Samir Bensaid

List of Publications by Year
in descending order

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88 papers	4,001 citations	94381 37 h-index	123376 61 g-index
88 all docs	88 docs citations	88 times ranked	4426 citing authors

#	Article	IF	Citations
1	A review on the catalytic combustion of soot in Diesel particulate filters for automotive applications: From powder catalysts to structured reactors. Applied Catalysis A: General, 2016, 509, 75-96.	2.2	270
2	Nanostructured ceria-based catalysts for soot combustion: Investigations on the surface sensitivity. Applied Catalysis B: Environmental, 2015, 165, 742-751.	10.8	234
3	Towards Artificial Leaves for Solar Hydrogen and Fuels from Carbon Dioxide. ChemSusChem, 2012, 5, 500-521.	3.6	203
4	Green-synthesized W- and Mo-doped BiVO4 oriented along the {0 4 0} facet with enhanced activity for the sun-driven water oxidation. Applied Catalysis B: Environmental, 2016, 180, 630-636.	10.8	156
5	Investigations into nanostructured ceriaâ€“zirconia catalysts for soot combustion. Applied Catalysis B: Environmental, 2016, 180, 271-282.	10.8	134
6	Synthesis, Characterization, and Activity Pattern of Niâ€“Al Hydrotalcite Catalysts in CO₂ Methanation. Industrial & Engineering Chemistry Research, 2016, 55, 8299-8308.	1.8	133
7	Catalytic Performance of Î³-Al₂O₃â€“ZrO₂â€“TiO₂â€“CeO₂ Composite Oxide Supported Ni-Based Catalysts for CO₂ Methanation. Industrial & Engineering Chemistry Research, 2016, 55, 4451-4460.	1.8	117
8	Cerium-copper oxides prepared by solution combustion synthesis for total oxidation reactions: From powder catalysts to structured reactors. Applied Catalysis B: Environmental, 2017, 205, 455-468.	10.8	104
9	Numerical simulation of soot filtration and combustion within diesel particulate filters. Chemical Engineering Science, 2010, 65, 357-363.	1.9	95
10	Nanostructured ceria-praseodymia catalysts for diesel soot combustion. Applied Catalysis B: Environmental, 2016, 197, 125-137.	10.8	95
11	Techno-economic modelling of a Power-to-Gas system based on SOEC electrolysis and CO2 methanation in a RES-based electric grid. Chemical Engineering Journal, 2019, 377, 120233.	6.6	93
12	Nanostructured ceria-zirconia catalysts for CO oxidation: Study on surface properties and reactivity. Applied Catalysis B: Environmental, 2016, 197, 35-46.	10.8	92
13	In situ Raman analyses of the soot oxidation reaction over nanostructured ceria-based catalysts. Scientific Reports, 2019, 9, 3875.	1.6	85
14	Photocatalytic Degradation of Ethylene Emitted by Fruits with TiO₂ Nanoparticles. Industrial & Engineering Chemistry Research, 2011, 50, 2536-2543.	1.8	78
15	Power-to-Gas through High Temperature Electrolysis and Carbon Dioxide Methanation: Reactor Design and Process Modeling. Industrial & Engineering Chemistry Research, 2018, 57, 4007-4018.	1.8	77
16	Pure and Fe-doped CeO2 nanoparticles obtained by microwave assisted combustion synthesis: Physico-chemical properties ruling their catalytic activity towards CO oxidation and soot combustion. Applied Catalysis B: Environmental, 2017, 211, 31-45.	10.8	73
17	CuO nanoparticles supported by ceria for NO x -assisted soot oxidation: insight into catalytic activity and sintering. Applied Catalysis B: Environmental, 2017, 216, 41-58.	10.8	72
18	CO2 methanation over Ni/Al hydrotalcite-derived catalyst: Experimental characterization and kinetic study. Fuel, 2018, 225, 230-242.	3.4	69

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19	Ceria-supported small Pt and Pt 3 Sn nanoparticles for NO x -assisted soot oxidation. Applied Catalysis B: Environmental, 2017, 209, 295-310.	10.8	67
20	Nanostructured equimolar ceria-praseodymia for NOx-assisted soot oxidation: Insight into Pr dominance over Pt nanoparticles and metalâ€“support interaction. Applied Catalysis B: Environmental, 2018, 226, 147-161.	10.8	66
21	CeO2-based catalysts with engineered morphologies for soot oxidation to enhance soot-catalyst contact. Nanoscale Research Letters, 2014, 9, 254.	3.1	65
22	Elucidation of important parameters of BiVO4 responsible for photo-catalytic O2 evolution and insights about the rate of the catalytic process. Chemical Engineering Journal, 2014, 245, 124-132.	6.6	63
23	Aqueous phase reforming process for the valorization of wastewater streams: Application to different industrial scenarios. Catalysis Today, 2022, 387, 224-236.	2.2	59
24	Photo-catalytic activity of BiVO4 thin-film electrodes for solar-driven water splitting. Applied Catalysis A: General, 2015, 504, 266-271.	2.2	58
25	Catalysis in Diesel engine NO_xaftertreatment: a review. Journal of Lithic Studies, 2015, 1, 155-173.	0.1	57
26	Study on the CO Oxidation over Ceria-Based Nanocatalysts. Nanoscale Research Letters, 2016, 11, 165.	3.1	57
27	How to make sustainable CO2 conversion to Methanol: Thermocatalytic versus electrocatalytic technology. Chemical Engineering Journal, 2021, 417, 127973.	6.6	57
28	Contact dynamics for a solidâ€“solid reaction mediated by gas-phase oxygen: Study on the soot oxidation over ceria-based catalysts. Applied Catalysis B: Environmental, 2016, 199, 96-107.	10.8	55
29	A critical review on catalyst design for aqueous phase reforming. International Journal of Hydrogen Energy, 2022, 47, 151-180.	3.8	54
30	Process design accompanying life cycle management and risk analysis as a decision support tool for sustainable biodiesel production. Green Chemistry, 2013, 15, 463-477.	4.6	52
31	Influence on the performance and emissions of an automotive Euro 5 diesel engine fueled with F30 from Farnesane. Fuel, 2014, 138, 134-142.	3.4	48
32	Ceriaâ€based nanomaterials as catalysts for CO oxidation and soot combustion: Effect of Zrâ€Pr doping and structural properties on the catalytic activity. AICHE Journal, 2017, 63, 216-225.	1.8	44
33	Direct liquefaction of ligno-cellulosic residues for liquid fuel production. Fuel, 2012, 94, 324-332.	3.4	43
34	CO and Soot Oxidation over Ce-Zr-Pr Oxide Catalysts. Nanoscale Research Letters, 2016, 11, 278.	3.1	43
35	Novel Mnâ€“Cu-Containing CeO2 Nanopolyhedra for the Oxidation of CO and Diesel Soot: Effect of Dopants on the Nanostructure and Catalytic Activity. Catalysis Letters, 2018, 148, 298-311.	1.4	42
36	Influence of the MgCo₂O₄ Preparation Method on N₂O Catalytic Decomposition. Industrial & Engineering Chemistry Research, 2011, 50, 2622-2627.	1.8	41

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37	Detailed Investigation on Soot Particle Size Distribution during DPF Regeneration, using Standard and Bio-Diesel Fuels. Industrial & Engineering Chemistry Research, 2011, 50, 2650-2658.	1.8	40
38	Aqueous phase reforming of the residual waters derived from lignin-rich hydrothermal liquefaction: investigation of representative organic compounds and actual biorefinery streams. Catalysis Today, 2020, 345, 237-250.	2.2	39
39	High efficiency Thermo-Electric power generator. International Journal of Hydrogen Energy, 2012, 37, 1385-1398.	3.8	37
40	Catalytic Oxidation of CO and Soot over Ce-Zr-Pr Mixed Oxides Synthesized in a Multi-Inlet Vortex Reactor: Effect of Structural Defects on the Catalytic Activity. Nanoscale Research Letters, 2016, 11, 494.	3.1	37
41	Development of a Photosynthetic Microbial Electrochemical Cell (PMEC) Reactor Coupled with Dark Fermentation of Organic Wastes: Medium Term Perspectives. Energies, 2015, 8, 399-429.	1.6	33
42	Nanostructured Ceria-Based Materials: Effect of the Hydrothermal Synthesis Conditions on the Structural Properties and Catalytic Activity. Catalysts, 2017, 7, 174.	1.6	32
43	Aqueous phase reforming of sugar-based biorefinery streams: from the simplicity of model compounds to the complexity of real feeds. Catalysis Today, 2020, 345, 267-279.	2.2	28
44	Heterogeneous mechanism of NOx-assisted soot oxidation in the passive regeneration of a bench-scale diesel particulate filter catalyzed with nanostructured equimolar ceria-praseodymia. Applied Catalysis A: General, 2019, 583, 117136.	2.2	25
45	Composite Cu-SSZ-13 and CeO2-SnO2 for enhanced NH3-SCR resistance towards hydrocarbon deactivation. Applied Catalysis B: Environmental, 2021, 282, 119536.	10.8	25
46	CO₂ Conversion to Alcohols over Cu/ZnO Catalysts: Prospective Synergies between Electrocatalytic and Thermocatalytic Routes. ACS Applied Materials & Interfaces, 2022, 14, 517-530.	4.0	25
47	Towards practical application of lanthanum ferrite catalysts for NO reduction with H2. Chemical Engineering Journal, 2009, 154, 348-354.	6.6	24
48	Assessing the solar potential of roofs in ValparaÃso (Chile). Energy and Buildings, 2014, 69, 62-73.	3.1	24
49	Aqueous phase reforming of pilot-scale Fischer-Tropsch water effluent for sustainable hydrogen production. Catalysis Today, 2021, 367, 239-247.	2.2	24
50	Towards the sustainable hydrogen production by catalytic conversion of C-laden biorefinery aqueous streams. Chemical Engineering Journal, 2019, 377, 120677.	6.6	22
51	Dynamic modelling of methanation reactors during start-up and regulation in intermittent power-to-gas applications. Renewable Energy, 2021, 170, 1040-1051.	4.3	22
52	A new method for studying activity and reaction kinetics of photocatalytic water oxidation systems using a bubbling reactor. Chemical Engineering Journal, 2014, 238, 17-26.	6.6	21
53	Co-doped LaAlO3 perovskite oxide for NOx-assisted soot oxidation. Applied Catalysis A: General, 2020, 589, 117304.	2.2	21
54	Aqueous phase reforming of lignin-rich hydrothermal liquefaction by-products: A study on catalyst deactivation. Catalysis Today, 2021, 365, 206-213.	2.2	21

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55	Enzymatic Hydrolysis of Lignocellulosic Biomasses via CFD and Experiments. Industrial & Engineering Chemistry Research, 2012, 51, 7518-7525.	1.8	20
56	Appraisal of a De-NO_x System Based on H₂ for Light-Duty Diesel Engine Vehicles. Industrial & Engineering Chemistry Research, 2010, 49, 10323-10333.	1.8	19
57	Interesterification of rapeseed oil catalysed by a low surface area tin (II) oxide heterogeneous catalyst. Fuel Processing Technology, 2018, 177, 336-344.	3.7	19
58	Process Modeling of an Innovative Power to LNG Demonstration Plant. Energy & Fuels, 2018, 32, 8868-8879.	2.5	19
59	New insights on the defect sites evolution during CO oxidation over doped ceria nanocatalysts probed by in situ Raman spectroscopy. Applied Catalysis A: General, 2020, 596, 117517.	2.2	19
60	Simultaneous improvement of ammonia mediated NOx SCR and soot oxidation for enhanced SCR-on-Filter application. Applied Catalysis A: General, 2020, 596, 117538.	2.2	19
61	Power and Hydrogen Co-generation from Biogas. Energy & Fuels, 2010, 24, 4743-4747.	2.5	18
62	Nanostructured Equimolar Ceria-Praseodymia for Total Oxidations in Low-O2 Conditions. Catalysts, 2020, 10, 165.	1.6	17
63	Valorization of alginate for the production of hydrogen via catalytic aqueous phase reforming. Catalysis Today, 2018, 304, 153-164.	2.2	16
64	SO₂ deactivation mechanism of NO oxidation and regeneration of the LaCoO₃ perovskite. Catalysis Science and Technology, 2020, 10, 2193-2202.	2.1	16
65	Hazard assessment of W and Mo sulphide nanomaterials for automotive use. Journal of Nanoparticle Research, 2014, 16, 1.	0.8	15
66	Effect of surface area on the rate of photocatalytic water oxidation as promoted by different manganese oxides. Chemical Engineering Journal, 2015, 278, 36-45.	6.6	15
67	Nanostructured ceria-based catalysts doped with La and Nd: How acid-base sites and redox properties determine the oxidation mechanisms. Catalysis Today, 2022, 390-391, 117-134.	2.2	14
68	Numerical Simulation of Singleâ€Bubble Dynamics in Highâ€Viscosity Ionic Liquids Using the Levelâ€Set Method. Chemical Engineering and Technology, 2015, 38, 473-481.	0.9	13
69	A simple model for a complex system: Kinetics of water oxidation with the [Ru(bpy) 3] 2+ /S 2 O 8 2â^' photosystem as catalyzed by Mn 2 O 3 under different illumination conditions. Chemical Engineering Journal, 2017, 311, 143-152.	6.6	13
70	Insights on a Methanation Catalyst Aging Process: Aging Characterization and Kinetic Study. Catalysts, 2020, 10, 283.	1.6	13
71	Supercritical fluid technology in biodiesel production. Green Processing and Synthesis, 2013, 2, .	1.3	10
72	Novel Mnâ€“Cu-Containing CeO2 Nanopolyhedra for the Oxidation of CO and Diesel Soot (PartÂII): Effect of Oxygen Concentration on the Catalytic Activity. Catalysis Letters, 2019, 149, 107-118.	1.4	10

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73	Catalytic Abatement of Volatile Organic Compounds and Soot over Manganese Oxide Catalysts. Materials, 2021, 14, 4534.	1.3	9
74	Coupling hydrothermal liquefaction and aqueous phase reforming for integrated production of biocrude and renewable H₂. AICHE Journal, 2023, 69, .	1.8	9
75	Simulation of NO_x and soot abatement with Cuâ€Cha and Feâ€ZSM5 catalysts. AICHE Journal, 2017, 63, 238-248.	1.8	7
76	On-Filter Integration of Soot Oxidation and Selective Catalytic Reduction of NOx with NH3 by Selective Two Component Catalysts. Catalysis Letters, 2020, 150, 573-585.	1.4	7
77	Wide range temperature stability of palladium on ceria-praseodymia catalysts for complete methane oxidation. Catalysis Today, 2022, 390-391, 185-197.	2.2	7
78	Investigation on the conversion of rapeseed oil via supercritical ethanol condition in the presence of a heterogeneous catalyst. Green Processing and Synthesis, 2017, 6, 91-101.	1.3	6
79	Impact of Power-to-Gas on distribution systems with large renewable energy penetration. Energy Conversion and Management: X, 2020, 7, 100053.	0.9	5
80	Supercritical fluid technology in biodiesel production: pilot plant design and operation. Green Processing and Synthesis, 2013, 2, .	1.3	4
81	Cerium-Copper Oxides Synthesized in a Multi-Inlet Vortex Reactor as Effective Nanocatalysts for CO and Ethene Oxidation Reactions. Catalysts, 2022, 12, 364.	1.6	4
82	Nano-Sized Additive Synthesis for Lubricant Oils and Compatibility Tests with After-Treatment Catalysts. , 0, , .		2
83	NO and C Oxidation with Pt Recovered From Spent Catalytic Converters. Waste and Biomass Valorization, 2010, 1, 235-239.	1.8	1
84	Improved Soot Combustion in DPF Catalyzed by Ceria Nanofibers: The Importance of Soot-catalyst Contact. , 2013, , .		1
85	Catalytic Activity of Nanostructured Ceria-Based Materials Prepared by Different Synthesis Conditions. , 2017, , .		1
86	Advances in Cleaning Mobile Emissions: NO -Assisted Soot Oxidation in Light-Duty Diesel Engine Vehicle Application. Studies in Surface Science and Catalysis, 2019, , 329-352.	1.5	1
87	Catalytic Oxidation of Soot and Volatile Organic Compounds over Cu and Fe Doped Manganese Oxides Prepared via Sol-Gel Synthesis. , 0, , .		1
88	Ceria-zirconia Nanocatalysts for Diesel Soot Combustion. , 0, , .		0