

# JosÃ© Manuel Gatica Casas

## List of Publications by Year in descending order

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67  
papers

2,573  
citations

201385

27  
h-index

205818

48  
g-index

70  
all docs

70  
docs citations

70  
times ranked

3162  
citing authors

#	ARTICLE	IF	CITATIONS
1	Some contributions of electron microscopy to the characterisation of the strong metal-support interaction effect. <i>Catalysis Today</i> , 2003, 77, 385-406.	2.2	181
2	Reduction of High Surface Area CeO <sub>2</sub> -ZrO <sub>2</sub> Mixed Oxides. <i>Journal of Physical Chemistry B</i> , 2000, 104, 9186-9194.	1.2	150
3	Hydrogen chemisorption on ceria: influence of the oxide surface area and degree of reduction. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1993, 89, 3499.	1.7	138
4	Effects of the Nature of the Reducing Agent on the Transient Redox Behavior of NM/Ce <sub>0.68</sub> Zr <sub>0.32</sub> O <sub>2</sub> (NM=Pt, Pd, and Rh). <i>Journal of Catalysis</i> , 2001, 200, 181-193.	3.1	107
5	Direct and indirect effects of silver nanoparticles on freshwater and marine microalgae ( <i>Chlamydomonas reinhardtii</i> and <i>Phaeodactylum tricornutum</i> ). <i>Chemosphere</i> , 2017, 179, 279-289.	4.2	96
6	Toxicity of TiO <sub>2</sub> , in nanoparticle or bulk form to freshwater and marine microalgae under visible light and UV-A radiation. <i>Environmental Pollution</i> , 2017, 227, 39-48.	3.7	91
7	Extension of preparation methods employed with ceramic materials to carbon honeycomb monoliths. <i>Carbon</i> , 2004, 42, 3251-3254.	5.4	90
8	Stabilisation of nanostructured Ce <sub>0.2</sub> Zr <sub>0.8</sub> O <sub>2</sub> solid solution by impregnation on Al <sub>2</sub> O <sub>3</sub> : a suitable method for the production of thermally stable oxygen storage/release promoters for three-way catalysts. <i>Chemical Communications</i> , 2000, , 2167-2168.	2.2	87
9	Characterization of the Metal Phase in NM/Ce <sub>0.68</sub> Zr <sub>0.32</sub> O <sub>2</sub> (NM: Pt and Pd) Catalysts by Hydrogen Chemisorption and HRTEM Microscopy: A Comparative Study. <i>Journal of Physical Chemistry B</i> , 2001, 105, 1191-1199.	1.2	85
10	Rhodium Dispersion in a Rh/Ce <sub>0.68</sub> Zr <sub>0.32</sub> O <sub>2</sub> Catalyst Investigated by HRTEM and H <sub>2</sub> Chemisorption. <i>Journal of Physical Chemistry B</i> , 2000, 104, 4667-4672.	1.2	79
11	Thermal Stabilization of C <sub>x</sub> Zr <sub>1-x</sub> O <sub>2</sub> Oxygen Storage Promoters by Addition of Al <sub>2</sub> O <sub>3</sub> : Effect of Thermal Aging on Textural, Structural, and Morphological Properties. <i>Chemistry of Materials</i> , 2004, 16, 4273-4285.	3.2	78
12	A novel CoO <sub>x</sub> /La-modified-CeO <sub>2</sub> formulation for powdered and washcoated onto cordierite honeycomb catalysts with application in VOCs oxidation. <i>Applied Catalysis B: Environmental</i> , 2014, 144, 425-434.	10.8	67
13	Homoagglomeration and heteroagglomeration of TiO <sub>2</sub> , in nanoparticle and bulk form, onto freshwater and marine microalgae. <i>Science of the Total Environment</i> , 2017, 592, 403-411.	3.9	56
14	CeO <sub>2</sub> NPs, toxic or protective to phytoplankton? Charge of nanoparticles and cell wall as factors which cause changes in cell complexity. <i>Science of the Total Environment</i> , 2017, 590-591, 304-315.	3.9	54
15	Original carbon-based honeycomb monoliths as support of Cu or Mn catalysts for low-temperature SCR of NO: Effects of preparation variables. <i>Applied Catalysis A: General</i> , 2008, 342, 150-158.	2.2	49
16	Effect of Mild Re-oxidation Treatments with CO <sub>2</sub> on the Chemisorption Capability of a Pt/CeO <sub>2</sub> Catalyst Reduced at 500°C. <i>Journal of Catalysis</i> , 2001, 200, 411-415.	3.1	48
17	Au-TiO <sub>2</sub> /SiO <sub>2</sub> photocatalysts with NO <sub>x</sub> depolluting activity: Influence of gold particle size and loading. <i>Chemical Engineering Journal</i> , 2019, 368, 417-427.	6.6	48
18	DoE (Design of Experiments) Assisted Allylic Hydroxylation of Enones Catalysed by a Copper-Aluminium Mixed Oxide. <i>European Journal of Organic Chemistry</i> , 2013, 2013, 8307-8314.	1.2	47

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19	One-pot synthesis of Au/N-TiO <sub>2</sub> photocatalysts for environmental applications: Enhancement of dyes and NO <sub>x</sub> photodegradation. Powder Technology, 2019, 355, 793-807.	2.1	45
20	Non-cordierite clay-based structured materials for environmental applications. Journal of Hazardous Materials, 2010, 181, 9-18.	6.5	42
21	Lead removal from aqueous solution by means of integral natural clays honeycomb monoliths. Journal of Hazardous Materials, 2019, 365, 519-530.	6.5	41
22	TAP study of toluene total oxidation over a Co <sub>3</sub> O <sub>4</sub> /La-CeO <sub>2</sub> catalyst with an application as a washcoat of cordierite honeycomb monoliths. Physical Chemistry Chemical Physics, 2014, 16, 11447-11455.	1.3	40
23	Insights on the combustion mechanism of ethanol and n-hexane in honeycomb monolithic type catalysts: Influence of the amount and nature of Mn-Cu mixed oxide. Fuel, 2017, 208, 637-646.	3.4	39
24	Cytotoxicity of CeO <sub>2</sub> nanoparticles using in vitro assay with Mytilus galloprovincialis hemocytes: Relevance of zeta potential, shape and biocorona formation. Aquatic Toxicology, 2018, 200, 13-20.	1.9	39
25	Influence of the nature of the metal precursor salt on the redox behaviour of ceria in Rh/CeO <sub>2</sub> catalysts. Studies in Surface Science and Catalysis, 1995, 96, 419-429.	1.5	34
26	XPS analysis and microstructural characterization of a Ce/Tb mixed oxide supported on a lanthana-modified transition alumina. , 1999, 27, 941-949.		33
27	Monolithic honeycomb design applied to carbon materials for catalytic methane decomposition. Applied Catalysis A: General, 2013, 458, 21-27.	2.2	32
28	Au-TiO <sub>2</sub> /SiO <sub>2</sub> photocatalysts for building materials: Self-cleaning and de-polluting performance. Building and Environment, 2019, 164, 106347.	3.0	31
29	Role of the Wild Carob as Biosorbent and as Precursor of a New High-Surface-Area Activated Carbon for the Adsorption of Methylene Blue. Arabian Journal for Science and Engineering, 2021, 46, 325-341.	1.7	31
30	Title is missing!. Catalysis Letters, 2001, 76, 131-137.	1.4	27
31	Originally prepared carbon-based honeycomb monoliths with potential application as VOCs adsorbents. Comptes Rendus Chimie, 2006, 9, 1215-1220.	0.2	27
32	Use of Au/N-TiO <sub>2</sub> /SiO <sub>2</sub> photocatalysts in building materials with NO depolluting activity. Journal of Cleaner Production, 2020, 243, 118633.	4.6	27
33	Investigation by Means of H <sub>2</sub> Adsorption, Diffraction, and Electron Microscopy Techniques of a Cerium/Terbium Mixed Oxide Supported on a Lanthana-Modified Alumina. Chemistry of Materials, 2002, 14, 844-850.	3.2	26
34	Comparative study of the catalytic performance and final surface structure of Co <sub>3</sub> O <sub>4</sub> /La-CeO <sub>2</sub> washcoated ceramic and metallic honeycomb monoliths. Catalysis Today, 2015, 253, 190-198.	2.2	26
35	CHEMICAL AND NANOSTRUCTURAL ASPECTS OF THE PREPARATION AND CHARACTERISATION OF CERIA AND CERIA-BASED MIXED OXIDE-SUPPORTED METAL CATALYSTS. Catalytic Science Series, 2002, , 85-168.	0.6	25
36	Easy route to activate clay honeycomb monoliths for environmental applications. Applied Clay Science, 2010, 47, 392-399.	2.6	24

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37	Use of pillared clays in the preparation of washcoated clay honeycomb monoliths as support of manganese catalysts for the total oxidation of VOCs. <i>Catalysis Today</i> , 2017, 296, 84-94.	2.2	24
38	Integration of Adsorption and Photocatalytic Degradation of Methylene Blue Using $\text{TiO}_2$ Supported on Granular Activated Carbon. <i>Arabian Journal for Science and Engineering</i> , 2017, 42, 1475-1486.	1.7	24
39	Easy extrusion of honeycomb-shaped monoliths using Moroccan natural clays and investigation of their dynamic adsorptive behavior towards VOCs. <i>Journal of Hazardous Materials</i> , 2009, 170, 87-95.	6.5	23
40	Low temperature prepared copper-iron mixed oxides for the selective CO oxidation in the presence of hydrogen. <i>Applied Catalysis A: General</i> , 2018, 552, 58-69.	2.2	23
41	Physicochemical characterization and adsorptive properties of some Moroccan clay minerals extruded as lab-scale monoliths. <i>Applied Clay Science</i> , 2007, 36, 287-296.	2.6	22
42	A comparative study of $\text{Bi}_2\text{WO}_6$ , $\text{CeO}_2$ , and $\text{TiO}_2$ as catalysts for selective photo-oxidation of alcohols to carbonyl compounds. <i>Applied Catalysis A: General</i> , 2015, 505, 375-381.	2.2	22
43	Preferential oxidation of CO in the presence of excess of hydrogen on $\text{Ru}/\text{Al}_2\text{O}_3$ catalyst: Promoting effect of ceria-zirconia mixed oxide. <i>Journal of Catalysis</i> , 2013, 299, 272-283.	3.1	21
44	Speciation-controlled incipient wetness impregnation: A rational synthetic approach to prepare sub-nanosized and highly active ceria-zirconia supported gold catalysts. <i>Journal of Catalysis</i> , 2014, 318, 119-127.	3.1	20
45	Unveiling the source of activity of carbon integral honeycomb monoliths in the catalytic methane decomposition reaction. <i>Catalysis Today</i> , 2015, 249, 86-93.	2.2	20
46	Adding value to natural clays as low-cost adsorbents of methylene blue in polluted water through honeycomb monoliths manufacture. <i>SN Applied Sciences</i> , 2019, 1, 1.	1.5	18
47	Study of the Structural Modifications Induced by Reducing Treatments on a $\text{Pd}/\text{Ce}_{0.8}\text{Tb}_{0.2}\text{O}_{2-x}/\text{La}_2\text{O}_3/\text{Al}_2\text{O}_3$ Catalyst by Means of X-ray Diffraction and Electron Microscopy Techniques. <i>Chemistry of Materials</i> , 2002, 14, 1405-1410.	3.2	17
48	Reactivation of aged model $\text{Pd}/\text{Ce}_{0.68}\text{Zr}_{0.32}\text{O}_2$ three-way catalyst by high temperature oxidising treatment. <i>Chemical Communications</i> , 2004, , 196-197.	2.2	17
49	Metal Sintering in $\text{Rh}/\text{Al}_2\text{O}_3$ Catalysts Followed by HREM, $^1\text{H}$ NMR, and $\text{H}_2$ Chemisorption. <i>Langmuir</i> , 2001, 17, 2720-2726.	1.6	15
50	Clay honeycomb monoliths for water purification: Modulating methylene blue adsorption through controlled activation via natural coal templating. <i>Applied Surface Science</i> , 2013, 277, 242-248.	3.1	14
51	Changing the adsorption capacity of coal-based honeycomb monoliths for pollutant removal from liquid streams by controlling their porosity. <i>Applied Surface Science</i> , 2010, 256, 7111-7117.	3.1	13
52	Simultaneous water gas shift and methanation reactions on $\text{Ru}/\text{Ce}_{0.8}\text{Tb}_{0.2}\text{O}_{2-x}$ based catalysts. <i>Catalysis Today</i> , 2012, 180, 42-50.	2.2	13
53	Combined (S)TEM-FIB Insight into the Influence of the Preparation Method on the Final Surface Structure of a $\text{Co}_3\text{O}_4/\text{La}$ -Modified- $\text{CeO}_2$ Washcoated Monolithic Catalyst. <i>Journal of Physical Chemistry C</i> , 2013, 117, 13028-13036.	1.5	13
54	Experimental evidences of the relationship between reducibility and micro- and nanostructure in commercial high surface area ceria. <i>Applied Catalysis A: General</i> , 2014, 479, 35-44.	2.2	13

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55	Acyloxylation of 1,4-Dioxanes and 1,4-Dithianes Catalyzed by a Copper-iron Mixed Oxide. Journal of Organic Chemistry, 2015, 80, 6814-6821.	1.7	13
56	Clay honeycomb monoliths as low cost CO <sub>2</sub> adsorbents. Journal of the Taiwan Institute of Chemical Engineers, 2017, 80, 415-423.	2.7	13
57	Oxygen storage capacity improvement using CeO <sub>2</sub> -ZrO <sub>2</sub> mixed oxides in three way catalysts. Studies in Surface Science and Catalysis, 1999, , 257-262.	1.5	9
58	Steady-state isotopic transient kinetic analysis of the H <sub>2</sub> /D <sub>2</sub> exchange reaction as a tool for characterising the metal phase in supported platinum catalysts. Applied Catalysis A: General, 2002, 232, 39-50.	2.2	9
59	Optimized preparation of washcoated clay honeycomb monoliths as support of manganese catalysts for acetone total combustion. Microporous and Mesoporous Materials, 2021, 310, 110651.	2.2	9
60	Honeycomb monolithic design to enhance the performance of Ni-based catalysts for dry reforming of methane. Catalysis Today, 2022, 383, 226-235.	2.2	8
61	Ultrathin Washcoat and Very Low Loading Monolithic Catalyst with Outstanding Activity and Stability in Dry Reforming of Methane. Nanomaterials, 2020, 10, 445.	1.9	8
62	Development of Acidity on Sol-Gel Prepared TiO <sub>2</sub> -SiO <sub>2</sub> Catalysts. Materials Research Society Symposia Proceedings, 1994, 346, 685.	0.1	7
63	Carbon integral honeycomb monoliths as support of copper catalysts in the Kharasch-Sosnovsky oxidation of cyclohexene. Chemical Engineering Journal, 2016, 290, 174-184.	6.6	7
64	Hydrogen scrambling over Rh/Ce <sub>0.68</sub> Zr <sub>0.32</sub> O <sub>2</sub> and Rh/Al <sub>2</sub> O <sub>3</sub> catalysts: Effects of support, metal precursor and redox aging. Physical Chemistry Chemical Physics, 2002, 4, 381-388.	1.3	6
65	Chemical Reactivity of Binary Rare Earth Oxides. , 2004, , 9-55.		3
66	Copper-iron mixed oxide supported onto cordierite honeycomb as a heterogeneous catalyst in the Kharasch-Sosnovsky oxidation of cyclohexene. Catalysis Today, 2021, , .	2.2	3
67	Clay honeycomb monoliths for the simultaneous retention of lead and cadmium in water. Environmental Technology and Innovation, 2022, 27, 102765.	3.0	3