JosÃ© J Calvino

List of Publications by Year
in descending order

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197 papers	8,189 citations	53794 45 h-index	60623 81 g-index

208 all docs	208 docs citations	208 times ranked	8917 citing authors

#	Article	IF	Citations
1	Transforming Nonselective into Chemoselective Metal Catalysts for the Hydrogenation of Substituted Nitroaromatics. Journal of the American Chemical Society, 2008, 130, 8748-8753.	13.7	496
2	Lanthanide compounds as environmentally-friendly corrosion inhibitors of aluminium alloys: a review. Corrosion Science, 1998, 40, 1803-1819.	6.6	453
3	Some recent results on metal/support interaction effects in NM/CeO2 (NM: noble metal) catalysts. Catalysis Today, 1999, 50, 175-206.	4.4	437
4	Regioselective generation and reactivity control of subnanometric platinum clusters in zeolites for high-temperature catalysis. Nature Materials, 2019, 18, 866-873.	27.5	339
5	Structural modulation and direct measurement of subnanometric bimetallic PtSn clusters confined in zeolites. Nature Catalysis, 2020, 3, 628-638.	34.4	182
6	Some contributions of electron microscopy to the characterisation of the strong metalâ€“support interaction effect. Catalysis Today, 2003, 77, 385-406.	4.4	181
7	The interpretation of HREM images of supported metal catalysts using image simulation: profile view images. Ultramicroscopy, 1998, 72, 135-164.	1.9	154
8	Increasing the Number of Oxygen Vacancies on TiO₂ by Doping with Iron Increases the Activity of Supported Gold for CO Oxidation. Chemistry - A European Journal, 2007, 13, 7771-7779.	3.3	152
9	Hydrogen chemisorption on ceria: influence of the oxide surface area and degree of reduction. Journal of the Chemical Society, Faraday Transactions, 1993, 89, 3499.	1.7	138
10	The role of Pdâ€“Ga bimetallic particles in the bifunctional mechanism of selective methanol synthesis via CO2 hydrogenation on a Pd/Ga2O3 catalyst. Journal of Catalysis, 2012, 292, 90-98.	6.2	136
11	HREM study of the behaviour of a Rh/CeO2 catalyst under high temperature reducing and oxidizing conditions. Catalysis Today, 1995, 23, 219-250.	4.4	134
12	Comparative Structural and Chemical Studies of Ferritin Cores with Gradual Removal of their Iron Contents. Journal of the American Chemical Society, 2008, 130, 8062-8068.	13.7	134
13	Synthesis of Densely Packaged, Ultrasmall Pt⁰₂ Clusters within a Thioetherâ€Functionalized MOF: Catalytic Activity in Industrial Reactions at Low Temperature. Angewandte Chemie - International Edition, 2018, 57, 6186-6191.	13.8	115
14	Single-Step Process To Prepare CeO₂ Nanotubes with Improved Catalytic Activity. Nano Letters, 2009, 9, 1395-1400.	9.1	113
15	Microstructural and chemical properties of ceria-supported rhodium catalysts reduced at 773 K. The Journal of Physical Chemistry, 1993, 97, 4118-4123.	2.9	108
16	Textural and phase stability of CexZr1â^'xO2 mixed oxides under high temperature oxidising conditions. Catalysis Today, 1999, 50, 271-284.	4.4	105
17	Unknown Aspects of Self-Assembly of PbS Microscale Superstructures. ACS Nano, 2012, 6, 3800-3812.	14.6	92
18	Graphene-TiO2 hybrids for photocatalytic aided removal of VOCs and nitrogen oxides from outdoor environment. Chemical Engineering Journal, 2021, 405, 126651.	12.7	90

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19	Selective oxidative dehydrogenation of ethane over SnO2-promoted NiO catalysts. Journal of Catalysis, 2012, 295, 104-114.	6.2	87
20	High-resolution electron microscopy investigation of metalâ€“support interactions in Rh/TiO2. Journal of the Chemical Society, Faraday Transactions, 1996, 92, 2799-2809.	1.7	86
21	Structural, Morphological, and Oxygen Handling Properties of Nanosized Ceriumâ^'Terbium Mixed Oxides Prepared by Microemulsion. Chemistry of Materials, 2003, 15, 4309-4316.	6.7	81
22	Influence of the calcination temperature on the nano-structural properties, surface basicity, and catalytic behavior of alumina-supported lanthana samples. Journal of Catalysis, 2010, 272, 121-130.	6.2	81
23	Magnetic Nanoparticles-Templated Assembly of Protein Subunits: A New Platform for Carbohydrate-Based MRI Nanoprobes. Journal of the American Chemical Society, 2011, 133, 4889-4895.	13.7	79
24	Thermal Stabilization of CexZr1-xO2Oxygen Storage Promoters by Addition of Al2O3:Â Effect of Thermal Aging on Textural, Structural, and Morphological Properties. Chemistry of Materials, 2004, 16, 4273-4285.	6.7	78
25	Gold Nanoparticles in Organic Capsules: A Supramolecular Assembly of Gold Nanoparticles and Cucurbituril. Chemistry - A European Journal, 2007, 13, 6359-6364.	3.3	78
26	Enhanced Hydroxyl Radical Scavenging Activity by Doping Lanthanum in Ceria Nanocubes. Journal of Physical Chemistry C, 2016, 120, 1891-1901.	3.1	77
27	Influence of the Reduction/Evacuation Conditions on the Rate of Hydrogen Spillover on Rh/CeO2 Catalysts. Langmuir, 1994, 10, 717-722.	3.5	76
28	Synthesis of acidic Al-MCM-48: influence of the Si/Al ratio, degree of the surfactant hydroxyl exchange, and post-treatment in NHF solution. Journal of Catalysis, 2005, 230, 327-338.	6.2	75
29	Nanostructural Evolution of a Pt/CeO2Catalyst Reduced at Increasing Temperatures (473â€“1223 K): A HREM Study. Journal of Catalysis, 1997, 169, 510-515.	6.2	74
30	3â€‰D Characterization of Gold Nanoparticles Supported on Heavy Metal Oxide Catalysts by HAADFâ€STEM Electron Tomography. Angewandte Chemie - International Edition, 2009, 48, 5313-5315.	13.8	72
31	Improved Oxidase Mimetic Activity by Praseodymium Incorporation into Ceria Nanocubes. ACS Applied Materials & Interfaces, 2017, 9, 18595-18608.	8.0	71
32	Optimization of tin dioxide nanosticks faceting for the improvement of palladium nanocluster epitaxy. Applied Physics Letters, 2002, 80, 329-331.	3.3	70
33	Characterisation of Three-Way Automotive Aftertreatment Catalysts and Related Model Systems. Topics in Catalysis, 2004, 28, 31-45.	2.8	67
34	Hydrogen Interaction with a Ceriaâ^'Zirconia Supported Gold Catalyst. Influence of CO Co-adsorption and Pretreatment Conditions. Journal of Physical Chemistry C, 2007, 111, 14371-14379.	3.1	65
35	Redox Behavior of Thermally Aged Ceriaâ^'Zirconia Mixed Oxides. Role of Their Surface and Bulk Structural Properties. Chemistry of Materials, 2006, 18, 2750-2757.	6.7	63
36	Synthesis of Supported Planar Iron Oxide Nanoparticles and Their Chemo- and Stereoselectivity for Hydrogenation of Alkynes. ACS Catalysis, 2017, 7, 3721-3729.	11.2	63

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37	Synergistic effect of bimetallic Au-Pd supported on ceria-zirconia mixed oxide catalysts for selective oxidation of glycerol. Applied Catalysis B: Environmental, 2016, 197, 222-235.	20.2	62
38	Comments on "Redox Processes on Pure Ceria and Rh/CeO2 Catalyst Monitored by X-ray Absorption (Fast Acquisition Mode). The Journal of Physical Chemistry, 1995, 99, 11794-11796.	2.9	58
39	Lanthanide salts as alternative corrosion inhibitors. Journal of Alloys and Compounds, 1995, 225, 638-641.	5.5	57
40	Nanoparticles of Pd on Hybrid Polyoxometalateâ^'Ionic Liquid Material: Synthesis, Characterization, and Catalytic Activity for Heck Reaction. Journal of Physical Chemistry C, 2010, 114, 8828-8836.	3.1	54
41	Confined Pt₁¹⁺ Water Clusters in a MOF Catalyze the Lowâ€Temperature Waterâ€“Gas Shift Reaction with both CO₂ Oxygen Atoms Coming from Water. Angewandte Chemie - International Edition, 2018, 57, 17094-17099.	13.8	54
42	Critical Influence of Nanofaceting on the Preparation and Performance of Supported Gold Catalysts. ACS Catalysis, 2015, 5, 3504-3513.	11.2	53
43	Image simulation and experimental HREM study of the metal dispersion in Rh/CeO2 catalysts. Influence of the reduction/reoxidation conditions. Applied Catalysis B: Environmental, 1998, 16, 127-138.	20.2	50
44	Selective hydrogenation of nitrocyclohexane to cyclohexanone oxime with H2 on decorated Pt nanoparticles. Journal of Catalysis, 2009, 263, 328-334.	6.2	49
45	Metal-support interaction phenomena in rhodium/ceria and rhodium/titania catalysts: Comparative study by high-resolution transmission electron spectroscopy. Applied Catalysis A: General, 1993, 99, 1-8.	4.3	46
46	Highly stable ceria-zirconia-yttria supported Ni catalysts for syngas production by CO 2 reforming of methane. Applied Surface Science, 2017, 426, 864-873.	6.1	46
47	Regioselective Generation of Singleâ€Site Iridium Atoms and Their Evolution into Stabilized Subnanometric Iridium Clusters in MWW Zeolite. Angewandte Chemie - International Edition, 2020, 59, 15695-15702.	13.8	46
48	Reversible deactivation of a Au/Ce0.62Zr0.38O2 catalyst in CO oxidation: A systematic study of CO2-triggered carbonate inhibition. Journal of Catalysis, 2014, 316, 210-218.	6.2	45
49	Ru-modified Au catalysts supported on ceriaâ€“zirconia for the selective oxidation of glycerol. Catalysis Today, 2015, 253, 178-189.	4.4	45
50	Model bimetallic Pd-Ni automotive exhaust catalysts: Influence of thermal aging and hydrocarbon self-poisoning. Applied Catalysis B: Environmental, 2006, 62, 359-368.	20.2	44
51	Influence of the Preparation Procedure on the Catalytic Activity of Gold Supported on Diamond Nanoparticles for Phenol Peroxidation. Chemistry - A European Journal, 2011, 17, 9494-9502.	3.3	44
52	Size, nanostructure, and composition dependence of bimetallic Auâ€“Pd supported on ceriaâ€“zirconia mixed oxide catalysts for selective oxidation of benzyl alcohol. Journal of Catalysis, 2019, 375, 44-55.	6.2	43
53	Structural characterisation of a VMgO catalyst used in the oxidative dehydrogenation of propane. Catalysis Letters, 1999, 57, 121-128.	2.6	42
54	Fully Reversible Metal Deactivation Effects in Gold/Ceriaâ€“Zirconia Catalysts: Role of the Redox State of the Support. Angewandte Chemie - International Edition, 2010, 49, 9744-9748.	13.8	42

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55	Rational design of nanostructured, noble metal free, ceriaâ€“zirconia catalysts with outstanding low temperature oxygen storage capacity. Journal of Materials Chemistry A, 2013, 1, 4836.	10.3	42
56	Sizeâ€Controlled Waterâ€Soluble Ag Nanoparticles. European Journal of Inorganic Chemistry, 2007, 2007, 4823-4826.	2.0	41
57	Alumina- and Aluminaâ€“Zirconia-Supported PtSn Bimetallics: Microstructure and Performance for the n-Butane ODH Reaction. Journal of Catalysis, 2002, 208, 467-478.	6.2	40
58	Some major aspects of the chemical behavior of rare earth oxides: An overview. Journal of Alloys and Compounds, 2006, 408-412, 496-502.	5.5	39
59	Influence of yttrium doping on the structural, morphological and optical properties of nanostructured ZnO thin films grown by spray pyrolysis. Ceramics International, 2019, 45, 6842-6852.	4.8	39
60	A New Straightforward and Mild Preparation of Nickel(0) Nanoparticles. Chemistry Letters, 2005, 34, 1262-1263.	1.3	37
61	First Stage of Thermal Aging under Oxidizing Conditions of a Ce_{0.62}Zr_{0.38}O₂ Mixed Oxide with an Ordered Cationic Sublattice: A Chemical, Nanostructural, and Nanoanalytical Study. Chemistry of Materials, 2008, 20, 5107-5113.	6.7	37
62	Structural Surface Investigations of Ceriumâ^'Zirconium Mixed Oxide Nanocrystals with Enhanced Reducibility. Journal of Physical Chemistry C, 2007, 111, 9001-9004.	3.1	36
63	Structure of highly dispersed metals and oxides: exploring the capabilities of high-resolution electron microscopy. Surface and Interface Analysis, 2000, 29, 411-421.	1.8	35
64	Combined HREM and HAADF Scanning Transmission Electron Microscopy:Â A Powerful Tool for Investigating Structural Changes in Thermally Aged Ceriaâ^'Zirconia Mixed Oxides. Chemistry of Materials, 2005, 17, 4282-4285.	6.7	35
65	Bridging the Gap between CO Adsorption Studies on Gold Model Surfaces and Supported Nanoparticles. Angewandte Chemie - International Edition, 2010, 49, 1981-1985.	13.8	35
66	Influence of pretreatment atmospheres on the performance of bimetallic Au-Pd supported on ceria-zirconia mixed oxide catalysts for benzyl alcohol oxidation. Applied Catalysis A: General, 2016, 525, 145-157.	4.3	35
67	Influence of the nature of the metal precursor salt on the redox behaviour of ceria in Rh/CeO2 catalysts. Studies in Surface Science and Catalysis, 1995, 96, 419-429.	1.5	34
68	Quantum Dots Decorated with Magnetic Bionanoparticles. Advanced Functional Materials, 2008, 18, 3931-3935.	14.9	34
69	From synthetic to natural nanoparticles: monitoring the biodegradation of SPIO (P904) into ferritin by electron microscopy. Nanoscale, 2011, 3, 4597.	5.6	34
70	Catalytic Performance of Ni/CeO2/X-ZrO2 (X = Ca, Y) Catalysts in the Aqueous-Phase Reforming of Methanol. Nanomaterials, 2019, 9, 1582.	4.1	34
71	Some recent results on the correlation of nano-structural and redox properties in ceria-zirconia mixed oxides. Journal of Alloys and Compounds, 2008, 451, 521-525.	5.5	32
72	The promotional effect of Sn-beta zeolites on platinum for the selective hydrogenation of Î±,Î²-unsaturated aldehydes. Physical Chemistry Chemical Physics, 2013, 15, 12048.	2.8	32

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73	Preparation and characterization of a praseodymium oxide to be used as a catalytic support. Journal of Alloys and Compounds, 1992, 180, 271-279.	5.5	31
74	Cobalt nanoclusters coated with N-doped carbon for chemoselective nitroarene hydrogenation and tandem reactions in water. Green Chemistry, 2021, 23, 4490-4501.	9.0	31
75	Preparation of rhodium catalysts dispersed on TiO2SiO2 aerogels. Journal of Non-Crystalline Solids, 1992, 147-148, 758-763.	3.1	30
76	The key role of highly dispersed rhodium in the chemistry of hydrogenâ€“ceria systems. Journal of the Chemical Society Chemical Communications, 1992, , 460-462.	2.0	30
77	In situ transmission electron microscopy investigation of Ce(iv) and Pr(iv) reducibility in a Rh (1%)/Ce0.8Pr0.2O2â€“x catalyst. Chemical Communications, 2003, , 644-645.	4.1	30
78	Atomic-level understanding on the evolution behavior of subnanometric Pt and Sn species during high-temperature treatments for generation of dense PtSn clusters in zeolites. Journal of Catalysis, 2020, 391, 11-24.	6.2	30
79	Tutorial: structural characterization of isolated metal atoms and subnanometric metal clusters in zeolites. Nature Protocols, 2021, 16, 1871-1906.	12.0	30
80	Direct assessment of confinement effect in zeolite-encapsulated subnanometric metal species. Nature Communications, 2022, 13, 821.	12.8	30
81	Imaging Nanostructural Modifications Induced by Electronic Metalâ€“Support Interaction Effects at Au||Cerium-Based Oxide Nanointerfaces. ACS Nano, 2012, 6, 6812-6820.	14.6	29
82	CO Oxidation over Bimetallic Auâ€“Pd Supported on Ceriaâ€“Zirconia Catalysts: Effects of Oxidation Temperature and Au:Pd Molar Ratio. Catalysis Letters, 2016, 146, 144-156.	2.6	29
83	3D-printing of metallic honeycomb monoliths as a doorway to a new generation of catalytic devices: the Ni-based catalysts in methane dry reforming showcase. Catalysis Communications, 2021, 148, 106181.	3.3	28
84	Title is missing!. Catalysis Letters, 2001, 76, 131-137.	2.6	27
85	Comparative study of the reducibility under H2 and CO of two thermally aged Ce0.62Zr0.38O2 mixed oxide samples. Catalysis Today, 2009, 141, 409-414.	4.4	27
86	Chemical Imaging at Atomic Resolution as a Technique To Refine the Local Structure of Nanocrystals. Angewandte Chemie - International Edition, 2011, 50, 868-872.	13.8	27
87	Tuning operational conditions for efficient NOx storage and reduction over a Ptâ€“Ba/Al2O3 monolith catalyst. Applied Catalysis B: Environmental, 2010, 96, 329-337.	20.2	26
88	Direct sub-nanometer scale electron microscopy analysis of anion incorporation to self-ordered anodic alumina layers. Corrosion Science, 2010, 52, 3763-3773.	6.6	26
89	Synthesis of ceria-praseodimia nanotubes with high catalytic activity for CO oxidation. Catalysis Today, 2012, 180, 167-173.	4.4	26
90	Comparative study of the catalytic performance and final surface structure of Co3O4/La-CeO2 washcoated ceramic and metallic honeycomb monoliths. Catalysis Today, 2015, 253, 190-198.	4.4	26

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91	Rare-earth oxides with fluorite-related structures: their systematic investigation using HREM images, image simulations and electron diffraction pattern simulations. Ultramicroscopy, 1999, 80, 19-39.	1.9	25
92	Nanostructural Evolution under Reducing Conditions of a Pt/CeTbOxCatalyst:Â A New Alternative System as a TWC Component. Chemistry of Materials, 1999, 11, 3610-3619.	6.7	25
93	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.	0.0	25
94	CeO2-modified Au/TiO2 catalysts with outstanding stability under harsh CO oxidation conditions. Applied Catalysis B: Environmental, 2016, 197, 86-94.	20.2	25
95	Synergy of Neodymium and Copper for Fast and Reversible Visible-light Promoted Photochromism, and Photocatalysis, in Cu/Nd-TiO₂ Nanoparticles. ACS Applied Energy Materials, 2019, 2, 3237-3252.	5.1	25
96	Photo-electrochemical properties of CuOâ€“TiO₂ heterojunctions for glucose sensing. Journal of Materials Chemistry C, 2020, 8, 9529-9539.	5.5	25
97	HRTEM and TPO Study of the Behaviour under Oxidizing Conditions of some Rh/CeO2 Catalysts. Studies in Surface Science and Catalysis, 1994, 82, 507-514.	1.5	24
98	A promoting effect of dilution of Pd sites due to gold surface segregation under reaction conditions on supported Pdâ€“Au catalysts for the selective hydrogenation of 1,5-cyclooctadiene. Catalysis Today, 2016, 259, 213-221.	4.4	24
99	ELECTRON MICROSCOPY IN THE CATALYSIS OF ALKANE OXIDATION, ENVIRONMENTAL CONTROL, AND ALTERNATIVE ENERGY SOURCES. Annual Review of Materials Research, 2005, 35, 465-504.	9.3	23
100	Preparation of nickel(0) nanoparticles by arene-catalysed reduction of different nickel chloride-containing systems. Journal of Experimental Nanoscience, 2006, 1, 419-433.	2.4	23
101	A Bioinspired Approach to the Synthesis of Bimetallic CoNi Nanoparticles. Inorganic Chemistry, 2010, 49, 1705-1711.	4.0	23
102	CO Oxidation Activity of a Au/Ceria-Zirconia Catalyst Prepared by Depositionâ€“Precipitation with Urea. Topics in Catalysis, 2011, 54, 931-940.	2.8	23
103	Structure transformations and reducibility of nanocrystalline Ce1â^'xYbxO2â^'(x/2) mixed oxides. Catalysis Today, 2012, 187, 56-64.	4.4	22
104	Influence of {111} nanofaceting on the dynamics of CO adsorption and oxidation over Au supported on CeO2 nanocubes: An operando DRIFT insight. Catalysis Today, 2019, 336, 90-98.	4.4	22
105	Nano-structural investigation of Ag/Al2O3 catalyst for selective removal of O2 with excess H2 in the presence of C2H4. Applied Catalysis A: General, 2011, 391, 187-193.	4.3	21
106	Improving the Redox Response Stability of Ceria-Zirconia Nanocatalysts under Harsh Temperature Conditions. Chemistry of Materials, 2017, 29, 9340-9350.	6.7	21
107	Selective oxidation of glycerol on morphology controlled ceria nanomaterials. Catalysis Science and Technology, 2019, 9, 2328-2334.	4.1	21
108	Sunlight photoactivity of rice husks-derived biogenic silica. Catalysis Today, 2019, 328, 125-135.	4.4	21

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109	Speciation-controlled incipient wetness impregnation: A rational synthetic approach to prepare sub-nanosized and highly active ceriaâ€“zirconia supported gold catalysts. Journal of Catalysis, 2014, 318, 119-127.	6.2	20
110	Apoferritin Protein Amyloid Fibrils with Tunable Chirality and Polymorphism. Journal of the American Chemical Society, 2019, 141, 1606-1613.	13.7	20
111	Nanostructural evolution of high loading Rh/lanthana catalysts through the preparation and reduction steps. Catalysis Today, 1999, 52, 29-43.	4.4	19
112	Interaction of Pt and Rh nanoparticles with ceria supports: Ring opening of methylcyclobutane and CO hydrogenation after reduction at 373â€“723K. Applied Catalysis A: General, 2005, 294, 279-289.	4.3	19
113	HREM characterization of metal catalysts supported on rare-earth oxides: samarium oxide as support. Ultramicroscopy, 1990, 34, 60-65.	1.9	18
114	Influence of the preparation procedure on the chemical and microstructural properties of lanthana promoted Rh/SiO2 catalysts. Journal of Alloys and Compounds, 1997, 250, 461-466.	5.5	18
115	Scanning Transmission Electron Microscopy Investigation of Differences in the High Temperature Redox Deactivation Behavior of CePrOx Particles Supported on Modified Alumina. Chemistry of Materials, 2009, 21, 1035-1045.	6.7	18
116	Sub-nanometer surface chemistry and orbital hybridization in lanthanum-doped ceria nano-catalysts revealed by 3D electron microscopy. Scientific Reports, 2017, 7, 5406.	3.3	18
117	Study of the Structural Modifications Induced by Reducing Treatments on a Pd/Ce0.8Tb0.2O2-x/La2O3â^'Al2O3Catalyst by Means of X-ray Diffraction and Electron Microscopy Techniques. Chemistry of Materials, 2002, 14, 1405-1410.	6.7	17
118	Selective Oxidation of Veratryl Alcohol over Au-Pd/Ce0.62Zr0.38O2 Catalysts Synthesized by Sol-Immobilization: Effect of Au:Pd Molar Ratio. Nanomaterials, 2018, 8, 669.	4.1	17
119	Active and Regioselective Ru Single-Site Heterogeneous Catalysts for Alpha-Olefin Hydroformylation. ACS Catalysis, 2022, 12, 4182-4193.	11.2	17
120	Ultrasound as a tool for the preparation of gels: effect on the textural properties of TiO2-SiO2 aerogels. Journal of Materials Science, 1993, 28, 2191-2195.	3.7	16
121	Contributions of Electron Microscopy to Understanding CO Adsorption on Powder Au/Ceriaâ€“Zirconia Catalysts. Chemistry - A European Journal, 2010, 16, 9536-9543.	3.3	16
122	Electron Microscopy Investigations of Nanostructured Ce/Mn Oxides for Catalytic Wet Oxidation. Journal of Physical Chemistry C, 2010, 114, 8981-8991.	3.1	16
123	Advanced Electron Microscopy Investigation of Ceriaâ€“Zirconiaâ€Based Catalysts. ChemCatChem, 2011, 3, 1015-1027.	3.7	16
124	Assessment of engineered surfaces roughness by high-resolution 3D SEM photogrammetry. Ultramicroscopy, 2017, 177, 106-114.	1.9	16
125	A Macroscopically Relevant 3Dâ€Metrology Approach for Nanocatalysis Research. Particle and Particle Systems Characterization, 2018, 35, 1700343.	2.3	16
126	HAADF-STEM Electron Tomography in Catalysis Research. Topics in Catalysis, 2019, 62, 808-821.	2.8	16

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127	Study of the COCeO2 interaction in presence of highly dispersed rhodium. Journal of Molecular Catalysis, 1994, 89, 391-396.	1.2	14
128	One-Step Encapsulation of ortho-Disulfides in Functionalized Zinc MOF. Enabling Metalâ€“Organic Frameworks in Agriculture. ACS Applied Materials & Interfaces, 2021, 13, 7997-8005.	8.0	14
129	Combined (S)TEM-FIB Insight into the Influence of the Preparation Method on the Final Surface Structure of a Co₃O₄/La-Modified-CeO₂ Washcoated Monolithic Catalyst. Journal of Physical Chemistry C, 2013, 117, 13028-13036.	3.1	13
130	Experimental evidences of the relationship between reducibility and micro- and nanostructure in commercial high surface area ceria. Applied Catalysis A: General, 2014, 479, 35-44.	4.3	13
131	Lowâ€Lanthanideâ€Content CeO₂/MgO Catalysts with Outstandingly Stable Oxygen Storage Capacities: An Inâ€Depth Structural Characterization by Advanced STEM Techniques. ChemCatChem, 2015, 7, 3763-3778.	3.7	13
132	Critical Influence of Redox Pretreatments on the CO Oxidation Activity of BaFeO3â^'Î´ Perovskites: An in-Depth Atomic-Scale Analysis by Aberration-Corrected and in Situ Diffraction Techniques. ACS Catalysis, 2017, 7, 8653-8663.	11.2	13
133	In Situ Eco Encapsulation of Bioactive Agrochemicals within Fully Organic Nanotubes. ACS Applied Materials & Interfaces, 2019, 11, 41925-41934.	8.0	13
134	In-Depth Structural and Optical Analysis of Ce-modified ZnO Nanopowders with Enhanced Photocatalytic Activity Prepared by Microwave-Assisted Hydrothermal Method. Catalysts, 2020, 10, 551.	3.5	13
135	Enhanced Artificial Enzyme Activities on the Reconstructed Sawtoothlike Nanofacets of Pure and Pr-Doped Ceria Nanocubes. ACS Applied Materials & Interfaces, 2021, 13, 38061-38073.	8.0	13
136	Photocatalytic removal of benzene over Ti₃C₂T_x MXene and TiO₂â€“MXene composite materials under solar and NIR irradiation. Journal of Materials Chemistry C, 2022, 10, 626-639.	5.5	13
137	Key insights on the structural characterization of textured Er2O3â€“ZrO2 nano-oxides prepared by a surfactant-free solvothermal route. Journal of Alloys and Compounds, 2012, 519, 29-36.	5.5	12
138	Self-assembly of one-pot synthesized CexZr1â^'xO2â€“BaOÂ·nAl2O3 nanocomposites promoted by site-selective doping of alumina with barium. Journal of Materials Chemistry A, 2013, 1, 3645.	10.3	12
139	A Novel Electron Microscopic Characterization of Core/Shell Nanobiostimulator Against Parasitic Plants. ACS Applied Materials & Interfaces, 2018, 10, 2354-2359.	8.0	12
140	Gradual Transformation of Ag₂S to Au₂S Nanoparticles by Sequential Cation Exchange Reactions: Binary, Ternary, and Hybrid Compositions. Chemistry of Materials, 2018, 30, 6893-6902.	6.7	12
141	An atomically efficient, highly stable and redox active Ce0.5Tb0.5Ox (3% mol.)/MgO catalyst for total oxidation of methane. Journal of Materials Chemistry A, 2019, 7, 8993-9003.	10.3	12
142	Preparation of Rhodium/Ce_xPr₁₋_xO₂ Catalysts:â€‰ A Nanostructural and Nanoanalytical Investigation of Surface Modifications by Transmission and Scanning-Transmission Electron Microscopy. Journal of Physical Chemistry C, 2008, 112, 5900-5910.	3.1	11
143	A novel procedure for accurate estimations of the lattice parameter of supported nanoparticles from the analysis of plan view HREM images: Application to the structural investigation of Pd/CeO2 catalysts. Catalysis Today, 2012, 180, 174-183.	4.4	11
144	Nanotubes from the Misfit Compound Alloy LaS-Nb_xTa_(1â€“x)S₂. Chemistry of Materials, 2018, 30, 8829-8842.	6.7	11

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145	Cu O and carbonâ€“modified TiO2â€“based hybrid materials for photocatalytically assisted H2 generation. Materials Today Energy, 2021, 19, 100607.	4.7	11
146	Strain Field in Ultrasmall Gold Nanoparticles Supported on Cerium-Based Mixed Oxides. Key Influence of the Support Redox State. Langmuir, 2016, 32, 4313-4322.	3.5	10
147	Surface and redox characterization of new nanostructured ZrO₂@CeO₂ systems with potential catalytic applications. Surface and Interface Analysis, 2018, 50, 1025-1029.	1.8	10
148	Microstructure and catalytic properties of Rh and Ni dispersed on TiO2-SiO2 aerogels. Journal of Sol-Gel Science and Technology, 1994, 2, 831-836.	2.4	9
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