Krishna Gunugunuri

List of Publications by Year
in descending order

53 papers	2,189 citations	186265 28 h-index	243625 44 g-index
53 all docs	53 docs citations	53 times ranked	2780 citing authors

#	Article	IF	Citations
1	Effect of Cu substitution on the structure and reactivity of CuxCo3-xO4 spinel catalysts for direct NOx decomposition. Catalysis Today, 2021, 360, 204-212.	4.4	14
2	Contrasting Effects of Potassium Addition on M3O4 (M = Co, Fe, and Mn) Oxides during Direct NO Decomposition Catalysis. Catalysts, 2020, 10, 561.	3.5	13
3	CeO2â€“MxOy (M = Fe, Co, Ni, and Cu)-Based Oxides for Direct NO Decomposition. Journal of Physical Chemistry C, 2019, 123, 28695-28706.	3.1	21
4	A high-performance oxygen evolution catalyst in neutral-pH for sunlight-driven CO2 reduction. Nature Communications, 2019, 10, 4081.	12.8	57
5	Monolayer supported CuO_x/Co₃O₄ as an active and selective low temperature NO_x decomposition catalyst. Catalysis Science and Technology, 2019, 9, 1132-1140.	4.1	10
6	â€œPdO vs. PtOâ€â€"The Influence of PGM Oxide Promotion of Co3O4 Spinel on Direct NO Decomposition Activity. Catalysts, 2019, 9, 62.	3.5	13
7	Monolayer Detection of Supported Fe and Co Oxides on Ceria To Establish Structureâ€“Activity Relationships for Reduction of NO by CO. Journal of Physical Chemistry C, 2017, 121, 8435-8443.	3.1	18
8	Understanding the chemical state of palladium during the direct NO decomposition â€“ influence of pretreatment environment and reaction temperature. RSC Advances, 2017, 7, 19645-19655.	3.6	45
9	Impact of Interfacial Roughness on the Sorption Properties of Nanocast Polymers. Macromolecules, 2016, 49, 2663-2670.	4.8	1
10	Evaluation of Rh/Ce x Ti 1â^'x O 2 catalysts for synthesis of oxygenates from syngas using XPS and TPR techniques. Catalysis Today, 2016, 263, 75-83.	4.4	38
11	Low-Temperature WGS Reaction. , 2015, , 47-100.		4
12	Introduction About WGS Reaction. , 2015, , 1-20.		10
13	High-Temperature WGS Reaction. , 2015, , 21-45.		3
14	WGS Reaction over Co-Mo Sulphided Catalysts. , 2015, , 101-126.		2
15	Ultra High Temperature WGS Reaction. , 2015, , 127-136.		0
16	WGS Reaction in Membrane Reactors. , 2015, , 137-168.		0
17	Homogeneous WGS Reaction. , 2015, , 169-205.		2
18	Photo-Catalytic Water-Gas Shift Reaction. , 2015, , 207-223.		2

#	Article	IF	Citations
19	Mechanism and Kinetics of the WGS Reaction. , 2015, , 225-261.		5
20	Sulfur-Tolerant Mn-Ce-Ti Sorbents for Elemental Mercury Removal from Flue Gas: Mechanistic Investigation by XPS. Journal of Physical Chemistry C, 2015, 119, 8634-8644.	3.1	42
21	Preparation, characterization and lysozyme immobilization studies on siliceous mesocellular foams: Effect of precursor chemistry on pore size, wall thickness and interpore spacing. Microporous and Mesoporous Materials, 2014, 190, 215-226.	4.4	20
22	Influence of the Synthesis Method on the Structure and CO₂ Adsorption Properties of Ca/Zr Sorbents. Energy & Fuels, 2014, 28, 3292-3299.	5.1	41
23	Influence of Foreign Metal Dopants on the Durability and Performance of Zr/Ca Sorbents during High Temperature CO₂Capture. Separation Science and Technology, 2014, 49, 47-54.	2.5	22
24	Simultaneous Removal of Elemental Mercury and NO from Flue Gas Using CeO₂ Modified MnO_{<i>x</i>}/TiO₂ Materials. Energy & Fuels, 2013, 27, 4832-4839.	5.1	68
25	Zeolite Membrane Reactor for High-Temperature Water-Gas Shift Reaction: Effects of Membrane Properties and Operating Conditions. Energy & Fuels, 2013, 27, 4471-4480.	5.1	70
26	A rapid microwave-assisted solution combustion synthesis of CuO promoted CeO2â€“MxOy (M=Zr, La, Pr) Tj ETQq0 0 0 rgBT /Overlock	4.3	61
27	Effect of Pressure on High-Temperature Water Gas Shift Reaction in Microporous Zeolite Membrane Reactor. Industrial & Engineering Chemistry Research, 2012, 51, 1364-1375.	3.7	60
28	Single Nozzle Flame-Made Highly Durable Metal Doped Ca-Based Sorbents for CO₂ Capture at High Temperature. Energy & Fuels, 2012, 26, 3103-3109.	5.1	72
29	Unexpected Behavior of Copper in Modified Ferrites during High Temperature WGS Reactionâ€"Aspects of Fe³⁺ â†" Fe²⁺ Redox Chemistry from MÃ¶ssbauer and XPS Studies. Journal of Physical Chemistry C, 2012, 116, 11019-11031.	3.1	131
30	Long-term WGS stability of Fe/Ce and Fe/Ce/Cr catalysts at high and low steam to CO ratiosâ€"XPS and MÃ¶ssbauer spectroscopic study. Applied Catalysis A: General, 2012, 415-416, 101-110.	4.3	36
31	A Facile Microwave-Assisted Solution Combustion Synthesis of Highly Stable Magnesium Oxide for Multicomponent Mannich Reaction. Current Catalysis, 2012, 1, 164-170.	0.5	1
32	Effect of Zirconia Doping on the Structure and Stability of CaO-Based Sorbents for CO₂ Capture during Extended Operating Cycles. Journal of Physical Chemistry C, 2011, 115, 24804-24812.	3.1	156
33	Cr- and Ce-Doped Ferrite Catalysts for the High Temperature Waterâ^'Gas Shift Reaction: TPR and Mossbauer Spectroscopic Study. Journal of Physical Chemistry C, 2011, 115, 920-930.	3.1	66
34	Ceria-Modified Manganese Oxide/Titania Materials for Removal of Elemental and Oxidized Mercury from Flue Gas. Journal of Physical Chemistry C, 2011, 115, 24300-24309.	3.1	95
35	High Temperature Water Gas Shift Reaction over Nanocrystalline Copper Codoped-Modified Ferrites. Journal of Physical Chemistry C, 2011, 115, 7586-7595.	3.1	70
36	Sulfur tolerant metal doped Fe/Ce catalysts for high temperature WGS reaction at low steam to CO ratios â€" XPS and MÃ¶ssbauer spectroscopic study. Journal of Catalysis, 2011, 282, 258-269.	6.2	80

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37	Effect of Copper as a Dopant on the Water Gas Shift Activity of Fe/Ce and Fe/Cr Modified Ferrites. Catalysis Letters, 2011, 141, 27-32.	2.6	24
38	Modified zeolite membrane reactor for high temperature water gas shift reaction. Journal of Membrane Science, 2010, 354, 114-122.	8.2	77
39	Structural characterization and dehydration activity of CeO2â€"SiO2 and CeO2â€"ZrO2 mixed oxides prepared by a rapid microwave-assisted combustion synthesis method. Journal of Molecular Catalysis A, 2010, 319, 52-57.	4.8	41
40	Reforming of methane with carbon dioxide over Pt/ZrO2/SiO2 catalystsâ€"Effect of zirconia to silica ratio. Applied Catalysis A: General, 2010, 389, 92-100.	4.3	54
41	Single step synthesis of nanosized CeO2â€"MxOy mixed oxides (MxOyÂ=ÂSiO2, TiO2, ZrO2, and Al2O3) by microwave induced solution combustion synthesis: characterization and CO oxidation. Journal of Materials Science, 2009, 44, 2743-2751.	3.7	45
42	Characterization and photocatalytic activity of TiO2â€"M x O y (M x O y Â=ÂSiO2, Al2O3, and ZrO2) mixed oxides synthesized by microwave-induced solution combustion technique. Journal of Materials Science, 2009, 44, 4874-4882.	3.7	29
43	Microwave-assisted Synthesis and Structural Characterization of Nanosized Ce0.5Zr0.5O2 for CO Oxidation. Catalysis Letters, 2009, 130, 227-234.	2.6	31
44	Controlled Hydrogenation of Acetophenone Over Pt/CeO2â€"MO x (MÂ=ÂSi, Ti, Al, and Zr) Catalysts. Catalysis Letters, 2009, 131, 328-336.	2.6	20
45	A Rapid Microwave-Induced Solution Combustion Synthesis of Ceria-Based Mixed Oxides for Catalytic Applications. Catalysis Surveys From Asia, 2009, 13, 237-255.	2.6	20
46	Influence of alumina and titania on the structure and catalytic properties of sulfated zirconia: Beckmann rearrangement. Journal of Molecular Catalysis A, 2009, 306, 62-68.	4.8	44
47	Synthesis of Nanosized Ceria-Zirconia Solid Solutions by a Rapid Microwave-Assisted Combustion Method. The Open Physical Chemistry Journal, 2009, 3, 24-29.	0.4	23
48	Structural Characterization and Oxidehydrogenation Activity of CeO₂/Al₂O₃ and V₂O₅/CeO₂/Al₂O₃ Catalysts. Journal of Physical Chemistry C, 2007, 111, 18751-18758.	3.1	104
49	Selective tert-butylation of phenol over molybdate- and tungstate-promoted zirconia catalysts. Applied Catalysis A: General, 2007, 332, 183-191.	4.3	22
50	Silica supported transition metal-based bimetallic catalysts for vapour phase selective hydrogenation of furfuraldehyde. Journal of Molecular Catalysis A, 2007, 265, 276-282.	4.8	102
51	Synthesis of monophasic Ce0.5Zr0.5O2 solid solution by microwave-induced combustion method. Journal of Materials Science, 2007, 42, 3557-3563.	3.7	17
52	Characterization and catalytic activity of V2O5/Al2O3-TiO2 for selective oxidation of 4-methylanisole. Journal of Molecular Catalysis A, 2006, 253, 44-51.	4.8	99
53	An easy-to-use heterogeneous promoted zirconia catalyst for Knoevenagel condensation in liquid phase under solvent-free conditions. Journal of Molecular Catalysis A, 2006, 258, 302-307.	4.8	88