.4	113
20	Carbon, nitrogen and phosphorus containing metal-free photocatalysts for hydrogen production: progress and challenges. *Journal of Materials Chemistry A*, **2018**, 6, 1305-1322	13	125
19	Molecular-Level Hybridization of Nafion with Quantum Dots for Highly Enhanced Proton Conduction. *Advanced Materials*, **2018**, 30, e1707516	24	90
18	Enabling Pt-free photocatalytic hydrogen evolution on polymeric melon: Role of amorphization for overcoming the limiting factors. *Physical Review Materials*, **2018**, 2,	3.2	6
17	Titelbild: 2D MoN-VN Heterostructure To Regulate Polysulfides for Highly Efficient Lithium-Sulfur Batteries (Angew. Chem. 51/2018). *Angewandte Chemie*, **2018**, 130, 16809-16809	3.6	0
16	1D Sub-Nanotubes with Anatase/Bronze TiO Nanocrystal Wall for High-Rate and Long-Life Sodium-Ion Batteries. *Advanced Materials*, **2018**, 30, e1804116	24	85
15	Multiscale Structural Engineering of Ni-Doped CoO Nanosheets for Zinc-Air Batteries with High Power Density. *Advanced Materials*, **2018**, 30, e1804653	24	93
14	2D MoN-VN Heterostructure To Regulate Polysulfides for Highly Efficient Lithium-Sulfur Batteries. *Angewandte Chemie*, **2018**, 130, 16945-16949	3.6	10
13	2D MoN-VN Heterostructure To Regulate Polysulfides for Highly Efficient Lithium-Sulfur Batteries. *Angewandte Chemie - International Edition*, **2018**, 57, 16703-16707	16.4	224
12	Advent of 2D Rhenium Disulfide (ReS2): Fundamentals to Applications. *Advanced Functional Materials*, **2017**, 27, 1606129	15.6	224
11	Counteracting Blueshift Optical Absorption and Maximizing Photon Harvest in Carbon Nitride Nanosheet Photocatalyst. *Small*, **2017**, 13, 1700376	11	31

10	A Benchmark Quantum Yield for Water Photoreduction on Amorphous Carbon Nitride. *Advanced Functional Materials*, **2017**, 27, 1702384	15.6	94
9	Graphene oxide coupled carbon nitride homo-heterojunction photocatalyst for enhanced hydrogen production. *Materials Chemistry Frontiers*, **2017**, 1, 562-571	7.8	27
8	A detailed research study of learning and teaching core chemical engineering to a high standard in a mixed-ability small class in industry. *European Journal of Engineering Education*, **2017**, 42, 775-799	1.5	
7	Activity origin and catalyst design principles for electrocatalytic hydrogen evolution on heteroatom-doped graphene. *Nature Energy*, **2016**, 1,	62.3	703
6	Efficient and Stable Bifunctional Electrocatalysts Ni/NixMy (M = P, S) for Overall Water Splitting. *Advanced Functional Materials*, **2016**, 26, 3314-3323	15.6	690
5	2D phosphorene as a water splitting photocatalyst: fundamentals to applications. *Energy and Environmental Science*, **2016**, 9, 709-728	35.4	420
4	Water Splitting: Strongly Coupled Nafion Molecules and Ordered Porous CdS Networks for Enhanced Visible-Light Photoelectrochemical Hydrogen Evolution (Adv. Mater. 24/2016). *Advanced Materials*, **2016**, 28, 4943	24	
3	Strongly Coupled Nafion Molecules and Ordered Porous CdS Networks for Enhanced Visible-Light Photoelectrochemical Hydrogen Evolution. *Advanced Materials*, **2016**, 28, 4935-42	24	75
2	A quantitative failure assessment of ice slurry cooling of fish at sea to meet regulatory guidelines demonstrated with Southern Bluefin Tuna (Thunnus maccoyii). *Journal of Food Engineering*, **2016**, 183, 58-64	6	
1	Experimental validation of a time-dependent model for chemical taste taint accumulation as geosmin (GSM) and 2-methylisoborneol (MIB) in commercial RAS farmed barramundi (Lates calcarifer). *Ecological Modelling*, **2016**, 340, 17-27	3	9