Alessandro Trovarelli

List of Publications by Year
in descending order

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184 papers	17,559 citations	25034 57 h-index	13771 129 g-index
198 all docs	198 docs citations	198 times ranked	11566 citing authors

#	Article	IF	Citations
1	Catalytic Properties of Ceria and CeO2-Containing Materials. Catalysis Reviews - Science and Engineering, 1996, 38, 439-520.	12.9	3,141
2	The utilization of ceria in industrial catalysis. Catalysis Today, 1999, 50, 353-367.	4.4	854
3	Rh-Loaded CeO2-ZrO2 Solid-Solutions as Highly Efficient Oxygen Exchangers: Dependence of the Reduction Behavior and the Oxygen Storage Capacity on the Structural-Properties. Journal of Catalysis, 1995, 151, 168-177.	6.2	830
4	Catalysis by Ceria and Related Materials. Catalytic Science Series, 2002, , .	0.0	740
5	Ceria Catalysts at Nanoscale: How Do Crystal Shapes Shape Catalysis?. ACS Catalysis, 2017, 7, 4716-4735.	11.2	526
6	Shape-Dependent Activity of Ceria in Soot Combustion. ACS Catalysis, 2014, 4, 172-181.	11.2	377
7	Nanophase Fluorite-Structured CeO2â€“ZrO2Catalysts Prepared by High-Energy Mechanical Milling. Journal of Catalysis, 1997, 169, 490-502.	6.2	374
8	Ni/CeO2-ZrO2 catalysts for the dry reforming of methane. Applied Catalysis A: General, 2010, 377, 16-26.	4.3	374
9	Insights into the redox properties of ceria-based oxides and their implications in catalysis. Journal of Alloys and Compounds, 2006, 408-412, 1096-1102.	5.5	364
10	Promotional effect of rare earths and transition metals in the combustion of diesel soot over CeO2 and CeO2â€“ZrO2. Catalysis Today, 2006, 114, 40-47.	4.4	295
11	A Model for the Temperature-Programmed Reduction of Low and High Surface Area Ceria. Journal of Catalysis, 2000, 193, 273-282.	6.2	288
12	Nanofaceted Pdï£¿O Sites in Pdï£¿Ce Surface Superstructures: Enhanced Activity in Catalytic Combustion of Methane. Angewandte Chemie - International Edition, 2009, 48, 8481-8484.	13.8	256
13	Surface-structure sensitivity of CO oxidation over polycrystalline ceria powders. Journal of Catalysis, 2005, 234, 88-95.	6.2	252
14	The Synthesis and Characterization of Mesoporous High-Surface Area Ceria Prepared Using a Hybrid Organic/Inorganic Route. Journal of Catalysis, 1998, 178, 299-308.	6.2	227
15	A Temperature-Programmed and Transient Kinetic Study of CO2Activation and Methanation over CeO2Supported Noble Metals. Journal of Catalysis, 1997, 166, 98-107.	6.2	225
16	The use of temperature-programmed and dynamic/transient methods in catalysis: characterization of ceria-based, model three-way catalysts. Catalysis Today, 2003, 77, 407-417.	4.4	210
17	The preparation of high surface area CeO2â€“ZrO2 mixed oxides by a surfactant-assisted approach. Catalysis Today, 1998, 43, 79-88.	4.4	202
18	CO2 Methanation Under Transient and Steady-State Conditions over Rh/CeO2 and CeO2-Promoted Rh/SiO2: The Role of Surface and Bulk Ceria. Journal of Catalysis, 1995, 151, 111-124.	6.2	199

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19	Opposite Face Sensitivity of CeO₂ in Hydrogenation and Oxidation Catalysis. Angewandte Chemie - International Edition, 2014, 53, 12069-12072.	13.8	199
20	Structural and Oxygen Storage/Release Properties of CeO2-Based Solid Solutions. Comments on Inorganic Chemistry, 1999, 20, 263-284.	5.2	194
21	Catalytic combustion of hydrocarbons with Mn and Cu-doped ceriaâ€“zirconia solid solutions. Catalysis Today, 1999, 47, 133-140.	4.4	186
22	Some recent developments in the characterization of ceria-based catalysts. Journal of Alloys and Compounds, 2001, 323-324, 584-591.	5.5	186
23	Surface Faceting and Reconstruction of Ceria Nanoparticles. Angewandte Chemie - International Edition, 2017, 56, 375-379.	13.8	185
24	Rhâ€“CeO2interaction induced by high-temperature reduction. Characterization and catalytic behaviour in transient and continuous conditions. Journal of the Chemical Society, Faraday Transactions, 1992, 88, 1311-1319.	1.7	168
25	Soot combustion over silver-supported catalysts. Applied Catalysis B: Environmental, 2009, 91, 489-498.	20.2	161
26	On the role of lattice/surface oxygen in ceriaâ€“zirconia catalysts for diesel soot combustion. Catalysis Today, 2012, 181, 108-115.	4.4	158
27	The effect of doping CeO2 with zirconium in the oxidation of isobutane. Applied Catalysis A: General, 1996, 139, 161-173.	4.3	155
28	The Dynamics of Oxygen Storage in Ceriaâ€“Zirconia Model Catalysts Measured by CO Oxidation under Stationary and Cycling Feedstream Compositions. Journal of Catalysis, 2000, 193, 338-347.	6.2	152
29	On the mechanism of fast oxygen storage and release in ceria-zirconia model catalysts. Applied Catalysis B: Environmental, 2004, 52, 225-237.	20.2	145
30	Remarkable stabilization of transition alumina operated by ceria under reducing and redox conditions. Applied Catalysis B: Environmental, 2000, 28, L77-L81.	20.2	136
31	The effect of water in the low-temperature catalytic oxidation of hydrogen sulfide to sulfur over activated carbon. Applied Catalysis A: General, 1998, 173, 185-192.	4.3	126
32	Diesel soot combustion activity of ceria promoted with alkali metals. Catalysis Today, 2008, 136, 3-10.	4.4	120
33	CeO2-based solid solutions with the fluorite structure as novel and effective catalysts for methane combustion. Journal of the Chemical Society Chemical Communications, 1995, , 965.	2.0	117
34	Outstanding Methane Oxidation Performance of Palladiumâ€Embedded Ceria Catalysts Prepared by a Oneâ€Step Dry Ballâ€Milling Method. Angewandte Chemie - International Edition, 2018, 57, 10212-10216.	13.8	117
35	Electrical and oxygen storage/release properties of nanocrystalline ceriaÃ¢Â€Â“zirconia solid solutions. Solid State Ionics, 2002, 147, 85-95.	2.7	111
36	Structure and morphology of Pd/Al2O3 and Pd/CeO2/Al2O3 combustion catalysts in Pdâ€“PdO transformation hysteresis. Applied Catalysis A: General, 2010, 390, 1-10.	4.3	110

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37	Ethanol steam reforming and water gas shift over Co/ZnO catalytic honeycombs doped with Fe, Ni, Cu, Cr and Na. International Journal of Hydrogen Energy, 2010, 35, 7690-7698.	7.1	103
38	Relationships between Structural/Morphological Modifications and Oxygen Storageâ€“Redox Behavior of Silica-Doped Ceria. Journal of Catalysis, 2000, 194, 461-478.	6.2	101
39	An investigation of possible mechanisms for the waterâ€“gas shift reaction over a ZrO2-supported Pt catalyst. Journal of Catalysis, 2006, 244, 183-191.	6.2	98
40	Ceria-Based Materials in Hydrogenation and Reforming Reactions for CO2 Valorization. Frontiers in Chemistry, 2019, 7, 28.	3.6	98
41	Metal-Support Interactions in Rh/CeO2, Rh/TiO2, and Rh/Nb2O5 Catalysts as Inferred from CO2 Methanation Activity. Journal of Catalysis, 1995, 156, 171-174.	6.2	96
42	Unusual Oxygen Storage/Redox Behavior of High-Surface-Area Ceria Prepared by a Surfactant-Assisted Route. Chemistry of Materials, 1997, 9, 2676-2678.	6.7	96
43	A novel and simple route to catalysts with a high oxygen storage capacity: the direct room-temperature synthesis of CeO2â€“ZrO2solid solutions. Journal of the Chemical Society Chemical Communications, 1995, , 2181-2182.	2.0	93
44	An IR study of thermally stable V2O5-WO3 -TiO2 SCR catalysts modified with silica and rare-earths (Ce,) Tj ETQq0 0 0 rgBT /Overlock 10	20.2	93
45	High stability and activity of solution combustion synthesized Pd-based catalysts for methane combustion in presence of water. Applied Catalysis B: Environmental, 2018, 230, 237-245.	20.2	87
46	Catalytic combustion of methane over bimetallic Pdâ€“Pt catalysts: The influence of support materials. Applied Catalysis B: Environmental, 2006, 66, 175-185.	20.2	85
47	The effect of CeO2 on the dynamics of Pdâ€“PdO transformation over Pd/Al2O3 combustion catalysts. Catalysis Communications, 2007, 8, 1263-1266.	3.3	81
48	The role of rare earth oxides as promoters and stabilizers in combustion catalysts. Journal of Alloys and Compounds, 2004, 374, 387-392.	5.5	77
49	Methanol steam reforming behavior of copper impregnated over CeO 2 â€“ZrO 2 derived from aÂsurfactant assisted coprecipitation route. International Journal of Hydrogen Energy, 2015, 40, 10463-10479.	7.1	77
50	Higher activity of Diesel soot oxidation over polycrystalline ceria and ceriaâ€“zirconia solid solutions from more reactive surface planes. Catalysis Today, 2012, 197, 119-126.	4.4	76
51	Room temperature oxidation of formaldehyde on Pt-based catalysts: A comparison between ceria and other supports (TiO2, Al2O3 and ZrO2). Catalysis Today, 2015, 253, 163-171.	4.4	71
52	Catalytic monoliths for ethanol steam reforming. Catalysis Today, 2008, 138, 187-192.	4.4	69
53	NO reduction by CO over Rh/Al2O3. Effects of rhodium dispersion on the catalytic properties. Journal of Catalysis, 1994, 146, 136-143.	6.2	66
54	Wet oxidation of acetic acid catalyzed by doped ceria. Applied Catalysis B: Environmental, 1996, 11, L29-L35.	20.2	66

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55	Improved high temperature stability of NH3-SCR catalysts based on rare earth vanadates supported on TiO2WO3SiO2. Catalysis Today, 2012, 184, 227-236.	4.4	65
56	Origin of High Activity and Selectivity of CuO/CeO₂ Catalysts Prepared by Solution Combustion Synthesis in CO-PROX Reaction. Journal of Physical Chemistry C, 2016, 120, 13039-13048.	3.1	65
57	Structure-activity relationship in Pd/CeO2 methane oxidation catalysts. Chinese Journal of Catalysis, 2020, 41, 938-950.	14.0	62
58	Methane oxidation activity and nanoscale characterization of Pd/CeO2 catalysts prepared by dry milling Pd acetate and ceria. Applied Catalysis B: Environmental, 2021, 282, 119567.	20.2	61
59	Oxidative Dehydrogenation of Isobutane to Isobutene: Dawson-Type Heteropolyoxoanions as Stable and Selective Heterogeneous Catalysts. Journal of Catalysis, 1996, 160, 317-321.	6.2	59
60	An efficient and reusable catalyst based on Pd/CeO2 for the room temperature aerobic Suzukiâ€“Miyaura reaction in water/ethanol. Journal of Molecular Catalysis A, 2010, 315, 197-204.	4.8	59
61	Acidâ€“base properties and catalytic activity of nanophase ceriaâ€“zirconia catalysts for 4-methylpentan-2-ol dehydration. Physical Chemistry Chemical Physics, 1999, 1, 3369-3375.	2.8	57
62	A comparative study of water gas shift reaction over gold and platinum supported on ZrO2 and CeO2â€“ZrO2. Applied Catalysis B: Environmental, 2009, 88, 272-282.	20.2	57
63	Chemoselective hydrogenation of unsaturated carbonyl compounds over groups 8 and 9 titania-supported metal catalysts. Journal of Molecular Catalysis, 1992, 72, 243-251.	1.2	56
64	Structural and Morphological Investigation of Ceria-Promoted Al2O3under Severe Reducing/Oxidizing Conditions. Journal of Physical Chemistry B, 2005, 109, 11110-11118.	2.6	56
65	The influence of ceria and other rare earth promoters on palladium-based methane combustion catalysts. Catalysis Today, 2012, 180, 124-130.	4.4	55
66	Ambient Pressure Photoemission Spectroscopy Reveals the Mechanism of Carbon Soot Oxidation in Ceriaâ€Based Catalysts. ChemCatChem, 2016, 8, 2748-2751.	3.7	54
67	Regeneration of S-poisoned Pd/Al2O3 catalysts for the combustion of methane. Catalysis Today, 2006, 117, 569-576.	4.4	52
68	Ceriaâ€“Zirconia Particles Wrapped in a 2D Carbon Envelope: Improved Lowâ€Temperature Oxygen Transfer and Oxidation Activity. Angewandte Chemie - International Edition, 2015, 54, 14040-14043.	13.8	49
69	The direct room-temperature synthesis of CeO2-based solid solutions: a novel route to catalysts with a high oxygen storage/transport capacity. Studies in Surface Science and Catalysis, 1996, 101, 1283-1292.	1.5	48
70	High-temperature stability of V2O5/TiO2-WO3-SiO2 SCR catalysts modified with rare-earths. Journal of Alloys and Compounds, 2006, 408-412, 1108-1112.	5.5	48
71	Effect of alternate CH4-reducing/lean combustion treatments on the reactivity of fresh and S-poisoned Pd/CeO2/Al2O3 catalysts. Applied Catalysis B: Environmental, 2008, 80, 335-342.	20.2	48
72	Combustion synthesized copper-ion substituted FeAl2O4 (Cu0.1Fe0.9Al2O4): A superior catalyst for methanol steam reforming compared to its impregnated analogue. Journal of Power Sources, 2016, 304, 319-331.	7.8	47

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73	Mixed ironâ€“erbium vanadate NH3-SCR catalysts. Catalysis Today, 2015, 241, 159-168.	4.4	46
74	Study of sulfur poisoning on Pd/Al2O3 and Pd/CeO2/Al2O3 methane combustion catalysts. Catalysis Today, 2010, 155, 59-65.	4.4	45
75	The formation of nanodomains of Ce6O11 in ceria catalyzed soot combustion. Journal of Catalysis, 2014, 312, 191-194.	6.2	45
76	Preparation, characterization and NH3â€“SCR activity of FeVO4 supported on TiO2â€“WO3â€“SiO2. Applied Catalysis B: Environmental, 2015, 176-177, 699-708.	20.2	45
77	The influence of nano-architectured CeO supports in RhPd/CeO2 for the catalytic ethanol steam reforming reaction. Catalysis Today, 2015, 253, 99-105.	4.4	44
78	Carbon dioxide hydrogenation on rhodium supported on transition metal oxides. Applied Catalysis, 1990, 65, 129-142.	0.8	43
79	The solid-state rearrangement of the Wells-Dawson K6P2W18O62ï¿½10H2O to a stable Keggin-type heteropolyanion phase: a catalyst for the selective oxidation of isobutane to isobutene. Catalysis Letters, 1996, 36, 75-79.	2.6	43
80	Reduction and Oxygen Storage Behavior of Noble Metals Supported on Silica-Doped Ceria. Journal of Catalysis, 2002, 211, 407-421.	6.2	43
81	Ethanol steam reforming and water gas shift reaction over Coâ€“Mn/ZnO catalysts. Chemical Engineering Journal, 2009, 154, 267-273.	12.7	43
82	Expanded product, plus kinetic and mechanistic, studies of polyoxoanion-based cyclohexene oxidation catalysis: the detection of âˆ¼70 products at higher conversion leading to a simple, product-based test for the presence of olefin autoxidation. Journal of Molecular Catalysis A, 2003, 191, 217-252.	4.8	42
83	Insights into the dynamics of oxygen storage/release phenomena in model ceriaâ€“zirconia catalysts as inferred from transient studies using H2, CO and soot as reductants. Catalysis Today, 2006, 112, 94-98.	4.4	41
84	SrTiO 3 -based perovskites: Preparation, characterization and photocatalytic activity in gasâ€“solid regime under simulated solar irradiation. Journal of Catalysis, 2015, 321, 13-22.	6.2	41
85	STRUCTURAL PROPERTIES AND NONSTOICHIOMETRIC BEHAVIOR OF CeO₂. Catalytic Science Series, 2002, , 15-50.	0.0	40
86	Synergic effect of Cu/Ce0.5Pr0.5O2-Î´ and Ce0.5Pr0.5O2-Î´ in soot combustion. Applied Catalysis B: Environmental, 2016, 197, 95-104.	20.2	40
87	An operando DRIFTSâ€“MS study on model Ce0.5Zr0.5O2 redox catalyst: A critical evaluation of DRIFTS and MS data on CO abatement reaction. Catalysis Today, 2006, 113, 81-86.	4.4	37
88	Ceria-Based Materials in Catalysis. Fundamental Theories of Physics, 2016, 50, 209-242.	0.3	37
89	Characterization of large, polyanionic inorganic molecules: fast atom bombardment mass spectrometry of P2W15Nb3O629- and of the supported organometallic catalyst precursor (1,5-COD)Ir.cntdot.P2W15Nb3O628-. Inorganic Chemistry, 1993, 32, 6034-6039.	4.0	36
90	Activity, durability and microstructural characterization of ex-nitrate and ex-chloride Pt/Ce0.56Zr0.44O2 catalysts for low temperature water gas shift reaction. Journal of Catalysis, 2010, 270, 285-298.	6.2	36

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91	Enhanced ibuprofen removal by heterogeneous-Fenton process over Cu/ZrO2 and Fe/ZrO2 catalysts. Journal of Environmental Chemical Engineering, 2020, 8, 103586.	6.7	35
92	A meerwein - ponndorf - verley type reduction of Î±,Î² unsaturated ketones to allylic alcohols catalyzed by MgO. Tetrahedron Letters, 1989, 30, 2705-2706.	1.4	34
93	Structure and reactivity of ceriaâ€“zirconia catalysts for bromine and chlorine production via the oxidation of hydrogen halides. Journal of Catalysis, 2015, 331, 128-137.	6.2	34
94	Polyoxoanion-supported catalysis: evidence for a P2W15Nb3O629â^'-supported iridium cyclohexene oxidation catalyst starting from [n-Bu4N]5Na3[(1,5-COD)IrÂ·P2W15Nb3O62]. Journal of Molecular Catalysis A, 2003, 191, 253-279.	4.8	33
95	Efficient fluoride adsorption by mesoporous hierarchical alumina microspheres. RSC Advances, 2016, 6, 42288-42296.	3.6	33
96	The effect of milling parameters on the mechanochemical synthesis of Pdâ€“CeO₂ methane oxidation catalysts. Catalysis Science and Technology, 2019, 9, 4232-4238.	4.1	33
97	PdO hydrate as an efficient and recyclable catalyst for the Suzukiâ€“Miyaura reaction in water/ethanol at room temperature. Catalysis Communications, 2011, 12, 563-567.	3.3	32
98	Outstanding Methane Oxidation Performance of Palladiumâ€Embedded Ceria Catalysts Prepared by a Oneâ€Step Dry Ballâ€Milling Method. Angewandte Chemie, 2018, 130, 10369-10373.	2.0	32
99	Catalytic Performance of Solution Combustion Synthesized Alumina- and Ceria-Supported Pt and Pd Nanoparticles for the Combustion of Propane and Dimethyl Ether (DME). Industrial & Engineering Chemistry Research, 2012, 51, 7510-7517.	3.7	31
100	Silver-based catalytic materials for the simultaneous removal of soot and NO. Catalysis Today, 2015, 258, 405-415.	4.4	31
101	Oxygen Storage Behavior of Ceriaâ€“Zirconia-Based Catalysts in the Presence of SO2. Topics in Catalysis, 2001, 16/17, 299-306.	2.8	30
102	Degradation of phenol in wastewaters via heterogeneous Fenton-like Ag/CeO 2 catalyst. Journal of Environmental Chemical Engineering, 2017, 5, 1159-1165.	6.7	30
103	Carbon dioxide hydrogenation over iron containing catalysts. Applied Catalysis A: General, 1994, 117, 125-137.	4.3	28
104	Structural Characterization of Ceriaâ€“zirconia Powder Catalysts Prepared by High-energy Mechanical Milling: A Neutron Diffraction Study. Journal of Materials Research, 2000, 15, 1538-1545.	2.6	27
105	CO preferential oxidation under H2-rich streams on copper oxide supported on Fe promoted CeO2. Applied Catalysis A: General, 2015, 506, 268-277.	4.3	27
106	CO2 Hydrogenation Over Platinum Group Metals Supported on CeO2: Evidence for a Transient Metal-Support Interaction. Studies in Surface Science and Catalysis, 1993, , 2781-2784.	1.5	26
107	Some Insight into the Effects of Oxygen Diffusion in the Reduction Kinetics of Ceria. Industrial & Engineering Chemistry Research, 2001, 40, 4828-4835.	3.7	26
108	New Insights into the Dynamics That Control the Activity of Ceriaâ€“Zirconia Solid Solutions in Thermochemical Water Splitting Cycles. Journal of Physical Chemistry C, 2017, 121, 17746-17755.	3.1	26

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109	Structural Evolution of Bimetallic PtPd/CeO₂ Methane Oxidation Catalysts Prepared by Dry Milling. ACS Applied Materials & Interfaces, 2021, 13, 31614-31623.	8.0	25
110	Reactivity and Characterization of Pd-containing Ceria-Zirconia Catalysts for Methane Combustion. Studies in Surface Science and Catalysis, 1998, 119, 87-92.	1.5	24
111	Influence of Different Palladium Precursors on the Properties of Solutionâ€Combustionâ€Synthesized Palladium/Ceria Catalysts for Methane Combustion. ChemCatChem, 2015, 7, 2222-2229.	3.7	24
112	Fast oxygen uptake/release over a new CeOx phase. Chemical Communications, 1998, , 1897-1898.	4.1	23
113	Promotion effect of surface Lanthanum in soot oxidation over ceria-based catalysts. Topics in Catalysis, 2007, 42-43, 319-322.	2.8	22
114	Redox behavior of gold supported on ceria and ceria-zirconia based catalysts. Journal of Rare Earths, 2009, 27, 196-203.	4.8	22
115	Effect of redox treatments on Ce 0.50 Zr 0.50 O 2 based solid oxide fuel cell anodes. Journal of Power Sources, 2014, 270, 79-91.	7.8	22
116	Mechanism of Ethylene Oxychlorination on Ceria. ACS Catalysis, 2018, 8, 2651-2663.	11.2	22
117	Nanophase iron carbides as catalysts for carbon dioxide hydrogenation. Applied Catalysis A: General, 1993, 95, L9-L13.	4.3	21
118	Room-Temperature Suzukiâ€“Miyaura Reaction Catalyzed by Pd Supported on Rare Earth Oxides: Influence of the Point of Zero Charge on the Catalytic Activity. Catalysis Letters, 2013, 143, 547-554.	2.6	21
119	Simultaneous removal of soot and NO over K- and Ba-doped ruthenium supported catalysts. Catalysis Today, 2016, 267, 119-129.	4.4	21
120	The dynamics of PdO-Pd phase transformation in the presence of water over Si-doped Pd/CeO2 methane oxidation catalysts. Applied Catalysis A: General, 2019, 574, 79-86.	4.3	21
121	In situ environmental HRTEM discloses low temperature carbon soot oxidation by ceriaâ€“zirconia at the nanoscale. Chemical Communications, 2019, 55, 3876-3878.	4.1	21
122	CO and CO2hydrogenation under transient conditions over Rhâ€“CeO2: novel positive effects of metalâ€“support interaction on catalytic activity and selectivity. Journal of the Chemical Society Chemical Communications, 1991, .	2.0	20
123	Vapour phase hydroformylation of ethylene and propene catalyzed by a rhodium-containing aluminum pillared smectite clay. Journal of Molecular Catalysis, 1992, 72, 75-84.	1.2	20
124	Acetylene semi-hydrogenation over Pd-Zn/CeO2: Relevance of CO adsorption and methanation as descriptors of selectivity. Catalysis Communications, 2018, 105, 52-55.	3.3	20
125	Potential of Ceria-Based Catalysts for the Oxidation of Landfill Leachate by Heterogeneous Fenton Process. International Journal of Photoenergy, 2012, 2012, 1-8.	2.5	19
126	Methanol steam reforming behavior of sol-gel synthesized nanodimensional CuxFe1-xAl2O4 hercynites. Applied Catalysis A: General, 2019, 570, 73-83.	4.3	19

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127	Chemoselective Reduction of Enones to Allylic Alcohols. Studies in Surface Science and Catalysis, 1991, 59, 253-261.	1.5	18
128	COD and AOX abatement in catalytic wet oxidation of halogenated liquid wastes using CeO2-based catalysts. Journal of Alloys and Compounds, 2006, 408-412, 1136-1140.	5.5	18
129	Ceria-based palladium zinc catalysts as promising materials for water gas shift reaction. Catalysis Communications, 2014, 47, 63-66.	3.3	18
130	The characterization and the catalytic activity of modified Wellsâ€“Dawson-type polyoxometalates in the oxidehydrogenation of isobutane to isobutene. Journal of Molecular Catalysis A, 2003, 204-205, 599-607.	4.8	17
131	Study on Redox, Structural and Electrical Properties of Ce[sub x]Zr[sub 1â^'x]O[sub 2] for Applications in SOFC Anodes. Journal of the Electrochemical Society, 2011, 158, P22.	2.9	16
132	The role of palladium salt precursors in Pd-PdO/CeO2 catalysts prepared by dry milling for methane oxidation. Catalysis Communications, 2020, 135, 105899.	3.3	16
133	Thermal stability and catalytic properties of the Wells-Dawson K6P2W18O62Â·10H2O heteropoly compound in the oxidative dehydrogenation of isobutane to isobutene. Topics in Catalysis, 1996, 3, 387-406.	2.8	15
134	Water splitting reaction on Ce_{0.15}Zr_{0.85}O₂ driven by surface heterogeneity. Catalysis Science and Technology, 2016, 6, 399-403.	4.1	15
135	Pd/CeO₂ Catalysts Prepared by Solvent-free Mechanochemical Route for Methane Abatement in Natural Gas Fueled Vehicles. Industrial & Engineering Chemistry Research, 2021, 60, 6435-6445.	3.7	15
136	A New Class of Environmental Friendly Vanadate Based NH₃ SCR Catalysts Exhibiting Good Low Temperature Activity and High Temperature Stability. SAE International Journal of Engines, 0, 4, 1839-1849.	0.4	14
137	The Effect of Ceria on the Dynamics of CuOâ€“Cu2O Redox Transformation: CuOâ€“Cu2O Hysteresis on Ceria. Catalysis Letters, 2014, 144, 1023-1030.	2.6	14
138	OberflÃchenfacettierung und Rekonstruktion von Ceroxidâ€•Nanopartikeln. Angewandte Chemie, 2017, 129, 382-387.	2.0	14
139	The Effect of Sr Addition in Cu- and Fe-Modified CeO2 and ZrO2 Soot Combustion Catalysts. Catalysts, 2017, 7, 28.	3.5	14
140	The Role of Neodymium in the Optimization of a Ni/CeO2 and Ni/CeZrO2 Methane Dry Reforming Catalyst. Inorganics, 2018, 6, 39.	2.7	14
141	Removal of Organics from Landfill Leachate by Heterogeneous Fenton-like Oxidation over Copper-Based Catalyst. Catalysts, 2022, 12, 338.	3.5	14
142	A molecular approach to the hydrogen transfer reduction of ketones catalyzed by silica-supported osmium carbonyls. Journal of Molecular Catalysis, 1989, 51, 181-192.	1.2	13
143	Comparison between Niâ€“Rh/gadolinia doped ceria catalysts in reforming of propane for anode implementations in intermediate solid oxide fuel cells. Journal of Power Sources, 2010, 195, 649-661.	7.8	13
144	Development of a modified co-precipitation route for thermally resistant, high surface area ceria-zirconia based solid solutions. Studies in Surface Science and Catalysis, 2010, , 835-838.	1.5	13

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145	Chemoselective hydrogenation of cinnamaldehyde at atmospheric pressure over combustion synthesized Pd catalysts. Reaction Kinetics, Mechanisms and Catalysis, 2017, 122, 135-153.	1.7	13
146	Potential of Ceria-Zirconia-Based Materials in Carbon Soot Oxidation for Gasoline Particulate Filters. Catalysts, 2020, 10, 768.	3.5	13
147	Catalytic Wet-oxidation of a Mixed Liquid Waste: COD and AOX Abatement. Environmental Technology (United Kingdom), 2004, 25, 1397-1403.	2.2	12
148	Effect of process modification and presence of H2O2 in the synthesis of samaria-doped ceria powders for fuel cell applications. International Journal of Hydrogen Energy, 2012, 37, 1698-1709.	7.1	11
149	Structural and electrocatalytic properties of molten core Sn@SnOx nanoparticles on ceria. Applied Catalysis B: Environmental, 2016, 197, 254-261.	20.2	11
150	Catalytic applications of cerium dioxide. , 2020, , 45-108.		11
151	Synthesis and properties of cerium oxide-based materials. , 2020, , 13-43.		11
152	Hydrogen Transfer Reduction of Hexan-2-one Catalyzed by a Silica Surface-Grafted Osmium Cluster. Journal of Molecular Catalysis, 1988, 44, 183-186.	1.2	10
153	Silica-supported ruthenium and osmium carbonyls as catalysts for cycloocta-1,5-diene isomerization. Journal of Molecular Catalysis, 1988, 48, 29-36.	1.2	10
154	Groups 8 and 9 metal carbonyls as catalysts for 1,5-cyclooctadiene isomerization. Journal of Molecular Catalysis, 1989, 55, 229-240.	1.2	10
155	Insights on the Interfacial Processes Involved in the Mechanical and Redox Stability of the BaCe_{0.65}Zr_{0.2}0Y_{0.15}O_{3â^'Î´}â€“Ce_{0.85}Gd_{0.15}O₂ Composite. ACS Applied Energy Materials, 2020, 3, 9877-9888.		10
156	Regeneration of S-poisoned Pd/Al2O3 and Pd/CeO2/Al2O3 catalysts for the combustion of methane. Topics in Catalysis, 2007, 42-43, 405-408.	2.8	9
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