Nunzio Russo

List of Publications by Citations

106 papers	4,605 citations	40 h-index	65 g-index
111 ext. papers	5,323 ext. citations	8.4 avg, IF	5.99 L-index

#	Paper	IF	Citations
106	Mesoporous manganese oxides prepared by solution combustion synthesis as catalysts for the total oxidation of VOCs. *Applied Catalysis B: Environmental*, **2015**, 163, 277-287	21.8	319
105	The role of suprafacial oxygen in some perovskites for the catalytic combustion of soot. *Journal of Catalysis*, **2003**, 217, 367-375	7.3	225
104	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	5.1	209
103	Syngas production from electrochemical reduction of CO2: current status and prospective implementation. *Green Chemistry*, **2017**, 19, 2326-2346	10	190
102	Nanostructured ceria-based catalysts for soot combustion: Investigations on the surface sensitivity. *Applied Catalysis B: Environmental*, **2015**, 165, 742-751	21.8	186
101	Recent Advances in the BiVO4 Photocatalyst for Sun-Driven Water Oxidation: Top-Performing Photoanodes and Scale-Up Challenges. *Catalysts*, **2017**, 7, 13	4	158
100	N2O catalytic decomposition over various spinel-type oxides. *Catalysis Today*, **2007**, 119, 228-232	5.3	133
99	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	21.8	128
98	Investigations into nanostructured ceria–zirconia catalysts for soot combustion. *Applied Catalysis B: Environmental*, **2016**, 180, 271-282	21.8	114
97	BiVO4 as photocatalyst for solar fuels production through water splitting: A short review. *Applied Catalysis A: General*, **2015**, 504, 158-170	5.1	113
96	Photocatalytic abatement of VOCs by novel optimized TiO2 nanoparticles. *Chemical Engineering Journal*, **2011**, 166, 138-149	14.7	97
95	Lanthanum cobaltite catalysts for diesel soot combustion. *Applied Catalysis B: Environmental*, **2008**, 83, 85-95	21.8	96
94	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	21.8	82
93	Novel mesoporous silica supported ZnO adsorbents for the desulphurization of biogas at low temperatures. *Chemical Engineering Journal*, **2012**, 188, 222-232	14.7	79
92	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	21.8	77
91	Nanostructured ceria-praseodymia catalysts for diesel soot combustion. *Applied Catalysis B: Environmental*, **2016**, 197, 125-137	21.8	77
90	Nanostructured ceria-zirconia catalysts for CO oxidation: Study on surface properties and reactivity. *Applied Catalysis B: Environmental*, **2016**, 197, 35-46	21.8	72

89	Synthesis and catalytic properties of CeO2 and Co/CeO2 nanofibres for diesel soot combustion. *Catalysis Today*, **2012**, 184, 279-287	5.3	65
88	La□iCr perovskite catalysts for diesel particulate combustion. *Catalysis Today*, **2006**, 114, 31-39	5.3	63
87	Green-Synthesized BiVO4 Oriented along {040} Facets for Visible-Light-Driven Ethylene Degradation. *Industrial & Engineering Chemistry Research*, **2014**, 53, 2640-2646	3.9	61
86	Photocatalytic Degradation of Ethylene Emitted by Fruits with TiO2 Nanoparticles. *Industrial & Engineering Chemistry Research*, **2011**, 50, 2536-2543	3.9	60
85	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	3.9	59
84	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	21.8	58
83	Novel nanostructured-TiO2 materials for the photocatalytic reduction of CO2 greenhouse gas to hydrocarbons and syngas. *Fuel*, **2015**, 149, 55-65	7.1	58
82	N2O decomposition by mesoporous silica supported Rh catalysts. *Journal of Hazardous Materials*, **2012**, 211-212, 255-65	12.8	57
81	CeO2-based catalysts with engineered morphologies for soot oxidation to enhance soot-catalyst contact. *Nanoscale Research Letters*, **2014**, 9, 254	5	54
80	Effect of active species mobility on soot-combustion over Cs-V catalysts. *AICHE Journal*, **2003**, 49, 2173-2180	3.9	53
79	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	14.7	52
78	High catalytic activity of SCS-synthesized ceria towards diesel soot combustion. *Applied Catalysis B: Environmental*, **2006**, 69, 85-92	21.8	51
77	Catalysis in Diesel engine NOx aftertreatment: a review **2015**, 1, 155-173		50
76	Ceria-supported small Pt and Pt3Sn nanoparticles for NOx-assisted soot oxidation. *Applied Catalysis B: Environmental*, **2017**, 209, 295-310	21.8	48
75	In situ Raman analyses of the soot oxidation reaction over nanostructured ceria-based catalysts. *Scientific Reports*, **2019**, 9, 3875	4.9	48
74	Photo-catalytic activity of BiVO4 thin-film electrodes for solar-driven water splitting. *Applied Catalysis A: General*, **2015**, 504, 266-271	5.1	48
73	Study on the CO Oxidation over Ceria-Based Nanocatalysts. *Nanoscale Research Letters*, **2016**, 11, 165	5	47
72	Low Temperature NH3 Selective Catalytic Reduction of NOx over Substituted MnCr2O4 Spinel-Oxide Catalysts. *Industrial & Engineering Chemistry Research*, **2011**, 50, 6668-6672	3.9	46

71	Mesoporous silica supported Rh catalysts for high concentration N2O decomposition. *Applied Catalysis B: Environmental*, **2015**, 165, 158-168	21.8	42
70	Removal of NOx and diesel soot over catalytic traps based on spinel-type oxides. *Powder Technology*, **2008**, 180, 74-78	5.2	42
69	Nanostructured equimolar ceria-praseodymia for NOx-assisted soot oxidation: Insight into Pr dominance over Pt nanoparticles and metal□support interaction. *Applied Catalysis B: Environmental*, **2018**, 226, 147-161	21.8	41
68	Contact dynamics for a solid□solid reaction mediated by gas-phase oxygen: Study on the soot oxidation over ceria-based catalysts. *Applied Catalysis B: Environmental*, **2016**, 199, 96-107	21.8	41
67	Insights on the role of #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	5.3	41
66	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	4.4	38
65	A novel ZnO-based adsorbent for biogas purification in H2 production systems. *Chemical Engineering Journal*, **2011**, 176-177, 272-279	14.7	37
64	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	14.7	36
63	Ceria-based nanomaterials as catalysts for CO oxidation and soot combustion: Effect of Zr-Pr doping and structural properties on the catalytic activity. *AICHE Journal*, **2017**, 63, 216-225	3.6	36
62	Nanostructured TiO2/KIT-6 catalysts for improved photocatalytic reduction of CO2 to tunable energy products. *Applied Catalysis B: Environmental*, **2015**, 170-171, 53-65	21.8	36
61	Studies on the activity and deactivation of novel optimized TiO2 nanoparticles for the abatement of VOCs. *Chemical Engineering Journal*, **2011**, 175, 330-340	14.7	36
60	A multifunctional filter for the simultaneous removal of fly-ash and NOx from incinerator flue gases. *Chemical Engineering Science*, **2004**, 59, 5329-5336	4.4	34
59	A screening study on the activation energy of vanadate-based catalysts for diesel soot combustion. *Catalysis Letters*, **2000**, 69, 207-215	2.8	34
58	Novel Mn□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	2.8	33
57	Detailed Investigation on Soot Particle Size Distribution during DPF Regeneration, using Standard and Bio-Diesel Fuels. *Industrial & Engineering Chemistry Research*, **2011**, 50, 2650-2658	3.9	32
56	Diesel particulate abatement via catalytic traps. *Catalysis Today*, **2000**, 60, 33-41	5.3	32
55	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	6.8	30
54	Novel Ti-KIT-6 material for the photocatalytic reduction of carbon dioxide to methane. *Catalysis Communications*, **2013**, 36, 58-62	3.2	29

53	Influence of the MgCo2O4 Preparation Method on N2O Catalytic Decomposition. *Industrial & Engineering Chemistry Research*, **2011**, 50, 2622-2627	3.9	29
52	Nanostructured Ceria-Based Materials: Effect of the Hydrothermal Synthesis Conditions on the Structural Properties and Catalytic Activity. *Catalysts*, **2017**, 7, 174	4	28
51	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	28
50	Chemically induced porosity on BiVO4 films produced by double magnetron sputtering to enhance the photo-electrochemical response. *Physical Chemistry Chemical Physics*, **2015**, 17, 17821-7	3.6	27
49	Optimization of BiVO4 photoelectrodes made by electrodeposition for sun-driven water oxidation. *International Journal of Hydrogen Energy*, **2020**, 45, 605-618	6.7	27
48	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	6.3	26
47	CO and Soot Oxidation over Ce-Zr-Pr Oxide Catalysts. *Nanoscale Research Letters*, **2016**, 11, 278	5	25
46	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	6.8	22
45	Synthesis, Characterization, and Thiophene Hydrodesulfurization Activity of Novel Macroporous and Mesomacroporous Carbon. *Industrial & Engineering Chemistry Research*, **2011**, 50, 2530-2535	3.9	22
44	Towards practical application of lanthanum ferrite catalysts for NO reduction with H2. *Chemical Engineering Journal*, **2009**, 154, 348-354	14.7	22
43	Modified KIT-6 and SBA-15-spherical supported metal catalysts for N2O decomposition. *Journal of Environmental Chemical Engineering*, **2013**, 1, 164-174	6.8	20
42	How to make sustainable CO2 conversion to Methanol: Thermocatalytic versus electrocatalytic technology. *Chemical Engineering Journal*, **2021**, 417, 127973	14.7	20
41	VOCs photocatalytic abatement using nanostructured titania-silica catalysts. *Journal of Environmental Chemical Engineering*, **2017**, 5, 3100-3107	6.8	19
40	Synthesis and characterization of Ce and Er doped ZrO2 nanoparticles as solar light driven photocatalysts. *Journal of Alloys and Compounds*, **2019**, 775, 896-904	5.7	19
39	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	14.7	18
38	Appraisal of a De-NOx System Based on H2 for Light-Duty Diesel Engine Vehicles. *Industrial & Engineering Chemistry Research*, **2010**, 49, 10323-10333	3.9	17
37	Power and Hydrogen Co-generation from Biogas *Energy & Fuels*, **2010**, 24, 4743-4747	4.1	16
36	Cerium Copper Manganese Oxides Synthesized via Solution Combustion Synthesis (SCS) for Total Oxidation of VOCs. *Catalysis Letters*, **2020**, 150, 1821-1840	2.8	15

35	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	3.2	14
34	Kinetic Study of Diesel Soot Combustion with Perovskite Catalysts. *Industrial & Engineering Chemistry Research*, **2012**, 51, 7584-7589	3.9	14
33	Insights Into the Sunlight-Driven Water Oxidation by Ce and Er-Doped ZrO. *Frontiers in Chemistry*, **2018**, 6, 368	5	13
32	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	5.1	13
31	Particle Number, Size and Mass Emissions of Different Biodiesel Blends Versus ULSD from a Small Displacement Automotive Diesel Engine **2011**,		13
30	CO2 valorisation towards alcohols by Cu-based electrocatalysts: challenges and perspectives. *Green Chemistry*, **2021**, 23, 1896-1920	10	13
29	New nanostructured silica incorporated with isolated Ti material for the photocatalytic conversion of CO2 to fuels. *Nanoscale Research Letters*, **2014**, 9, 158	5	11
28	Photocatalytic Abatement of Volatile Organic Compounds by TiO Nanoparticles Doped with Either Phosphorous or Zirconium. *Materials*, **2019**, 12,	3.5	10
27	Particle Number and Size Distribution from a Small Displacement Automotive Diesel Engine during DPF Regeneration. *SAE International Journal of Fuels and Lubricants*, **2010**, 3, 404-413	1.8	10
26	Visible Light-Driven Catalysts for Water Oxidation: Towards Solar Fuel Biorefineries. *Studies in Surface Science and Catalysis*, **2019**, 178, 65-84	1.8	9
25	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	3.9	9
24	Metal Exchanged ZSM-5 Zeolite Based Catalysts for Direct Decomposition of N2O. *Catalysis Letters*, **2009**, 132, 248-252	2.8	9
23	Core-substituted naphthalenediimides anchored on BiVO4 for visible light-driven water splitting. *Green Chemistry*, **2017**, 19, 2448-2462	10	8
22	Nanostructured Equimolar Ceria-Praseodymia for Total Oxidations in Low-O2 Conditions. *Catalysts*, **2020**, 10, 165	4	8
21	A new concept for a self-cleaning household oven. *Chemical Engineering Journal*, **2011**, 176-177, 253-259	14.7	7
20	Novel MnCu-Containing CeO2 Nanopolyhedra for the Oxidation of CO and Diesel Soot (Part II): Effect of Oxygen Concentration on the Catalytic Activity. *Catalysis Letters*, **2019**, 149, 107-118	2.8	7
19	Catalytic Wet Air Oxidation of Maleic Acid Over Lanthanum-Based Perovskites Synthesized by Solution Combustion Synthesis. *Waste and Biomass Valorization*, **2014**, 5, 857-863	3.2	6
18	NOx Abatement by HC-Assisted SCR over Combustion Synthesized-Supported Ag Catalysts. *Industrial & Engineering Chemistry Research*, **2012**, 51, 7467-7474	3.9	6

17	CsV catalysts for the combustion of diesel particulate. *Topics in Catalysis*, **2004**, 30/31, 251-255	2.3	6
16	Structured catalytic reactor for soot abatement in a reducing atmosphere. *Fuel Processing Technology*, **2017**, 167, 462-473	7.2	5
15	Photo/electrocatalytic hydrogen exploitation for CO2 reduction toward solar fuels production **2019**, 365-418		5
14	Investigation of Gas Diffusion Electrode Systems for the Electrochemical CO2 Conversion. *Catalysts* , **2021**, 11, 482	4	5
13	CO Conversion to Alcohols over Cu/ZnO Catalysts: Prospective Synergies between Electrocatalytic and Thermocatalytic Routes.. *ACS Applied Materials & Interfaces*, **2021**,	9.5	5
12	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	5.1	4
11	Mobile and non-mobile catalysts for diesel-particulate combustion: A kinetic study. *Korean Journal of Chemical Engineering*, **2003**, 20, 451-456	2.8	3
10	Nanostructured ceria-based catalysts doped with La and Nd: How acid-base sites and redox properties determine the oxidation mechanisms. *Catalysis Today*, **2021**,	5.3	3
9	Nano-Sized Additive Synthesis for Lubricant Oils and Compatibility Tests with After-Treatment Catalysts **2011**,		2
8	NO and C Oxidation with Pt Recovered From Spent Catalytic Converters. *Waste and Biomass Valorization*, **2010**, 1, 235-239	3.2	1
7	Novel Approches in Oxidative Catalysis for Diesel Particulate Abatement. *Advances in Science and Technology*, **2006**, 45, 2083-2088	0.1	1
6	Catalytic Abatement of Volatile Organic Compounds and Soot over Manganese Oxide Catalysts. *Materials*, **2021**, 14,	3.5	1
5	Cerium-Copper Oxides Synthesized in a Multi-Inlet Vortex Reactor as Effective Nanocatalysts for CO and Ethene Oxidation Reactions. *Catalysts*, **2022**, 12, 364	4	0
4	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	2.9	0
3	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	1.8	
2	Aftertreatment Technologies: State-of-the-Art and Emerging Technologies **2015**, 1-27		
1	Phosphorous-Based Titania Nanoparticles for the Photocatalytic Abatement of VOCs **2021**, 189-208		