

Jair C C Freitas

List of Publications by Year in descending order

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110
papers

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citations

318942

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all docs

110
docs citations

110
times ranked

2978
citing authors

#	ARTICLE	IF	CITATIONS
1	A new magnetic composite with potential application in boron adsorption: Development, characterization, and removal tests. <i>Materials Chemistry and Physics</i> , 2022, 277, 125368.	2.0	13
2	Synthesis of nanostructured iron oxides and study of the thermal crystallization process using DSC and in situ XRD experiments. <i>Materials Chemistry and Physics</i> , 2022, 285, 126065.	2.0	6
3	Single step production of activated carbon from microalgae cultivated with urban wastewater. <i>Algal Research</i> , 2022, 64, 102669.	2.4	5
4	Fundamental studies on zeolite-adsorbate interactions: designing a better aluminosilicate adsorbent for pollutants removal. <i>Environmental Earth Sciences</i> , 2022, 81, 1.	1.3	9
5	Synthesis of bilayer films from regenerated cellulose nanofibers and poly(globalide) for skin tissue engineering applications. <i>Carbohydrate Polymers</i> , 2021, 252, 117201.	5.1	19
6	Reply to Comment on "On the Difficulties and Pitfalls with the Analysis of Solid-State ¹³ C NMR Spectra in Graphitic Materials". <i>Applied Magnetic Resonance</i> , 2021, 52, 91-98.	0.6	0
7	Recycling of graphite and metals from spent Li-ion batteries aiming the production of graphene/CoO-based electrochemical sensors. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 104689.	3.3	21
8	Heterogeneous Fenton-like surface properties of oxygenated graphitic carbon nitride. <i>Journal of Colloid and Interface Science</i> , 2021, 587, 479-488.	5.0	21
9	Nanostructured faujasite zeolite as metal ion adsorbent: kinetics, equilibrium adsorption and metal recovery studies. <i>Water Science and Technology</i> , 2021, 83, 358-371.	1.2	5
10	Photocatalytic activity of P-Fe/activated carbon nanocomposites under artificial solar irradiation. <i>Catalysis Today</i> , 2020, 356, 226-240.	2.2	15
11	2,4-dichlorophenoxyacetic acid (2,4-D) micropollutant herbicide removing from water using granular and powdered activated carbons: a comparison applied for water treatment and health safety. <i>Journal of Environmental Science and Health - Part B Pesticides, Food Contaminants, and Agricultural Wastes</i> , 2020, 55, 361-375.	0.7	9
12	Porous Carbon-Based Nanocomposites Containing Fe ₂ P Nanoparticles as Promising Materials for Supercapacitor Electrodes. <i>Journal of Electronic Materials</i> , 2020, 49, 1059-1074.	1.0	7
13	Eco-green biodiesel production from domestic waste cooking oil by transesterification using LiOH into basic catalysts mixtures. <i>Journal of Renewable and Sustainable Energy</i> , 2020, 12, .	0.8	13
14	Physicochemical characterization and in vitro biological evaluation of solid compounds from furazolidone-based cyclodextrins for use as leishmanicidal agents. <i>Drug Delivery and Translational Research</i> , 2020, 10, 1788-1809.	3.0	12
15	Potential and limitations of ¹³ C CP/MAS NMR spectroscopy to determine the lignin content of lignocellulosic feedstock. <i>Biomass and Bioenergy</i> , 2020, 142, 105792.	2.9	23
16	Simulations of NMR Relaxation in a Real Porous Structure: Pre-asymptotic Behavior to the Localization Regime. <i>Applied Magnetic Resonance</i> , 2020, 51, 581-595.	0.6	3
17	¹³ C NMR Parameters of Disordered Carbons: Atomistic Simulations, DFT Calculations, and Experimental Results. <i>Journal of Physical Chemistry C</i> , 2020, 124, 12784-12793.	1.5	6
18	Study of thermal transformations in Na,Ca-based catalysts supported on activated carbon and their application in the synthesis of biodiesel from soybean oil. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 104208.	3.3	12

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19	High-performance of activated biocarbon based on agricultural biomass waste applied for 2,4-D herbicide removing from water: adsorption, kinetic and thermodynamic assessments. <i>Journal of Environmental Science and Health - Part B Pesticides, Food Contaminants, and Agricultural Wastes</i> , 2020, 55, 767-782.	0.7	17
20	Designed single-phase ZrO ₂ nanocrystals obtained by solvothermal syntheses. <i>CrystEngComm</i> , 2020, 22, 1802-1811.	1.3	12
21	Preparation of a Nitrogen Oil Compound Fraction by Modified Gel Silica Column Chromatography. <i>Energy & Fuels</i> , 2020, 34, 5652-5664.	2.5	3
22	Na,Ca-based catalysts supported on activated carbon for synthesis of biodiesel from soybean oil. <i>Materials Chemistry and Physics</i> , 2020, 249, 123173.	2.0	13
23	Production of Phosphorus-Containing Activated Carbons From Coffee Husk and Application in Adsorption Processes. <i>Revista Virtual De Quimica</i> , 2020, 12, 75-88.	0.1	2
24	Application of Solid State ¹³ C NMR in the Study of Lignin and Carbohydrate Contents in Acid-Treated Sugarcane Bagasse Samples. <i>Revista Virtual De Quimica</i> , 2020, 12, 639-658.	0.1	1
25	All-Fiber Erbium-Doped Q-Switched Laser With Recycled Graphite Oxide. <i>IEEE Photonics Technology Letters</i> , 2019, 31, 1713-1716.	1.3	3
26	Effects of textural and chemical properties of \hat{I}^2 -zeolites on their performance as adsorbents for heavy metals removal. <i>Environmental Earth Sciences</i> , 2019, 78, 1.	1.3	12
27	On the Difficulties and Pitfalls with the Analysis of Solid-State ¹³ C NMR Spectra in Graphitic Materials. <i>Applied Magnetic Resonance</i> , 2019, 50, 1245-1252.	0.6	7
28	Production of high-purity cellulose, cellulose acetate and cellulose-silica composite from babassu coconut shells. <i>Carbohydrate Polymers</i> , 2019, 210, 127-134.	5.1	54
29	Bio-oil: a versatile precursor to produce carbon nanostructures in liquid phase under mild conditions. <i>New Journal of Chemistry</i> , 2019, 43, 2430-2433.	1.4	11
30	One-step methodology for preparing physically activated biocarbons from agricultural biomass waste. <i>Journal of Environmental Chemical Engineering</i> , 2019, 7, 103113.	3.3	25
31	The role played by the aging of aloe vera on its drag reduction properties in turbulent flows. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2019, 265, 1-10.	1.0	17
32	\hat{I}^2 -Cyclodextrin inclusion complexes with essential oils: Obtention, characterization, antimicrobial activity and potential application for food preservative sachets. <i>Food Research International</i> , 2019, 119, 499-509.	2.9	81
33	Observation of the transformation of silica phytoliths into SiC and SiO ₂ particles in biomass-derived carbons by using SEM/EDS, Raman spectroscopy, and XRD. <i>Journal of Materials Science</i> , 2019, 54, 3761-3777.	1.7	18
34	Stable dark pulses produced by a graphite oxide saturable absorber in a fiber laser cavity. <i>Applied Optics</i> , 2019, 58, 9297.	0.9	6
35	Representative elementary volume for NMR simulations based on X-ray microtomography of sedimentary rock. <i>Journal of Petroleum Science and Engineering</i> , 2018, 166, 906-912.	2.1	10
36	Quantification of cocaine and its adulterants by nuclear magnetic resonance spectroscopy without deuterated solvents (No-D qNMR). <i>Analytical Methods</i> , 2018, 10, 1685-1694.	1.3	12

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37	Characterization of Naphthenic Acids in Thermally Degraded Petroleum by ESI(̂)-FT-ICR MS and ¹ H NMR after Solid-Phase Extraction and Liquid/Liquid Extraction. Energy & Fuels, 2018, 32, 2878-2888.	2.5	40
38	One-pot synthesis of amine-functionalized graphene oxide by microwave-assisted reactions: an outstanding alternative for supporting materials in supercapacitors. RSC Advances, 2018, 8, 6136-6145.	1.7	93
39	Recovery of latent fingerprints from brass cartridge cases: Evaluation of developers, analysis of surfaces and internal ballistic effects. Forensic Science International, 2018, 290, 258-278.	1.3	17
40	Synthesis, characterization and photocatalytic properties of nanostructured CoFe ₂ O ₄ recycled from spent Li-ion batteries. Chemosphere, 2017, 182, 339-347.	4.2	45
41	Study of degradation of acid crude oil by high resolution analytical techniques. Journal of Petroleum Science and Engineering, 2017, 154, 194-203.	2.1	23
42	Multinuclear magnetic resonance study on the occurrence of phosphorus in activated carbons prepared by chemical activation of lignocellulosic residues from the babassu production. Journal of Environmental Chemical Engineering, 2017, 5, 6016-6029.	3.3	20
43	Solid-State ¹³ C NMR Spectroscopy Applied to the Study of Carbon Blacks and Carbon Deposits Obtained by Plasma Pyrolysis of Natural Gas. Journal of Spectroscopy, 2016, 2016, 1-6.	0.6	9
44	Synthesis and characterization of nanostructured iron compounds prepared from the decomposition of iron pentacarbonyl dispersed into carbon materials with varying porosities. Journal of Nanoparticle Research, 2016, 18, 1.	0.8	3
45	Interaction between single vacancies in graphene sheet: An ab initio calculation. Solid State Communications, 2016, 240, 5-9.	0.9	11
46	Okra as a drag reducer for high Reynolds numbers water flows. Rheologica Acta, 2016, 55, 983-991.	1.1	19
47	NMR Spectral Parameters in Graphene, Graphite, and Related Materials: Ab Initio Calculations and Experimental Results. Journal of Physical Chemistry C, 2016, 120, 27707-27716.	1.5	44
48	Fractionation of Asphaltene by Adsorption onto Silica and Chemical Characterization by Atmospheric Pressure Photoionization Fourier Transform Ion Cyclotron Resonance Mass Spectrometry, Fourier Transform Infrared Spectroscopy Coupled to Attenuated Total Reflectance, and Proton Nuclear Magnetic Resonance. Energy & Fuels, 2016, 30, 5439-5448.	2.5	37
49	Synthesis of graphite oxide from milled graphite studied by solid-state ¹³ C nuclear magnetic resonance. Carbon, 2016, 98, 496-503.	5.4	51
50	Magnetic and hyperfine properties of Fe ₂ P nanoparticles dispersed in a porous carbon matrix. Journal of Magnetism and Magnetic Materials, 2016, 401, 173-179.	1.0	11
51	Preparation, Characterization and Evaluation in Gasification of Cellulignins Derived from Sugar Cane Bagasse and Rice Husks: Reuse Case of Lignocellulosic Waste. Revista Virtual De Quimica, 2016, 8, 1262-1276.	0.1	2
52	Determination of the hyperfine magnetic field in magnetic carbon-based materials: DFT calculations and NMR experiments. Scientific Reports, 2015, 5, 14761.	1.6	20
53	Catalytic decarboxylation of naphthenic acids in crude oils. Fuel, 2015, 158, 113-121.	3.4	37
54	Synthesis of nanostructured iron oxides dispersed in carbon materials and in situ XRD study of the changes caused by thermal treatment. Journal of Nanoparticle Research, 2015, 17, 1.	0.8	11

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55	Comparison of practical techniques to develop latent fingerprints on fired and unfired cartridge cases. <i>Forensic Science International</i> , 2015, 250, 17-26.	1.3	30
56	Solid state ²⁷ Al NMR and X-ray diffraction study of alumina-carbon composites. <i>Carbon</i> , 2015, 93, 751-761.	5.4	16
57	Characterisation and selection of demulsifiers for water-in-crude oil emulsions using low-field ¹ H NMR and ESI-FT-ICR MS. <i>Fuel</i> , 2015, 140, 762-769.	3.4	41
58	Análise do teor e da qualidade dos lipídeos presentes em sementes de oleaginosas por rnm de baixo campo. <i>Quimica Nova</i> , 2014, 37, 10-17.	0.3	12
59	STUDY OF NICKEL CATALYSTS PREPARED FROM RICE HUSK ASH FOR THE REACTION OF METHANE REFORMING WITH CARBON DIOXIDE. <i>Quimica Nova</i> , 2014, , .	0.3	2
60	On the connection between structural distortion and magnetism in graphene with a single vacancy. <i>Solid State Communications</i> , 2013, 175-176, 71-75.	0.9	25
61	Application of Low-Field NMR for the Determination of Physical Properties of Petroleum Fractions. <i>Energy & Fuels</i> , 2013, 27, 673-679.	2.5	62
62	Quantum information processing by nuclear magnetic resonance on quadrupolar nuclei. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2012, 370, 4770-4793.	1.6	11
63	Recent Advances in Solid-State ²⁵ Mg NMR Spectroscopy. <i>Annual Reports on NMR Spectroscopy</i> , 2012, 75, 25-114.	0.7	42
64	Emprego de catalisadores heterogêneos de CaO e SnO ₂ suportados em cinza de casca de arroz na obtenção de biodiesel. <i>Quimica Nova</i> , 2012, 35, 268-273.	0.3	4
65	Studies on crude oil-water biphasic mixtures by low-field NMR. <i>Magnetic Resonance in Chemistry</i> , 2012, 50, 85-88.	1.1	37
66	¹ H low- and high-field NMR study of the effects of plasma treatment on the oil and water fractions in crude heavy oil. <i>Fuel</i> , 2012, 92, 62-68.	3.4	16
67	Solid-State Nuclear Magnetic Resonance (NMR) Methods Applied to the Study of Carbon Materials. <i>Chemistry and Physics of Carbon: A Series of Advances</i> , 2012, , 85-170.	0.3	12
68	Numerical simulation of NQR/NMR: Applications in quantum computing. <i>Journal of Magnetic Resonance</i> , 2011, 209, 250-260.	1.2	13
69	High-temperature XRD study of thermally induced structural and chemical changes in iron oxide nanoparticles embedded in porous carbons. <i>Journal of Nanoparticle Research</i> , 2010, 12, 3097-3103.	0.8	8
70	Synthesis, characterization, DFT and Td-dft study of the [Fe(mnt)(L)(t-BuNC) ₂] octahedral complex (L =)	0.3	3
71	Natural Abundance ²⁵ Mg Solid-State NMR of Mg Oxyanion Systems: A Combined Experimental and Computational Study. <i>Chemistry - A European Journal</i> , 2009, 15, 9785-9798.	1.7	53
72	Solid-state natural abundance ²⁵ Mg NMR studies of Na ₂ MgEDTA·4H ₂ O a possible new reference compound for ²⁵ Mg NMR spectroscopy. <i>Magnetic Resonance in Chemistry</i> , 2009, 47, 9-15.	1.1	14

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73	33S MAS NMR of a disordered sulfur-doped silicate: Signal enhancement via RAPT, QCPMG and adiabatic pulses. Applied Magnetic Resonance, 2009, 35, 247-259.	0.6	23
74	Kinetics and 13C NMR Study of Oxygen Incorporation into PVC- and Pitch-Derived Materials. Energy & Fuels, 2009, 23, 1373-1378.	2.5	3
75	Evidence for magnetic phase separation in La _{0.86} Sr _{0.14} Mn _{1-x} Cu _x O ₃ + δ manganites from NMR and magnetic measurements. Journal of Physics Condensed Matter, 2008, 20, 095214.	0.7	5
76	Propriedades estruturais e microestruturais de manganitas dopadas com cobre. Quimica Nova, 2007, 30, 1517-1522.	0.3	1
77	Nanostructured FeZrCuB alloys prepared by mechanosynthesis. Journal of Applied Physics, 2007, 102, 033515.	1.1	2
78	Preparação e caracterização de carvão ativado quimicamente a partir da casca de arroz. Quimica Nova, 2007, 30, 1663-1668.	0.3	18
79	NMR investigation on the occurrence of Na species in porous carbons prepared by NaOH activation. Carbon, 2007, 45, 1097-1104.	5.4	24
80	A multiple-field ²³ Na NMR study of sodium species in porous carbons. Solid State Nuclear Magnetic Resonance, 2007, 32, 109-117.	1.5	12
81	Structure and melting of Pb nanocrystals produced by mechanical alloying of Fe/Pb powder mixtures. Acta Materialia, 2006, 54, 5095-5102.	3.8	12
82	Thermal stability and magnetic properties of FeSiB amorphous alloy. Journal of Materials Science, 2006, 41, 1649-1651.	1.7	4
83	Quantum logical operations for spin 3/2 quadrupolar nuclei monitored by quantum state tomography. Journal of Magnetic Resonance, 2005, 175, 226-234.	1.2	21
84	Extended solubility in non-equilibrium Pb/Fe system. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 390, 13-18.	2.6	16
85	Quantum information processing through nuclear magnetic resonance. Brazilian Journal of Physics, 2005, 35, 617-625.	0.7	9
86	Novel neutral iron(II) isocyanide maleonitrile dithiolate [Fe(S ₂ C ₂ (CN) ₂)(t-BuNC) ₄] compound. Quimica Nova, 2004, 27, 76.	0.3	0
87	Quantum-state tomography for quadrupole nuclei and its application on a two-qubit system. Physical Review A, 2004, 69, .	1.0	31
88	Reaction products between sodium diphenyl -amine-4-sulfonate and hydrated LaCl ₃ . Journal of Thermal Analysis and Calorimetry, 2004, 75, 615-621.	2.0	4
89	Synthesis temperature optimization of HgRe 1212 using an changed TBA. Physica C: Superconductivity and Its Applications, 2004, 408-410, 879-880.	0.6	0
90	Phase transformation in iron/cobalt-based amorphous alloys revealed by thermal and magnetic techniques. Journal of Alloys and Compounds, 2004, 369, 131-135.	2.8	8

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91	Development of Si/C/N/O ceramics from pyrolyzed and heat-treated rice hulls. <i>Journal of Non-Crystalline Solids</i> , 2004, 341, 77-85.	1.5	16
92	Study on characterization of pyrolysis and hydrolysis products of poly(vinyl chloride) waste. <i>Journal of Applied Polymer Science</i> , 2003, 90, 3252-3259.	1.3	15
93	Relaxation of coherent states in a two-qubit NMR quadrupole system. <i>Physical Review A</i> , 2003, 68, .	1.0	18
94	Evidences for Tsallis non-extensivity on CMR manganites. <i>Europhysics Letters</i> , 2002, 58, 42-48.	0.7	28
95	Effects of Ferromagnetic Inclusions on ^{13}C MAS NMR Spectra of Heat-Treated Peat Samples. <i>Energy & Fuels</i> , 2002, 16, 1068-1075.	2.5	22
96	Solubility study of $\text{Fe}_{0.95}\text{Pb}_{0.05}$ alloy prepared by high energy ball milling. <i>Journal of Alloys and Compounds</i> , 2002, 345, 116-122.	2.8	6
97	Oxochloroalkoxide of the Cerium (IV) and Titanium (IV) as oxides precursor. <i>Quimica Nova</i> , 2002, 25, 897-901.	0.3	1
98	Electric and magnetic properties of Cu-doped LaSr manganites. <i>Journal of Magnetism and Magnetic Materials</i> , 2002, 242-245, 668-671.	1.0	8
99	Structure and magnetotransport properties in plasma-sprayed $\text{La}_{0.78}\text{Sr}_{0.22}\text{MnO}_3$ thick film. <i>Journal of Magnetism and Magnetic Materials</i> , 2002, 246, 10-15.	1.0	4
100	Magnetic Susceptibility Effects on ^{13}C MAS NMR Spectra of Carbon Materials and Graphite. <i>Solid State Nuclear Magnetic Resonance</i> , 2001, 20, 61-73.	1.5	76
101	Investigation of biomass- and polymer-based carbon materials using ^{13}C high-resolution solid-state NMR. <i>Carbon</i> , 2001, 39, 535-545.	5.4	80
102	High-Resolution Solid-State NMR Study of the Occurrence and Thermal Transformations of Silicon-Containing Species in Biomass Materials. <i>Chemistry of Materials</i> , 2000, 12, 711-718.	3.2	41
103	Low field magnetic studies of some alloys. <i>Journal of Physics Condensed Matter</i> , 1999, 11, 821-831.	0.7	2
104	^{13}C High-Resolution Solid-State NMR Study of Peat Carbonization. <i>Energy & Fuels</i> , 1999, 13, 53-59.	2.5	106
105	Physical and chemical properties of a Brazilian peat char as a function of HTT. <i>Fuel</i> , 1997, 76, 229-232.	3.4	11
106	APCI(+)-FT-ICR MS Analysis of Hydrocarbons Using Isooctane as Ionizing Reagent - A Comparison with HTGC-FID, GC-MS and NMR. <i>Journal of the Brazilian Chemical Society</i> , 0, , .	0.6	4
107	ESTUDO ATRAVÉS DE RMN DE ^{13}C NO ESTADO SÓLIDO SOBRE A SÍNTESE DE ÓXIDO DE GRAFITE UTILIZANDO DIFERENTES PRECURSORES GRAFÍTICOS. <i>Quimica Nova</i> , 0, , .	0.3	1
108	Study of biocarbon supported Fe_2P particles for HER with energy applications. <i>Renewable Energy and Power Quality Journal</i> , 0, 17, 466-469.	0.2	1

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109	Heat treatment of iron/carbon composites for energy storage: effect on physicochemical and electrochemical properties. Renewable Energy and Power Quality Journal, 0, , 506-510.	0.2	1
110	APROVEITAMENTO DE PRECURSORES LIGNOCELULÃ“SICOS PARA PRODUÃ“FO DE ACETATO DE CELULOSE. Quimica Nova, 0, , .	0.3	0