Sara Morandi

List of Publications by Year
in descending order

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86 papers	1,820 citations	236925 25 h-index	315739 38 g-index
86 all docs	86 docs citations	86 times ranked	2405 citing authors

#	Article	IF	Citations
1	Photoactive TiO2â€“montmorillonite composite for degradation of organic dyes in water. Journal of Photochemistry and Photobiology A: Chemistry, 2014, 295, 57-63.	3.9	103
2	Characterization of Pt,Sn/Mg(Al)O Catalysts for Light Alkane Dehydrogenation by FT-IR Spectroscopy and Catalytic Measurements. Journal of Physical Chemistry C, 2007, 111, 14732-14742.	3.1	93
3	Catalytic behaviour of hybrid LNT/SCR systems: Reactivity and in situ FTIR study. Journal of Catalysis, 2011, 282, 128-144.	6.2	65
4	Properties of NiO sputtered thin films and modeling of their sensing mechanism under formaldehyde atmospheres. Acta Materialia, 2013, 61, 1146-1153.	7.9	62
5	Photoreduction of Mesoporous In₂O₃: Mechanistic Model and Utility in Gas Sensing. Chemistry - A European Journal, 2012, 18, 8216-8223.	3.3	61
6	Removal of NOx and soot over Ce/Zr/K/Me (Me = Fe, Pt, Ru, Au) oxide catalysts. Applied Catalysis B: Environmental, 2017, 201, 318-330.	20.2	53
7	The NOx storage-reduction on PtK/Al2O3 Lean NOx Trap catalyst. Journal of Catalysis, 2010, 276, 335-350.	6.2	51
8	Photocatalytic degradation of dyes in water with micro-sized TiO2 as powder or coated on porcelain-grÃ¨s tiles. Journal of Photochemistry and Photobiology A: Chemistry, 2014, 280, 27-31.	3.9	46
9	Pigmentary TiO2: A challenge for its use as photocatalyst in NOx air purification. Chemical Engineering Journal, 2015, 261, 76-82.	12.7	46
10	Alkaline- and alkaline-earth oxides based Lean NOx Traps: Effect of the storage component on the catalytic reactivity. Chemical Engineering Journal, 2010, 161, 416-423.	12.7	45
11	Ptâ^'K/Al₂O₃ NSR Catalysts: Characterization of Morphological, Structural and Surface Properties. Journal of Physical Chemistry C, 2010, 114, 1127-1138.	3.1	44
12	New insights on the adsorption, thermal decomposition and reduction of NOx over Pt- and Ba-based catalysts. Applied Catalysis B: Environmental, 2018, 224, 249-263.	20.2	42
13	(Ti, Sn)O2 binary solid solutions for gas sensing: Spectroscopic, optical and transport properties. Sensors and Actuators B: Chemical, 2008, 130, 38-45.	7.8	40
14	Low Temperature NOx Adsorption Study on Pd-Promoted Zeolites. Topics in Catalysis, 2018, 61, 2021-2034.	2.8	40
15	Nano and micro-TiO₂ for the photodegradation of ethanol: experimental data and kinetic modelling. RSC Advances, 2015, 5, 53419-53425.	3.6	37
16	Reaction pathway of the reduction by CO under dry conditions of NOx species stored onto PtBa/Al2O3 Lean NOx Trap catalysts. Journal of Catalysis, 2010, 274, 163-175.	6.2	34
17	(Ti, Sn)O2 solid solutions for gas sensing: A systematic approach by different techniques for different calcination temperature and molar composition. Sensors and Actuators B: Chemical, 2009, 139, 329-339.	7.8	33
18	CO₂ hydrogenation to methanol and hydrocarbons over bifunctional Zn-doped ZrO₂/zeolite catalysts. Catalysis Science and Technology, 2021, 11, 1249-1268.	4.1	33

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19	FT-IR characterization of supported Ni-catalysts: Influence of different supports on the metal phase properties. Catalysis Today, 2012, 197, 38-49.	4.4	31
20	Surface decoration of commercial micro-sized TiO2 by means of high energy ultrasound: A way to enhance its photocatalytic activity under visible light. Applied Catalysis B: Environmental, 2015, 178, 124-132.	20.2	31
21	Dynamics of Reactive Species and Reactant-Induced Reconstruction of Pt Clusters in Pt/Al₂O₃Catalysts. ACS Catalysis, 2019, 9, 7124-7136.	11.2	31
22	Electrical and spectroscopic properties of Ti0.2 Sn0.8O2 solid solution for gas sensing. Thin Solid Films, 2009, 517, 6176-6183.	1.8	30
23	Facile synthesis of ZnO nano-structures: Morphology influence on electronic properties. Sensors and Actuators B: Chemical, 2017, 249, 581-589.	7.8	30
24	Synthesis and characterisation of gas sensor materials obtained from Pt/Zn/Al layered double hydroxides. Sensors and Actuators B: Chemical, 2006, 118, 215-220.	7.8	29
25	The influence of CO2 and H2O on the storage properties of Pt-Ba/Al2O3 LNT catalyst studied by FT-IR spectroscopy and transient microreactor experiments. Catalysis Today, 2014, 231, 116-124.	4.4	29
26	Aspirin and paracetamol removal using a commercial micro-sized TiO2 catalyst in deionized and tap water. Environmental Science and Pollution Research, 2017, 24, 12646-12654.	5.3	26
27	Low-temperature Pd/FER NOx adsorbers: Operando FT-IR spectroscopy and performance analysis. Catalysis Today, 2021, 360, 317-325.	4.4	26
28	(Ti,Sn) solid solutions as functional materials for gas sensing. Sensors and Actuators B: Chemical, 2014, 194, 195-205.	7.8	25
29	Copper NPs decorated titania: A novel synthesis by high energy US with a study of the photocatalytic activity under visible light. Ultrasonics Sonochemistry, 2016, 31, 295-301.	8.2	25
30	Tunable formation of nanostructured SiC/SiOC core-shell for selective detection of SO2. Sensors and Actuators B: Chemical, 2020, 305, 127485.	7.8	25
31	Multifunctional Catalyst Combination for the Direct Conversion of CO₂ to Propane. Jacs Au, 2021, 1, 1719-1732.	7.9	25
32	The NOx Reduction by CO on a Ptâ^'K/Al2O3 Lean NOx Trap Catalyst. Journal of Physical Chemistry C, 2011, 115, 1277-1286.	3.1	22
33	Micro-TiO2 coated glass surfaces safely abate drugs in surface water. Journal of Hazardous Materials, 2019, 363, 328-334.	12.4	22
34	FT-IR and UV-Vis-NIR characterisation of pure and mixed MoO3 and WO3 thin films. Thin Solid Films, 2005, 490, 74-80.	1.8	21
35	Structural and spectroscopic characterization of Mo1â^'xWxO3â^'Î´ mixed oxides. Journal of Solid State Chemistry, 2009, 182, 3342-3352.	2.9	21
36	Synthesis and characterization of Pt/Mg(Al)O catalysts obtained from layered double hydroxides by different routes. Microporous and Mesoporous Materials, 2007, 103, 48-56.	4.4	20

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37	Looking for the active hydrogen species in a 5Âwt% Pt/C catalyst: a challenge for inelastic neutron scattering. Faraday Discussions, 2018, 208, 227-242.	3.2	20
38	MoO3â€“WO3 mixed oxide powder and thin films for gas sensing devices: A spectroscopic characterisation. Sensors and Actuators B: Chemical, 2005, 111-112, 28-35.	7.8	19
39	FT-IR investigation of NOx storage properties of Ptâ€“Mg(Al)O and Pt/Cuâ€“Mg(Al)O catalysts obtained from hydrotalcite compounds. Microporous and Mesoporous Materials, 2008, 107, 31-38.	4.4	19
40	Electrical and spectroscopic analysis in nanostructured SnO2: â€œLong-termâ€•resistance drift is due to in-diffusion. Journal of Applied Physics, 2011, 110, .	2.5	19
41	Effect of water and ammonia on surface species formed during NOx storageâ€“reduction cycles over Ptâ€“K/Al2O3 and Ptâ€“Ba/Al2O3 catalysts. Physical Chemistry Chemical Physics, 2013, 15, 13409.	2.8	18
42	Micro-sized TiO2 as photoactive catalyst coated on industrial porcelain grÃ¨s tiles to photodegrade drugs in water. Environmental Science and Pollution Research, 2018, 25, 20348-20353.	5.3	17
43	Structural and mechanistic insights into low-temperature CO oxidation over a prototypical high entropy oxide by Cu L-edge operando soft X-ray absorption spectroscopy. Physical Chemistry Chemical Physics, 2021, 23, 26575-26584.	2.8	17
44	Reduction by CO of NOx species stored onto Ptâ€“K/Al2O3 and Ptâ€“Ba/Al2O3 lean NOx traps. Catalysis Today, 2011, 176, 399-403.	4.4	16
45	Chemoresistive Gas Sensors for Sub-ppm Acetone Detection. Procedia Engineering, 2016, 168, 485-488.	1.2	16
46	Supported Ni catalysts prepared by intercalation of Layered Double Hydroxides: Investigation of acidâ€“base properties and nature of Ni phases. Microporous and Mesoporous Materials, 2012, 147, 178-187.	4.4	15
47	Formaldehyde sensing mechanism of SnO₂ nanowires grown on-chip by sputtering techniques. RSC Advances, 2016, 6, 18558-18566.	3.6	15
48	Crâ€“Sn oxide thin films: Electrical and spectroscopic characterisation with CO, NO2, NH3 and ethanol. Sensors and Actuators B: Chemical, 2006, 118, 142-148.	7.8	14
49	Growth Mechanisms of ZnO Micro-Nanomorphologies and Their Role in Enhancing Gas Sensing Properties. Sensors, 2021, 21, 1331.	3.8	14
50	DFT and kinetic evidences of the preferential CO oxidation pattern of manganese dioxide catalysts in hydrogen stream (PROX). Applied Catalysis B: Environmental, 2022, 300, 120715.	20.2	14
51	Photo-mineralization of noxious o-toluidine water pollutant by nano-ZnO: The role of the oxide surface texture on the kinetic path. Applied Catalysis B: Environmental, 2015, 178, 233-240.	20.2	12
52	Nanosized SnO2 Prepared by Electrospinning: Influence of the Polymer on Both Morphology and Microstructure. Polymers, 2021, 13, 977.	4.5	12
53	Operational functionalities of air-quality W Sn metal-oxide sensors correlating semiconductor defect levels and surface potential barriers. Science of the Total Environment, 2020, 706, 135731.	8.0	11
54	(Ti,Sn) Solid Solution Based Gas Sensors for New Monitoring of Hydraulic Oil Degradation. Materials, 2021, 14, 605.	2.9	11

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55	n-Heptane As a Reducing Agent in the NO_x Removal over a Ptâ€“Ba/Al₂O₃ NSR Catalyst. ACS Catalysis, 2014, 4, 3261-3272.	11.2	10
56	Unraveling the effect of ZrO₂ modifiers on the nature of active sites on AuRu/ZrO₂ catalysts for furfural hydrogenation. Sustainable Energy and Fuels, 2020, 4, 1469-1480.	4.9	10
57	Characterization of the Evolution of Noble Metal Particles in a Commercial Three-Way Catalyst: Correlation between Real and Simulated Ageing. Catalysts, 2021, 11, 247.	3.5	10
58	A New Frontier of Photocatalysis Employing Micro-Sized TiO2: Air/Water Pollution Abatement and Self-Cleaning/ Antibacterial Applications. , 0, , .		9
59	Shedding light on precursor and thermal treatment effects on the nanostructure of electrospun TiO2 fibers. Nano Structures Nano Objects, 2016, 7, 49-55.	3.5	7
60	Selective hydrogenation of cinnamaldehyde using Pd catalysts supported on Mg/Al mixed oxides: Influence of the Pd incorporation method. Canadian Journal of Chemical Engineering, 2018, 96, 297-306.	1.7	7
61	Steering polymer growth by molding nanochannels: 1,5-hexadiene polymerization in high silica mordenite. Microporous and Mesoporous Materials, 2021, 311, 110728.	4.4	7
62	Investigation of the key parameters for gas sensing through comparison of electrospun and sol-gel semiconducting oxides. Ceramics International, 2022, 48, 20948-20960.	4.8	7
63	Surface barrier modulation and diffuse reflectance spectroscopy of MoO3â€“WO3 thick films. Sensors and Actuators B: Chemical, 2006, 118, 94-97.	7.8	6
64	FTIR and Transient Reactivity Experiments of the Reduction by H2, CO and HCs of NO x Stored Over Ptâ€“Ba/Al2O3 LNTs. Topics in Catalysis, 2013, 56, 193-200.	2.8	6
65	Cation Dependent Carbonate Speciation and the Effect of Water. Journal of Physical Chemistry C, 2016, 120, 17570-17578.	3.1	6
66	Dynamics and Selectivity of N2O Formation/Reduction During Regeneration Phase of Pt-Based Catalysts. Topics in Catalysis, 2018, 61, 1672-1683.	2.8	6
67	Development of an easy portable procedure for on-site determination of mercury and methylmercury. Food Chemistry, 2021, 342, 128347.	8.2	6
68	Tailoring manganese oxide catalysts for the total oxidation of pollutants in gas and liquid phase. Applied Catalysis A: General, 2021, 610, 117917.	4.3	6
69	Zeolite/dye hybrid composites: Organization of photoactive azobenzene molecules inside AlPO4-5. Microporous and Mesoporous Materials, 2018, 268, 25-30.	4.4	5
70	Deactivation of Industrial Pd/Al₂O₃ Catalysts by Ethanol: A Spectroscopic Study. ChemCatChem, 2021, 13, 900-908.	3.7	5
71	Gas phasevs.liquid phase: monitoring H₂and CO adsorption phenomena on Pt/Al₂O₃by IR spectroscopy. Catalysis Science and Technology, 2022, 12, 1359-1367.	4.1	5
72	Thermal behavior of high silica mordenite. Microporous and Mesoporous Materials, 2020, 294, 109882.	4.4	4

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73	Recovery of hexavalent chromium from water using photoactive TiO2-montmorillonite under sunlight. Mediterranean Journal of Chemistry, 2016, 5, 442-449.	0.7	4
74	Supported PdZn nanoparticles for selective CO2 conversion, through the grafting of a heterobimetallic complex on CeZrOx. Applied Catalysis A: General, 2022, 635, 118568.	4.3	4
75	In-situ infrared spectroscopy as a non-invasive technique to study carbon sequestration at high pressure and high temperature. International Journal of Greenhouse Gas Control, 2016, 51, 126-135.	4.6	3
76	New Insights on the Release and Reduction of NOx Stored over PGM-Based LNT Catalysts. Topics in Catalysis, 2017, 60, 250-254.	2.8	3
77	Ultrasensitive Gas Sensors Based on Electrospun TiO2 and ZnO. Proceedings (mdpi), 2017, 1, .	0.2	2
78	Optical Sensing of Molecular Oxygen (O2) via Metal Oxide Photoluminescence: A Comparative Study of TiO2, SnO2 and ZnO. Chemosensors, 2021, 9, 163.	3.6	2
79	Mesoporous In2O3: Photoreduction and Gas-Sensing Properties. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2012, 638, 1563-1563.	1.2	1
80	The Role of the Nano/Microstructure in the Case of the Photodegradation of Two Model VOC Pollutants Using Commercial TiO₂. Energy and Environment Focus, 2015, 4, 226-231.	0.3	1
81	Ultrasensitive Gas Sensors Based on Electrospun TiO2 and ZnO â€. Proceedings (mdpi), 2017, 1, 485.	0.2	1
82	Metal Oxide Gas Sensors from Design to Real Applications: The Case Study of TixSn1-xO2 Solid Solutions. Lecture Notes in Electrical Engineering, 2023, , 92-97.	0.4	1
83	Novel Methodology Based on Thick Film Gas Sensors to Monitor the Hydraulic Oil Ageing. Proceedings (mdpi), 2018, 2, .	0.2	0
84	W-Sn Mixed Oxides and ZnO to Detect NOx and Ozone in Atmosphere. Proceedings (mdpi), 2018, 2, .	0.2	0
85	Pathways for N2O Formation/Reduction During Operation of Commercial LNT Catalysts. Topics in Catalysis, 2019, 62, 18-26.	2.8	0
86	Semiconductor Oxide Gas Sensors: Correlation between Conduction Mechanisms and Their Sensing Performances. , 2021, 5, .		0