

# Juan Pedro Holgado

## List of Publications by Year in descending order

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84  
papers

4,683  
citations

117625

34  
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98798

67  
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88  
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88  
docs citations

88  
times ranked

6673  
citing authors

#	ARTICLE	IF	CITATIONS
1	Interface Effects for Cu, CuO, and Cu <sub>2</sub> O Deposited on SiO <sub>2</sub> and ZrO <sub>2</sub> . XPS Determination of the Valence State of Copper in Cu/SiO <sub>2</sub> and Cu/ZrO <sub>2</sub> Catalysts. <i>Journal of Physical Chemistry B</i> , 2002, 106, 6921-6929.	2.6	526
2	Study of CeO <sub>2</sub> XPS spectra by factor analysis: reduction of CeO <sub>2</sub> . <i>Applied Surface Science</i> , 2000, 161, 301-315.	6.1	293
3	XPS study of oxidation processes of CeO <sub>x</sub> defective layers. <i>Applied Surface Science</i> , 2000, 158, 164-171.	6.1	248
4	Critical influence of the amorphous silica-to-cristobalite phase transition on the performance of Mn/Na <sub>2</sub> WO <sub>4</sub> /SiO <sub>2</sub> catalysts for the oxidative coupling of methane. <i>Journal of Catalysis</i> , 1998, 177, 259-266.	6.2	212
5	Morphology changes induced by strong metal-support interaction on a Ni-ceria catalytic system. <i>Journal of Catalysis</i> , 2008, 257, 307-314.	6.2	202
6	Synthesis and characterization of a LaNiO <sub>3</sub> perovskite as precursor for methane reforming reactions catalysts. <i>Applied Catalysis B: Environmental</i> , 2010, 93, 346-353.	20.2	189
7	Effect of support oxygen storage capacity on the catalytic performance of Rh nanoparticles for CO <sub>2</sub> reforming of methane. <i>Applied Catalysis B: Environmental</i> , 2019, 243, 490-501.	20.2	178
8	Structural, Optical, and Photoelectrochemical Properties of Mn-doped TiO <sub>2</sub> Model Thin Film Photocatalysts. <i>Journal of Physical Chemistry B</i> , 2004, 108, 17466-17476.	2.6	164
9	Complete n-hexane oxidation over supported Mn-Co catalysts. <i>Applied Catalysis B: Environmental</i> , 2010, 94, 46-54.	20.2	144
10	In situ spectroscopic detection of SMSI effect in a Ni/CeO <sub>2</sub> system: hydrogen-induced burial and dig out of metallic nickel. <i>Chemical Communications</i> , 2010, 46, 1097-1099.	4.1	140
11	Modifying the Size of Nickel Metallic Particles by H <sub>2</sub> /CO Treatment in Ni/ZrO <sub>2</sub> Methane Dry Reforming Catalysts. <i>ACS Catalysis</i> , 2011, 1, 82-88.	11.2	128
12	In Situ XAS Study of Synergic Effects on Ni-Co/ZrO <sub>2</sub> Methane Reforming Catalysts. <i>Journal of Physical Chemistry C</i> , 2012, 116, 2919-2926.	3.1	126
13	LaNiO <sub>3</sub> as a precursor of Ni/La <sub>2</sub> O <sub>3</sub> for CO <sub>2</sub> reforming of CH <sub>4</sub> : Effect of the presence of an amorphous NiO phase. <i>Applied Catalysis B: Environmental</i> , 2012, 123-124, 324-332.	20.2	116
14	Study of nanostructured Ni/CeO <sub>2</sub> catalysts prepared by combustion synthesis in dry reforming of methane. <i>Applied Catalysis A: General</i> , 2010, 384, 1-9.	4.3	112
15	Use of factor analysis and XPS to study defective nickel oxide. <i>The Journal of Physical Chemistry</i> , 1992, 96, 3080-3086.	2.9	100
16	Effect of thermal treatments on the catalytic behaviour in the CO preferential oxidation of a CuO-CeO <sub>2</sub> -ZrO <sub>2</sub> catalyst with a flower-like morphology. <i>Applied Catalysis B: Environmental</i> , 2011, 102, 627-637.	20.2	98
17	New efficient catalysts for the oxidative coupling of methane. <i>Catalysis Letters</i> , 2000, 68, 191-196.	2.6	76
18	Photoefficiency and Optical, Microstructural, and Structural Properties of TiO <sub>2</sub> Thin Films Used as Photoanodes. <i>Langmuir</i> , 2004, 20, 1688-1697.	3.5	73

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19	Mechanism of complete n-hexane oxidation on silica supported cobalt and manganese catalysts. Applied Catalysis A: General, 2012, 413-414, 43-51.	4.3	70
20	SiO <sub>2</sub> /TiO <sub>2</sub> thin films with variable refractive index prepared by ion beam induced and plasma enhanced chemical vapor deposition. Thin Solid Films, 2006, 500, 19-26.	1.8	67
21	Preparation of transparent and conductive Al-doped ZnO thin films by ECR plasma enhanced CVD. Surface and Coatings Technology, 2002, 151-152, 289-293.	4.8	66
22	Sonogashira Cross-Coupling and Homocoupling on a Silver Surface: Chlorobenzene and Phenylacetylene on Ag(100). Journal of the American Chemical Society, 2015, 137, 940-947.	13.7	50
23	An XPS study of the Ar <sup>+</sup> -induced reduction of Ni <sup>2+</sup> in NiO and Ni-Si oxide systems. Applied Surface Science, 1991, 51, 19-26.	6.1	49
24	Determination of texture by infrared spectroscopy in titanium oxide anatase thin films. Journal of Applied Physics, 2003, 93, 4634-4645.	2.5	49
25	Study of Oxygen Reactivity in La <sub>1-x</sub> Sr <sub>x</sub> CoO <sub>3</sub> Perovskites for Total Oxidation of Toluene. Catalysis Letters, 2012, 142, 408-416.	2.6	49
26	Towards Extending Solar Cell Lifetimes: Addition of a Fluorous Cation to Triple Cation-Based Perovskite Films. ChemSusChem, 2017, 10, 3846-3853.	6.8	49
27	Cobalt Carbide Identified as Catalytic Site for the Dehydrogenation of Ethanol to Acetaldehyde. ACS Catalysis, 2017, 7, 5243-5247.	11.2	47
28	An XPS study of the mixing effects induced by ion bombardment in composite oxides. Applied Surface Science, 1993, 68, 453-459.	6.1	46
29	X-ray Photoelectron Spectroscopy and Infrared Study of the Nature of Cu Species in Cu/ZrO <sub>2</sub> -NO <sub>x</sub> Catalysts. Journal of Physical Chemistry B, 2002, 106, 10185-10190.	2.6	44
30	An in situ XAS study of Cu/ZrO catalysts under de-NO reaction conditions. Journal of Catalysis, 2005, 235, 295-301.	6.2	42
31	In Situ Electrochemical Promotion by Sodium of the Selective Hydrogenation of Acetylene over Platinum. Journal of Catalysis, 1998, 179, 231-240.	6.2	38
32	Chemical and electronic characterization of cobalt in a lanthanum perovskite. Effects of strontium substitution. Journal of Solid State Chemistry, 2010, 183, 27-32.	2.9	36
33	Promotional Effect of the Base Metal on Bimetallic Au-Ni/CeO <sub>2</sub> Catalysts Prepared from Core-Shell Nanoparticles. ACS Catalysis, 2013, 3, 2169-2180.	11.2	36
34	Optical and crystallisation behaviour of TiO <sub>2</sub> and V/TiO <sub>2</sub> thin films prepared by plasma and ion beam assisted methods. Thin Solid Films, 2003, 429, 84-90.	1.8	35
35	Ar stabilisation of the cubic/tetragonal phases of ZrO <sub>2</sub> in thin films prepared by ion beam induced chemical vapour deposition. Thin Solid Films, 2001, 389, 34-42.	1.8	34
36	A study of the optical properties of metal-doped polyoxotitanium cages and the relationship to metal-doped titania. Dalton Transactions, 2014, 43, 8679.	3.3	33

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37	Theory and Practice: Bulk Synthesis of $C_{30}B$ and its $H_{2O}$ and $Li^+$ Storage Capacity. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 5919-5923.	13.8	33
38	Promoting effect of Ce and Mg cations in Ni/Al catalysts prepared from hydrotalcites for the dry reforming of methane. <i>Reaction Kinetics, Mechanisms and Catalysis</i> , 2014, 111, 259-275.	1.7	32
39	In-situ hydrogasification/regeneration of NiAl-hydrotalcite derived catalyst in the reaction of $CO_2$ reforming of methane: A versatile approach to catalyst recycling. <i>Journal of <math>CO_2</math> Utilization</i> , 2016, 14, 98-105.	6.8	28
40	Corrosion resistant $ZrO_2$ thin films prepared at room temperature by ion beam induced chemical vapour deposition. <i>Surface and Coatings Technology</i> , 2002, 151-152, 449-453.	4.8	27
41	Monitoring Interface Interactions by XPS at Nanometric Tin Oxides Supported on $Al_2O_3$ and $Sb_2O_3$ . <i>Journal of Physical Chemistry B</i> , 2004, 108, 9905-9913.	2.6	27
42	A low-temperature single-source route to an efficient broad-band cerium(III) photocatalyst using a bimetallic polyoxotitanium cage. <i>RSC Advances</i> , 2013, 3, 13659.	3.6	27
43	Degradation of $LaMnO_{3-\delta}$ surface layer in $LaMnO_{3-\delta}$ /metal interface. <i>Applied Physics Letters</i> , 2002, 81, 859-861.	3.3	26
44	Ion beam effects in $SiO_x$ ( $x < 2$ ) subjected to low energy $Ar^+$ , $He^+$ and $N_2^+$ bombardment. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2002, 187, 465-474.	1.4	26
45	Mixing effects in $CeO_2/TiO_2$ and $CeO_2/SiO_2$ systems submitted to $Ar^+$ sputtering. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1993, 11, 58-65.	2.1	25
46	Factors that Contribute to the Growth of $Ag@TiO_2$ Nanofibers by Plasma Deposition. <i>Plasma Processes and Polymers</i> , 2007, 4, 515-527.	3.0	25
47	$Co_3O_4@CeO_2/SiO_2$ Catalysts for n-Hexane and CO Oxidation. <i>Catalysis Letters</i> , 2009, 129, 149-155.	2.6	25
48	Operando XAS and Raman study on the structure of a supported vanadium oxide catalyst during the oxidation of $H_2S$ to sulphur. <i>Catalysis Today</i> , 2010, 155, 296-301.	4.4	25
49	Angle dependence of the O K edge absorption spectra of $TiO_2$ thin films with preferential texture. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2003, 200, 248-254.	1.4	24
50	Structure and chemistry of $SiO_x$ ( $x < 2$ ) systems. <i>Vacuum</i> , 2002, 67, 491-499.	3.5	22
51	Comprehensive Experimental and Theoretical Study of the $CO + NO$ Reaction Catalyzed by Au/Ni Nanoparticles. <i>ACS Catalysis</i> , 2019, 9, 4919-4929.	11.2	22
52	Phase mixing in $Fe/TiO_2$ thin films prepared by ion beam-induced chemical vapour deposition: optical and structural properties. <i>Surface and Coatings Technology</i> , 2002, 158-159, 552-557.	4.8	21
53	Microstructure and transport properties of ceria and samaria doped ceria thin films prepared by EBE-IBAD. <i>Surface and Coatings Technology</i> , 2007, 202, 1256-1261.	4.8	20
54	A single-source route to bulk samples of $C_3N$ and the co-evolution of graphitic carbon microspheres. <i>Carbon</i> , 2013, 64, 6-10.	10.3	20

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55	The Auger parameter and the study of chemical and electronic interactions at the Sb <sub>2</sub> O <sub>3</sub> /SnO <sub>2</sub> and Sb <sub>2</sub> O <sub>3</sub> /Al <sub>2</sub> O <sub>3</sub> interfaces. <i>Surface Science</i> , 2003, 537, 228-240.	1.9	19
56	Reactivity of LaNi <sub>1-x</sub> Co <sub>y</sub> O <sub>3</sub> Perovskite Systems in the Deep Oxidation of Toluene. <i>Catalysis Letters</i> , 2009, 131, 164-169.	2.6	18
57	XPS/TPR study of the reducibility of M/CeO <sub>2</sub> catalysts (M=Pt, Rh): Does junction effect theory apply?. <i>Studies in Surface Science and Catalysis</i> , 1995, 96, 109-122.	1.5	17
58	Amorphisation and related structural effects in thin films prepared by ion beam assisted methods. <i>Surface and Coatings Technology</i> , 2000, 125, 116-123.	4.8	15
59	Correlation between optical properties and electronic parameters for mixed oxide thin films. <i>Surface and Interface Analysis</i> , 2006, 38, 752-756.	1.8	14
60	Characterization of Sb <sub>2</sub> O <sub>3</sub> subjected to different ion and plasma surface treatments. <i>Surface and Interface Analysis</i> , 2003, 35, 256-262.	1.8	13
61	Characterisation by X-ray absorption spectroscopy of oxide thin films prepared by ion beam-induced CVD. <i>Thin Solid Films</i> , 2000, 377-378, 460-466.	1.8	12
62	Examination of the Deactivation Cycle of NiAl- and NiMgAl-Hydrotalcite Derived Catalysts in the Dry Reforming of Methane. <i>Catalysis Letters</i> , 2021, 151, 2696-2715.	2.6	11
63	Plate reactor for testing catalysts in the form of thin films. <i>Applied Catalysis B: Environmental</i> , 2001, 31, L5-L10.	20.2	10
64	Determination of surface nanostructure from analysis of electron plasmon losses in XPS. <i>Surface and Interface Analysis</i> , 2002, 34, 201-205.	1.8	10
65	Analysis of texture and microstructure of anatase thin films by Fourier transform infrared spectroscopy. <i>Thin Solid Films</i> , 2006, 515, 1585-1591.	1.8	9
66	Study of the first nucleation steps of thin films by XPS inelastic peak shape analysis. <i>Surface and Interface Analysis</i> , 2007, 39, 331-336.	1.8	9
67	Structural characteristics and morphology of Sm <sub>x</sub> Ce <sub>1-x</sub> O <sub>2</sub> thin films. <i>Applied Surface Science</i> , 2009, 255, 9085-9091.	6.1	8
68	Structural and chemical reactivity modifications of a cobalt perovskite induced by Sr-substitution. An in situ XAS study. <i>Materials Chemistry and Physics</i> , 2015, 151, 29-33.	4.0	8
69	Critical Role of Oxygen in Silver-Catalyzed Glaser-Hay Coupling on Ag(100) under Vacuum and in Solution on Ag Particles. <i>ACS Catalysis</i> , 2017, 7, 3113-3120.	11.2	8
70	Structural effects due to the incorporation of Ar atoms in the lattice of ZrO <sub>2</sub> thin films prepared by ion beam assisted deposition. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2002, 194, 333-345.	1.4	7
71	Molecular nitrogen implanted in Al <sub>2</sub> O <sub>3</sub> by low energy N <sub>2</sub> <sup>+</sup> ion bombardment. <i>Solid State Communications</i> , 2003, 128, 235-238.	1.9	7
72	First stages of growth of cerium oxide deposited on alumina and reduced titania surfaces. <i>Surface and Interface Analysis</i> , 2006, 38, 510-513.	1.8	7

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73	Size and shape of supported zirconia nanoparticles determined by x-ray photoelectron spectroscopy. <i>Journal of Applied Physics</i> , 2007, 101, 124910.	2.5	7
74	Structural phase transitions in ZrO <sub>2</sub> films induced by ion bombardment—Argon irradiation versus implantation. <i>Journal of Applied Physics</i> , 2003, 93, 5251-5254.	2.5	6
75	Phase composition-dependent physical and mechanical properties of Yb Zr <sub>1-x</sub> O <sub>2</sub> solid solutions. <i>Journal of Physics and Chemistry of Solids</i> , 2008, 69, 805-814.	4.0	6
76	Study of nanoporous catalysts in the selective catalytic reduction of NO <sub>x</sub> . <i>Catalysis Today</i> , 2010, 158, 78-88.	4.4	6
77	LED-driven controlled deposition of Ni onto TiO <sub>2</sub> for visible-light expanded conversion of carbon dioxide into C <sub>1</sub> –C <sub>2</sub> alkanes. <i>Nanoscale Advances</i> , 2021, 3, 3788-3798.	4.6	6
78	Study of in situ adsorption and intercalation of cobaltocene into SnS <sub>2</sub> single crystals by photoelectron spectroscopy. <i>Surface Science</i> , 2001, 477, L295-L300.	1.9	5
79	Title is missing!. <i>Journal of Superconductivity and Novel Magnetism</i> , 2002, 15, 579-582.	0.5	4
80	Surface microstructure of MgO deposited on SiO <sub>2</sub> by analysis of plasmon excitations in photoemission experiments. <i>Surface Science</i> , 2001, 482-485, 1325-1330.	1.9	3
81	Near edge x-ray absorption fine structure spectroscopy study of atomic nitrogen implanted in Al <sub>2</sub> O <sub>3</sub> by low energy N <sub>2</sub> <sup>+</sup> bombardment. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2001, 19, 1024-1026.	2.1	3
82	First Demonstration of in Situ Electrochemical Control of the Composition and Performance of an Alloy Catalyst during Reaction. <i>Journal of Catalysis</i> , 2002, 210, 237-240.	6.2	3
83	Structure and microstructure of EB-PVD yttria thin films grown on Si (111) substrate. <i>Vacuum</i> , 2010, 85, 535-540.	3.5	3
84	In situ spectroscopic characterization of some LaNi <sub>1-x</sub> CoxO <sub>3</sub> perovskite catalysts active for CH <sub>4</sub> reforming reactions. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1446, 73.	0.1	1