

Emilio Munoz-Sandoval

List of Publications by Year in descending order

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82
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257101

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82
all docs

82
docs citations

82
times ranked

5632
citing authors

#	ARTICLE	IF	CITATIONS
1	Graphene and graphite nanoribbons: Morphology, properties, synthesis, defects and applications. Nano Today, 2010, 5, 351-372.	6.2	817
2	Covalently bonded three-dimensional carbon nanotube solids via boron induced nanojunctions. Scientific Reports, 2012, 2, 363.	1.6	329
3	Longitudinal Cutting of Pure and Doped Carbon Nanotubes to Form Graphitic Nanoribbons Using Metal Clusters as Nanoscalpels. Nano Letters, 2010, 10, 366-372.	4.5	323
4	Electronic Transport and Mechanical Properties of Phosphorus- and Phosphorus-Nitrogen-Doped Carbon Nanotubes. ACS Nano, 2009, 3, 1913-1921.	7.3	228
5	Pure and doped boron nitride nanotubes. Materials Today, 2007, 10, 30-38.	8.3	204
6	Heterodoped Nanotubes: Theory, Synthesis, and Characterization of Phosphorus-Nitrogen Doped Multiwalled Carbon Nanotubes. ACS Nano, 2008, 2, 441-448.	7.3	192
7	Fabrication of vapor and gas sensors using films of aligned CNx nanotubes. Chemical Physics Letters, 2004, 386, 137-143.	1.2	178
8	Production and Characterization of Single-Crystal FeCo Nanowires Inside Carbon Nanotubes. Nano Letters, 2005, 5, 467-472.	4.5	167
9	Synthesis, Electronic Structure, and Raman Scattering of Phosphorus-Doped Single-Wall Carbon Nanotubes. Nano Letters, 2009, 9, 2267-2272.	4.5	134
10	Phosphorus and phosphorus-nitrogen doped carbon nanotubes for ultrasensitive and selective molecular detection. Nanoscale, 2011, 3, 1008-1013.	2.8	102
11	Magnetism in Fe-based and carbon nanostructures: Theory and applications. Solid State Sciences, 2006, 8, 303-320.	1.5	94
12	Controlling high coercivities of ferromagnetic nanowires encapsulated in carbon nanotubes. Journal of Materials Chemistry, 2010, 20, 5906.	6.7	59
13	Adsorption of cadmium and lead onto oxidized nitrogen-doped multiwall carbon nanotubes in aqueous solution: equilibrium and kinetics. Journal of Nanoparticle Research, 2010, 12, 467-480.	0.8	55
14	Clean Nanotube Unzipping by Abrupt Thermal Expansion of Molecular Nitrogen: Graphene Nanoribbons with Atomically Smooth Edges. ACS Nano, 2012, 6, 2261-2272.	7.3	54
15	Millimeter-Long Carbon Nanotubes: Outstanding Electron-Emitting Sources. ACS Nano, 2011, 5, 5072-5077.	7.3	50
16	Carbon sponge-type nanostructures based on coaxial nitrogen-doped multiwalled carbon nanotubes grown by CVD using benzylamine as precursor. Carbon, 2017, 115, 409-421.	5.4	49
17	Synthesis of ZnMn ₂ O ₄ Nanoparticles by a Microwave-Assisted Colloidal Method and their Evaluation as a Gas Sensor of Propane and Carbon Monoxide. Sensors, 2018, 18, 701.	2.1	43
18	Synthesis and state of art characterization of BN bamboo-like nanotubes: Evidence of a root growth mechanism catalyzed by Fe. Chemical Physics Letters, 2005, 416, 342-348.	1.2	42

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19	Surface Plasmon Resonance Effects in the Magneto-Optical Activity of Ag@Co@Ag Trilayers. IEEE Transactions on Magnetics, 2008, 44, 3303-3306.	1.2	37
20	Acid modified bamboo-type carbon nanotubes and cup-stacked-type carbon nanofibres as adsorbent materials: cadmium removal from aqueous solution. Journal of Chemical Technology and Biotechnology, 2009, 84, 519-524.	1.6	37
21	Nitrogen-Doped Graphitic Nanoribbons: Synthesis, Characterization, and Transport. Advanced Functional Materials, 2013, 23, 3755-3762.	7.8	31
22	Two Sprayer CVD Synthesis of Nitrogen-doped Carbon Sponge-type Nanomaterials. Scientific Reports, 2018, 8, 2983.	1.6	29
23	Creation of Helical Vortices during Magnetization of Aligned Carbon Nanotubes Filled with Fe: Theory and Experiment. Physical Review Letters, 2005, 94, 216102.	2.9	28
24	Magnetotransport in single-crystal half-Heusler compounds. Physical Review B, 2004, 69, .	1.1	27
25	Synthesis, Characterization, and Sensor Applications of Spinel ZnCo ₂ O ₄ Nanoparticles. Sensors, 2016, 16, 2162.	2.1	26
26	Cytotoxicity induced by carbon nanotubes in experimental malignant glioma. International Journal of Nanomedicine, 2017, Volume 12, 6005-6026.	3.3	24
27	Synthesis, characterization and magnetic properties of Co@Au core-shell nanoparticles encapsulated by nitrogen-doped multiwall carbon nanotubes. Carbon, 2014, 77, 722-737.	5.4	23
28	Controlling the Optical, Electrical and Chemical Properties of Carbon Inverse Opal by Nitrogen Doping. Advanced Functional Materials, 2014, 24, 2612-2619.	7.8	22
29	Effect of pyrrolic-N defects on the capacitance and magnetization of nitrogen-doped multiwalled carbon nanotubes. Carbon, 2021, 183, 743-762.	5.4	22
30	Magnetic response in finite carbon graphene sheets and nanotubes. Optical Materials, 2006, 29, 110-115.	1.7	21
31	Nitrogen-phosphorus doped graphitic nano onion-like structures: experimental and theoretical studies. RSC Advances, 2021, 11, 2793-2803.	1.7	20
32	Removal and surface photocatalytic degradation of methylene blue on carbon nanostructures. Diamond and Related Materials, 2021, 119, 108544.	1.8	20
33	Production and detailed characterization of bean husk-based carbon: Efficient cadmium (II) removal from aqueous solutions. Water Research, 2008, 42, 3473-3479.	5.3	18
34	Efficient carbon nanotube sponges production boosted by acetone in CVD-Synthesis. Carbon, 2018, 135, 145-156.	5.4	18
35	Chloride functionalized carbon nanotube sponge: High charge capacity and high magnetic saturation. Carbon, 2020, 164, 324-336.	5.4	18
36	Magnetization patterns simulations of Fe, Ni, Co, and permalloy individual nanomagnets. Journal of Magnetism and Magnetic Materials, 2005, 294, e7-e12.	1.0	17

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37	Magnetic properties of a new intermetallic compound Ho ₂ Ni ₂ Pb. <i>Europhysics Letters</i> , 2001, 56, 302-308.	0.7	16
38	First-principles study of transition metal adsorbed on porphyrin-like motifs in pyrrolic nitrogen-doped carbon nanostructures. <i>Carbon</i> , 2017, 116, 381-390.	5.4	16
39	Tuning the electronic and magnetic properties of graphene nanoribbons through phosphorus doping and functionalization. <i>Materials Chemistry and Physics</i> , 2021, 265, 124450.	2.0	16
40	Trends in nanoscience, nanotechnology, and carbon nanotubes: a bibliometric approach. <i>Journal of Nanoparticle Research</i> , 2014, 16, 1.	0.8	15
41	Synthesis, morphology, magnetic and electrochemical studies of nitrogen-doped multiwall carbon nanotubes fabricated using banded iron-formation as catalyst. <i>Journal of Alloys and Compounds</i> , 2020, 835, 155200.	2.8	15
42	Understanding the electrochemistry of armchair graphene nanoribbons containing nitrogen and oxygen functional groups: DFT calculations. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 4533-4543.	1.3	15
43	Potential Use of Nitrogen-Doped Carbon Nanotube Sponges as Payload Carriers Against Malignant Glioma. <i>Nanomaterials</i> , 2021, 11, 1244.	1.9	14
44	Micromagnetic simulations of 200-nm-diameter cobalt nanorings using a Reuleaux triangular geometry. <i>Journal of Magnetism and Magnetic Materials</i> , 2006, 305, 133-140.	1.0	13
45	Competing magnetic structures and magnetic transitions in $Er_{1/2}Mn_2$. Powder neutron diffraction measurements. <i>Physical Review B</i> , 2008, 78, ..	1.1	13
46	Spin-dependent band-gap driven by nitrogen and oxygen functional groups in zigzag graphene nanoribbons. <i>Applied Surface Science</i> , 2020, 521, 146435.	3.1	13
47	High performance isopropanol sensor based on spinel ZnMn ₂ O ₄ nanoparticles. <i>Materials Today Communications</i> , 2021, 26, 102138.	0.9	13
48	Micromagnetic simulation of iron nanorings. <i>Journal of Magnetism and Magnetic Materials</i> , 2005, 294, e1-e5.	1.0	12
49	Architectures from Aligned Nanotubes Using Controlled Micropatterning of Silicon Substrates and Electrochemical Methods. <i>Small</i> , 2007, 3, 1157-1163.	5.2	12
50	Oxygenated Surface of Carbon Nanotube Sponges: Electroactivity and Magnetic Studies. <i>ACS Omega</i> , 2019, 4, 18011-18022.	1.6	12
51	Graphene oxide membranes for lactose-free milk. <i>Carbon</i> , 2021, 181, 118-129.	5.4	12
52	Magnetic properties of individual carbon clusters, clusters inside fullerenes and graphitic nanoribbons. <i>Journal of Materials Chemistry</i> , 2008, 18, 1535.	6.7	11
53	Micromagnetic simulations of hysteresis loops in ferromagnetic Reuleaux's triangles. <i>Journal of Applied Physics</i> , 2005, 97, 10E318.	1.1	10
54	Efficient Vapor Sensors Using Foils of Dispersed Nitrogen-Doped and Pure Carbon Multiwalled Nanotubes. <i>Journal of Nanoscience and Nanotechnology</i> , 2010, 10, 3965-3972.	0.9	9

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55	Temperature Dependence of Sensors Based on Silver-Decorated Nitrogen-Doped Multiwalled Carbon Nanotubes. <i>Journal of Sensors</i> , 2016, 2016, 1-10.	0.6	9
56	Vibration sample magnetometry, a good tool for the study of nanomagnetic inclusions. <i>Superlattices and Microstructures</i> , 2008, 43, 482-486.	1.4	8
57	Wrinkled Nitrogen-doped Carbon Belts. <i>Scientific Reports</i> , 2018, 8, 3546.	1.6	8
58	Synthesis, characterization and cyclic voltammetry studies of helical carbon nanostructures produced by thermal decomposition of ethanol on Cu-foils. <i>Carbon</i> , 2019, 155, 469-482.	5.4	8
59	Metallurgy and characterization of R2Ni2Pb intermetallic compounds. <i>Journal of Alloys and Compounds</i> , 2003, 359, 5-9.	2.8	7
60	Unusual magnetic and transport properties in naturally layered intermetallic compounds R2Ni2Pb (R=Gd, Tb and Y). <i>Journal of Alloys and Compounds</i> , 2004, 369, 260-264.	2.8	7
61	Magnetic and Electrical Properties of Nitrogen-Doped Multiwall Carbon Nanotubes Fabricated by a Modified Chemical Vapor Deposition Method. <i>Journal of Nanomaterials</i> , 2015, 2015, 1-14.	1.5	7
62	Growth of nitrogen-doped carbon nanotubes using Ni/La2Zr2O7 as catalyst: Electrochemical and magnetic studies. <i>Carbon</i> , 2021, 171, 907-920.	5.4	7
63	Magnetic and transport properties of Fe nanowires encapsulated in carbon nanotubes. <i>Journal of Magnetism and Magnetic Materials</i> , 2004, 272-276, E1255-E1257.	1.0	6
64	Magnetic Properties of Encapsulated Nanoparticles in Nitrogen-Doped Multiwalled Carbon Nanotubes Embedded in SiO ₂ Matrices. <i>Journal of Nanoscience and Nanotechnology</i> , 2010, 10, 5576-5582.	0.9	6
65	Holey nitrogen-doped multiwalled carbon nanotubes from extended air oxidation at low-temperature. <i>Applied Surface Science</i> , 2020, 524, 146546.	3.1	6
66	The synthesis of sponge-type nitrogen-doped multiwall carbon nanotubes using ball-milled natural red-leptosol as catalyst precursor: A cycle voltammetry study. <i>Carbon</i> , 2022, 196, 510-524.	5.4	6
67	Pine-tree-like morphologies of nitrogen-doped carbon nanotubes: Electron field emission enhancement. <i>Journal of Materials Research</i> , 2014, 29, 2441-2450.	1.2	4
68	Biocompatibility of nitrogen-doped multiwalled carbon nanotubes with murine fibroblasts and human hematopoietic stem cells. <i>Journal of Nanoparticle Research</i> , 2019, 21, 1.	0.8	4
69	Furan and Pyran Functional Groups Driven the Surface of Nitrogen-Doped Nanofiber Sponges. <i>ChemNanoMat</i> , 2020, 6, 672-684.	1.5	4
70	Pyrolic nitrogen-doped multiwall carbon nanotubes using ball-milled slag-SiC mixtures as a catalyst by aerosol assisted chemical vapor deposition. <i>Materials Research Express</i> , 2020, , .	0.8	4
71	N-doped carbon nanotube sponges and their excellent lithium storage performances. <i>Nano Select</i> , 0, , .	1.9	4
72	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.	0.8	2

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73	Boracites: A Structural Family Presenting Ferroic Phase Transitions. <i>Ferroelectrics</i> , 2002, 267, 229-236.	0.3	1
74	Tailoring the structure of MoS ₂ using ball-milled MoO ₃ powders: hexagonal, triangular, and fullerene-like shapes. <i>Nanotechnology</i> , 2021, 32, 155605.	1.3	1
75	Nitrogen and Sulfur Incorporation into Graphene Oxide by Mechanical Process. <i>Advanced Engineering Materials</i> , 2021, 23, 2001444.	1.6	1
76	Carbon Nanotubes as Antimicrobial Agents: Trends and Perspectives. , 2021, , 1-19.		1
77	Surfactant suspended multi-wall carbon nanotube stability in artificial water samples of different hydrogeochemical families. <i>Applied Geochemistry</i> , 2022, 139, 105252.	1.4	1
78	Highly Concentrated Nitrogen-Doped Carbon Nanotubes in Alginate-Gelatin 3D Hydrogels Enable in Vitro Breast Cancer Spheroid Formation. <i>Advanced NanoBiomed Research</i> , 2022, 2, .	1.7	1
79	Tetrahedral magnetic cluster embedded in metallic matrix: electron-correlation effects. <i>IEEE Transactions on Magnetics</i> , 2005, 41, 3428-3430.	1.2	0
80	Synthesis Characterization of Nanostructured ZnCo ₂ O ₄ with High Sensitivity to CO Gas. , 2017, , .		0
81	(Invited) Synthesis of Helical-CNT and Stacked Graphene-CNF Using a Copper Foil As Catalyst in a Chemical Vapor Deposition System. <i>ECS Meeting Abstracts</i> , 2019, , .	0.0	0
82	(Invited) Nanocarbons Fabricated By CVD: Medical and Electrochemical Applications. <i>ECS Meeting Abstracts</i> , 2019, , .	0.0	0