Antonio A Portugal

List of Publications by Year
in descending order

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	An overview on silica aerogels synthesis and different mechanical reinforcing strategies. Journal of Non-Crystalline Solids, 2014, 385, 55-74.	3.1	555
2	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
3	Synthesis and biomedical applications of aerogels: Possibilities and challenges. Advances in Colloid and Interface Science, 2016, 236, 1-27.	14.7	270
4	Effect of supplementary cementitious materials on autogenous shrinkage of ultra-high performance concrete. Construction and Building Materials, 2016, 127, 43-48.	7.2	187
5	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
6	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
7	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
8	Development of Mechanically Strong Ambient Pressure Dried Silica Aerogels with Optimized Properties. Journal of Physical Chemistry C, 2015, 119, 7689-7703.	3.1	79
9	Silica-based aerogels as adsorbents for phenol-derivative compounds. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 480, 260-269.	4.7	60
10	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
11	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
12	Phase investigation of as-prepared iron oxide/hydroxide produced by solâ€“gel synthesis. Materials Letters, 2005, 59, 859-863.	2.6	50
13	Novel flexible, hybrid aerogels with vinyl- and methyltrimethoxysilane in the underlying silica structure. Journal of Materials Science, 2016, 51, 6781-6792.	3.7	48
14	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
15	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
16	Title is missing!. Cellulose, 2001, 8, 217-224.	4.9	42
17	Speed of sound in pure fatty acid methyl esters and biodiesel fuels. Fuel, 2014, 116, 242-254.	6.4	39
18	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

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19	Modeling Dissolution of Sparingly Soluble Multisized Powders. Journal of Pharmaceutical Sciences, 1997, 86, 726-732.	3.3	38
20	Correlation and prediction of biodiesel density for extended ranges of temperature and pressure. Fuel, 2015, 141, 23-38.	6.4	35
21	Radial Combustion Propagation in Iron(III) Oxide/Aluminum Thermite Mixtures. Propellants, Explosives, Pyrotechnics, 2006, 31, 42-49.	1.6	31
22	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
23	Biodiesel obtained from supercritical carbon dioxide oil of Cynara cardunculus L.. Journal of Supercritical Fluids, 2012, 68, 52-63.	3.2	25
24	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
25	MgAl2O4 spinel synthesis by combustion and detonation reactions: A thermochemical evaluation. Journal of the European Ceramic Society, 2012, 32, 3161-3170.	5.7	24
26	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
27	Three dimensional modelling of fibrous materials and experimental validation. Materialwissenschaft Und Werkstofftechnik, 2011, 42, 370-374.	0.9	22
28	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
29	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
30	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
31	New Propellant Component, Part II. Study of a PSAN/DNAM/HTPB Based Formulation. Propellants, Explosives, Pyrotechnics, 2001, 26, 278.	1.6	19
32	A new trend for development of mechanically robust hybrid silica aerogels. Materials Letters, 2016, 179, 206-209.	2.6	19
33	Melamine/epichlorohydrin prepolymers: syntheses and characterization. Polymer, 2005, 46, 1766-1774.	3.8	18
34	Silica based aerogelâ€like materials obtained by quick microwave drying. Materialwissenschaft Und Werkstofftechnik, 2013, 44, 380-385.	0.9	18
35	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
36	Optimization of Polyamide Pulp-Reinforced Silica Aerogel Composites for Thermal Protection Systems. Polymers, 2020, 12, 1278.	4.5	18

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37	Exploring the Versatile Surface Chemistry of Silica Aerogels for Multipurpose Application. MRS Advances, 2017, 2, 3511-3519.	0.9	17
38	Design of multifunctional magnetic hybrid silica aerogels with improved properties. Microporous and Mesoporous Materials, 2016, 232, 227-237.	4.4	16
39	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
40	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
41	Modelling and simulation of Fe2O3/Aluminum thermite combustion: Experimental validation. Computer Aided Chemical Engineering, 2006, , 365-370.	0.5	15
42	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
43	Tailored Silica Based Xerogels and Aerogels for Insulation in Space Environments. Advances in Science and Technology, 0, , .	0.2	15
44	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
45	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
46	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
47	Production of Aromatic Compounds by Catalytic Depolymerization of Technical and Downstream Biorefinery Lignins. Biomolecules, 2020, 10, 1338.	4.0	12
48	Influence of Structure-Directing Additives on the Properties of Poly(methylsilsesquioxane) Aerogel-Like Materials. Gels, 2019, 5, 6.	4.5	11
49	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
50	Simulation of Fe2O3/Al combustion: Sensitivity analysis. Chemical Engineering Science, 2007, 62, 5078-5083.	3.8	9
51	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
52	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
53	Coding a Simulation Model of the 3D Structure of Paper. Lecture Notes in Computer Science, 2010, , 299-310.	1.3	7
54	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

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55	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
56	Gasification of Charcoal in Air, Oxygen, and Steam Mixtures over a Î³-Al₂O₃ Fluidized Bed. Energy & Fuels, 2018, 32, 406-415.	5.1	6
57	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
58	Biorefining of Pinus pinaster Stump Wood for Ethanol Production and Lignin Recovery. Chemical Engineering and Technology, 2021, 44, 1043-1050.	1.5	5
59	Detonation Meso-Scale Tests for Energetic Materials. AIP Conference Proceedings, 2002, , .	0.4	4
60	Solâ€gel synthesis and washing of amorphous gâ€FeO(OH) xerogels. Materialwissenschaft Und Werkstofftechnik, 2012, 43, 427-434.	0.9	4
61	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
62	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
63	Determination of the steady state of isothermal two-phase continuous stirred tank reactors. Chemical Engineering Science, 1994, 49, 3447-3456.	3.8	2
64	Cyanuric Acid/Epichlorohydrin Energetic Prepolymers. Propellants, Explosives, Pyrotechnics, 2005, 30, 338-343.	1.6	2
65	Development of an Innovative 3D Simulator for Structured Polymeric Fibrous Materials and Liquid Droplets. Advanced Structured Materials, 2015, , 301-321.	0.5	2
66	Coarse Explosive Particles of PBX as a Dominant Factor of Detonation Instability. AIP Conference Proceedings, 2004, , .	0.4	1
67	Simulation of Membrane Separations Using a Modified Maxwell-Stefan Model. Chemical Product and Process Modeling, 2009, 4, .	0.9	1
68	RADIAL COMBUSTION DYNAMICS IN Fe[sub 2]O[sub 3]âˆ•Al THERMITE: VARIABILITY OF THE FLAME PROPAGATION PROFILES. , 2009, , .		1
69	Reaction path of energetic materials using THOR code. , 1998, , .		0
70	Iron Oxide/Aluminum Fast Thermite Reaction. AIP Conference Proceedings, 2004, , .	0.4	0
71	Synergetic phenomena in detonation of solid heterogeneous explosives. Control of oscillations and dissipative structures in detonation flow. , 0, , .		0
72	Cyanuric acidâ€“epichlorohydrin prepolymers. Journal of Applied Polymer Science, 2006, 99, 3684-3691.	2.6	0

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73	A performance comparison of some high breakdown robust estimators for nonlinear parameter estimation. Computer Aided Chemical Engineering, 2006, , 279-284.	0.5	0
74	Thermal Behavior of Fe2O3/Al Thermite Mixtures in Air and Vacuum Environments. AIP Conference Proceedings, 2006, , .	0.4	0
75	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
76	Reinforcement Strategies of Silica Aerogels for Thermal Insulation Applications. Proceedings (mdpi), 2020, 57, 2.	0.2	0
77	Adaptive Collocation Methods for the Solution of Partial Differential Equations. , 2010, , 499-504.		0
78	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