# Antonio A Portugal

List of Publications by Year
in descending order



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|---|---|---|---|
| 78 papers | 2,897 citations | 279798 23 h-index | 168389 53 g-index |
| 78 all docs | 78 docs citations | 78 times ranked | 3207 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Biorefining of Pinus pinaster Stump Wood for Ethanol Production and Lignin Recovery. Chemical Engineering and Technology, 2021, 44, 1043-1050. | 1.5 | 5 |
| 2 | Clean syngas production by gasification of lignocellulosic char: State of the art and future prospects. Journal of Industrial and Engineering Chemistry, 2021, 101, 1-20. | 5.8 | 10 |
| 3 | Reinforcement Strategies of Silica Aerogels for Thermal Insulation Applications. Proceedings (mdpi), 2020, 57, 2. | 0.2 | 0 |
| 4 | Production of Aromatic Compounds by Catalytic Depolymerization of Technical and Downstream Biorefinery Lignins. Biomolecules, 2020, 10, 1338. | 4.0 | 12 |
| 5 | New insights in the fractionation of Pinus pinaster wood: sequential autohydrolysis, soda ethanol organosolv and acidic precipitation. Industrial Crops and Products, 2020, 152, 112499. | 5.2 | 18 |
| 6 | Optimization of Polyamide Pulp-Reinforced Silica Aerogel Composites for Thermal Protection Systems. Polymers, 2020, 12, 1278. | 4.5 | 18 |
| 7 | COMPARAÃ‡ÃƒO DE PROCESSOS E TIPOS DE 2Âª GERAÃ‡ÃƒO DE BIOCOMBUSTÃVEIS: UMA AVALIAÃ‡ÃƒO DO POTENCIAL BRASILEIRO E PORTUGUÃŠS. Revista GestÃ£o & Sustentabilidade Ambiental, 2020, 9, 255. | 0.1 | 0 |
| 8 | Syngas production via catalytic oxidative steam reforming of glycerol using a Co/Al coprecipitated catalyst and different bed fillers. Fuel Processing Technology, 2019, 189, 120-133. | 7.2 | 24 |
| 9 | Influence of Structure-Directing Additives on the Properties of Poly(methylsilsesquioxane) Aerogel-Like Materials. Gels, 2019, 5, 6. | 4.5 | 11 |
| 10 | Gasification of Charcoal in Air, Oxygen, and Steam Mixtures over a Î³-Al<sub>2</sub>O<sub>3</sub> Fluidized Bed. Energy & Fuels, 2018, 32, 406-415. | 5.1 | 6 |
| 11 | Liquid-Phase Hydrodeoxygenation of Guaiacol over Mo2C Supported on Commercial CNF. Effects of Operating Conditions on Conversion and Product Selectivity. Catalysts, 2018, 8, 127. | 3.5 | 28 |
| 12 | Towards improved adsorption of phenolic compounds by surface chemistry tailoring of silica aerogels. Journal of Sol-Gel Science and Technology, 2017, 84, 409-421. | 2.4 | 9 |
| 13 | Exploring the Versatile Surface Chemistry of Silica Aerogels for Multipurpose Application. MRS Advances, 2017, 2, 3511-3519. | 0.9 | 17 |
| 14 | Spectroscopic characterization of silica aerogels prepared using several precursors â€“ effect on the formation of molecular clusters. New Journal of Chemistry, 2017, 41, 6742-6759. | 2.8 | 25 |
| 15 | Adsorption of phenol on silica aerogels using a stirred tank and a fixed bed column. CiÃªncia & Tecnologia Dos Materiais, 2017, 29, e229-e233. | 0.5 | 6 |
| 16 | Methylsilsesquioxane-Based Aerogel Systemsâ€”Insights into the Role of the Formation of Molecular Clusters. Journal of Physical Chemistry A, 2016, 120, 4079-4088. | 2.5 | 21 |
| 17 | A new trend for development of mechanically robust hybrid silica aerogels. Materials Letters, 2016, 179, 206-209. | 2.6 | 19 |
| 18 | High Antimicrobial Activity and Low Human Cell Cytotoxicity of Coreâ€“Shell Magnetic Nanoparticles Functionalized with an Antimicrobial Peptide. ACS Applied Materials & Interfaces, 2016, 8, 11366-11378. | 8.0 | 56 |

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|---|---|---|---|
| 19 | Novel flexible, hybrid aerogels with vinyl- and methyltrimethoxysilane in the underlying silica structure. Journal of Materials Science, 2016, 51, 6781-6792. | 3.7 | 48 |
| 20 | Effect of supplementary cementitious materials on autogenous shrinkage of ultra-high performance concrete. Construction and Building Materials, 2016, 127, 43-48. | 7.2 | 187 |
| 21 | Synthesis and biomedical applications of aerogels: Possibilities and challenges. Advances in Colloid and Interface Science, 2016, 236, 1-27. | 14.7 | 270 |
| 22 | Design of multifunctional magnetic hybrid silica aerogels with improved properties. Microporous and Mesoporous Materials, 2016, 232, 227-237. | 4.4 | 16 |
| 23 | Liquid glycerol: Experimental densities at pressures of up to 25 MPa, and some derived thermodynamic properties. Journal of Chemical Thermodynamics, 2016, 101, 64-77. | 2.0 | 15 |
| 24 | Nanocrystalline ZnO Thin Films â€“ Influence of Sol-gel Conditions on the Underlying Chemistry and Film Microstructure and Transparency. Materials Today: Proceedings, 2015, 2, 49-56. | 1.8 | 6 |
| 25 | Controlled phase formation of nanocrystalline iron oxides/hydroxides in solution â€“ An insight on the phase transformation mechanisms. Materials Chemistry and Physics, 2015, 163, 88-98. | 4.0 | 22 |
| 26 | Effect of additives on the properties of silica based aerogels synthesized from methyltrimethoxysilane (MTMS). Journal of Supercritical Fluids, 2015, 106, 85-92. | 3.2 | 39 |
| 27 | Silica-based aerogels as adsorbents for phenol-derivative compounds. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 480, 260-269. | 4.7 | 60 |
| 28 | Development of Mechanically Strong Ambient Pressure Dried Silica Aerogels with Optimized Properties. Journal of Physical Chemistry C, 2015, 119, 7689-7703. | 3.1 | 79 |
| 29 | Synthesis of mechanically reinforced silica aerogels via surface-initiated reversible addition-fragmentation chain transfer (RAFT) polymerization. Journal of Materials Chemistry A, 2015, 3, 1594-1600. | 10.3 | 85 |
| 30 | Correlation and prediction of biodiesel density for extended ranges of temperature and pressure. Fuel, 2015, 141, 23-38. | 6.4 | 35 |
| 31 | Development of an Innovative 3D Simulator for Structured Polymeric Fibrous Materials and Liquid Droplets. Advanced Structured Materials, 2015, , 301-321. | 0.5 | 2 |
| 32 | The effect of nanosilica addition on flowability, strength and transport properties of ultra high performance concrete. Materials & Design, 2014, 59, 1-9. | 5.1 | 318 |
| 33 | An overview on silica aerogels synthesis and different mechanical reinforcing strategies. Journal of Non-Crystalline Solids, 2014, 385, 55-74. | 3.1 | 555 |
| 34 | Synthesis of lightweight polymer-reinforced silica aerogels with improved mechanical and thermal insulation properties for space applications. Microporous and Mesoporous Materials, 2014, 197, 116-129. | 4.4 | 115 |
| 35 | Poly(ethylene glycol)-block-poly(4-vinyl pyridine) as a versatile block copolymer to prepare nanoaggregates of superparamagnetic iron oxide nanoparticles. Journal of Materials Chemistry B, 2014, 2, 1565. | 5.8 | 22 |
| 36 | Speed of sound in pure fatty acid methyl esters and biodiesel fuels. Fuel, 2014, 116, 242-254. | 6.4 | 39 |

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|---|---|---|---|
| 37 | Silica based aerogelâ€like materials obtained by quick microwave drying. Materialwissenschaft Und Werkstofftechnik, 2013, 44, 380-385. | 0.9 | 18 |
| 38 | Effect of the Drying Conditions on the Microstructure of Silica Based Xerogels and Aerogels. Journal of Nanoscience and Nanotechnology, 2012, 12, 6828-6834. | 0.9 | 56 |
| 39 | Comparison of Two Robust Alternatives to the Boxâ€“Draper Determinant Criterion in Multiresponse Kinetic Parameter Estimation. Industrial & Engineering Chemistry Research, 2012, 51, 1118-1130. | 3.7 | 0 |
| 40 | Solâ€gel synthesis and washing of amorphous gâ€FeO(OH) xerogels. Materialwissenschaft Und Werkstofftechnik, 2012, 43, 427-434. | 0.9 | 4 |
| 41 | Biodiesel obtained from supercritical carbon dioxide oil of Cynara cardunculus L.. Journal of Supercritical Fluids, 2012, 68, 52-63. | 3.2 | 25 |
| 42 | Measurements of pVT, viscosity, and surface tension of trihexyltetradecylphosphonium tris(pentafluoroethyl)trifluorophosphate ionic liquid and modelling with equations of state. Journal of Chemical Thermodynamics, 2012, 47, 183-196. | 2.0 | 43 |
| 43 | MgAl2O4 spinel synthesis by combustion and detonation reactions: A thermochemical evaluation. Journal of the European Ceramic Society, 2012, 32, 3161-3170. | 5.7 | 24 |
| 44 | Study of the suitability of silica based xerogels synthesized using ethyltrimethoxysilane and/or methyltrimethoxysilane precursors for aerospace applications. Journal of Sol-Gel Science and Technology, 2012, 61, 151-160. | 2.4 | 47 |
| 45 | 1D AND 2D MODELING AND SIMULATION OF RADIAL COMBUSTION PROPAGATION ON Fe2O3/Al THERMITE SYSTEMS. Computational Thermal Sciences, 2012, 4, 137-149. | 0.9 | 4 |
| 46 | Characterization of iron(III) oxide/hydroxide nanostructured materials produced by solâ€“gel technology based on the Fe(NO3)3Â·9H2Oâ€“C2H5OHâ€“CH3CHCH2O system. Materials Chemistry and Physics, 2011, 130, 548-560. | 4.0 | 15 |
| 47 | Three dimensional modelling of fibrous materials and experimental validation. Materialwissenschaft Und Werkstofftechnik, 2011, 42, 370-374. | 0.9 | 22 |
| 48 | Finite-sample comparison of robust estimators for nonlinear regression using Monte Carlo simulation: Part I. Univariate response models. Computers and Chemical Engineering, 2011, 35, 530-544. | 3.8 | 3 |
| 49 | Solâ€“gel synthesis of iron(III) oxyhydroxide nanostructured monoliths using Fe(NO3)3Â·9H2O/CH3CH2OH/NH4OH ternary system. Journal of Physics and Chemistry of Solids, 2011, 72, 678-684. | 4.0 | 14 |
| 50 | Coding a Simulation Model of the 3D Structure of Paper. Lecture Notes in Computer Science, 2010, , 299-310. | 1.3 | 7 |
| 51 | Adaptive Collocation Methods for the Solution of Partial Differential Equations. , 2010, , 499-504. | | 0 |
| 52 | Simulation of Membrane Separations Using a Modified Maxwell-Stefan Model. Chemical Product and Process Modeling, 2009, 4, . | 0.9 | 1 |
| 53 | RADIAL COMBUSTION DYNAMICS IN Fe[sub 2]O[sub 3]âˆ•Al THERMITE: VARIABILITY OF THE FLAME PROPAGATION PROFILES. , 2009, , . | | 1 |
| 54 | Low-Temperature FTIR Spectroscopic and Theoretical Study on an Energetic Nitroimine:â€‰Dinitroammeline (DNAM). Journal of Physical Chemistry A, 2008, 112, 3432-3443. | 2.5 | 9 |

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|---|---|---|---|
| 55 | Simulation of Fe2O3/Al combustion: Sensitivity analysis. Chemical Engineering Science, 2007, 62, 5078-5083. | 3.8 | 9 |
| 56 | Fe2O3/aluminum thermite reaction intermediate and final products characterization. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 465, 199-210. | 5.6 | 110 |
| 57 | Crystal and Molecular Structure of 4,6-Bis(nitroimino)-1,3,5-triazinan-2-one:Â Theoretical and X-ray Studies. Journal of Physical Chemistry A, 2007, 111, 150-158. | 2.5 | 15 |
| 58 | Modelling and simulation of Fe2O3/Aluminum thermite combustion: Experimental validation. Computer Aided Chemical Engineering, 2006, , 365-370. | 0.5 | 15 |
| 59 | Radial Combustion Propagation in Iron(III) Oxide/Aluminum Thermite Mixtures. Propellants, Explosives, Pyrotechnics, 2006, 31, 42-49. | 1.6 | 31 |
| 60 | Cyanuric acidâ€“epichlorohydrin prepolymers. Journal of Applied Polymer Science, 2006, 99, 3684-3691. | 2.6 | 0 |
| 61 | A performance comparison of some high breakdown robust estimators for nonlinear parameter estimation. Computer Aided Chemical Engineering, 2006, , 279-284. | 0.5 | 0 |
| 62 | Thermal Behavior of Fe2O3/Al Thermite Mixtures in Air and Vacuum Environments. AIP Conference Proceedings, 2006, , . | 0.4 | 0 |
| 63 | Melamine/epichlorohydrin prepolymers: syntheses and characterization. Polymer, 2005, 46, 1766-1774. | 3.8 | 18 |
| 64 | Phase investigation of as-prepared iron oxide/hydroxide produced by solâ€“gel synthesis. Materials Letters, 2005, 59, 859-863. | 2.6 | 50 |
| 65 | Cyanuric Acid/Epichlorohydrin Energetic Prepolymers. Propellants, Explosives, Pyrotechnics, 2005, 30, 338-343. | 1.6 | 2 |
| 66 | Coarse Explosive Particles of PBX as a Dominant Factor of Detonation Instability. AIP Conference Proceedings, 2004, , . | 0.4 | 1 |
| 67 | Iron Oxide/Aluminum Fast Thermite Reaction. AIP Conference Proceedings, 2004, , . | 0.4 | 0 |
| 68 | Detonation Meso-Scale Tests for Energetic Materials. AIP Conference Proceedings, 2002, , . | 0.4 | 4 |
| 69 | New Propellant Component, Part I. Study of 4,6-Dinitroamino-1,3,5-Triazine-2(1 H)-One (DNAM). Propellants, Explosives, Pyrotechnics, 2001, 26, 273. | 1.6 | 15 |
| 70 | New Propellant Component, Part II. Study of a PSAN/DNAM/HTPB Based Formulation. Propellants, Explosives, Pyrotechnics, 2001, 26, 278. | 1.6 | 19 |
| 71 | Title is missing!. Cellulose, 2001, 8, 217-224. | 4.9 | 42 |
| 72 | Thermal decomposition of solid mixtures of 2-oxy-4,6-dinitramine-s-triazine (DNAM) and phase stabilized ammonium nitrate (PSAN). Thermochimica Acta, 2000, 364, 71-85. | 2.7 | 15 |

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|---|---|---|---|
| 73 | Reaction path of energetic materials using THOR code. , 1998, , . | | 0 |
| 74 | Modeling Dissolution of Sparingly Soluble Multisized Powders. Journal of Pharmaceutical Sciences, 1997, 86, 726-732. | 3.3 | 38 |
| 75 | Moving finite elements method applied to the solution of front reaction models: causticizing reaction. Computers and Chemical Engineering, 1995, 19, 421-426. | 3.8 | 5 |
| 76 | Determination of the steady state of isothermal two-phase continuous stirred tank reactors. Chemical Engineering Science, 1994, 49, 3447-3456. | 3.8 | 2 |
| 77 | Synergetic phenomena in detonation of solid heterogeneous explosives. Control of oscillations and dissipative structures in detonation flow. , 0, , . | | 0 |
| 78 | Tailored Silica Based Xerogels and Aerogels for Insulation in Space Environments. Advances in Science and Technology, 0, , . | 0.2 | 15 |