Tomas Ramirez Reina

List of Publications by Year
in descending order

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148 papers	4,623 citations	109321 35 h-index	144013 57 g-index
157 all docs	157 docs citations	157 times ranked	4043 citing authors

#	Article	IF	Citations
1	Strategies for Carbon and Sulfur Tolerant Solid Oxide Fuel Cell Materials, Incorporating Lessons from Heterogeneous Catalysis. Chemical Reviews, 2016, 116, 13633-13684.	47.7	229
2	Chemical CO2 recycling via dry and bi reforming of methane using Ni-Sn/Al2O3 and Ni-Sn/CeO2-Al2O3 catalysts. Applied Catalysis B: Environmental, 2018, 224, 125-135.	20.2	178
3	Catalytic Upgrading of Biomass Model Compounds: Novel Approaches and Lessons Learnt from Traditional Hydrodeoxygenation â€“ a Review. ChemCatChem, 2019, 11, 924-960.	3.7	167
4	CO2 valorisation via Reverse Water-Gas Shift reaction using advanced Cs doped Fe-Cu/Al2O3 catalysts. Journal of CO2 Utilization, 2017, 21, 423-428.	6.8	156
5	Highly efficient Ni/CeO2-Al2O3 catalysts for CO2 upgrading via reverse water-gas shift: Effect of selected transition metal promoters. Applied Catalysis B: Environmental, 2018, 232, 464-471.	20.2	141
6	Ni stabilised on inorganic complex structures: superior catalysts for chemical CO2 recycling via dry reforming of methane. Applied Catalysis B: Environmental, 2018, 236, 458-465.	20.2	141
7	Pt vs. Au in waterâ€“gas shift reaction. Journal of Catalysis, 2014, 314, 1-9.	6.2	103
8	Understanding the promoter effect of Cu and Cs over highly effective Î2-Mo2C catalysts for the reverse water-gas shift reaction. Applied Catalysis B: Environmental, 2019, 244, 889-898.	20.2	101
9	Membrane-based technologies for biogas upgrading: a review. Environmental Chemistry Letters, 2020, 18, 1649-1658.	16.2	87
10	Analysis of Dry Reforming as direct route for gas phase CO2 conversion. The past, the present and future of catalytic DRM technologies. Progress in Energy and Combustion Science, 2022, 89, 100970.	31.2	78
11	Engineering Ni/SiO2 catalysts for enhanced CO2 methanation. Fuel, 2021, 285, 119151.	6.4	76
12	Switchable Catalysts for Chemical CO₂ Recycling: A Step Forward in the Methanation and Reverse Waterâ€“Gas Shift Reactions. ACS Sustainable Chemistry and Engineering, 2020, 8, 4614-4622.	6.7	69
13	Understanding the role of Ni-Sn interaction to design highly effective CO2 conversion catalysts for dry reforming of methane. Journal of CO2 Utilization, 2018, 27, 1-10.	6.8	68
14	Synthetic natural gas production from CO2 over Ni-x/CeO2-ZrO2 (x = Fe, Co) catalysts: Influence of promoters and space velocity. Catalysis Today, 2018, 317, 108-113.	4.4	64
15	Gold promoted Cu/ZnO/Al2O3 catalysts prepared from hydrotalcite precursors: Advanced materials for the WGS reaction. Applied Catalysis B: Environmental, 2017, 201, 310-317.	20.2	61
16	Multicomponent Ni-CeO2 nanocatalysts for syngas production from CO2/CH4 mixtures. Journal of CO2 Utilization, 2018, 25, 68-78.	6.8	61
17	CO2 valorisation via reverse water-gas shift reaction using promoted Fe/CeO2-Al2O3 catalysts: Showcasing the potential of advanced catalysts to explore new processes design. Applied Catalysis A: General, 2020, 593, 117442.	4.3	61
18	Au/CeO2 Catalysts: Structure and CO Oxidation Activity. Catalysts, 2016, 6, 158.	3.5	58

#	ARTICLE	IF	CITATIONS
19	Improving Fe/Al2O3 Catalysts for the Reverse Water-Gas Shift Reaction: On the Effect of Cs as Activity/Selectivity Promoter. Catalysts, 2018, 8, 608.	3.5	56
20	Carbon stabilised saponite supported transition metal-alloy catalysts for chemical CO2 utilisation via reverse water-gas shift reaction. Applied Catalysis B: Environmental, 2020, 261, 118241.	20.2	56
21	Mono and bimetallic Cu-Ni structured catalysts for the water gas shift reaction. Applied Catalysis A: General, 2015, 497, 1-9.	4.3	55
22	WGS and CO-PrOx reactions using gold promoted copper-ceria catalysts: â€œBulk CuO CeO2 vs. CuO CeO2/Al2O3 with low mixed oxide contentâ€. Applied Catalysis B: Environmental, 2016, 197, 62-72.	20.2	53
23	CO2 methanation in the presence of methane: Catalysts design and effect of methane concentration in the reaction mixture. Journal of the Energy Institute, 2020, 93, 415-424.	5.3	53
24	Enhanced ceria nanoflakes using graphene oxide as a sacrificial template for CO oxidation and dry reforming of methane. Applied Catalysis B: Environmental, 2019, 242, 358-368.	20.2	50
25	The role of Au, Cu & CeO 2 and their interactions for an enhanced WGS performance. Applied Catalysis B: Environmental, 2016, 187, 98-107.	20.2	49
26	Boosting the activity of a Au/CeO2/Al2O3 catalyst for the WGS reaction. Catalysis Today, 2015, 253, 149-154.	4.4	47
27	Biogas Upgrading Via Dry Reforming Over a Ni-Sn/CeO2-Al2O3 Catalyst: Influence of the Biogas Source. Energies, 2019, 12, 1007.	3.1	46
28	Evolution of chars during slow pyrolysis of citrus waste. Fuel Processing Technology, 2017, 158, 255-263.	7.2	41
29	Investigating New Routes for Biomass Upgrading: â€œH2-Freeâ€• Hydrodeoxygenation Using Ni-Based Catalysts. ACS Sustainable Chemistry and Engineering, 2019, 7, 16041-16049.	6.7	40
30	Impact of Ceâ€“Fe synergism on the catalytic behaviour of Au/CeO₂â€“FeO_x/Al₂O₃for pure H₂production. Catalysis Science and Technology, 2013, 3, 779-787.	4.1	38
31	Dry Reforming of Ethanol and Glycerol: Mini-Review. Catalysts, 2019, 9, 1015.	3.5	38
32	A theoretical overview on the prevention of coking in dry reforming of methane using non-precious transition metal catalysts. Journal of CO2 Utilization, 2021, 53, 101728.	6.8	38
33	Catalytic Conversion of Palm Oil to Bio-Hydrogenated Diesel over Novel N-Doped Activated Carbon Supported Pt Nanoparticles. Energies, 2020, 13, 132.	3.1	37
34	Closing the Carbon Cycle with Dual Function Materials. Energy & Fuels, 2021, 35, 19859-19880.	5.1	37
35	Theoretical Insights of Ni₂P (0001) Surface toward Its Potential Applicability in CO₂ Conversion via Dry Reforming of Methane. ACS Catalysis, 2019, 9, 3487-3497.	11.2	36
36	Bio-methane and bio-methanol co-production from biogas: A profitability analysis to explore new sustainable chemical processes. Journal of Cleaner Production, 2020, 265, 121909.	9.3	36

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37	Bimetallic Cuâ€“Ni catalysts for the WGS reaction â€“ Cooperative or uncooperative effect?. International Journal of Hydrogen Energy, 2019, 44, 4011-4019.	7.1	35
38	Stepping towards a low-carbon economy. Formic acid from biogas as case of study. Applied Energy, 2020, 268, 115033.	10.1	35
39	Electrocatalytic CO2 conversion to C2 products: Catalysts design, market perspectives and techno-economic aspects. Renewable and Sustainable Energy Reviews, 2022, 161, 112329.	16.4	35
40	O2-assisted Water Gas Shift reaction over structured Au and Pt catalysts. Applied Catalysis B: Environmental, 2016, 185, 337-343.	20.2	34
41	Effect of carbon-based materials and CeO₂ on Ni catalysts for Kraft lignin liquefaction in supercritical water. Green Chemistry, 2018, 20, 4308-4318.	9.0	34
42	Identifying Commercial Opportunities for the Reverse Water Gas Shift Reaction. Energy Technology, 2021, 9, 2100554.	3.8	34
43	In situ characterization of iron-promoted ceriaâ€“alumina gold catalysts during the water-gas shift reaction. Catalysis Today, 2013, 205, 41-48.	4.4	32
44	Converting CO2 from biogas and MgCl2 residues into valuable magnesium carbonate: A novel strategy for renewable energy production. Energy, 2019, 180, 457-464.	8.8	32
45	Is the production of biofuels and bio-chemicals always profitable? Co-production of biomethane and urea from biogas as case study. Energy Conversion and Management, 2020, 220, 113058.	9.2	32
46	Recent advances in carbon dioxide capture for process intensification. Carbon Capture Science & Technology, 2022, 2, 100031.	10.4	32
47	Understanding the opportunities of metalâ€“organic frameworks (MOFs) for CO₂capture and gas-phase CO₂conversion processes: a comprehensive overview. Reaction Chemistry and Engineering, 2021, 6, 787-814.	3.7	31
48	Catalytic Converters for Vehicle Exhaust: Fundamental Aspects and Technology Overview for Newcomers to the Field. Chemistry, 2021, 3, 630-646.	2.2	31
49	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.	13.7	31
50	Carbon Supported Gold Nanoparticles for the Catalytic Reduction of 4-Nitrophenol. Frontiers in Chemistry, 2019, 7, 548.	3.6	30
51	Molten Salt-Promoted MgO Adsorbents for CO₂ Capture: Transient Kinetic Studies. Environmental Science & Technology, 2021, 55, 4513-4521.	10.0	30
52	Highly Active and Selective Multicomponent Feâ€“Cu/CeO₂â€“Al₂O₃ Catalysts for CO₂ Upgrading via RWGS: Impact of Fe/Cu Ratio. ACS Sustainable Chemistry and Engineering, 2021, 9, 12155-12166.	6.7	30
53	Noble Metal Supported on Activated Carbon for â€œHydrogen Freeâ€•HDO Reactions: Exploring Economically Advantageous Routes for Biomass Valorisation. ChemCatChem, 2019, 11, 4434-4441.	3.7	29
54	Synergizing carbon capture storage and utilization in a biogas upgrading lab-scale plant based on calcium chloride: Influence of precipitation parameters. Science of the Total Environment, 2019, 670, 59-66.	8.0	29

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55	Transition Metal Carbides (TMCs) Catalysts for Gas Phase CO2 Upgrading Reactions: A Comprehensive Overview. Catalysts, 2020, 10, 955.	3.5	29
56	Could an efficient WGS catalyst be useful in the CO-PrOx reaction?. Applied Catalysis B: Environmental, 2014, 150-151, 554-563.	20.2	28
57	Catalytic screening of Au/CeO 2 -MO x /Al 2 O 3 catalysts (MÂ=ÂLa, Ni, Cu, Fe, Cr, Y) in the CO-PrOx reaction. International Journal of Hydrogen Energy, 2015, 40, 1782-1788.	7.1	28
58	Highly active Cu-ZnO catalysts for the WGS reaction at mediumâ€“high space velocities: Effect of the support composition. International Journal of Hydrogen Energy, 2017, 42, 10747-10751.	7.1	28
59	Regeneration of Sodium Hydroxide from a Biogas Upgrading Unit through the Synthesis of Precipitated Calcium Carbonate: An Experimental Influence Study of Reaction Parameters. Processes, 2018, 6, 205.	2.8	28
60	Cost-effective routes for catalytic biomass upgrading. Current Opinion in Green and Sustainable Chemistry, 2020, 23, 1-9.	5.9	27
61	In-situ HDO of guaiacol over nitrogen-doped activated carbon supported nickel nanoparticles. Applied Catalysis A: General, 2021, 620, 118033.	4.3	27
62	Influence of Vanadium or Cobalt Oxides on the CO Oxidation Behavior of Au/MO_{<i>x</i>}/CeO₂â€“Al₂O₃ Systems. ChemCatChem, 2012, 4, 512-520.	3.7	26
63	Robust mesoporous bimetallic yolkâ€“shell catalysts for chemical CO2 upgrading via dry reforming of methane. Reaction Chemistry and Engineering, 2018, 3, 433-436.	3.7	26
64	Nickel Phosphide Catalysts as Efficient Systems for CO2 Upgrading via Dry Reforming of Methane. Catalysts, 2021, 11, 446.	3.5	26
65	Bimetallic Niâ€“Ru and Niâ€“Re Catalysts for Dry Reforming of Methane: Understanding the Synergies of the Selected Promoters. Frontiers in Chemistry, 2021, 9, 694976.	3.6	26
66	Conversion of CO2 to added value products via rWGS using Fe-promoted catalysts: Carbide, metallic Fe or a mixture?. Journal of Energy Chemistry, 2022, 66, 635-646.	12.9	26
67	Enhanced low-temperature CO2 methanation performance of Ni/ZrO2 catalysts via a phase engineering strategy. Chemical Engineering Journal, 2022, 446, 137031.	12.7	26
68	Mechanistic Insights into Selective CO₂ Conversion via RWGS on Transition Metal Phosphides: A DFT Study. Journal of Physical Chemistry C, 2019, 123, 22918-22931.	3.1	25
69	Flexible syngas production using a La2Zr2-xNixO7-Î´ pyrochlore-double perovskite catalyst: Towards a direct route for gas phase CO2 recycling. Catalysis Today, 2020, 357, 583-589.	4.4	25
70	Modelling approaches for biomass gasifiers: A comprehensive overview. Science of the Total Environment, 2022, 834, 155243.	8.0	25
71	Profitability analysis of a novel configuration to synergize biogas upgrading and Power-to-Gas. Energy Conversion and Management, 2020, 224, 113369.	9.2	24
72	Ni-CeO2/C Catalysts with Enhanced OSC for the WGS Reaction. Catalysts, 2015, 5, 298-309.	3.5	23

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73	Experimental study of high velocity oxy-fuel sprayed WC-17Co coatings applied on complex geometries. Part B: Influence of kinematic spray parameters on microstructure, phase composition and decarburization of the coatings. Surface and Coatings Technology, 2017, 328, 499-512.	4.8	23
74	Understanding the effect of Ca and Mg ions from wastes in the solvent regeneration stage of a biogas upgrading unit. Science of the Total Environment, 2019, 691, 93-100.	8.0	23
75	Engineering heterogenous catalysts for chemical CO2 utilization: Lessons from thermal catalysis and advantages of yolk@shell structured nanoreactors. Journal of Energy Chemistry, 2021, 57, 304-324.	12.9	23
76	Analysis of the potential for biogas upgrading to syngas via catalytic reforming in the United Kingdom. Renewable and Sustainable Energy Reviews, 2021, 144, 110939.	16.4	23
77	Sub-ambient CO oxidation over Au/MOx/CeO2-Al2O3 (M=Zn or Fe). Applied Catalysis A: General, 2012, 419-420, 58-66.	4.3	22
78	Yolk-Shell structured NiCo@SiO2 nanoreactor for CO2 upgrading via reverse water-gas shift reaction. Catalysis Today, 2022, 383, 358-367.	4.4	22
79	Versatile Ni-Ru catalysts for gas phase CO2 conversion: Bringing closer dry reforming, reverse water gas shift and methanation to enable end-products flexibility. Fuel, 2022, 315, 123097.	6.4	22
80	Low-temperature CO oxidation on multicomponent gold based catalysts. Frontiers in Chemistry, 2013, 1, 12.	3.6	21
81	Viability of Au/CeO₂â€"ZnO/Al₂O₃ Catalysts for Pure Hydrogen Production by the Waterâ€"Gas Shift Reaction. ChemCatChem, 2014, 6, 1401-1409.	3.7	21
82	H2 oxidation as criterion for PrOx catalyst selection: Examples based on Auâ€"CoO -supported systems. Journal of Catalysis, 2015, 326, 161-171.	6.2	21
83	Anthracene aquacracking using NiMo/SiO2 catalysts in supercritical water conditions. Fuel, 2016, 182, 740-748.	6.4	20
84	Thermochemical stability of LaxSr1-xCoyFe1-yO3-Î´ and NiFe2O4-Ce0.8Tb0.2O2-Î´ under real conditions for its application in oxygen transport membranes for oxyfuel combustion. Journal of Membrane Science, 2018, 562, 26-37.	8.2	20
85	Free radicals formation on thermally decomposed biomass. Fuel, 2019, 255, 115802.	6.4	20
86	Unlocking the potential of biofuels <i>via</i> reaction pathways in van Krevelen diagrams. Green Chemistry, 2021, 23, 8949-8963.	9.0	20
87	Phenanthrene catalytic cracking in supercritical water: effect of the reaction medium on NiMo/SiO2 catalysts. Catalysis Today, 2019, 329, 197-205.	4.4	19
88	â€œH2-freeâ€•demethoxylation of guaiacol in subcritical water using Pt supported on N-doped carbon catalysts: A cost-effective strategy for biomass upgrading. Journal of Energy Chemistry, 2021, 58, 377-385.	12.9	19
89	From biogas upgrading to CO2 utilization and waste recycling: A novel circular economy approach. Journal of CO2 Utilization, 2021, 47, 101496.	6.8	19
90	Advantages of Yolk Shell Catalysts for the DRM: A Comparison of Ni/ZnO@SiO2 vs. Ni/CeO2 and Ni/Al2O3. Chemistry, 2019, 1, 3-16.	2.2	18

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91	Novel process for carbon capture and utilization and saline wastes valorization. Journal of Natural Gas Science and Engineering, 2020, 73, 103071.	4.4	18
92	Effect of Cu and Cs in the Î²-Mo2C System for CO2 Hydrogenation to Methanol. Catalysts, 2020, 10, 1213.	3.5	18
93	Performance and stability of (ZrO 2) 0.89 (Y 2 O 3) 0.01 (Sc 2 O 3) 0.10 -LaCr 0.85 Cu 0.10 Ni 0.05 O 3-Î´ oxygen transport membranes under conditions relevant for oxy-fuel combustion. Journal of Membrane Science, 2018, 552, 115-123.	8.2	17
94	Ni-Phosphide catalysts as versatile systems for gas-phase CO2 conversion: Impact of the support and evidences of structure-sensitivity. Fuel, 2022, 323, 124301.	6.4	17
95	Highly stable Ru nanoparticles incorporated in mesoporous carbon catalysts for production of Î³-valerolactone. Catalysis Today, 2020, 351, 75-82.	4.4	16
96	Cu-CuOx/rGO catalyst derived from hybrid LDH/GO with enhanced C2H4 selectivity by CO2 electrochemical reduction. Journal of CO2 Utilization, 2020, 40, 101205.	6.8	16
97	Exploring profitability of bioeconomy paths: Dimethyl ether from biogas as case study. Energy, 2021, 225, 120230.	8.8	16
98	Biogas upgrading to biomethane as a local source of renewable energy to power light marine transport: Profitability analysis for the county of Cornwall. Waste Management, 2022, 137, 81-88.	7.4	16
99	Multicomponent Au/Cu-ZnO-Al2O3 catalysts: Robust materials for clean hydrogen production. Applied Catalysis A: General, 2018, 558, 91-98.	4.3	15
100	Molybdenum Oxide Supported on Ti₃AlC₂ is an Active Reverse Waterâ€“Gas Shift Catalyst. ACS Sustainable Chemistry and Engineering, 2021, 9, 4957-4966.	6.7	15
101	Characterization of emissions of condensable particulate matter under real operation conditions in cement clinker kilns using complementary experimental techniques. Science of the Total Environment, 2021, 786, 147472.	8.0	15
102	Hydrogen production from landfill biogas: Profitability analysis of a real case study. Fuel, 2022, 324, 124438.	6.4	15
103	Sustainable routes for acetic acid production: Traditional processes vs a low-carbon, biogas-based strategy. Science of the Total Environment, 2022, 840, 156663.	8.0	15
104	Understanding the influence of the alkaline cation K ⁺ or Na ⁺ in the regeneration efficiency of a biogas upgrading unit. International Journal of Energy Research, 2019, 43, 1578-1585.	4.5	14
105	Nanogold mesoporous iron promoted ceria catalysts for total and preferential CO oxidation reactions. Journal of Molecular Catalysis A, 2016, 414, 62-71.	4.8	13
106	Guaiacol hydrodeoxygenation in hydrothermal conditions using N-doped reduced graphene oxide (RGO) supported Pt and Ni catalysts: Seeking for economically viable biomass upgrading alternatives. Applied Catalysis A: General, 2021, 611, 117977.	4.3	13
107	Synergizing carbon capture and utilization in a biogas upgrading plant based on calcium chloride: Scaling-up and profitability analysis. Science of the Total Environment, 2021, 758, 143645.	8.0	13
108	Stability and performance of robust dual-phase (ZrO2)0.89(Y2O3)0.01(Sc2O3)0.10-Al0.02Zn0.98O1.01 oxygen transport membranes. Journal of Membrane Science, 2017, 543, 18-27.	8.2	12

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109	Preparation of sorbents derived from bamboo and bromine flame retardant for elemental mercury removal. Journal of Hazardous Materials, 2021, 410, 124583.	12.4	12
110	In-situ formation of carboxylate species on TiO2 nanosheets for enhanced visible-light photocatalytic performance. Journal of Colloid and Interface Science, 2020, 577, 512-522.	9.4	12
111	Catalytic upgrading of acetone, butanol and ethanol (ABE): A step ahead for the production of added value chemicals in bio-refineries. Renewable Energy, 2020, 156, 1065-1075.	8.9	12
112	The direct synthesis of dimethyl ether (DME) from landfill gas: A techno-economic investigation. Fuel, 2022, 319, 123741.	6.4	12
113	Biogas Conversion to Syngas Using Advanced Ni-Promoted Pyrochlore Catalysts: Effect of the CH4/CO2 Ratio. Frontiers in Chemistry, 2021, 9, 672419.	3.6	11
114	Lignin to Monoaromatics with a Carbon-Nanofiber-Supported Niâ€“CeO_{2â€“<i>x</i>} Catalyst Synthesized in a One-Pot Hydrothermal Process. ACS Sustainable Chemistry and Engineering, 2021, 9, 12800-12812.	6.7	11
115	K-Promoted Ni-Based Catalysts for Gas-Phase CO2 Conversion: Catalysts Design and Process Modelling Validation. Frontiers in Chemistry, 2021, 9, 785571.	3.6	10
116	Catalytic Upgrading of a Biogas Model Mixture via Low Temperature DRM Using Multicomponent Catalysts. Topics in Catalysis, 2020, 63, 281-293.	2.8	9
117	Towards emission free steel manufacturing â€“ Exploring the advantages of a CO2 methanation unit to minimize CO2 emissions. Science of the Total Environment, 2021, 781, 146776.	8.0	9
118	Synthesis and characterisation of nanocrystalline CuOâ€“Fe2O3/GDC anode powders for solid oxide fuel cells. Ceramics International, 2020, 46, 14776-14786.	4.8	8
119	Scalable synthesis of KNaTiO3-based high-temperature CO2 capture material from high titanium slag: CO2 uptake, kinetics, regenerability and mechanism study. Journal of CO2 Utilization, 2021, 49, 101578.	6.8	8
120	Design of Full-Temperature-Range RWGS Catalysts: Impact of Alkali Promoters on Ni/CeO₂. Energy & Fuels, 2022, 36, 6362-6373.	5.1	7
121	Au/CeO2-ZnO/Al2O3 as Versatile Catalysts for Oxidation Reactions: Application in Gas/Liquid Environmental Processes. Frontiers in Chemistry, 2019, 7, 504.	3.6	6
122	The Success Story of Gold-Based Catalysts for Gas- and Liquid-Phase Reactions: A Brief Perspective and Beyond. Frontiers in Chemistry, 2019, 7, 691.	3.6	6
123	Synthesis and characterisation of nâ€octacosane@silica nanocapsules for thermal storage applications. International Journal of Energy Research, 2020, 44, 2306-2315.	4.5	6
124	Fabrication Methodâ€Engineered Cuâ€“ZnO/SiO₂ Catalysts with Highly Dispersed Metal Nanoparticles toward Efficient Utilization of Methanol as a Hydrogen Carrier. Advanced Energy and Sustainability Research, 2021, 2, 2100082.	5.8	6
125	Synthesis and characteristics of nanocrystalline Ni1âˆ’xCoxO/GDC powder as a methane reforming catalyst for SOFCs. Ceramics International, 2018, 44, 6851-6860.	4.8	5
126	Integration of Fossil Fuel-based with Bio-based Industries: The Use of Waste Streams and Biomass to Produce Syngas and Added Value Products. IFAC-PapersOnLine, 2019, 52, 616-621.	0.9	5

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127	Physicochemical comparison of precipitated calcium carbonate for different configurations of a biogas upgrading unit. Journal of Chemical Technology and Biotechnology, 2019, 94, 2256-2262.	3.2	5
128	Aqueous Miscible Organic LDH Derived Ni-Based Catalysts for Efficient CO2 Methanation. Catalysts, 2020, 10, 1168.	3.5	5
129	Influence of Reaction Parameters on the Catalytic Upgrading of an Acetone, Butanol, and Ethanol (ABE) Mixture: Exploring New Routes for Modern Biorefineries. Frontiers in Chemistry, 2019, 7, 906.	3.6	5
130	CO2 Hydrogenation to Methanol Over Cu/ZnO/Al2O3 Catalyst: Kinetic Modeling Based on Either Single- or Dual-Active Site Mechanism. Catalysis Letters, 2022, 152, 3110-3124.	2.6	5
131	Catalytic Upgrading of Biomass-Gasification Mixtures Using Ni-Fe/MgAl₂O₄ as a Bifunctional Catalyst. Energy & Fuels, 2022, 36, 8267-8273.	5.1	5
132	Integration of Bio-refinery Concepts in Oil Refineries. Computer Aided Chemical Engineering, 2017, , 829-834.	0.5	4
133	Understanding the thermochemical behavior of La0.6Sr0.4Co0.2Fe0.8O3 and Ce0.9Gd0.1O_Co oxygen transport membranes under real oxy-combustion process conditions. Solid State Ionics, 2019, 341, 115039.	2.7	4
134	Recent advances on gas-phase CO2 conversion: Catalysis design and chemical processes to close the carbon cycle. Current Opinion in Green and Sustainable Chemistry, 2022, 36, 100647.	5.9	4
135	Influence of the Active Phase (Fe, Ni, and Niâ€“Fe) of Mixed Oxides in CWAO of Crystal Violet. Catalysts, 2020, 10, 1053.	3.5	3
136	Thermochemical evaluation of oxygen transport membranes under oxyâ€combustion conditions in a pilotâ€scale facility. Journal of Chemical Technology and Biotechnology, 2020, 95, 1865-1875.	3.2	3
137	Numerical Modelling of Braiding and Meandering Instabilities in Gravityâ€Driven Liquid Rivulets. Chemie-Ingenieur-Technik, 2017, 89, 1515-1522.	0.8	2
138	High Channel Density Ceramic Microchannel Reactor for Syngas Production. Energies, 2020, 13, 6472.	3.1	2
139	On the primary pyrolysis products of torrefied oak at extremely high heating rates in a wire mesh reactor. Applications in Energy and Combustion Science, 2022, 9, 100046.	1.5	2
140	Influence of the Lanthanide Oxides on the Catalytic Behavior of Au/Al₂O₃ Catalysts for Total and Preferential CO Oxidation. Advanced Chemistry Letters, 2013, 1, 237-246.	0.1	1
141	Biogas as a Renewable Energy Source: Focusing on Principles and Recent Advances of Membrane-Based Technologies for Biogas Upgrading. Environmental Chemistry for A Sustainable World, 2020, , 95-120.	0.5	1
142	Model-Based Analysis and Integration of Synthetic Methane Production and Methane Oxidative Coupling. Computer Aided Chemical Engineering, 2017, 40, 1147-1152.	0.5	0
143	14. Gas phase reactions for chemical CO2 upgrading. , 2019, , 249-280.		0
144	Editorial: Catalysis by Gold for Gas & Liquid Phase Reactions: A Golden Future for Environmental Catalysis. Frontiers in Chemistry, 2020, 7, 891.	3.6	0

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145	An identification approach to a reaction network for an ABE catalytic upgrade. Computer Aided Chemical Engineering, 2021, 50, 643-648.	0.5	0
146	Integrating Oil Refineries and Bio-refineries: Upgrading Acetone, Butanol and Ethanol to High-Value Products. Computer Aided Chemical Engineering, 2019, 46, 349-354.	0.5	0
147	Enhanced Low-Temperature Co2 Methanation Performance of Ni/Zro2 Catalysts Via a Phase Engineering Strategy. SSRN Electronic Journal, 0, , .	0.4	0
148	Editorial: Catalysis in Iberoamerica: Recent Trends. Frontiers in Chemistry, 2022, 10, 870084.	3.6	0