Sanjaya D Senanayake

List of Publications by Year
in descending order

217 papers	14,128 citations	20797 60 h-index	24232 110 g-index
232 all docs	232 docs citations	232 times ranked	14138 citing authors

#	Article	IF	Citations
1	Highly active copper-ceria and copper-ceria-titania catalysts for methanol synthesis from CO ₂. Science, 2014, 345, 546-550.	6.0	1,114
2	Structural Changes and Thermal Stability of Charged LiNi_{<i>x</i>}Mn_{<i>y</i>}Co_{<i>z</i>}O₂ Cathode Materials Studied by Combined <i>In Situ</i> Time-Resolved XRD and Mass Spectroscopy. ACS Applied Materials & Interfaces, 2014, 6, 22594-22601.	4.0	731
3	A New Type of Strong Metalâ€“Support Interaction and the Production of H₂ through the Transformation of Water on Pt/CeO₂(111) and Pt/CeO_{<i>x</i>}/TiO₂(110) Catalysts. Journal of the American Chemical Society, 2012, 134, 8968-8974.	6.6	682
4	Hydrogenation of CO₂ to Methanol: Importance of Metalâ€“Oxide and Metalâ€“Carbide Interfaces in the Activation of CO₂. ACS Catalysis, 2015, 5, 6696-6706.	5.5	374
5	Ceria-based model catalysts: fundamental studies on the importance of the metalâ€“ceria interface in CO oxidation, the waterâ€“gas shift, CO₂hydrogenation, and methane and alcohol reforming. Chemical Society Reviews, 2017, 46, 1824-1841.	18.7	311
6	Effect of Chloride Anions on the Synthesis and Enhanced Catalytic Activity of Silver Nanocoral Electrodes for CO₂ Electroreduction. ACS Catalysis, 2015, 5, 5349-5356.	5.5	310
7	Importance of the Metalâ€“Oxide Interface in Catalysis: In Situ Studies of the Waterâ€“Gas Shift Reaction by Ambientâ€Pressure Xâ€ray Photoelectron Spectroscopy. Angewandte Chemie - International Edition, 2013, 52, 5101-5105.	7.2	280
8	Dry Reforming of Methane on a Highlyâ€Active Niâ€CeO₂ Catalyst: Effects of Metalâ€Support Interactions on Câˆ’H Bond Breaking. Angewandte Chemie - International Edition, 2016, 55, 7455-7459.	7.2	276
9	Waterâ€Gas Shift Reaction on a Highly Active Inverse CeO_{<i>x</i>}/Cu(111) Catalyst: Unique Role of Ceria Nanoparticles. Angewandte Chemie - International Edition, 2009, 48, 8047-8050.	7.2	262
10	Gold, Copper, and Platinum Nanoparticles Dispersed on CeO_{<i>x</i>}/TiO₂(110) Surfaces: High Water-Gas Shift Activity and the Nature of the Mixed-Metal Oxide at the Nanometer Level. Journal of the American Chemical Society, 2010, 132, 356-363.	6.6	247
11	Steam Reforming of Ethanol on Ni/CeO₂: Reaction Pathway and Interaction between Ni and the CeO₂ Support. ACS Catalysis, 2013, 3, 975-984.	5.5	210
12	In Situ and Theoretical Studies for the Dissociation of Water on an Active Ni/CeO₂ Catalyst: Importance of Strong Metalâ€“Support Interactions for the Cleavage of Oâ€“H Bonds. Angewandte Chemie - International Edition, 2015, 54, 3917-3921.	7.2	205
13	Low Pressure CO₂ Hydrogenation to Methanol over Gold Nanoparticles Activated on a CeO_{<i>x</i>}/TiO₂ Interface. Journal of the American Chemical Society, 2015, 137, 10104-10107.	6.6	200
14	Unique Properties of Ceria Nanoparticles Supported on Metals: Novel Inverse Ceria/Copper Catalysts for CO Oxidation and the Water-Gas Shift Reaction. Accounts of Chemical Research, 2013, 46, 1702-1711.	7.6	198
15	Water-promoted interfacial pathways in methane oxidation to methanol on a CeO ₂ -Cu ₂ O catalyst. Science, 2020, 368, 513-517.	6.0	182
16	A New Class of Metal-Cyclam-Based Zirconium Metalâ€“Organic Frameworks for CO₂ Adsorption and Chemical Fixation. Journal of the American Chemical Society, 2018, 140, 993-1003.	6.6	176
17	In Situ Probes of Capture and Decomposition of Chemical Warfare Agent Simulants by Zr-Based Metal Organic Frameworks. Journal of the American Chemical Society, 2017, 139, 599-602.	6.6	169
18	Hydrogenation of CO₂ to Methanol on CeO_{<i>x</i>}/Cu(111) and ZnO/Cu(111) Catalysts: Role of the Metalâ€“Oxide Interface and Importance of Ce³⁺ Sites. Journal of Physical Chemistry C, 2016, 120, 1778-1784.	1.5	156

#	ARTICLE	IF	CITATIONS
19	Highly active Ni/CeO2 catalyst for CO2 methanation: Preparation and characterization. Applied Catalysis B: Environmental, 2021, 282, 119581.	10.8	154
20	Room-Temperature Activation of Methane and Dry Re-forming with CO₂ on Ni-CeO₂(111) Surfaces: Effect of Ce³⁺ Sites and Metalâ€“Support Interactions on Câ€“H Bond Cleavage. ACS Catalysis, 2016, 6, 8184-8191.	5.5	146
21	In Situ Characterization of Cu/CeO₂ Nanocatalysts for CO₂ Hydrogenation: Morphological Effects of Nanostructured Ceria on the Catalytic Activity. Journal of Physical Chemistry C, 2018, 122, 12934-12943.	1.5	145
22	Morphological effects of the nanostructured ceria support on the activity and stability of CuO/CeO₂ catalysts for the water-gas shift reaction. Physical Chemistry Chemical Physics, 2014, 16, 17183-17195.	1.3	143
23	Hydrogenation of CO₂ to Methanol on a Au^{Î´+}â€“In₂O_{3â€“<i>x</i>} Catalyst. ACS Catalysis, 2020, 10, 11307-11317.	5.5	142
24	Direct Conversion of Methane to Methanol on Ni-Ceria Surfaces: Metalâ€“Support Interactions and Water-Enabled Catalytic Conversion by Site Blocking. Journal of the American Chemical Society, 2018, 140, 7681-7687.	6.6	141
25	Highly Active Ceria-Supported Ru Catalyst for the Dry Reforming of Methane: In Situ Identification of Ru^{Î´+}â€“Ce³⁺ Interactions for Enhanced Conversion. ACS Catalysis, 2019, 9, 3349-3359.	5.5	135
26	In situ studies of CeO2-supported Pt, Ru, and Ptâ€“Ru alloy catalysts for the waterâ€“gas shift reaction: Active phases and reaction intermediates. Journal of Catalysis, 2012, 291, 117-126.	3.1	133
27	Hydrogenation of CO₂ on ZnO/Cu(100) and ZnO/Cu(111) Catalysts: Role of Copper Structure and Metalâ€“Oxide Interface in Methanol Synthesis. Journal of Physical Chemistry B, 2018, 122, 794-800.	1.2	129
28	Unraveling the Dynamic Nature of a CuO/CeO₂ Catalyst for CO Oxidation in <i>Operando</i>: A Combined Study of XANES (Fluorescence) and DRIFTS. ACS Catalysis, 2014, 4, 1650-1661.	5.5	128
29	Low-Temperature Conversion of Methane to Methanol on CeO_{<i>x</i>}/Cu₂O Catalysts: Water Controlled Activation of the Câ€“H Bond. Journal of the American Chemical Society, 2016, 138, 13810-13813.	6.6	125
30	Inverse Oxide/Metal Catalysts in Fundamental Studies and Practical Applications: A Perspective of Recent Developments. Journal of Physical Chemistry Letters, 2016, 7, 2627-2639.	2.1	120
31	Inâ€…Situ Investigation of Methane Dry Reforming on Metal/Ceria(111) Surfaces: Metalâ€“Support Interactions and Câˆ’H Bond Activation at Low Temperature. Angewandte Chemie - International Edition, 2017, 56, 13041-13046.	7.2	120
32	Redox Pathways for HCOOH Decomposition over CeO₂ Surfaces. Journal of Physical Chemistry C, 2008, 112, 9744-9752.	1.5	111
33	Probing the reaction intermediates for the waterâ€“gas shift over inverse CeOx/Au(111) catalysts. Journal of Catalysis, 2010, 271, 392-400.	3.1	110
34	Waterâ€“Gas Shift and CO Methanation Reactions over Niâ€“CeO2(111) Catalysts. Topics in Catalysis, 2011, 54, 34-41.	1.3	109
35	High Activity of Ce_{1âˆ’<i>x</i>}Ni_{<i>x</i>}O_{2âˆ’<i>y</i>} for H₂ Production through Ethanol Steam Reforming: Tuning Catalytic Performance through Metalâ€“Oxide Interactions. Angewandte Chemie - International Edition, 2010, 49, 9680-9684.	7.2	108
36	Effects of Zr Doping into Ceria for the Dry Reforming of Methane over Ni/CeZrO₂ Catalysts: In Situ Studies with XRD, XAFS, and AP-XPS. ACS Catalysis, 2020, 10, 3274-3284.	5.5	107

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37	Dynamic structure of active sites in ceria-supported Pt catalysts for the water gas shift reaction. Nature Communications, 2021, 12, 914.	5.8	103
38	Correlation between metal-insulator transition characteristics and electronic structure changes in vanadium oxide thin films. Physical Review B, 2008, 77, .	1.1	97
39	Interaction of CO with OH on Au(111): HCOO, CO₃, and HOCO as Key Intermediates in the Water-Gas Shift Reaction. Journal of Physical Chemistry C, 2009, 113, 19536-19544.	1.5	93
40	Adsorption and Reaction of C₁â^'C₃ Alcohols over CeO_{<i>X</i>}(111) Thin Films. Journal of Physical Chemistry C, 2010, 114, 17112-17119.	1.5	91
41	The Activation of Gold and the Waterâ€"Gas Shift Reaction: Insights from Studies with Model Catalysts. Accounts of Chemical Research, 2014, 47, 773-782.	7.6	87
42	A Phenomenological Study of the Metalâ€"Oxide Interface: The Role of Catalysis in Hydrogen Production from Renewable Resources. ChemSusChem, 2008, 1, 905-910.	3.6	85
43	Ambient pressure XPS and IRRAS investigation of ethanol steam reforming on Niâ€"CeO₂(111) catalysts: an in situ study of Câ€"C and Oâ€"H bond scission. Physical Chemistry Chemical Physics, 2016, 18, 16621-16628.	1.3	83
44	Striving Toward Noble-Metal-Free Photocatalytic Water Splitting: The Hydrogenated-Grapheneâ€"TiO₂ Prototype. Chemistry of Materials, 2015, 27, 6282-6296.	3.2	81
45	In situ/operando studies for the production of hydrogen through the water-gas shift on metal oxide catalysts. Physical Chemistry Chemical Physics, 2013, 15, 12004.	1.3	80
46	In Situ Elucidation of the Active State of Coâ€"CeO_{<i>x</i>} Catalysts in the Dry Reforming of Methane: The Important Role of the Reducible Oxide Support and Interactions with Cobalt. ACS Catalysis, 2018, 8, 3550-3560.	5.5	80
47	X-ray absorption spectroscopy of vanadium dioxide thin films across the phase-transition boundary. Physical Review B, 2007, 75, .	1.1	79
48	Fundamental Studies of Well-Defined Surfaces of Mixed-Metal Oxides: Special Properties of MO_x/TiO₂(110) {M = V, Ru, Ce, or W}. Chemical Reviews, 2013, 113, 4373-4390.	23.0	77
49	Catalytic conversion of biomass pyrolysis vapors into hydrocarbon fuel precursors. Green Chemistry, 2015, 17, 2362-2368.	4.6	76
50	<i>In Situ</i> Imaging of Cu₂O under Reducing Conditions: Formation of Metallic Fronts by Mass Transfer. Journal of the American Chemical Society, 2013, 135, 16781-16784.	6.6	74
51	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
52	Visible Light-Driven H₂ Production over Highly Dispersed Ruthenia on Rutile TiO₂ Nanorods. ACS Catalysis, 2016, 6, 407-417.	5.5	71
53	Local Structure and Electronic State of Atomically Dispersed Pt Supported on Nanosized CeO₂. ACS Catalysis, 2019, 9, 8738-8748.	5.5	70
54	Dimethyl methylphosphonate decomposition on fully oxidized and partially reduced ceria thin films. Surface Science, 2010, 604, 574-587.	0.8	69

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55	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
56	Enhanced Stability of Pt-Cu Single-Atom Alloy Catalysts: In Situ Characterization of the Pt/Cu(111) Surface in an Ambient Pressure of CO. Journal of Physical Chemistry C, 2018, 122, 4488-4495.	1.5	68
57	The reaction of water on polycrystalline UO2: Pathways to surface and bulk oxidation. Journal of Nuclear Materials, 2005, 342, 179-187.	1.3	67
58	Low Temperature Activation of Methane on Metal-Oxides and Complex Interfaces: Insights from Surface Science. Accounts of Chemical Research, 2020, 53, 1488-1497.	7.6	66
59	Unravelling the Structure of Magnusâ€™ Pink Salt. Journal of the American Chemical Society, 2014, 136, 1333-1351.	6.6	65
60	Why Substitution Enhances the Reactivity of LiFePO₄. Chemistry of Materials, 2013, 25, 85-89.	3.2	63
61	The reactions of water vapour on the surfaces of stoichiometric and reduced uranium dioxide: A high resolution XPS study. Catalysis Today, 2007, 120, 151-157.	2.2	62
62	Direct Epoxidation of Propylene over Stabilized Cu⁺ Surface Sites on Titaniumâ€Modified Cu₂O. Angewandte Chemie - International Edition, 2015, 54, 11946-11951.	7.2	62
63	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.	10.8	61
64	Reversing sintering effect of Ni particles on Î³-Mo2N via strong metal support interaction. Nature Communications, 2021, 12, 6978.	5.8	58
65	Electronic Metalâ€"Support Interactions and the Production of Hydrogen Through the Water-Gas Shift Reaction and Ethanol Steam Reforming: Fundamental Studies with Well-Defined Model Catalysts. Topics in Catalysis, 2013, 56, 1488-1498.	1.3	57
66	Elucidating the roles of metallic Ni and oxygen vacancies in CO2 hydrogenation over Ni/CeO2 using isotope exchange and in situ measurements. Applied Catalysis B: Environmental, 2019, 245, 360-366.	10.8	57
67	Interfacial Active Sites for CO2 Assisted Selective Cleavage of Câ€"C/Câ€"H Bonds in Ethane. CheM, 2020, 6, 2703-2716.	5.8	57
68	Three-dimensional ruthenium-doped TiO₂ sea urchins for enhanced visible-light-responsive H₂ production. Physical Chemistry Chemical Physics, 2016, 18, 15972-15979.	1.3	56
69	Water reactions over stoichiometric and reduced UO2(111) single crystal surfaces. Surface Science, 2004, 563, 135-144.	0.8	55
70	Growth and Morphology of Ceria on Ruthenium (0001). Journal of Physical Chemistry C, 2013, 117, 221-232.	1.5	52
71	Hierarchical Heterogeneity at the CeO_{<i>x</i>}â€"TiO₂ Interface: Electronic and Geometric Structural Influence on the Photocatalytic Activity of Oxide on Oxide Nanostructures. Journal of Physical Chemistry C, 2015, 119, 2669-2679.	1.5	52
72	Stabilization of Catalytically Active Cu⁺ Surface Sites on Titaniumâ€"Copper Mixedâ€Oxide Films. Angewandte Chemie - International Edition, 2014, 53, 5336-5340.	7.2	51

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73	Methanol steam reforming over Ni-CeO2 model and powder catalysts: Pathways to high stability and selectivity for H2/CO2 production. Catalysis Today, 2018, 311, 74-80.	2.2	51
74	Insights into the methanol synthesis mechanism via CO2 hydrogenation over Cu-ZnO-ZrO2 catalysts: Effects of surfactant/Cu-Zn-Zr molar ratio. Journal of CO2 Utilization, 2020, 41, 101215.	3.3	51
75	Effect of Ni particle size on the production of renewable methane from CO2 over Ni/CeO2 catalyst. Journal of Energy Chemistry, 2021, 61, 602-611.	7.1	51
76	Exploring Metalâ€“Support Interactions To Immobilize Subnanometer Co Clusters on Î³â€“Mo₂N: A Highly Selective and Stable Catalyst for CO₂ Activation. ACS Catalysis, 2019, 9, 9087-9097.	5.5	50
77	High selectivity of CO₂ hydrogenation to CO by controlling the valence state of nickel using perovskite. Chemical Communications, 2018, 54, 7354-7357.	2.2	49
78	Determining the Behavior of RuO_{<i>x</i>} Nanoparticles in Mixedâ€Metal Oxides: Structural and Catalytic Properties of RuO₂/TiO₂(110) Surfaces. Angewandte Chemie - International Edition, 2011, 50, 10198-10202.	7.2	48
79	Water-Gas Shift Reaction on Niâ€“Wâ€“Ce Catalysts: Catalytic Activity and Structural Characterization. Journal of Physical Chemistry C, 2014, 118, 2528-2538.	1.5	48
80	Uniform 2 nm gold nanoparticles supported on iron oxides as active catalysts for CO oxidation reaction: structureâ€“activity relationship. Nanoscale, 2015, 7, 4920-4928.	2.8	47
81	Superior performance of Niâ€“Wâ€“Ce mixed-metal oxide catalysts for ethanol steam reforming: Synergistic effects of W- and Ni-dopants. Journal of Catalysis, 2015, 321, 90-99.	3.1	47
82	Adsorption and Reaction of Acetone over CeOx(111) Thin Films. Journal of Physical Chemistry C, 2009, 113, 6208-6214.	1.5	46
83	Reaction of Formic Acid over Amorphous Manganese Oxide Catalytic Systems: An In Situ Study. Journal of Physical Chemistry C, 2010, 114, 20000-20006.	1.5	46
84	Modification of CO₂ Reduction Activity of Nanostructured Silver Electrocatalysts by Surface Halide Anions. ACS Applied Energy Materials, 2019, 2, 102-109.	2.5	46
85	The influence of nano-architectured CeO supports in RhPd/CeO2 for the catalytic ethanol steam reforming reaction. Catalysis Today, 2015, 253, 99-105.	2.2	44
86	Infrared reflectance and photoemission spectroscopy studies across the phase transition boundary in thin film vanadium dioxide. Journal of Physics Condensed Matter, 2008, 20, 465204.	0.7	43
87	Unraveling the Dynamic Nanoscale Reducibility (Ce⁴⁺ â†’ Ce³⁺) of CeO<i>_x</i>â€“Ru in Hydrogen Activation. Advanced Materials Interfaces, 2015, 2, 1500314.	1.9	42
88	Non-equilibrium oxidation states of zirconium during early stages of metal oxidation. Applied Physics Letters, 2015, 106, .	1.5	42
89	Interfaces in heterogeneous catalytic reactions: Ambient pressure XPS as a tool to unravel surface chemistry. Journal of Electron Spectroscopy and Related Phenomena, 2017, 221, 28-43.	0.8	41
90	Selective Methane Oxidation to Methanol on ZnO/Cu₂O/Cu(111) Catalysts: Multiple Site-Dependent Behaviors. Journal of the American Chemical Society, 2021, 143, 19018-19032.	6.6	41

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91	Utilizing bimetallic catalysts to mitigate coke formation in dry reforming of methane. Journal of Energy Chemistry, 2022, 68, 124-142.	7.1	41
92	Deciphering Dynamic Structural and Mechanistic Complexity in Cu/CeO₂/ZSM-5 Catalysts for the Reverse Water-Gas Shift Reaction. ACS Catalysis, 2020, 10, 10216-10228.	5.5	39
93	Reaction Pathway for Coke-Free Methane Steam Reforming on a Ni/CeO₂ Catalyst: Active Sites and the Role of Metalâ€“Support Interactions. ACS Catalysis, 2021, 11, 8327-8337.	5.5	39
94	Metalâ€“Support Interactions and C1 Chemistry: Transforming Pt-CeO₂ into a Highly Active and Stable Catalyst for the Conversion of Carbon Dioxide and Methane. ACS Catalysis, 2021, 11, 1613-1623.	5.5	39
95	Probing Surface Oxidation of Reduced Uranium Dioxide Thin Film Using Synchrotron Radiation. Journal of Physical Chemistry C, 2007, 111, 7963-7970.	1.5	38
96	Nanopattering in CeO_{<i>x</i>}/Cu(111): A New Type of Surface Reconstruction and Enhancement of Catalytic Activity. Journal of Physical Chemistry Letters, 2012, 3, 839-843.	2.1	38
97	The effect of Feâ€“Rh alloying on CO hydrogenation to C2+ oxygenates. Journal of Catalysis, 2015, 329, 87-94.	3.1	38
98	Elucidating the interaction between Ni and CeOx in ethanol steam reforming catalysts: A perspective of recent studies over model and powder systems. Applied Catalysis B: Environmental, 2016, 197, 184-197.	10.8	38
99	Waterâ€“Gas Shift Reaction on K/Cu(111) and Cu/K/TiO₂(110) Surfaces: Alkali Promotion of Water Dissociation and Production of H₂. ACS Catalysis, 2019, 9, 10751-10760.	5.5	38
100	Mechanistic Insights of Ethanol Steam Reforming over Niâ€“CeO_{<i>x</i>}(111): The Importance of Hydroxyl Groups for Suppressing Coke Formation. Journal of Physical Chemistry C, 2015, 119, 18248-18256.	1.5	37
101	The Effect of the Surface Composition of Ru-Pt Bimetallic Catalysts for Methanol Oxidation. Electrochimica Acta, 2016, 195, 106-111.	2.6	37
102	The reaction of carbon monoxide with palladium supported on cerium oxide thin films. Surface Science, 2007, 601, 3215-3223.	0.8	36
103	Enhancing ORR Performance of Bimetallic PdAg Electrocatalysts by Designing Interactions between Pd and Ag. ACS Applied Energy Materials, 2020, 3, 2342-2349.	2.5	36
104	Dry Reforming of Methane on a Highlyâ€Active Niâ€CeO₂ Catalyst: Effects of Metalâ€Support Interactions on Câˆ'H Bond Breaking. Angewandte Chemie, 2016, 128, 7581-7585.	1.6	35
105	Assisted deprotonation of formic acid on Cu(111) and self-assembly of 1D chains. Physical Chemistry Chemical Physics, 2013, 15, 12291.	1.3	34
106	Ethanol Photoreaction on RuO_{<i>x</i>}/Ru-Modified TiO₂(110). Journal of Physical Chemistry C, 2013, 117, 11149-11158.	1.5	34
107	Thermal stability in the blended lithium manganese oxide â€“ Lithium nickel cobalt manganese oxide cathode materials: An in situ time-resolved X-Ray diffraction and mass spectroscopy study. Journal of Power Sources, 2015, 277, 193-197.	4.0	33
108	Soft x-ray photoemission of clean and sulfur-covered polar ZnO surfaces: A view of the stabilization of polar oxide surfaces. Physical Review B, 2008, 78, .	1.1	32

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109	Inverse Catalysts for CO Oxidation: Enhanced Oxideâ€“Metal Interactions in MgO/Au(111), CeO₂/Au(111), and TiO₂/Au(111). ACS Sustainable Chemistry and Engineering, 2017, 5, 10783-10791.	3.2	32
110	Probing adsorption sites for CO on ceria. Physical Chemistry Chemical Physics, 2013, 15, 15856.	1.3	30
111	Au and Pt nanoparticle supported catalysts tailored for H2 production: From models to powder catalysts. Applied Catalysis A: General, 2016, 518, 18-47.	2.2	30
112	Selective Catalytic Chemistry at Rhodium(II) Nodes in Bimetallic Metalâ€“Organic Frameworks. Angewandte Chemie - International Edition, 2019, 58, 16533-16537.	7.2	29
113	Effect of operating parameters on H2/CO2 conversion to methanol over Cu-Zn oxide supported on ZrO2 polymorph catalysts: Characterization and kinetics. Chemical Engineering Journal, 2022, 427, 130947.	6.6	29
114	Solid-state NMR study of 15N labelled polyaniline upon reaction with DPPH. Polymer, 2006, 47, 1166-1171.	1.8	28
115	New In-Situ and Operando Facilities for Catalysis Science at NSLS-II: The Deployment of Real-Time, Chemical, and Structure-Sensitive X-ray Probes. Synchrotron Radiation News, 2017, 30, 30-37.	0.2	28
116	<i>In Situ</i> Characterization of Mesoporous Co/CeO₂ Catalysts for the High-Temperature Water-Gas Shift. Journal of Physical Chemistry C, 2018, 122, 8998-9008.	1.5	28
117	Conversion of CO₂ on a highly active and stable Cu/FeO_x/CeO₂ catalyst: tuning catalytic performance by oxide-oxide interactions. Catalysis Science and Technology, 2019, 9, 3735-3742.	2.1	28
118	The behavior of inverse oxide/metal catalysts: CO oxidation and water-gas shift reactions over ZnO/Cu(111) surfaces. Surface Science, 2019, 681, 116-121.	0.8	27
119	Breaking Simple Scaling Relations through Metalâ€“Oxide Interactions: Understanding Room-Temperature Activation of Methane on M/CeO₂ (M = Pt, Ni, or Co) Interfaces. Journal of Physical Chemistry Letters, 2020, 11, 9131-9137.	2.1	27
120	The reactions of formaldehyde over the surfaces of uranium oxides.A comparative study between polycrystalline and single crystal materials. Catalysis Today, 2003, 85, 311-320.	2.2	26
121	Special Chemical Properties of RuO_{<i>x</i>} Nanowires in RuO_{<i>x</i>}/TiO₂(110): Dissociation of Water and Hydrogen Production. Journal of Physical Chemistry C, 2012, 116, 4767-4773.	1.5	25
122	Cu supported on mesoporous ceria: water gas shift activity at low Cu loadings through metalâ€“support interactions. Physical Chemistry Chemical Physics, 2017, 19, 17708-17717.	1.3	25
123	Growth mode and oxidation state analysis of individual cerium oxide islands on Ru(0001). Ultramicroscopy, 2013, 130, 87-93.	0.8	24
124	Interfacial Cu+ promoted surface reactivity: Carbon monoxide oxidation reaction over polycrystalline copperâ€“titania catalysts. Surface Science, 2016, 652, 206-212.	0.8	24
125	Atomic-Level Structural Dynamics of Polyoxoniobates during DMMP Decomposition. Scientific Reports, 2017, 7, 773.	1.6	24
126	Reduction of Nano-Cu₂O: Crystallite Size Dependent and the Effect of Nano-Ceria Support. Journal of Physical Chemistry C, 2015, 119, 17667-17672.	1.5	23

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127	Enhanced, robust light-driven H₂ generation by gallium-doped titania nanoparticles. Physical Chemistry Chemical Physics, 2018, 20, 2104-2112.	1.3	23
128	<i>In Situ</i> Formation of FeRh Nanoalloys for Oxygenate Synthesis. ACS Catalysis, 2018, 8, 7279-7286.	5.5	23
129	Correlated Multimodal Approach Reveals Key Details of Nerve-Agent Decomposition by Single-Site Zr-Based Polyoxometalates. Journal of Physical Chemistry Letters, 2019, 10, 2295-2299.	2.1	23
130	Studies of CO₂ hydrogenation over cobalt/ceria catalysts with <i>in situ</i> characterization: the effect of cobalt loading and metalâ€“support interactions on the catalytic activity. Catalysis Science and Technology, 2020, 10, 6468-6482.	2.1	23
131	Pseudocapacitive Hausmannite Nanoparticles with (101) Facets: Synthesis, Characterization, and Chargeâ€Transfer Mechanism. ChemSusChem, 2013, 6, 1983-1992.	3.6	22
132	Origin of chemical contrast in low-energy electron reflectivity of correlated multivalent oxides: The case of ceria. Physical Review B, 2013, 88, .	1.1	22
133	The Unique Properties of the Oxide-Metal Interface: Reaction of Ethanol on an Inverse Model CeO_{<i>x</i>}â€“Au(111) Catalyst. Journal of Physical Chemistry C, 2014, 118, 25057-25064.	1.5	22
134	Growth and characterization of epitaxially stabilized ceria(001) nanostructures on Ru(0001). Nanoscale, 2016, 8, 10849-10856.	2.8	22
135	High Activity of Au/K/TiO₂(110) for CO Oxidation: Alkali-Metal-Enhanced Dispersion of Au and Bonding of CO. Journal of Physical Chemistry C, 2018, 122, 4324-4330.	1.5	22
136	Growth, Structure, and Catalytic Properties of ZnO<i>_x</i> Grown on CuO<i>_x</i>/Cu(111) Surfaces. Journal of Physical Chemistry C, 2018, 122, 26554-26562.	1.5	22
137	Capture and Decomposition of the Nerve Agent Simulant, DMCP, Using the Zeolitic Imidazolate Framework (ZIF-8). ACS Applied Materials & Interfaces, 2020, 12, 58326-58338.	4.0	22
138	Coupling of Carbon Monoxide Molecules over Oxygen-Defected UO2(111) Single Crystal and Thin Film Surfaces. Langmuir, 2005, 21, 11141-11145.	1.6	21
139	Multimodal Characterization of Materials and Decontamination Processes for Chemical Warfare Protection. ACS Applied Materials & Interfaces, 2020, 12, 14721-14738.	4.0	21
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