

AndrÃ© Santarosa Ferlauto

List of Publications by Year in descending order

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104
papers

3,022
citations

201674

27
h-index

175258

52
g-index

104
all docs

104
docs citations

104
times ranked

3563
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Chemical vapor deposition graphene transfer onto asymmetric <sc>PMMA</sc> support. Journal of Applied Polymer Science, 2022, 139, 51590. | 2.6 | 2 |
| 2 | Aerosol-Printed MoS ₂ Ink as a High Sensitivity Humidity Sensor. ACS Omega, 2022, 7, 9388-9396. | 3.5 | 17 |
| 3 | Direct Conversion of Methane to C ₂ Hydrocarbons in Solid-State Membrane Reactors at High Temperatures. Chemical Reviews, 2022, 122, 3966-3995. | 47.7 | 23 |
| 4 | Tuning of Shape, Defects, and Disorder in Lanthanum-Doped Ceria Nanoparticles: Implications for High-Temperature Catalysis. ACS Applied Nano Materials, 2022, 5, 8859-8867. | 5.0 | 5 |
| 5 | From thin films to shaped platelets: effects of temperature gradient on SnS synthesis. Thin Solid Films, 2021, 721, 138507. | 1.8 | 4 |
| 6 | Process of production of CVD graphene membrane for desalination and water treatment: a review of experimental research results. Brazilian Journal of Chemical Engineering, 2021, 38, 423-434. | 1.3 | 3 |
| 7 | Oxygen vacancy engineering of TaO _x -based resistive memories by Zr doping for improved variability and synaptic behavior. Nanotechnology, 2021, 32, 405202. | 2.6 | 6 |
| 8 | Characterization and application of niobium-doped titanium dioxide thin films prepared by sol-gel process. Applied Physics A: Materials Science and Processing, 2021, 127, 1. | 2.3 | 3 |
| 9 | Alumina coating for dispersion management in ultra-high Q microresonators. APL Photonics, 2020, 5, 116107. | 5.7 | 10 |
| 10 | Buckypapers of carbon nanotubes and cellulose nanofibrils: Foldable and flexible electrodes for redox supercapacitors. Electrochimica Acta, 2020, 349, 136241. | 5.2 | 25 |
| 11 | Exsolution of Nickel Nanoparticles from Mixed-Valence Metal Oxides: A Quantitative Evaluation by Magnetic Measurements. Particle and Particle Systems Characterization, 2020, 37, 1900472. | 2.3 | 6 |
| 12 | Flash Sintering Samaria-Doped Ceria-Carbon Nanotube Composites. Ceramics, 2019, 2, 64-73. | 2.6 | 17 |
| 13 | Neurotoxicity in zebrafish exposed to carbon nanotubes: Effects on neurotransmitters levels and antioxidant system. Comparative Biochemistry and Physiology Part - C: Toxicology and Pharmacology, 2019, 218, 30-35. | 2.6 | 32 |
| 14 | A systematic study of multifunctional xTiO ₂ /(100-x)SiO ₂ thin films prepared by sol-gel process. Journal of Sol-Gel Science and Technology, 2019, 89, 380-391. | 2.4 | 7 |
| 15 | Probing the Electronic Properties of Monolayer MoS ₂ via Interaction with Molecular Hydrogen. Advanced Electronic Materials, 2019, 5, 1800591. | 5.1 | 22 |
| 16 | High-yield synthesis of bundles of double- and triple-walled carbon nanotubes on aluminum flakes. Carbon, 2018, 133, 53-61. | 10.3 | 14 |
| 17 | Influence of substrate on the structure of predominantly anatase TiO ₂ films grown by reactive sputtering. RSC Advances, 2018, 8, 7062-7071. | 3.6 | 5 |
| 18 | Monolayer and bilayer graphene on polydimethylsiloxane as a composite membrane for gas barrier applications. Journal of Applied Polymer Science, 2017, 134, 45521. | 2.6 | 10 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 19 | Oxide-cladding aluminum nitride photonic crystal slab: Design and investigation of material dispersion and fabrication induced disorder. <i>Journal of Applied Physics</i> , 2016, 119, . | 2.5 | 3 |
| 20 | Influence of annealing temperature and Sn doping on the optical properties of hematite thin films determined by spectroscopic ellipsometry. <i>Journal of Applied Physics</i> , 2016, 119, 245104. | 2.5 | 9 |
| 21 | The role of hydrogen partial pressure on the annealing of copper substrates for graphene CVD synthesis. <i>Materials Research Express</i> , 2016, 3, 045602. | 1.6 | 20 |
| 22 | Room temperature observation of the correlation between atomic and electronic structure of graphene on Cu(110). <i>RSC Advances</i> , 2016, 6, 98001-98009. | 3.6 | 2 |
| 23 | Synthesis of iron pyrite thin films by Russian Doll sulfurization apparatus. <i>Thin Solid Films</i> , 2016, 616, 303-310. | 1.8 | 0 |
| 24 | Nafion [®] titanate nanotubes composites prepared by in situ crystallization and casting for direct ethanol fuel cells. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 1859-1867. | 7.1 | 22 |
| 25 | One-pot in situ photochemical synthesis of graphene oxide/gold nanorod nanocomposites for surface-enhanced Raman spectroscopy. <i>RSC Advances</i> , 2015, 5, 46552-46557. | 3.6 | 18 |
| 26 | Temperature dependence of the electrical properties of hydrogen titanate nanotubes. <i>Journal of Applied Physics</i> , 2014, 116, 184307. | 2.5 | 3 |
| 27 | Real time spectroscopic ellipsometry for analysis and control of thin film polycrystalline semiconductor deposition in photovoltaics. <i>Thin Solid Films</i> , 2014, 571, 442-446. | 1.8 | 23 |
| 28 | Oxidative desulfurization of dibenzothiophene over titanate nanotubes. <i>Fuel</i> , 2014, 132, 53-61. | 6.4 | 78 |
| 29 | Graphene chemical vapor deposition at very low pressure: The impact of substrate surface self-diffusion in domain shape. <i>Applied Physics Letters</i> , 2014, 105, . | 3.3 | 13 |
| 30 | Determination of the band alignment of multi-walled carbon nanotubes decorated with cadmium sulfide. <i>Applied Surface Science</i> , 2014, 321, 283-288. | 6.1 | 4 |
| 31 | Generation of reactive oxygen species in titanates nanotubes induced by hydrogen peroxide and their application in catalytic degradation of methylene blue dye. <i>Journal of Molecular Catalysis A</i> , 2014, 394, 316-323. | 4.8 | 26 |
| 32 | Applications of real-time and mapping spectroscopic ellipsometry for process development and optimization in hydrogenated silicon thin-film photovoltaics technology. <i>Solar Energy Materials and Solar Cells</i> , 2014, 129, 32-56. | 6.2 | 19 |
| 33 | Asymmetric Effect of Oxygen Adsorption on Electron and Hole Mobilities in Bilayer Graphene: Long- and Short-Range Scattering Mechanisms. <i>ACS Nano</i> , 2013, 7, 6597-6604. | 14.6 | 34 |
| 34 | Gene expression and biochemical responses in brain of zebrafish <i>Danio rerio</i> exposed to organic nanomaterials: Carbon nanotubes (SWCNT) and fullereneol (C ₆₀ (OH) ₁₈ •22(OH ₄)). <i>Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology</i> , 2013, 165, 460-467. | 1.8 | 30 |
| 35 | <i>In Situ</i> Fabrication of Nafion [®] Titanate Hybrid Electrolytes for High-Temperature Direct Ethanol Fuel Cell. <i>Journal of Physical Chemistry C</i> , 2013, 117, 16863-16870. | 3.1 | 23 |
| 36 | Optimization of a-Si:H p-i-n solar cells through development of n-layer growth evolution diagram and large area mapping. , 2013, , . | | 3 |

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|----|---|------|-----------|
| 37 | Surface properties of oxidized and aminated multi-walled carbon nanotubes. Journal of the Brazilian Chemical Society, 2012, 23, 1078-1086. | 0.6 | 97 |
| 38 | Self-assembled films of multi-wall carbon nanotubes used in gas sensors to increase the sensitivity limit for oxygen detection. Carbon, 2012, 50, 1953-1958. | 10.3 | 51 |
| 39 | Synthesis and characterization of SnO ₂ thin films prepared by dip-coating method. Physics Procedia, 2012, 28, 22-27. | 1.2 | 26 |
| 40 | Enhanced electrochemical activity using vertically aligned carbon nanotube electrodes grown on carbon fiber. Materials Research, 2011, 14, 403-407. | 1.3 | 7 |
| 41 | Thermal behavior of carbon nanotubes decorated with gold nanoparticles. Journal of Thermal Analysis and Calorimetry, 2011, 105, 953-959. | 3.6 | 18 |
| 42 | Nafion-based composite electrolytes for proton exchange membrane fuel cells operating above 120 °C with titania nanoparticles and nanotubes as fillers. Journal of Power Sources, 2011, 196, 1061-1068. | 7.8 | 57 |
| 43 | New material for low-dose brachytherapy seeds: Xe-doped amorphous carbon films with post-growth neutron activated ¹²⁵ I. Applied Radiation and Isotopes, 2011, 69, 118-121. | 1.5 | 9 |
| 44 | Hydrogen sensing in titanate nanotubes associated with modulation in protonic conduction. Nanotechnology, 2011, 22, 235501. | 2.6 | 8 |
| 45 | Carbothermal reduction of the YSZ-NiO solid oxide fuel cell anode precursor by carbon-based materials. Journal of Thermal Analysis and Calorimetry, 2009, 97, 157-161. | 3.6 | 10 |
| 46 | Thermal properties of Nafion-TiO ₂ composite electrolytes for PEM fuel cell. Journal of Thermal Analysis and Calorimetry, 2009, 97, 591-594. | 3.6 | 31 |
| 47 | Nanostructured 3-D collagen/nanotube biocomposites for future bone regeneration scaffolds. Nano Research, 2009, 2, 462-473. | 10.4 | 53 |
| 48 | Fabrication of Gas Nanosensors and Microsensors via Local Anodic Oxidation. Langmuir, 2009, 25, 602-605. | 3.5 | 12 |
| 49 | On the growth and electrical characterization of CuO nanowires by thermal oxidation. Journal of Applied Physics, 2009, 106, . | 2.5 | 139 |
| 50 | Direct Production of Carbon Nanotubes/Metal Nanoparticles Hybrids from a Redox Reaction between Metal Ions and Reduced Carbon Nanotubes. ACS Applied Materials & Interfaces, 2009, 1, 2104-2106. | 8.0 | 29 |
| 51 | Vapor-Solid Growth Mechanism Driven by Epitaxial Match between Solid AuZn Alloy Catalyst Particles and ZnO Nanowires at Low Temperatures. Advanced Materials, 2008, 20, 1499-1504. | 21.0 | 60 |
| 52 | Deformation Induced Semiconductor-Metal Transition in Single Wall Carbon Nanotubes Probed by Electric Force Microscopy. Physical Review Letters, 2008, 100, 256804. | 7.8 | 62 |
| 53 | On the elastic constants of amorphous carbon nitride. Diamond and Related Materials, 2008, 17, 1850-1852. | 3.9 | 2 |
| 54 | Determination of the epitaxial growth of zinc oxide nanowires on sapphire by grazing incidence synchrotron x-ray diffraction. Applied Physics Letters, 2007, 90, 181929. | 3.3 | 14 |

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|----|--|-----|-----------|
| 55 | Purity Evaluation of Carbon Nanotube Materials by Thermogravimetric, TEM, and SEM Methods. <i>Journal of Nanoscience and Nanotechnology</i> , 2007, 7, 3477-3486. | 0.9 | 72 |
| 56 | Mixed ionic-electronic conductivity in yttria-stabilized zirconia/carbon nanotube composites. <i>Applied Physics Letters</i> , 2007, 91, 243107. | 3.3 | 11 |
| 57 | Nafion®Titanate Nanotube Composite Membranes for PEMFC Operating at High Temperature. <i>Journal of the Electrochemical Society</i> , 2007, 154, B1358. | 2.9 | 43 |
| 58 | Chemical vapor deposition of multi-walled carbon nanotubes from nickel/yttria-stabilized zirconia catalysts. <i>Applied Physics A: Materials Science and Processing</i> , 2006, 84, 271-276. | 2.3 | 28 |
| 59 | Synthesis of Silica Nanowires by Active Oxidation of Silicon Substrates. <i>Journal of Nanoscience and Nanotechnology</i> , 2006, 6, 791-795. | 0.9 | 7 |
| 60 | Polymer Blend for Electrolyte and Electrode Coatings. <i>Macromolecular Symposia</i> , 2005, 229, 160-167. | 0.7 | 3 |
| 61 | Morphological and magnetic properties of carbon®nickel nanocomposite thin films. <i>Journal of Applied Physics</i> , 2005, 97, 044313. | 2.5 | 43 |
| 62 | Co-Sputtered Carbon-Nickel Nanocomposite Thin Films. <i>Journal of Metastable and Nanocrystalline Materials</i> , 2004, 20-21, 700-704. | 0.1 | 4 |
| 63 | Comparison of Phase Diagrams for vhf and rf Plasma-Enhanced Chemical Vapor Deposition of Si:H Films. <i>Materials Research Society Symposia Proceedings</i> , 2004, 808, 299. | 0.1 | 3 |
| 64 | Application of spectral and temporal weighted error functions for data analysis in real-time spectroscopic ellipsometry. <i>Thin Solid Films</i> , 2004, 455-456, 106-111. | 1.8 | 8 |
| 65 | Calibration and data reduction for a UV-extended rotating-compensator multichannel ellipsometer. <i>Thin Solid Films</i> , 2004, 455-456, 132-137. | 1.8 | 22 |
| 66 | Evaluation of compositional depth profiles in mixed-phase (amorphous+crystalline) silicon films from real time spectroscopic ellipsometry. <i>Thin Solid Films</i> , 2004, 455-456, 665-669. | 1.8 | 28 |
| 67 | Analytical model for the optical functions of amorphous semiconductors and its applications for thin film solar cells. <i>Thin Solid Films</i> , 2004, 455-456, 388-392. | 1.8 | 36 |
| 68 | Advances in multichannel ellipsometric techniques for in-situ and real-time characterization of thin films. <i>Thin Solid Films</i> , 2004, 469-470, 38-46. | 1.8 | 6 |
| 69 | Kinetics of silicon film growth and the deposition phase diagram. <i>Journal of Non-Crystalline Solids</i> , 2004, 338-340, 13-18. | 3.1 | 18 |
| 70 | Structural properties of amorphous carbon nitride films prepared by ion beam assisted deposition. <i>Journal of Non-Crystalline Solids</i> , 2004, 338-340, 486-489. | 3.1 | 2 |
| 71 | Evolution of microstructure and phase in amorphous, protocrystalline, and microcrystalline silicon studied by real time spectroscopic ellipsometry. <i>Solar Energy Materials and Solar Cells</i> , 2003, 78, 143-180. | 6.2 | 305 |
| 72 | Identification of the mechanism-limiting nitrogen diffusion in metallic alloys by in situ photoemission electron spectroscopy. <i>Journal of Applied Physics</i> , 2003, 94, 5435. | 2.5 | 20 |

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|----|--|------|-----------|
| 73 | Evolution of Crystallinity in Mixed-Phase (a+1/4c)-Si:H as Determined by Real Time Spectroscopic Ellipsometry. Materials Research Society Symposia Proceedings, 2003, 762, 5101. | 0.1 | 4 |
| 74 | Microstructure and Optical Functions of Transparent Conductors and their Impact on Collection in Amorphous Silicon Solar Cells. Materials Research Society Symposia Proceedings, 2003, 762, 1461. | 0.1 | 2 |
| 75 | Protocrystalline Si:H p-type Layers for Maximization of the Open Circuit Voltage in a-Si:H n-i-p Solar Cells. Materials Research Society Symposia Proceedings, 2002, 715, 611. | 0.1 | 12 |
| 76 | Maximization of the open circuit voltage for hydrogenated amorphous silicon n-i-p solar cells by incorporation of protocrystalline silicon p-type layers. Applied Physics Letters, 2002, 81, 1258-1260. | 3.3 | 43 |
| 77 | Analytical model for the optical functions of amorphous semiconductors from the near-infrared to ultraviolet: Applications in thin film photovoltaics. Journal of Applied Physics, 2002, 92, 2424-2436. | 2.5 | 485 |
| 78 | Extended phase diagrams for guiding plasma-enhanced chemical vapor deposition of silicon thin films for photovoltaics applications. Applied Physics Letters, 2002, 80, 2666-2668. | 3.3 | 47 |
| 79 | Phase diagrams for Si:H film growth by plasma-enhanced chemical vapor deposition. Journal of Non-Crystalline Solids, 2002, 299-302, 68-73. | 3.1 | 6 |
| 80 | Mobility gap profiles in Si:H intrinsic layers prepared by H ₂ -dilution of SiH ₄ : effects on the performance of p-i-n solar cells. Journal of Non-Crystalline Solids, 2002, 299-302, 1136-1141. | 3.1 | 6 |
| 81 | Advances in plasma-enhanced chemical vapor deposition of silicon films at low temperatures. Current Opinion in Solid State and Materials Science, 2002, 6, 425-437. | 11.5 | 61 |
| 82 | Light Induced Defect Creation Kinetics in Thin Film Protocrystalline Silicon Materials and Their Solar Cells. Materials Research Society Symposia Proceedings, 2002, 715, 1341. | 0.1 | 52 |
| 83 | Optical Simulations of the Effects of Transparent Conducting Oxide Interface Layers on Amorphous Silicon Solar Cell Performance. Materials Research Society Symposia Proceedings, 2001, 664, 2461. | 0.1 | 6 |
| 84 | Phase Diagrams for the Optimization of rf Plasma Enhanced Chemical Vapor Deposition of a-Si:H: Variations in Plasma Power and Substrate Temperature. Materials Research Society Symposia Proceedings, 2001, 664, 541. | 0.1 | 11 |
| 85 | Evolution of the Mobility Gap with Thickness in Hydrogen-Diluted Intrinsic Si:H Materials in the Phase Transition Region and Its Effect on p-i-n Solar Cell Characteristics. Materials Research Society Symposia Proceedings, 2001, 664, 1641. | 0.1 | 11 |
| 86 | Real Time Optics of p-Type Microcrystalline Silicon Deposition On Specular and Textured ZnO-Coated Glass. Materials Research Society Symposia Proceedings, 2000, 609, 1961. | 0.1 | 7 |
| 87 | Study of the Amorphous-to-Microcrystalline Transition during Silicon Film Growth at Increased Rates: Extensions of the Evolutionary Phase Diagram. Materials Research Society Symposia Proceedings, 2000, 609, 221. | 0.1 | 15 |
| 88 | Real time analysis of amorphous and microcrystalline silicon film growth by multichannel ellipsometry. Thin Solid Films, 2000, 364, 129-137. | 1.8 | 42 |
| 89 | Recent progress in thin film growth analysis by multichannel spectroscopic ellipsometry. Applied Surface Science, 2000, 154-155, 217-228. | 6.1 | 42 |
| 90 | Dependence of open-circuit voltage in hydrogenated protocrystalline silicon solar cells on carrier recombination in p/i interface and bulk regions. Applied Physics Letters, 2000, 77, 3093-3095. | 3.3 | 50 |

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| 91 | Evolutionary phase diagrams for the deposition of silicon films from hydrogen-diluted silane. Journal of Non-Crystalline Solids, 2000, 266-269, 43-47. | 3.1 | 20 |
| 92 | Modeling the dielectric functions of silicon-based films in the amorphous, nanocrystalline and microcrystalline regimes. Journal of Non-Crystalline Solids, 2000, 266-269, 269-273. | 3.1 | 21 |
| 93 | Optics of textured amorphous silicon surfaces. Journal of Non-Crystalline Solids, 2000, 266-269, 279-283. | 3.1 | 15 |
| 94 | Evolutionary phase diagrams for plasma-enhanced chemical vapor deposition of silicon thin films from hydrogen-diluted silane. Applied Physics Letters, 1999, 75, 2286-2288. | 3.3 | 150 |
| 95 | Real Time Optics of Amorphous Silicon Solar Cellfabrication on Textured Tin-Oxide-Coated Glass. Materials Research Society Symposia Proceedings, 1999, 557, 719. | 0.1 | 6 |
| 96 | Real Time Characterization of Non-Ideal Surfaces and Thin Film Growth by Advanced Ellipsometric Spectroscopies. Materials Research Society Symposia Proceedings, 1999, 569, 43. | 0.1 | 2 |
| 97 | Microcrystalline Silicon Tunnel Junctions for Amorphous Silicon-Based Multijunction Solar Cells. Materials Research Society Symposia Proceedings, 1999, 557, 579. | 0.1 | 3 |
| 98 | A NEW METHOD FOR STUDYING SEMICONDUCTING SURFACES IN AIR BY SCANNING TUNNELING MICROSCOPY. Modern Physics Letters B, 1996, 10, 1189-1195. | 1.9 | 2 |
| 99 | Contributions of bulk, interface and built-in potential to the open circuit voltage of a-Si:H solar cells. , 0, , . | | 2 |
| 100 | The role of phase transitions between amorphous and microcrystalline silicon on the performance of protocrystalline Si:H solar cells. , 0, , . | | 3 |
| 101 | Real time optics of p-type silicon deposition on specular and textured ZnO surfaces. , 0, , . | | 2 |
| 102 | Effects of H/sub 2/-dilution and plasma power in amorphous silicon deposition: comparison of microstructural evolution and solar cell performance. , 0, , . | | 0 |
| 103 | Microstructurally engineered p-layers for obtaining high open-circuit voltages in a-Si:H n-i-p solar cells. , 0, , . | | 5 |
| 104 | Thickness evolution of the microstructural and optical properties of Si:H films in the amorphous-to-microcrystalline phase transition region. , 0, , . | | 4 |