

# Angelos Efstathiou

## List of Publications by Year in descending order

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161  
papers

7,701  
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34076

52  
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64755

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166  
docs citations

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times ranked

5350  
citing authors

#	ARTICLE	IF	CITATIONS
1	Reforming of Methane with Carbon Dioxide to Synthesis Gas over Supported Rhodium Catalysts. Journal of Catalysis, 1996, 158, 51-63.	3.1	250
2	Hydrogen Production Technologies: Current State and Future Developments. Conference Papers in Energy, 2013, 2013, 1-9.	0.5	249
3	Redox vs associative formate with OH group regeneration WGS reaction mechanism on Pt/CeO <sub>2</sub> : Effect of platinum particle size. Journal of Catalysis, 2011, 279, 287-300.	3.1	226
4	Characterization of Carbonaceous Species Formed during Reforming of CH <sub>4</sub> with CO <sub>2</sub> over Ni/CaO-Al <sub>2</sub> O <sub>3</sub> Catalysts Studied by Various Transient Techniques. Journal of Catalysis, 1996, 161, 626-640.	3.1	191
5	Kinetic and mechanistic studies of the water-gas shift reaction on Pt/TiO <sub>2</sub> catalyst. Journal of Catalysis, 2009, 264, 117-129.	3.1	168
6	An Investigation of the NO/H <sub>2</sub> /O <sub>2</sub> (Lean-deNO <sub>x</sub> ) Reaction on a Highly Active and Selective Pt/La <sub>0.5</sub> Ce <sub>0.5</sub> MnO <sub>3</sub> Catalyst. Journal of Catalysis, 2001, 197, 350-364.	3.1	155
7	Reforming of Methane with Carbon Dioxide to Synthesis Gas over Supported Rhodium Catalysts. Journal of Catalysis, 1996, 158, 64-75.	3.1	151
8	Low-temperature H <sub>2</sub> -SCR of NO on a novel Pt/MgO-CeO <sub>2</sub> catalyst. Applied Catalysis B: Environmental, 2007, 72, 240-252.	10.8	150
9	The phenol steam reforming reaction over MgO-based supported Rh catalysts. Journal of Catalysis, 2004, 228, 417-432.	3.1	136
10	Reforming of methane with carbon dioxide to synthesis gas over supported Rh catalysts. Catalysis Today, 1994, 21, 579-587.	2.2	135
11	Mechanistic Studies of the Water-Gas Shift Reaction over Pt/Ce <sub>x</sub> Zr <sub>1-x</sub> O <sub>2</sub> Catalysts: The Effect of Pt Particle Size and Zr Dopant. ACS Catalysis, 2012, 2, 2729-2742.	5.5	133
12	Absorption-enhanced reforming of phenol by steam over supported Fe catalysts. Journal of Catalysis, 2006, 241, 132-148.	3.1	129
13	An Investigation of the NO/H <sub>2</sub> /O <sub>2</sub> (Lean De-NO <sub>x</sub> ) Reaction on a Highly Active and Selective Pt/La <sub>0.7</sub> Sr <sub>0.2</sub> Ce <sub>0.1</sub> FeO <sub>3</sub> Catalyst at Low Temperatures. Journal of Catalysis, 2002, 209, 456-471.	3.1	123
14	Mechanistic Aspects of the H <sub>2</sub> -SCR of NO on a Novel Pt/MgO-CeO <sub>2</sub> Catalyst. Journal of Physical Chemistry C, 2007, 111, 3010-3020.	1.5	112
15	Industrial H <sub>2</sub> -SCR of NO on a novel Pt/MgO-CeO <sub>2</sub> catalyst. Applied Catalysis B: Environmental, 2007, 75, 147-156.	10.8	109
16	Effect of support composition on the origin and reactivity of carbon formed during dry reforming of methane over 5wt% Ni/Ce <sub>1-x</sub> MxO <sub>2</sub> (M=Zr <sup>4+</sup> , Pr <sup>3+</sup> ) catalysts. Catalysis Today, 2016, 259, 150-164.	2.2	105
17	Mathematical modeling of the oxygen storage capacity phenomenon studied by CO pulse transient experiments over Pd/CeO <sub>2</sub> catalyst. Journal of Catalysis, 2003, 219, 259-272.	3.1	95
18	The steam reforming of phenol reaction over supported-Rh catalysts. Applied Catalysis A: General, 2004, 272, 37-52.	2.2	93

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19	Mechanistic aspects of the water-gas shift reaction on alumina-supported noble metal catalysts: In situ DRIFTS and SSITKA-mass spectrometry studies. <i>Catalysis Today</i> , 2007, 127, 304-318.	2.2	93
20	Novel Zn-Ti-based mixed metal oxides for low-temperature adsorption of H <sub>2</sub> S from industrial gas streams. <i>Applied Catalysis B: Environmental</i> , 2005, 57, 125-137.	10.8	92
21	CO adsorption on transition metal clusters: Trends from density functional theory. <i>Surface Science</i> , 2008, 602, 1858-1862.	0.8	91
22	Effects of Reaction Temperature and Support Composition on the Mechanism of Water-Gas Shift Reaction over Supported-Pt Catalysts. <i>Journal of Physical Chemistry C</i> , 2011, 115, 11595-11610.	1.5	90
23	Transient methods in heterogeneous catalysis: Experimental features and application to study mechanistic aspects of the CH <sub>4</sub> /O <sub>2</sub> (OCM), NH <sub>3</sub> /O <sub>2</sub> and NO/He reactions. <i>Applied Catalysis A: General</i> , 1997, 151, 109-166.	2.2	85
24	The effects of Fe on the oxygen storage and release properties of model Pd-Rh/CeO <sub>2</sub> -Al <sub>2</sub> O <sub>3</sub> three-way catalyst. <i>Journal of Catalysis</i> , 2006, 240, 182-193.	3.1	85
25	Transient Isotopic Kinetic Study of the NO/H <sub>2</sub> /O <sub>2</sub> (Lean de-NO <sub>x</sub> ) Reaction on Pt/SiO <sub>2</sub> and Pt/La-Ce-Mn-O Catalysts. <i>Journal of Physical Chemistry B</i> , 2004, 108, 2620-2630.	1.2	83
26	Dynamics of oxygen storage and release on commercial aged Pd-Rh three-way catalysts and their characterization by transient experiments. <i>Applied Catalysis B: Environmental</i> , 2004, 54, 237-250.	10.8	82
27	Dry reforming of methane over 5 wt% Ni/Ce <sub>1-x</sub> Pr <sub>x</sub> O <sub>2-<math>\delta</math></sub> catalysts: Performance and characterisation of active and inactive carbon by transient isotopic techniques. <i>Applied Catalysis B: Environmental</i> , 2016, 197, 168-183.	10.8	82
28	The Selective Catalytic Reduction of Nitric Oxide with Methane over La <sub>2</sub> O <sub>3</sub> -CaO Systems: Synergistic Effects and Surface Reactivity Studies of NO, CH <sub>4</sub> , O <sub>2</sub> , and CO <sub>2</sub> by Transient Techniques. <i>Journal of Catalysis</i> , 2000, 194, 250-265.	3.1	81
29	The effect of calcination temperature on the oxygen storage and release properties of CeO <sub>2</sub> and Ce-Zr-O metal oxides modified by phosphorus incorporation. <i>Applied Catalysis B: Environmental</i> , 2005, 59, 13-25.	10.8	81
30	The influence of reaction temperature on the chemical structure and surface concentration of active NO <sub>x</sub> in H <sub>2</sub> -SCR over Pt/MgOCeO <sub>2</sub> : SSITKA-DRIFTS and transient mass spectrometry studies. <i>Journal of Catalysis</i> , 2008, 257, 324-333.	3.1	81
31	Effects of the CePO on the oxygen storage and release properties of CeO and CeZrO solid solution. <i>Journal of Catalysis</i> , 2004, 226, 443-456.	3.1	79
32	Industrial NO <sub>x</sub> control via H <sub>2</sub> -SCR on a novel supported-Pt nanocatalyst. <i>Chemical Engineering Journal</i> , 2011, 170, 424-432.	6.6	79
33	A comparative study of the steam reforming of phenol towards H <sub>2</sub> production over natural calcite, dolomite and olivine materials. <i>Applied Catalysis B: Environmental</i> , 2010, 95, 255-269.	10.8	77
34	Promotional effect of Ce doping in Cu <sub>4</sub> Al <sub>10</sub> O <sub>x</sub> LDO catalyst for low-T practical NH <sub>3</sub> -SCR: Steady-state and transient kinetics studies. <i>Applied Catalysis B: Environmental</i> , 2019, 255, 117749.	10.8	75
35	Remarkable N <sub>2</sub> -selectivity enhancement of practical NH <sub>3</sub> -SCR over Co <sub>0.5</sub> Mn <sub>1</sub> Fe <sub>0.25</sub> Al <sub>0.75</sub> O <sub>x</sub> -LDO: The role of Co investigated by transient kinetic and DFT mechanistic studies. <i>Applied Catalysis B: Environmental</i> , 2020, 277, 119186.	10.8	73
36	Novel Fe-Mn-Zn-Ti-O mixed-metal oxides for the low-temperature removal of H <sub>2</sub> S from gas streams in the presence of H <sub>2</sub> , CO <sub>2</sub> , and H <sub>2</sub> O. <i>Journal of Catalysis</i> , 2005, 236, 205-220.	3.1	71

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37	The effect of La <sup>3+</sup> -doping of CeO <sub>2</sub> support on the water-gas shift reaction mechanism and kinetics over Pt/Ce <sub>1-x</sub> La <sub>x</sub> O <sub>2</sub> . <i>Applied Catalysis B: Environmental</i> , 2013, 136-137, 225-238.	10.8	70
38	Design Aspects of Doped CeO <sub>2</sub> for Low-Temperature Catalytic CO Oxidation: Transient Kinetics and DFT Approach. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 22391-22415.	4.0	70
39	Catalytic behavior of La <sup>3+</sup> -Sr <sup>2+</sup> -Ce <sup>4+</sup> -Fe <sup>3+</sup> -O mixed oxidic/perovskitic systems for the NO+CO and NO+CH <sub>4</sub> +O <sub>2</sub> (lean-NO <sub>x</sub> ) reactions. <i>Catalysis Today</i> , 2000, 59, 347-363.	2.2	66
40	The water-gas shift reaction on Pt/γ-Al <sub>2</sub> O <sub>3</sub> catalyst: Operando SSITKA-DRIFTS-mass spectroscopy studies. <i>Catalysis Today</i> , 2008, 138, 228-234.	2.2	66
41	Low-temperature water-gas shift on Pt/Ce <sub>1-x</sub> La <sub>x</sub> O <sub>2</sub> : Effect of Ce/La ratio. <i>Applied Catalysis B: Environmental</i> , 2013, 140-141, 333-347.	10.8	63
42	Low-temperature conversion of phenol into CO, CO <sub>2</sub> and H <sub>2</sub> by steam reforming over La-containing supported Rh catalysts. <i>Applied Catalysis B: Environmental</i> , 2012, 117-118, 81-95.	10.8	62
43	Dry reforming of methane over Ni/Ce <sub>0.8</sub> Ti <sub>0.2</sub> O <sub>2</sub> : The effect of Ni particle size on the carbon pathways studied by transient and isotopic techniques. <i>Applied Catalysis B: Environmental</i> , 2021, 296, 120321.	10.8	62
44	Structural and Redox Properties of Ce <sub>1-x</sub> Zr <sub>x</sub> O <sub>2</sub> and Ce <sub>0.8</sub> Zr <sub>0.15</sub> RE <sub>0.05</sub> O <sub>2</sub> (RE: La, Nd, Pr, Y) Solids Studied by High Temperature <i>in Situ</i> Raman Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2017, 121, 7931-7943.	1.5	61
45	The role of oxygen and hydroxyl support species on the mechanism of H <sub>2</sub> production in the steam reforming of phenol over metal oxide-supported-Rh and -Fe catalysts. <i>Catalysis Today</i> , 2006, 112, 89-93.	2.2	60
46	Role of P-containing species in phosphated CeO <sub>2</sub> in the deterioration of its oxygen storage and release properties. <i>Journal of Catalysis</i> , 2006, 239, 410-421.	3.1	60
47	Low-temperature purification of gas streams from phenol by steam reforming over novel supported-Rh catalysts. <i>Applied Catalysis B: Environmental</i> , 2010, 96, 276-289.	10.8	60
48	Influence of oxychlorination treatments on the redox and oxygen storage and release properties of thermally aged Pd-Rh/Ce <sub>x</sub> Zr <sub>1-x</sub> O <sub>2</sub> /Al <sub>2</sub> O <sub>3</sub> model three-way catalysts. <i>Applied Catalysis B: Environmental</i> , 2005, 60, 117-127.	10.8	58
49	The effect of CeO <sub>2</sub> -ZrO <sub>2</sub> structural differences on the origin and reactivity of carbon formed during methane dry reforming over NiCo/CeO <sub>2</sub> -ZrO <sub>2</sub> catalysts studied by transient techniques. <i>Catalysis Science and Technology</i> , 2017, 7, 5422-5434.	2.1	58
50	Selective catalytic reduction of nitric oxide with ammonia over V <sub>2</sub> O <sub>5</sub> /TiO <sub>2</sub> catalyst: A steady-state and transient kinetic study. <i>Applied Catalysis B: Environmental</i> , 1995, 6, 35-59.	10.8	55
51	Origin and reactivity of active and inactive carbon formed during DRM over Ni/Ce <sub>0.38</sub> Zr <sub>0.62</sub> O <sub>2</sub> studied by transient isotopic techniques. <i>Catalysis Today</i> , 2018, 299, 201-211.	2.2	54
52	Synergistic effects of crystal phases and mixed valences in La <sup>3+</sup> -Sr <sup>2+</sup> -Ce <sup>4+</sup> -Fe <sup>3+</sup> -O mixed oxidic/perovskitic solids on their catalytic activity for the NO+CO reaction. <i>Applied Catalysis B: Environmental</i> , 2000, 28, 13-28.	10.8	53
53	Tailoring MgO-based supported Rh catalysts for purification of gas streams from phenol. <i>Applied Catalysis B: Environmental</i> , 2012, 111-112, 360-375.	10.8	52
54	Carbon sequestration via enhanced weathering of peridotites and basalts in seawater. <i>Applied Geochemistry</i> , 2018, 91, 197-207.	1.4	52

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55	Comparative study of La <sup>2+</sup> /Sr <sup>2+</sup> /Fe <sup>3+</sup> /O perovskite-type oxides prepared by ceramic and surfactant methods over the CH <sub>4</sub> and H <sub>2</sub> lean-deNO <sub>x</sub> . Applied Catalysis B: Environmental, 2009, 93, 1-11.	10.8	51
56	N <sub>2</sub> O decomposition over ceria-promoted Ir/Al <sub>2</sub> O <sub>3</sub> catalysts: The role of ceria. Applied Catalysis B: Environmental, 2016, 187, 259-268.	10.8	51
57	Spillover of labile OH, H, and O species in the H <sub>2</sub> production by steam reforming of phenol over supported-Rh catalysts. Catalysis Today, 2006, 116, 341-347.	2.2	50
58	Regeneration of thermally aged Pt-Rh/Ce <sub>x</sub> Zr <sub>1-x</sub> O <sub>2</sub> -Al <sub>2</sub> O <sub>3</sub> model three-way catalysts by oxychlorination treatments. Applied Catalysis B: Environmental, 2006, 64, 189-200.	10.8	50
59	Photoelectrocatalytic degradation of the insecticide imidacloprid using TiO <sub>2</sub> /Ti electrodes. Journal of Photochemistry and Photobiology A: Chemistry, 2009, 204, 129-136.	2.0	50
60	Transient Kinetic Study of the Oxidation and Hydrogenation of Carbon Species Formed during CH <sub>4</sub> /He, CO <sub>2</sub> /He, and CH <sub>4</sub> /CO <sub>2</sub> Reactions over Rh/Al <sub>2</sub> O <sub>3</sub> Catalyst. Journal of Catalysis, 1996, 161, 31-42.	3.1	49
61	Selective catalytic reduction of NO by hydrogen (H <sub>2</sub> -SCR) on WO <sub>3</sub> -promoted Ce-Zr-O <sub>2</sub> solids. Applied Catalysis B: Environmental, 2014, 156-157, 72-83.	10.8	49
62	Thermal stability of solid and aqueous solutions of humic acid. Thermochimica Acta, 2007, 454, 78-83.	1.2	48
63	Water-Gas Shift Reaction on Pt/Ce <sub>1-x</sub> Ti <sub>x</sub> O <sub>2</sub> : The Effect of Ce/Ti Ratio. Journal of Physical Chemistry C, 2013, 117, 25467-25477.	1.5	48
64	The CO/H <sub>2</sub> reaction on Rh/Al <sub>2</sub> O <sub>3</sub> II. Kinetic study by transient isotopic methods. Journal of Catalysis, 1989, 120, 137-156.	3.1	47
65	The effect of Pt on the carbon pathways in the dry reforming of methane over Ni-Pt/Ce <sub>0.8</sub> Pr <sub>0.2</sub> O <sub>2</sub> - $\gamma$ catalyst. Catalysis Today, 2020, 355, 788-803.	2.2	43
66	Effects of calcination temperature on the stability of CePO <sub>4</sub> detected in vehicle-aged commercial three-way catalysts. Applied Catalysis B: Environmental, 2004, 48, 113-123.	10.8	42
67	Effects of Pd particle size on the rates of oxygen back-spillover and CO oxidation under dynamic oxygen storage and release measurements over Pd/CeO <sub>2</sub> catalysts. Topics in Catalysis, 2007, 42-43, 351-355.	1.3	42
68	The phenol steam reforming reaction towards H <sub>2</sub> production on natural calcite. Applied Catalysis B: Environmental, 2009, 90, 347-359.	10.8	42
69	Carbon dioxide storage in olivine basalts: Effect of ball milling process. Powder Technology, 2015, 273, 220-229.	2.1	41
70	The effect of Ti <sup>4+</sup> dopant in the 5 wt% Ni/Ce <sub>1-x</sub> Ti <sub>x</sub> O <sub>2</sub> - catalyst on the carbon pathways of dry reforming of methane studied by various transient and isotopic techniques. Applied Catalysis A: General, 2019, 579, 116-129.	2.2	41
71	The Remarkable Effect of Oxygen on the N <sub>2</sub> Selectivity of Water Catalytic Denitrification by Hydrogen. Environmental Science & Technology, 2007, 41, 950-956.	4.6	40
72	The effect of Fe on the catalytic behavior of model Pd-Rh/CeO <sub>2</sub> -Al <sub>2</sub> O <sub>3</sub> three-way catalyst. Applied Catalysis B: Environmental, 2007, 76, 375-385.	10.8	39

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73	Cu-Ce-La-Ox as efficient CO oxidation catalysts: Effect of Cu content. Applied Surface Science, 2020, 505, 144474.	3.1	39
74	A Transient Kinetic Study of the Co/H <sub>2</sub> Reaction on Rh/Al <sub>2</sub> O <sub>3</sub> Using FTIR and Mass Spectroscopy. Journal of Catalysis, 1994, 148, 224-239.	3.1	37
75	Pt/Mg-Ce-O catalyst for NO/H <sub>2</sub> /O <sub>2</sub> lean de-NO <sub>x</sub> reaction. Environmental Chemistry Letters, 2004, 2, 55.	8.3	37
76	Effects of W <sub>6</sub> +Doping of TiO <sub>2</sub> on the Reactivity of Supported Rh toward NO: A Transient FTIR and Mass Spectroscopy Studies. Journal of Physical Chemistry B, 1997, 101, 7968-7977.	1.2	36
77	Deactivation of Pd/Ce <sub>0.5</sub> Zr <sub>0.5</sub> O <sub>2</sub> model three-way catalyst by P, Ca and Zn deposition. Applied Catalysis B: Environmental, 2012, 111-112, 233-245.	10.8	36
78	The CO/H <sub>2</sub> reaction on Rh/Al <sub>2</sub> O <sub>3</sub> . Steady-state and transient kinetics. Journal of Catalysis, 1989, 120, 118-136.	3.1	35
79	Reactivation of severely aged commercial three-way catalysts by washing with weak EDTA and oxalic acid solutions. Applied Catalysis B: Environmental, 2007, 71, 185-198.	10.8	35
80	Regeneration of three-way automobile catalysts using biodegradable metal chelating agent S,S-ethylenediamine disuccinic acid (S, S-EDDS). Journal of Hazardous Materials, 2011, 186, 999-1006.	6.5	35
81	The effect of La <sup>3+</sup> , Ti <sup>4+</sup> and Zr <sup>4+</sup> dopants on the mechanism of WGS on ceria-doped supported Pt catalysts. Catalysis Today, 2014, 228, 183-193.	2.2	35
82	Effects of Sol-Gel Synthesis on 5Fe <sup>~</sup> 15Mn <sup>~</sup> 40Zn <sup>~</sup> 40Ti <sup>~</sup> O Mixed Oxide Structure and its H <sub>2</sub> S Removal Efficiency from Industrial Gas Streams. Environmental Science & Technology, 2009, 43, 4367-4372.	4.6	34
83	Catalytic removal of nitrates from waters. Catalysis Today, 2010, 151, 190-194.	2.2	33
84	Selective catalytic reduction of NO by H <sub>2</sub> /C <sub>3</sub> H <sub>6</sub> over Pt/Ce <sub>1-x</sub> Zr <sub>x</sub> O <sub>2</sub> - $\gamma$ : The synergy effect studied by transient techniques. Applied Catalysis B: Environmental, 2017, 206, 308-318.	10.8	32
85	Enthalpy and entropy of H <sub>2</sub> Adsorption on Rh/Al <sub>2</sub> O <sub>3</sub> measured by temperature-programmed desorption. Journal of Catalysis, 1990, 124, 116-126.	3.1	31
86	The Effect of CeO <sub>2</sub> Preparation Method on the Carbon Pathways in the Dry Reforming of Methane on Ni/CeO <sub>2</sub> Studied by Transient Techniques. Catalysis, 2019, 9, 621.	1.6	31
87	Elucidation of mechanistic and kinetic aspects of water-gas shift reaction on supported Pt and Au catalysts via transient isotopic techniques. Catalysis, 0, , 175-236.	0.6	31
88	Enhancing the rate of ex situ mineral carbonation in dunites via ball milling. Advanced Powder Technology, 2016, 27, 360-371.	2.0	30
89	Molten Salt-Promoted MgO Adsorbents for CO <sub>2</sub> Capture: Transient Kinetic Studies. Environmental Science & Technology, 2021, 55, 4513-4521.	4.6	30
90	A Two-Step Reaction Mechanism of Oxygen Release from Pd/CeO <sub>2</sub> : Mathematical Modelling Based on Step Gas Concentration Experiments. Topics in Catalysis, 2004, 30/31, 325-331.	1.3	28

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91	Surface reactivity of LaCoO <sub>3</sub> and Ru/LaCoO <sub>3</sub> towards CO, CO <sub>2</sub> and C <sub>3</sub> H <sub>8</sub> : Effect of H <sub>2</sub> and O <sub>2</sub> pretreatments. Applied Catalysis B: Environmental, 2011, 102, 291-301.	10.8	28
92	Dry reforming of CH <sub>4</sub> over NiCo/Ce <sub>0.75</sub> Zr <sub>0.25</sub> O <sub>2-<math>\delta</math></sub> : The effect of Co on the site activity and carbon pathways studied by transient techniques. Catalysis Communications, 2021, 149, 106237.	1.6	28
93	H <sub>2</sub> -SCR of NO <sub>x</sub> on low-SSA CeO <sub>2</sub> -supported Pd: The effect of Pd particle size. Applied Catalysis A: General, 2021, 615, 118062.	2.2	28
94	CO Oxidation over Rh Dispersed on SiO <sub>2</sub> , Al <sub>2</sub> O <sub>3</sub> and TiO <sub>2</sub> : Kinetic Study and Oscillatory Behavior. Journal of Catalysis, 1995, 156, 265-272.	3.1	27
95	Ceria-Based Materials for Hydrogen Production Via Hydrocarbon Steam Reforming and Water-Gas Shift Reactions. Recent Patents on Materials Science, 2011, 4, 122-145.	0.5	25
96	Partial oxidation of methane to synthesis gas over Ru/TiO <sub>2</sub> catalysts. Studies in Surface Science and Catalysis, 1996, 101, 443-452.	1.5	24
97	Effect of Thermal Aging on the Transient Kinetics of Oxygen Storage and Release of Commercial Ce <sub>x</sub> Zr <sub>1-x</sub> O <sub>2</sub> -based Solids. Topics in Catalysis, 2009, 52, 2013-2018.	1.3	24
98	SURFACE SPECIES ON Rh/Al <sub>2</sub> O <sub>3</sub> DURING CO/H <sub>2</sub> REACTION STUDIED BY TRANSIENT TECHNIQUES. Chemical Engineering Communications, 1989, 83, 129-146.	1.5	23
99	Preadsorbed Water-Promoted Mechanism of the Water-Gas Shift Reaction. Journal of Physical Chemistry C, 2008, 112, 19030-19039.	1.5	23
100	Low-temperature catalytic decomposition of ethylene into H <sub>2</sub> and secondary carbon nanotubes over Ni/CNTs. Applied Catalysis B: Environmental, 2010, 93, 314-324.	10.8	23
101	NO <sub>x</sub> Control via H <sub>2</sub> -Selective Catalytic Reduction (H <sub>2</sub> -SCR) Technology for Stationary and Mobile Applications. Recent Patents on Materials Science, 2012, 5, 87-104.	0.5	23
102	Elucidating the role of La <sup>3+</sup> /Sm <sup>3+</sup> in the carbon paths of dry reforming of methane over Ni/Ce-La(Sm)-Cu-O using transient kinetics and isotopic techniques. Applied Catalysis B: Environmental, 2022, 304, 121015.	10.8	23
103	Encapsulation of molecular hydrogen in zeolites at 1 atm. Journal of Catalysis, 1990, 123, 456-462.	3.1	22
104	A Diffuse Reflectance Infrared Fourier-Transform Spectra and Density Functional Theory Study of CO Adsorption on Rh/ <sup>3</sup> -Al <sub>2</sub> O <sub>3</sub> . Journal of Physical Chemistry C, 2007, 111, 13872-13878.	1.5	22
105	The effect of preparation route of commercial Co/ <sup>3</sup> -Al <sub>2</sub> O <sub>3</sub> catalyst on important Fischer-Tropsch kinetic parameters studied by SSITKA and CO-DRIFTS transient hydrogenation techniques. Journal of Catalysis, 2019, 379, 60-77.	3.1	21
106	Unravelling the Mechanism of Intermediate-Temperature CO <sub>2</sub> Interaction with Molten NaNO <sub>3</sub> -Promoted MgO. Advanced Materials, 2022, 34, e2106677.	11.1	21
107	Reactivation of an Aged Commercial Three-Way Catalyst by Oxalic and Citric Acid Washing. Environmental Science & Technology, 2006, 40, 2030-2036.	4.6	20
108	Oxy-chlorination as an effective treatment of aged Pd/CeO <sub>2</sub> -Al <sub>2</sub> O <sub>3</sub> catalysts for Pd redispersion. Applied Catalysis B: Environmental, 2012, 111-112, 349-359.	10.8	20

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109	A Novel Analysis of Transient Isothermal $^{18}\text{O}$ Isotopic Exchange on Commercial $\text{Ce}_x\text{Zr}_{1-x}\text{O}_2$ -Based OSC Materials. <i>Topics in Catalysis</i> , 2019, 62, 219-226.	1.3	20
110	$\text{CO}$ Chemisorption and Hydrogenation of Surface Carbon Species Formed After $\text{CO}/\text{He}$ Reaction on $\text{Rh}/\text{MgO}$ : A Transient Kinetic Study Using FTIR and Mass Spectroscopy. <i>Journal of Catalysis</i> , 1994, 147, 24-37.	3.1	19
111	Hydrogen production by ethylene decomposition over Ni supported on novel carbon nanotubes and nanofibers. <i>Catalysis Today</i> , 2005, 102-103, 78-84.	2.2	19
112	The steam reforming of phenol over natural calcite materials. <i>Catalysis Today</i> , 2009, 143, 17-24.	2.2	19
113	Effect of ball milling on the carbon sequestration efficiency of serpentinized peridotites. <i>Minerals Engineering</i> , 2018, 120, 66-74.	1.8	19
114	Transient Kinetic Study of the Reaction of $\text{CH}_4$ and $\text{C}_2\text{H}_6$ with the Lattice Oxygen of Li+-Doped $\text{TiO}_2$ Catalyst. <i>Journal of Catalysis</i> , 1993, 141, 612-627.	3.1	18
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