Vincent Wing-hei Lau

List of Publications by Citations

42 papers	2,288 citations	19 h-index	43 g-index
43 ext. papers	2,790 ext. citations	11 avg, IF	5.15 L-index

#	Paper	IF	Citations
42	Rational design of carbon nitride photocatalysts by identification of cyanamide defects as catalytically relevant sites. *Nature Communications*, **2016**, 7, 12165	17.4	417
41	Low-molecular-weight carbon nitrides for solar hydrogen evolution. *Journal of the American Chemical Society*, **2015**, 137, 1064-72	16.4	267
40	Solar-Driven Reduction of Aqueous Protons Coupled to Selective Alcohol Oxidation with a Carbon Nitride-Molecular Ni Catalyst System. *Journal of the American Chemical Society*, **2016**, 138, 9183-92	16.4	210
39	Soft Photocatalysis: Organic Polymers for Solar Fuel Production. *Chemistry of Materials*, **2016**, 28, 5191-5204	9.6	175
38	Urea-Modified Carbon Nitrides: Enhancing Photocatalytic Hydrogen Evolution by Rational Defect Engineering. *Advanced Energy Materials*, **2017**, 7, 1602251	21.8	174
37	Photocatalytic hydrogen production using polymeric carbon nitride with a hydrogenase and a bioinspired synthetic Ni catalyst. *Angewandte Chemie - International Edition*, **2014**, 53, 11538-42	16.4	151
36	Dark Photocatalysis: Storage of Solar Energy in Carbon Nitride for Time-Delayed Hydrogen Generation. *Angewandte Chemie - International Edition*, **2017**, 56, 510-514	16.4	143
35	Manganese based layered oxides with modulated electronic and thermodynamic properties for sodium ion batteries. *Nature Communications*, **2019**, 10, 5203	17.4	130
34	Bifunctional Conducting Polymer Coated CoP Core–Shell Nanowires on Carbon Paper as a Free-Standing Anode for Sodium Ion Batteries. *Advanced Energy Materials*, **2018**, 8, 1800283	21.8	80
33	Ionic-liquid-mediated active-site control of MoS2 for the electrocatalytic hydrogen evolution reaction. *Chemistry - A European Journal*, **2012**, 18, 8230-9	4.8	61
32	Photocatalytic Oxidation of Sulfinates to Vinyl Sulfones with Cyanamide-Functionalised Carbon Nitride. *European Journal of Organic Chemistry*, **2017**, 2017, 2179-2185	3.2	39
31	Thermodynamic Equilibria in Carbon Nitride Photocatalyst Materials and Conditions for the Existence of Graphitic Carbon Nitride g-C3N4. *Chemistry of Materials*, **2017**, 29, 4445-4453	9.6	38
30	Photocatalytic Hydrogen Production using Polymeric Carbon Nitride with a Hydrogenase and a Bioinspired Synthetic Ni Catalyst. *Angewandte Chemie*, **2014**, 126, 11722-11726	3.6	38
29	Cationically charged Mn(II)Al(III) LDH nanosheets by chemical exfoliation and their use as building blocks in graphene oxide-based materials. *Langmuir*, **2013**, 29, 9199-207	4	34
28	Homonuclear Mixed-Valent Cobalt Imidazolate Framework for Oxygen-Evolution Electrocatalysis. *Chemistry - A European Journal*, **2016**, 22, 3676-80	4.8	33
27	Dark Photocatalysis: Storage of Solar Energy in Carbon Nitride for Time-Delayed Hydrogen Generation. *Angewandte Chemie*, **2017**, 129, 525-529	3.6	30
26	Promoting the Formation of Active Sites with Ionic Liquids: A Case Study of MoS2 as Hydrogen-Evolution-Reaction Electrocatalyst. *ChemCatChem*, **2011**, 3, 1739-1742	5.2	30

25	Activating a Multielectron Reaction of NASICON-Structured Cathodes toward High Energy Density for Sodium-Ion Batteries. *Journal of the American Chemical Society*, **2021**, 143, 18091-18102	16.4	20
24	Realizing Li7La3Zr2O12 garnets with high Li+ conductivity and dense microstructures by Ga/Nb dual substitution for lithium solid-state battery applications. *Sustainable Energy and Fuels*, **2020**, 4, 1812-1821	5.8	19
23	Uncovering the Shuttle Effect in Organic Batteries and Counter-Strategies Thereof: A Case Study of the N,N'-Dimethylphenazine Cathode. *Angewandte Chemie - International Edition*, **2020**, 59, 4023-4034	16.4	19
22	Morphology Control in 2D Carbon Nitrides: Impact of Particle Size on Optoelectronic Properties and Photocatalysis. *Advanced Functional Materials*, **2021**, 31, 2102468	15.6	18
21	Controlling the Valence State of Cu Dopant in □Fe2O3 Anodes: Effects on Crystal Structure and the Conversion Reactions with Alkali Ions. *Chemistry of Materials*, **2019**, 31, 1268-1279	9.6	17
20	Engineering Solid Electrolyte Interphase on Red Phosphorus for Long-Term and High-Capacity Sodium Storage. *Chemistry of Materials*, **2020**, 32, 448-458	9.6	17
19	A Tour-Guide through Carbon Nitride-Land: Structure- and Dimensionality-Dependent Properties for Photo(Electro)Chemical Energy Conversion and Storage. *Advanced Energy Materials*,2101078	21.8	17
18	The origin of heavy element doping to relieve the lattice thermal vibration of layered materials for high energy density Li ion cathodes. *Journal of Materials Chemistry A*, **2020**, 8, 12424-12435	13	16
17	Highly Reversible and Rapid Sodium Storage in GeP with Synergistic Effect from Outside-In Optimization. *ACS Nano*, **2020**, 14, 4352-4365	16.7	14
16	Tuning the photocatalytic activity of CdS nanocrystals through intermolecular interactions in ionic-liquid solvent systems. *Chemistry - A European Journal*, **2012**, 18, 2923-30	4.8	11
15	Regulating the Catalytic Dynamics Through a Crystal Structure Modulation of Bimetallic Catalyst. *Advanced Energy Materials*, **2020**, 10, 1903225	21.8	10
14	Unraveling the Structure of the Poly(triazine imide)/LiCl Photocatalyst: Cooperation of Facile Syntheses and a Low-Temperature Synchrotron Approach. *Inorganic Chemistry*, **2019**, 58, 15880-15888	5.1	9
13	Laser ablation of molecular carbon nitride compounds. *Applied Surface Science*, **2015**, 349, 353-360	6.7	8
12	Interface-Controlled Rhombohedral LiV(PO) Embedded in Carbon Nanofibers with Ultrafast Kinetics for Li-Ion Batteries. *Journal of Physical Chemistry Letters*, **2020**, 11, 4059-4069	6.4	8
11	p-Phenylenediamine Functionalization Induced 3D Microstructure Formation of Reduced Graphene Oxide for the Improved Electrical double Layer Capacitance in Organic Electrolyte. *ChemistrySelect*, **2018**, 3, 7680-7688	1.8	8
10	Utilizing Oxygen Redox in Layered Cathode Materials from Multiscale Perspective. *Advanced Energy Materials*, **2021**, 11, 2003227	21.8	8
9	New Barium Vanadate BaxV2O5 (x □0.16) for Fast Lithium Intercalation: Lower Symmetry for Higher Flexibility and Electrochemical Durability. *Small Methods*, **2020**, 4, 1900585	12.8	5
8	Uncovering the Shuttle Effect in Organic Batteries and Counter-Strategies Thereof: A Case Study of the N,N?-Dimethylphenazine Cathode. *Angewandte Chemie*, **2020**, 132, 4052-4063	3.6	5

7	Electrochemical grinding-induced metallic assembly exploiting a facile conversion reaction route of metal oxides toward Li ions. *Acta Materialia*, **2021**, 211, 116863	8.4	4
6	Elucidating the charge storage mechanism of carbonaceous and organic electrode materials for sodium ion batteries. *Chemical Communications*, **2021**,	5.8	2
5	Microstructural Investigation into Na-Ion Storage Behaviors of Cellulose-Based Hard Carbons for Na-Ion Batteries. *Journal of Physical Chemistry C*, **2021**, 125, 14559-14566	3.8	2
4	Direct Cation□Cation Interactions Induced by Mg Dopants for Electron□Gas Behavior in □Fe2O3. *Journal of Physical Chemistry C*, **2021**, 125, 12893-12902	3.8	1
3	Molecular reconfigurations enabling active liquid□solid interfaces for ultrafast Li diffusion kinetics in the 3D framework of a garnet solid-state electrolyte. *Journal of Materials Chemistry A*, **2021**, 9, 17039-17047	13	0
2	Steric modulation of Na2Ti2O3(SiO4)□2H2O toward highly reversible Na ion intercalation/deintercalation for Na ion batteries. *Chemical Engineering Journal*, **2021**, 133245	14.7	
1	Effectiveness of salification against shuttle effect in p-type organic batteries: case studies of triflimide and iodide salts of N,N□dimethylphenazine. *Chemical Engineering Journal*, **2022**, 137292	14.7	