Michela Signoretto

List of Publications by Year
in descending order

137 papers	5,280 citations	53794 45 h-index	106344 65 g-index
140 all docs	140 docs citations	140 times ranked	5094 citing authors

#	Article	IF	Citations
1	Crystal Phase, Spectral Features, and Catalytic Activity of Sulfate-Doped Zirconia Systems. Journal of Catalysis, 1995, 157, 109-123.	6.2	187
2	5-Hydroxymethylfurfural (HMF) Production from Real Biomasses. Molecules, 2018, 23, 2201.	3.8	178
3	Glycerol steam reforming for hydrogen production: Design of Ni supported catalysts. Applied Catalysis B: Environmental, 2012, 111-112, 225-232.	20.2	165
4	On the Acid-Catalyzed Isomerization of Light Paraffins over a ZrO2/SO4 System: The Effect of Hydration. Journal of Catalysis, 1994, 149, 181-188.	6.2	156
5	Ni/SiO2 and Ni/ZrO2 catalysts for the steam reforming of ethanol. Applied Catalysis B: Environmental, 2012, 117-118, 384-396.	20.2	114
6	Ni/ZrO2 catalysts in ethanol steam reforming: Inhibition of coke formation by CaO-doping. Applied Catalysis B: Environmental, 2014, 150-151, 12-20.	20.2	111
7	Consecutive hydrogenation of benzaldehyde over Pd catalysts. Applied Catalysis A: General, 2001, 219, 195-200.	4.3	109
8	The control of selectivity in gas-phase glycerol dehydration to acrolein catalysed by sulfated zirconia. Applied Catalysis B: Environmental, 2010, 100, 197-204.	20.2	100
9	Quantitative determination of gold active sites by chemisorption and by infrared measurements of adsorbed CO. Journal of Catalysis, 2006, 237, 431-434.	6.2	88
10	Effect of the addition of Au in zirconia and ceria supported Pd catalysts for the direct synthesis of hydrogen peroxide. Journal of Catalysis, 2008, 257, 369-381.	6.2	84
11	Structural investigation on the stoichiometry of Î²-PdHx in Pd/SiO2 catalysts as a function of metal dispersion. Catalysis Letters, 1995, 32, 293-303.	2.6	83
12	New Pdâ€“Pt and Pdâ€“Au catalysts for an efficient synthesis of H2O2 from H2 and O2 under very mild conditions. Applied Catalysis A: General, 2009, 358, 129-135.	4.3	81
13	On the process for furfural and HMF oxidative esterification over Au/ZrO2. Journal of Catalysis, 2014, 319, 61-70.	6.2	81
14	Isomerization ofn-butane on sulfated zirconia: Evidence for the dominant role of Lewis acidity on the catalytic activity. Catalysis Letters, 1994, 26, 339-344.	2.6	80
15	Nickel Catalysts Supported Over TiO₂, SiO₂ and ZrO₂ for the Steam Reforming of Glycerol. ChemCatChem, 2013, 5, 294-306.	3.7	79
16	Silica and zirconia supported catalysts for the low-temperature ethanol steam reforming. Applied Catalysis B: Environmental, 2014, 150-151, 257-267.	20.2	79
17	Platinum-Promoted and Unpromoted Sulfated Zirconia Catalysts Prepared by a One-Step Aerogel Procedure. Journal of Catalysis, 1997, 167, 522-532.	6.2	76
18	Catalytic Production of Levulinic Acid (LA) from Actual Biomass. Molecules, 2019, 24, 2760.	3.8	76

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19	Mesoporous silica as supports for Pd-catalyzed H2O2 direct synthesis: Effect of the textural properties of the support on the activity and selectivity. Journal of Catalysis, 2010, 273, 266-273.	6.2	73
20	Au/ZrO2: an efficient and reusable catalyst for the oxidative esterification of renewable furfural. Applied Catalysis B: Environmental, 2013, 129, 287-293.	20.2	72
21	Oxidative esterification of renewable furfural on gold-based catalysts: Which is the best support?. Journal of Catalysis, 2014, 309, 241-247.	6.2	72
22	Structural and Surface Characterization of Pure and Sulfated Iron Oxides. Chemistry of Materials, 2003, 15, 675-687.	6.7	70
23	Hydrogen production by ethanol steam reforming: Effect of the synthesis parameters on the activity of Ni/TiO2 catalysts. International Journal of Hydrogen Energy, 2014, 39, 4252-4258.	7.1	69
24	On the role of the calcination step in the preparation of active (superacid) sulfated zirconia catalysts. Catalysis Letters, 1996, 41, 101-109.	2.6	68
25	C-N/TiO2 photocatalysts: Effect of co-doping on the catalytic performance under visible light. Applied Catalysis B: Environmental, 2014, 160-161, 152-160.	20.2	68
26	The effects of gold nanosize for the exploitation of furfural by selective oxidation. Catalysis Today, 2013, 203, 196-201.	4.4	65
27	Pd-Fe/SiO2 Catalysts in the Hydrogenation of 2,4-Dinitrotoluene. Journal of Catalysis, 1994, 150, 356-367.	6.2	64
28	New insight on the nature of catalytically active gold sites: Quantitative CO chemisorption data and analysis of FTIR spectra of adsorbed CO and of isotopic mixtures. Journal of Catalysis, 2009, 262, 169-176.	6.2	64
29	Structureâ€“activity relationships of Au/ZrO2 catalysts for 5-hydroxymethylfurfural oxidative esterification: Effects of zirconia sulphation on gold dispersion, position and shape. Journal of Catalysis, 2015, 326, 1-8.	6.2	61
30	Platinum-Promoted and Unpromoted Sulfated Zirconia Catalysts Prepared by a One-Step Aerogel Procedure. Journal of Catalysis, 1997, 165, 172-183.	6.2	60
31	Effects of synthetic parameters on the catalytic performance of Au/CeO2 for furfural oxidative esterification. Journal of Catalysis, 2015, 330, 465-473.	6.2	60
32	Amount and nature of sulfates at the surface of sulfate-doped zirconia catalysts. Journal of Materials Chemistry, 1995, 5, 353.	6.7	59
33	Influence of the preparation method on the morphological and composition properties of Pdâ€“Au/ZrO2 catalysts and their effect on the direct synthesis of hydrogen peroxide from hydrogen and oxygen. Journal of Catalysis, 2009, 268, 122-130.	6.2	59
34	On the strength of Lewis- and Bro/nsted-acid sites at the surface of sulfated zirconia catalysts. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 1179-1184.	1.7	56
35	Microencapsulated Chloroperoxidase as a Recyclable Catalyst for the Enantioselective Oxidation of Sulfides with Hydrogen Peroxide. Angewandte Chemie - International Edition, 2004, 43, 4097-4099.	13.8	56
36	Catalytic conversion of Venice lagoon brown marine algae for producing hydrogen-rich gas and valuable biochemical using algal biochar and Ni/SBA-15 catalyst. International Journal of Hydrogen Energy, 2018, 43, 19918-19929.	7.1	55

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37	Platinum promoted zirconia-sulfate catalysts: one-pot preparation, physical properties and catalytic activity. Catalysis Letters, 1996, 36, 129-133.	2.6	54
38	When high metal dispersion has a detrimental effect: Hydrogen peroxide direct synthesis under very mild and nonexplosive conditions catalyzed by Pd supported on silica. Journal of Catalysis, 2012, 290, 143-150.	6.2	54
39	Liquid vs. Gas Phase CO2 Photoreduction Process: Which Is the Effect of the Reaction Medium?. Energies, 2017, 10, 1394.	3.1	54
40	Looking for the â€œDream Catalystâ€•for Hydrogen Peroxide Production from Hydrogen and Oxygen. Catalysts, 2019, 9, 251.	3.5	54
41	Wustite as a new precursor of industrial ammonia synthesis catalysts. Applied Catalysis A: General, 2003, 251, 121-129.	4.3	53
42	Optimization of bimetallic dry reforming catalysts by temperature programmed reaction. Applied Catalysis A: General, 2012, 439-440, 80-87.	4.3	52
43	Ethanol steam reforming on nanostructured catalysts of Ni, Co and CeO 2 : Influence of synthesis method on activity, deactivation and regenerability. Catalysis Today, 2017, 296, 135-143.	4.4	51
44	Nickel based catalysts for methane dry reforming: Effect of supports on catalytic activity and stability. International Journal of Hydrogen Energy, 2019, 44, 28065-28076.	7.1	51
45	TiO2â€“MCM-41 for the photocatalytic abatement of NOx in gas phase. Applied Catalysis B: Environmental, 2010, 95, 130-136.	20.2	49
46	TiO2-supported catalysts for the steam reforming of ethanol. Applied Catalysis A: General, 2014, 477, 42-53.	4.3	46
47	Surface features and catalytic activity of sulfated zirconia catalysts from hydrothermal precursors. Physical Chemistry Chemical Physics, 2002, 4, 3136-3145.	2.8	43
48	Quantitative determination of sites able to chemisorb CO on Au/ZrO2 catalysts. Applied Catalysis A: General, 2009, 356, 31-35.	4.3	42
49	Low pressure conversion of CO2 to methanol over Cu/Zn/Al catalysts. The effect of Mg, Ca and Sr as basic promoters. Fuel, 2020, 274, 117804.	6.4	42
50	Biomass Derived Chemicals: Furfural Oxidative Esterification to Methyl-2-furoate over Gold Catalysts. Catalysts, 2016, 6, 107.	3.5	40
51	H2O2 direct synthesis under mild conditions on Pdâ€“Au samples: Effect of the morphology and of the composition of the metallic phase. Catalysis Today, 2015, 248, 18-27.	4.4	39
52	What is the best catalyst for biomass pyrolysis?. Journal of Analytical and Applied Pyrolysis, 2021, 158, 105280.	5.5	38
53	Active and recyclable sulphated zirconia catalysts for the acylation of aromatic compounds. Applied Catalysis A: General, 2006, 299, 137-144.	4.3	37
54	CO2 photoreduction with water: Catalyst and process investigation. Journal of CO2 Utilization, 2015, 12, 86-94.	6.8	37

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55	Pd-SiO2 catalysts. stability of Î²-PdHx as a function of Pd dispersion. Reaction Kinetics and Catalysis Letters, 1997, 60, 9-13.	0.6	36
56	Boosting levulinic acid hydrogenation to value-added 1,4-pentanediol using microwave-assisted gold catalysis. Journal of Catalysis, 2019, 380, 267-277.	6.2	36
57	Loading and promoter effects on the performance of nitrogen functionalized graphene nanosheets supported cobalt Fischer-Tropsch synthesis catalysts. International Journal of Hydrogen Energy, 2019, 44, 10604-10615.	7.1	36
58	Ga2O3-promoted sulfated zirconia systems: Morphological, structural and redox properties. Microporous and Mesoporous Materials, 2005, 81, 19-29.	4.4	35
59	Controlled release of metoprolol tartrate from nanoporous silica matrices. Microporous and Mesoporous Materials, 2010, 132, 258-267.	4.4	35
60	Effect of textural properties on the drug delivery behaviour of nanoporous TiO2 matrices. Microporous and Mesoporous Materials, 2011, 139, 189-196.	4.4	34
61	Hydrodeoxygenation of isoeugenol over Ni-SBA-15: Kinetics and modelling. Applied Catalysis A: General, 2019, 580, 1-10.	4.3	34
62	Title is missing!. Catalysis Letters, 1997, 49, 25-34.	2.6	33
63	Zr(IV) surface chemical state and acid features of sulphated-zirconia samples. Applied Surface Science, 1998, 136, 213-220.	6.1	33
64	Title is missing!. Catalysis Letters, 2000, 64, 135-140.	2.6	33
65	Microporous Zirconiaâ€“Silica Mixed Oxides Made by Solâ€“Gel as Catalysts for the Liquid-Phase Oxidation of Olefins with Hydrogen Peroxide. Journal of Catalysis, 2000, 194, 286-293.	6.2	33
66	Highly Dispersed Gold on Zirconia: Characterization and Activity in Lowâ€Temperature Water Gas Shift Tests. ChemSusChem, 2008, 1, 320-326.	6.8	33
67	Catalytic activity and some related spectral features of yttria-stabilised cubic sulfated zirconia. Catalysis Letters, 2001, 73, 113-119.	2.6	32
68	Increase of Ceria Redox Ability by Lanthanum Addition on Ni Based Catalysts for Hydrogen Production. ACS Sustainable Chemistry and Engineering, 2018, 6, 13867-13876.	6.7	32
69	Î²-Galactosidase entrapment in silica gel matrices for a more effective treatment of lactose intolerance. Journal of Molecular Catalysis B: Enzymatic, 2011, 71, 10-15.	1.8	30
70	Bimetallic Niâ€“Cu Catalysts for the Low-Temperature Ethanol Steam Reforming: Importance of Metalâ€“Support Interactions. Catalysis Letters, 2015, 145, 549-558.	2.6	30
71	Mesoporous sulphated zirconia by liquid-crystal templating method. Microporous and Mesoporous Materials, 2006, 91, 23-32.	4.4	29
72	Investigation on gold dispersion of Au/ZrO2 catalysts and activity in the low-temperature WGS reaction. Applied Catalysis B: Environmental, 2009, 89, 303-308.	20.2	29

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73	Metal dispersion and distribution in Pd-based PTA catalysts. Catalysis Communications, 2007, 8, 876-879.	3.3	26
74	Mesoporous Silicaâ€“Zirconia Systems for Catalytic Applications. Catalysis Letters, 2008, 125, 359-370.	2.6	25
75	Au/ZrO2 catalysts for LT-WGSR: Active role of sulfates during gold deposition. Applied Catalysis B: Environmental, 2010, 96, 28-33.	20.2	25
76	Gas- and Liquid-Phase Reactions on Sulphated Zirconia Prepared by Precipitation. Catalysis Letters, 2004, 94, 193-198.	2.6	24
77	Hybrid Organicâ€“Inorganic Silica Gel Carriers with Controlled Drugâ€Delivery Properties. Chemistry - A European Journal, 2009, 15, 12043-12049.	3.3	24
78	Photoreforming of Glucose over CuO/TiO2. Catalysts, 2020, 10, 477.	3.5	24
79	Acylation of veratrole over promoted SZ/MCM-41 catalysts: Influence of metal promotion. Applied Catalysis A: General, 2006, 308, 216-222.	4.3	23
80	Determining the Degree of Crystallinity in Semicrystalline Materials by means of the Rietveld Analysis. Journal of Applied Crystallography, 1995, 28, 121-126.	4.5	22
81	Ruthenium as a Dispersing Agent in Carbon-Supported Palladium. Journal of Catalysis, 1995, 155, 166-169.	6.2	22
82	Surface composition of Pdâ€“Fe catalysts supported on silica. Journal of the Chemical Society, Faraday Transactions, 1995, 91, 3237-3244.	1.7	22
83	Gas and liquid phase reactions on MCM-41/SZ catalysts. Applied Catalysis B: Environmental, 2006, 67, 24-33.	20.2	22
84	Low temperature ethanol steam reforming for process intensification: New Ni/MxOâ€“ZrO2 active and stable catalysts prepared by flame spray pyrolysis. International Journal of Hydrogen Energy, 2017, 42, 28193-28213.	7.1	22
85	Aerogel and xerogel WO3/ZrO2 samples for fine chemicals production. Microporous and Mesoporous Materials, 2013, 165, 134-141.	4.4	21
86	Fractal properties of a partially crystalline zirconium oxide aerogel. Journal of Applied Crystallography, 1993, 26, 717-720.	4.5	19
87	Systematic study of TiO₂/ZnO mixed metal oxides for CO₂ photoreduction. RSC Advances, 2019, 9, 21660-21666.	3.6	19
88	WO3/ZrO2 catalysts by solâ€“gel processing. Journal of Non-Crystalline Solids, 1998, 225, 178-183.	3.1	17
89	Arrays of TiO2 Nanowires as Photoelectrochemical Sensors for Hydrazine Detection. Chemosensors, 2015, 3, 146-156.	3.6	17
90	Title is missing!. Catalysis Letters, 2001, 75, 199-204.	2.6	16

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91	Sustainable Carbon Dioxide Photoreduction by a Cooperative Effect of Reactor Design and Titania Metal Promotion. Catalysts, 2018, 8, 41.	3.5	16
92	Sustainable lithium-ion batteries based on metal-free tannery waste biochar. Green Chemistry, 2022, 24, 4119-4129.	9.0	16
93	Synthesis of sulfated-zirconia aerogel: effect of the chemical modification of precursor on catalyst porosity. Journal of Non-Crystalline Solids, 2001, 290, 145-152.	3.1	15
94	Hydrogenation of Biobased Aldehydes to Monoalcohols Using Bimetallic Catalysts. ACS Sustainable Chemistry and Engineering, 2020, 8, 11994-12004.	6.7	15
95	Effects of Support and Synthetic Procedure for Sol-Immobilized Au Nanoparticles. Catalysts, 2016, 6, 87.	3.5	14
96	Solâ€immobilized vs depositedâ€precipitated Au nanoparticles supported on <scp>CeO₂</scp> for furfural oxidative esterification. Journal of Chemical Technology and Biotechnology, 2017, 92, 2196-2205.	3.2	14
97	Continuous-flow alkene metathesis: the model reaction of 1-octene catalyzed by Re2O7/Î³-Al2O3 with supercritical CO2 as a carrier. Green Chemistry, 2012, 14, 2727.	9.0	13
98	Arrays of templated TiO2nanofibres as improved photoanodes for water splitting under visible light. Nanotechnology, 2015, 26, 165402.	2.6	13
99	Solar Fuels by Heterogeneous Photocatalysis: From Understanding Chemical Bases to Process Development. ChemEngineering, 2018, 2, 42.	2.4	13
100	Investigation of process parameters assessment via design of experiments for CO2 photoreduction in two photoreactors. Journal of CO2 Utilization, 2020, 36, 25-32.	6.8	13
101	Effect of grafting solvent in the optimisation of Sba-15 acidity for levulinIc acid production. Catalysis Today, 2020, 345, 183-189.	4.4	13
102	Development of La Doped Ni/CeO2 for CH4/CO2 Reforming. Journal of Carbon Research, 2018, 4, 60.	2.7	12
103	Multifunctional and Environmentally Friendly TiO2â€“SiO2 Mesoporous Materials for Sustainable Green Buildings. Molecules, 2019, 24, 4226.	3.8	12
104	A Review on the Efficient Catalysts for Algae Transesterification to Biodiesel. Sustainability, 2021, 13, 10479.	3.2	12
105	Short-range structure of zirconia xerogel and aerogel, determined by wide angle X-ray scattering. Journal of Non-Crystalline Solids, 1993, 155, 259-266.	3.1	11
106	Study on reuse of metal oxide-promoted sulphated zirconia in acylation reactions. Applied Catalysis B: Environmental, 2008, 84, 363-371.	20.2	11
107	Investigation on the Stability of Supported Gold Nanoparticles. Catalysts, 2013, 3, 656-670.	3.5	11
108	Supported Gold Nanoparticles for Furfural Valorization in the Future Bio-based Industry. Topics in Catalysis, 2018, 61, 1877-1887.	2.8	11

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109	Ga-promoted sulfated zirconia systems. II. Surface features and catalytic activity. Microporous and Mesoporous Materials, 2006, 94, 40-49.	4.4	10
110	Structureâ€Directing Agents for the Synthesis of TiO₂â€Based Drugâ€Delivery Systems. Chemistry - A European Journal, 2012, 18, 10653-10660.	3.3	10
111	Hydrogen Production by Ethanol Steam Reforming on Ni-Based Catalysts: Effect of the Support and of CaO and Au Doping. ChemistrySelect, 2017, 2, 9523-9531.	1.5	10
112	Effects of SiO2-based scaffolds in TiO2 photocatalyzed CO2 reduction. Catalysis Today, 2022, 387, 54-60.	4.4	10
113	Influence of preparation procedure on physical and catalytic properties of carbon supported Pd-Au catalysts.. Studies in Surface Science and Catalysis, 2000, 143, 1011-1018.	1.5	9
114	MCM-41 Supported Co-Based Bimetallic Catalysts for Aqueous Phase Transformation of Glucose to Biochemicals. Processes, 2020, 8, 843.	2.8	9
115	CuZSM-5@HMS composite as an efficient micro-mesoporous catalyst for conversion of sugars into levulinic acid. Catalysis Today, 2022, 390-391, 146-161.	4.4	8
116	Selective Hydrogenation of 5â€Hydroxymethylfurfural to 1â€Hydroxyâ€2,5â€hexanedione by Biocharâ€Supported Ru Catalysts. ChemSusChem, 2022, 15, .	6.8	7
117	From Seaweeds to Cosmeceutics: A Multidisciplinar Approach. Sustainability, 2021, 13, 13443.	3.2	7
118	Sulfadiazine-based drug delivery systems prepared by an effective solâ€“gel process. Journal of Sol-Gel Science and Technology, 2017, 83, 618-626.	2.4	6
119	Titanium Dioxide-Based Nanocomposites for Enhanced Gas-Phase Photodehydrogenation. Materials, 2019, 12, 3093.	2.9	6
120	Ibuprofen delivery behaviour on MCM-41: influence of organic groups amount. Studies in Surface Science and Catalysis, 2008, , 429-432.	1.5	5
121	Quantitative determination of carbon in titania photocatalysts by temperature programmed oxidation method. Microchemical Journal, 2014, 112, 186-189.	4.5	5
122	Levulinic Acid Production: Comparative Assessment of Al-Rich Ordered Mesoporous Silica and Microporous Zeolite. Catalysis Letters, 2023, 153, 41-53.	2.6	5
123	Photocatalytic degradation of ethylbenzene in gas phase over N or NF doped TiO2 catalysts. Journal of Materials Science: Materials in Electronics, 2019, 30, 18919-18926.	2.2	4
124	Ethanol Steam Reforming on Lanthanum Ni-ZrO₂ Catalysts. ACS Sustainable Chemistry and Engineering, 0, , .	6.7	4
125	One-step synthesis of silica gel used in the controlled release of drug. Studies in Surface Science and Catalysis, 2008, 174, 489-492.	1.5	3
126	New Insights on the Dynamic Role of the Protecting Agent on the Reactivity of Supported Gold Nanoparticles. ChemCatChem, 2020, 12, 1653-1663.	3.7	3

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127	Microemulsion vs. Precipitation: Which Is the Best Synthesis of Nickelâ€“Ceria Catalysts for Ethanol Steam Reforming?. Processes, 2021, 9, 77.	2.8	3
128	Balanced acidity by microwave-assisted ion-exchange of ZSM-5 zeolite as a catalyst for transformation of glucose to levulinic acid. Biomass Conversion and Biorefinery, 0, , .	4.6	3
129	Sol-gel zirconia spheres for catalytic applications. Studies in Surface Science and Catalysis, 1995, 91, 327-335.	1.5	2
130	Acid sites modulation of siliceous-based mesoporous material by post synthesis methods. Microporous and Mesoporous Materials, 2021, 328, 111459.	4.4	2
131	Formulation of Innovative Hybrid Chitosan/TiO2- and Chitosan/SiO2-Based Drug-Delivery Systems. , 2016, , 201-226.		1
132	TiO2-Chitosan Hybrid Materials for Drug Delivery Applications: Conjugation Reaction with a Model Drug and Evaluation of the Functional Properties. Journal of Nanoscience and Nanotechnology, 2021, 21, 2892-2900.	0.9	1
133	Traditional Venetian marmorino: Effect of zinc-based oxides on self-bleaching properties. Journal of Cultural Heritage, 2021, 50, 171-178.	3.3	1
134	Sulfated zirconia spheres and microspheres by gel supported precipitation. Studies in Surface Science and Catalysis, 1998, 118, 625-632.	1.5	0
135	Tuning the Synthetic Parameters to Obtain Smart Câ€N Coâ€Doped Titania Photocatalysts for NOx Abatement. ChemistrySelect, 2017, 2, 728-739.	1.5	0
136	Special Issue â€œMetal Nanoparticles as Catalysts for Green Applicationsâ€• Processes, 2021, 9, 1015.	2.8	0
137	Structural and Functional Behaviour of Ce-Doped Wide-Bandgap Semiconductors for Photo-Catalytic Applications. Catalysts, 2021, 11, 1209.	3.5	0