Miriam GonzÃ¡lez CastaÃ±o

List of Publications by Year
in descending order

32 papers	732 citations	567144 15 h-index	552653 26 g-index
33 all docs	33 docs citations	33 times ranked	600 citing authors

#	Article	IF	Citations
1	The reverse water gas shift reaction: a process systems engineering perspective. Reaction Chemistry and Engineering, 2021, 6, 954-976.	1.9	129
2	Pt vs. Au in waterâ€“gas shift reaction. Journal of Catalysis, 2014, 314, 1-9.	3.1	103
3	O2-assisted Water Gas Shift reaction over structured Au and Pt catalysts. Applied Catalysis B: Environmental, 2016, 185, 337-343.	10.8	34
4	New concept for old reaction: Novel WGS catalyst design. Applied Catalysis B: Environmental, 2018, 238, 1-5.	10.8	34
5	Insights into the product quality and energy requirements for solid biofuel production: A comparison of hydrothermal carbonization, pyrolysis and torrefaction of olive tree pruning. Energy, 2022, 238, 122022.	4.5	33
6	Structuring Pt/CeO2/Al2O3 WGS catalyst: Introduction of buffer layer. Applied Catalysis B: Environmental, 2017, 200, 420-427.	10.8	31
7	Au and Pt Remain Unoxidized on a CeO₂-Based Catalyst during the Waterâ€“Gas Shift Reaction. Journal of the American Chemical Society, 2022, 144, 446-453.	6.6	31
8	Deep insight into Zr/Fe combination for successful Pt/CeO₂/Al₂O₃ WGS catalyst doping. Catalysis Science and Technology, 2017, 7, 1556-1564.	2.1	30
9	Microreactors technology for hydrogen purification: Effect of the catalytic layer thickness on CuO /CeO2-coated microchannel reactors for the PROX reaction. Chemical Engineering Journal, 2015, 275, 45-52.	6.6	27
10	Nickel Phosphide Catalysts as Efficient Systems for CO2 Upgrading via Dry Reforming of Methane. Catalysts, 2021, 11, 446.	1.6	26
11	Stepping toward Efficient Microreactors for CO₂ Methanation: 3D-Printed Gyroid Geometry. ACS Sustainable Chemistry and Engineering, 2021, 9, 8198-8206.	3.2	22
12	Valorization of biomass-derived CO2 residues with Cu-MnOx catalysts for RWGS reaction. Renewable Energy, 2022, 182, 443-451.	4.3	22
13	Cu supported Fe-SiO2 nanocomposites for reverse water gas shift reaction. Journal of CO2 Utilization, 2021, 46, 101493.	3.3	21
14	Promoting bioeconomy routes: From food waste to green biomethane. A profitability analysis based on a real case study in eastern Germany. Journal of Environmental Management, 2021, 300, 113788.	3.8	21
15	Tailoring structured WGS catalysts: Impact of multilayered concept on the water surface interactions. Applied Catalysis B: Environmental, 2018, 222, 124-132.	10.8	20
16	Unprofitability of small biogas plants without subsidies in the Brandenburg region. Environmental Chemistry Letters, 2021, 19, 1823-1829.	8.3	20
17	Exploring profitability of bioeconomy paths: Dimethyl ether from biogas as case study. Energy, 2021, 225, 120230.	4.5	16
18	Ni/YMnO3 perovskite catalyst for CO2 methanation. Applied Materials Today, 2021, 23, 101055.	2.3	13

#	Article	IF	Citations
19	3D-printed structured catalysts for CO2 methanation reaction: Advancing of gyroid-based geometries. Energy Conversion and Management, 2022, 258, 115464.	4.4	12
20	On the role of Cu, Ag and Pt in active titania for gas-phase ethanol photo-reforming. Materials Science in Semiconductor Processing, 2018, 73, 30-34.	1.9	11
21	Are Ni/ and Ni5Fe1/biochar catalysts suitable for synthetic natural gas production? A comparison with Î³-Al2O3 supported catalysts. Green Energy and Environment, 2023, 8, 744-756.	4.7	10
22	Syngas production using CO2-rich residues: From ideal to real operating conditions. Journal of CO2 Utilization, 2021, 52, 101661.	3.3	10
23	Anodizing of Self-Passivating W_xTi_{1â€“x} Precursors for W_xTi_{1â€“x}O_n Oxide Alloys with Tailored Stability. ACS Applied Materials & Interfaces, 2019, 11, 9510-9518.	4.0	8
24	Development of one-pot Cu/cellulose derived carbon catalysts for RWGS reaction. Fuel, 2022, 319, 123707.	3.4	8
25	Substrate Purity Effect on the Defect Formation and Properties of Amorphous Anodic Barrier Al₂O₃. Journal of the Electrochemical Society, 2018, 165, C422-C431.	1.3	7
26	Enhancing the insulating and dielectric properties of barrier anodic Al2O3 on high purity aluminum. Applied Surface Science, 2020, 505, 144522.	3.1	6
27	Economic approach for CO2 valorization from hydrothermal carbonization gaseous streams via reverse water-gas shift reaction. Fuel, 2022, 313, 123055.	3.4	6
28	Catalytic Upgrading of Biomass-Gasification Mixtures Using Ni-Fe/MgAl₂O₄ as a Bifunctional Catalyst. Energy & Fuels, 2022, 36, 8267-8273.	2.5	5
29	CO2 methanation on Ni/YMn1-xAlxO3 perovskite catalysts. Applied Materials Today, 2022, 29, 101577.	2.3	5
30	Zr and Fe on Pt/ <scp> CeO ₂ â€MO _x </scp> / <scp> Al ₂ O ₃ </scp> catalysts for <scp>WGS</scp> reaction. International Journal of Energy Research, 2021, 45, 13978-13989.	2.2	4
31	Assessing the impact of textural properties in Niâ€“Fe catalysts for CO2 methanation performance. Microporous and Mesoporous Materials, 2021, 327, 111405.	2.2	4
32	Unravelling the role of Fe in trimetallic Fe-Cu-Pt/Al2O3 catalysts for CO-PROX reaction. Molecular Catalysis, 2022, 517, 112015.	1.0	2