Nunzio Russo

List of Publications by Year
in descending order

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110 papers	5,905 citations	57758 44 h-index	76900 74 g-index
111 all docs	111 docs citations	111 times ranked	6338 citing authors

#	Article	IF	Citations
1	Mesoporous manganese oxides prepared by solution combustion synthesis as catalysts for the total oxidation of VOCs. Applied Catalysis B: Environmental, 2015, 163, 277-287.	20.2	415
2	Syngas production from electrochemical reduction of CO₂: current status and prospective implementation. Green Chemistry, 2017, 19, 2326-2346.	9.0	281
3	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.	4.3	270
4	The role of suprafacial oxygen in some perovskites for the catalytic combustion of soot. Journal of Catalysis, 2003, 217, 367-375.	6.2	255
5	Nanostructured ceria-based catalysts for soot combustion: Investigations on the surface sensitivity. Applied Catalysis B: Environmental, 2015, 165, 742-751.	20.2	234
6	Recent Advances in the BiVO4 Photocatalyst for Sun-Driven Water Oxidation: Top-Performing Photoanodes and Scale-Up Challenges. Catalysts, 2017, 7, 13.	3.5	202
7	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.	20.2	156
8	N2O catalytic decomposition over various spinel-type oxides. Catalysis Today, 2007, 119, 228-232.	4.4	151
9	BiVO4 as photocatalyst for solar fuels production through water splitting: A short review. Applied Catalysis A: General, 2015, 504, 158-170.	4.3	140
10	Investigations into nanostructured ceriaâ€“zirconia catalysts for soot combustion. Applied Catalysis B: Environmental, 2016, 180, 271-282.	20.2	134
11	Photocatalytic abatement of VOCs by novel optimized TiO2 nanoparticles. Chemical Engineering Journal, 2011, 166, 138-149.	12.7	116
12	Lanthanum cobaltite catalysts for diesel soot combustion. Applied Catalysis B: Environmental, 2008, 83, 85-95.	20.2	105
13	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.	20.2	104
14	Nanostructured ceria-praseodymia catalysts for diesel soot combustion. Applied Catalysis B: Environmental, 2016, 197, 125-137.	20.2	95
15	Evaluation of the charge transfer kinetics of spin-coated BiVO 4 thin films for sun-driven water photoelectrolysis. Applied Catalysis B: Environmental, 2016, 190, 66-74.	20.2	94
16	Nanostructured ceria-zirconia catalysts for CO oxidation: Study on surface properties and reactivity. Applied Catalysis B: Environmental, 2016, 197, 35-46.	20.2	92
17	Novel mesoporous silica supported ZnO adsorbents for the desulphurization of biogas at low temperatures. Chemical Engineering Journal, 2012, 188, 222-232.	12.7	91
18	In situ Raman analyses of the soot oxidation reaction over nanostructured ceria-based catalysts. Scientific Reports, 2019, 9, 3875.	3.3	85

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19	Novel nanostructured-TiO2 materials for the photocatalytic reduction of CO2 greenhouse gas to hydrocarbons and syngas. Fuel, 2015, 149, 55-65.	6.4	80
20	Photocatalytic Degradation of Ethylene Emitted by Fruits with TiO₂ Nanoparticles. Industrial & Engineering Chemistry Research, 2011, 50, 2536-2543.	3.7	78
21	Synthesis and catalytic properties of CeO2 and Co/CeO2 nanofibres for diesel soot combustion. Catalysis Today, 2012, 184, 279-287.	4.4	73
22	Green-Synthesized BiVO₄ Oriented along {040} Facets for Visible-Light-Driven Ethylene Degradation. Industrial & Engineering Chemistry Research, 2014, 53, 2640-2646.	3.7	73
23	Evaluation of the Parameters Affecting the Visible-Light-Induced Photocatalytic Activity of Monoclinic BiVO₄ for Water Oxidation. Industrial & Engineering Chemistry Research, 2013, 52, 17414-17418.	3.7	72
24	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.	20.2	72
25	Laâ€“Liâ€“Cr perovskite catalysts for diesel particulate combustion. Catalysis Today, 2006, 114, 31-39.	4.4	70
26	N2O decomposition by mesoporous silica supported Rh catalysts. Journal of Hazardous Materials, 2012, 211-212, 255-265.	12.4	67
27	Ceria-supported small Pt and Pt 3 Sn nanoparticles for NO x -assisted soot oxidation. Applied Catalysis B: Environmental, 2017, 209, 295-310.	20.2	67
28	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.	20.2	66
29	CeO2-based catalysts with engineered morphologies for soot oxidation to enhance soot-catalyst contact. Nanoscale Research Letters, 2014, 9, 254.	5.7	65
30	High catalytic activity of SCS-synthesized ceria towards diesel soot combustion. Applied Catalysis B: Environmental, 2006, 69, 85-92.	20.2	63
31	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.	12.7	63
32	Effect of active species mobility on soot-combustion over Cs-V catalysts. AICHE Journal, 2003, 49, 2173-2180.	3.6	59
33	Photo-catalytic activity of BiVO4 thin-film electrodes for solar-driven water splitting. Applied Catalysis A: General, 2015, 504, 266-271.	4.3	58
34	Catalysis in Diesel engine NO_xaftertreatment: a review. Journal of Lithic Studies, 2015, 1, 155-173.	0.5	57
35	Study on the CO Oxidation over Ceria-Based Nanocatalysts. Nanoscale Research Letters, 2016, 11, 165.	5.7	57
36	How to make sustainable CO2 conversion to Methanol: Thermocatalytic versus electrocatalytic technology. Chemical Engineering Journal, 2021, 417, 127973.	12.7	57

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37	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.	20.2	55
38	Low Temperature NH₃ Selective Catalytic Reduction of NO_x over Substituted MnCr₂O₄ Spinel-Oxide Catalysts. Industrial & Engineering Chemistry Research, 2011, 50, 6668-6672.	3.7	52
39	Mesoporous silica supported Rh catalysts for high concentration N2O decomposition. Applied Catalysis B: Environmental, 2015, 165, 158-168.	20.2	50
40	The effect of crystal facets and induced porosity on the performance of monoclinic BiVO4 for the enhanced visible-light driven photocatalytic abatement of methylene blue. Journal of Environmental Chemical Engineering, 2019, 7, 103265.	6.7	49
41	Removal of NOx and diesel soot over catalytic traps based on spinel-type oxides. Powder Technology, 2008, 180, 74-78.	4.2	48
42	Insights on the role of Î²-Bi2O3/Bi5O7NO3 heterostructures synthesized by a scalable solid-state method for the sunlight-driven photocatalytic degradation of dyes. Catalysis Today, 2019, 321-322, 135-145.	4.4	48
43	Studies on the activity and deactivation of novel optimized TiO2 nanoparticles for the abatement of VOCs. Chemical Engineering Journal, 2011, 175, 330-340.	12.7	46
44	A novel ZnO-based adsorbent for biogas purification in H2 production systems. Chemical Engineering Journal, 2011, 176-177, 272-279.	12.7	45
45	Optimization of BiVO4 photoelectrodes made by electrodeposition for sun-driven water oxidation. International Journal of Hydrogen Energy, 2020, 45, 605-618.	7.1	45
46	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.	3.6	44
47	CO and Soot Oxidation over Ce-Zr-Pr Oxide Catalysts. Nanoscale Research Letters, 2016, 11, 278.	5.7	43
48	Nanostructured TiO2/KIT-6 catalysts for improved photocatalytic reduction of CO2 to tunable energy products. Applied Catalysis B: Environmental, 2015, 170-171, 53-65.	20.2	42
49	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.	2.6	42
50	NO SCR reduction by hydrogen generated in line on perovskite-type catalysts for automotive diesel exhaust gas treatment. Chemical Engineering Science, 2010, 65, 120-127.	3.8	41
51	Influence of the MgCo₂O₄ Preparation Method on N₂O Catalytic Decomposition. Industrial & Engineering Chemistry Research, 2011, 50, 2622-2627.	3.7	41
52	A multifunctional filter for the simultaneous removal of fly-ash and NOx from incinerator flue gases. Chemical Engineering Science, 2004, 59, 5329-5336.	3.8	40
53	Detailed Investigation on Soot Particle Size Distribution during DPF Regeneration, using Standard and Bio-Diesel Fuels. Industrial & Engineering Chemistry Research, 2011, 50, 2650-2658.	3.7	40
54	Diesel particulate abatement via catalytic traps. Catalysis Today, 2000, 60, 33-41.	4.4	39

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55	Synthesis and characterization of Ce and Er doped ZrO2 nanoparticles as solar light driven photocatalysts. Journal of Alloys and Compounds, 2019, 775, 896-904.	5.5	39
56	Development of modified KIT-6 and SBA-15-spherical supported Rh catalysts for N2O abatement: From powder to monolith supported catalysts. Chemical Engineering Journal, 2014, 238, 198-205.	12.7	38
57	Single BiFeO3 and mixed BiFeO3/Fe2O3/Bi2Fe4O9 ferromagnetic photocatalysts for solar light driven water oxidation and dye pollutants degradation. Journal of Industrial and Engineering Chemistry, 2018, 63, 437-448.	5.8	38
58	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.	5.7	37
59	A screening study on the activation energy of vanadateâ€based catalysts for diesel soot combustion. Catalysis Letters, 2000, 69, 207-215.	2.6	36
60	Chemically induced porosity on BiVO₄ films produced by double magnetron sputtering to enhance the photo-electrochemical response. Physical Chemistry Chemical Physics, 2015, 17, 17821-17827.	2.8	36
61	Environmental issues regarding CO2 and recent strategies for alternative fuels through photocatalytic reduction with titania-based materials. Journal of Environmental Chemical Engineering, 2016, 4, 3934-3953.	6.7	35
62	Novel Ti-KIT-6 material for the photocatalytic reduction of carbon dioxide to methane. Catalysis Communications, 2013, 36, 58-62.	3.3	33
63	Nanostructured Ceria-Based Materials: Effect of the Hydrothermal Synthesis Conditions on the Structural Properties and Catalytic Activity. Catalysts, 2017, 7, 174.	3.5	32
64	CO₂valorisation towards alcohols by Cu-based electrocatalysts: challenges and perspectives. Green Chemistry, 2021, 23, 1896-1920.	9.0	32
65	Synthesis, Characterization, and Thiophene Hydrodesulfurization Activity of Novel Macroporous and Mesomacroporous Carbon. Industrial & Engineering Chemistry Research, 2011, 50, 2530-2535.	3.7	27
66	Insights Into the Sunlight-Driven Water Oxidation by Ce and Er-Doped ZrO2. Frontiers in Chemistry, 2018, 6, 368.	3.6	26
67	New optimized mesoporous silica incorporated isolated Ti materials towards improved photocatalytic reduction of carbon dioxide to renewable fuels. Chemical Engineering Journal, 2015, 278, 279-292.	12.7	25
68	VOCs photocatalytic abatement using nanostructured titania-silica catalysts. Journal of Environmental Chemical Engineering, 2017, 5, 3100-3107.	6.7	25
69	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.	4.3	25
70	CO₂ Conversion to Alcohols over Cu/ZnO Catalysts: Prospective Synergies between Electrocatalytic and Thermocatalytic Routes. ACS Applied Materials & Interfaces, 2022, 14, 517-530.	8.0	25
71	Towards practical application of lanthanum ferrite catalysts for NO reduction with H2. Chemical Engineering Journal, 2009, 154, 348-354.	12.7	24
72	Modified KIT-6 and SBA-15-spherical supported metal catalysts for N2O decomposition. Journal of Environmental Chemical Engineering, 2013, 1, 164-174.	6.7	21

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73	Ceriumâ€“Copperâ€“Manganese Oxides Synthesized via Solution Combustion Synthesis (SCS) for Total Oxidation of VOCs. Catalysis Letters, 2020, 150, 1821-1840.	2.6	21
74	Appraisal of a De-NO_x System Based on H₂ for Light-Duty Diesel Engine Vehicles. Industrial & Engineering Chemistry Research, 2010, 49, 10323-10333.	3.7	19
75	Power and Hydrogen Co-generation from Biogas. Energy & Fuels, 2010, 24, 4743-4747.	5.1	18
76	Wet Air Oxidation of Industrial Lignin Case Study: Influence of the Dissolution Pretreatment and Perovskite-type Oxides. Waste and Biomass Valorization, 2018, 9, 2165-2179.	3.4	17
77	Nanostructured Equimolar Ceria-Praseodymia for Total Oxidations in Low-O2 Conditions. Catalysts, 2020, 10, 165.	3.5	17
78	Kinetic Study of Diesel Soot Combustion with Perovskite Catalysts. Industrial & Engineering Chemistry Research, 2012, 51, 7584-7589.	3.7	16
79	New nanostructured silica incorporated with isolated Ti material for the photocatalytic conversion of CO2 to fuels. Nanoscale Research Letters, 2014, 9, 158.	5.7	14
80	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.	4.4	14
81	Metal Exchanged ZSM-5 Zeolite Based Catalysts for Direct Decomposition of N2O. Catalysis Letters, 2009, 132, 248-252.	2.6	13
82	Particle Number, Size and Mass Emissions of Different Biodiesel Blends Versus ULSD from a Small Displacement Automotive Diesel Engine. , 0, , .		13
83	Photocatalytic Abatement of Volatile Organic Compounds by TiO2 Nanoparticles Doped with Either Phosphorous or Zirconium. Materials, 2019, 12, 2121.	2.9	13
84	Particle Number and Size Distribution from a Small Displacement Automotive Diesel Engine during DPF Regeneration. SAE International Journal of Fuels and Lubricants, 0, 3, 404-413.	0.2	12
85	Core-substituted naphthalenediimides anchored on BiVO₄ for visible light-driven water splitting. Green Chemistry, 2017, 19, 2448-2462.	9.0	11
86	Visible Light-Driven Catalysts for Water Oxidation: Towards Solar Fuel Biorefineries. Studies in Surface Science and Catalysis, 2019, 178, 65-84.	1.5	11
87	Investigation of Gas Diffusion Electrode Systems for the Electrochemical CO2 Conversion. Catalysts, 2021, 11, 482.	3.5	11
88	Particle Number and Size Emissions from a Small Displacement Automotive Diesel Engine: Bioderived vs Conventional Fossil Fuels. Industrial & Engineering Chemistry Research, 2012, 51, 7565-7572.	3.7	10
89	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.	2.6	10
90	Insights on the surface chemistry of BiVO4 photoelectrodes and the role of Al overlayers on its water oxidation activity. Applied Catalysis A: General, 2020, 605, 117796.	4.3	10

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91	Catalytic Abatement of Volatile Organic Compounds and Soot over Manganese Oxide Catalysts. Materials, 2021, 14, 4534.	2.9	9
92	Csâ€“V Catalysts for the Combustion of Diesel Particulate. Topics in Catalysis, 2004, 30/31, 251-255.	2.8	8
93	Catalytic wet air oxidation of d-glucose by perovskite type oxides (Fe, Co, Mn) for the synthesis of value-added chemicals. Carbohydrate Research, 2022, 514, 108529.	2.3	8
94	A new concept for a self-cleaning household oven. Chemical Engineering Journal, 2011, 176-177, 253-259.	12.7	7
95	NO_x Abatement by HC-Assisted SCR over Combustion Synthesized-Supported Ag Catalysts. Industrial & Engineering Chemistry Research, 2012, 51, 7467-7474.	3.7	7
96	Catalytic Wet Air Oxidation of Maleic Acid Over Lanthanum-Based Perovskites Synthesized by Solution Combustion Synthesis. Waste and Biomass Valorization, 2014, 5, 857-863.	3.4	7
97	Structured catalytic reactor for soot abatement in a reducing atmosphere. Fuel Processing Technology, 2017, 167, 462-473.	7.2	6
98	Photo/electrocatalytic hydrogen exploitation for CO2 reduction toward solar fuels production. , 2019, , 365-418.		6
99	Mobile and non-mobile catalysts for diesel-particulate combustion: A kinetic study. Korean Journal of Chemical Engineering, 2003, 20, 451-456.	2.7	4
100	Cerium-Copper Oxides Synthesized in a Multi-Inlet Vortex Reactor as Effective Nanocatalysts for CO and Ethene Oxidation Reactions. Catalysts, 2022, 12, 364.	3.5	4
101	Nano-Sized Additive Synthesis for Lubricant Oils and Compatibility Tests with After-Treatment Catalysts. , 0, , .		2
102	Novel Approches in Oxidative Catalysis for Diesel Particulate Abatement. Advances in Science and Technology, 2006, 45, 2083-2088.	0.2	1
103	NO and C Oxidation with Pt Recovered From Spent Catalytic Converters. Waste and Biomass Valorization, 2010, 1, 235-239.	3.4	1
104	Improved Soot Combustion in DPF Catalyzed by Ceria Nanofibers: The Importance of Soot-catalyst Contact. , 2013, , .		1
105	Catalytic Activity of Nanostructured Ceria-Based Materials Prepared by Different Synthesis Conditions. , 2017, , .		1
106	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
107	Catalytic Oxidation of Soot and Volatile Organic Compounds over Cu and Fe Doped Manganese Oxides Prepared via Sol-Gel Synthesis. , 0, , .		1
108	X-Ray Spectroscopy Tools for the Characterization of Nanoparticles. , 2012, , .		0

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109	Ceria-zirconia Nanocatalysts for Diesel Soot Combustion. , 0, , .		0
110	Phosphorous-Based Titania Nanoparticles for the Photocatalytic Abatement of VOCs. , 2021, , 189-208.		0