## AgustÃ-n R. GonzÃ;lez-Elipe

List of Publications by Year in descending order

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|          |                | 26630        | 39675          |
|----------|----------------|--------------|----------------|
| 510      | 16,047         | 56           | 94             |
| papers   | citations      | h-index      | g-index        |
|          |                |              |                |
|          |                |              |                |
|          |                |              |                |
| 532      | 532            | 532          | 16819          |
| all docs | docs citations | times ranked | citing authors |
|          |                |              |                |

| #  | Article   | IF               | CITATIONS           |
|----|---|------------------|---------------------|
| 1  | Perspectives on oblique angle deposition of thin films: From fundamentals to devices. Progress in<br>Materials Science, 2016, 76, 59-153.   | 32.8             | 564                 |
| 2  | Interface Effects for Cu, CuO, and Cu2O Deposited on SiO2and ZrO2. XPS Determination of the Valence<br>State of Copper in Cu/SiO2and Cu/ZrO2Catalysts. Journal of Physical Chemistry B, 2002, 106, 6921-6929.                                 | 2.6              | 526                 |
| 3  | Preparation and characterization of TiO2 photocatalysts supported on various rigid supports (glass,) Tj ETQq1 1<br>Applied Catalysis B: Environmental, 1995, 7, 49-63.  | 0.784314<br>20.2 | rgBT /Overlo<br>475 |
| 4  | Characterization and photocatalytic activity in aqueous medium of TiO2 and Ag-TiO2 coatings on quartz. Applied Catalysis B: Environmental, 1997, 13, 219-228.   | 20.2             | 415                 |
| 5  | The state of the oxygen at the surface of polycrystalline cobalt oxide. Journal of Electron Spectroscopy and Related Phenomena, 1995, 71, 61-71.  | 1.7              | 319                 |
| 6  | XPS study of oxidation processes of CeOx defective layers. Applied Surface Science, 2000, 158, 164-171.   | 6.1              | 248                 |
| 7  | XPS investigation of the reaction of carbon with NO, O2, N2 and H2O plasmas. Carbon, 2007, 45, 89-96.   | 10.3             | 222                 |
| 8  | Spectroscopic characterization of quantum-sized TiO2 supported on silica: influence of size and TiO2-SiO2 interface composition. The Journal of Physical Chemistry, 1995, 99, 1484-1490.  | 2.9              | 209                 |
| 9  | Structural, Optical, and Photoelectrochemical Properties of Mn+â^'TiO2 Model Thin Film<br>Photocatalysts. Journal of Physical Chemistry B, 2004, 108, 17466-17476.  | 2.6              | 164                 |
| 10 | Photo-adsorption and photo-desorption of oxygen on highly hydroxylated TiO2 surfaces. Part<br>2.—Study of radical intermediates by electron paramagnetic resonance. Journal of the Chemical<br>Society Faraday Transactions I, 1979, 75, 748. | 1.0              | 140                 |
| 11 | An update of argon inelastic cross sections for plasma discharges. Journal Physics D: Applied Physics, 2005, 38, 1588-1598.   | 2.8              | 129                 |
| 12 | Response of Nanoparticle-Based One-Dimensional Photonic Crystals to Ambient Vapor Pressure.<br>Langmuir, 2008, 24, 9135-9139.   | 3.5              | 114                 |
| 13 | Hydrogen production by reforming of hydrocarbons and alcohols in a dielectric barrier discharge.<br>Journal of Power Sources, 2007, 169, 140-143.   | 7.8              | 112                 |
| 14 | Sorption Properties of Mesoporous Multilayer Thin Films. Journal of Physical Chemistry C, 2008, 112, 3157-3163.   | 3.1              | 110                 |
| 15 | Spectroscopic characterization of Tio2/SiO2 catalysts. Journal of Catalysis, 1988, 112, 489-494.  | 6.2              | 109                 |
| 16 | Efficient synthesis of ammonia from N <sub>2</sub> and H <sub>2</sub> alone in a ferroelectric packed-bed DBD reactor. Plasma Sources Science and Technology, 2015, 24, 065011.   | 3.1              | 106                 |
| 17 | Structure determination of Ni(111)c(4 $\tilde{A}$ — 2)-CO and its implications for the interpretation of vibrational spectroscopic data. Surface Science, 1994, 311, 337-348.   | 1.9              | 105                 |
| 18 | Use of factor analysis and XPS to study defective nickel oxide. The Journal of Physical Chemistry, 1992, 96, 3080-3086.   | 2.9              | 100                 |

| #  | Article  | IF  | CITATIONS |
|----|--|-----|-----------|
| 19 | Compositional changes induced by 3.5 keV Ar+ ion bombardment in Ni-Ti oxide systems. Surface Science, 1989, 220, 368-380.  | 1.9 | 97        |
| 20 | XPS analysis of down stream plasma treated wool: Influence of the nature of the gas on the surface modification of wool. Applied Surface Science, 2005, 252, 1417-1429.                            | 6.1 | 96        |
| 21 | Non-enzymatic Glucose electrochemical sensor made of porous NiO thin films prepared by reactive magnetron sputtering at oblique angles. Electrochimica Acta, 2016, 201, 38-44.                     | 5.2 | 95        |
| 22 | XPS Study of Interface and Ligand Effects in Supported Cu2O and CuO Nanometric Particles. Journal of Physical Chemistry B, 2005, 109, 7758-7765.   | 2.6 | 94        |
| 23 | Enhanced gas sensing performance of TiO2 functionalized magneto-optical SPR sensors. Journal of<br>Materials Chemistry, 2011, 21, 16049.   | 6.7 | 91        |
| 24 | A photoelectron diffraction study of the structure of PF3 adsorbed on Ni{in111}. Chemical Physics<br>Letters, 1992, 199, 625-630.  | 2.6 | 90        |
| 25 | Single local site structure for vibrationally distinct adsorption states: NO on Ni(111). Chemical Physics Letters, 1992, 192, 259-264.   | 2.6 | 90        |
| 26 | Reversible Superhydrophobic to Superhydrophilic Conversion of Ag@TiO2 Composite Nanofiber Surfaces. Langmuir, 2008, 24, 8021-8026.   | 3.5 | 87        |
| 27 | Interface effects for metal oxide thin films deposited on another metal oxide II. SnO2 deposited on SiO2. Surface Science, 1996, 366, 545-555.   | 1.9 | 86        |
| 28 | XPS study of the surface carbonation/hydroxylation state of metal oxides. Applied Surface Science, 1990, 45, 103-108.  | 6.1 | 83        |
| 29 | Control of the stoichiometry in the deposition of cobalt oxides on SiO2. Surface and Interface Analysis, 1998, 26, 62-71.  | 1.8 | 82        |
| 30 | Reactivity of lanthanum substituted cobaltites toward carbon particles. Journal of Catalysis, 2008, 257, 334-344.  | 6.2 | 81        |
| 31 | Surface chemistry and germination improvement of Quinoa seeds subjected to plasma activation.<br>Scientific Reports, 2017, 7, 5924.  | 3.3 | 81        |
| 32 | Is the frequency of the internal mode of an adsorbed diatomic molecule a reliable guide to its local adsorption site?. Journal of Electron Spectroscopy and Related Phenomena, 1993, 64-65, 75-83. | 1.7 | 80        |
| 33 | Structural determination of a molecular adsorbate by photoelectron diffraction: Ammonia on Ni{111}.<br>Physical Review B, 1992, 46, 4836-4843.   | 3.2 | 74        |
| 34 | Reforming of ethanol in a microwave surface-wave plasma discharge. Applied Physics Letters, 2004, 85, 4004-4006.   | 3.3 | 74        |
| 35 | Photoefficiency and Optical, Microstructural, and Structural Properties of TiO2Thin Films Used as Photoanodes. Langmuir, 2004, 20, 1688-1697.  | 3.5 | 73        |
| 36 | Interpretation of the Binding Energy and Auger Parameter Shifts Found by XPS for TiO2Supported on<br>Different Surfaces. The Journal of Physical Chemistry, 1996, 100, 16255-16262.                | 2.9 | 72        |

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|----|--|------|-----------|
| 37 | Effect of Visible and UV Illumination on the Water Contact Angle of TiO2Thin Films with Incorporated Nitrogen. Journal of Physical Chemistry C, 2007, 111, 1801-1808.  | 3.1  | 71        |
| 38 | Growth regimes of porous gold thin films deposited by magnetron sputtering at oblique incidence: from compact to columnar microstructures. Nanotechnology, 2013, 24, 045604.   | 2.6  | 71        |
| 39 | Oxidation and diffusion processes in nickel-titanium oxide systems. Surface Science, 1993, 295, 402-410.   | 1.9  | 70        |
| 40 | Aligned TiO2 nanocolumnar layers prepared by PVD-GLAD for transparent dye sensitized solar cells.<br>Energy and Environmental Science, 2011, 4, 3426.  | 30.8 | 70        |
| 41 | Chemical changes induced by sputtering in TiO2 and some selected titanates as observed by X-ray absorption spectroscopy. Surface Science, 1993, 290, 427-435.  | 1.9  | 68        |
| 42 | SiO2/TiO2 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        |
| 43 | Preparation of transparent and conductive Al-doped ZnO thin films by ECR plasma enhanced CVD.<br>Surface and Coatings Technology, 2002, 151-152, 289-293.  | 4.8  | 66        |
| 44 | Influence of the chemical and electronic structure on the electrical behavior of zirconium oxynitride films. Journal of Applied Physics, 2008, 103, .  | 2.5  | 66        |
| 45 | Electronic state characterization of SiOx thin films prepared by evaporation. Journal of Applied Physics, 2005, 97, 113714.  | 2.5  | 65        |
| 46 | TiO2–SiO2 one-dimensional photonic crystals of controlled porosity by glancing angle physical vapour deposition. Journal of Materials Chemistry, 2010, 20, 6408.   | 6.7  | 64        |
| 47 | Differences in n-type doping efficiency between Al- and Ga-ZnO films. Journal of Applied Physics, 2013, 113, .   | 2.5  | 64        |
| 48 | Chemical State of Nitrogen and Visible Surface and Schottky Barrier Driven Photoactivities of<br>N-Doped TiO <sub>2</sub> Thin Films. Journal of Physical Chemistry C, 2009, 113, 13341-13351.   | 3.1  | 63        |
| 49 | Evaluation of Different Dielectric Barrier Discharge Plasma Configurations As an Alternative<br>Technology for Green C <sub>1</sub> Chemistry in the Carbon Dioxide Reforming of Methane and the<br>Direct Decomposition of Methanol. Journal of Physical Chemistry A, 2010, 114, 4009-4016. | 2.5  | 62        |
| 50 | Correlation lengths, porosity and water adsorption in TiO2thin films prepared by glancing angle deposition. Nanotechnology, 2012, 23, 205701.  | 2.6  | 61        |
| 51 | The electronic structure of mesoscopic NiO particles. Chemical Physics Letters, 1993, 208, 460-464.  | 2.6  | 60        |
| 52 | Electronic structure of stoichiometric andAr+-bombardedZrO2determined by resonant photoemission. Physical Review B, 1995, 52, 11711-11720.   | 3.2  | 60        |
| 53 | Non-enzymatic hydrogen peroxide detection at NiO nanoporous thin film- electrodes prepared by physical vapor deposition at oblique angles. Electrochimica Acta, 2017, 235, 534-542.  | 5.2  | 60        |
| 54 | Use of carbon monoxide and third-derivative EPR spectra to probe the coordination of surface<br>vanadium(4+) ions on reduced vanadium pentoxide (V2O5)/silicon dioxide catalysts. The Journal of<br>Physical Chemistry, 1986, 90, 618-621.   | 2.9  | 59        |

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|----|---|------|-----------|
| 55 | In Situ EXAFS Study of the Photocatalytic Reduction and Deposition of Gold on Colloidal Titania. The<br>Journal of Physical Chemistry, 1995, 99, 3303-3309.   | 2.9  | 59        |
| 56 | Measuring the electron temperature by optical emission spectroscopy in two temperature plasmas at atmospheric pressure: A critical approach. Journal of Applied Physics, 2006, 99, 033104.  | 2.5  | 59        |
| 57 | Perovskite Solar Cells Based on Nanocolumnar Plasmaâ€Deposited ZnO Thin Films. ChemPhysChem, 2014, 15, 1148-1153.   | 2.1  | 59        |
| 58 | About the enhancement of chemical yield during the atmospheric plasma synthesis of ammonia in a ferroelectric packed bed reactor. Plasma Processes and Polymers, 2017, 14, 1600081.   | 3.0  | 58        |
| 59 | Characterisation of iron/titanium oxide photocatalysts. Part 2.—Surface studies. Journal of the<br>Chemical Society, Faraday Transactions, 1994, 90, 2257-2264.   | 1.7  | 56        |
| 60 | Ion beam induced chemical vapor deposition procedure for the preparation of oxide thin films. II.<br>Preparation and characterization of AlxTiyOz thin films. Journal of Vacuum Science and Technology A:<br>Vacuum, Surfaces and Films, 1996, 14, 2842-2848. | 2.1  | 56        |
| 61 | Structure, microstructure and electronic characterisation of the Al2O3/SiO2 interface by electron spectroscopies. Surface Science, 2000, 457, 199-210.  | 1.9  | 56        |
| 62 | Type of Plasmas and Microstructures of TiO[sub 2] Thin Films Prepared by Plasma Enhanced Chemical<br>Vapor Deposition. Journal of the Electrochemical Society, 2007, 154, P152.   | 2.9  | 56        |
| 63 | Nanoindentation of TiO <sub>2</sub> thin films with different microstructures. Journal Physics D:<br>Applied Physics, 2009, 42, 145305.   | 2.8  | 56        |
| 64 | A transparent TMPyP/TiO2 composite thin film as an HCl sensitive optochemical gas sensor. Sensors and Actuators B: Chemical, 2010, 150, 764-769.  | 7.8  | 56        |
| 65 | Quantification of the H content in diamondlike carbon and polymeric thin films by reflection electron energy loss spectroscopy. Applied Physics Letters, 2005, 87, 084101.  | 3.3  | 55        |
| 66 | Growth of Crystalline TiO2 by Plasma Enhanced Chemical Vapor Deposition. Crystal Growth and Design, 2009, 9, 2868-2876.   | 3.0  | 54        |
| 67 | Nanostructured Ti thin films by magnetron sputtering at oblique angles. Journal Physics D: Applied Physics, 2016, 49, 045303.   | 2.8  | 54        |
| 68 | Synthesis of SiO2 and SiOxCyHz thin films by microwave plasma CVD. Thin Solid Films, 2001, 401, 150-158.  | 1.8  | 53        |
| 69 | Chemical stability of Sin+ species in SiOx (x<2) thin films. Journal of Vacuum Science and Technology<br>A: Vacuum, Surfaces and Films, 2001, 19, 136-144.  | 2.1  | 53        |
| 70 | Plasma catalysis with perovskite-type catalysts for the removal of NO and CH4 from combustion exhausts. Journal of Catalysis, 2007, 247, 288-297.   | 6.2  | 51        |
| 71 | Wetting angles and photocatalytic activities of illuminated TiO2 thin films. Catalysis Today, 2009, 143, 347-354.   | 4.4  | 51        |
| 72 | Low Temperature Production of Formaldehyde from Carbon Dioxide and Ethane by Plasma-Assisted<br>Catalysis in a Ferroelectrically Moderated Dielectric Barrier Discharge Reactor. ACS Catalysis, 2014, 4,<br>402-408.  | 11.2 | 51        |

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|----|---|------|-----------|
| 73 | Diffraction and XPS Studies of Misfit Layer Chalcogenides Intercalated with Cobaltocene. Chemistry of Materials, 1995, 7, 1576-1582.  | 6.7  | 50        |
| 74 | Sonogashira Cross-Coupling and Homocoupling on a Silver Surface: Chlorobenzene and<br>Phenylacetylene on Ag(100). Journal of the American Chemical Society, 2015, 137, 940-947.   | 13.7 | 50        |
| 75 | Laser Treatment of Ag@ZnO Nanorods as Long-Life-Span SERS Surfaces. ACS Applied Materials &<br>Interfaces, 2015, 7, 2331-2339.  | 8.0  | 50        |
| 76 | Recent Advances in Alkaline Exchange Membrane Water Electrolysis and Electrode Manufacturing.<br>Molecules, 2021, 26, 6326.   | 3.8  | 50        |
| 77 | Bonding-state characterization of constituent elements in phyllosilicate minerals by XPS and NMR.<br>The Journal of Physical Chemistry, 1988, 92, 3471-3476.  | 2.9  | 49        |
| 78 | An XPS study of the Ar+-induced reduction of Ni2+ in NiO and Ni-Si oxide systems. Applied Surface<br>Science, 1991, 51, 19-26.  | 6.1  | 49        |
| 79 | Interface effects for metal oxide thin films deposited on another metal oxide I. SnO deposited on SiO2.<br>Surface Science, 1996, 350, 123-135.   | 1.9  | 49        |
| 80 | Determination of texture by infrared spectroscopy in titanium oxide–anatase thin films. Journal of<br>Applied Physics, 2003, 93, 4634-4645.   | 2.5  | 49        |
| 81 | Electrochromic Behavior of W <sub><i>x</i></sub> Si <sub><i>y</i></sub> O <sub><i>z</i></sub> Thin<br>Films Prepared by Reactive Magnetron Sputtering at Normal and Glancing Angles. ACS Applied<br>Materials & Interfaces, 2012, 4, 628-638. | 8.0  | 49        |
| 82 | Oxygen Optical Sensing in Gas and Liquids with Nanostructured ZnO Thin Films Based on Exciton<br>Emission Detection. Journal of Physical Chemistry C, 2014, 118, 9852-9859.   | 3.1  | 48        |
| 83 | Chemistry and Electrocatalytic Activity of Nanostructured Nickel Electrodes for Water Electrolysis.<br>ACS Catalysis, 2020, 10, 6159-6170.  | 11.2 | 48        |
| 84 | Effect of visible light on the water contact angles on illuminated oxide semiconductors other than<br>TiO2. Solar Energy Materials and Solar Cells, 2006, 90, 2944-2949.  | 6.2  | 47        |
| 85 | Active and Optically Transparent Tetracationic Porphyrin/TiO2 Composite Thin Films. ACS Applied Materials & Interfaces, 2010, 2, 712-721.   | 8.0  | 47        |
| 86 | Growth of silver on ZnO and SnO2 thin films intended for low emissivity applications. Applied Surface Science, 2013, 268, 507-515.  | 6.1  | 47        |
| 87 | An XPS study of the mixing effects induced by ion bombardment in composite oxides. Applied Surface Science, 1993, 68, 453-459.  | 6.1  | 46        |
| 88 | Oxidation State and Size Effects in CoO Nanoparticles. Journal of Physical Chemistry B, 1999, 103, 6676-6679.   | 2.6  | 46        |
| 89 | Biocompatible surfaces by immobilization of heparin on diamond-like carbon films deposited on various substrates. Surface and Interface Analysis, 2000, 29, 386-391.  | 1.8  | 46        |
| 90 | Mechanism of Copper Passivation in Aqueous Sodium Carbonateâ^'Bicarbonate Solution Derived from<br>Combined X-ray Photoelectron Spectroscopic and Electrochemical Data. Journal of Physical<br>Chemistry B, 1998, 102, 5483-5489.             | 2.6  | 45        |

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|-----|---|-----|-----------|
| 91  | Theoretical and experimental characterization of TiO <sub>2</sub> thin films deposited at oblique angles. Journal Physics D: Applied Physics, 2011, 44, 385302.   | 2.8 | 45        |
| 92  | Nickel–copper bilayer nanoporous electrode prepared by physical vapor deposition at oblique angles<br>for the non-enzymatic determination of glucose. Sensors and Actuators B: Chemical, 2016, 226, 436-443.  | 7.8 | 45        |
| 93  | Application of Prussian Blue electrodes for amperometric detection of free chlorine in water samples using Flow Injection Analysis. Talanta, 2016, 146, 410-416.  | 5.5 | 45        |
| 94  | Spectroscopic characterisation and photochemical behaviour of a titanium hydroxyperoxo compound. Journal of the Chemical Society Faraday Transactions I, 1989, 85, 1279.  | 1.0 | 44        |
| 95  | Titania-supported bimetallic catalyst synthesis by photocatalytic codeposition at ambient temperature:<br>Preparation and characterization of Pt\$z.sbnd;Rh, Ag\$z.sbnd;Rh, and Pt\$z.sbnd;Pd couples. Journal of<br>Catalysis, 1991, 132, 490-497. | 6.2 | 44        |
| 96  | X-ray Photoelectron Spectroscopy and Infrared Study of the Nature of Cu Species in Cu/ZrO2de-NOx<br>Catalysts. Journal of Physical Chemistry B, 2002, 106, 10185-10190.   | 2.6 | 44        |
| 97  | A novel and improved surfactant-modified Prussian Blue electrode for amperometric detection of free chlorine in water. Sensors and Actuators B: Chemical, 2015, 213, 116-123.   | 7.8 | 44        |
| 98  | Passivation of nanocrystalline Al prepared by the gas phase condensation method: An x-ray photoelectron spectroscopy study. Journal of Materials Research, 1998, 13, 703-710.   | 2.6 | 43        |
| 99  | Low temperature synthesis of dense SiO2 thin films by ion beam induced chemical vapor deposition.<br>Thin Solid Films, 2001, 396, 9-15.   | 1.8 | 43        |
| 100 | Influence of irrigation conditions in the germination of plasma treated Nasturtium seeds. Scientific Reports, 2018, 8, 16442.   | 3.3 | 43        |
| 101 | Size and support effects in the photoelectron spectra of small TiO2 particles. Surface and Interface Analysis, 1992, 18, 392-396.   | 1.8 | 42        |
| 102 | XPS and ISS study of NiTiO3and PbTiO3subjected to low-energy ion bombardment. I. Influence of the type of ion (Ar+and O 2+). Surface and Interface Analysis, 1993, 20, 941-948.   | 1.8 | 42        |
| 103 | SnO2 thin films prepared by ion beam induced CVD: preparation and characterization by X-ray absorption spectroscopy. Thin Solid Films, 1999, 353, 113-123.  | 1.8 | 42        |
| 104 | An in situ XAS study of Cu/ZrO catalysts under de-NO reaction conditions. Journal of Catalysis, 2005, 235, 295-301.   | 6.2 | 42        |
| 105 | Influence of the Angular Distribution Function of Incident Particles on the Microstructure and Anomalous Scaling Behavior of Thin Films. Physical Review Letters, 2006, 96, 236101.   | 7.8 | 42        |
| 106 | Porosity and microstructure of plasma deposited TiO2 thin films. Microporous and Mesoporous<br>Materials, 2009, 118, 314-324.   | 4.4 | 42        |
| 107 | Nanocolumnar growth of thin films deposited at oblique angles: Beyond the tangent rule. Journal of<br>Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2014, 32, .  | 1.2 | 42        |
| 108 | Ion beam induced chemical vapor deposition for the preparation of thin film oxides. Thin Solid Films, 1994, 241, 198-201.   | 1.8 | 41        |

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|-----|---|-----|-----------|
| 109 | Valence and Localization of Praseodymium in Pr-Doped Zircon. Journal of Solid State Chemistry, 1998, 139, 412-415.  | 2.9 | 41        |
| 110 | Non-conventional synthesis of Cr-doped SnO2 pigments. Ceramics International, 2003, 29, 385-392.  | 4.8 | 41        |
| 111 | Superhydrophobic supported Ag-NPs@ZnO-nanorods with photoactivity in the visible range. Journal of Materials Chemistry, 2012, 22, 1341-1346.  | 6.7 | 41        |
| 112 | Structure determination for coadsorbed molecular fragments using chemical shift photoelectron diffraction. Physical Review Letters, 1993, 71, 581-584.  | 7.8 | 40        |
| 113 | Formation of Subsurface W <sup>5+</sup> Species in Gasochromic Pt/WO <sub>3</sub> Thin Films<br>Exposed to Hydrogen. Journal of Physical Chemistry C, 2017, 121, 15719-15727.                       | 3.1 | 40        |
| 114 | Optical Gas Sensing of Ammonia and Amines Based on Protonated Porphyrin/TiO2 Composite Thin Films.<br>Sensors, 2017, 17, 24.  | 3.8 | 40        |
| 115 | CuxCo3-xO4 ultra-thin film as efficient anodic catalysts for anion exchange membrane water electrolysers. Journal of Power Sources, 2019, 415, 136-144.   | 7.8 | 40        |
| 116 | Interface effects for metal oxide thin films deposited on another metal oxide III. SnO and SnO2<br>deposited on MgO (100) and the use of chemical state plots. Surface Science, 1996, 366, 556-563. | 1.9 | 39        |
| 117 | Characterization and application of a new pH sensor based on magnetron sputtered porous WO3 thin films deposited at oblique angles. Electrochimica Acta, 2016, 193, 24-31.                          | 5.2 | 39        |
| 118 | Structural characterization of partially amorphous SnO2 nanoparticles by factor analysis of XAS and FT-IR spectra. Solid State Ionics, 1999, 116, 117-127.  | 2.7 | 38        |
| 119 | On the Deposition Rates of Magnetron Sputtered Thin Films at Oblique Angles. Plasma Processes and Polymers, 2014, 11, 571-576.  | 3.0 | 38        |
| 120 | Cholesterol biosensing with a polydopamine-modified nanostructured platinum electrode prepared by oblique angle physical vacuum deposition. Sensors and Actuators B: Chemical, 2017, 240, 37-45.    | 7.8 | 38        |
| 121 | Hydrogen-induced titanium oxide migration onto metallic rhodium in real rhodium/titania catalysts.<br>The Journal of Physical Chemistry, 1987, 91, 6625-6628.                                       | 2.9 | 37        |
| 122 | XPS characterization of coal surfaces: Study of aerial oxidation of brown coals. Surface and Interface Analysis, 1988, 12, 565-571.   | 1.8 | 37        |
| 123 | The effects of the NaF flux on the oxidation state and localisation of praseodymium in Pr-doped zircon pigments. Journal of the European Ceramic Society, 1999, 19, 641-648.                        | 5.7 | 37        |
| 124 | Determination of the hydrogen content in diamond-like carbon and polymeric thin films by reflection electron energy loss spectroscopy. Diamond and Related Materials, 2007, 16, 107-111.            | 3.9 | 37        |
| 125 | Preillumination of TiO2 and Ta2O5 Photoactive Thin Films As a Tool to Tailor the Synthesis of Composite Materials. Langmuir, 2008, 24, 9460-9469.   | 3.5 | 37        |
| 126 | Optically Active Luminescent Perylene Thin Films Deposited by Plasma Polymerization. Journal of<br>Physical Chemistry C, 2009, 113, 431-438.  | 3.1 | 37        |

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| #   | Article   | IF                           | CITATIONS  |
|-----|---|------------------------------|------------|
| 127 | Wetting Properties of Polycrystalline TiO <sub>2</sub> Surfaces: A Scaling Approach to the Roughness Factors. Langmuir, 2010, 26, 15875-15882.  | 3.5                          | 37         |
| 128 | Selective Dichroic Patterning by Nanosecond Laser Treatment of Ag Nanostripes. Advanced Materials, 2011, 23, 848-853.   | 21.0                         | 37         |
| 129 | Robust anti-icing superhydrophobic aluminum alloy surfaces by grafting fluorocarbon molecular<br>chains. Applied Materials Today, 2020, 21, 100815.   | 4.3                          | 37         |
| 130 | Unraveling Discharge and Surface Mechanisms in Plasma-Assisted Ammonia Reactions. ACS Sustainable<br>Chemistry and Engineering, 2020, 8, 14855-14866.   | 6.7                          | 37         |
| 131 | XPS intensities and binding energy shifts as metal dispersion parameters in Ni/SiO2 catalysts. Surface and Interface Analysis, 1990, 16, 375-379.   | 1.8                          | 36         |
| 132 | Hybrid catalytic-DBD plasma reactor for the production of hydrogen and preferential CO oxidation (CO-PROX) at reduced temperatures. Chemical Communications, 2009, , 6192.  | 4.1                          | 36         |
| 133 | Selective Detection of Volatile Organic Compounds by Spectral Imaging of Porphyrin Derivatives<br>Bound to TiO <sub>2</sub> Porous Films. ACS Applied Materials & Interfaces, 2012, 4, 5147-5154.   | 8.0                          | 36         |
| 134 | Vertically Aligned Hybrid Core/Shell Semiconductor Nanowires for Photonics Applications. Advanced<br>Functional Materials, 2013, 23, 5981-5989.   | 14.9                         | 36         |
| 135 | Oxygen interaction with CoSi(100) and CoSi2(100) surfaces. Surface Science, 1982, 117, 621-628.   | 1.9                          | 35         |
| 136 | Optical and crystallisation behaviour of TiO2 and V/TiO2 thin films prepared by plasma and ion beam assisted methods. Thin Solid Films, 2003, 429, 84-90.   | 1.8                          | 35         |
| 137 | Chemical state and distribution of Mn ions in Mn-doped α-Al 2 O 3 solid solutions prepared in the absence and the presence of fluxes. Journal of the European Ceramic Society, 2004, 24, 3057-3062.   | 5.7                          | 35         |
| 138 | Design and control of porosity in oxide thin films grown by PECVD. Journal of Materials Science, 2006, 41, 5220-5226.   | 3.7                          | 35         |
| 139 | Physicochemical surface analysis and germination at different irrigation conditions of DBD plasmaâ€ŧreated wheat seeds. Plasma Processes and Polymers, 2021, 18, .  | 3.0                          | 35         |
| 140 | Ion beam induced chemical vapor deposition procedure for the preparation of oxide thin films. I.<br>Preparation and characterization of TiO2 thin films. Journal of Vacuum Science and Technology A:<br>Vacuum, Surfaces and Films, 1994, 12, 2728-2732.                                    | 2.1                          | 34         |
| 141 | Synthesis of SnO and SnO2 nanocrystalline powders by the gas phase condensation method. Sensors and Actuators B: Chemical, 1996, 31, 29-32.   | 7.8                          | 34         |
| 142 | Ar stabilisation of the cubic/tetragonal phases of ZrO2 in thin films prepared by ion beam induced chemical vapour deposition. Thin Solid Films, 2001, 389, 34-42.  | 1.8                          | 34         |
| 143 | Relationship between scaling behavior and porosity of plasma-deposited <mml:math<br>xmlns:mml="http://www.w3.org/1998/Math/MathML"<br/>display="inline"&gt;<mml:mrow><mml:msub><mml:mi>TiO</mml:mi><mml:mn>2</mml:mn></mml:msub>films. Physical Review B. 2007. 76</mml:mrow></mml:math<br> | nrðŵ> <td>mi:math&gt;th</td> | mi:math>th |
| 144 | Band Gap Narrowing versus Formation of Electronic States in the Gap in Nâ^'TiO <sub>2</sub> Thin Films. Journal of Physical Chemistry C, 2010, 114, 22546-22557.  | 3.1                          | 34         |

| #   | Article   | IF   | CITATIONS |
|-----|---|------|-----------|
| 145 | Surface Functionalization, Oxygen Depth Profiles, and Wetting Behavior of PET Treated with Different<br>Nitrogen Plasmas. ACS Applied Materials & Interfaces, 2010, 2, 980-990.             | 8.0  | 34        |
| 146 | Liquids Analysis with Optofluidic Bragg Microcavities. ACS Applied Materials & Interfaces, 2013, 5, 6743-6750.  | 8.0  | 34        |
| 147 | New Copper wide range nanosensor electrode prepared by physical vapor deposition at oblique angles for the non-enzimatic determination of glucose. Electrochimica Acta, 2015, 169, 195-201. | 5.2  | 34        |
| 148 | 1-dimensional TiO2 nano-forests as photoanodes for efficient and stable perovskite solar cells fabrication. Nano Energy, 2017, 35, 215-222.   | 16.0 | 34        |
| 149 | Adsorption and oxidation of K deposited on graphite. Surface Science, 1996, 364, 253-265.   | 1.9  | 33        |
| 150 | Surface Defects and Homogeneous Distribution of Silver Particles on HOPG. Langmuir, 1998, 14, 7324-7326.  | 3.5  | 33        |
| 151 | Transparent Nanometric Organic Luminescent Films as UVâ€Active Components in Photonic Structures.<br>Advanced Materials, 2011, 23, 761-765.   | 21.0 | 33        |
| 152 | Tuning Dichroic Plasmon Resonance Modes of Gold Nanoparticles in Optical Thin Films. Advanced<br>Functional Materials, 2013, 23, 1655-1663.   | 14.9 | 33        |
| 153 | Optical properties and electronic transitions of SnO2 thin films by reflection electron energy loss spectroscopy. Surface Science, 1998, 400, 116-126.                                      | 1.9  | 32        |
| 154 | Crystal-Field Effects at the TiO2â^'SiO2Interface As Observed by X-ray Absorption Spectroscopy.<br>Langmuir, 2000, 16, 7066-7069.   | 3.5  | 32        |
| 155 | Spectroscopic Studies on the Localization of Vanadium(IV) in Vanadiumâ€Doped Zircon Pigments.<br>Journal of the American Ceramic Society, 1998, 81, 395-400.                                | 3.8  | 32        |
| 156 | Morphology and surface-plasmon resonance of silver nanoparticles sandwiched between Si3N4 and<br>BN layers. Journal of Applied Physics, 2005, 98, 114316.                                   | 2.5  | 32        |
| 157 | Morphological evolution of pulsed laser deposited ZrO2 thin films. Journal of Applied Physics, 2010, 107, .   | 2.5  | 32        |
| 158 | Roughness assessment and wetting behavior of fluorocarbon surfaces. Journal of Colloid and<br>Interface Science, 2012, 376, 274-282.  | 9.4  | 32        |
| 159 | Plasma reforming of methane in a tunable ferroelectric packed-bed dielectric barrier discharge reactor. Journal of Power Sources, 2015, 296, 268-275.                                       | 7.8  | 32        |
| 160 | Electrochromic response and porous structure of WO3 cathode layers. Electrochimica Acta, 2021, 376, 138049.   | 5.2  | 32        |
| 161 | The state of nickel in Ni/SiO2 and Ni/TiO2-calcined catalysts. Journal of Catalysis, 1992, 136, 415-422.  | 6.2  | 31        |
| 162 | Effect of texture and annealing treatments in SnO2 and Pd/SnO2 gas sensor materials. Sensors and Actuators B: Chemical, 1999, 61, 23-32.  | 7.8  | 31        |

| #   | Article   | IF                 | CITATIONS    |
|-----|---|--------------------|--------------|
| 163 | The Flexible Surface Revisited: Adsorbate-Induced Reconstruction, Homocoupling, and Sonogashira<br>Cross-Coupling on the Au(100) Surface. Journal of Physical Chemistry C, 2014, 118, 11677-11684.  | 3.1                | 31           |
| 164 | Porous, robust highly conducting Ni-YSZ thin film anodes prepared by magnetron sputtering at<br>oblique angles for application as anodes and buffer layers in solid oxide fuel cells. International<br>Journal of Hydrogen Energy, 2015, 40, 7382-7387.   | 7.1                | 31           |
| 165 | Mechanism of hydrogen gas-sensing at low temperatures using Rh/TiO2 systems. Sensors and Actuators, 1989, 18, 337-348.  | 1.7                | 30           |
| 166 | Low-temperature preparation and structural characterization of Pr-doped ceria solid solutions.<br>Journal of Materials Research, 2002, 17, 797-804.   | 2.6                | 30           |
| 167 | Incorporation and Thermal Evolution of Rhodamine 6G Dye Molecules Adsorbed in Porous Columnar<br>Optical SiO2 Thin Films. Langmuir, 2009, 25, 9140-9148.  | 3.5                | 30           |
| 168 | Tunable Nanostructure and Photoluminescence of Columnar ZnO Films Grown by Plasma Deposition.<br>Journal of Physical Chemistry C, 2010, 114, 20932-20940.   | 3.1                | 30           |
| 169 | On the microstructure of thin films grown by an isotropically directed deposition flux. Journal of Applied Physics, 2010, 108, 064316.  | 2.5                | 30           |
| 170 | Antibacterial Nanostructured Ti Coatings by Magnetron Sputtering: From Laboratory Scales to<br>Industrial Reactors. Nanomaterials, 2019, 9, 1217.   | 4.1                | 30           |
| 171 | Synchrotron Photoemission Characterization of TiO2Supported on SiO2. Langmuir, 1998, 14, 4908-4914.   | 3.5                | 29           |
| 172 | Plasma Chemistry of NO in Complex Gas Mixtures Excited with a Surfatron Launcher. Journal of<br>Physical Chemistry A, 2005, 109, 4930-4938.   | 2.5                | 29           |
| 173 | Wetting Angles on Illuminated Ta2O5 Thin Films with Controlled Nanostructure. Journal of Physical Chemistry C, 2009, 113, 3775-3784.  | 3.1                | 29           |
| 174 | Surface nanostructuring of <mml:math <br="" xmlns:mml="http://www.w3.org/1998/Math/MathML">display="inline"&gt;<mml:mrow><mml:msub><mml:mrow><mml:mtext>TiO</mml:mtext></mml:mrow><mml:mn><br/>films by high energy ion irradiation. Physical Review B, 2010, 82, .</mml:mn></mml:msub></mml:mrow></mml:math> | 2 <b>⊲/n₂</b> ml:m | ın 29/mml:ms |
| 175 | Influence of plasma-generated negative oxygen ion impingement on magnetron sputtered amorphous<br>SiO2 thin films during growth at low temperatures. Journal of Applied Physics, 2012, 111, 054312.   | 2.5                | 29           |
| 176 | Improving the pollutant removal efficiency of packed-bed plasma reactors incorporating ferroelectric components. Chemical Engineering Journal, 2017, 314, 311-319.  | 12.7               | 29           |
| 177 | Hydrophobicity, Freezing Delay, and Morphology of Laser-Treated Aluminum Surfaces. Langmuir, 2019,<br>35, 6483-6491.  | 3.5                | 29           |
| 178 | Structural aspects of the interaction of methyl thiol and dimethyldisulphide with Ni(111). Journal of Physics Condensed Matter, 1995, 7, 7781-7796.   | 1.8                | 28           |
| 179 | Chemical Analysis of Ternary Ti Oxides using Soft X-ray Absorption Spectroscopy. Surface and Interface Analysis, 1997, 25, 804-808.   | 1.8                | 28           |
| 180 | Preparation and characterization of uniform spherical silica particles coated with Ni and Co<br>compounds. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1999, 157, 315-324.  | 4.7                | 28           |

| #   | Article  | IF   | CITATIONS |
|-----|--|------|-----------|
| 181 | Supported Ag–TiO2core–shell nanofibres formed at low temperature by plasma deposition.<br>Nanotechnology, 2006, 17, 3518-3522.   | 2.6  | 28        |
| 182 | Free-Base Carboxyphenyl Porphyrin Films Using a TiO2 Columnar Matrix: Characterization and Application as NO2 Sensors. Sensors, 2015, 15, 11118-11132.   | 3.8  | 28        |
| 183 | Synthesis, characterization and performance of robust poison-resistant ultrathin film yttria<br>stabilized zirconia – nickel anodes for application in solid electrolyte fuel cells. Journal of Power<br>Sources, 2016, 324, 679-686.  | 7.8  | 28        |
| 184 | Use of hydrogen atoms for the low-temperature reduction of oxides. Journal of the Chemical Society<br>Faraday Transactions I, 1982, 78, 1043.  | 1.0  | 27        |
| 185 | Ion-Beam-Induced CVD: An Alternative Method of Thin Film Preparation. Chemical Vapor Deposition, 1997, 3, 219-226.   | 1.3  | 27        |
| 186 | Corrosion resistant ZrO2 thin films prepared at room temperature by ion beam induced chemical vapour deposition. Surface and Coatings Technology, 2002, 151-152, 449-453.  | 4.8  | 27        |
| 187 | Monitoring Interface Interactions by XPS at Nanometric Tin Oxides Supported on Al2O3 and Sb2Ox.<br>Journal of Physical Chemistry B, 2004, 108, 9905-9913.  | 2.6  | 27        |
| 188 | Optofluidic Modulation of Self-Associated Nanostructural Units Forming Planar Bragg<br>Microcavities. ACS Nano, 2016, 10, 1256-1264.   | 14.6 | 27        |
| 189 | Ion beam effects in SiOx (x<2) subjected to low energy Ar+, He+ and N2+ bombardment. Nuclear<br>Instruments & Methods in Physics Research B, 2002, 187, 465-474.   | 1.4  | 26        |
| 190 | Deposition of Thin Films of SiOxCyH in a Surfatron Microwave Plasma Reactor with<br>Hexamethyldisiloxane as Precursor. Chemical Vapor Deposition, 2005, 11, 317-323.   | 1.3  | 26        |
| 191 | Water plasmas for the revalorisation of heavy oils and cokes from petroleum refining. Environmental Science & Technology, 2009, 43, 2557-2562.   | 10.0 | 26        |
| 192 | Structure of Glancing Incidence Deposited TiO2 Thin Films as Revealed by Grazing Incidence<br>Small-Angle X-ray Scattering. ChemPhysChem, 2010, 11, 2205-2208.   | 2.1  | 26        |
| 193 | Thermal and photochemical methods for the preparation of thin films of cermet materials. Journal of<br>Materials Science, 1996, 31, 2325-2332.   | 3.7  | 25        |
| 194 | Scaling behavior and mechanism of formation of <mml:math<br>xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"&gt; <mml:mrow> <mml:mi<br>mathvariant="normal"&gt; Si  <mml:msub> <mml:mi<br>mathvariant="normal"&gt; O  <mml:mn> 2 </mml:mn> </mml:mi<br></mml:msub> </mml:mi<br></mml:mrow> thin</mml:math<br> | 3.2  | 25        |
| 195 | films grown by plasma-enhanced chemical vapor deposition. Physical Review B, 2007, 76, .<br>Removal of NO in NO/N2, NO/N2/O2, NO/CH4/N2, and NO/CH4/O2/N2Systems by Flowing Microwave<br>Discharges. Journal of Physical Chemistry A, 2007, 111, 1057-1065.  | 2.5  | 25        |
| 196 | Factors that Contribute to the Growth of Ag@TiO <sub>2</sub> Nanofibers by Plasma Deposition.<br>Plasma Processes and Polymers, 2007, 4, 515-527.  | 3.0  | 25        |
| 197 | Plasmas and atom beam activation of the surface of polymers. Journal Physics D: Applied Physics, 2008, 41, 225209.   | 2.8  | 25        |
| 198 | Anchoring effect on (tetra)carboxyphenyl porphyrin/TiO <sub>2</sub> composite films for VOC optical detection. RSC Advances, 2014, 4, 1974-1981.   | 3.6  | 25        |

| #   | Article   | IF   | CITATIONS |
|-----|---|------|-----------|
| 199 | Single-step fabrication process of 1-D photonic crystals coupled to nanocolumnar TiO_2 layers to improve DSC efficiency. Optics Express, 2015, 23, A1642.   | 3.4  | 25        |
| 200 | Growth of nanocolumnar porous TiO 2 thin films by magnetron sputtering using particle collimators. Surface and Coatings Technology, 2018, 343, 172-177.   | 4.8  | 25        |
| 201 | Mixed (Oxygen Ion and nâ€Type) Conductivity and Structural Characterization of Titaniaâ€Doped<br>Stabilized Tetragonal Zirconia. Journal of the Electrochemical Society, 1999, 146, 2425-2434.  | 2.9  | 24        |
| 202 | Angle dependence of the O K edge absorption spectra of TiO2 thin films with preferential texture.<br>Nuclear Instruments & Methods in Physics Research B, 2003, 200, 248-254.   | 1.4  | 24        |
| 203 | X-ray photoelectron spectroscopy study of the first stages of ZnO growth and nanostructure dependence of the effects of polarization at ZnO/SiO2 and ZnO/Al2O3 interfaces. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2003, 21, 1393-1398. | 2.1  | 24        |
| 204 | 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.  | 3.3  | 24        |
| 205 | Tuning the transmittance and the electrochromic behavior of CoxSiyOz thin films prepared by magnetron sputtering at glancing angle. Solar Energy Materials and Solar Cells, 2014, 123, 130-138.   | 6.2  | 24        |
| 206 | Nanocolumnar 1-dimensional TiO <sub>2</sub> photoanodes deposited by PVD-OAD for perovskite solar cell fabrication. Journal of Materials Chemistry A, 2015, 3, 13291-13298.   | 10.3 | 24        |
| 207 | High performance novel gadolinium doped ceria/yttria stabilized zirconia/nickel layered and hybrid<br>thin film anodes for application in solid oxide fuel cells. Journal of Power Sources, 2017, 363, 251-259.   | 7.8  | 24        |
| 208 | Active sites and optimization of mixed copper-cobalt oxide anodes for anion exchange membrane water electrolysis. Journal of Power Sources, 2021, 485, 229217.  | 7.8  | 24        |
| 209 | Anisotropic Resistivity Surfaces Produced in ITO Films by Laserâ€Induced Nanoscale Selfâ€organization.<br>Advanced Optical Materials, 2021, 9, 2001086.   | 7.3  | 24        |
| 210 | The growth of thin Ti and TiOx films on Pt(111): Morphology and oxidation states. Surface Science, 1992, 273, 31-39.  | 1.9  | 23        |
| 211 | Preparation by hydrolysis of aerosols and colour properties of Cr-doped and Co-doped zircon powders. Journal of the European Ceramic Society, 1998, 18, 821-830.  | 5.7  | 23        |
| 212 | Resonant photoemission characterization of SnO. Physical Review B, 1999, 60, 11171-11179.   | 3.2  | 23        |
| 213 | Growth Mechanism and Chemical Structure of Amorphous Hydrogenated Silicon Carbide (a‧iC:H)<br>Films Formed by Remote Hydrogen Microwave Plasma CVD From a Triethylsilane Precursor: Part 1.<br>Chemical Vapor Deposition, 2009, 15, 39-46.                              | 1.3  | 23        |
| 214 | Non-destructive depth compositional profiles by XPS peak-shape analysis. Analytical and Bioanalytical Chemistry, 2010, 396, 2757-2768.  | 3.7  | 23        |
| 215 | Enhanced Photoactivity in Bilayer Films with Buried Rutile–Anatase Heterojunctions. ChemPhysChem, 2011, 12, 191-196.  | 2.1  | 23        |
| 216 | Importance of Poly(lactic-co-glycolic acid) in Scaffolds for Guided Bone Regeneration: A Focused<br>Review. Journal of Oral Implantology, 2015, 41, e152-e157.  | 1.0  | 23        |

| #   | Article  | IF   | CITATIONS |
|-----|--|------|-----------|
| 217 | Nanocolumnar association and domain formation in porous thin films grown by evaporation at oblique angles. Nanotechnology, 2016, 27, 395702.   | 2.6  | 23        |
| 218 | In Situ Determination of the Water Condensation Mechanisms on Superhydrophobic and Superhydrophilic Titanium Dioxide Nanotubes. Langmuir, 2017, 33, 6449-6456.   | 3.5  | 23        |
| 219 | Microstructural engineering and use of efficient poison resistant Au-doped Ni-GDC ultrathin anodes<br>in methane-fed solid oxide fuel cells. International Journal of Hydrogen Energy, 2018, 43, 885-893.              | 7.1  | 23        |
| 220 | Electron exchange in TiO2-supported silver catalysts I. Effect of the reducing pretreatments. Journal of Catalysis, 1982, 76, 254-264.   | 6.2  | 22        |
| 221 | A resonant photoemission study of the ZrO2 valence band. Surface Science, 1994, 307-309, 848-853.  | 1.9  | 22        |
| 222 | Contribution of the xâ€ray absorption spectroscopy to study TiO2thin films prepared by ion beam induced chemical vapor deposition. Journal of Applied Physics, 1995, 77, 591-597.                                      | 2.5  | 22        |
| 223 | Substrate Effects and Chemical State Plots for the XPS Analysis of Supported TiO2 Catalysts. Surface and Interface Analysis, 1997, 25, 292-294.  | 1.8  | 22        |
| 224 | Structure and chemistry of SiOx (x<2) systems. Vacuum, 2002, 67, 491-499.  | 3.5  | 22        |
| 225 | A structural study of organo-silicon polymeric thin films deposited by remote microwave plasma enhanced chemical vapour deposition. Surface and Coatings Technology, 2004, 180-181, 244-249.                           | 4.8  | 22        |
| 226 | Excitation transfer mechanism along the visible to the Near-IR in rhodamine J-heteroaggregates.<br>Chemical Communications, 2010, 46, 4372.  | 4.1  | 22        |
| 227 | Plasma Deposition of Perylene–Adamantane Nanocomposite Thin Films for NO <sub>2</sub><br>Room-Temperature Optical Sensing. Journal of Physical Chemistry C, 2012, 116, 8731-8740.                                      | 3.1  | 22        |
| 228 | Charge collection properties of dye-sensitized solar cells based on 1-dimensional TiO2 porous nanostructures and ionic-liquid electrolytes. Journal of Photochemistry and Photobiology A: Chemistry, 2012, 241, 58-66. | 3.9  | 22        |
| 229 | Mechanisms of Electron Transport and Recombination in ZnO Nanostructures for Dye‣ensitized Solar<br>Cells. ChemPhysChem, 2014, 15, 1088-1097.  | 2.1  | 22        |
| 230 | Plasma assisted CO2 dissociation in pure and gas mixture streams with a ferroelectric packed-bed reactor in ambient conditions. Chemical Engineering Journal, 2022, 430, 133066.                                       | 12.7 | 22        |
| 231 | Ionomer-Free Nickel-Iron bimetallic electrodes for efficient anion exchange membrane water electrolysis. Chemical Engineering Journal, 2022, 433, 133774.  | 12.7 | 22        |
| 232 | Structural changes at the titania surface and their relationship to metal-support interactions in rhodium-titania catalysts. The Journal of Physical Chemistry, 1988, 92, 4685-4690.                                   | 2.9  | 21        |
| 233 | Depth profiling of catalyst samples: An XPS-based model for the sputtering behavior of powder materials. Journal of Catalysis, 1991, 130, 627-641.   | 6.2  | 21        |
| 234 | Charging and mixing effects during the XPS analysis of mixtures of oxides. Surface and Interface<br>Analysis, 1994, 22, 111-114.   | 1.8  | 21        |

## AgustÃn R. GonzÃilez-Elipe

| #   | Article   | IF                | CITATIONS |
|-----|---|-------------------|-----------|
| 235 | Electronic structure of insulatingZr3N4studied by resonant photoemission. Physical Review B, 1995, 51, 17984-17987.   | 3.2               | 21        |
| 236 | Oxidation of molybdenum surfaces by reactive oxygen plasma and O2+ bombardment: an auger and XPS study. Surface and Interface Analysis, 1998, 26, 235-241.  | 1.8               | 21        |
| 237 | Electron temperature measurement in a surface-wave-produced argon plasma at intermediate pressures. European Physical Journal D, 2001, 14, 361-366.   | 1.3               | 21        |
| 238 | Phase mixing in Fe/TiO2 thin films prepared by ion beam-induced chemical vapour deposition: optical and structural properties. Surface and Coatings Technology, 2002, 158-159, 552-557.   | 4.8               | 21        |
| 239 | Plasma Characterization of Oxygen-TetramethylsilaneÂMixtures for the Plasma-Enhanced CVD of<br>SiOxCyHz Thin Films. Chemical Vapor Deposition, 2006, 12, 728-735.   | 1.3               | 21        |
| 240 | Surface nanostructuring of TiO2 thin films by ion beam irradiation. Scripta Materialia, 2009, 60, 574-577.  | 5.2               | 21        |
| 241 | Air- and Light-Stable Superhydrophobic Colored Surfaces Based on Supported Organic Nanowires.<br>Langmuir, 2010, 26, 1487-1492.   | 3.5               | 21        |
| 242 | "In Operando―X-ray Absorption Spectroscopy Analysis of Structural Changes During Electrochemical<br>Cycling of WO3 and WxSiyOz Amorphous Electrochromic Thin Film Cathodes. Journal of Physical<br>Chemistry C, 2015, 119, 644-652.                     | 3.1               | 21        |
| 243 | Electrochromism in WO <sub><i>x</i></sub> and<br>W <sub><i>x</i></sub> Si <sub><i>y</i></sub> O <sub><i&g<br>Thin Films Prepared by Magnetron Sputtering at Glancing Angles. Nanoscience and Nanotechnology<br/>Letters, 2013, 5, 89-93.</i&g<br></sub> | gt;z <td>gt;</td> | gt;       |
| 244 | Role of hydrogen in the mobility of phases in Ni\$z.sbnd;TiOx systems. Journal of Catalysis, 1991, 131, 51-59.  | 6.2               | 20        |
| 245 | Photoelectron spectroscopy of metal oxide particles: size and support effects. Vacuum, 1994, 45, 1085-1086.   | 3.5               | 20        |
| 246 | 121Sb Mössbauer and X-ray Photoelectron Spectroscopy Studies of the Electronic Structure of Some<br>Antimony Misfit Layer Compounds. Chemistry of Materials, 1997, 9, 1393-1398.  | 6.7               | 20        |
| 247 | Anomalous behaviour in resonant Auger emission of SiOx thin films. Surface Science, 1999, 436, 202-212.   | 1.9               | 20        |
| 248 | Microstructure and transport properties of ceria and samaria doped ceria thin films prepared by<br>EBE–IBAD. Surface and Coatings Technology, 2007, 202, 1256-1261.   | 4.8               | 20        |
| 249 | "in situ―XPS studies of laser induced surface cleaning and nitridation of Ti. Surface and Coatings<br>Technology, 2008, 202, 1486-1492.   | 4.8               | 20        |
| 250 | Soft plasma processing of organic nanowires: a route for the fabrication of 1D organic<br>heterostructures and the template synthesis of inorganic 1D nanostructures. Nanoscale, 2011, 3, 4554.   | 5.6               | 20        |
| 251 | Lateral and in-depth distribution of functional groups on diamond-like carbon after oxygen plasma treatments. Diamond and Related Materials, 2011, 20, 49-56.   | 3.9               | 20        |
| 252 | Low refractive index SiOF thin films prepared by reactive magnetron sputtering. Thin Solid Films, 2013, 542, 332-337.   | 1.8               | 20        |

| #   | Article   | IF   | CITATIONS |
|-----|---|------|-----------|
| 253 | Nanoindentation of nanocolumnar TiO2 thin films with single and stacked zig-zag layers. Thin Solid<br>Films, 2014, 550, 444-449.  | 1.8  | 20        |
| 254 | EPR study of oxygen adsorption on X-ray irradiated anatase. Chemical Physics Letters, 1978, 57, 265-268.  | 2.6  | 19        |
| 255 | Local site identification for NO on Ni(111) in vibrationally distinct adsorption states. Journal of<br>Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1992, 10, 2445-2450.  | 2.1  | 19        |
| 256 | Iron oxide thin films prepared by ion beam induced chemical vapor deposition: Structural characterization by infrared spectroscopy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2000, 18, 2244.   | 2.1  | 19        |
| 257 | Electron temperature measurement in a slot antenna 2.45 GHz microwave plasma source. Journal of<br>Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics<br>Processing and Phenomena, 2001, 19, 410.                   | 1.6  | 19        |
| 258 | The Auger parameter and the study of chemical and electronic interactions at the Sb2Ox/SnO2 and Sb2Ox/Al2O3 interfaces. Surface Science, 2003, 537, 228-240.  | 1.9  | 19        |
| 259 | X-ray photoelectron spectroscopy study of the nucleation processes and chemistry of CdS thin films deposited by sublimation on different solar cell substrate materials. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 919-928. | 2.1  | 19        |
| 260 | Critical thickness and nanoporosity of TiO2 optical thin films. Microporous and Mesoporous<br>Materials, 2012, 160, 1-9.  | 4.4  | 19        |
| 261 | Light induced hydrophilicity and osteoblast adhesion promotion on amorphous TiO <sub>2</sub> .<br>Journal of Biomedical Materials Research - Part A, 2013, 101A, 1026-1035.   | 4.0  | 19        |
| 262 | Optical properties of zirconium oxynitride films: The effect of composition, electronic and crystalline structures. Applied Surface Science, 2015, 358, 660-669.  | 6.1  | 19        |
| 263 | Light management: porous 1-dimensional nanocolumnar structures as effective photonic crystals for perovskite solar cells. Journal of Materials Chemistry A, 2016, 4, 4962-4970.   | 10.3 | 19        |
| 264 | Electron paramagnetic resonance study of the reactivity toward carbon monoxide and oxygen of O–<br>ions adsorbed on silica-supported molybdenum catalysts. Journal of the Chemical Society Faraday<br>Transactions I, 1982, 78, 1297.                               | 1.0  | 18        |
| 265 | Microscopic and macroscopic dielectric description of mixed oxide thin films. Journal of Applied Physics, 2007, 102, 084112.  | 2.5  | 18        |
| 266 | Optically Active Thin Films Deposited by Plasma Polymerization of Dye Molecules. Chemical Vapor Deposition, 2007, 13, 319-325.  | 1.3  | 18        |
| 267 | Tunable In-Plane Optical Anisotropy of Ag Nanoparticles Deposited by DC Sputtering onto SiO2<br>Nanocolumnar Films. Plasmonics, 2010, 5, 241-250.   | 3.4  | 18        |
| 268 | Nitrogen plasma functionalization of low density polyethylene. Surface and Coatings Technology, 2011, 205, 3356-3364.   | 4.8  | 18        |
| 269 | XPS study of lutetium oxide samples with different hydration/carbonation degrees as a function of the preparation method. Applied Surface Science, 1987, 29, 40-48.   | 6.1  | 17        |
| 270 | Structural characterization of PbTiO3 thin films prepared by ion beam induced CVD and evaporation of lead. Thin Solid Films, 1996, 272, 99-106.   | 1.8  | 17        |

| #   | Article  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 271 | Preparation of Al2O3 thin films by ion-beam-induced CVD: structural effects of the bombardment with accelerated ions. Surface and Coatings Technology, 1996, 80, 23-26.                            | 4.8 | 17        |
| 272 | Optical properties and electron spectroscopy characterization of AlxTiyOz thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1998, 16, 3477-3482.                 | 2.1 | 17        |
| 273 | XPS, SEM and TEM characterization of stainless-steel 316L surfaces after electrochemical etching and oxidizing. Surface and Interface Analysis, 1999, 28, 106-110.                                 | 1.8 | 17        |
| 274 | SPECTROSCOPIC CHARACTERIZATION OF OXIDE/OXIDE INTERFACES. , 2001, , 147-194.   |     | 17        |
| 275 | Room temperature synthesis of porous SiO2 thin films by plasma enhanced chemical vapor deposition.<br>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2004, 22, 1275-1284. | 2.1 | 17        |
| 276 | Collisional radiative model of an argon atmospheric capillary surface-wave discharge. Physics of Plasmas, 2004, 11, 5497-5506.   | 1.9 | 17        |
| 277 | Optical refractive index and static permittivity of mixed Zr–Si oxide thin films prepared by ion beam induced CVD. Thin Solid Films, 2007, 516, 481-485.   | 1.8 | 17        |
| 278 | Formation of Nitrogen Functional Groups on Plasma Treated DLC. Plasma Processes and Polymers, 2009, 6, 555-565.  | 3.0 | 17        |
| 279 | Rhodamine 6G and 800 J-heteroaggregates with enhanced acceptor luminescence (HEAL) adsorbed in transparent SiO2 GLAD thin films. Physical Chemistry Chemical Physics, 2011, 13, 7071.              | 2.8 | 17        |
| 280 | Vertical and tilted Ag-NPs@ZnO nanorods by plasma-enhanced chemical vapour deposition.<br>Nanotechnology, 2012, 23, 255303.  | 2.6 | 17        |
| 281 | Sodium ion storage performance of magnetron sputtered WO3 thin films. Electrochimica Acta, 2019, 321, 134669.  | 5.2 | 17        |
| 282 | Photo-decomposition of Ozone on TiO <sub>2</sub> . Zeitschrift Fur Physikalische Chemie, 1981, 126, 251-257.   | 2.8 | 16        |
| 283 | The role of oxygen vacancies during the decomposition of RhCl3/TiO2 precursor: study by XPS, IR, EPR and NMR Catalysis Today, 1988, 2, 663-673.  | 4.4 | 16        |
| 284 | XPS and TRP/TPO Study of the behaviour of rhodium particles supported on TiO2. Surface and Interface Analysis, 1988, 12, 247-252.  | 1.8 | 16        |
| 285 | Electronic interaction of Ni particles with TiO2 and SiO2. Surface Science, 1991, 251-252, 1012-1017.  | 1.9 | 16        |
| 286 | "In situ―XPS study of the photoassisted reduction of noble-metal cations on TiO2. Applied Surface<br>Science, 1993, 69, 285-289.   | 6.1 | 16        |
| 287 | Use of XAS and chemical probes to study the structural damage induced in oxide ceramics by bombardment with low-energy ions. Surface and Interface Analysis, 1994, 21, 418-424.                    | 1.8 | 16        |
| 288 | Interface effects and the Auger parameter in titanium oxide thin films deposited on metals and in sandwich structures. Journal of Electron Spectroscopy and Related Phenomena, 1997, 87, 61-71.    | 1.7 | 16        |

| #   | Article  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 289 | Different oxidation states of polycrystalline molybdenum treated by O2-plasma or O2-ion<br>bombardment. Surface Science, 1998, 402-404, 174-177.   | 1.9 | 16        |
| 290 | Electronic interactions at SiO2/M′O (M′: Al, Ti) oxide interfaces. Surface Science, 2001, 482-485, 680-686.  | 1.9 | 16        |
| 291 | First nucleation steps of vanadium oxide thin films studied by XPS inelastic peak shape analysis. Applied<br>Surface Science, 2005, 252, 189-195.  | 6.1 | 16        |
| 292 | Global model of a low pressure ECR microwave plasma applied to the PECVD of SiO2thin films. Journal Physics D: Applied Physics, 2007, 40, 3411-3422.   | 2.8 | 16        |
| 293 | Using ion beams to tune the nanostructure and optical response of co-deposited Ag : BN thin films.<br>Journal Physics D: Applied Physics, 2007, 40, 4614-4620.   | 2.8 | 16        |
| 294 | Plasma catalysis over lanthanum substituted perovskites. Catalysis Communications, 2007, 8, 1739-1742.   | 3.3 | 16        |
| 295 | Luminescent and Optical Properties of Nanocomposite Thin Films Deposited by Remote Plasma<br>Polymerization of Rhodamine 6G. Plasma Processes and Polymers, 2009, 6, 17-26.                                    | 3.0 | 16        |
| 296 | Colored and Transparent Oxide Thin Films Prepared by Magnetron Sputtering: The Glass Blower<br>Approach. ACS Applied Materials & Interfaces, 2013, 5, 1967-1976.   | 8.0 | 16        |
| 297 | Luminescent 3-hydroxyflavone nanocomposites with a tuneable refractive index for photonics and UV detection by plasma assisted vacuum deposition. Journal of Materials Chemistry C, 2014, 2, 6561-6573.        | 5.5 | 16        |
| 298 | Bending Induced Self-Organized Switchable Gratings on Polymeric Substrates. ACS Applied Materials<br>& Interfaces, 2014, 6, 11924-11931.   | 8.0 | 16        |
| 299 | Flexible Distributed Bragg Reflectors from Nanocolumnar Templates. Advanced Optical Materials, 2015, 3, 171-175.   | 7.3 | 16        |
| 300 | Sensing and biosensing with screen printed electrodes modified with nanostructured nickel oxide thin films prepared by magnetron sputtering at oblique angles. Electrochemistry Communications, 2018, 94, 5-8. | 4.7 | 16        |
| 301 | Use of XPS and Ar+depth profiling to determine the dispersion degree of Ni in Ni/TiO2and<br>Ni/SiO2catalysts. Surface and Interface Analysis, 1992, 19, 508-512.   | 1.8 | 15        |
| 302 | Preparation of TiO2 and Al2O3 thin films by ion-beam induced chemical vapour deposition. Vacuum, 1994, 45, 1043-1045.  | 3.5 | 15        |
| 303 | Synthesis and Characterization of Diamine Intercalation Compounds of SnS2 Single Crystals. Journal of Solid State Chemistry, 2000, 150, 391-398.   | 2.9 | 15        |
| 304 | Amorphisation and related structural effects in thin films prepared by ion beam assisted methods.<br>Surface and Coatings Technology, 2000, 125, 116-123.  | 4.8 | 15        |
| 305 | Titanium local environment and electrical conductivity of TiO2-doped stabilized tetragonal zirconia.<br>Journal of Materials Science, 2000, 35, 345-352.   | 3.7 | 15        |
| 306 | Molecular dynamics simulation of the effect of pH on the adsorption of rhodamine laser dyes on<br>TiO <sub>2</sub> hydroxylated surfaces. Molecular Simulation, 2009, 35, 1140-1151.                           | 2.0 | 15        |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 307 | Growth of SiO <sub>2</sub> and TiO <sub>2</sub> thin films deposited by reactive magnetron<br>sputtering and PECVD by the incorporation of nonâ€directional deposition fluxes. Physica Status Solidi<br>(A) Applications and Materials Science, 2013, 210, 796-801. | 1.8 | 15        |
| 308 | Anisotropic In-Plane Conductivity and Dichroic Gold Plasmon Resonance in Plasma-Assisted ITO Thin<br>Films e-Beam-Evaporated at Oblique Angles. ACS Applied Materials & Interfaces, 2015, 7, 10993-11001.   | 8.0 | 15        |
| 309 | Dye-based photonic sensing systems. Sensors and Actuators B: Chemical, 2016, 228, 649-657.  | 7.8 | 15        |
| 310 | Effect of sodium on the reductibility of V(V) ions during propene adsorption on V2O5/TiO2 catalysts.<br>Journal of Catalysis, 1988, 114, 473-477.   | 6.2 | 14        |
| 311 | TiO2corrosion during water photocleavage using Rh/TiO2suspensions. Journal of the Chemical<br>Society, Faraday Transactions, 1990, 86, 3441-3445.   | 1.7 | 14        |
| 312 | Generation of homogeneous rhodium particles by photoreduction of rhodium(III) on titania colloids grafted on silica. Langmuir, 1993, 9, 121-125.  | 3.5 | 14        |
| 313 | XAS and XRD structural studies of titanium oxide thin films prepared by ion beam induced CVD. Thin Solid Films, 1994, 241, 175-178.   | 1.8 | 14        |
| 314 | Thermal annealing of defects in highly defective NiO nanoparticles studied by X-ray and electron spectroscopies. Chemical Physics Letters, 1997, 266, 184-188.  | 2.6 | 14        |
| 315 | AlN thin films prepared by ion beam induced chemical vapour deposition. Thin Solid Films, 1998, 317, 100-104.   | 1.8 | 14        |
| 316 | Preparation and characterization of Al-Ti mixed oxide thin films. Surface and Coatings Technology, 1998, 100-101, 142-145.  | 4.8 | 14        |
| 317 | Determination of growth mechanisms by X-ray photoemission and ion scattering spectroscopies: application to thin iron oxide films deposited on SiO2. Surface Science, 2000, 457, 24-36.   | 1.9 | 14        |
| 318 | Spectroscopic characterisation and chemical reactivity of silicon monoxide layers deposited on Cu(100). Surface Science, 2000, 458, 229-238.  | 1.9 | 14        |
| 319 | Room temperature synthesis of SiO2 thin films by ion beam induced and plasma enhanced CVD. Surface and Coatings Technology, 2001, 142-144, 856-860.   | 4.8 | 14        |
| 320 | Correlation between optical properties and electronic parameters for mixed oxide thin films. Surface and Interface Analysis, 2006, 38, 752-756.   | 1.8 | 14        |
| 321 | Ar + NO microwave plasmas for <i>Escherichia coli</i> sterilization. Journal Physics D: Applied Physics, 2008, 41, 092002.  | 2.8 | 14        |
| 322 | Nitridation of nanocrystalline TiO2 thin films by treatment with ammonia. Thin Solid Films, 2011, 519, 3587-3595.   | 1.8 | 14        |
| 323 | Osteoblasts Interaction with PLGA Membranes Functionalized with Titanium Film Nanolayer by PECVD.<br>In vitro Assessment of Surface Influence on Cell Adhesion during Initial Cell to Material Interaction.<br>Materials, 2014, 7, 1687-1708.                       | 2.9 | 14        |
| 324 | Electrochemical activation of an oblique angle deposited Cu catalyst film for H <sub>2</sub><br>production. Catalysis Science and Technology, 2015, 5, 2203-2214.   | 4.1 | 14        |

| #   | Article  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 325 | Robust polarization active nanostructured 1D Bragg Microcavities as optofluidic label-free refractive index sensor. Sensors and Actuators B: Chemical, 2018, 256, 590-599.   | 7.8 | 14        |
| 326 | Isotope Labelling for Reaction Mechanism Analysis in DBD Plasma Processes. Catalysts, 2019, 9, 45.   | 3.5 | 14        |
| 327 | IR and XPS studies of the reactivity of CO with Ti-H species at the support on Rh/TiO2 catalysts.<br>Spectrochimica Acta Part A: Molecular Spectroscopy, 1987, 43, 1599-1605.                                      | 0.1 | 13        |
| 328 | XPS study of phase mobility in Ni/TiO2 systems. Surface Science, 1989, 211-212, 1113-1122.   | 1.9 | 13        |
| 329 | Effect of chlorine impurities on the properties of CeO2. Surface Science, 1991, 251-252, 990-994.  | 1.9 | 13        |
| 330 | Optical properties of zirconia–yttria single crystal compounds by reflection electron energy loss<br>spectroscopy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1998, 16,<br>2287-2291. | 2.1 | 13        |
| 331 | Surface chemical effects of low-energy N2+ ion bombardment on single crystalline ?-Al2O3. Surface and Interface Analysis, 2000, 30, 90-94.   | 1.8 | 13        |
| 332 | Characterization of Sb2 O3 subjected to different ion and plasma surface treatments. Surface and<br>Interface Analysis, 2003, 35, 256-262.   | 1.8 | 13        |
| 333 | Colored semi-transparent Cu-Si oxide thin films prepared by magnetron sputtering. Optical Materials Express, 2011, 1, 1100.  | 3.0 | 13        |
| 334 | Preparation and characterization of CrO2 films by Low Pressure Chemical Vapor Deposition from CrO3. Thin Solid Films, 2013, 539, 1-11.   | 1.8 | 13        |
| 335 | Osteoconductive Potential of Barrier NanoSiO <sub>2</sub> PLGA Membranes Functionalized by Plasma<br>Enhanced Chemical Vapour Deposition. BioMed Research International, 2014, 2014, 1-10.                         | 1.9 | 13        |
| 336 | Kinetic energy-induced growth regimes of nanocolumnar Ti thin films deposited by evaporation and magnetron sputtering. Nanotechnology, 2019, 30, 475603.   | 2.6 | 13        |
| 337 | SiOx by magnetron sputtered revisited: Tailoring the photonic properties of multilayers. Applied Surface Science, 2019, 488, 791-800.  | 6.1 | 13        |
| 338 | 3D Organic Nanofabrics: Plasma-Assisted Synthesis and Antifreezing Behavior of Superhydrophobic and Lubricant-Infused Slippery Surfaces. Langmuir, 2019, 35, 16876-16885.  | 3.5 | 13        |
| 339 | An electron spin resonance study of charge-carrier stabilization in ZnO. Journal of the Chemical<br>Society Faraday Transactions I, 1988, 84, 3961.  | 1.0 | 12        |
| 340 | The Role of the Oxygen Vacancies at the Support in the Co Oxidation On Rh/Ceo2 AND Rh/TiO2<br>AUTOCATALYSTS Studies in Surface Science and Catalysis, 1991, 71, 207-219.   | 1.5 | 12        |
| 341 | Structure–electrical properties relationships in TiO2-doped stabilized tetragonal zirconia ceramics.<br>Ceramics International, 1999, 25, 639-648.   | 4.8 | 12        |
| 342 | Characterisation by X-ray absorption spectroscopy of oxide thin films prepared by ion beam-induced CVD. Thin Solid Films, 2000, 377-378, 460-466.  | 1.8 | 12        |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 343 | The chemical state vector: a new concept for the characterization of oxide interfaces. Surface and Interface Analysis, 2001, 31, 761-767.   | 1.8 | 12        |
| 344 | Type of precursor and synthesis of silicon oxycarbide (SiOxCyH) thin films with a surfatron<br>microwave oxygen/argon plasma. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and<br>Films, 2006, 24, 988-994.     | 2.1 | 12        |
| 345 | Enhancement of visible light-induced surface photo-activity of nanostructured N–TiO2 thin films modified by ion implantation. Chemical Physics Letters, 2013, 582, 95-99.   | 2.6 | 12        |
| 346 | Physiological Degradation Mechanisms of PLGA Membrane Films under Oxygen Plasma Treatment.<br>Journal of Physical Chemistry C, 2015, 119, 20446-20452.  | 3.1 | 12        |
| 347 | In situ monitoring of the phenomenon of electrochemical promotion of catalysis. Journal of<br>Catalysis, 2018, 358, 27-34.  | 6.2 | 12        |
| 348 | Solid-State Dewetting of Gold on Stochastically Periodic SiO <sub>2</sub> Nanocolumns Prepared by Oblique Angle Deposition. ACS Applied Materials & Interfaces, 2021, 13, 11385-11395.  | 8.0 | 12        |
| 349 | Photo-Adsorption of Oxygen on Acid and Basic TiO2 Surfaces. Studies in Surface Science and Catalysis, 1985, , 113-126.  | 1.5 | 11        |
| 350 | Electron spin resonance study of the radicals formed by ultraviolet irradiation of TiO2 in the<br>presence of sulphur dioxide and oxygen. Journal of the Chemical Society Faraday Transactions I, 1986,<br>82, 739.             | 1.0 | 11        |
| 351 | Effect of Water in the Encapsulation of the Metallic Phase During Smsi Generation in Pt/TiO2<br>Catalysts. Studies in Surface Science and Catalysis, 1989, 48, 427-436.   | 1.5 | 11        |
| 352 | Photoassisted deposition of rhodium on platinum/titania samples as a method of preparing bimetallic catalysts. Applied Catalysis, 1990, 57, 191-202.  | 0.8 | 11        |
| 353 | Chemical changes in titanate surfaces induced by Ar+ion bombardment. Surface and Interface Analysis, 1992, 19, 286-290.   | 1.8 | 11        |
| 354 | 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. | 3.9 | 11        |
| 355 | Determination of thin film growth mechanisms of deposited metal oxides by a combined use of ISS and XPS. Applied Surface Science, 1999, 141, 186-192.   | 6.1 | 11        |
| 356 | Structure and electrical behavior in air of TiO 2 -doped stabilized tetragonal zirconia ceramics.<br>Applied Physics A: Materials Science and Processing, 1999, 68, 41-48.  | 2.3 | 11        |
| 357 | Supported plasma-made 1D heterostructures: perspectives and applications. Journal Physics D: Applied Physics, 2011, 44, 174016.   | 2.8 | 11        |
| 358 | Following the Wetting of One-Dimensional Photoactive Surfaces. Langmuir, 2012, 28, 15047-15055.   | 3.5 | 11        |
| 359 | Effects of plasma surface treatments of diamond-like carbon and polymeric substrata on the cellular behavior of human fibroblasts. Journal of Biomaterials Applications, 2013, 27, 669-683.                                     | 2.4 | 11        |
| 360 | Laser induced enhancement of dichroism in supported silver nanoparticles deposited by evaporation at glancing angles. Nanotechnology, 2013, 24, 045301.   | 2.6 | 11        |

| #   | Article  | IF   | CITATIONS |
|-----|--|------|-----------|
| 361 | Portable IR dye laser optofluidic microresonator as a temperature and chemical sensor. Optics Express, 2016, 24, 14383.  | 3.4  | 11        |
| 362 | Growth of nanocolumnar thin films on patterned substrates at oblique angles. Plasma Processes and Polymers, 2019, 16, 1800135.   | 3.0  | 11        |
| 363 | Diffusion of nickel and surface reconstruction in Ni/TiO2 catalysts promoted by H2 and O2 treatments. Solid State Ionics, 1993, 63-65, 748-754.  | 2.7  | 10        |
| 364 | Low-temperature photoassisted generation of a strong metal-support interaction in a rhodium/titania catalyst. The Journal of Physical Chemistry, 1993, 97, 3350-3354.                            | 2.9  | 10        |
| 365 | Barium and titanium aryl oxides as precursors for the preparation of thin-film oxides. The effect of bombardment by O2+. Journal of the Chemical Society Dalton Transactions, 1995, , 1529-1536. | 1.1  | 10        |
| 366 | Plate reactor for testing catalysts in the form of thin films. Applied Catalysis B: Environmental, 2001, 31, L5-L10.   | 20.2 | 10        |
| 367 | Determination of surface nanostructure from analysis of electron plasmon losses in XPS. Surface and Interface Analysis, 2002, 34, 201-205.   | 1.8  | 10        |
| 368 | Acicular Metallic Particles Obtained from Al-Doped Goethite Precursors. Chemistry of Materials, 2003, 15, 951-957.   | 6.7  | 10        |
| 369 | Influence of the excited states on the electron-energy distribution function in low-pressure microwave argon plasmas. Physical Review E, 2005, 72, 016401.                                       | 2.1  | 10        |
| 370 | First nucleation steps during deposition of SiO2 thin films by plasma enhanced chemical vapour deposition. Surface Science, 2007, 601, 2223-2231.  | 1.9  | 10        |
| 371 | Comments on "An Essay on Contact Angle Measurements†Determination of Surface Roughness and Modeling of the Wetting Behavior. Plasma Processes and Polymers, 2011, 8, 998-1002.                   | 3.0  | 10        |
| 372 | <i>c</i> -C <sub>4</sub> F <sub>8</sub> Plasmas for the Deposition of Fluorinated Carbon Films. Plasma<br>Processes and Polymers, 2014, 11, 289-299.   | 3.0  | 10        |
| 373 | "In situ―XPS studies of laser-induced surface nitridation and oxidation of tantalum. Journal of<br>Materials Research, 2015, 30, 2967-2976.  | 2.6  | 10        |
| 374 | Highâ€Rate Deposition of Stoichiometric Compounds by Reactive Magnetron Sputtering at Oblique<br>Angles. Plasma Processes and Polymers, 2016, 13, 960-964.                                       | 3.0  | 10        |
| 375 | Ripening and recrystallization of NaCl nanocrystals in humid conditions. RSC Advances, 2016, 6, 3778-3782.   | 3.6  | 10        |
| 376 | Energy-Sensitive Ion- and Cathode-Luminescent Radiation-Beam Monitors Based on Multilayer Thin-Film<br>Designs. ACS Applied Materials & Interfaces, 2017, 9, 16313-16320.                        | 8.0  | 10        |
| 377 | EPR study of the radicals involved in the photooxidation of ethylene on TiO2. Journal De Chimie<br>Physique Et De Physico-Chimie Biologique, 1982, 79, 355-359.                                  | 0.2  | 10        |
| 378 | EPR Study of SO <sub>2</sub> Adsorption on ZnO. Zeitschrift Fur Physikalische Chemie, 1982, 132, 67-74.  | 2.8  | 9         |

| #   | Article  | IF              | CITATIONS               |
|-----|--|-----------------|-------------------------|
| 379 | Calibration of the Probing Depth by Total Electron Yield of EXAFS Spectra in Oxide Overlayers (Ta2O5,) Tj ETQq1 1  | 0.784314<br>1.8 | 4 <sub>g</sub> gBT /Ove |
| 380 | Preparation and characterization of diamine intercalation compounds of misfit layer sulfides. Journal of Materials Chemistry, 1998, 8, 2281-2286.  | 6.7             | 9                       |
| 381 | Structural modifications produced by the incorporation of Ar within the lattice of Fe2O3 thin films prepared by ion beam induced chemical vapour deposition. Acta Materialia, 2000, 48, 4555-4561. | 7.9             | 9                       |
| 382 | Are measured values of the Auger parameter always independent of charging effects?. Surface and Interface Analysis, 2003, 35, 991-997.   | 1.8             | 9                       |
| 383 | Analysis of texture and microstructure of anatase thin films by Fourier transform infrared spectroscopy. Thin Solid Films, 2006, 515, 1585-1591.   | 1.8             | 9                       |
| 384 | Study of the first nucleation steps of thin films by XPS inelastic peak shape analysis. Surface and<br>Interface Analysis, 2007, 39, 331-336.  | 1.8             | 9                       |
| 385 | Novel Guests for Porous Columnar Thin Films: The Switchable Perchlorinated Trityl Radical<br>Derivatives. Langmuir, 2011, 27, 5098-5106.   | 3.5             | 9                       |
| 386 | Modulating Low Energy Ion Plasma Fluxes for the Growth of Nanoporous Thin Films. Plasma<br>Processes and Polymers, 2015, 12, 719-724.  | 3.0             | 9                       |
| 387 | Cathode and ion-luminescence of Eu:ZnO thin films prepared by reactive magnetron sputtering and plasma decomposition of non-volatile precursors. Journal of Luminescence, 2016, 178, 139-146.      | 3.1             | 9                       |
| 388 | Nanoindentation and scratch resistance of multilayered TiO2-SiO2coatings with different<br>nanocolumnar structures deposited by PV-OAD. Journal Physics D: Applied Physics, 2016, 49, 135104.      | 2.8             | 9                       |
| 389 | Laser Treatment of Nanoparticulated Metal Thin Films for Ceramic Tile Decoration. ACS Applied Materials & Interfaces, 2016, 8, 24880-24886.  | 8.0             | 9                       |
| 390 | Antibacterial response of titanium oxide coatings doped by nitrogen plasma immersion ion implantation. Surface and Coatings Technology, 2017, 314, 67-71.  | 4.8             | 9                       |
| 391 | Patterning and control of the nanostructure in plasma thin films with acoustic waves:<br>mechanical <i>vs.</i> electrical polarization effects. Materials Horizons, 2021, 8, 515-524.              | 12.2            | 9                       |
| 392 | Photo-Adsorption of Oxygen on Chlorinated TiO2 Surfaces; A Possible Way to<br>Photo-Oxy-Chlorinations. Studies in Surface Science and Catalysis, 1981, 7, 1185-1197.                               | 1.5             | 8                       |
| 393 | Study of the Mechanism of Water Splitting on UV-Irradiated Rh/TiO2. Studies in Surface Science and Catalysis, 1984, , 335-346.   | 1.5             | 8                       |
| 394 | XPS characterization of oxygenated species in TiO2 and Rh/TiO2 photocatalysts. Journal of Molecular Structure, 1986, 143, 227-230.   | 3.6             | 8                       |
| 395 | Interpretation of surface textural changes in SrTiO3 ex-oxalate samples using XPS and IR spectroscopies. Surface and Interface Analysis, 1990, 15, 693-697.  | 1.8             | 8                       |
| 396 | CO adsorption on rhodium(i) and on metallic rhodium supported on titanium dioxide. Journal of<br>Molecular Catalysis, 1990, 62, 171-177.   | 1.2             | 8                       |

| #   | Article   | IF   | CITATIONS |
|-----|---|------|-----------|
| 397 | Surface modification of oxide materials subjected to low energy ion bombardment: a XAS study.<br>Nuclear Instruments & Methods in Physics Research B, 1995, 97, 397-401.  | 1.4  | 8         |
| 398 | Ultra-high vacuum deposition of Na on SnS2 in single crystal and powder forms: evidence of a decomposition reaction. Surface Science, 1999, 426, 259-267.   | 1.9  | 8         |
| 399 | Plasma Deposition of Superhydrophobic Ag@TiO <sub>2</sub> Core@shell Nanorods on Processable<br>Substrates. Plasma Processes and Polymers, 2014, 11, 164-174.   | 3.0  | 8         |
| 400 | Non-Enzymatic Glucose Sensors Based on Nickel Nanoporous Thin Films Prepared by Physical Vapor<br>Deposition at Oblique Angles for Beverage Industry Applications. Journal of the Electrochemical<br>Society, 2016, 163, B704-B709. | 2.9  | 8         |
| 401 | Critical Role of Oxygen in Silver-Catalyzed Glaser–Hay Coupling on Ag(100) under Vacuum and in<br>Solution on Ag Particles. ACS Catalysis, 2017, 7, 3113-3120.  | 11.2 | 8         |
| 402 | Ultrastable Co x Si y O z Nanowires by Glancing Angle Deposition with Magnetron Sputtering as Novel Electrocatalyst for Water Oxidation. ChemCatChem, 2019, 11, 6111-6115.  | 3.7  | 8         |
| 403 | Positron annihilation analysis of nanopores and growth mechanism of oblique angle evaporated TiO2 and SiO2 thin films and multilayers. Microporous and Mesoporous Materials, 2020, 295, 109968.                                     | 4.4  | 8         |
| 404 | EXAFS study of catalyst preparation procedure in Ni-silica and Ni-titania. Physica B: Condensed Matter, 1989, 158, 174-175.   | 2.7  | 7         |
| 405 | Gas heating in low-pressure microwave argon discharges. Physical Review E, 2002, 66, 066401.  | 2.1  | 7         |
| 406 | Structural effects due to the incorporation of Ar atoms in the lattice of ZrO2 thin films prepared by ion beam assisted deposition. Nuclear Instruments & Methods in Physics Research B, 2002, 194, 333-345.                        | 1.4  | 7         |
| 407 | Characterization of Co/ZrO2de-NOXThin Film Catalysts Prepared by Magnetron Sputtering. Catalysis<br>Letters, 2003, 90, 195-203.   | 2.6  | 7         |
| 408 | Molecular nitrogen implanted in Al2O3 by low energy N2+ ion bombardment. Solid State<br>Communications, 2003, 128, 235-238.   | 1.9  | 7         |
| 409 | Polymeric Sacrificial Layers for the Control of Microstructure and Porosity of Oxide Thin Films<br>Deposited by Plasma-Enhanced Chemical Vapor Deposition. Chemistry of Materials, 2003, 15, 3041-3043.                             | 6.7  | 7         |
| 410 | A Novel PECVD Procedure for the Room-Temperature Synthesis of SiO2 Thin Films with Controlled Porosity. Chemical Vapor Deposition, 2004, 10, 17-20.   | 1.3  | 7         |
| 411 | First stages of growth of cerium oxide deposited on alumina and reduced titania surfaces. Surface and Interface Analysis, 2006, 38, 510-513.  | 1.8  | 7         |
| 412 | SiK-edge XANES study ofSiOxCyHzamorphous polymeric materials. Physical Review B, 2007, 75, .  | 3.2  | 7         |
| 413 | Size and shape of supported zirconia nanoparticles determined by x-ray photoelectron spectroscopy.<br>Journal of Applied Physics, 2007, 101, 124910.  | 2.5  | 7         |
| 414 | Study by grazing incident diffraction and surface spectroscopy of amalgams from ancient mirrors.<br>Open Chemistry, 2009, 7, 47-53.   | 1.9  | 7         |

| #   | Article  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 415 | Combined reactive magnetron sputtering and plasma decomposition of non-volatile precursors to grow luminescent thin films. Surface and Coatings Technology, 2013, 222, 144-150.  | 4.8 | 7         |
| 416 | Stoichiometric Control of SiO <sub>x</sub> Thin Films Grown by Reactive Magnetron Sputtering at Oblique Angles. Plasma Processes and Polymers, 2016, 13, 1242-1248.  | 3.0 | 7         |
| 417 | Metallization of ceramic substrates by laser induced decomposition of coordination complexes.<br>Journal of the European Ceramic Society, 2016, 36, 2831-2836.   | 5.7 | 7         |
| 418 | A compact and portable optofluidic device for detection of liquid properties and label-free sensing.<br>Journal Physics D: Applied Physics, 2017, 50, 215103.  | 2.8 | 7         |
| 419 | In Vitro and in Vivo Study of Poly(Lactic–co–Glycolic) (PLGA) Membranes Treated with Oxygen Plasma<br>and Coated with Nanostructured Hydroxyapatite Ultrathin Films for Guided Bone Regeneration<br>Processes. Polymers, 2017, 9, 410. | 4.5 | 7         |
| 420 | Electron Beam Evaporated vs. Magnetron Sputtered Nanocolumnar Porous Stainless Steel: Corrosion<br>Resistance, Wetting Behavior and Anti-bacterial Activity. Materials Today Communications, 2022, 31,<br>103266.                      | 1.9 | 7         |
| 421 | EPR study of the coordination sphere of Mo5+ ions in UV-irradiated silica-supported molybdenum catalysts. Journal of Catalysis, 1991, 131, 300-303.  | 6.2 | 6         |
| 422 | Chemical effects in TiO2 and titanates due to bombardment with Ar+ and O 2 + ions of different energies (3.5-10 keV). Applied Physics A: Materials Science and Processing, 1996, 63, 237-242.  | 2.3 | 6         |
| 423 | Gas temperature equation in a high-frequency argon plasma column at low pressures. Physics of Plasmas, 2002, 9, 358-363.   | 1.9 | 6         |
| 424 | Structural phase transitions in ZrO2 films induced by ion bombardment—Argon irradiation versus<br>implantation. Journal of Applied Physics, 2003, 93, 5251-5254.   | 2.5 | 6         |
| 425 | Synthesis of undoped and Ni doped InTaO4 photoactive thin films by metal organic chemical vapor deposition. Surface and Coatings Technology, 2007, 201, 9365-9368.   | 4.8 | 6         |
| 426 | UV irradiation effects on TiO <sub>2</sub> thin films. Physica Status Solidi C: Current Topics in Solid<br>State Physics, 2008, 5, 1164-1167.  | 0.8 | 6         |
| 427 | Structural control in porous/compact multilayer systems grown by magnetron sputtering.<br>Nanotechnology, 2017, 28, 465605.  | 2.6 | 6         |
| 428 | Nanostructural Analysis of Porous Oblique Angle Deposited (OAD) Multilayer Systems by<br>Grazingâ€Incidence Smallâ€Angle Xâ€Ray Scattering. Advanced Materials Interfaces, 2018, 5, 1800530.   | 3.7 | 6         |
| 429 | Environmentally Tight TiO <sub>2</sub> –SiO <sub>2</sub> Porous 1Dâ€Photonic Structures. Advanced<br>Materials Interfaces, 2019, 6, 1801212.   | 3.7 | 6         |
| 430 | Thin film electroluminescent device based on magnetron sputtered Tb doped ZnGa2O4 layers. Journal of Luminescence, 2020, 228, 117617.  | 3.1 | 6         |
| 431 | Electrical and reaction performances of packedâ€bed plasma reactors moderated with ferroelectric or dielectric materials. Plasma Processes and Polymers, 2021, 18, 2000193.  | 3.0 | 6         |
| 432 | New Insights on the Conversion Reaction Mechanism in Metal Oxide Electrodes for Sodium-Ion<br>Batteries. Nanomaterials, 2021, 11, 966.   | 4.1 | 6         |

| #   | Article   | IF   | CITATIONS |
|-----|---|------|-----------|
| 433 | Wetting and spreading of liquid lithium onto nanocolumnar tungsten coatings tailored through the topography of stainless steel substrates. Nuclear Fusion, 2020, 60, 126033.  | 3.5  | 6         |
| 434 | Catalytic activity and characterization of platinum implanted in oxide single crystals: Comparison between Pt/α-Al2O3 and Pt/MgO systems after annealing in argon. Surface Science, 1981, 106, 484-488.                   | 1.9  | 5         |
| 435 | Cobaltocene intercalation into misfit layer chalcogenides. Journal of the Chemical Society Chemical Communications, 1994, , 1081-1082.  | 2.0  | 5         |
| 436 | Chemistry and diffusion processes at the SiO î—,AlN interface. Surface Science, 1998, 395, 326-341.   | 1.9  | 5         |
| 437 | Study of in situ adsorption and intercalation of cobaltocene into SnS2 single crystals by photoelectron spectroscopy. Surface Science, 2001, 477, L295-L300.  | 1.9  | 5         |
| 438 | Oxygenated polymeric thin films deposited from toluene and oxygen by remote plasma enhanced<br>chemical vapor deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films,<br>2003, 21, 1655-1664. | 2.1  | 5         |
| 439 | Microstructure of mixed oxide thin films prepared by magnetron sputtering at oblique angles. Thin<br>Solid Films, 2015, 591, 330-335.   | 1.8  | 5         |
| 440 | Nickel/Copper Bilayerâ€modified Screen Printed Electrode for Glucose Determination in Flow Injection<br>Analysis. Electroanalysis, 2018, 30, 187-193.   | 2.9  | 5         |
| 441 | Graphene Formation Mechanism by the Electrochemical Promotion of a Ni Catalyst. ACS Catalysis, 2019, 9, 11447-11454.  | 11.2 | 5         |
| 442 | Robust label-free CuxCoyOz electrochemical sensors for hexose detection during fermentation process monitoring. Sensors and Actuators B: Chemical, 2020, 304, 127360.   | 7.8  | 5         |
| 443 | Laser-induced scanning transfer deposition of silver electrodes on glass surfaces: A green and scalable technology. Applied Surface Science, 2021, 556, 149673.   | 6.1  | 5         |
| 444 | Extraction of microstructural parameters from sculptured thin films nanoindentation. Surface and Coatings Technology, 2021, 425, 127696.  | 4.8  | 5         |
| 445 | Vapor and liquid optical monitoring with sculptured Bragg microcavities. Journal of Nanophotonics, 2017, 11, 1.   | 1.0  | 5         |
| 446 | Thin film nanostructuring at oblique angles by substrate patterning. Surface and Coatings<br>Technology, 2022, 436, 128293.   | 4.8  | 5         |
| 447 | Titania Enhanced Photocatalysis and Dye Giant Absorption in Nanoporous 1D Bragg Microcavities. ACS<br>Applied Nano Materials, 2022, 5, 5487-5497.   | 5.0  | 5         |
| 448 | SO2 adsorption on Mo\$z.sbnd;Ni/Al2O3 catalysts. Journal of Catalysis, 1983, 83, 235-237.   | 6.2  | 4         |
| 449 | An electron spin resonance study of formation of SO2\$minus; and S\$z.sbnd;O\$z.sbnd;O\$minus; radicals on nickel/alumina catalysts. Journal of Catalysis, 1987, 103, 506-511.  | 6.2  | 4         |
| 450 | EXAFS/XANES studies of the influence of the drying pretreatments on the reducibility of Pt/Al2O3 and Pt-Re/Al2O3 catalysts. Physica B: Condensed Matter, 1989, 158, 158-159.  | 2.7  | 4         |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 451 | The use of EXAFS spectroscopy to show the structural modifications in metals implanted with N+<br>ions. Surface and Coatings Technology, 1996, 83, 109-114.   | 4.8 | 4         |
| 452 | Characterization of mixed Ti/Al oxide thin films prepared by ion-beam-induced CVD. Applied Surface Science, 2000, 161, 209-218.   | 6.1 | 4         |
| 453 | Gas Temperature Measurement in a Surface-Wave Argon Plasma Column at Low Pressures. Japanese<br>Journal of Applied Physics, 2002, 41, 5787-5791.  | 1.5 | 4         |
| 454 | Growth mechanisms of SiO2 thin films prepared by plasma enhanced chemical vapour deposition.<br>Surface and Coatings Technology, 2005, 200, 881-885.  | 4.8 | 4         |
| 455 | Bacterial adherence on fluorinated carbon based coatings deposited on polyethylene surfaces.<br>Journal of Physics: Conference Series, 2010, 252, 012013.   | 0.4 | 4         |
| 456 | Isotope labelling to study molecular fragmentation during the dielectric barrier discharge wet reforming of methane. Journal of Power Sources, 2016, 325, 501-505.  | 7.8 | 4         |
| 457 | Enhanced green fluorescent protein in optofluidic Fabry-Perot microcavity to detect laser induced temperature changes in a bacterial culture. Applied Physics Letters, 2017, 111, .   | 3.3 | 4         |
| 458 | â€~Reliability of new poly (lactic-co-glycolic acid) membranes treated with oxygen plasma plus silicon<br>dioxide layers for pre-prosthetic guided bone regeneration processes'. Medicina Oral, Patologia Oral<br>Y Cirugia Bucal, 2017, 22, 0-0. | 1.7 | 4         |
| 459 | Colorimetric energy sensitive scintillator detectors based on luminescent multilayer designs.<br>Sensors and Actuators A: Physical, 2018, 272, 217-222.   | 4.1 | 4         |
| 460 | In Vitro Comparative Study of Oxygen Plasma Treated Poly(Lactic–Co–Glycolic) (PLGA) Membranes and<br>Supported Nanostructured Oxides for Guided Bone Regeneration Processes. Materials, 2018, 11, 752.  | 2.9 | 4         |
| 461 | One-reactor vacuum and plasma synthesis of transparent conducting oxide nanotubes and nanotrees:<br>from single wire conductivity to ultra-broadband perfect absorbers in the NIR. Nanoscale, 2021, 13,<br>13882-13895.                           | 5.6 | 4         |
| 462 | Factors triggering germination in plasma-activated cotton seeds: water imbibition vs. reactive species'<br>formation. Journal Physics D: Applied Physics, 2021, 54, 325205.   | 2.8 | 4         |
| 463 | CVD induced by ion beams for the preparation of oxide and nitride thin films. European Physical<br>Journal Special Topics, 1999, 09, Pr8-699-Pr8-708.   | 0.2 | 4         |
| 464 | Multiscale ultrafast laser texturing of marble for reduced surface wetting. Applied Surface Science, 2022, 577, 151850.   | 6.1 | 4         |
| 465 | Comparative analysis of the germination of barley seeds subjected to drying, hydrogen peroxide, or oxidative air plasma treatments. Plasma Processes and Polymers, 2022, 19, .  | 3.0 | 4         |
| 466 | Electron spin resonance of vanadium oxide monolayer catalysts. Colloids and Surfaces, 1984, 11, 31-38.  | 0.9 | 3         |
| 467 | XPS Study of TiO <sub>2</sub> Surfaces Modified by Immersion in Aqueous Solutions. Materials Science Forum, 1988, 25-26, 467-470.   | 0.3 | 3         |
| 468 | Surface microstructure of MgO deposited on SiO2 by analysis of plasmon excitations in photoemission experiments. Surface Science, 2001, 482-485, 1325-1330.   | 1.9 | 3         |

| #   | Article  | IF   | CITATIONS |
|-----|--|------|-----------|
| 469 | Near edge x-ray absorption fine structure spectroscopy study of atomic nitrogen implanted in Al2O3<br>by low energy N2+ bombardment. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and<br>Films, 2001, 19, 1024-1026. | 2.1  | 3         |
| 470 | Analysis of SiOxCyHz polymeric materials by x-ray absorption spectroscopy: Anomalous behavior of the resonant SiKLL Auger spectra. Journal of Applied Physics, 2006, 100, 033706.  | 2.5  | 3         |
| 471 | A Full Vacuum Approach for the Fabrication of Hybrid White-Light-Emitting Thin Films and Wide-Range<br>In Situ Tunable Luminescent Microcavities. Advanced Optical Materials, 2016, 4, 1124-1131.                                    | 7.3  | 3         |
| 472 | Silver and gold nanoparticles in nanometric confined templates: synthesis and alloying within the anisotropic pores of oblique angle deposited films. Nanotechnology, 2017, 28, 485602.  | 2.6  | 3         |
| 473 | Dye Giant Absorption and Light Confinement Effects in Porous Bragg Microcavities. ACS Photonics, 2018, 5, 984-991.   | 6.6  | 3         |
| 474 | 2D compositional self-patterning in magnetron sputtered thin films. Applied Surface Science, 2019, 480, 115-121.   | 6.1  | 3         |
| 475 | Liquid switchable radial polarization converters made of sculptured thin films. Applied Surface Science, 2019, 475, 230-236.   | 6.1  | 3         |
| 476 | Nanostructured nickel based electrocatalysts for hybrid ethanol-water anion exchange membrane electrolysis. Journal of Environmental Chemical Engineering, 2022, 10, 107994.   | 6.7  | 3         |
| 477 | The role of hydrogen in the development of electronic interactions in Ni-titanium oxide systems.<br>Applied Surface Science, 1992, 62, 137-143.  | 6.1  | 2         |
| 478 | The role of Cu in the reactivity of Cu/ZrO2 catalysts for the SCR of NO with CH4. Studies in Surface Science and Catalysis, 2001, , 339-346.   | 1.5  | 2         |
| 479 | Plasma-enhanced chemical vapor deposition of SiO2 from a Si(CH3)3Cl precursor and mixtures Ar/O2 as plasma gas. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2003, 21, 900-905.                           | 2.1  | 2         |
| 480 | Luminescent Thin Films: Transparent Nanometric Organic Luminescent Films as UV-Active Components<br>in Photonic Structures (Adv. Mater. 6/2011). Advanced Materials, 2011, 23, 684-684.  | 21.0 | 2         |
| 481 | Performance of Porous, Nanocolumnar ZnO Electrodes Obtained at Low Temperature by<br>Plasma-Enhanced Chemical Vapor Deposition in Dye-Sensitized Solar Cells. Energy and Environment<br>Focus, 2013, 2, 270-276.                     | 0.3  | 2         |
| 482 | Micronâ€scale wedge thin films prepared by plasma enhanced chemical vapor deposition. Plasma<br>Processes and Polymers, 2017, 14, 1700043.   | 3.0  | 2         |
| 483 | Optofluidic liquid sensing on electromicrofluidic devices. Materials Research Express, 2020, 7, 036407.  | 1.6  | 2         |
| 484 | Mechanically Switchable Wetting Petal Effect in Self-Patterned Nanocolumnar Films on Poly(dimethylsiloxane). Nanomaterials, 2021, 11, 2566.  | 4.1  | 2         |
| 485 | Chemical effects in TiO 2 and titanates due to bombardment with Ar + and O + 2 ions of different energies (3.5-10 keV). Applied Physics A: Materials Science and Processing, 1996, 63, 237-242.                                      | 2.3  | 2         |
| 486 | Effect of CO2 on O2 photo-adsorption on anatase. Reaction Kinetics and Catalysis Letters, 1981, 18, 367-370.   | 0.6  | 1         |

| #   | Article   | IF   | CITATIONS |
|-----|---|------|-----------|
| 487 | XPS study of irradiated polycrystalline TiO2. Surface and Interface Analysis, 1986, 9, 248-248.   | 1.8  | 1         |
| 488 | Function generator to study the dielectric breakdown in thin film structures. , 2001, , .   |      | 1         |
| 489 | Synthesis, characterization, and photoactivity of InTaO4 and In0.9Ni0.1TaO4 thin films prepared by electron evaporation. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2010, 28, 127-134.                       | 2.1  | 1         |
| 490 | (Invited) Plasma Assisted Oblique Angle Deposition of Transparent and Conductive in-Plane<br>Anisotropic ITO Thin Films. ECS Transactions, 2017, 77, 9-15.  | 0.5  | 1         |
| 491 | Laserâ€induced coloration of ceramic tiles covered with magnetron sputtered precursor layers.<br>Journal of the American Ceramic Society, 2018, 102, 1589.  | 3.8  | 1         |
| 492 | Large gap atmospheric pressure barrier discharges using ferroelectric materials. Plasma Sources Science and Technology, 2019, 28, 075002.   | 3.1  | 1         |
| 493 | Form Birefringence in Resonant Transducers for the Selective Monitoring of VOCs under Ambient<br>Conditions. ACS Applied Materials & Interfaces, 2021, 13, 19148-19158.   | 8.0  | 1         |
| 494 | Photonic sensor systems for the identification of hydrocarbons and crude oils in static and flow conditions. Sensors and Actuators B: Chemical, 2021, 344, 130265.  | 7.8  | 1         |
| 495 | Plasma Deposition of N-TiO2 Thin Films. , 0, , 349-356.   |      | 1         |
| 496 | Compositional gradients at the nanoscale in substoichiometric thin films deposited by magnetron<br>sputtering at oblique angles: A case study on SiO <sub><i>x</i></sub> thin films. Plasma Processes and<br>Polymers, 2022, 19, 2100116. | 3.0  | 1         |
| 497 | Reduction of So2 on molybdenum loaded Y zeolite. Studies in Surface Science and Catalysis, 1991, , 339-346.   | 1.5  | 0         |
| 498 | Changes in Structure and Composition of Silicon Oxide Thin Films Induced by Ultraviolet<br>Illumination. Materials Research Society Symposia Proceedings, 1996, 441, 211.   | 0.1  | 0         |
| 499 | SnO2 thin films prepared by ion beam induced CVD. Preparation and characterization. European<br>Physical Journal Special Topics, 1999, 09, Pr8-749-Pr8-755.   | 0.2  | 0         |
| 500 | Dielectric breakdown of SiO/sub 2/ thin films deposited by ion beam induced and plasma enhanced CVD. , 0, , .   |      | 0         |
| 501 | Faceting of (001) CeO2Films: The Road to High Quality TFA-YBa2Cu3O7Multilayers. Journal of Physics:<br>Conference Series, 2006, 43, 138-141.  | 0.4  | 0         |
| 502 | Dichroic Optical Structures: Selective Dichroic Patterning by Nanosecond Laser Treatment of Ag<br>Nanostripes (Adv. Mater. 7/2011). Advanced Materials, 2011, 23, 800-800.  | 21.0 | 0         |
| 503 | Back Cover: Plasma Process. Polym. 3â^•2014. Plasma Processes and Polymers, 2014, 11, 300-300.  | 3.0  | 0         |
|     |   |      |           |

Bragg Reflectors: Flexible Distributed Bragg Reflectors from Nanocolumnar Templates (Advanced) Tj ETQq0 0 0 rgBT. Overlock 10 Tf 50

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 505 | White Light Emission: A Full Vacuum Approach for the Fabrication of Hybrid Whiteâ€Lightâ€Emitting Thin<br>Films and Wideâ€Range In Situ Tunable Luminescent Microcavities (Advanced Optical Materials 7/2016).<br>Advanced Optical Materials, 2016, 4, 1134-1134. | 7.3 | 0         |
| 506 | Anisotropic Resistivity ITO Surfaces produced by Laser-induced Self-organization at the Nanoscale. , 2021, , .  |     | 0         |
| 507 | Characterization of Thin Films by X-Ray Absorption Spectroscopy. , 1997, , 307-316.   |     | Ο         |
| 508 | Vapor and liquid optical monitoring with sculptured Bragg microcavities. , 2017, , .  |     | 0         |
| 509 | Rhodamine 6G and 800 intermolecular heteroaggregates embedded in PMMA for Near-Infrared wavelength shifting. Journal of Materials Chemistry C, 0, , .   | 5.5 | Ο         |
| 510 | Electron spin resonance of vanadium oxide monolayer catalysts. Colloids and Surfaces, 1984, 11, 31-38.  | 0.9 | 0         |