Design of Ceria Catalysts for Lowâ€Temperature CO Ox

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Citation Report

#	Article	IF	Citations
1	Template Synthesis of Porous Ceria-Based Catalysts for Environmental Application. Molecules, 2020, 25, 4242.	1.7	37
2	DFT+U study of CO2 reduction and CO oxidation on a reconstructed CeO2â˜(110) facet. Materials Today Advances, 2020, 8, 100111.	2.5	8
3	Physical and Chemical Synthesis of Au/CeO2 Nanoparticle Catalysts for Room Temperature CO Oxidation: A Comparative Study. Catalysts, 2020, 10, 1351.	1.6	10
4	A kinetic model for evolution of H2 and CO over Zr-doped ceria. Molecular Catalysis, 2020, 498, 111256.	1.0	3
5	Tuning the oxygen release properties of CeO₂-based catalysts by metalâ€“support interactions for improved gasoline soot combustion. Catalysis Science and Technology, 2020, 10, 7177-7185.	2.1	16
6	Design of an Ultrastable and Highly Active Ceria Catalyst for CO Oxidation by Rare-Earth- and Transition-Metal Co-Doping. ACS Catalysis, 2020, 10, 14877-14886.	5.5	23
7	Influence of Synthesis Time on the Morphology and Properties of CeO₂ Nanoparticles: An Experimentalâ€“Theoretical Study. Crystal Growth and Design, 2020, 20, 5031-5042.	1.4	22
8	Templated Synthesis of Copper Modified Tin-Doped Ceria for Catalytic CO Oxidation. Topics in Catalysis, 2020, 63, 86-98.	1.3	8
9	The characterization of purified citrate-coated cerium oxide nanoparticles prepared via hydrothermal synthesis. Applied Surface Science, 2021, 535, 147681.	3.1	27
10	Towards the Effect of Pt 0 /Pt Î´+ and Ce 3+ Species at the Surface of CeO 2 Crystals: Understanding the Nature of the Interactions under CO Oxidation Conditions. ChemCatChem, 2021, 13, 1340-1354.	1.8	23
11	Oxygen chemistry of halogen-doped CeO₂(111). Physical Chemistry Chemical Physics, 2021, 23, 19375-19385.	1.3	2
12	Activity of 5% CuO/Ce1 â€“ xPrxOy Catalysts in the Reaction of Carbon Monoxide Oxidation with Oxygen in an Excess of Hydrogen. Kinetics and Catalysis, 2021, 62, 116-126.	0.3	2
13	Design Aspects of Doped CeO₂ for Low-Temperature Catalytic CO Oxidation: Transient Kinetics and DFT Approach. ACS Applied Materials & Interfaces, 2021, 13, 22391-22415.	4.0	70
14	Renaissance of Homogeneous Cerium Catalysts with Unique â€¯â€¯â€¯Ce(IV/III) Couple: Redox-Mediated Organic Transformations Involving Homolysis of Ce(IV)â€“Ligand Covalent Bonds. Journal of the American Chemical Society, 2021, 143, 7879-7890.	6.6	39
15	Unraveling the nature of active sites onto copper/ceria-zirconia catalysts for low temperature CO oxidation. Catalysis Today, 2022, 384-386, 246-256.	2.2	5
16	Is Oxygen Diffusion Faster in Bulk CeO2 or on a (111)-CeO2 Surface? A Theoretical Study. Chemistry Letters, 2021, 50, 568-571.	0.7	4
17	DFT + U Study of Strain-Engineered CO2 Reduction on a CeO2â€“x (111) Facet. Journal of Physical Chemistry C, 2021, 125, 14221-14227.	1.5	14
18	Cu-doped phosphorene as highly efficient single atom catalyst for CO oxidation: A DFT study. Molecular Catalysis, 2021, 509, 111630.	1.0	5

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19	Effect of Preparation Methods on the Performance of Pt/TiO2 Catalysts for the Catalytic Oxidation of Carbon Monoxide in Simulated Sintering Flue Gas. Catalysts, 2021, 11, 804.	1.6	5
20	Ceria-Based Materials for Thermocatalytic and Photocatalytic Organic Synthesis. ACS Catalysis, 2021, 11, 9618-9678.	5.5	146
21	Effect of Additional Doping of the Cuâ€“Mnâ€“Ceâ€“O Solid Solution on the Catalytic Properties. Russian Journal of Inorganic Chemistry, 2021, 66, 1212-1216.	0.3	5
22	Lowâ€Temperature CO Oxidation over the Ptâˆ’TiN Interfacial Dual Sites. ChemCatChem, 2021, 13, 4610-4617.	1.8	2
23	Recent advances in catalytic systems in the prism of physicochemical properties to remediate toxic CO pollutants: A state-of-the-art review. Chemosphere, 2021, 277, 130285.	4.2	24
24	Engineering Co3+-rich crystal planes on Co3O4 hexagonal nanosheets for CO and hydrocarbons oxidation with enhanced catalytic activity and water resistance. Chemical Engineering Journal, 2021, 420, 130448.	6.6	34
25	Loading mechanism and double-site reaction mechanism of Cu on activated carbon for enhanced oxidation of CO from flue gas. Chemical Engineering Journal, 2021, 419, 129994.	6.6	19
26	Balancing surface acidity, oxygen vacancies and Cu+ of CuOx/CeO2 catalysts by Nb doping for enhancing CO oxidation and moisture resistance and lowering byproducts in plasma catalysis. Journal of Cleaner Production, 2021, 318, 128564.	4.6	16
27	Shape impact of nanostructured ceria on the dispersion of Pd species. Chinese Journal of Catalysis, 2021, 42, 2234-2241.	6.9	15
28	A review of smart exsolution catalysts for the application of gas phase reactions. Ceramist, 2020, 23, 211-230.	0.0	2
29	Exploring the effect of morphology and surface properties of nanoshaped Pd/CeO2 catalysts on CO2 hydrogenation to methanol. Applied Catalysis A: General, 2021, 627, 118394.	2.2	22
30	Influence of CeO2 and ZrO2 on the Thermal Stability and Catalytic Activity of SBA-15-Supported Pd Catalysts for CO Oxidation. Industrial & Engineering Chemistry Research, 2021, 60, 14424-14433.	1.8	6
31	A Hydrothermally Stable Single-Atom Catalyst of Pt Supported on High-Entropy Oxide/Al₂O₃: Structural Optimization and Enhanced Catalytic Activity. ACS Applied Materials & Interfaces, 2021, 13, 48764-48773.	4.0	21
32	Low temperature CO oxidation by doped cerium oxide electrospun fibers. Nano Convergence, 2020, 7, 22.	6.3	0
33	Influence of the Pt size and CeO₂ morphology at the Ptâ€“CeO₂ interface in CO oxidation. Journal of Materials Chemistry A, 2021, 9, 26381-26390.	5.2	28
34	Recent progress in the synthesis of CeO2-based nanocatalysts towards efficient oxidation of CO. Journal of Science: Advanced Materials and Devices, 2022, 7, 100399.	1.5	7
35	Cu/O Frustrated Lewis Pairs on Cu Doped CeO2(111) for Acetylene Hydrogenation: A First-Principles Study. Catalysts, 2022, 12, 74.	1.6	8
36	Reactivity of Pdâ€“MO₂ encapsulated catalytic systems for CO oxidation. Catalysis Science and Technology, 2022, 12, 1476-1486.	2.1	7

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37	Ni/CexZr1-xO2 catalyst prepared via one-step co-precipitation for CO2 reforming of CH4 to produce syngas: role of oxygen storage capacity (OSC) and oxygen vacancy formation energy (OVFE). Journal of Materials Science, 2022, 57, 2839-2856.	1.7	8
38	Promoting effect of Co-doped CeO2 nanorods activity and SO2 resistance for Hg0 removal. Fuel, 2022, 317, 123320.	3.4	26
39	Hybrid DFT small-cluster model of CO oxidation on CeO2/(110). Chemical Physics Letters, 2022, 793, 139436.	1.2	3
40	Oxygen vacancy concentration in nanoobjects of CeO2â^'Î´: Effects of characteristic size, morphology, and temperature. Materials Chemistry and Physics, 2022, 282, 125979.	2.0	5
41	Reducibility Studies of Ceria, Ce0.85Zr0.15O2 (CZ) and Au/CZ Catalysts after Alkali Ion Doping: Impact on Activity in Oxidation of NO and CO. Catalysts, 2022, 12, 524.	1.6	4
42	Synthesis of Ni-doped ceria nanoparticles and their unusual surface reduction in hydrogen. Materials Today Chemistry, 2022, 26, 101011.	1.7	4
43	Hierarchical Au/CeO2 systems â€“ influence of Ln3+ dopants on the catalytic activity in the propane oxidation process.. CrystEngComm, 0, , .	1.3	1
44	Confinement of nano-gold in 3D hierarchically structured gadolinium-doped ceria mesocrystal: synergistic effect of chemical composition and structural hierarchy in CO and propane oxidation.. Catalysis Science and Technology, 0, , .	2.1	0
45	Surfactant effects on the synthesis of porous cerium oxide from a type IV deep eutectic solvent. Journal of Materials Chemistry A, 2022, 10, 18422-18430.	5.2	3
46	Kinetically rate-determining step modulation by metalâ€”support interactions for CO oxidation on Pt/CeO2. Science China Chemistry, 2022, 65, 2038-2044.	4.2	7
47	The Study of Thermal Stability of Mn-Zr-Ce, Mn-Ce and Mn-Zr Oxide Catalysts for CO Oxidation. Materials, 2022, 15, 7553.	1.3	5
48	New horizons of MBenes: highly active catalysts for the CO oxidation reaction. Nanoscale, 2023, 15, 483-489.	2.8	2
49	Regulation of metal-support interface of Ni/CeO2 catalyst and the performance of low temperature chemical looping dry reforming of methane. Journal of Fuel Chemistry and Technology, 2022, 50, 1458-1470.	0.9	14
50	In situ infrared absorption probing of plasma catalysis: vibrationally-excited species induced Marsâ€“van Krevelen type mechanism. Plasma Sources Science and Technology, 2022, 31, 124005.	1.3	1
51	The Formation of Mn-Ce-Zr Oxide Catalysts for CO and Propane Oxidation: The Role of Element Content Ratio. Catalysts, 2023, 13, 211.	1.6	5
52	Fabrication and catalytic properties of nanorod-shaped (Ptâ€“Pd)/CeO₂ composites. RSC Advances, 2023, 13, 2811-2819.	1.7	2
53	MOF-Derived CeO2 and CeZrOx Solid Solutions: Exploring Ce Reduction through FTIR and NEXAFS Spectroscopy. Nanomaterials, 2023, 13, 272.	1.9	3
54	Spatially confined (Au core)/CeO2â€“(Au nanoclusters) hierarchical nanostructures as highly active and stable catalysts for CO oxidation. Journal of Alloys and Compounds, 2023, 938, 168655.	2.8	1

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55	Atomically Incorporating Ni into Mesoporous CeO₂ Matrix via Synchronous Spray-Pyrolysis as Efficient Noble-Metal-Free Catalyst for Low-Temperature CO Oxidation. Inorganic Chemistry, 2023, 62, 782-791.	1.9	1
56	Enhancing the Polishing Efficiency of CeO₂ Abrasives on the SiO₂ Substrates by Improving the Ce³⁺ Concentration on Their Surface. ACS Applied Electronic Materials, 2023, 5, 526-536.	2.0	10
57	Abatement of CO and light alkanes on the heterostructured catalysts: Insights into the interfacial effect. Chemical Engineering Journal, 2023, 464, 142527.	6.6	2
58	Computational investigation of Î±-SiO₂surfaces as a support for Pd. Physical Chemistry Chemical Physics, 2023, 25, 6121-6130.	1.3	2
59	A systematic study on synthesis of CeO₂ nanoparticles by various routes. IOP Conference Series: Earth and Environmental Science, 2023, 1110, 012030.	0.2	3
60	Alumina-Supported Silver Catalyst for O3-Assisted Catalytic Abatement of CO: Effect of Ag Loading. Topics in Catalysis, 2023, 66, 1064-1070.	1.3	1
61	Comparison of the Reactivity of Platinum Cations and Clusters Supported on Ceria or Alumina in Carbon Monoxide Oxidation. ACS Catalysis, 2023, 13, 5358-5374.	5.5	3
62	Origin of Higher CO Oxidation Activity of Pt/Rutile than That of Pt/Anatase. Journal of Physical Chemistry C, 2023, 127, 7142-7150.	1.5	2
74	Recent advancements of CeO2-enabled liquid acid/base catalysis. Catalysis Science and Technology, 0, , .	2.1	0