Emma Lovell

List of Publications by Year
in descending order

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40 papers	2,432 citations	201385 27 h-index	288905 40 g-index
40 all docs	40 docs citations	40 times ranked	3027 citing authors

#	Article	IF	Citations
1	A sea-change: manganese doped nickel/nickel oxide electrocatalysts for hydrogen generation from seawater. Energy and Environmental Science, 2018, 11, 1898-1910.	15.6	192
2	A hybrid plasma electrocatalytic process for sustainable ammonia production. Energy and Environmental Science, 2021, 14, 865-872.	15.6	164
3	Nitrate reduction to ammonium: from CuO defect engineering to waste NO_x-to-NH₃economic feasibility. Energy and Environmental Science, 2021, 14, 3588-3598.	15.6	161
4	A review on photo-thermal catalytic conversion of carbon dioxide. Green Energy and Environment, 2017, 2, 204-217.	4.7	153
5	Metalâ€“Organic Framework Decorated Cuprous Oxide Nanowires for Longâ€lived Charges Applied in Selective Photocatalytic CO₂ Reduction to CH₄. Angewandte Chemie - International Edition, 2021, 60, 8455-8459.	7.2	152
6	Elucidating the impact of Ni and Co loading on the selectivity of bimetallic NiCo catalysts for dry reforming of methane. Chemical Engineering Journal, 2018, 352, 572-580.	6.6	144
7	Electroreduction of CO₂ to CO on a Mesoporous Carbon Catalyst with Progressively Removed Nitrogen Moieties. ACS Energy Letters, 2018, 3, 2292-2298.	8.8	129
8	Bio-oil upgrading with catalytic pyrolysis of biomass using Copper/zeolite-Nickel/zeolite and Copper-Nickel/zeolite catalysts. Bioresource Technology, 2019, 279, 404-409.	4.8	94
9	Modulating Activity through Defect Engineering of Tin Oxides for Electrochemical CO₂ Reduction. Advanced Science, 2019, 6, 1900678.	5.6	92
10	CO2 reforming of methane over MCM-41-supported nickel catalysts: altering support acidity by one-pot synthesis at room temperature. Applied Catalysis A: General, 2014, 473, 51-58.	2.2	82
11	Plasmacatalytic bubbles using CeO2 for organic pollutant degradation. Chemical Engineering Journal, 2021, 403, 126413.	6.6	79
12	Enhancing Ni-SiO 2 catalysts for the carbon dioxide reforming of methane: Reduction-oxidation-reduction pre-treatment. Applied Catalysis B: Environmental, 2016, 199, 155-165.	10.8	71
13	Mixedâ€Metal MOFâ€74 Templated Catalysts for Efficient Carbon Dioxide Capture and Methanation. Advanced Functional Materials, 2021, 31, 2007624.	7.8	65
14	Anchoring Sites Engineering in Singleâ€Atom Catalysts for Highly Efficient Electrochemical Energy Conversion Reactions. Advanced Materials, 2021, 33, e2102801.	11.1	64
15	Ni-SiO2 Catalysts for the Carbon Dioxide Reforming of Methane: Varying Support Properties by Flame Spray Pyrolysis. Molecules, 2015, 20, 4594-4609.	1.7	57
16	Low-Temperature CO₂ Methanation: Synergistic Effects in Plasma-Ni Hybrid Catalytic System. ACS Sustainable Chemistry and Engineering, 2020, 8, 1888-1898.	3.2	54
17	Uncovering Atomicâ€Scale Stability and Reactivity in Engineered Zinc Oxide Electrocatalysts for Controllable Syngas Production. Advanced Energy Materials, 2020, 10, 2001381.	10.2	51
18	Oxygen-Vacancy Engineering of Cerium-Oxide Nanoparticles for Antioxidant Activity. ACS Omega, 2019, 4, 9473-9479.	1.6	47

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19	Enhanced bio-oil deoxygenation activity by Cu/zeolite and Ni/zeolite catalysts in combined in-situ and ex-situ biomass pyrolysis. Journal of Analytical and Applied Pyrolysis, 2019, 140, 148-160.	2.6	46
20	Emerging material engineering strategies for amplifying photothermal heterogeneous CO2 catalysis. Journal of Energy Chemistry, 2021, 59, 108-125.	7.1	46
21	Role of support in photothermal carbon dioxide hydrogenation catalysed by Ni/CexTiyO2. Progress in Natural Science: Materials International, 2018, 28, 168-177.	1.8	44
22	Plasmonic effects on CO2 reduction over bimetallic Ni-Au catalysts. Chemical Engineering Science, 2019, 194, 94-104.	1.9	42
23	Flame spray pyrolysis-designed silica/ceria-zirconia supports for the carbon dioxide reforming of methane. Applied Catalysis A: General, 2017, 546, 47-57.	2.2	41
24	Light-Induced Synergistic Multidefect Sites on TiO₂/SiO₂ Composites for Catalytic Dehydrogenation. ACS Catalysis, 2019, 9, 2674-2684.	5.5	41
25	3D Heterostructured Copper Electrode for Conversion of Carbon Dioxide to Alcohols at Low Overpotentials. Advanced Sustainable Systems, 2019, 3, 1800064.	2.7	37
26	From passivation to activation â€“ tunable nickel/nickel oxide for hydrogen evolution electrocatalysis. Chemical Communications, 2020, 56, 1709-1712.	2.2	35
27	Light-Enhanced CO₂ Reduction to CH₄ using Nonprecious Transition-Metal Catalysts. ACS Sustainable Chemistry and Engineering, 2020, 8, 5056-5066.	3.2	29
28	Asymmetrical Double Flame Spray Pyrolysis-Designed SiO2/Ce0.7Zr0.3O2 for the Dry Reforming of Methane. ACS Applied Materials & Interfaces, 2019, 11, 25766-25777.	4.0	26
29	Effect of Metalâ€Support Interactions in Mixed Co/Al Catalysts for Dry Reforming of Methane. ChemCatChem, 2019, 11, 3432-3440.	1.8	26
30	Unifying double flame spray pyrolysis with lanthanum doping to restrict cobaltâ€“aluminate formation in Co/Al₂O₃ catalysts for the dry reforming of methane. Catalysis Science and Technology, 2019, 9, 4970-4980.	2.1	23
31	Silver-Based Plasmonic Catalysts for Carbon Dioxide Reduction. ACS Sustainable Chemistry and Engineering, 2020, 8, 1879-1887.	3.2	23
32	Manipulating ceria-titania binary oxide features and their impact as nickel catalyst supports for low temperature steam reforming of methane. Applied Catalysis A: General, 2017, 530, 111-124.	2.2	22
33	Photoenhanced CO2 methanation over La2O3 promoted Co/TiO2 catalysts. Applied Catalysis B: Environmental, 2021, 294, 120248.	10.8	21
34	Altering the influence of ceria oxygen vacancies in Ni/Ce_xSi_yO₂for photothermal CO₂methanation. Catalysis Science and Technology, 2021, 11, 5297-5309.	2.1	17
35	Cooperative defect-enriched SiO2 for oxygen activation and organic dehydrogenation. Journal of Catalysis, 2019, 376, 168-179.	3.1	16
36	Plasma Treating Mixed Metal Oxides to Improve Oxidative Performance via Defect Generation. Materials, 2019, 12, 2756.	1.3	15

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37	Metalâ€“Organic Framework Decorated Cuprous Oxide Nanowires for Longâ€lived Charges Applied in Selective Photocatalytic CO₂ Reduction to CH₄. Angewandte Chemie, 2021, 133, 8536-8540.	1.6	11
38	Plasma-Induced Catalyst Support Defects for the Photothermal Methanation of Carbon Dioxide. Materials, 2021, 14, 4195.	1.3	11
39	Two Steps Back, One Leap Forward: Synergistic Energy Conversion in Plasmonic and Plasma Catalysis. ACS Energy Letters, 2022, 7, 300-309.	8.8	7
40	Complexities of Capturing Light for Enhancing Thermal Catalysis. Catalysis Letters, 2022, 152, 619-628.	1.4	2