Agnieszka M Kierzkowska

List of Publications by Year
in descending order

24 papers	1,616 citations	430874 18 h-index	580821 25 g-index
27 all docs	27 docs citations	27 times ranked	1574 citing authors

#	Article	IF	Citations
1	Hydrogen dissociation sites on indium-based ZrO2-supported catalysts for hydrogenation of CO2 to methanol. Catalysis Today, 2022, 387, 38-46.	4.4	11
2	Chemical Looping Partial Oxidation of Methane: Reducing Carbon Deposition through Alloying. Energy & Fuels, 2022, 36, 9780-9784.	5.1	7
3	Correlating the Structural Evolution of ZnO/Al₂O₃ to Spinel Zinc Aluminate with its Catalytic Performance in Propane Dehydrogenation. Journal of Physical Chemistry C, 2021, 125, 14065-14074.	3.1	14
4	Development of an effective bi-functional Niâ€“CaO catalyst-sorbent for the sorption-enhanced water gas shift reaction through structural optimization and the controlled deposition of a stabilizer by atomic layer deposition. Sustainable Energy and Fuels, 2020, 4, 713-729.	4.9	20
5	Oxidative dehydrogenation of propane on silica-supported vanadyl sites promoted with sodium metavanadate. Catalysis Science and Technology, 2020, 10, 7186-7193.	4.1	2
6	Na₂CO₃-modified CaO-based CO₂ sorbents: the effects of structure and morphology on CO₂ uptake. Physical Chemistry Chemical Physics, 2020, 22, 24697-24703.	2.8	22
7	Inverse Opal-Like, Ca₃Al₂O₆-Stabilized, CaO-Based CO₂Sorbent: Stabilization of a Highly Porous Structure To Improve Its Cyclic CO₂Uptake. ACS Applied Energy Materials, 2019, 2, 6461-6471.	5.1	26
8	Single Site Cobalt Substitution in 2D Molybdenum Carbide (MXene) Enhances Catalytic Activity in the Hydrogen Evolution Reaction. Journal of the American Chemical Society, 2019, 141, 17809-17816.	13.7	259
9	Reversible Exsolution of Dopant Improves the Performance of Ca₂Fe₂O₅ for Chemical Looping Hydrogen Production. ACS Applied Materials & Interfaces, 2019, 11, 18276-18284.	8.0	50
10	Redox-Driven Restructuring of FeMnZr-Oxygen Carriers Enhances the Purity and Yield of H₂ in a Chemical Looping Process. ACS Applied Energy Materials, 2018, 1, 1294-1303.	5.1	14
11	In Situ XRD and Dynamic Nuclear Polarization Surface Enhanced NMR Spectroscopy Unravel the Deactivation Mechanism of CaO-Based, Ca₃Al₂O₆-Stabilized CO₂ Sorbents. Chemistry of Materials, 2018, 30, 1344-1352.	6.7	40
12	Optimization of the structural characteristics of CaO and its effective stabilization yield high-capacity CO2 sorbents. Nature Communications, 2018, 9, 2408.	12.8	167
13	Multishelled CaO Microspheres Stabilized by Atomic Layer Deposition of Al₂O₃ for Enhanced CO₂ Capture Performance. Advanced Materials, 2017, 29, 1702896.	21.0	126
14	Sol-gel Synthesis of MgAl2O4-stabilized CaO for CO2 Capture. Energy Procedia, 2017, 114, 220-229.	1.8	17
15	ZrO₂-Supported Fe₂O₃ for Chemical-Looping-Based Hydrogen Production: Effect of pH on Its Structure and Performance As Probed by X-ray Absorption Spectroscopy and Electrical Conductivity Measurements. Journal of Physical Chemistry C, 2016, 120, 18977-18985.	3.1	21
16	Development of a Steelâ€Slagâ€Based, Ironâ€Functionalized Sorbent for an Autothermal Carbon Dioxide Capture Process. ChemSusChem, 2015, 8, 3839-3846.	6.8	30
17	Caâ€“Cu looping process for CO2 capture from a power plant and its comparison with Ca-looping, oxy-combustion and amine-based CO2 capture processes. International Journal of Greenhouse Gas Control, 2015, 43, 198-212.	4.6	40
18	Development of Highly Effective CaOâ€based, MgOâ€stabilized CO₂ Sorbents via a Scalable â€œOneâ€Potâ€•Recrystallization Technique. Advanced Functional Materials, 2014, 24, 5753-5761.	14.9	66

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19	Solâ€“Gelâ€Derived, Calciumâ€Based, Copperâ€Functionalised CO₂ Sorbents for an Integrated Chemical Looping Combustionâ€“Calcium Looping CO₂ Capture Process. ChemPlusChem, 2013, 78, 92-100.	2.8	33
20	CaOâ€Based CO₂ Sorbents: From Fundamentals to the Development of New, Highly Effective Materials. ChemSusChem, 2013, 6, 1130-1148.	6.8	287
21	Sorbent-Enhanced Methane Reforming over a Niâ€“Ca-Based, Bifunctional Catalyst Sorbent. ACS Catalysis, 2012, 2, 1635-1646.	11.2	112
22	Development of calcium-based, copper-functionalised CO2 sorbents to integrate chemical looping combustion into calcium looping. Energy and Environmental Science, 2012, 5, 6061.	30.8	77
23	Highly Efficient CO₂ Sorbents: Development of Synthetic, Calcium-Rich Dolomites. Environmental Science & Technology, 2012, 46, 559-565.	10.0	104
24	Application of the Solâ€“Gel Technique to Develop Synthetic Calciumâ€Based Sorbents with Excellent Carbon Dioxide Capture Characteristics. ChemSusChem, 2012, 5, 411-418.	6.8	70