Alejandro AnsÃ³n-Casaos

List of Publications by Year
in descending order

100 papers	3,862 citations	109137 35 h-index	133063 59 g-index
101 all docs	101 docs citations	101 times ranked	5296 citing authors

#	Article	IF	Citations
1	Development and characterization of PEEK/carbon nanotube composites. Carbon, 2009, 47, 3079-3090.	5.4	170
2	Effect of carbon nanotube type and functionalization on the electrical, thermal, mechanical and electromechanical properties of carbon nanotube/styreneâ€“butadieneâ€“styrene composites for large strain sensor applications. Composites Part B: Engineering, 2014, 61, 136-146.	5.9	166
3	Hydrogen adsorption studies on single wall carbon nanotubes. Carbon, 2004, 42, 1243-1248.	5.4	154
4	Tribological and mechanical properties of graphene nanoplatelet/PEEK composites. Carbon, 2019, 141, 107-122.	5.4	143
5	Hydrogen Capacity of Palladium-Loaded Carbon Materials. Journal of Physical Chemistry B, 2006, 110, 6643-6648.	1.2	138
6	Electromechanical performance of poly(vinylidene fluoride)/carbon nanotube composites for strain sensor applications. Sensors and Actuators A: Physical, 2012, 178, 10-16.	2.0	124
7	Single-Walled Carbon Nanotubes as Electrodes in Supercapacitors. Journal of the Electrochemical Society, 2004, 151, A831.	1.3	118
8	High performance PEEK/carbon nanotube composites compatibilized with polysulfones-II. Mechanical and electrical properties. Carbon, 2010, 48, 3500-3511.	5.4	114
9	Porosity, Surface Area, Surface Energy, and Hydrogen Adsorption in Nanostructured Carbons. Journal of Physical Chemistry B, 2004, 108, 15820-15826.	1.2	112
10	The effect of gamma-irradiation on few-layered graphene materials. Applied Surface Science, 2014, 301, 264-272.	3.1	104
11	Modifications of single-wall carbon nanotubes upon oxidative purification treatments. Nanotechnology, 2003, 14, 691-695.	1.3	102
12	Adsorption of ethane and ethylene on modified ETS-10. Chemical Engineering Science, 2008, 63, 4171-4175.	1.9	94
13	High performance PEEK/carbon nanotube composites compatibilized with polysulfones-I. Structure and thermal properties. Carbon, 2010, 48, 3485-3499.	5.4	88
14	The influence of a compatibilizer on the thermal and dynamic mechanical properties of PEEK/carbon nanotube composites. Nanotechnology, 2009, 20, 315707.	1.3	87
15	Frictional and mechanical behaviour of graphene/UHMWPE composite coatings. Tribology International, 2017, 116, 295-302.	3.0	84
16	Influence of size and oxidative treatments of multi-walled carbon nanotubes on their electrocatalytic properties. Electrochimica Acta, 2012, 62, 163-171.	2.6	79
17	Solvent-Free Preparation of High-Toughness Epoxyâ^'SWNT Composite Materials. ACS Applied Materials & Interfaces, 2011, 3, 1441-1450.	4.0	70
18	Carbon Nanotube Effect on Polyaniline Morphology in Water Dispersible Composites. Journal of Physical Chemistry B, 2010, 114, 1579-1585.	1.2	64

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19	Adsorption of carbon dioxide, ethane, and methane on titanosilicate type molecular sieves. Chemical Engineering Science, 2009, 64, 3683-3687.	1.9	63
20	Effect of Various Aminated Single-Walled Carbon Nanotubes on the Epoxy Cross-Linking Reactions. Journal of Physical Chemistry C, 2011, 115, 7238-7248.	1.5	63
21	Covalent functionalization of MWCNTs with poly(p-phenylene sulphide) oligomers: a route to the efficient integration through a chemical approach. Journal of Materials Chemistry, 2012, 22, 21285.	6.7	58
22	Xenon Adsorption on Modified ETS-10. Journal of Physical Chemistry C, 2007, 111, 1560-1562.	1.5	57
23	Dielectric behavior and electrical conductivity of PVDF filled with functionalized single-walled carbon nanotubes. Composites Science and Technology, 2017, 152, 263-274.	3.8	57
24	Relationship between electromechanical response and percolation threshold in carbon nanotube/poly(vinylidene fluoride) composites. Carbon, 2013, 61, 568-576.	5.4	53
25	DFT-Based Prediction of High-Pressure H2Adsorption on Porous Carbons at Ambient Temperatures from Low-Pressure Adsorption Data Measured at 77 K. Journal of Physical Chemistry B, 2006, 110, 4531-4534.	1.2	52
26	Controlling the surface chemistry of graphene oxide: Key towards efficient ZnO-GO photocatalysts. Catalysis Today, 2020, 357, 350-360.	2.2	50
27	Hydrogen adsorption on a single-walled carbon nanotube material: a comparative study of three different adsorption techniques. Nanotechnology, 2004, 15, 1503-1508.	1.3	48
28	Grafting of a hydroxylated poly(ether ether ketone) to the surface of single-walled carbon nanotubes. Journal of Materials Chemistry, 2010, 20, 8285.	6.7	48
29	Preparation of a TiO2â€“MoS2 nanoparticle-based composite by solvothermal method with enhanced photoactivity for the degradation of organic molecules in water under UV light. Micro and Nano Letters, 2011, 6, 932.	0.6	47
30	Characterization and performance evaluation of Ptâ€“Ru electrocatalysts supported on different carbon materials for direct methanol fuel cells. International Journal of Hydrogen Energy, 2013, 38, 910-920.	3.8	47
31	Densities and Viscosities of Binary Mixtures of 1-Chlorobutane with Butanol Isomers at Several Temperatures. Journal of Chemical & Engineering Data, 2005, 50, 677-682.	1.0	44
32	Surfactant-free assembling of functionalized single-walled carbon nanotube buckypapers. Carbon, 2010, 48, 1480-1488.	5.4	44
33	Adsorption of argon, oxygen, and nitrogen on silver exchanged ETS-10 molecular sieve. Microporous and Mesoporous Materials, 2008, 109, 577-580.	2.2	41
34	Mesoporous carbon doped with N,S heteroatoms prepared by one-pot auto-assembly of molecular precursor for electrocatalytic hydrogen peroxide synthesis. Catalysis Today, 2018, 301, 2-10.	2.2	40
35	Combined modification of a TiO2 photocatalyst with two different carbon forms. Applied Surface Science, 2013, 270, 675-684.	3.1	36
36	Single-walled carbon nanotubes covalently functionalized with cysteine: A new alternative for the highly sensitive and selective Cd(II) quantification. Sensors and Actuators B: Chemical, 2017, 249, 506-514.	4.0	35

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37	Separation of ethylene/ethane mixtures by adsorption on small-pored titanosilicate molecular sieves. Chemical Engineering Science, 2010, 65, 807-811.	1.9	34
38	Densities and Viscosities of Binary Mixtures of 1-Bromobutane with Butanol Isomers at Several Temperatures. Journal of Chemical & Engineering Data, 2005, 50, 1478-1483.	1.0	33
39	Covalent functionalization of single-walled carbon nanotubes with polytyrosine: Characterization and analytical applications for the sensitive quantification of polyphenols. Analytica Chimica Acta, 2016, 909, 51-59.	2.6	33
40	High NIR-purity index single-walled carbon nanotubes for electrochemical sensing in microfluidic chips. Lab on A Chip, 2012, 12, 2006.	3.1	32
41	Hydrothermal synthesis of 1D TiO2 nanostructures for dye sensitized solar cells. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2012, 177, 19-26.	1.7	32
42	Understanding Carbonâ€“Carbon Composites as Electrodes of Supercapacitors. Journal of the Electrochemical Society, 2007, 154, A579.	1.3	31
43	Epoxy composites with covalently anchored amino-functionalized SWNTs: towards the tailoring of physical properties through targeted functionalization. Journal of Materials Chemistry, 2011, 21, 14948.	6.7	31
44	Unique Properties and Behavior of Nonmercerized Type-II Cellulose Nanocrystals as Carbon Nanotube Biocompatible Dispersants. Biomacromolecules, 2019, 20, 3147-3160.	2.6	30
45	Enhanced hydrogen adsorption on single-wall carbon nanotubes by sample reduction. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2004, 108, 120-123.	1.7	29
46	Electrochemical sensing of guanine, adenine and 8-hydroxy-2â€²-deoxyguanosine at glassy carbon modified with single-walled carbon nanotubes covalently functionalized with lysine. RSC Advances, 2016, 6, 13469-13477.	1.7	29
47	Evaluation of solâ€“gel TiO 2 photocatalysts modified with carbon or boron compounds and crystallized in nitrogen or air atmospheres. Chemical Engineering Journal, 2015, 277, 11-20.	6.6	26
48	Preparation of palladium loaded carbon nanotubes and activated carbons for hydrogen sorption. Journal of Alloys and Compounds, 2007, 436, 294-297.	2.8	25
49	Separation of single-walled carbon nanotubes from graphite by centrifugation in a surfactant or in polymer solutions. Carbon, 2010, 48, 2917-2924.	5.4	25
50	Optical absorption response of chemically modified single-walled carbon nanotubes upon ultracentrifugation in various dispersants. Carbon, 2014, 66, 105-118.	5.4	25
51	Wrapping of SWCNTs in Polyethylenoxide-Based Amphiphilic Diblock Copolymers: An Approach to Purification, Debundling, and Integration into the Epoxy Matrix. Journal of Physical Chemistry C, 2012, 116, 7399-7408.	1.5	24
52	Peptide-based biomaterials. Linking l-tyrosine and poly l-tyrosine to graphene oxide nanoribbons. Journal of Materials Chemistry B, 2015, 3, 3870-3884.	2.9	24
53	Cysteine functionalized bio-nanomaterial for the affinity sensing of Pb(II) as an indicator of environmental damage. Microchemical Journal, 2018, 141, 271-278.	2.3	24
54	Intrinsic and selective activity of functionalized carbon nanotube/nanocellulose platforms against colon cancer cells. Colloids and Surfaces B: Biointerfaces, 2022, 212, 112363.	2.5	24

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55	Influence of Air Oxidation on the Surfactant-Assisted Purification of Single-Walled Carbon Nanotubes. Langmuir, 2011, 27, 7192-7198.	1.6	22
56	Electrochemical synthesis and characterization of single-walled carbon nanotubes/polypyrrole films on transparent substrates. Electrochimica Acta, 2012, 64, 1-9.	2.6	22
57	Single-walled carbon nanotube buckypapers as electrocatalyst supports for methanol oxidation. Journal of Power Sources, 2013, 242, 7-14.	4.0	22
58	The viscosity of dilute carbon nanotube (1D) and graphene oxide (2D) nanofluids. Physical Chemistry Chemical Physics, 2020, 22, 11474-11484.	1.3	21
59	Anatase nanotubes synthesized by a template method and their application as a green photocatalyst. Journal of Materials Science, 2011, 46, 2097-2104.	1.7	19
60	Tailored SWCNT functionalization optimized for compatibility with epoxy matrices. Nanotechnology, 2012, 23, 285701.	1.3	19
61	Electrochemical behaviour of different redox probes on single wall carbon nanotube buckypaper-modified electrodes. Electrochimica Acta, 2014, 135, 404-411.	2.6	18
62	Choosing the Chemical Route for Carbon Nanotube Integration in Poly(vinylidene fluoride). Journal of Physical Chemistry C, 2012, 116, 16217-16225.	1.5	16
63	Functionalized carbon dots on TiO2 for perovskite photovoltaics and stable photoanodes for water splitting. International Journal of Hydrogen Energy, 2021, 46, 12180-12191.	3.8	15
64	Integration of block copolymer-wrapped single-wall carbon nanotubes into a trifunctional epoxy resin. Influence on thermal performance. Polymer Degradation and Stability, 2010, 95, 2065-2075.	2.7	14
65	Reactive fillers based on SWCNTs functionalized with matrix-based moieties for the production of epoxy composites with superior and tunable properties. Nanotechnology, 2012, 23, 285702.	1.3	14
66	Singleâ€Wall Carbon Nanotubes Covalently Functionalized with Polylysine: Synthesis, Characterization and Analytical Applications for the Development of Electrochemical (Bio)Sensors. Electroanalysis, 2014, 26, 1676-1683.	1.5	14
67	Electrochemical Sensor for the Quantification of Dopamine Using Glassy Carbon Electrodes Modified with Singleâ€Wall Carbon Nanotubes Covalently Functionalized with Polylysine. Electroanalysis, 2015, 27, 1565-1571.	1.5	13
68	Transparent conducting films made of different carbon nanotubes, processed carbon nanotubes, and graphene nanoribbons. Chemical Engineering Science, 2015, 138, 566-574.	1.9	13
69	Block Copolymer Assisted Dispersion of Single Walled Carbon Nanotubes and Integration into a Trifunctional Epoxy. Journal of Nanoscience and Nanotechnology, 2009, 9, 6104-6112.	0.9	11
70	Separation of Argon and Oxygen by Adsorption on a Titanosilicate Molecular Sieve. Separation Science and Technology, 2009, 44, 1604-1620.	1.3	11
71	Study of neuron survival on polypyrrole-embedded single-walled carbon nanotube substrates for long-term growth conditions. Journal of Biomedical Materials Research - Part A, 2014, 102, n/a-n/a.	2.1	11
72	Activated carbon from cherry stones by chemical activation: Influence of the impregnation method on porous structure. Journal of Wood Chemistry and Technology, 2017, 37, 148-162.	0.9	11

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73	Chemical Postdeposition Treatments To Improve the Adhesion of Carbon Nanotube Films on Plastic Substrates. ACS Omega, 2019, 4, 2804-2811.	1.6	11
74	Electrochemical behavior of hybrid carbon nanomaterials: the chemistry behind electrochemistry. Electrochimica Acta, 2016, 214, 286-294.	2.6	10
75	Photoactivity improvement of TiO2 electrodes by thin hole transport layers of reduced graphene oxide. Electrochimica Acta, 2019, 298, 279-287.	2.6	10
76	A tool box to ascertain the nature of doping and photoresponse in single-walled carbon nanotubes. Physical Chemistry Chemical Physics, 2019, 21, 4063-4071.	1.3	9
77	Waterborne Graphene- and Nanocellulose-Based Inks for Functional Conductive Films and 3D Structures. Nanomaterials, 2021, 11, 1435.	1.9	9
78	Modification of Physicochemical Properties and Boosting Electrical Conductivity of Reduced Graphene Oxide Aerogels by Postsynthesis Treatment. Journal of Physical Chemistry C, 2020, 124, 13739-13752.	1.5	9
79	Formamidinium halide salts as precursors of carbon nitrides. Carbon, 2022, 196, 1035-1046.	5.4	9
80	Piezoresistive response of Pluronic-wrapped single-wall carbon nanotubeâ€“epoxy composites. Journal of Intelligent Material Systems and Structures, 2012, 23, 909-917.	1.4	8
81	A chemically reactive spinning dope for significant improvements in wet spun carbon nanotube fibres. Chemical Communications, 2013, 49, 3973.	2.2	8
82	Electrochemical characterization of oligonucleotide-carbon nanotube functionalized using different strategies. Electrochimica Acta, 2014, 140, 489-496.	2.6	8
83	Carbon Nanotube Film Electrodes with Acrylic Additives: Blocking Electrochemical Charge Transfer Reactions. Nanomaterials, 2020, 10, 1078.	1.9	8
84	Chemical upgrading of sedimentary Na-Chabazite from Bowie, Arizona. Clays and Clay Minerals, 2007, 55, 235-238.	0.6	7
85	XPS Characterization of Silver Exchanged ETS-10 and Mordenite Molecular Sieves. Journal of Nanoscience and Nanotechnology, 2009, 9, 3134-3137.	0.9	7
86	The influence of the impregnation method on yield of activated carbon produced by H3PO4 activation. Materials Letters, 2011, 65, 1423-1426.	1.3	7
87	Effects of argon ion sputtering on the surface of graphene/polyethylene composites. Surface and Coatings Technology, 2019, 374, 1059-1070.	2.2	7
88	Inâ€vitro toxicity of carbon nanotube/polylysine colloids to colon cancer cells. IET Nanobiotechnology, 2016, 10, 374-381.	1.9	6
89	Electron Trap States and Photopotential of Nanocrystalline Titanium Dioxide Electrodes Filled with Singleâ€Walled Carbon Nanotubes. ChemElectroChem, 2017, 4, 2300-2307.	1.7	6
90	SWCNTs AS ELECTRON WITHDRAWERS IN NANOCRYSTALLINE ANATASE PHOTOCATALYSTS. Nano, 2012, 07, 1250020.	0.5	5

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91	Single-Walled Carbon Nanotubes (SWCNTs) Enhance KCl-, Acetylcholine-, and Serotonin-Induced Contractions and Evoke Oxidative Stress on Rabbit Ileum. Journal of Biomedical Nanotechnology, 2014, 10, 529-542.	0.5	5
92	Capacitive and Charge Transfer Effects of Singleâ€Walled Carbon Nanotubes in TiO₂ Electrodes. ChemPhysChem, 2019, 20, 838-847.	1.0	5
93	Differential properties and effects of fluorescent carbon nanoparticles towards intestinal theranostics. Colloids and Surfaces B: Biointerfaces, 2020, 185, 110612.	2.5	5
94	Deeping into the microporosity of porous silicates Ti- and Sn-umbite. Microporous and Mesoporous Materials, 2011, 142, 649-654.	2.2	3
95	Electrical conductivity and tensile properties of blockâ€copolymerâ€wrapped singleâ€walled carbon nanotube/poly(methyl methacrylate) composites. Journal of Applied Polymer Science, 2015, 132, .	1.3	3
96	Charge-transfer characteristics in carbon nanostructure/metal oxide photoelectrodes efficiently probed by hydrogen peroxide. Journal of Electroanalytical Chemistry, 2018, 828, 86-90.	1.9	3
97	Double resonance features in the Raman spectrum of carbon nanotubes. Physical Review B, 2004, 70, .	1.1	2
98	Nanostructured Carbon Materials: Synthesis and Applications. NATO Science for Peace and Security Series B: Physics and Biophysics, 2018, , 177-191.	0.2	0
99	Preparation of Metallic and Semiconducting SWCNT Inks by a Simple Chromatographic Method: A Two-Parameter Study. NATO Science for Peace and Security Series B: Physics and Biophysics, 2018, , 229-238.	0.2	0
100	Rational description and modelling of the separation of nanotubes from solid nanoparticles in centrifugation processes. Carbon Trends, 2021, 5, 100084.	1.4	0