Maria Antonia herrero

List of Publications by Year
in descending order

98 papers	8,214 citations	50276 46 h-index	45317 90 g-index
106 all docs	106 docs citations	106 times ranked	11771 citing authors

#	Article	IF	Citations
1	Is airborne graphene oxide a possible hazard for the sexual reproduction of wind-pollinated plants?. Science of the Total Environment, 2022, 830, 154625.	8.0	5
2	Hydrogel-based soft pneumatic bending actuator with self-healing and proprioception capabilities. , 2022, , .		1
3	Quasi-Static FEA Model for a Multi-Material Soft Pneumatic Actuator in SOFA. IEEE Robotics and Automation Letters, 2022, 7, 7391-7398.	5.1	2
4	A novel hydrogel-based connection mechanism for soft modular robots. , 2022, , .		0
5	The lipid composition of few layers graphene and graphene oxide biomolecular corona. Carbon, 2021, 185, 591-598.	10.3	11
6	Skin irritation potential of graphene-based materials using a non-animal test. Nanoscale, 2020, 12, 610-622.	5.6	42
7	Autonomous self-healing hydrogel with anti-drying properties and applications in soft robotics. Applied Materials Today, 2020, 21, 100806.	4.3	23
8	Sublethal exposure of small few-layer graphene promotes metabolic alterations in human skin cells. Scientific Reports, 2020, 10, 18407.	3.3	15
9	Effects of Few-Layer Graphene on the Sexual Reproduction of Seed Plants: An In Vivo Study with Cucurbita pepo L.. Nanomaterials, 2020, 10, 1877.	4.1	5
10	Concentration Gradientâ€Based Soft Robotics: Hydrogels Out of Water. Advanced Functional Materials, 2020, 30, 2004417.	14.9	35
11	Graphene, other carbon nanomaterials and the immune system: toward nanoimmunity-by-design. JPhys Materials, 2020, 3, 034009.	4.2	29
12	Autonomous self-healing pneumatic McKibben muscle based on a new hydrogel material. , 2020, , .		4
13	Stimuli-responsive graphene-based hydrogel driven by disruption of triazine hydrophobic interactions. Nanoscale, 2020, 12, 7072-7081.	5.6	11
14	Microwave-assisted functionalization of carbon nanohorns with oligothiophene units with SERS activity. Chemical Communications, 2020, 56, 8948-8951.	4.1	2
15	Beyond graphene oxide acidity: Novel insights into graphene related materials effects on the sexual reproduction of seed plants. Journal of Hazardous Materials, 2020, 393, 122380.	12.4	14
16	Production and processing of graphene and related materials. 2D Materials, 2020, 7, 022001.	4.4	333
17	Conjugation with carbon nanotubes improves the performance of mesoporous silicon as Li-ion battery anode. Scientific Reports, 2020, 10, 5589.	3.3	31
18	Molecular adsorption of iminotriazine derivatives on graphene. JPhys Materials, 2020, 3, 034011.	4.2	4

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19	A new soft fingertip based on electroactive hydrogels. , 2019, , .		3
20	Graphene-based materials do not impair physiology, gene expression and growth dynamics of the aeroterrestrial microalga Trebouxia gelatinosa. Nanotoxicology, 2019, 13, 492-509.	3.0	12
21	Physically Cross-Linked Hydrogel Based on Phenyl-1,3,5-triazine: Soft Scaffold with Aggregation-Induced Emission. ACS Macro Letters, 2019, 8, 1391-1395.	4.8	22
22	Modulation of waveguide behaviour of an ICT 2H-Benzo[d][1,2,3]Triazole derivative with graphene. Organic Electronics, 2019, 68, 1-8.	2.6	5
23	Graphene hybrid materials? The role of graphene materials in the final structure of hydrogels. Nanoscale, 2019, 11, 4822-4830.	5.6	26
24	Production of ready-to-use few-layer graphene in aqueous suspensions. Nature Protocols, 2018, 13, 495-506.	12.0	62
25	Smart Hybrid Graphene Hydrogels: A Study of the Different Responses to Mechanical Stretching Stimulus. ACS Applied Materials & Interfaces, 2018, 10, 1987-1995.	8.0	53
26	Sweet graphene: exfoliation of graphite and preparation of glucose-graphene cocrystals through mechanochemical treatments. Green Chemistry, 2018, 20, 3581-3592.	9.0	56
27	Graphene Quantum Dotâ€“Aerogel: From Nanoscopic to Macroscopic Fluorescent Materials. Sensing Polyaromatic Compounds in Water. ACS Applied Materials & Interfaces, 2018, 10, 18192-18201.	8.0	48
28	Advantageous Microwave-Assisted Suzuki Polycondensation for the Synthesis of Aniline-Fluorene Alternate Copolymers as Molecular Model with Solvent Sensing Properties. Polymers, 2018, 10, 215.	4.5	14
29	Graphene and graphene oxide induce ROS production in human HaCaT skin keratinocytes: the role of xanthine oxidase and NADH dehydrogenase. Nanoscale, 2018, 10, 11820-11830.	5.6	90
30	Fewâ€Layer Graphene Kills Selectively Tumor Cells from Myelomonocytic Leukemia Patients. Angewandte Chemie - International Edition, 2017, 56, 3014-3019.	13.8	59
31	Differential cytotoxic effects of graphene and graphene oxide on skin keratinocytes. Scientific Reports, 2017, 7, 40572.	3.3	141
32	Fewâ€Layer Graphene Kills Selectively Tumor Cells from Myelomonocytic Leukemia Patients. Angewandte Chemie, 2017, 129, 3060-3065.	2.0	9
33	Gold nanoparticles as analytical tools for the quantification of small quantities of triazine derivatives anchored on graphene in water dispersions. RSC Advances, 2017, 7, 21982-21987.	3.6	2
34	Targeted killing of prostate cancer cells using antibodyâ€“drug conjugated carbon nanohorns. Journal of Materials Chemistry B, 2017, 5, 8821-8832.	5.8	20
35	Graphene Improves the Biocompatibility of Polyacrylamide Hydrogels: 3D Polymeric Scaffolds for Neuronal Growth. Scientific Reports, 2017, 7, 10942.	3.3	87
36	Carbon Nanohorns Modified with Conjugated Terthienyl/Terthiophene Structures: Additives to Enhance the Performance of Dye-Sensitized Solar Cells. Nanomaterials, 2017, 7, 294.	4.1	4

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37	Triazineâ€Carbon Nanotubes: New Platforms for the Design of Flavin Receptors. Chemistry - A European Journal, 2016, 22, 8879-8888.	3.3	2
38	Graphene Oxide Nanosheets Reshape Synaptic Function in Cultured Brain Networks. ACS Nano, 2016, 10, 4459-4471.	14.6	133
39	Design of Assembled Systems Based on Conjugated Polyphenylene Derivatives and Carbon Nanohorns. Chemistry - A European Journal, 2016, 22, 11643-11651.	3.3	4
40	Stability of melamine-exfoliated graphene in aqueous media: quantum-mechanical insights at the nanoscale. Physical Chemistry Chemical Physics, 2016, 18, 22203-22209.	2.8	16
41	Graphene-Based Interfaces Do Not Alter Target Nerve Cells. ACS Nano, 2016, 10, 615-623.	14.6	208
42	Green synthesis of luminescent blue emitters based on bistriazines with naphthalene as a Ï€-conjugated spacer. Dyes and Pigments, 2016, 124, 203-209.	3.7	7
43	Detection of Endotoxin Contamination of Graphene Based Materials Using the TNF-Î± Expression Test and Guidelines for Endotoxin-Free Graphene Oxide Production. PLoS ONE, 2016, 11, e0166816.	2.5	84
44	Dispersibilityâ€Dependent Biodegradation of Graphene Oxide by Myeloperoxidase. Small, 2015, 11, 3985-3994.	10.0	215
45	Nanocomposite Hydrogels: 3D Polymerâ€“Nanoparticle Synergies for On-Demand Drug Delivery. ACS Nano, 2015, 9, 4686-4697.	14.6	624
46	Non-conventional methods and media for the activation and manipulation of carbon nanoforms. Chemical Society Reviews, 2014, 43, 58-69.	38.1	76
47	Exfoliation of Graphite with Triazine Derivatives under Ball-Milling Conditions: Preparation of Few-Layer Graphene via Selective Noncovalent Interactions. ACS Nano, 2014, 8, 563-571.	14.6	241
48	Carbon nanohorns as alternative gene delivery vectors. RSC Advances, 2014, 4, 27315.	3.6	19
49	Selective suspension of single layer graphene mechanochemically exfoliated from carbon nanofibres. Nano Research, 2014, 7, 963-972.	10.4	73
50	Classification Framework for Grapheneâ€Based Materials. Angewandte Chemie - International Edition, 2014, 53, 7714-7718.	13.8	369
51	Carbon Nanohorns as Integrative Materials for Efficient Dyeâ€Sensitized Solar Cells. Advanced Materials, 2013, 25, 6513-6518.	21.0	46
52	Asbestosâ€like Pathogenicity of Long Carbon Nanotubes Alleviated by Chemical Functionalization. Angewandte Chemie - International Edition, 2013, 52, 2274-2278.	13.8	153
53	Carbon Nanotubes: Synthesis, Structure, Functionalization, and Characterization. Topics in Current Chemistry, 2013, 350, 65-109.	4.0	10
54	An Atomâ€Economical Approach to Functionalized Singleâ€Walled Carbon Nanotubes: Reaction with Disulfides. Angewandte Chemie - International Edition, 2013, 52, 6480-6483.	13.8	33

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55	Organic Functionalization of Graphene in Dispersions. Accounts of Chemical Research, 2013, 46, 138-148.	15.6	229
56	An Atomâ€Economical Approach to Functionalized Singleâ€Walled Carbon Nanotubes: Reaction with Disulfides. Angewandte Chemie, 2013, 125, 6608-6611.	2.0	5
57	Synthesis and Characterization of Highly Water-Soluble Dendrofulleropyrrolidine Bisadducts with DNA Binding Activity. Organic Letters, 2012, 14, 4450-4453.	4.6	8
58	Enhanced docetaxel-mediated cytotoxicity in human prostate cancer cells through knockdown of cofilin-1 by carbon nanohorn delivered siRNA. Biomaterials, 2012, 33, 8152-8159.	11.4	45
59	In vivo degradation of functionalized carbon nanotubes after stereotactic administration in the brain cortex. Nanomedicine, 2012, 7, 1485-1494.	3.3	104
60	Degree of Chemical Functionalization of Carbon Nanotubes Determines Tissue Distribution and Excretion Profile. Angewandte Chemie - International Edition, 2012, 51, 6389-6393.	13.8	109
61	Carbon nanohorns functionalized with polyamidoamine dendrimers as efficient biocarrier materials for gene therapy. Carbon, 2012, 50, 2832-2844.	10.3	58
62	Translocation mechanisms of chemically functionalised carbon nanotubes across plasma membranes. Biomaterials, 2012, 33, 3334-3343.	11.4	224
63	Functionalised carbon nanotubes: high biocompatibility with lack of toxicity. International Journal of Nanotechnology, 2011, 8, 885.	0.2	14
64	Influence of Polarity on the Scalability and Reproducibility of Solvent-Free Microwave-Assisted Reactions. Combinatorial Chemistry and High Throughput Screening, 2011, 14, 109-116.	1.1	12
65	Few-layer graphenes from ball-milling of graphite with melamine. Chemical Communications, 2011, 47, 10936.	4.1	299
66	Charge Transfer Events in Semiconducting Single-Wall Carbon Nanotubes. Journal of the American Chemical Society, 2011, 133, 18696-18706.	13.7	28
67	Ballâ€Milling Modification of Singleâ€Walled Carbon Nanotubes: Purification, Cutting, and Functionalization. Small, 2011, 7, 665-674.	10.0	60
68	Highly Conductive Redox Proteinâ€“Carbon Nanotube Complex for Biosensing Applications. Advanced Functional Materials, 2011, 21, 153-157.	14.9	15
69	Functional motor recovery from brain ischemic insult by carbon nanotube-mediated siRNA silencing. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 10952-10957.	7.1	217
70	Functionalization of carbon nanotubes for applications in materials science and nanomedicine. Pure and Applied Chemistry, 2010, 82, 853-861.	1.9	18
71	Enhanced cellular internalization and gene silencing with a series of cationic dendronâ€multiwalled carbon nanotube:siRNA complexes. FASEB Journal, 2010, 24, 4354-4365.	0.5	71
72	Gold Dendrimer Encapsulated Nanoparticles as Labeling Agents for Multiwalled Carbon Nanotubes. ACS Nano, 2010, 4, 905-912.	14.6	59

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73	Versatile microwave-induced reactions for the multiple functionalization of carbon nanotubes. Organic and Biomolecular Chemistry, 2010, 8, 1936.	2.8	26
74	Hybrid materials based on Pd nanoparticles on carbon nanostructures for environmentally benign Câ€“C coupling chemistry. Nanoscale, 2010, 2, 1390.	5.6	86
75	Antitumor Activity and Prolonged Survival by Carbonâ€Nanotubeâ€Mediated Therapeutic siRNA Silencing in a Human Lung Xenograft Model. Small, 2009, 5, 1176-1185.	10.0	153
76	Carbon Nanotubes and Microwaves: Interactions, Responses, and Applications. ACS Nano, 2009, 3, 3819-3824.	14.6	270
77	Synthesis and Characterization of a Carbon Nanotubeâ^'Dendron Series for Efficient siRNA Delivery. Journal of the American Chemical Society, 2009, 131, 9843-9848.	13.7	168
78	Efficient functionalization of carbon nanohorns via microwave irradiation. Journal of Materials Chemistry, 2009, 19, 4407.	6.7	46
79	Carbonâ€Nanotube Shape and Individualization Critical for Renal Excretion. Small, 2008, 4, 1130-1132.	10.0	172
80	Synthesis of dendrimerâ€“carbon nanotube conjugates. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 1402-1407.	1.8	12
81	Dynamic Imaging of Functionalized Multiâ€Walled Carbon Nanotube Systemic Circulation and Urinary Excretion. Advanced Materials, 2008, 20, 225-230.	21.0	196
82	Tissue histology and physiology following intravenous administration of different types of functionalized multiwalled carbon nanotubes. Nanomedicine, 2008, 3, 149-161.	3.3	149
83	Microwave-Induced Multiple Functionalization of Carbon Nanotubes. Journal of the American Chemical Society, 2008, 130, 8094-8100.	13.7	157
84	Recent Advances in the Covalent Functionalization of Carbon Nanotubes. Molecular Crystals and Liquid Crystals, 2008, 483, 21-32.	0.9	21
85	Nonthermal Microwave Effects Revisited:â€‰ On the Importance of Internal Temperature Monitoring and Agitation in Microwave Chemistry. Journal of Organic Chemistry, 2008, 73, 36-47.	3.2	482
86	Microwave-Assisted Reactions in Heterocyclic Compounds with Applications in Medicinal and Supramolecular Chemistry. Combinatorial Chemistry and High Throughput Screening, 2007, 10, 877-902.	1.1	47
87	Reproducibility and Scalability of Solvent-Free Microwave-Assisted Reactions:From Domestic Ovens to Controllable Parallel Applications. Combinatorial Chemistry and High Throughput Screening, 2007, 10, 163-169.	1.1	19
88	Green and chemoselective oxidation of sulfides with sodium perborate and sodium percarbonate: nucleophilic and electrophilic character of the oxidation system. Green Chemistry, 2007, 9, 331-336.	9.0	70
89	Solvent-Free Thermal and Microwave-Assisted [3 + 2] Cycloadditions between Stabilized Azomethine Ylides and Nitrostyrenes. An Experimental and Theoretical Study. Journal of Organic Chemistry, 2007, 72, 4313-4322.	3.2	85
90	Reversible Microwave-Assisted Cycloaddition of Aziridines to Carbon Nanotubes. Journal of the American Chemical Society, 2007, 129, 14580-14581.	13.7	115

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91	Microwave Irradiation as an Efficient Tool for the Generation of N-Heterocyclico-Quinodimethanes: Synthesis of Polyheterocyclic Compounds by Diels-Alder Reactions. Synlett, 2006, 2006, 0579-0582.	1.8	8
92	Direct Microwave Synthesis ofN,Nâ€²-Diacylhydrazines and Boc-Protected Hydrazides by in situ Carbonylations under Air. Synlett, 2004, 2004, 2335-2338.	1.8	5
93	Enhancing stereochemical diversity by means of microwave irradiation in the absence of solvent: Synthesis of highly substituted nitroproline esters via 1,3-dipolar reactions. Molecular Diversity, 2003, 7, 175-180.	3.9	11
94	Single-Wall Carbon Nanotubeâ€“Ferrocene Nanohybrids: Observing Intramolecular Electron Transfer in Functionalized SWNTs. Angewandte Chemie - International Edition, 2003, 42, 4206-4209.	13.8	188
95	Microwave-Enhanced Reactivity of Non-Activated Dienophiles Towards Pyrazineo-Quinodimethanes. Synlett, 2002, 2002, 2037-2038.	1.8	10
96	Purification of HiPCO Carbon Nanotubes via Organic Functionalization. Journal of the American Chemical Society, 2002, 124, 14318-14319.	13.7	210
97	Microwave-assisted purification of HIPCO carbon nanotubes. Chemical Communications, 2002, , 2308-2309.	4.1	59
98	Novel Versatile Fullerene Synthons. Journal of Organic Chemistry, 2001, 66, 4915-4920.	3.2	136