Vincent Wing-hei Lau

List of Publications by Year
in descending order

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43 papers	3,356 citations	218381 26 h-index	253896 43 g-index
43 all docs	43 docs citations	43 times ranked	4450 citing authors

#	Article	IF	Citations
1	Rational design of carbon nitride photocatalysts by identification of cyanamide defects as catalytically relevant sites. Nature Communications, 2016, 7, 12165.	5.8	586
2	Low-Molecular-Weight Carbon Nitrides for Solar Hydrogen Evolution. Journal of the American Chemical Society, 2015, 137, 1064-1072.	6.6	321
3	Solar-Driven Reduction of Aqueous Protons Coupled to Selective Alcohol Oxidation with a Carbon Nitrideâ€“Molecular Ni Catalyst System. Journal of the American Chemical Society, 2016, 138, 9183-9192.	6.6	285
4	Ureaâ€Modified Carbon Nitrides: Enhancing Photocatalytic Hydrogen Evolution by Rational Defect Engineering. Advanced Energy Materials, 2017, 7, 1602251.	10.2	238
5	Soft Photocatalysis: Organic Polymers for Solar Fuel Production. Chemistry of Materials, 2016, 28, 5191-5204.	3.2	208
6	Dark Photocatalysis: Storage of Solar Energy in Carbon Nitride for Timeâ€Delayed Hydrogen Generation. Angewandte Chemie - International Edition, 2017, 56, 510-514.	7.2	204
7	Manganese based layered oxides with modulated electronic and thermodynamic properties for sodium ion batteries. Nature Communications, 2019, 10, 5203.	5.8	202
8	Photocatalytic Hydrogen Production using Polymeric Carbon Nitride with a Hydrogenase and a Bioinspired Synthetic Ni Catalyst. Angewandte Chemie - International Edition, 2014, 53, 11538-11542.	7.2	170
9	Bifunctional Conducting Polymer Coated CoP Coreâ€“Shell Nanowires on Carbon Paper as a Freeâ€Standing Anode for Sodium Ion Batteries. Advanced Energy Materials, 2018, 8, 1800283.	10.2	104
10	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.	6.6	96
11	A Tourâ€Guide through Carbon Nitrideâ€Land: Structureâ€and Dimensionalityâ€Dependent Properties for Photo(Electro)Chemical Energy Conversion and Storage. Advanced Energy Materials, 2022, 12, 2101078.	10.2	81
12	Ionicâ€Liquidâ€Mediated Activeâ€Site Control of MoS₂ for the Electrocatalytic Hydrogen Evolution Reaction. Chemistry - A European Journal, 2012, 18, 8230-8239.	1.7	66
13	Morphology Control in 2D Carbon Nitrides: Impact of Particle Size on Optoelectronic Properties and Photocatalysis. Advanced Functional Materials, 2021, 31, 2102468.	7.8	63
14	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.	3.2	58
15	Dark Photocatalysis: Storage of Solar Energy in Carbon Nitride for Timeâ€Delayed Hydrogen Generation. Angewandte Chemie, 2017, 129, 525-529.	1.6	54
16	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, 9199-9207.	1.6	43
17	Photocatalytic Oxidation of Sulfinates to Vinyl Sulfones with Cyanamideâ€Functionalised Carbon Nitride. European Journal of Organic Chemistry, 2017, 2017, 2179-2185.	1.2	43
18	Homonuclear Mixedâ€Valent Cobalt Imidazolate Framework for Oxygenâ€Evolution Electrocatalysis. Chemistry - A European Journal, 2016, 22, 3676-3680.	1.7	41

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19	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.	2.5	40
20	Utilizing Oxygen Redox in Layered Cathode Materials from Multiscale Perspective. Advanced Energy Materials, 2021, 11, 2003227.	10.2	39
21	Photocatalytic Hydrogen Production using Polymeric Carbon Nitride with a Hydrogenase and a Bioinspired Synthetic Ni Catalyst. Angewandte Chemie, 2014, 126, 11722-11726.	1.6	38
22	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.	5.2	37
23	Promoting the Formation of Active Sites with Ionic Liquids: A Case Study of MoS₂ as Hydrogenâ€Evolutionâ€Reaction Electrocatalyst. ChemCatChem, 2011, 3, 1739-1742.	1.8	36
24	Uncovering the Shuttle Effect in Organic Batteries and Counterâ€Strategies Thereof: A Case Study of the N,Nâ€²â€Dimethylphenazine Cathode. Angewandte Chemie - International Edition, 2020, 59, 4023-4034.	7.2	34
25	Highly Reversible and Rapid Sodium Storage in GeP₃ with Synergistic Effect from Outside-In Optimization. ACS Nano, 2020, 14, 4352-4365.	7.3	31
26	Engineering Solid Electrolyte Interphase on Red Phosphorus for Long-Term and High-Capacity Sodium Storage. Chemistry of Materials, 2020, 32, 448-458.	3.2	29
27	Controlling the Valence State of Cu Dopant in Î±-Fe2O3 Anodes: Effects on Crystal Structure and the Conversion Reactions with Alkali Ions. Chemistry of Materials, 2019, 31, 1268-1279.	3.2	23
28	Regulating Pseudo-Jahnâ€“Teller Effect and Superstructure in Layered Cathode Materials for Reversible Alkali-Ion Intercalation. Journal of the American Chemical Society, 2022, 144, 7929-7938.	6.6	22
29	Regulating the Catalytic Dynamics Through a Crystal Structure Modulation of Bimetallic Catalyst. Advanced Energy Materials, 2020, 10, 1903225.	10.2	21
30	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.	1.9	19
31	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.	1.5	15
32	p â€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.	0.7	13
33	Electrochemical grinding-induced metallic assembly exploiting a facile conversion reaction route of metal oxides toward Li ions. Acta Materialia, 2021, 211, 116863.	3.8	12
34	Tuning the Photocatalytic Activity of CdS Nanocrystals through Intermolecular Interactions in Ionicâ€Liquid Solvent Systems. Chemistry - A European Journal, 2012, 18, 2923-2930.	1.7	11
35	Laser ablation of molecular carbon nitride compounds. Applied Surface Science, 2015, 349, 353-360.	3.1	11
36	New Barium Vanadate Ba_xV₂O₅ (x â‰ˆ 0.16) for Fast Lithium Intercalation: Lower Symmetry for Higher Flexibility and Electrochemical Durability. Small Methods, 2020, 4, 1900585.	4.6	11

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37	Interface-Controlled Rhombohedral Li3V2(PO4)3 Embedded in Carbon Nanofibers with Ultrafast Kinetics for Li-Ion Batteries. Journal of Physical Chemistry Letters, 2020, 11, 4059-4069.	2.1	11
38	Molecular reconfigurations enabling active liquidâ€“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.	5.2	10
39	Elucidating the charge storage mechanism of carbonaceous and organic electrode materials for sodium ion batteries. Chemical Communications, 2021, 57, 13465-13494.	2.2	9
40	Uncovering the Shuttle Effect in Organic Batteries and Counterâ€Strategies Thereof: A Case Study of the N,Nâ€²â€Dimethylphenazine Cathode. Angewandte Chemie, 2020, 132, 4052-4063.	1.6	8
41	Direct Cationâ€“Cation Interactions Induced by Mg Dopants for Electronâ€“Gas Behavior in Î±-Fe₂O₃. Journal of Physical Chemistry C, 2021, 125, 12893-12902.	1.5	5
42	Effectiveness of salification against shuttle effect in p-type organic batteries: Case studies of triflimide and iodide salts of N,Nâ€™-dimethylphenazine. Chemical Engineering Journal, 2022, 446, 137292.	6.6	5
43	Steric modulation of Na2Ti2O3(SiO4)Â·2H2O toward highly reversible Na ion intercalation/deintercalation for Na ion batteries. Chemical Engineering Journal, 2022, 431, 133245.	6.6	3