Paul N Duchesne

List of Publications by Year
in descending order

35 papers	5,385 citations	172457 29 h-index	361022 35 g-index
35 all docs	35 docs citations	35 times ranked	8351 citing authors

#	Article	IF	Citations
1	New black indium oxideâ€"tandem photothermal CO2-H2 methanol selective catalyst. Nature Communications, 2022, 13, 1512.	12.8	47
2	The next big thing for silicon nanostructures â€“ CO₂ photocatalysis. Faraday Discussions, 2020, 222, 424-432.	3.2	13
3	High-performance light-driven heterogeneous CO2 catalysis with near-unity selectivity on metal phosphides. Nature Communications, 2020, 11, 5149.	12.8	82
4	Bismuth atom tailoring of indium oxide surface frustrated Lewis pairs boosts heterogeneous CO2 photocatalytic hydrogenation. Nature Communications, 2020, 11, 6095.	12.8	129
5	High-Performance, Scalable, and Low-Cost Copper Hydroxyapatite for Photothermal CO2 Reduction. ACS Catalysis, 2020, 10, 13668-13681.	11.2	55
6	Flash Solidâ€"Solid Synthesis of Silicon Oxide Nanorods. Small, 2020, 16, 2001435.	10.0	2
7	Black indium oxide a photothermal CO2 hydrogenation catalyst. Nature Communications, 2020, 11, 2432.	12.8	192
8	Fundamentals and applications of photocatalytic CO2 methanation. Nature Communications, 2019, 10, 3169.	12.8	304
9	Cu2O nanocubes with mixed oxidation-state facets for (photo)catalytic hydrogenation of carbon dioxide. Nature Catalysis, 2019, 2, 889-898.	34.4	234
10	Nickel@Siloxene catalytic nanosheets for high-performance CO2 methanation. Nature Communications, 2019, 10, 2608.	12.8	104
11	Towards Solar Methanol: Past, Present, and Future. Advanced Science, 2019, 6, 1801903.	11.2	63
12	Principles of photothermal gas-phase heterogeneous CO₂ catalysis. Energy and Environmental Science, 2019, 12, 1122-1142.	30.8	300
13	Fe Stabilization by Intermetallic L1₀-FePt and Pt Catalysis Enhancement in L1₀-FePt/Pt Nanoparticles for Efficient Oxygen Reduction Reaction in Fuel Cells. Journal of the American Chemical Society, 2018, 140, 2926-2932.	13.7	312
14	Tailoring Surface Frustrated Lewis Pairs of In₂O_{3â^'}_x(OH)_y for Gasâ€Phase Heterogeneous Photocatalytic Reduction of CO₂ by Isomorphous Substitution of In³⁺ with Bi³⁺. Advanced Science, 2018, 5, 1700732.	11.2	91
15	Towards enhancing photocatalytic hydrogen generation: Which is more important, alloy synergistic effect or plasmonic effect?. Applied Catalysis B: Environmental, 2018, 221, 77-85.	20.2	59
16	Golden single-atomic-site platinum electrocatalysts. Nature Materials, 2018, 17, 1033-1039.	27.5	266
17	Solar Fuels: Tailoring Surface Frustrated Lewis Pairs of In₂O_{3â^'}_x(OH)_y for Gasâ€Phase Heterogeneous Photocatalytic Reduction of CO₂ by Isomorphous Substitution of In³⁺ with Bi³⁺ (Adv. Sci. 6/2018). Advanced Science, 2018, 5, 1870034.	11.2	3
18	Pd Nanoparticles Coupled to WO_{2.72} Nanorods for Enhanced Electrochemical Oxidation of Formic Acid. Nano Letters, 2017, 17, 2727-2731.	9.1	136

#	Article	IF	Citations
19	Promoting Effect of Ni(OH)₂ on Palladium Nanocrystals Leads to Greatly Improved Operation Durability for Electrocatalytic Ethanol Oxidation in Alkaline Solution. Advanced Materials, 2017, 29, 1703057.	21.0	251
20	Amorphous MoS₃ Infiltrated with Carbon Nanotubes as an Advanced Anode Material of Sodiumâ€Ion Batteries with Large Gravimetric, Areal, and Volumetric Capacities. Advanced Energy Materials, 2017, 7, 1601602.	19.5	164
21	Luminescent Gold Nanoparticles with Sizeâ€Independent Emission. Angewandte Chemie - International Edition, 2016, 55, 8894-8898.	13.8	126
22	Ultrasmall and phase-pure W2C nanoparticles for efficient electrocatalytic and photoelectrochemical hydrogen evolution. Nature Communications, 2016, 7, 13216.	12.8	334
23	Luminescent Gold Nanoparticles with Sizeâ€Independent Emission. Angewandte Chemie, 2016, 128, 9040-9044.	2.0	31
24	A single iron site confined in a graphene matrix for the catalytic oxidation of benzene at room temperature. Science Advances, 2015, 1, e1500462.	10.3	719
25	Copper Phosphate as a Cathode Material for Rechargeable Li Batteries and Its Electrochemical Reaction Mechanism. Chemistry of Materials, 2015, 27, 5736-5744.	6.7	32
26	The surface structure of silver-coated gold nanocrystals and its influence on shape control. Nature Communications, 2015, 6, 7664.	12.8	53
27	Highly active and durable methanol oxidation electrocatalyst based on the synergy of platinumâ€“nickel hydroxideâ€“graphene. Nature Communications, 2015, 6, 10035.	12.8	466
28	Self-Assembly and Chemical Reactivity of Alkenes on Platinum Nanoparticles. Langmuir, 2015, 31, 522-528.	3.5	11
29	Surface Reconstruction and Reactivity of Platinumâ€“Iron Oxide Nanoparticles. Journal of Physical Chemistry C, 2014, 118, 28861-28867.	3.1	5
30	Element-Specific Analysis of the Growth Mechanism, Local Structure, and Electronic Properties of Pt Clusters Formed on Ag Nanoparticle Surfaces. Journal of Physical Chemistry C, 2014, 118, 21714-21721.	3.1	12
31	Interfacial Effects in Iron-Nickel Hydroxideâ€“Platinum Nanoparticles Enhance Catalytic Oxidation. Science, 2014, 344, 495-499.	12.6	591
32	Size Effects of Platinum Colloid Particles on the Structure and CO Oxidation Properties of Supported Pt/Fe₂O₃ Catalysts. Journal of Physical Chemistry C, 2013, 117, 21254-21262.	3.1	67
33	In Situ Electrochemical XAFS Studies on an Iron Fluoride High-Capacity Cathode Material for Rechargeable Lithium Batteries. Journal of Physical Chemistry C, 2013, 117, 11498-11505.	3.1	51
34	Local Structure, Electronic Behavior, and Electrocatalytic Reactivity of CO-Reduced Platinumâ€“Iron Oxide Nanoparticles. Journal of Physical Chemistry C, 2013, 117, 26324-26333.	3.1	40
35	Local structure of fluorescent platinum nanoclusters. Nanoscale, 2012, 4, 4199.	5.6	40