

Rodolfo Cruz Silva

List of Publications by Citations

Source: <https://exaly.com/author-pdf/5325129/rodolfo-cruz-silva-publications-by-citations.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

99
papers

4,801
citations

32
h-index

68
g-index

104
ext. papers

5,362
ext. citations

8.4
avg, IF

5.38
L-index

#	Paper	IF	Citations
99	Flash reduction and patterning of graphite oxide and its polymer composite. <i>Journal of the American Chemical Society</i> , 2009 , 131, 11027-32	16.4	743
98	Nitrogen-doped graphene: beyond single substitution and enhanced molecular sensing. <i>Scientific Reports</i> , 2012 , 2, 586	4.9	517
97	Self-Propagating Domino-like Reactions in Oxidized Graphite. <i>Advanced Functional Materials</i> , 2010 , 20, 2867-2873	15.6	271
96	Energetic graphene oxide: Challenges and opportunities. <i>Nano Today</i> , 2012 , 7, 137-152	17.9	235
95	Effective NaCl and dye rejection of hybrid graphene oxide/graphene layered membranes. <i>Nature Nanotechnology</i> , 2017 , 12, 1083-1088	28.7	227
94	Non-oxidative intercalation and exfoliation of graphite by Brüsted acids. <i>Nature Chemistry</i> , 2014 , 6, 957-63	17.6	154
93	Super-stretchable graphene oxide macroscopic fibers with outstanding knotability fabricated by dry film scrolling. <i>ACS Nano</i> , 2014 , 8, 5959-67	16.7	150
92	Ultrasensitive gas detection of large-area boron-doped graphene. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 14527-32	11.5	146
91	Rice husk-derived graphene with nano-sized domains and clean edges. <i>Small</i> , 2014 , 10, 2766-70, 2740	11	130
90	Three-dimensional nitrogen-doped multiwall carbon nanotube sponges with tunable properties. <i>Nano Letters</i> , 2013 , 13, 5514-20	11.5	97
89	Large-area Si-doped graphene: controllable synthesis and enhanced molecular sensing. <i>Advanced Materials</i> , 2014 , 26, 7593-9	24	91
88	Comparative study of polyaniline cast films prepared from enzymatically and chemically synthesized polyaniline. <i>Polymer</i> , 2004 , 45, 4711-4717	3.9	90
87	Defect Engineering and Surface Functionalization of Nanocarbons for Metal-Free Catalysis. <i>Advanced Materials</i> , 2019 , 31, e1805717	24	88
86	High-performance multi-functional reverse osmosis membranes obtained by carbon nanotube/polyamide nanocomposite. <i>Scientific Reports</i> , 2015 , 5, 13562	4.9	81
85	Importance of open, heteroatom-decorated edges in chemically doped-graphene for supercapacitor applications. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 9532-9540	13	80
84	Template-free enzymatic synthesis of electrically conducting polyaniline using soybean peroxidase. <i>European Polymer Journal</i> , 2005 , 41, 1129-1135	5.2	76
83	Encapsulation and immobilization of papain in electrospun nanofibrous membranes of PVA cross-linked with glutaraldehyde vapor. <i>Materials Science and Engineering C</i> , 2015 , 52, 306-14	8.3	75

82	Large area films of alternating graphene-carbon nanotube layers processed in water. <i>ACS Nano</i> , 2013 , 7, 10788-98	16.7	73
81	Activation routes for high surface area graphene monoliths from graphene oxide colloids. <i>Carbon</i> , 2014 , 76, 220-231	10.4	72
80	Formation of nitrogen-doped graphene nanoribbons via chemical unzipping. <i>ACS Nano</i> , 2013 , 7, 2192-2016.7	16.7	61
79	Single-atom doping of MoS with manganese enables ultrasensitive detection of dopamine: Experimental and computational approach. <i>Science Advances</i> , 2020 , 6, eabc4250	14.3	57
78	Biomimetic polymerization of aniline using hematin supported on halloysite nanotubes. <i>Applied Catalysis A: General</i> , 2010 , 381, 267-273	5.1	52
77	pH- and thermosensitive polyaniline colloidal particles prepared by enzymatic polymerization. <i>Langmuir</i> , 2007 , 23, 8-12	4	52
76	Clean nanotube unzipping by abrupt thermal expansion of molecular nitrogen: graphene nanoribbons with atomically smooth edges. <i>ACS Nano</i> , 2012 , 6, 2261-72	16.7	48
75	Molecular Dynamics Study of Carbon Nanotubes/Polyamide Reverse Osmosis Membranes: Polymerization, Structure, and Hydration. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 24566-75	9.5	47
74	Enzymatic synthesis of colloidal polyaniline particles. <i>Polymer</i> , 2006 , 47, 1563-1568	3.9	47
73	Electrospun nylon nanofibers as effective reinforcement to polyaniline membranes. <i>ACS Applied Materials & Interfaces</i> , 2009 , 1, 2502-8	9.5	44
72	Biocatalytic synthesis of polypyrrole powder, colloids, and films using horseradish peroxidase. <i>Journal of Colloid and Interface Science</i> , 2008 , 328, 263-9	9.3	37
71	Viscoelastic properties of POSS/tyrene nanocomposite blended with polystyrene. <i>Rheologica Acta</i> , 2009 , 48, 641-652	2.3	35
70	Influence of P3HT concentration on morphological, optical and electrical properties of P3HT/PS and P3HT/PMMA binary blends. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2011 , 176, 1393-1400	3.1	34
69	Robust water desalination membranes against degradation using high loads of carbon nanotubes. <i>Scientific Reports</i> , 2018 , 8, 2748	4.9	32
68	High electrical conductivity of double-walled carbon nanotube fibers by hydrogen peroxide treatments. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 74-82	13	32
67	Antiorganic Fouling and Low-Protein Adhesion on Reverse-Osmosis Membranes Made of Carbon Nanotubes and Polyamide Nanocomposite. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 32192-32201	9.5	32
66	Effect of modified ITO substrate on electrochromic properties of polyaniline films. <i>Solar Energy Materials and Solar Cells</i> , 2007 , 91, 1444-1448	6.4	32
65	Nanostructured carbon materials for enhanced nitrobenzene adsorption: Physical vs. chemical surface properties. <i>Carbon</i> , 2018 , 139, 833-844	10.4	31

64	Graphene oxide films, fibers, and membranes. <i>Nanotechnology Reviews</i> , 2016 , 5,	6.3	30
63	Strengthened PAN-based carbon fibers obtained by slow heating rate carbonization. <i>Scientific Reports</i> , 2016 , 6, 22988	4.9	30
62	4-nitrophenol optical sensing with N doped oxidized carbon dots. <i>Journal of Hazardous Materials</i> , 2020 , 386, 121643	12.8	29
61	Improvement on the corrosion protection of conductive polymers in pemfc environments by adhesives. <i>Journal of Power Sources</i> , 2007 , 168, 184-190	8.9	28
60	New Insights in the Natural Organic Matter Fouling Mechanism of Polyamide and Nanocomposite Multiwalled Carbon Nanotubes-Polyamide Membranes. <i>Environmental Science & Technology</i> , 2019 , 53, 6255-6263	10.3	27
59	Effects of nitrogen-doped multi-walled carbon nanotubes compared to pristine multi-walled carbon nanotubes on human small airway epithelial cells. <i>Toxicology</i> , 2015 , 333, 25-36	4.4	25
58	Salt rejection behavior of carbon nanotube-polyamide nanocomposite reverse osmosis membranes in several salt solutions. <i>Desalination</i> , 2018 , 443, 165-171	10.3	23
57	Spontaneous chemical functionalization via coordination of Au single atoms on monolayer MoS ₂ . <i>Science Advances</i> , 2020 , 6,	14.3	22
56	The influence of carbon nanotubes characteristics in their performance as positive electrodes in vanadium redox flow batteries. <i>Sustainable Energy Technologies and Assessments</i> , 2015 , 9, 105-110	4.7	21
55	Effective Antiscalming Performance of Reverse-Osmosis Membranes Made of Carbon Nanotubes and Polyamide Nanocomposites. <i>ACS Omega</i> , 2018 , 3, 6047-6055	3.9	21
54	Enzymatic polymerization of aniline in the presence of different inorganic substrates. <i>Materials Chemistry and Physics</i> , 2007 , 105, 136-141	4.4	21
53	Two-dimensional and three-dimensional hybrid assemblies based on graphene oxide and other layered structures: A carbon science perspective. <i>Carbon</i> , 2017 , 125, 437-453	10.4	20
52	Oil sorption by exfoliated graphite from dilute oil/water emulsion for practical applications in produced water treatments. <i>Journal of Water Process Engineering</i> , 2015 , 8, 91-98	6.7	20
51	Peroxidase-mediated synthesis of water-soluble fully sulfonated polyaniline. <i>Synthetic Metals</i> , 2012 , 162, 794-799	3.6	20
50	Structural evolution of hydrothermal carbon spheres induced by high temperatures and their electrical properties under compression. <i>Carbon</i> , 2017 , 121, 426-433	10.4	19
49	Mechanical properties and fracture behavior of polypropylene reinforced with polyaniline-grafted short glass fibers. <i>Journal of Applied Polymer Science</i> , 2009 , 112, 934-941	2.9	18
48	Enzymatic synthesis of pH-responsive polyaniline colloids by using chitosan as steric stabilizer. <i>European Polymer Journal</i> , 2007 , 43, 3471-3479	5.2	18
47	Oil removing properties of exfoliated graphite in actual produced water treatment. <i>Journal of Water Process Engineering</i> , 2017 , 20, 226-231	6.7	17

46	Magnetic properties of thermally reduced graphene oxide decorated with PtNi nanoparticles. <i>Journal of Alloys and Compounds</i> , 2016 , 678, 541-548	5.7	17
45	Water Diffusion Mechanism in Carbon Nanotube and Polyamide Nanocomposite Reverse Osmosis Membranes: A Possible Percolation-Hopping Mechanism. <i>Physical Review Applied</i> , 2018 , 9,	4.3	16
44	Morphology, thermal, and mechanical properties of polypropylene/polyaniline coated short glass fiber composites. <i>Journal of Applied Polymer Science</i> , 2007 , 105, 2387-2395	2.9	16
43	Platinum nanoparticles supported on electrochemically oxidized and exfoliated graphite for the oxygen reduction reaction. <i>Electrochimica Acta</i> , 2019 , 298, 172-185	6.7	16
42	Use of Silica Tubes as Nanocontainers for Corrosion Inhibitor Storage. <i>Journal of Nanotechnology</i> , 2011 , 2011, 1-9	3.5	15
41	CO ₂ adsorption on crystalline graphitic nanostructures. <i>Journal of CO₂ Utilization</i> , 2014 , 5, 60-65	7.6	14
40	Mesoporous titania nanofibers by solution blow spinning. <i>Journal of Sol-Gel Science and Technology</i> , 2017 , 81, 468-474	2.3	14
39	Enzymatically synthesized polyaniline film deposition studied by simultaneous open circuit potential and electrochemical quartz crystal microbalance measurements. <i>Journal of Colloid and Interface Science</i> , 2012 , 369, 103-10	9.3	12
38	Enzyme mediated synthesis of polypyrrole in the presence of chondroitin sulfate and redox mediators of natural origin. <i>Materials Science and Engineering C</i> , 2016 , 63, 650-6	8.3	12
37	Nanostructured carbon-based membranes: nitrogen doping effects on reverse osmosis performance. <i>NPG Asia Materials</i> , 2016 , 8, e258-e258	10.3	12
36	Nanocomposite desalination membranes made of aromatic polyamide with cellulose nanofibers: synthesis, performance, and water diffusion study. <i>Nanoscale</i> , 2020 , 12, 19628-19637	7.7	11
35	Room-temperature deposition of crystalline patterned ZnO films by confined dewetting lithography. <i>Applied Surface Science</i> , 2010 , 256, 3386-3389	6.7	11
34	Melt rheology of polypropylene reinforced with polyaniline-coated short glass fibers. <i>Journal of Applied Polymer Science</i> , 2008 , 109, 2207-2218	2.9	11
33	Layer-by-layer assembled films of a rigid poly(phenyl-ethynylene) and alternate poly(phenyl-ethynylene)/poly(aniline). <i>Synthetic Metals</i> , 2003 , 139, 155-161	3.6	11
32	Electrochemical polymerization of an aniline-terminated self-assembled monolayer on indium tin oxide electrodes and its effect on polyaniline electrodeposition. <i>Thin Solid Films</i> , 2008 , 516, 4793-4802	2.2	10
31	High Performance and Chlorine Resistant Carbon Nanotube/Aromatic Polyamide Reverse Osmosis Nanocomposite Membrane. <i>MRS Advances</i> , 2016 , 1, 1469-1476	0.7	10
30	Enhanced Antifouling Feed Spacer Made from a Carbon Nanotube-Polypropylene Nanocomposite. <i>ACS Omega</i> , 2019 , 4, 15496-15503	3.9	9
29	Electrically conducting polypropylene/polyaniline-grafted-short glass fiber composites: Microstructure and dynamic mechanical analysis. <i>Polymer Engineering and Science</i> , 2011 , 51, 254-263	2.3	9

28	Nucleation activity of polyaniline coated short glass fiber towards isotactic polypropylene. <i>Journal of Materials Science</i> , 2005 , 40, 5107-5109	4.3	9
27	Facile synthesis of graphene sheets intercalated by carbon spheres for high-performance supercapacitor electrodes. <i>Carbon</i> , 2020 , 167, 11-18	10.4	8
26	Directional Electrical Transport in Tough Multifunctional Layered Ceramic/Graphene Composites. <i>Advanced Electronic Materials</i> , 2015 , 1, 1500132	6.4	6
25	Electrospinning Smart Polymeric Inhibitor Nanocontainer System for Copper Corrosion. <i>ECS Transactions</i> , 2011 , 36, 119-127	1	6
24	Morphology-induced hydrophobic behavior of electrospun polyhydroxyalkanoate membranes. <i>Materials Research Society Symposia Proceedings</i> , 2012 , 1466, 32		5
23	Novel Hybridization Approaches for Graphene-Based Nanocomposites. <i>Science of Advanced Materials</i> , 2015 , 7, 1962-1978	2.3	5
22	Fullerene and nanotube growth: new insights using first principles and molecular dynamics. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2016 , 374,	3	5
21	Graphene oxide membranes for lactose-free milk. <i>Carbon</i> , 2021 , 181, 118-129	10.4	5
20	Isothermal crystallization of novel polypropylene/polyaniline-grafted-short glass fiber (Pan-g-SGF) composites. <i>Emerging Materials Research</i> , 2012 , 1, 39-48	1.4	4
19	Electrospun nylon nanofibers for polymer composites. <i>Emerging Materials Research</i> , 2013 , 2, 53-57	1.4	4
18	Self-affinity study of nanostructured porous silicon-crystalline silicon interfaces. <i>Applied Surface Science</i> , 2009 , 256, 645-649	6.7	4
17	The Effect of a Chemically Modified Graphene in Water Based Corrosion Coating. <i>ECS Transactions</i> , 2011 , 36, 111-118	1	4
16	Electrospun Nylon-Graphene Nanocomposites Synthesis and Microstructure. <i>Materials Research Society Symposia Proceedings</i> , 2012 , 1453, 7		4
15	Antifouling performance of spiral wound type module made of carbon nanotubes/polyamide composite RO membrane for seawater desalination. <i>Desalination</i> , 2022 , 523, 115445	10.3	4
14	Effect of non-electroactive additives on the early stage pyrrole electropolymerization on indium tin oxide electrodes. <i>Thin Solid Films</i> , 2014 , 566, 23-31	2.2	3
13	Simultaneous intercalated assembly of mesostructured hybrid carbon nanofiber/reduced graphene oxide and its use in electrochemical sensing. <i>Nanotechnology</i> , 2019 , 30, 025601	3.4	3
12	Catalytic Nanocarbons: Defect Engineering and Surface Functionalization of Nanocarbons for Metal-Free Catalysis (Adv. Mater. 13/2019). <i>Advanced Materials</i> , 2019 , 31, 1970096	24	2
11	Synthesis, Characterization and Magnetic Properties of Defective Nitrogen-Doped Multiwall Carbon Nanotubes Encapsulating Ferromagnetic Nanoparticles. <i>Journal of Nano Research</i> , 2014 , 28, 39-49		2

10	Modified Carbon Nanotubes 2013 , 189-232		2
9	Enzymatic Synthesis of Polyaniline and Other Electrically Conductive Polymers 2010 , 187-210		2
8	Enhanced desalination performance in compacted carbon-based reverse osmosis membranes. <i>Nanoscale Advances</i> , 2020 , 2, 3444-3451	5.1	2
7	Enzymatic Synthesis of Polyaniline/Graphite Oxide Nanocomposites. <i>Materials Research Society Symposia Proceedings</i> , 2012 , 1448, 19		1
6	Self-Propagating Domino-like Reactions in Oxidized Graphite. <i>Advanced Functional Materials</i> , 2010 , 20, n/a-n/a	15.6	1
5	Low-pressure reverse osmosis membrane made of cellulose nanofiber and carbon nanotube polyamide nano-nanocomposite for high purity water production. <i>Chemical Engineering Journal</i> , 2022 , 137359	14.7	1
4	Graphene: Large-Area Si-Doped Graphene: Controllable Synthesis and Enhanced Molecular Sensing (Adv. Mater. 45/2014). <i>Advanced Materials</i> , 2014 , 26, 7676-7676	24	
3	Reversible fusion-fission fibers. <i>Science</i> , 2021 , 372, 573	33.3	
2	Graphene Oxide Membranes for Water Filtration. <i>Membrane</i> , 2021 , 46, 184-186	0	
1	Preparation of polysulfone support for higher-performance reverse osmosis membranes. <i>Journal of Environmental Chemical Engineering</i> , 2022 , 107860	6.8	