Rufino M Navarro

List of Publications by Year
in descending order

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121 papers	9,056 citations	50170 46 h-index	40881 93 g-index
126 all docs	126 docs citations	126 times ranked	9456 citing authors

#	Article	IF	Citations
1	Hydrogen Production Reactions from Carbon Feedstocks:â€‰ Fossil Fuels and Biomass. Chemical Reviews, 2007, 107, 3952-3991.	23.0	1,108
2	Water Splitting on Semiconductor Catalysts under Visibleâ€Light Irradiation. ChemSusChem, 2009, 2, 471-485.	3.6	504
3	Ethanol steam reforming over Ni/MxOyNi/MxOyâ€“Al2O3Al2O3 (M=CeM=Ce, La, Zr and Mg) catalysts: Influence of support on the hydrogen production. International Journal of Hydrogen Energy, 2007, 32, 1462-1471.	3.8	390
4	Hydrogen production from renewable sources: biomass and photocatalytic opportunities. Energy and Environmental Science, 2009, 2, 35-54.	15.6	378
5	Production of hydrogen from methanol over Cu/ZnO catalysts promoted by ZrO2 and Al2O3. Journal of Catalysis, 2003, 219, 389-403.	3.1	364
6	Direct methane conversion routes to chemicals and fuels. Catalysis Today, 2011, 171, 15-23.	2.2	275
7	Hydrogen Production from Glycerol Over Nickel Catalysts Supported on Al2O3 Modified by Mg, Zr, Ce or La. Topics in Catalysis, 2008, 49, 46-58.	1.3	224
8	Hydrogenation of Aromatics on Sulfur-Resistant PtPd Bimetallic Catalysts. Journal of Catalysis, 2000, 189, 184-194.	3.1	219
9	Glycerol steam reforming over Ni catalysts supported on ceria and ceria-promoted alumina. International Journal of Hydrogen Energy, 2010, 35, 11622-11633.	3.8	184
10	A framework for visible-light water splitting. Energy and Environmental Science, 2010, 3, 1865.	15.6	181
11	Ethanol steam reforming over Ni/Laâ€“Al2O3 catalysts: Influence of lanthanum loading. Catalysis Today, 2007, 129, 336-345.	2.2	174
12	Oxidative Methanol Reforming Reactions on CuZnAl Catalysts Derived from Hydrotalcite-like Precursors. Journal of Catalysis, 2001, 198, 338-347.	3.1	167
13	Methanol Synthesis from CO2: A Review of the Latest Developments in Heterogeneous Catalysis. Materials, 2019, 12, 3902.	1.3	160
14	Production of hydrogen by oxidative reforming of ethanol over Pt catalysts supported on Al2O3 modified with Ce and La. Applied Catalysis B: Environmental, 2005, 55, 229-241.	10.8	156
15	Hydrogenation of aromatics over supported Pt-Pd catalysts. Applied Catalysis A: General, 2002, 225, 223-237.	2.2	148
16	Influence of the solvent on the structure, morphology and performance for H2 evolution of CdS photocatalysts prepared by solvothermal method. Applied Catalysis B: Environmental, 2017, 203, 753-767.	10.8	146
17	Photocatalytic hydrogen evolution from CdSâ€“ZnOâ€“CdO systems under visible light irradiation: Effect of thermal treatment and presence of Pt and Ru cocatalysts. International Journal of Hydrogen Energy, 2008, 33, 4265-4273.	3.8	142
18	Comparative study of hydrotalcite-derived supported Pd2Ga and PdZn intermetallic nanoparticles as methanol synthesis and methanol steam reforming catalysts. Journal of Catalysis, 2012, 293, 27-38.	3.1	135

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19	A comparative study of the water gas shift reaction over platinum catalysts supported on CeO2, TiO2 and Ce-modified TiO2. Catalysis Today, 2010, 149, 372-379.	2.2	128
20	Influence of La2O3 modified support and Ni and Pt active phases on glycerol steam reforming to produce hydrogen. Catalysis Communications, 2009, 10, 1275-1278.	1.6	125
21	Improved stability of Ni/Al2O3 catalysts by effect of promoters (La2O3, CeO2) for ethanol steam-reforming reaction. Catalysis Today, 2016, 259, 27-38.	2.2	115
22	Hydrogen production by oxidative reforming of hexadecane over Ni and Pt catalysts supported on Ce/La-doped Al2O3. Applied Catalysis A: General, 2006, 297, 60-72.	2.2	110
23	Influence of Zn concentration in the activity of Cd1â^'xZnxS solid solutions for water splitting under visible light. Catalysis Today, 2009, 143, 51-56.	2.2	107
24	Mechanistic Aspects of the Ethanol Steam Reforming Reaction for Hydrogen Production on Pt, Ni, and PtNi Catalysts Supported on Î³-Al₂O₃. Journal of Physical Chemistry A, 2010, 114, 3873-3882.	1.1	103
25	Performance of La,Ce-modified alumina-supported Pt and Ni catalysts for the oxidative reforming of diesel hydrocarbons. International Journal of Hydrogen Energy, 2008, 33, 652-663.	3.8	93
26	Oxidative reforming of diesel fuel over LaCoO3 perovskite derived catalysts: Influence of perovskite synthesis method on catalyst properties and performance. Applied Catalysis B: Environmental, 2011, 105, 276-288.	10.8	93
27	On the origin of the high performance of MWNT-supported PtPd catalysts for the hydrogenation of aromatics. Carbon, 2006, 44, 84-98.	5.4	90
28	Effects of Reaction Temperature and Support Composition on the Mechanism of Waterâ€“Gas Shift Reaction over Supported-Pt Catalysts. Journal of Physical Chemistry C, 2011, 115, 11595-11610.	1.5	90
29	Hydrogen production by oxidative ethanol reforming on Co, Ni and Cu ex-hydrotalcite catalysts. International Journal of Hydrogen Energy, 2011, 36, 1512-1523.	3.8	87
30	Effect of Ru on LaCoO3 perovskite-derived catalyst properties tested in oxidative reforming of diesel. Applied Catalysis B: Environmental, 2007, 73, 247-258.	10.8	80
31	Photocatalytic Water Splitting Under Visible Light. Advances in Chemical Engineering, 2009, 36, 111-143.	0.5	77
32	Nature of the Mixed-Oxide Interface in Ceriaâ€“Titania Catalysts: Clusters, Chains, and Nanoparticles. Journal of Physical Chemistry C, 2013, 117, 14463-14471.	1.5	73
33	Steam reforming of tar model compounds over Ni/Mayenite catalysts: effect of Ce addition. Fuel, 2018, 224, 676-686.	3.4	72
34	Exploring the Structural and Electronic Properties of Pt/Ceria-Modified TiO₂ and Its Photocatalytic Activity for Water Splitting under Visible Light. Journal of Physical Chemistry C, 2012, 116, 14062-14070.	1.5	69
35	Effect of ZrO2 addition on Ni/Al2O3 catalyst to produce H2 from glycerol. International Journal of Hydrogen Energy, 2012, 37, 7084-7093.	3.8	64
36	Partial Oxidation of Methane to Syngas Over Nickel-Based Catalysts: Influence of Support Type, Addition of Rhodium, and Preparation Method. Frontiers in Chemistry, 2019, 7, 104.	1.8	59

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37	Catalysts for Hydrogen Production from Heavy Hydrocarbons. ChemCatChem, 2011, 3, 440-457.	1.8	58
38	Competitive effects of nitrogen and sulfur content on activity of hydrotreating CoMo/Al2O3 catalysts: a batch reactor study. Catalysis Today, 2004, 98, 67-74.	2.2	54
39	Simultaneous 1-pentene hydroisomerisation and thiophene hydrodesulphurisation over sulphided Ni/FAU and Ni/ZSM-5 catalysts. Applied Catalysis A: General, 2004, 262, 155-166.	2.2	54
40	A simple approach to synthesize g-C3N4 with high visible light photoactivity for hydrogen production. International Journal of Hydrogen Energy, 2015, 40, 7273-7281.	3.8	53
41	Deep hydrodesulfurization of DBT and diesel fuel on supported Pt and Ir catalysts. Applied Catalysis A: General, 1996, 137, 269-286.	2.2	50
42	Ni- and PtNi-catalysts supported on Al2O3 for acetone steam reforming: Effect of the modification of support with Ce, La and Mg. Catalysis Today, 2015, 242, 60-70.	2.2	50
43	Dibenzothiophene hydrodesulfurization on silica-alumina-supported transition metal sulfide catalysts. Applied Catalysis A: General, 1996, 148, 23-40.	2.2	49
44	Improved ethanol steam reforming on Rh/Al2O3 catalysts doped with CeO2 or/and La2O3: Influence in reaction pathways including coke formation. Applied Catalysis A: General, 2015, 505, 159-172.	2.2	49
45	Hydrogen production for fuel cell by oxidative reforming of diesel surrogate: Influence of ceria and/or lanthana over the activity of Pt/Al2O3 catalysts. Fuel, 2008, 87, 2502-2511.	3.4	47
46	Photocatalytic activity of mont-La (6%)-Cu0.6Cd0.4S catalyst for phenol degradation under near UV visible light irradiation. Applied Catalysis B: Environmental, 2017, 211, 114-125.	10.8	47
47	Highly active Cu/ZnOâ€“Al catalyst for methanol synthesis: effect of aging on its structure and activity. RSC Advances, 2018, 8, 20619-20629.	1.7	46
48	Production of Hydrogen by Partial Oxidation of Methanol over a Cu/ZnO/Al2O3 Catalyst: Influence of the Initial State of the Catalyst on the Start-Up Behaviour of the Reformer. Journal of Catalysis, 2002, 212, 112-118.	3.1	45
49	Photocatalytic Hydrogen Production on Cd_{1â^'x}Zn_xS Solid Solutions under Visible Light: Influence of Thermal Treatment. Industrial & Engineering Chemistry Research, 2010, 49, 6854-6861.	1.8	45
50	Rh/Al 2 O 3 â€“La 2 O 3 catalysts promoted with CeO 2 for ethanol steam reforming reaction. Journal of Molecular Catalysis A, 2015, 407, 169-181.	4.8	45
51	Direct Synthesis of Dimethyl Ether from CO2: Recent Advances in Bifunctional/Hybrid Catalytic Systems. Catalysts, 2021, 11, 411.	1.6	45
52	Deep aromatics hydrogenation in the presence of DBT over Auâ€“Pd/Î³-alumina catalysts. Applied Catalysis A: General, 2004, 275, 127-139.	2.2	44
53	Performance enhancement in the waterâ€“gas shift reaction of platinum deposited over a cerium-modified TiO2 support. Catalysis Communications, 2008, 9, 1759-1765.	1.6	44
54	Hydrogen production by autothermal reforming of methane over NiPd catalysts: Effect of support composition and preparation mode. International Journal of Hydrogen Energy, 2014, 39, 20992-21006.	3.8	43

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55	Hydrogen production by autothermal reforming of methane: Effect of promoters (Pt, Pd, Re, Mo, Sn) on the performance of Ni/La2O3 catalysts. Applied Catalysis A: General, 2014, 481, 104-115.	2.2	42
56	Dibenzothiophene hydrodesulfurization on HY-zeolite-supported transition metal sulfide catalysts. Fuel Processing Technology, 1999, 61, 73-88.	3.7	39
57	Catalytic fast pyrolysis of biomass over Mg-Al mixed oxides derived from hydrotalcite-like precursors: Influence of Mg/Al ratio. Journal of Analytical and Applied Pyrolysis, 2018, 134, 362-370.	2.6	39
58	Silicaâ€“alumina-supported transition metal sulphide catalysts for deep hydrodesulphurization. Catalysis Today, 2003, 86, 73-85.	2.2	37
59	Evolution of the nanostructure of CdS using solvothermal synthesis at different temperature and its influence on the photoactivity for hydrogen production. International Journal of Hydrogen Energy, 2016, 41, 11558-11567.	3.8	36
60	Diesel fuel processor for hydrogen production for 5kW fuel cell application. International Journal of Hydrogen Energy, 2007, 32, 1429-1436.	3.8	35
61	Hydrogen production by methane decomposition: A comparative study of supported and bulk ex-hydrotalcite mixed oxide catalysts with Ni, Mg and Al. International Journal of Hydrogen Energy, 2018, 43, 9607-9621.	3.8	35
62	In situ characterization of Ptcatalysts supported on ceria modified TiO2 for the WGS reaction: influence of ceria loading. Physical Chemistry Chemical Physics, 2012, 14, 2192-2202.	1.3	34
63	Cd1â^'xZnxS solid solutions supported on ordered mesoporous silica (SBA-15): Structural features and photocatalytic activity under visible light. International Journal of Hydrogen Energy, 2012, 37, 9948-9958.	3.8	34
64	Nanoscale control during synthesis of Me/La2O3, Me/CexGd1â^'xOy and Me/CexZr1â^'xOy (Me=Ni, Pt, Pd,) Tj ETQq0 0 0 rgBT /Overlock	2.2	34
65	Optimization of nickel loading of mixed oxide catalyst ex -hydrotalcite for H 2 production by methane decomposition. Applied Catalysis A: General, 2017, 548, 71-82.	2.2	34
66	Biohydrogen production by gas phase reforming of glycerine and ethanol mixtures. International Journal of Hydrogen Energy, 2012, 37, 2028-2036.	3.8	33
67	Biogas as a source of renewable syngas production: advances and challenges. Biofuels, 2011, 2, 325-343.	1.4	32
68	Insights on the role of Ru substitution in the properties of LaCoO3-based oxides as catalysts precursors for the oxidative reforming of diesel fuel. Applied Catalysis B: Environmental, 2012, 113-114, 271-280.	10.8	32
69	Hydrodesulfurization of dibenzothiophene and a SRGO on sulfide Ni(Co)Mo/Al2O3 catalysts. Effect of Ru and Pd promotion. Catalysis Today, 2009, 143, 108-114.	2.2	29
70	Bimetallic MNi/Al2O3-La catalysts (M=Pt, Cu) for acetone steam reforming: Role of M on catalyst structure and activity. Applied Catalysis A: General, 2014, 474, 168-177.	2.2	29
71	Influence of Ni environment on the reactivity of Niâ€“Mgâ€“Al catalysts for the acetone steam reforming reaction. International Journal of Hydrogen Energy, 2015, 40, 5289-5296.	3.8	29
72	Surface reactivity of LaCoO3 and Ru/LaCoO3 towards CO, CO2 and C3H8: Effect of H2 and O2 pretreatments. Applied Catalysis B: Environmental, 2011, 102, 291-301.	10.8	28

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73	Factors affecting Ni-sulfide formation in Y-type zeolites: a combined Fourier transform infrared and X-ray photoelectron spectroscopy study. Microporous and Mesoporous Materials, 2000, 34, 181-194.	2.2	27
74	Glycerol liquid phase conversion over monometallic and bimetallic catalysts: Effect of metal, support type and reaction temperatures. Applied Catalysis B: Environmental, 2011, 106, 83-83.	10.8	27
75	The effect of Pt characteristics on the photoactivity of Pt/TiO2 for hydrogen production from ethanol. Catalysis Today, 2013, 210, 33-38.	2.2	27
76	Removal of PAH Compounds from Liquid Fuels by Pd Catalysts. Environmental Science & Technology, 2005, 39, 3374-3381.	4.6	26
77	Methane partial oxidation over a LaCr 0.85 Ru 0.15 O 3 catalyst: Characterization, activity tests and kinetic modeling. Applied Catalysis A: General, 2014, 486, 239-249.	2.2	26
78	Effect of Re addition on the WGS activity and stability of Pt/CeO2â€“TiO2 catalyst for membrane reactor applications. Catalysis Today, 2016, 268, 95-102.	2.2	25
79	Hydrogen production by autothermal reforming of methane over lanthanum chromites modified with Ru and Sr. International Journal of Hydrogen Energy, 2016, 41, 19373-19381.	3.8	25
80	Influence of the reduction of graphene oxide (rGO) on the structure and photoactivity of CdS-rGO hybrid systems. International Journal of Hydrogen Energy, 2017, 42, 13691-13703.	3.8	24
81	Hydrogen production by reforming of diesel fuel over catalysts derived from LaCo1â^'xRuxO3 perovskites: Effect of the partial substitution of Co by Ru (x=0.01â€“0.1). Journal of Power Sources, 2011, 196, 9087-9095.	4.0	22
82	Diesel fuel reforming over catalysts derived from LaCo1â^'xRuxO3 perovskites with high Ru loading. International Journal of Hydrogen Energy, 2012, 37, 7056-7066.	3.8	22
83	Zirconia-supported LaCoO3 catalysts for hydrogen production by oxidative reforming of diesel: Optimization of preparation conditions. Catalysis Today, 2008, 138, 135-140.	2.2	21
84	Cd1â^'xZnxS supported on SBA-16 as photocatalysts for water splitting under visible light: Influence of Zn concentration. International Journal of Hydrogen Energy, 2013, 38, 11799-11810.	3.8	21
85	Design of a diesel reformer coupled to a PEMFC. Catalysis Today, 2006, 116, 324-333.	2.2	20
86	Reforming of Diesel Fuel for Hydrogen Production over Catalysts Derived from LaCo1â^'x M x O3 (MÂ=ÂRu, Fe). Topics in Catalysis, 2009, 52, 1995-2000.	1.3	19
87	From Nanorods to Nanowires of CdS Synthesized by a Solvothermal Method: Influence of the Morphology on the Photoactivity for Hydrogen Evolution from Water. Molecules, 2016, 21, 401.	1.7	19
88	Visible light production of hydrogen from glycerol over Cu2O-gC3N4 nanocomposites with enhanced photocatalytic efficiency. Journal of Materials Research and Technology, 2020, 9, 15335-15345.	2.6	19
89	Structure and activity of Cu/ZnO catalysts co-modified with aluminium and gallium for methanol synthesis. Catalysis Today, 2020, 355, 870-881.	2.2	17
90	Role of the Ru and Support in Sulfided RuNiMo Catalysts in Simultaneous Hydrodearomatization (HDA), Hydrodesulfurization (HDS), and Hydrodenitrogenation (HDN) Reactions. Energy & Fuels, 2009, 23, 1364-1372.	2.5	16

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91	Effect of photodeposition conditions on Niâ€“CdS photocatalysts and its role in the photoactivity for H2 production from ethanolic solutions. International Journal of Hydrogen Energy, 2020, 45, 20536-20548.	3.8	15
92	Straightforward Highâ€Pressure Synthesis and Characterization of Indiumâ€Based Thiospinels: Photocatalytic Potential for Hydrogen Production. European Journal of Inorganic Chemistry, 2016, 2016, 1558-1565.	1.0	14
93	Perovskites as Catalysts in the Reforming of Hydrocarbons: A Review. Micro and Nanosystems, 2012, 4, 231-252.	0.3	14
94	Hydrogen Production from Water Splitting Using Photo-Semiconductor Catalysts. , 2013, , 43-61.		12
95	Direct Synthesis of Dimethyl Ether from Syngas on Bifunctional Hybrid Catalysts Based on Supported H3PW12O40 and Cu-ZnO(Al): Effect of Heteropolyacid Loading on Hybrid Structure and Catalytic Activity. Catalysts, 2020, 10, 1071.	1.6	12
96	Production of Hydrogen by Partial Oxidation of Methanol over Carbon-Supported Copper Catalysts. Topics in Catalysis, 2004, 30/31, 481-486.	1.3	11
97	Role of Pt in the Activity and Stability of PtNi/CeO2â€“Al2O3 Catalysts in Ethanol Steam Reforming for H2 Production. Topics in Catalysis, 2013, 56, 1672-1685.	1.3	11
98	Structure and photoactivity for hydrogen production of CdS nanorods modified with In, Ga, Ag-In and Ag-Ga and prepared by solvothermal method. Materials Today Energy, 2018, 9, 345-358.	2.5	11
99	Influence of the Reduction of Graphene Oxide with Hydroiodic Acid on the Structure and Photoactivity of CdSâ€“rGO Hybrids. Topics in Catalysis, 2017, 60, 1183-1195.	1.3	10
100	Nickel ferrite supported on calcium-stabilized zirconia for solar hydrogen production by two-step thermochemical water splitting. Materials Today Energy, 2017, 6, 248-254.	2.5	10
101	Catalysts for Production and Conversion of Syngas. Catalysts, 2021, 11, 752.	1.6	10
102	Methyl-naphthalene hydrogenation on Pt/HYâ€“Al2O3 catalysts. An approach to hydrogenation of polyaromatic hydrocarbon mixtures. Fuel Processing Technology, 2000, 64, 117-133.	3.7	9
103	Glycerol conversion into H2 by steam reforming over Ni and PtNi catalysts supported on MgO modified Î³-Al2O3. Studies in Surface Science and Catalysis, 2010, 175, 449-452.	1.5	9
104	Introduction to hydrogen production. , 2015, , 21-61.		9
105	Direct Synthesis of Dimethyl Ether on Bifunctional Catalysts Based on Cuâ€“ZnO(Al) and Supported H₃PW₁₂O₄₀: Effect of Physical Mixing on Bifunctional Interactions and Activity. Industrial & Engineering Chemistry Research, 2021, 60, 18853-18869.	1.8	9
106	Effect of the Partial Substitution of Fe by Ni on the Structure and Activity of Nanocrystalline Ni_{<I>x</I>}Fe_{3â€“<I>x</I>}O₄ Ferrites for Hydrogen Production by Two-Step Water-Splitting. Nanoscience and Nanotechnology Letters, 2011, 3, 705-716.	0.4	8
107	Controlling the impregnation of nickel on nanoporous aluminum oxide nanoliths as catalysts for partial oxidation of methane. Chemical Engineering Journal, 2014, 256, 458-467.	6.6	8
108	CO Oxidation at 20 Â°C on Au Catalysts Supported on Mesoporous Silica: Effects of Support Structural Properties and Modifiers. Materials, 2018, 11, 948.	1.3	8

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109	Ptâ€“BiVO₄/TiO₂ composites as Z-scheme photocatalysts for hydrogen production from ethanol: the effect of BiVO₄ and Pt on the photocatalytic efficiency. New Journal of Chemistry, 2021, 45, 4481-4495.	1.4	8
110	Ruthenium Effect on Formation Mechanism and Structural Characteristics of LaCo_{1â€“x}Ru_xO₃ Perovskites and Its Influence on Catalytic Performance for Hydrocarbon Oxidative Reforming. Journal of Physical Chemistry C, 2015, 119, 16708-16723.	1.5	6
111	Role of the Sulphur Source in the Solvothermal Synthesis of Ag-CdS Photocatalysts: Effects on the Structure and Photoactivity for Hydrogen Production. Hydrogen, 2020, 1, 64-89.	1.7	6
112	Design of Highly Efficient Catalyst for Rational Way of Direct Conversion of Methane. Eurasian Chemico-Technological Journal, 2015, 17, 105.	0.3	6
113	Structure and Activity of Ptâ€“Ni Catalysts Supported on Modified Al₂O₃ for Ethanol Steam Reforming. Journal of Nanoscience and Nanotechnology, 2015, 15, 6592-6603.	0.9	5
114	Data on TGA of precursors and SEM of reduced Cu/ZnO catalysts co-modified with aluminium and gallium for methanol synthesis. Data in Brief, 2019, 24, 104010.	0.5	5
115	Factors influencing selectivity in the liquid-phase phenol hydrodeoxygenation over ZSM-5 supported Pt/Ir and Pt+Ir catalysts. Molecular Catalysis, 2020, 482, 110669.	1.0	5
116	Synergistic Effect in Vapor Phase Hydrodeoxygenation on USY Zeolite Supported Irâ€“Pt Catalyst: Role of Pentacoordinated Al³⁺ Ions. Industrial & Engineering Chemistry Research, 2021, 60, 18707-18721.	1.8	5
117	Renewable Syngas Production via Dry Reforming of Methane. Green Energy and Technology, 2013, , 45-66.	0.4	4
118	Unravelling the Structural Modification (Meso-Nano-) of Cu/ZnO-Al2O3 Catalysts for Methanol Synthesis by the Residual NaNO3 in Hydroxycarbonate Precursors. Catalysts, 2020, 10, 1346.	1.6	3
119	Structural, Optical and Photocatalytic Characterization of ZnxCd1â^'xS Solid Solutions Synthetized Using a Simple Ultrasonic Radiation Method. Energies, 2020, 13, 5603.	1.6	3
120	Lower methane combustion temperature on palladium nanoparticles anchored on TiOx subnano-islets in stellate mesoporous silica nanospheres. New Journal of Chemistry, 2020, 44, 906-919.	1.4	1
121	Catalytic Upgrading of Bio-oils. RSC Green Chemistry, 2018, , 181-205.	0.0	0