Braulio Archanjo

List of Publications by Citations

99 papers	2,076 citations	23 h-index	42 g-index
104 ext. papers	2,499 ext. citations	4.9 avg, IF	4.73 L-index

#	Paper	IF	Citations
99	Copper Nanocrystals Encapsulated in Zr-based Metal-Organic Frameworks for Highly Selective CO Hydrogenation to Methanol. *Nano Letters*, **2016**, 16, 7645-7649	11.5	285
98	Biochar built soil carbon over a decade by stabilizing rhizodeposits. *Nature Climate Change*, **2017**, 7, 371-376	21.4	155
97	Structural analysis of polycrystalline graphene systems by Raman spectroscopy. *Carbon*, **2015**, 95, 646-652	10.4	122
96	Heterogeneous Catalysis by Covalent Organic Frameworks (COF): Pd(OAc)2@COF-300 in Cross-Coupling Reactions. *ChemCatChem*, **2016**, 8, 743-750	5.2	92
95	Understanding growth mechanisms and tribocorrosion behaviour of porous TiO2 anodic films containing calcium, phosphorous and magnesium. *Applied Surface Science*, **2015**, 341, 1-12	6.7	67
94	Micro-arc oxidation as a tool to develop multifunctional calcium-rich surfaces for dental implant applications. *Materials Science and Engineering C*, **2015**, 54, 196-206	8.3	66
93	Nanoscale analyses of the surface structure and composition of biochars extracted from field trials or after co-composting using advanced analytical electron microscopy. *Geoderma*, **2017**, 294, 70-79	6.7	65
92	Deformation induced semiconductor-metal transition in single wall carbon nanotubes probed by electric force microscopy. *Physical Review Letters*, **2008**, 100, 256804	7.4	57
91	Dynamic negative compressibility of few-layer graphene, h-BN, and MoS2. *Nano Letters*, **2012**, 12, 2313-7	11.5	56
90	Tuning Localized Surface Plasmon Resonance in Scanning Near-Field Optical Microscopy Probes. *ACS Nano*, **2015**, 9, 6297-304	16.7	50
89	Linear carbon chains encapsulated in multiwall carbon nanotubes: Resonance Raman spectroscopy and transmission electron microscopy studies. *Carbon*, **2015**, 90, 172-180	10.4	46
88	Crystalline nano-coatings of fluorine-substituted hydroxyapatite produced by magnetron sputtering with high plasma confinement. *Surface and Coatings Technology*, **2015**, 264, 163-174	4.4	46
87	Selective extraction of humic acids from an anthropogenic Amazonian dark earth and from a chemically oxidized charcoal. *Biology and Fertility of Soils*, **2014**, 50, 1223-1232	6.1	45
86	Chemical analysis and molecular models for calcium-oxygen-carbon interactions in black carbon found in fertile Amazonian anthrosoils. *Environmental Science & Technology*, **2014**, 48, 7445-52	10.3	44
85	New transfer method of CVD-grown graphene using a flexible, transparent and conductive polyaniline-rubber thin film for organic electronic applications. *Chemical Engineering Journal*, **2015**, 273, 509-518	14.7	43
84	Microscopy and spectroscopy analysis of carbon nanostructures in highly fertile Amazonian anthrosoils. *Soil and Tillage Research*, **2012**, 122, 61-66	6.5	43
83	Thermo-optical properties of silver and gold nanofluids. *Journal of Thermal Analysis and Calorimetry* , **2013**, 114, 557-564	4.1	40

82	The use of a Ga+ focused ion beam to modify graphene for device applications. *Nanotechnology*, **2012**, 23, 255305	3.4	38
81	Controlling burst effect with PLA/PVA coaxial electrospun scaffolds loaded with BMP-2 for bone guided regeneration. *Materials Science and Engineering C*, **2019**, 97, 602-612	8.3	35
80	Growth mechanisms of Ca- and P-rich MAO films in Ti-15Zr-xMo alloys for osseointegrative implants. *Surface and Coatings Technology*, **2018**, 344, 373-382	4.4	30
79	Activation of Tungsten Oxide for Propane Dehydrogenation and Its High Catalytic Activity and Selectivity. *Catalysis Letters*, **2017**, 147, 622-632	2.8	29
78	Graphene nanoribbon superlattices fabricated via He ion lithography. *Applied Physics Letters*, **2014**, 104, 193114	3.4	29
77	Experimental and theoretical investigations of monolayer and few-layer talc. *2D Materials*, **2015**, 2, 015004	7.9	24
76	Al-/Fe-(hydr)oxides–organic carbon associations in Oxisols – From ecosystems to submicron scales. *Catena*, **2017**, 154, 63-72	5.8	23
75	The High performance of nanocrystalline CVD diamond coated hip joints in wear simulator test. *Journal of the Mechanical Behavior of Biomedical Materials*, **2015**, 49, 175-85	4.1	23
74	Plasmon-Tunable Tip Pyramids: Monopole Nanoantennas for Near-Field Scanning Optical Microscopy. *Advanced Optical Materials*, **2018**, 6, 1800528	8.1	22
73	Calcium incorporation in graphene oxide particles: A morphological, chemical, electrical, and thermal study. *Thin Solid Films*, **2016**, 610, 10-18	2.2	22
72	Nanoscale mapping of carbon oxidation in pyrogenic black carbon from ancient Amazonian anthrosols. *Environmental Sciences: Processes and Impacts*, **2015**, 17, 775-9	4.3	20
71	Multi-Scale Evaluation of Wear in UHMWPE-Metal Hip Implants Tested in a hip Joint Simulator. *Biotribology*, **2015**, 4, 1-11	2.3	18
70	Hysteresis in the resistance of a graphene device induced by charge modulation in the substrate. *Applied Physics Letters*, **2010**, 97, 042113	3.4	17
69	Morphology, crystalline structure and thermal properties of PEO/MEEP blends. *European Polymer Journal*, **2007**, 43, 3283-3291	5.2	16
68	The two faces of titanium dioxide nanoparticles bio-camouflage in 3D bone spheroids. *Scientific Reports*, **2019**, 9, 9309	4.9	15
67	Quantifying defects in N-layer graphene via a phenomenological model of Raman spectroscopy. *Nuclear Instruments & Methods in Physics Research B*, **2014**, 319, 71-74	1.2	15
66	The role of intermolecular interactions in polyaniline/polyamide-6,6 pressure-sensitive blends studied by DFT and 1H NMR. *European Polymer Journal*, **2016**, 85, 588-604	5.2	14
65	Microstructure and selected mechanical properties of aged Ti-15Zr-based alloys for biomedical applications. *Materials Science and Engineering C*, **2018**, 91, 762-771	8.3	14

64	TiO2 nanotubes enriched with calcium, phosphorous and zinc: promising bio-selective functional surfaces for osseointegrated titanium implants. *RSC Advances*, **2017**, 7, 49720-49738	3.7	14
63	Nanoscale lateral switchable rectifiers fabricated by local anodic oxidation. *Journal of Applied Physics*, **2011**, 110, 024511	2.5	14
62	Optical Nanoantennas for Tip-Enhanced Raman Spectroscopy. *IEEE Journal of Selected Topics in Quantum Electronics*, **2021**, 27, 1-11	3.8	14
61	Optimization of Benzodiazepine Drugs Removal from Water by Heterogeneous Photocatalysis Using TiO2/Activated Carbon Composite. *Water, Air, and Soil Pollution*, **2019**, 230, 1	2.6	13
60	Heat Dissipation Interfaces Based on Vertically Aligned Diamond/Graphite Nanoplatelets. *ACS Applied Materials & Interfaces*, **2015**, 7, 24772-7	9.5	13
59	Corn starch films as a long-term drug delivery system for chlorhexidine gluconate. *Materials Science and Engineering C*, **2020**, 112, 110852	8.3	13
58	Surface-enhanced Raman scattering study of the redox adsorption of p-phenylenediamine on gold or copper surfaces. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2013**, 103, 108-13	4.4	13
57	Electrochemical Response of Glassy Carbon Electrodes Modified using Graphene Sheets of Different Sizes. *International Journal of Electrochemical Science*, **2018**, 71-87	2.2	13
56	Ion beam nanopatterning and micro-Raman spectroscopy analysis on HOPG for testing FIB performances. *Ultramicroscopy*, **2011**, 111, 1338-42	3.1	12
55	Revealing lattice disorder, oxygen incorporation and pore formation in laser induced two-photon oxidized graphene. *Carbon*, **2019**, 143, 720-727	10.4	12
54	Interaction between lamellar twinning and catalyst dynamics in spontaneous core-shell InGaP nanowires. *Nanoscale*, **2015**, 7, 12722-7	7.7	11
53	Mo-doped WO3 nanowires for adsorbing methylene blue dye from wastewater. *Journal of Materials Science*, **2020**, 55, 6429-6440	4.3	11
52	Fabrication of gas nanosensors and microsensors via local anodic oxidation. *Langmuir*, **2009**, 25, 602-5	4	11
51	Morphology and morphogenesis of SARS-CoV-2 in Vero-E6 cells. *Memorias Do Instituto Oswaldo Cruz*, **2021**, 116, e200443	2.6	11
50	Physical Structure and Electrochemical Response of Diamond-Graphite Nanoplatelets: From CVD Synthesis to Label-Free Biosensors. *ACS Applied Materials & Interfaces*, **2019**, 11, 8470-8482	9.5	10
49	High-performance electrochemical sensor based on molecularly imprinted polypyrrole-graphene modified glassy carbon electrode. *Thin Solid Films*, **2020**, 699, 137875	2.2	9
48	Crystallinity, oxidation states and morphology of polyaniline coated curauá fibers in polyamide-6 composites. *Composites Science and Technology*, **2013**, 88, 106-112	8.6	9
47	Plasmon 3D Electron Tomography and Local Electric-Field Enhancement of Engineered Plasmonic Nanoantennas. *ACS Photonics*, **2018**, 5, 2834-2842	6.3	8

46	Silicon dioxide covered Au and Ag nanoparticles for shell-isolated nanoparticle enhanced spectroscopies in the near-infrared. *RSC Advances*, **2015**, 5, 59373-59378	3.7	7
45	Quantum corrections to conductivity in graphene with vacancies. *Physica E: Low-Dimensional Systems and Nanostructures*, **2018**, 100, 40-44	3	7
44	Unraveling structural and compositional information in 3D FinFET electronic devices. *Scientific Reports*, **2019**, 9, 11629	4.9	7
43	Long-range crystalline order in spicules from the calcareous sponge Paraleucilla magna (Porifera, Calcarea). *Acta Biomaterialia*, **2014**, 10, 3875-84	10.8	7
42	Patterning graphene with a helium ion microscope: Observation of metal-insulator transition induced by disorder. *Physical Review B*, **2015**, 91,	3.3	7
41	On the Structural and Chemical Characteristics of Co/Al2O3/graphene Interfaces for Graphene Spintronic Devices. *Scientific Reports*, **2015**, 5, 14332	4.9	7
40	Propanolysis of Methyl Paraoxon in the Presence of Aluminum-Titanate-Supported Erbium Oxide. *Journal of Physical Chemistry C*, **2016**, 120, 22323-22329	3.8	7
39	Free glycerol determination in biodiesel samples using palladium nanoparticles modified glassy carbon electrode associated with solid phase extraction. *Journal of Solid State Electrochemistry*, **2019**, 23, 3057-3066	2.6	6
38	All-Diamond Microelectrodes as Solid State Probes for Localized Electrochemical Sensing. *Analytical Chemistry*, **2015**, 87, 6487-92	7.8	6
37	CO2 and H2 adsorption on 3D nitrogen-doped porous graphene: Experimental and theoretical studies. *Journal of CO2 Utilization*, **2021**, 48, 101517	7.6	6
36	Assessment of a High-Throughput Methodology for the Study of Alloy Oxidation using AlxFeyNi1-x-y Composition Gradient Thin Films. *ACS Combinatorial Science*, **2016**, 18, 425-36	3.9	5
35	Surface-enhanced Raman scattering study of the adsorption of croconate violet on colloidal silver particles. *Vibrational Spectroscopy*, **2013**, 64, 153-157	2.1	5
34	Nanofabrication of plasmon-tunable nanoantennas for tip-enhanced Raman spectroscopy. *Journal of Chemical Physics*, **2020**, 153, 114201	3.9	5
33	Hardening of Al thin films by TiC doping. *Surface and Coatings Technology*, **2017**, 325, 650-655	4.4	4
32	Characterization of Metal Oxide-Based Gas Nanosensors and Microsensors Fabricated via Local Anodic Oxidation Using Atomic Force Microscopy. *Advances in Materials Science and Engineering*, **2013**, 2013, 1-13	1.5	4
31	Final report of CCQM-K129 Measurement of Mole Fractions of Cu, In, Ga and Se in Cu(In,Ga)Se2 Films. *Metrologia*, **2016**, 53, 08011-08011	2.1	4
30	Sodium-Mediated Low-Temperature Synthesis of Monolayers of Molybdenum Disulfide for Nanoscale Optoelectronic Devices. *ACS Applied Nano Materials*, **2021**, 4, 4172-4180	5.6	4
29	Probing the nature of soil organic matter. *Critical Reviews in Environmental Science and Technology*,1-22	11.1	4

28	Cyclodextrin - Stabilized Palladium Nanoparticles on Ceria: Investigation of Support Interactions and Pivotal Promotion in the Suzuki-Miyaura Reaction. *ChemistrySelect*, **2020**, 5, 7227-7235	1.8	3
27	Nanowires and nanoribbons formed by methylphosphonic acid. *Journal of Nanoscience and Nanotechnology*, **2007**, 7, 3071-80	1.3	3
26	SARS-CoV-2: Ultrastructural Characterization of Morphogenesis in an In Vitro System.. *Viruses*, **2022** , 14,	6.2	3
25	Nanostructured Hydroxyapatite from Hen□s Eggshells Using Sucrose as a Template. *Materials Research*, **2020**, 23,	1.5	3
24	Cross-linked lignin coatings produced by UV light and SF6 plasma treatments. *Progress in Organic Coatings*, **2019**, 128, 82-89	4.8	3
23	Characterization of Polyaniline-Based Blends, Composites, and Nanocomposites **2018**, 209-233		3
22	SPEEK-Tin dioxide proton conducting membranes: Effect of modifying agent of tin dioxide particles surface. *Journal of Applied Polymer Science*, **2020**, 137, 49507	2.9	2
21	Electron Microscopy and Spectroscopy Analysis of Carbon Nanostructures in Highly Fertile Amazonian Anthrosoils. *Microscopy and Microanalysis*, **2012**, 18, 1502-1503	0.5	2
20	A New Sensor Based on Reduced Graphene Oxide/Au Nanoparticles for Glycerol Detection. *Materials Research*, **2020**, 23,	1.5	2
19	Thermoresponsive Starch Hydrogel Stabilized Pd Nanoparticles: Soft Catalyst for the Preparation of (−)-□-Methylbiphenylalanine in Water Aiming at Bioorthogonal Chemistries. *Catalysis Letters*, **2021**, 151, 844-852	2.8	2
18	Revealing Pd Nanoparticles Formation from PEG-Mediated Decomposition of Organometallic Precursor and Their Application as Catalyst for the Synthesis of n-Extended Carbazoles.. *ChemistrySelect*, **2018**, 3, 9725-9730	1.8	2
17	Antibacterial coatings on vegetable ivory obtained by cold plasma jet activation of silicone and copaiba oils. *Plasma Processes and Polymers*, **2020**, 17, 2000035	3.4	1
16	Flashed copper and silver luster nano-structures: Characterization and technology. *Ceramics International*, **2016**, 42, 7757-7766	5.1	1
15	High-field paramagnetic Meissner effect up to 14 T in melt-textured YBa 2 Cu 3 O 7 □. *Physica C: Superconductivity and Its Applications*, **2016**, 525-526, 105-110	1.3	1
14	Effect of HMVF and LMVF layers thickness and annealing on the optical properties of Ti-Si-O-N films for mid-temperature solar thermal absorbers. *Solar Energy*, **2019**, 189, 318-324	6.8	1
13	Electron back scattered diffraction characterization of Sm(CoFeCuZr)z magnets. *Journal of Applied Physics*, **2011**, 109, 07A750	2.5	1
12	Structural characterization and plasmonic properties of manganese oxide-coated gold nanorods.. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2022**, 272, 120988	4.4	1
11	Effect of Ultra-Turrax on Nanocellulose Produced by Acid Hydrolysis and Modified by Nano ZnO by Sol-Gel Method. *Materials Sciences and Applications*, **2020**, 11, 150-166	0.3	1

List of Publications

10	Electrochemical analysis of monoethylene glycol using rGO/AuPd-np-modified glassy carbon electrode. *Bulletin of Materials Science*, **2021**, 44, 1	1.7	1
9	Hexamethyldisiloxane coating by plasma to create a superhydrophobic surface for fabric masks. *Journal of Materials Research and Technology*, **2022**, 17, 913-924	5.5	0
8	Electrochemical Analysis of Free Glycerol in Biodiesel Using Reduced Graphene Oxide and Gold/Palladium Core-Shell Nanoparticles Modified Glassy Carbon Electrode. *Processes*, **2021**, 9, 1389	2.9	0
7	Etching-Free Transfer and Nanoimaging of CVD-Grown MoS2 Monolayers. *Journal of Physical Chemistry C*, **2021**, 125, 21011-21017	3.8	0
6	The structure of Mn3O4 (110) thin films. *Surface Science*, **2022**, 720, 122062	1.8	0
5	Impact of nanoconfinement on acetylacetone Equilibria in Ordered Mesoporous Silicates. *Nanotechnology*, **2020**, 31, 355706	3.4	
4	The role of interference and polarization effects in the optical visualization of carbon nanotubes. *Journal of Applied Physics*, **2013**, 113, 084314	2.5	
3	Characterizing inorganic crystals grown on organic self-assembled bilayers with scanning probe and electron microscopies. *Microscopy Research and Technique*, **2013**, 76, 1278-83	2.8	
2	Study of Carbon Nanostructures for Soil Fertility Improvement. *Nanomedicine and Nanotoxicology*, **2016**, 85-104	0.3	
1	Rational design of large flat nitrogen-doped graphene oxide quantum dots with green-luminescence suitable for biomedical applications. *RSC Advances*, **2022**, 12, 14342-14355	3.7	