Raquel Portela

List of Publications by Citations

49 papers	1,626 citations	21 h-index	40 g-index
52 ext. papers	1,828 ext. citations	9 avg, IF	4.62 L-index

#	Paper	IF	Citations
49	Photocatalytic materials: recent achievements and near future trends. *Journal of Materials Chemistry A*, **2014**, 2, 2863-2884	13	342
48	Synthesis and photocatalytic properties of dense and porous TiO2-anatase thin films prepared by sol-gel. *Applied Catalysis B: Environmental*, **2009**, 86, 1-7	21.8	158
47	Kinetics of denitrification using sulphur compounds: effects of S/N ratio, endogenous and exogenous compounds. *Bioresource Technology*, **2008**, 99, 1293-9	11	83
46	Photocatalytic oxidation of 2-propanol/toluene binary mixtures at indoor air concentration levels. *Applied Catalysis B: Environmental*, **2011**, 107, 347-354	21.8	74
45	Preparation of TiO2 coatings on PET monoliths for the photocatalytic elimination of trichloroethylene in the gas phase. *Applied Catalysis B: Environmental*, **2006**, 66, 295-301	21.8	69
44	Design of Advanced Photocatalytic Materials for Energy and Environmental Applications. *Green Energy and Technology*, **2013**,	0.6	65
43	On the preparation of TiO2-sepiolite hybrid materials for the photocatalytic degradation of TCE: influence of TiO2 distribution in the mineralization. *Environmental Science & Technology*, **2008**, 42, 5892-6	10.3	63
42	Selection of TiO2-support: UV-transparent alternatives and long-term use limitations for H2S removal. *Catalysis Today*, **2007**, 129, 223-230	5.3	62
41	Photocatalytic-based strategies for H2S elimination. *Catalysis Today*, **2010**, 151, 64-70	5.3	53
40	Natural silicate-TiO 2 hybrids for photocatalytic oxidation of formaldehyde in gas phase. *Chemical Engineering Journal*, **2017**, 310, 560-570	14.7	51
39	Photocatalytic elimination of indoor air biological and chemical pollution in realistic conditions. *Chemosphere*, **2012**, 87, 625-30	8.4	46
38	H2S photodegradation by TiO2/M-MCM-41 (M = Cr or Ce): Deactivation and by-product generation under UV-A and visible light. *Applied Catalysis B: Environmental*, **2008**, 84, 643-650	21.8	45
37	Investigation of Toluene Oxidation over 1D Pt@CeO Derived from Pt Cluster-Containing MOF. *Journal of the American Chemical Society*, **2021**, 143, 196-205	16.4	39
36	Photocatalytic degradation of TCE in dry and wet air conditions with TiO2 porous thin films. *Applied Catalysis B: Environmental*, **2011**, 108-109, 14-21	21.8	35
35	Hybrid photocatalysts for the degradation of trichloroethylene in air. *Catalysis Today*, **2009**, 143, 302-308	5.3	35
34	Transient operando study on the NH3/NH4+ interplay in V-SCR monolithic catalysts. *Applied Catalysis B: Environmental*, **2018**, 224, 109-115	21.8	34
33	Enhanced photocatalytic activity of TiO2 thin films on plasma-pretreated organic polymers. *Catalysis Today*, **2014**, 230, 145-151	5.3	34

32	Photocatalysis for continuous air purification in wastewater treatment plants: from lab to reality. *Environmental Science & Technology*, **2012**, 46, 5040-8	10.3	31
31	Nanostructured ZnO/sepiolite monolithic sorbents for H2S removal. *Journal of Materials Chemistry A*, **2015**, 3, 1306-1316	13	29
30	Solar/lamp-irradiated tubular photoreactor for air treatment with transparent supported photocatalysts. *Applied Catalysis B: Environmental*, **2011**, 105, 95-102	21.8	25
29	Engineering operando methodology: Understanding catalysis in time and space. *Frontiers of Chemical Science and Engineering*, **2018**, 12, 509-536	4.5	22
28	Behaviour of TiO2–SiMgOx hybrid composites on the solar photocatalytic degradation of polluted air. *Applied Catalysis B: Environmental*, **2011**, 101, 176-182	21.8	21
27	Hybrid TiO2–SiMgOX Composite for Combined Chemisorption and Photocatalytic Elimination of Gaseous H2S. *Industrial & Engineering Chemistry Research*, **2010**, 49, 6685-6690	3.9	20
26	Photocatalytic activity of TiO2 films prepared by surfactant-mediated sol–gel methods over commercial polymer substrates. *Chemical Engineering Journal*, **2016**, 283, 535-543	14.7	16
25	MnOx-support interactions in catalytic bodies for selective reduction of NO with NH3. *Applied Catalysis B: Environmental*, **2019**, 256, 117821	21.8	15
24	Operando DRIFTS study of the role of hydroxyls groups in trichloroethylene photo-oxidation over titanate and TiO2 nanostructures. *Catalysis Today*, **2013**, 206, 32-39	5.3	14
23	Highly selective one-dimensional TiO2-based nanostructures for air treatment applications. *Applied Catalysis B: Environmental*, **2011**, 110, 251-259	21.8	14
22	Structured catalysts based on sepiolite with tailored porosity to remove diesel soot. *Applied Catalysis A: General*, **2015**, 498, 41-53	5.1	12
21	Reactor-Cell with Simultaneous Transmission FTIR and Raman Characterization (IRRaman) for the Study of Gas-Phase Reactions with Solid Catalysts. *Analytical Chemistry*, **2020**, 92, 5100-5106	7.8	12
20	Shaping up operando spectroscopy: Raman characterization of a working honeycomb monolith. *Catalysis Science and Technology*, **2015**, 5, 4942-4945	5.5	11
19	Development of sepiolite/SiC porous catalytic filters for diesel soot abatement. *Microporous and Mesoporous Materials*, **2016**, 230, 11-19	5.3	11
18	Environmental Applications of Photocatalysis. *Green Energy and Technology*, **2013**, 35-66	0.6	11
17	Influence of the pore generation method on the metal dispersion and oxidation activity of supported Pt in monolithic catalysts. *Applied Catalysis A: General*, **2016**, 510, 49-56	5.1	8
16	Development of a versatile experimental setup for the evaluation of the photocatalytic properties of construction materials under realistic outdoor conditions. *Environmental Science and Pollution Research*, **2014**, 21, 11208-17	5.1	8
15	Pt mechanical dispersion on non-porous alumina for soot oxidation. *Catalysis Communications*, **2020** , 140, 105999	3.2	7

14	Comparison of three high-flow single-stage impaction-based air samplers for bacteria quantification: DUO SAS SUPER 360, SAMPLAIR and SPIN AIR. *Analytical Methods*, **2012**, 4, 399-405	3.2	7
13	Influence of Catalyst Properties and Reactor Configuration on the Photocatalytic Degradation of Trichloroethylene Under Sunlight Irradiation. *Journal of Solar Energy Engineering, Transactions of the ASME*, **2008**, 130,	2.3	7
12	Pt-free CoAl2O4 catalyst for soot combustion with NOx/O2. *Applied Catalysis A: General*, **2020**, 591, 117404	5.1	7
11	Monolithic SiC supports with tailored hierarchical porosity for molecularly selective membranes and supported liquid-phase catalysis. *Catalysis Today*, **2020**, 383, 44-44	5.3	5
10	Performance and Stability of Wet-Milled CoAl2O4, Ni/CoAl2O4, and Pt,Ni/CoAl2O4 for Soot Combustion. *Catalysts*, **2020**, 10, 406	4	5
9	Solar Photocatalysis for the Elimination of Trichloroethylene in the Gas Phase. *Journal of Solar Energy Engineering, Transactions of the ASME*, **2008**, 130,	2.3	5
8	Novel Ni-Ce-Zr/Al2O3 Cellular Structure for the Oxidative Dehydrogenation of Ethane. *Catalysts*, **2017**, 7, 331	4	4
7	A simultaneous operando FTIR & Raman study of propane ODH mechanism over V-Zr-O catalysts. *Catalysis Today*, **2021**,	5.3	3
6	Tailored monolith supports for improved ultra-low temperature water-gas shift reaction. *Reaction Chemistry and Engineering*,	4.9	3
5	Non-metal Doping for Band-Gap Engineering. *Green Energy and Technology*, **2013**, 287-309	0.6	2
4	Future Perspectives of Photocatalysis. *Green Energy and Technology*, **2013**, 345-348	0.6	1
3	Review of Existing Standards, Guides, and Practices for Raman Spectroscopy.. *Applied Spectroscopy*, **2022**, 37028221090988	3.1	1
2	Chemometrics for Raman Spectroscopy Harmonization. *Applied Spectroscopy*,000370282210940	3.1	1
1	Turning Sunlight into Fuels: Photocatalysis for Energy. *Green Energy and Technology*, **2013**, 67-84	0.6	