MarÃa Olga Guerrero-PÃ©rez

List of Publications by Year
in descending order

86 papers	2,230 citations	201674 27 h-index	265206 42 g-index
98 all docs	98 docs citations	98 times ranked	1690 citing authors

#	Article	IF	Citations
1	Raman spectroscopy during catalytic operations with on-line activity measurement (operando) Tj ETQq1 1 0.784314 rgBT /Overlock 1 materials. Journal of Materials Chemistry, 2002, 12, 3337-3342.	6.7	116
2	Operando Raman study of alumina-supported Sbâ€“Vâ€“O catalyst during propane ammoxidation to acrylonitrile with on-line activity measurement. Chemical Communications, 2002, , 1292-1293.	4.1	104
3	Effect of Sb/V Ratio and of Sb + V Coverage on the Molecular Structure and Activity of Alumina-Supported Sbâ€“Vâ€“O Catalysts for the Ammoxidation of Propane to Acrylonitrile. Journal of Catalysis, 2002, 206, 339-348.	6.2	94
4	New Reaction: Conversion of Glycerol into Acrylonitrile. ChemSusChem, 2008, 1, 511-513.	6.8	76
5	From conventional in situ to operando studies in Raman spectroscopy. Catalysis Today, 2006, 113, 48-57.	4.4	68
6	Bulk mixed Moâ€“Vâ€“Teâ€“O catalysts for propane oxidation to acrylic acid. Applied Catalysis A: General, 2004, 274, 123-132.	4.3	67
7	M1 to M2 Phase Transformation and Phase Cooperation in Bulk Mixed Metal Moâ€“Vâ€“Mâ€“O (M=Te, Nb) Catalysts for Selective Ammoxidation of Propane. Topics in Catalysis, 2008, 50, 43-51.	2.8	65
8	Experimental methods in chemical engineering: Fourier transform infrared spectroscopyâ€”FTIR. Canadian Journal of Chemical Engineering, 2020, 98, 25-33.	1.7	60
9	Supported, bulk and bulk-supported vanadium oxide catalysts: A short review with an historical perspective. Catalysis Today, 2017, 285, 226-233.	4.4	59
10	Synthesis of Vanadium Oxide Nanofibers with Variable Crystallinity and V⁵⁺/V⁴⁺ Ratios. ACS Omega, 2017, 2, 7739-7745.	3.5	58
11	Bulk structure and catalytic properties of mixed Moâ€“Vâ€“Sbâ€“Nb oxides forÂselective propane oxidation to acrylic acid. Journal of Catalysis, 2003, 215, 108-115.	6.2	49
12	Metrics of acrylonitrile: From biomass vs. petrochemical route. Catalysis Today, 2015, 239, 25-30.	4.4	48
13	Niobium as promoting agent for selective oxidation reactions. Catalysis Today, 2009, 142, 245-251.	4.4	47
14	Catalytic properties of mixed Mo-V-Sb-Nb-O oxides catalysts for the ammoxidation of propane to acrylonitrile. Applied Catalysis A: General, 2004, 260, 93-99.	4.3	43
15	Experimental methods in chemical engineering:<scp>X</scp>â€ray absorption spectroscopyâ€”<scp>XAS</scp>,<scp>XANES</scp>,<scp>EXAFS</scp>. Canadian Journal of Chemical Engineering, 2022, 100, 3-22.	1.7	41
16	Raman?GC studies of alumina-supported Sb-V-O catalysts and role of the preparation method. Catalysis Today, 2004, 96, 265-272.	4.4	40
17	Direct ammoxidation of ethane: An approach to tackle the worldwide shortage of acetonitrile. Catalysis Communications, 2009, 10, 1555-1557.	3.3	40
18	Effect of the oxide support on the propane ammoxidation with Sbâ€“Vâ€“O-based catalysts. Catalysis Today, 2003, 78, 387-396.	4.4	38

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19	Ammoxidation of propane over V-Sb and V-Sb-Nb mixed oxides. Applied Catalysis A: General, 2006, 298, 1-7.	4.3	38
20	Reduction of chromia/alumina catalyst monitored by DRIFTS-mass spectrometry and TPR-Raman spectroscopy. Physical Chemistry Chemical Physics, 2003, 5, 4371-4377.	2.8	36
21	A Study about the Propane Ammoxidation to Acrylonitrile with an Alumina-Supported Sbâˆ’Vâˆ’O Catalyst. Industrial & Engineering Chemistry Research, 2006, 45, 4537-4543.	3.7	33
22	Operando Ramanâˆ’GC Study of Supported Alumina Sb- and V-Based Catalysts:â€‰ Effect of Sb/V Molar Ratio and Total Sb+V Coverage in the Structure of Catalysts during Propane Ammoxidation. Journal of Physical Chemistry C, 2007, 111, 1315-1322.	3.1	33
23	Effect of synthesis method on stabilized nano-scaled Sbâ€“Vâ€“O catalysts for the ammoxidation of propane to acrylonitrile. Topics in Catalysis, 2006, 41, 43-53.	2.8	32
24	Support Effect on the Structure and Reactivity of VSbO₄ Catalysts for Propane Ammoxidation to Acrylonitrile. Chemistry of Materials, 2007, 19, 6621-6628.	6.7	30
25	Lignocellulosic-derived mesoporous materials: An answer to manufacturing non-expensive catalysts useful for the biorefinery processes. Catalysis Today, 2012, 195, 155-161.	4.4	30
26	Nanoscaled rutile active phase in Moâ€“Vâ€“Nbâ€“O supported catalysts for the oxidation of propane to acrylic acid. Applied Catalysis A: General, 2010, 375, 55-62.	4.3	29
27	Lignocellulosic-derived catalysts for the selective oxidation of propane. Catalysis Communications, 2011, 12, 989-992.	3.3	28
28	Performance of NiO and Niâ€“Nbâ€“O active phases during the ethane ammoxidation into acetonitrile. Catalysis Science and Technology, 2013, 3, 3173.	4.1	26
29	Nanomaterials in Dentistry: State of the Art and Future Challenges. Nanomaterials, 2020, 10, 1770.	4.1	26
30	Niobia-supported Sbâ€“Vâ€“O catalysts for propane ammoxidation: effect of catalyst composition on the selectivity to acrylonitrile. Physical Chemistry Chemical Physics, 2003, 5, 4032-4039.	2.8	25
31	Recent Inventions in Glycerol Transformations and Processing. Recent Patents on Chemical Engineering, 2010, 2, 11-21.	0.5	25
32	Tunning the Nb addition to Sb-V-O catalysts for an efficient promotion of the ammoxidation of propane to acrylonitrile. Catalysis Today, 2006, 118, 366-372.	4.4	23
33	Rutile-type metal (Cr, V) niobates as catalysts for propane ammoxidation to nitriles: In situ characterization and operando reactivity. Catalysis Today, 2006, 112, 12-16.	4.4	23
34	Correlation between theoretical and experimental investigations of the ammonia adsorption process on the (110)-VSbO4 surface. Catalysis Today, 2010, 158, 178-185.	4.4	23
35	Theoretical and Experimental Study of Light Hydrocarbon Ammoxidation and Oxidative Dehydrogenation on (110)-VSbO₄ Surfaces. Journal of Physical Chemistry C, 2012, 116, 9132-9141.	3.1	23
36	Characterization and FT-IR study of nanostructured alumina-supported V-Mo-W-O catalysts. Catalysis Today, 2006, 118, 360-365.	4.4	20

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37	Surface active sites in alumina-supported MoVNbTeO oxide catalysts. Catalysis Today, 2010, 158, 139-145.	4.4	20
38	The fascinating effect of niobium as catalytic promoting agent. Catalysis Today, 2020, 354, 19-25.	4.4	20
39	<i>Operando</i> 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.	6.5	20
40	MS-FTIR reduction stage study of NSR catalysts. Catalysis Today, 2007, 126, 162-168.	4.4	19
41	Operando Raman study of propane oxidation over alumina-supported Vâ€“Moâ€“Wâ€“O catalysts. Catalysis Today, 2007, 126, 177-183.	4.4	19
42	Nature of Catalytic Active Sites for Sbâˆ’Vâˆ’O Mixed Metal Oxides. Journal of Physical Chemistry C, 2008, 112, 16858-16863.	3.1	19
43	Novel Synthesis Method of porous VPO catalysts with fibrous structure by Electrospinning. Catalysis Today, 2016, 277, 266-273.	4.4	19
44	V-Containing Mixed Oxide Catalysts for Reductionâ€“Oxidation-Based Reactions with Environmental Applications: A Short Review. Catalysts, 2018, 8, 564.	3.5	19
45	Carbon materials as template for the preparation of mixed oxides with controlled morphology and porous structure. Catalysis Today, 2014, 227, 233-241.	4.4	18
46	Structural changes occurring at the surface of alumina-supported nanoscaled Moâ€“Vâ€“Nbâ€“(Te)â€“O catalytic system during the selective oxidation of propane to acrylic acid. Applied Catalysis A: General, 2011, 406, 34-42.	4.3	17
47	Spectroscopic surface characterization of MoVNbTe nanostructured catalysts for the partial oxidation of propane. Catalysis Today, 2012, 187, 195-200.	4.4	16
48	Niobia-Supported Nanoscaled Bulk-NiO Catalysts for the Ammoxidation of Ethane into Acetonitrile. Catalysis Letters, 2013, 143, 31-42.	2.6	16
49	Electrospun vanadium oxide based submicron diameter fiber catalysts. Part I: Preparation procedure and propane ODH application. Catalysis Today, 2019, 325, 131-143.	4.4	16
50	SiO2 supported niobium oxides with active acid sites for the catalytic acetalization of glycerol. Catalysis Today, 2020, 356, 80-87.	4.4	16
51	Research Progress on the Applications of Electrospun Nanofibers in Catalysis. Catalysts, 2022, 12, 9.	3.5	16
52	Phase transformations in mesostructured VPO/surfactant composites. Microporous and Mesoporous Materials, 2004, 71, 57-63.	4.4	15
53	Alumina supported Moâ€“Vâ€“Teâ€“O catalysts for the ammoxidation of propane to acrylonitrile. Applied Catalysis A: General, 2008, 341, 119-126.	4.3	15
54	Tuning of Active Sites in Niï£¿Nbï£¿O Catalysts for the Direct Conversion of Ethane to Acetonitrile or Ethylene. ChemCatChem, 2011, 3, 1637-1645.	3.7	14

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55	On the Nature of Surface Vanadium Oxide Species on Carbons. Journal of Physical Chemistry C, 2012, 116, 20396-20403.	3.1	14
56	Selective destruction of nitrogen-containing organic volatile compounds over Sbâ€“Vâ€“O catalysts. Applied Catalysis B: Environmental, 2007, 71, 85-93.	20.2	13
57	Mesostructured mixed Moâ€“Vâ€“Nb oxides for propane ammoxidation. Catalysis Communications, 2009, 10, 416-420.	3.3	13
58	Designing new Vâ€“Sbâ€“O based catalysts on mesoporous supports for nitriles production. Applied Catalysis A: General, 2010, 380, 95-104.	4.3	13
59	In situ Raman studies during sulfidation, and operando Raman-GC during ammoxidation reaction using nickel-containing catalysts: a valuable tool to identify the transformations of catalytic species. Physical Chemistry Chemical Physics, 2011, 13, 9260.	2.8	13
60	Highly active and selective supported bulk nanostructured MoVNbTeO catalysts for the propane ammoxidation process. Catalysis Today, 2012, 192, 67-71.	4.4	13
61	Lignocellulosic waste-derived basic solids and their catalytic applications for the transformation of biomass waste. Catalysis Today, 2015, 257, 229-236.	4.4	11
62	Rapid scan FTIR reveals propane (am)oxidation mechanisms over vanadium based catalysts. Journal of Catalysis, 2020, 390, 72-80.	6.2	11
63	Experimental methods in chemical engineering: <scp>Raman</scp> spectroscopy. Canadian Journal of Chemical Engineering, 2021, 99, 97-107.	1.7	11
64	Sbâ€“Vâ€“O-based catalysts for the ammoxidation of propane with a fluidized bed reactor. Catalysis Today, 2008, 139, 202-208.	4.4	10
65	A simultaneous operando FTIR & Raman study of propane ODH mechanism over V-Zr-O catalysts. Catalysis Today, 2022, 387, 197-206.	4.4	10
66	Is the â€œGreen Washingâ€•Effect Stronger than Real Scientific Knowledge? Are We Able to Transmit Formal Knowledge in the Face of Marketing Campaigns?. Sustainability, 2022, 14, 285.	3.2	9
67	Effect of tellurium addition to supported Mo-V-O catalysts for the ammoxidation of propane to acrylonitrile. Catalysis Today, 2008, 133-135, 919-924.	4.4	7
68	XANES study of the dynamic states of V-based oxide catalysts under partial oxidation reaction conditions. Catalysis Today, 2019, 336, 210-215.	4.4	7
69	Effect of Mg in Alumina-Supported Sbâ€“Vâ€“O Catalysts for the Ammoxidation of Propane into Acrylonitrile. Catalysis Letters, 2008, 125, 192-196.	2.6	6
70	Propane Versus Ethane Ammoxidation on Mixed Oxide Catalytic Systems: Influence of the Alkane Structure. Catalysis Letters, 2016, 146, 1838-1847.	2.6	6
71	Nanosized-bulk V-containing mixed-oxide catalysts: a strategy for the improvement of the catalytic materials properties. New Journal of Chemistry, 2019, 43, 17661-17669.	2.8	6
72	Electrospun vanadium oxide based submicron diameter fiber catalysts. Part II: Effect of chemical formulation and dopants. Catalysis Today, 2019, 325, 144-150.	4.4	6

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73	A new versatile xâ€"yâ€"z electrospinning equipment for nanofiber synthesis in both far and near field. Scientific Reports, 2022, 12, 4872.	3.3	6
74	Role of V in supported Vâ€"Sbâ€"O catalysts for the ammoxidation of propane to acrylonitrile: Multilayered VOx/SbOx/Al2O3 catalysts. Catalysis Today, 2009, 142, 152-157.	4.4	5
75	Enhanced cyclic CO2/N2 separation performance stability on chemically modified N-doped ordered mesoporous carbon. Catalysis Today, 2020, 356, 88-94.	4.4	5
76	Effect of cellulose content on structural and transport parameters across dense cellophane membranes. Desalination, 2006, 200, 15-17.	8.2	3
77	Exploring the possibilities of carbon materials as catalytic supports for partial oxidation reactions. Catalysis Today, 2020, 356, 38-48.	4.4	3
78	Niobium as a Catalytic Promoting Agent. Recent Patents on Chemical Engineering, 2010, 1, 201-208.	0.5	3
79	Role of Nb in Rutile-type Metal Antimonates for Propane Ammoxidation. Studies in Surface Science and Catalysis, 2007, 172, 145-148.	1.5	2
80	Catalysis by Mixed Oxides. Catalysis Today, 2016, 277, 201.	4.4	2
81	Niobiosilica Materials as Attractive Supports for Sbâ€"Vâ€"O Catalysts. Topics in Catalysis, 2012, 55, 837-845.	2.8	1
82	Molecular structure performance relationships at the surface of functional materials. Catalysis Today, 2012, 187, 1.	4.4	1
83	Corrigendum to â€œMolecular structure performance relationships at the surface of functional materialsâ€• (preface) [Catal. Today 187 (2012) 1]. Catalysis Today, 2012, 191, 174.	4.4	0
84	Comments on â€œGlycerol conversion to acrylonitrile by consecutive dehydration over WO3/TiO2 and ammoxidation over Sbâ€"(Fe,V)â€"Oâ€ published by Liebig, C., Paul, S., Katryniok, B., Guillon, C., Couturier, J.-L., Dubois, J.-L., et al. in Applied Catalysis B: Environmental, 132â€"133 (2013) 170â€"182. doi:10.1016/j.apcatb.2012.11.035. Applied Catalysis B: Environmental, 2014, 148-149, 601-603.	20.2	0
85	Erasmus Mundus EurasiaCat: A successful EU-Asian network for research in Materials Science and Catalysis. Catalysis Today, 2020, 356, 37.	4.4	0
86	Improvements for a Sustainable Distance Education with the New UNED On-Site System for Virtualization of Exams: Malaga Region (AndalucÃa, Spain) as Case Study. World Sustainability Series, 2015, , 309-317.	0.4	0