

Alfonso Caballero

List of Publications by Year in descending order

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94
papers

4,733
citations

125106

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116156

66
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95
all docs

95
docs citations

95
times ranked

7063
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Research on properties and catalytic behaviour in CO hydrogenation at atmospheric and high pressure of bimetallic systems (10%Co+0.5%Pd)/TiO ₂ (Al ₂ O ₃). Reaction Kinetics, Mechanisms and Catalysis, 2022, 135, 589. | 0.8 | 0 |
| 2 | Unraveling the Mo/HZSM-5 reduction pre-treatment effect on methane dehydroaromatization reaction. Applied Catalysis B: Environmental, 2022, 312, 121382. | 10.8 | 10 |
| 3 | Elucidating the Promotional Effect of Cerium in the Dry Reforming of Methane. ChemCatChem, 2021, 13, 553-563. | 1.8 | 20 |
| 4 | Overcoming Pd-TiO ₂ Deactivation during H ₂ Production from Photoreforming Using Cu@Pd Nanoparticles Supported on TiO ₂ . ACS Applied Nano Materials, 2021, 4, 3204-3219. | 2.4 | 17 |
| 5 | Elucidating the nature of Mo species on ZSM-5 and its role in the methane aromatization reaction. Reaction Chemistry and Engineering, 2021, 6, 1265-1276. | 1.9 | 8 |
| 6 | Structural and surface considerations on Mo/ZSM-5 systems for methane dehydroaromatization reaction. Molecular Catalysis, 2020, 486, 110787. | 1.0 | 15 |
| 7 | Support effects on NiO-based catalysts for the oxidative dehydrogenation (ODH) of ethane. Catalysis Today, 2019, 333, 10-16. | 2.2 | 35 |
| 8 | Bimetallic Ni-Co/SBA-15 catalysts for reforming of ethanol: How cobalt modifies the nickel metal phase and product distribution. Molecular Catalysis, 2018, 449, 122-130. | 1.0 | 31 |
| 9 | Understanding the differences in catalytic performance for hydrogen production of Ni and Co supported on mesoporous SBA-15. Catalysis Today, 2018, 307, 224-230. | 2.2 | 16 |
| 10 | Nickel Particles Selectively Confined in the Mesoporous Channels of SBA-15 Yielding a Very Stable Catalyst for DRM Reaction. Journal of Physical Chemistry B, 2018, 122, 500-510. | 1.2 | 45 |
| 11 | Improving the direct synthesis of hydrogen peroxide from hydrogen and oxygen over Au-Pd/SBA-15 catalysts by selective functionalization. Molecular Catalysis, 2018, 445, 142-151. | 1.0 | 43 |
| 12 | Revealing the substitution mechanism in Eu ³⁺ :CaMoO ₄ and Eu ³⁺ ,Na ⁺ :CaMoO ₄ phosphors. Journal of Materials Chemistry C, 2018, 6, 12830-12840. | 2.7 | 34 |
| 13 | Preferential oxidation of CO on a La-Co-Ru perovskite-type oxide catalyst. Catalysis Communications, 2017, 92, 75-79. | 1.6 | 8 |
| 14 | Analysis of Ni species formed on zeolites, mesoporous silica and alumina supports and their catalytic behavior in the dry reforming of methane. Reaction Kinetics, Mechanisms and Catalysis, 2017, 121, 255-274. | 0.8 | 25 |
| 15 | Redox and Catalytic Properties of Promoted NiO Catalysts for the Oxidative Dehydrogenation of Ethane. Journal of Physical Chemistry C, 2017, 121, 25132-25142. | 1.5 | 36 |
| 16 | Photochemical methane partial oxidation to methanol assisted by H ₂ O ₂ . Journal of Photochemistry and Photobiology A: Chemistry, 2017, 349, 216-223. | 2.0 | 39 |
| 17 | Cobalt Carbide Identified as Catalytic Site for the Dehydrogenation of Ethanol to Acetaldehyde. ACS Catalysis, 2017, 7, 5243-5247. | 5.5 | 47 |
| 18 | Identification of Outer and Inner Nickel Particles in a Mesoporous Support: How the Channels Modify the Reducibility of Ni/SBA-15 Catalysts. ChemNanoMat, 2017, 3, 94-97. | 1.5 | 18 |

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|----|---|------|-----------|
| 19 | Nickel catalyst with outstanding activity in the DRM reaction prepared by high temperature calcination treatment. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 8459-8469. | 3.8 | 22 |
| 20 | 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. | 2.0 | 8 |
| 21 | Chromium removal on chitosan-based sorbents – An EXAFS/XANES investigation of mechanism. <i>Materials Chemistry and Physics</i> , 2014, 146, 412-417. | 2.0 | 50 |
| 22 | Spinodal decomposition and precipitation in Cu–Cr nanocomposite. <i>Journal of Alloys and Compounds</i> , 2014, 587, 670-676. | 2.8 | 26 |
| 23 | 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. | 0.8 | 32 |
| 24 | In situ XAS study of an improved natural phosphate catalyst for hydrogen production by reforming of methane. <i>Applied Catalysis B: Environmental</i> , 2014, 150-151, 459-465. | 10.8 | 17 |
| 25 | Promotional Effect of the Base Metal on Bimetallic Au–Ni/CeO ₂ Catalysts Prepared from Core–Shell Nanoparticles. <i>ACS Catalysis</i> , 2013, 3, 2169-2180. | 5.5 | 36 |
| 26 | In situ spectroscopic characterization of some LaNi _{1-x} CoxO ₃ perovskite catalysts active for CH ₄ reforming reactions. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1446, 73. | 0.1 | 1 |
| 27 | Preparation of nanostructured nickel aluminate spinel powder from spent NiO/Al ₂ O ₃ catalyst by mechano-chemical synthesis. <i>Advanced Powder Technology</i> , 2012, 23, 833-838. | 2.0 | 38 |
| 28 | LaNiO ₃ as a precursor of Ni/La ₂ O ₃ for CO ₂ reforming of CH ₄ : Effect of the presence of an amorphous NiO phase. <i>Applied Catalysis B: Environmental</i> , 2012, 123-124, 324-332. | 10.8 | 116 |
| 29 | In Situ XAS Study of Synergic Effects on Ni–Co/ZrO ₂ Methane Reforming Catalysts. <i>Journal of Physical Chemistry C</i> , 2012, 116, 2919-2926. | 1.5 | 126 |
| 30 | Study of Oxygen Reactivity in La _{1-x} Sr _x CoO ₃ Perovskites for Total Oxidation of Toluene. <i>Catalysis Letters</i> , 2012, 142, 408-416. | 1.4 | 49 |
| 31 | Modifying the Size of Nickel Metallic Particles by H ₂ /CO Treatment in Ni/ZrO ₂ Methane Dry Reforming Catalysts. <i>ACS Catalysis</i> , 2011, 1, 82-88. | 5.5 | 128 |
| 32 | Influence of Al ₂ O ₃ reinforcement on precipitation kinetic of Cu–Cr nanocomposite. <i>Thermochimica Acta</i> , 2011, 526, 222-228. | 1.2 | 12 |
| 33 | Effect of thermal treatments on the catalytic behaviour in the CO preferential oxidation of a Cu–CeO ₂ –ZrO ₂ catalyst with a flower-like morphology. <i>Applied Catalysis B: Environmental</i> , 2011, 102, 627-637. | 10.8 | 98 |
| 34 | Chemical and electronic characterization of cobalt in a lanthanum perovskite. Effects of strontium substitution. <i>Journal of Solid State Chemistry</i> , 2010, 183, 27-32. | 1.4 | 36 |
| 35 | Study of nanostructured Ni/CeO ₂ catalysts prepared by combustion synthesis in dry reforming of methane. <i>Applied Catalysis A: General</i> , 2010, 384, 1-9. | 2.2 | 112 |
| 36 | Synthesis and characterization of a LaNiO ₃ perovskite as precursor for methane reforming reactions catalysts. <i>Applied Catalysis B: Environmental</i> , 2010, 93, 346-353. | 10.8 | 189 |

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|----|--|------|-----------|
| 37 | Complete n-hexane oxidation over supported Mn ²⁺ /Co catalysts. Applied Catalysis B: Environmental, 2010, 94, 46-54. | 10.8 | 144 |
| 38 | Operando XAS and Raman study on the structure of a supported vanadium oxide catalyst during the oxidation of H ₂ S to sulphur. Catalysis Today, 2010, 155, 296-301. | 2.2 | 25 |
| 39 | Room-Temperature Reaction of Oxygen with Gold: An In situ Ambient-Pressure X-ray Photoelectron Spectroscopy Investigation. Journal of the American Chemical Society, 2010, 132, 2858-2859. | 6.6 | 79 |
| 40 | In situ spectroscopic detection of SMSI effect in a Ni/CeO ₂ system: hydrogen-induced burial and dig out of metallic nickel. Chemical Communications, 2010, 46, 1097-1099. | 2.2 | 140 |
| 41 | Co ₃ O ₄ +CeO ₂ /SiO ₂ Catalysts for n-Hexane and CO Oxidation. Catalysis Letters, 2009, 129, 149-155. | 1.4 | 25 |
| 42 | Reactivity of La _{1-x} Co _x O _{3-δ} Perovskite Systems in the Deep Oxidation of Toluene. Catalysis Letters, 2009, 131, 164-169. | 1.4 | 18 |
| 43 | Near-ambient X-ray photoemission spectroscopy and kinetic approach to the mechanism of carbon monoxide oxidation over lanthanum substituted cobaltites. Catalysis Communications, 2009, 10, 1898-1902. | 1.6 | 24 |
| 44 | Morphology changes induced by strong metal-support interaction on a Ni-ceria catalytic system. Journal of Catalysis, 2008, 257, 307-314. | 3.1 | 202 |
| 45 | Reactivity of lanthanum substituted cobaltites toward carbon particles. Journal of Catalysis, 2008, 257, 334-344. | 3.1 | 81 |
| 46 | Removal of NO in NO/N ₂ , NO/N ₂ /O ₂ , NO/CH ₄ /N ₂ , and NO/CH ₄ /O ₂ /N ₂ Systems by Flowing Microwave Discharges. Journal of Physical Chemistry A, 2007, 111, 1057-1065. | 1.1 | 25 |
| 47 | Plasma catalysis over lanthanum substituted perovskites. Catalysis Communications, 2007, 8, 1739-1742. | 1.6 | 16 |
| 48 | XPS investigation of the reaction of carbon with NO, O ₂ , N ₂ and H ₂ O plasmas. Carbon, 2007, 45, 89-96. | 5.4 | 222 |
| 49 | Plasma catalysis with perovskite-type catalysts for the removal of NO and CH ₄ from combustion exhausts. Journal of Catalysis, 2007, 247, 288-297. | 3.1 | 51 |
| 50 | An in situ XAS study of Cu/ZrO catalysts under de-NO reaction conditions. Journal of Catalysis, 2005, 235, 295-301. | 3.1 | 42 |
| 51 | Plasma Chemistry of NO in Complex Gas Mixtures Excited with a Surfatron Launcher. Journal of Physical Chemistry A, 2005, 109, 4930-4938. | 1.1 | 29 |
| 52 | XPS Study of Interface and Ligand Effects in Supported Cu ₂ O and CuO Nanometric Particles. Journal of Physical Chemistry B, 2005, 109, 7758-7765. | 1.2 | 94 |
| 53 | Reforming of ethanol in a microwave surface-wave plasma discharge. Applied Physics Letters, 2004, 85, 4004-4006. | 1.5 | 74 |
| 54 | Structural, Optical, and Photoelectrochemical Properties of Mn ²⁺ /TiO ₂ Model Thin Film Photocatalysts. Journal of Physical Chemistry B, 2004, 108, 17466-17476. | 1.2 | 164 |

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|----|---|------|-----------|
| 55 | Chemical state and distribution of Mn ions in Mn-doped Al_2O_3 solid solutions prepared in the absence and the presence of fluxes. <i>Journal of the European Ceramic Society</i> , 2004, 24, 3057-3062. | 2.8 | 35 |
| 56 | Oxidation state and localization of chromium ions in Cr-doped cassiterite and Cr-doped malayaite. <i>Acta Materialia</i> , 2003, 51, 2371-2381. | 3.8 | 68 |
| 57 | Acicular Metallic Particles Obtained from Al-Doped Goethite Precursors. <i>Chemistry of Materials</i> , 2003, 15, 951-957. | 3.2 | 10 |
| 58 | Low-temperature preparation and structural characterization of Pr-doped ceria solid solutions. <i>Journal of Materials Research</i> , 2002, 17, 797-804. | 1.2 | 30 |
| 59 | X-ray Photoelectron Spectroscopy and Infrared Study of the Nature of Cu Species in Cu/ZrO ₂ -NO _x Catalysts. <i>Journal of Physical Chemistry B</i> , 2002, 106, 10185-10190. | 1.2 | 44 |
| 60 | Interface Effects for Cu, CuO, and Cu ₂ O Deposited on SiO ₂ and ZrO ₂ . XPS Determination of the Valence State of Copper in Cu/SiO ₂ and Cu/ZrO ₂ Catalysts. <i>Journal of Physical Chemistry B</i> , 2002, 106, 6921-6929. | 1.2 | 526 |
| 61 | Structure and chemistry of SiO _x (x < 2) systems. <i>Vacuum</i> , 2002, 67, 491-499. | 1.6 | 22 |
| 62 | Synthesis and Structural Characterization by X-ray Absorption Spectroscopy of Tin-Doped Mullite Solid Solutions. <i>Journal of the American Ceramic Society</i> , 2002, 85, 1910-1914. | 1.9 | 7 |
| 63 | Plate reactor for testing catalysts in the form of thin films. <i>Applied Catalysis B: Environmental</i> , 2001, 31, L5-L10. | 10.8 | 10 |
| 64 | Structural modifications produced by the incorporation of Ar within the lattice of Fe ₂ O ₃ thin films prepared by ion beam induced chemical vapour deposition. <i>Acta Materialia</i> , 2000, 48, 4555-4561. | 3.8 | 9 |
| 65 | Amorphisation and related structural effects in thin films prepared by ion beam assisted methods. <i>Surface and Coatings Technology</i> , 2000, 125, 116-123. | 2.2 | 15 |
| 66 | Preparation by pyrolysis of aerosols and structural characterization of Fe-doped mullite powders. <i>Materials Research Bulletin</i> , 2000, 35, 775-788. | 2.7 | 30 |
| 67 | TEM, EELS and EFTEM characterization of nickel nanoparticles encapsulated in carbon. <i>Journal of Materials Chemistry</i> , 2000, 10, 715-721. | 6.7 | 40 |
| 68 | Mixed (Oxygen Ion and n-Type) Conductivity and Structural Characterization of Titania-Doped Stabilized Tetragonal Zirconia. <i>Journal of the Electrochemical Society</i> , 1999, 146, 2425-2434. | 1.3 | 24 |
| 69 | SnO ₂ thin films prepared by ion beam induced CVD: preparation and characterization by X-ray absorption spectroscopy. <i>Thin Solid Films</i> , 1999, 353, 113-123. | 0.8 | 42 |
| 70 | The effects of the NaF flux on the oxidation state and localisation of praseodymium in Pr-doped zircon pigments. <i>Journal of the European Ceramic Society</i> , 1999, 19, 641-648. | 2.8 | 37 |
| 71 | Structure-electrical properties relationships in TiO ₂ -doped stabilized tetragonal zirconia ceramics. <i>Ceramics International</i> , 1999, 25, 639-648. | 2.3 | 12 |
| 72 | Structural characterization of partially amorphous SnO ₂ nanoparticles by factor analysis of XAS and FT-IR spectra. <i>Solid State Ionics</i> , 1999, 116, 117-127. | 1.3 | 38 |

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|----|--|-----|-----------|
| 73 | Structure and electrical behavior in air of TiO ₂ -doped stabilized tetragonal zirconia ceramics. Applied Physics A: Materials Science and Processing, 1999, 68, 41-48. | 1.1 | 11 |
| 74 | Preparation, characterization and thermal evolution of oxygen passivated nanocrystalline cobalt. Journal of Materials Chemistry, 1999, 9, 1011-1017. | 6.7 | 22 |
| 75 | Valence and Localization of Praseodymium in Pr-Doped Zircon. Journal of Solid State Chemistry, 1998, 139, 412-415. | 1.4 | 41 |
| 76 | Characterisation of passivated aluminium nanopowders: An XPS and TEM/EELS study. Journal of the European Ceramic Society, 1998, 18, 1195-1200. | 2.8 | 27 |
| 77 | Characterization of nanophase Al ₂ O ₃ /Al powders by electron energy-loss spectroscopy. Journal of Microscopy, 1998, 191, 212-220. | 0.8 | 10 |
| 78 | Synchrotron Photoemission Characterization of TiO ₂ Supported on SiO ₂ . Langmuir, 1998, 14, 4908-4914. | 1.6 | 29 |
| 79 | In situ study by XAS of the sulfidation of industrial catalysts: the Pt and Pt/Re/Al ₂ O ₃ systems. Applied Catalysis A: General, 1997, 162, 171-180. | 2.2 | 23 |
| 80 | Ion-Beam-Induced CVD: An Alternative Method of Thin Film Preparation. Chemical Vapor Deposition, 1997, 3, 219-226. | 1.4 | 27 |
| 81 | Adsorption and oxidation of K deposited on graphite. Surface Science, 1996, 364, 253-265. | 0.8 | 33 |
| 82 | Structural characterization of PbTiO ₃ thin films prepared by ion beam induced CVD and evaporation of lead. Thin Solid Films, 1996, 272, 99-106. | 0.8 | 17 |
| 83 | Contribution of the X-ray absorption spectroscopy to study TiO ₂ thin films prepared by ion beam induced chemical vapor deposition. Journal of Applied Physics, 1995, 77, 591-597. | 1.1 | 22 |
| 84 | Experimental set-up for in-situ X-ray absorption spectroscopy analysis of photochemical reactions: the photocatalytic reduction of gold on titania. Journal of Photochemistry and Photobiology A: Chemistry, 1994, 78, 169-172. | 2.0 | 11 |
| 85 | Photoelectron spectroscopy of metal oxide particles: size and support effects. Vacuum, 1994, 45, 1085-1086. | 1.6 | 20 |
| 86 | XAS and XRD structural studies of titanium oxide thin films prepared by ion beam induced CVD. Thin Solid Films, 1994, 241, 175-178. | 0.8 | 14 |
| 87 | In situ EXAFS studies of modifications to supported metallic catalysts under reactive atmospheres. Catalysis Letters, 1993, 20, 1-13. | 1.4 | 14 |
| 88 | In situ EXAFS study of the effect of hydrocarbon deposition over Pt/Al ₂ O ₃ and Pt/Re/Al ₂ O ₃ catalysts. Journal of the Chemical Society, Faraday Transactions, 1993, 89, 159-164. | 1.7 | 9 |
| 89 | Generation of homogeneous rhodium particles by photoreduction of rhodium(III) on titania colloids grafted on silica. Langmuir, 1993, 9, 121-125. | 1.6 | 14 |
| 90 | Size and support effects in the photoelectron spectra of small TiO ₂ particles. Surface and Interface Analysis, 1992, 18, 392-396. | 0.8 | 42 |

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|----|---|-----|-----------|
| 91 | The state of nickel in Ni/SiO ₂ and Ni/TiO ₂ -calcined catalysts. Journal of Catalysis, 1992, 136, 415-422. | 3.1 | 31 |
| 92 | Effect of chlorine in the formation of PtRe alloys in PtRe/Al ₂ O ₃ catalysts. Journal of Catalysis, 1989, 115, 567-579. | 3.1 | 43 |
| 93 | Effect of consecutive and alternative oxidation and reduction treatments on the interactions between titania (anatase and rutile) and copper. Journal of Catalysis, 1988, 113, 120-128. | 3.1 | 42 |
| 94 | The selection of experimental conditions in temperature-programmed reduction experiments. Journal of the Chemical Society Faraday Transactions I, 1988, 84, 2369. | 1.0 | 234 |