

# Lucia Gutierrez

## List of Publications by Year in descending order

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89  
papers

4,701  
citations

117571

34  
h-index

98753

67  
g-index

93  
all docs

93  
docs citations

93  
times ranked

7489  
citing authors

#	ARTICLE	IF	CITATIONS
1	Magnetogenetics: remote activation of cellular functions triggered by magnetic switches. <i>Nanoscale</i> , 2022, 14, 2091-2118.	2.8	17
2	Iron oxide-manganese oxide nanoparticles with tunable morphology and switchable MRI contrast mode triggered by intracellular conditions. <i>Journal of Colloid and Interface Science</i> , 2022, 613, 447-460.	5.0	10
3	Magneto-optical hyperthermia agents based on probiotic bacteria loaded with magnetic and gold nanoparticles. <i>Nanoscale</i> , 2022, 14, 5716-5724.	2.8	9
4	Iron Speciation in Animal Tissues Using AC Magnetic Susceptibility Measurements: Quantification of Magnetic Nanoparticles, Ferritin, and Other Iron-Containing Species. <i>ACS Applied Bio Materials</i> , 2022, 5, 1879-1889.	2.3	6
5	Iron-Gold Nanoflowers: A Promising Tool for Multimodal Imaging and Hyperthermia Therapy. <i>Pharmaceutics</i> , 2022, 14, 636.	2.0	13
6	Ultrasmall Manganese Ferrites for In Vivo Catalase Mimicking Activity and Multimodal Bioimaging. <i>Small</i> , 2022, 18, e2106570.	5.2	23
7	Triphenylene-ethylammonium tetrachlorometallate salts: multicolumnar mesophases, thermochromism and Langmuir films. <i>Journal of Materials Chemistry C</i> , 2022, 10, 9222-9231.	2.7	4
8	Tunable Control of the Structural Features and Related Physical Properties of Mn <sub>3</sub> O <sub>4</sub> Nanoparticles: Implication on Their Heating Performance by Magnetic Hyperthermia. <i>Journal of Physical Chemistry C</i> , 2022, 126, 10110-10128.	1.5	8
9	Synthesis and Applications of Anisotropic Magnetic Iron Oxide Nanoparticles. , 2021, , 65-89.		0
10	Critical Parameters to Improve Pancreatic Cancer Treatment Using Magnetic Hyperthermia: Field Conditions, Immune Response, and Particle Biodistribution. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 12982-12996.	4.0	34
11	Novel, simple, and environmentally safe method for wastewater pollutant removal. <i>Journal of Water Process Engineering</i> , 2021, 42, 102181.	2.6	1
12	HAP-Multitag, a PET and Positive MRI Contrast Nanotracer for the Longitudinal Characterization of Vascular Calcifications in Atherosclerosis. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 45279-45290.	4.0	12
13	New insights into the structural analysis of maghemite and (MFe <sub>2</sub> O <sub>4</sub> , M = Co,) Tj ETQq1 1 0.784314 rgBT / 3.2 22 <i>Frontiers</i> , 2020, 4, 3063-3073.	3.2	22
14	The Intracellular Number of Magnetic Nanoparticles Modulates the Apoptotic Death Pathway after Magnetic Hyperthermia Treatment. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 43474-43487.	4.0	36
15	Smartphone-Based Colorimetric Method to Quantify Iron Concentration and to Determine the Nanoparticle Size from Suspensions of Magnetic Nanoparticles. <i>Particle and Particle Systems Characterization</i> , 2020, 37, 2000032.	1.2	6
16	The influence of cation incorporation and leaching in the properties of Mn-doped nanoparticles for biomedical applications. <i>Journal of Colloid and Interface Science</i> , 2020, 578, 510-521.	5.0	21
17	Toxicity and biodegradation of zinc ferrite nanoparticles in <i>Xenopus laevis</i> . <i>Journal of Nanoparticle Research</i> , 2019, 21, 1.	0.8	6
18	Flower-like Mn-Doped Magnetic Nanoparticles Functionalized with Î± <sub>5</sub> β <sub>3</sub> -Integrin-Ligand to Efficiently Induce Intracellular Heat after Alternating Magnetic Field Exposition, Triggering Glioma Cell Death. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 26648-26663.	4.0	52

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19	A Roadmap to the Standardization of In Vivo Magnetic Hyperthermia. , 2019, , 317-337.		9
20	Design of stable magnetic hybrid nanoparticles of Si-entrapped HRP. PLoS ONE, 2019, 14, e0214004.	1.1	19
21	Cu-Doped Extremely Small Iron Oxide Nanoparticles with Large Longitudinal Relaxivity: One-Pot Synthesis and in Vivo Targeted Molecular Imaging. ACS Omega, 2019, 4, 2719-2727.	1.6	35
22	<i>In vivo</i> comparison of the biodistribution and long-term fate of colloids “ gold nanoprisms and nanorods “ with minimum surface modification. Nanomedicine, 2019, 14, 3035-3055.	1.7	11
23	Design strategies for shape-controlled magnetic iron oxide nanoparticles. Advanced Drug Delivery Reviews, 2019, 138, 68-104.	6.6	217
24	Aggregation effects on the magnetic properties of iron oxide colloids. Nanotechnology, 2019, 30, 112001.	1.3	131
25	Unambiguous detection of atherosclerosis using bioorthogonal nanomaterials. Nanomedicine: Nanotechnology, Biology, and Medicine, 2019, 17, 26-35.	1.7	18
26	Triggering antitumoural drug release and gene expression by magnetic hyperthermia. Advanced Drug Delivery Reviews, 2019, 138, 326-343.	6.6	92
27	Effect of Surface Chemistry and Associated Protein Corona on the Long-Term Biodegradation of Iron Oxide Nanoparticles In Vivo. ACS Applied Materials & Interfaces, 2018, 10, 4548-4560.	4.0	123
28	Bacteria-Carried Iron Oxide Nanoparticles for Treatment of Anemia. Bioconjugate Chemistry, 2018, 29, 1785-1791.	1.8	36
29	Ferritin is secreted via 2 distinct nonclassical vesicular pathways. Blood, 2018, 131, 342-352.	0.6	143
30	Unravelling the mechanisms that determine the uptake and metabolism of magnetic single and multicore nanoparticles in a <i>Xenopus laevis</i> model. Nanoscale, 2018, 10, 690-704.	2.8	21
31	Dual Role of Magnetic Nanoparticles as Intracellular Hotspots and Extracellular Matrix Disruptors Triggered by Magnetic Hyperthermia in 3D Cell Culture Models. ACS Applied Materials & Interfaces, 2018, 10, 44301-44313.	4.0	40
32	Magnetic properties of nanoparticles as a function of their spatial distribution on liposomes and cells. Physical Chemistry Chemical Physics, 2018, 20, 17829-17838.	1.3	18
33	Controlling the Size and Shape of Uniform Magnetic Iron Oxide Nanoparticles for Biomedical Applications. , 2018, , 3-24.		3
34	Time-course assessment of the aggregation and metabolization of magnetic nanoparticles. Acta Biomaterialia, 2017, 58, 181-195.	4.1	58
35	How shape and internal structure affect the magnetic properties of anisometric magnetite nanoparticles. Acta Materialia, 2017, 125, 416-424.	3.8	43
36	Formation Mechanism of Maghemite Nanoflowers Synthesized by a Polyol-Mediated Process. ACS Omega, 2017, 2, 7172-7184.	1.6	82

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37	One-Step Fast Synthesis of Nanoparticles for MRI: Coating Chemistry as the Key Variable Determining Positive or Negative Contrast. <i>Langmuir</i> , 2017, 33, 10239-10247.	1.6	43
38	The actin-binding protein profilin 2 is a novel regulator of iron homeostasis. <i>Blood</i> , 2017, 130, 1934-1945.	0.6	26
39	Facile microwave synthesis of uniform magnetic nanoparticles with minimal sample processing. <i>Journal of Magnetism and Magnetic Materials</i> , 2017, 421, 283-291.	1.0	14
40	Nanotechnology in Drug Discovery and Development. , 2017, , 264-295.		12
41	Targeted Nanoparticles for the Treatment of Alzheimer's Disease. <i>Current Pharmaceutical Design</i> , 2017, 23, 1927-1952.	0.9	27
42	Counterion and solvent effects on the size of magnetite nanocrystals obtained by oxidative precipitation. <i>Journal of Materials Chemistry C</i> , 2016, 4, 9482-9488.	2.7	19
43	Magnetic study on biodistribution and biodegradation of oral magnetic nanostructures in the rat gastrointestinal tract. <i>Nanoscale</i> , 2016, 8, 15041-15047.	2.8	13
44	Detailed magnetic monitoring of the enhanced magnetism of ferrihydrite along its progressive transformation into hematite. <i>Journal of Geophysical Research: Solid Earth</i> , 2016, 121, 4118-4129.	1.4	14
45	Fast synthesis and bioconjugation of <sup>68</sup> Ga core-doped extremely small iron oxide nanoparticles for PET/MR imaging. <i>Contrast Media and Molecular Imaging</i> , 2016, 11, 203-210.	0.4	68
46	Dose-Response Bioconversion and Toxicity Analysis of Magnetite Nanoparticles. <i>IEEE Magnetics Letters</i> , 2016, 7, 1-5.	0.6	12
47	Superparamagnetic iron oxide nanoparticle uptake alters M2 macrophage phenotype, iron metabolism, migration and invasion. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2016, 12, 1127-1138.	1.7	87
48	Metal Homeostasis Regulators Suppress FRDA Phenotypes in a Drosophila Model of the Disease. <i>PLoS ONE</i> , 2016, 11, e0159209.	1.1	23
49	Tissue Iron Distribution Assessed by MRI in Patients with Iron Loading Anemias. <i>PLoS ONE</i> , 2015, 10, e0139220.	1.1	11
50	Challenges for Diagnosis of Malaria and Neglected Tropical Diseases in Elimination Settings. <i>BioMed Research International</i> , 2015, 2015, 1-2.	0.9	1
51	Safety assessment of chronic oral exposure to iron oxide nanoparticles. <i>Nanotechnology</i> , 2015, 26, 205101.	1.3	45
52	Degradation of magnetic nanoparticles mimicking lysosomal conditions followed by AC susceptibility. <i>Biomedizinische Technik</i> , 2015, 60, 417-25.	0.9	41
53	Manipulating directional cell motility using intracellular superparamagnetic nanoparticles. <i>Nanoscale</i> , 2015, 7, 4884-4889.	2.8	25
54	Synthesis methods to prepare single- and multi-core iron oxide nanoparticles for biomedical applications. <i>Dalton Transactions</i> , 2015, 44, 2943-2952.	1.6	96

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55	Biotransformation of magnetic nanoparticles as a function of coating in a rat model. <i>Nanoscale</i> , 2015, 7, 16321-16329.	2.8	52
56	The affinity of magnetic microspheres for <i>Schistosoma</i> eggs. <i>International Journal for Parasitology</i> , 2015, 45, 43-50.	1.3	18
57	Efficient and safe internalization of magnetic iron oxide nanoparticles: Two fundamental requirements for biomedical applications. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2014, 10, 733-743.	1.7	101
58	Variability and consistency in lung inflammatory responses to particles with a geogenic origin. <i>Respirology</i> , 2014, 19, 58-66.	1.3	32
59	Prospects for magnetic nanoparticles in systemic administration: synthesis and quantitative detection. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 4456-4464.	1.3	21
60	Profilin2 Is Controlled By the Iron Regulatory Proteins and Modulates Iron Homeostasis. <i>Blood</i> , 2014, 124, 749-749.	0.6	0
61	Long term biotransformation and toxicity of dimercaptosuccinic acid-coated magnetic nanoparticles support their use in biomedical applications. <i>Journal of Controlled Release</i> , 2013, 171, 225-233.	4.8	113
62	Effect of Anesthesia on Magnetic Nanoparticle Biodistribution After Intravenous Injection. <i>IEEE Transactions on Magnetics</i> , 2013, 49, 398-401.	1.2	14
63	Deferiprone and idebenone rescue frataxin depletion phenotypes in a <i>Drosophila</i> model of Friedreich's ataxia. <i>Gene</i> , 2013, 521, 274-281.	1.0	50
64	Biophysical and genetic analysis of iron partitioning and ferritin function in <i>Drosophila melanogaster</i> . <i>Metallomics</i> , 2013, 5, 997.	1.0	38
65	The Iron Distribution and Magnetic Properties of Schistosome Eggshells: Implications for Improved Diagnostics. <i>PLoS Neglected Tropical Diseases</i> , 2013, 7, e2219.	1.3	22
66	Identification of nonferritin mitochondrial iron deposits in a mouse model of Friedreich ataxia. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 20590-20595.	3.3	85
67	Fighting cancer with magnetic nanoparticles and immunotherapy. , 2012, , .		3
68	Quantitative magnetic analysis reveals ferritin-like iron as the most predominant iron-containing species in the murine Hfe-haemochromatosis. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2012, 1822, 1147-1153.	1.8	21
69	Biological applications of magnetic nanoparticles. <i>Chemical Society Reviews</i> , 2012, 41, 4306.	18.7	1,079
70	Insight into Serum Protein Interactions with Functionalized Magnetic Nanoparticles in Biological Media. <i>Langmuir</i> , 2012, 28, 4346-4356.	1.6	59
71	Renal iron load in sickle cell disease is influenced by severity of haemolysis. <i>British Journal of Haematology</i> , 2012, 157, 599-605.	1.2	23
72	Magnetic Capsules for NMR Imaging: Effect of Magnetic Nanoparticles Spatial Distribution and Aggregation. <i>Journal of Physical Chemistry C</i> , 2011, 115, 6257-6264.	1.5	83

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73	Ac magnetic susceptibility study of in vivo nanoparticle biodistribution. <i>Journal Physics D: Applied Physics</i> , 2011, 44, 255002.	1.3	40
74	Dimercaptosuccinic acid-coated magnetite nanoparticles for magnetically guided in vivo delivery of interferon gamma for cancer immunotherapy. <i>Biomaterials</i> , 2011, 32, 2938-2952.	5.7	170
75	Nuclear Magnetic Resonance: A Tool for Malaria Diagnosis?. <i>American Journal of Tropical Medicine and Hygiene</i> , 2011, 85, 815-817.	0.6	15
76	Magnetic Nanoparticle Location and Quantification in Mice Tissues after Intravenous Injection. , 2010, , .		1
77	Serum ferritin is derived primarily from macrophages through a nonclassical secretory pathway. <i>Blood</i> , 2010, 116, 1574-1584.	0.6	364
78	Zinc accumulation in heterozygous mutants of <i>fumble</i> , the pantothenate kinase homologue of <i>Drosophila</i> . <i>FEBS Letters</i> , 2010, 584, 2942-2946.	1.3	24
79	Could a dysfunction of ferritin be a determinant factor in the aetiology of some neurodegenerative diseases?. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2010, 1800, 770-782.	1.1	64
80	Iron speciation study in Hfe knockout mice tissues: Magnetic and ultrastructural characterisation. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2009, 1792, 541-547.	1.8	25
81	The speciation of iron in desert dust collected in Gran Canaria (Canary Islands): Combined chemical, magnetic and optical analysis. <i>Atmospheric Environment</i> , 2008, 42, 8987-8996.	1.9	52
82	Whole tissue AC susceptibility after superparamagnetic iron oxide contrast agent administration in a rat model. <i>Journal of Magnetism and Magnetic Materials</i> , 2007, 311, 460-463.	1.0	8
83	Biological tissue magnetism in the frame of iron overload diseases. <i>Journal of Magnetism and Magnetic Materials</i> , 2007, 316, 126-131.	1.0	10
84	Comparative study of iron-containing haematinics from the point of view of their magnetic properties. <i>Journal of Magnetism and Magnetic Materials</i> , 2007, 316, 136-139.	1.0	9
85	The role of dipolar interaction in the quantitative determination of particulate magnetic carriers in biological tissues. <i>Physics in Medicine and Biology</i> , 2007, 52, 5043-5056.	1.6	41
86	Bioinorganic transformations of liver iron deposits observed by tissue magnetic characterisation in a rat model. <i>Journal of Inorganic Biochemistry</i> , 2006, 100, 1790-1799.	1.5	46
87	Magnetic and structural study of the state of iron in the oral haematinic ferrimannitol ovoalbumin. <i>Journal of Inorganic Biochemistry</i> , 2006, 100, 413-417.	1.5	2
88	Magnetostructural study of iron sucrose. <i>Journal of Magnetism and Magnetic Materials</i> , 2005, 293, 69-74.	1.0	18
89	Magnetic characterisation of rat muscle tissues after subcutaneous iron dextran injection. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2005, 1740, 434-445.	1.8	36