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	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
2	Interfacial Effects in Iron-Nickel Hydroxideâ€“Platinum Nanoparticles Enhance Catalytic Oxidation. Science, 2014, 344, 495-499.	12.6	591
3	Highly active and durable methanol oxidation electrocatalyst based on the synergy of platinumâ€“nickel hydroxideâ€“graphene. Nature Communications, 2015, 6, 10035.	12.8	466
4	Ultrasmall and phase-pure W2C nanoparticles for efficient electrocatalytic and photoelectrochemical hydrogen evolution. Nature Communications, 2016, 7, 13216.	12.8	334
5	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
6	Fundamentals and applications of photocatalytic CO2 methanation. Nature Communications, 2019, 10, 3169.	12.8	304
7	Principles of photothermal gas-phase heterogeneous CO₂ catalysis. Energy and Environmental Science, 2019, 12, 1122-1142.	30.8	300
8	Golden single-atomic-site platinum electrocatalysts. Nature Materials, 2018, 17, 1033-1039.	27.5	266
9	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
10	Cu2O nanocubes with mixed oxidation-state facets for (photo)catalytic hydrogenation of carbon dioxide. Nature Catalysis, 2019, 2, 889-898.	34.4	234
11	Black indium oxide a photothermal CO2 hydrogenation catalyst. Nature Communications, 2020, 11, 2432.	12.8	192
12	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
13	Pd Nanoparticles Coupled to WO_{2.72} Nanorods for Enhanced Electrochemical Oxidation of Formic Acid. Nano Letters, 2017, 17, 2727-2731.	9.1	136
14	Bismuth atom tailoring of indium oxide surface frustrated Lewis pairs boosts heterogeneous CO2 photocatalytic hydrogenation. Nature Communications, 2020, 11, 6095.	12.8	129
15	Luminescent Gold Nanoparticles with Sizeâ€Independent Emission. Angewandte Chemie - International Edition, 2016, 55, 8894-8898.	13.8	126
16	Nickel@Siloxene catalytic nanosheets for high-performance CO2 methanation. Nature Communications, 2019, 10, 2608.	12.8	104
17	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
18	High-performance light-driven heterogeneous CO2 catalysis with near-unity selectivity on metal phosphides. Nature Communications, 2020, 11, 5149.	12.8	82

#	Article	IF	Citations
19	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
20	Towards Solar Methanol: Past, Present, and Future. Advanced Science, 2019, 6, 1801903.	11.2	63
21	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
22	High-Performance, Scalable, and Low-Cost Copper Hydroxyapatite for Photothermal CO2 Reduction. ACS Catalysis, 2020, 10, 13668-13681.	11.2	55
23	The surface structure of silver-coated gold nanocrystals and its influence on shape control. Nature Communications, 2015, 6, 7664.	12.8	53
24	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
25	New black indium oxideâ€”tandem photothermal CO2-H2 methanol selective catalyst. Nature Communications, 2022, 13, 1512.	12.8	47
26	Local structure of fluorescent platinum nanoclusters. Nanoscale, 2012, 4, 4199.	5.6	40
27	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
28	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
29	Luminescent Gold Nanoparticles with Sizeâ€Independent Emission. Angewandte Chemie, 2016, 128, 9040-9044.	2.0	31
30	The next big thing for silicon nanostructures â€“ CO₂ photocatalysis. Faraday Discussions, 2020, 222, 424-432.	3.2	13
31	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
32	Self-Assembly and Chemical Reactivity of Alkenes on Platinum Nanoparticles. Langmuir, 2015, 31, 522-528.	3.5	11
33	Surface Reconstruction and Reactivity of Platinumâ€“Iron Oxide Nanoparticles. Journal of Physical Chemistry C, 2014, 118, 28861-28867.	3.1	5
34	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
35	Flash Solidâ€“Solid Synthesis of Silicon Oxide Nanorods. Small, 2020, 16, 2001435.	10.0	2