

# Lidia Martinez

## List of Publications by Year in descending order

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Version: 2024-02-01

65  
papers

1,539  
citations

361045

20  
h-index

344852

36  
g-index

66  
all docs

66  
docs citations

66  
times ranked

2542  
citing authors

#	ARTICLE	IF	CITATIONS
1	Production and processing of graphene and related materials. 2D Materials, 2020, 7, 022001.	2.0	333
2	The ultimate step towards a tailored engineering of core@shell and core@shell@shell nanoparticles. Nanoscale, 2014, 6, 13483-13486.	2.8	101
3	Surface study of cerium oxide based coatings obtained by cathodic electrodeposition on zinc. Applied Surface Science, 2011, 257, 6202-6207.	3.1	82
4	Generation of Nanoparticles with Adjustable Size and Controlled Stoichiometry: Recent Advances. Langmuir, 2012, 28, 11241-11249.	1.6	79
5	Citric juice-mediated synthesis of tellurium nanoparticles with antimicrobial and anticancer properties. Green Chemistry, 2019, 21, 1982-1998.	4.6	60
6	Prevalence of non-aromatic carbonaceous molecules in the inner regions of circumstellar envelopes. Nature Astronomy, 2020, 4, 97-105.	4.2	48
7	Thermal Diffusion at Nanoscale: From CoAu Alloy Nanoparticles to Co@Au Core/Shell Structures. Journal of Physical Chemistry C, 2013, 117, 3101-3108.	1.5	35
8	The Chemistry of Cosmic Dust Analogs from C, C <sub>2</sub> , and C <sub>2</sub> H <sub>2</sub> in C-rich Circumstellar Envelopes. Astrophysical Journal, 2020, 895, 97.	1.6	30
9	Core@shell, Au@TiO <sub>x</sub> nanoparticles by gas phase synthesis. Nanoscale, 2017, 9, 6463-6470.	2.8	29
10	Gas-phase synthesis of nanoparticles: present status and perspectives. MRS Communications, 2018, 8, 947-954.	0.8	29
11	Influence of N, Ar and Si ion implantation on the passive layer and corrosion behaviour of AISI 304 and 430 stainless steels. Surface and Coatings Technology, 2006, 200, 5123-5131.	2.2	28
12	Aspect-ratio and lateral-resolution enhancement in force microscopy by attaching nanoclusters generated by an ion cluster source at the end of a silicon tip. Review of Scientific Instruments, 2011, 82, 023710.	0.6	27
13	Matrix and interaction effects on the magnetic properties of Co nanoparticles embedded in gold and vanadium. Physical Chemistry Chemical Physics, 2013, 15, 316-329.	1.3	27
14	Precisely controlled fabrication, manipulation and in-situ analysis of Cu based nanoparticles. Scientific Reports, 2018, 8, 7250.	1.6	27
15	Direct synthesis of graphene on silicon oxide by low temperature plasma enhanced chemical vapor deposition. Nanoscale, 2018, 10, 12779-12787.	2.8	26
16	Orientation and shape selection of self-assembled epitaxial Ce <sub>1-x</sub> GdxO <sub>2-y</sub> nanostructures grown by chemical solution deposition. CrystEngComm, 2011, 13, 6719.	1.3	25
17	Application of diamond-like carbon coatings to elastomers frictional surfaces. Tribology International, 2009, 42, 584-590.	3.0	24
18	Facile synthesis of an aminopropylsilane layer on Si/SiO <sub>2</sub> substrates using ethanol as APTES solvent. MethodsX, 2020, 7, 100931.	0.7	24

#	ARTICLE	IF	CITATIONS
19	Morphological, structural, and magnetic properties of Co nanoparticles in a silicon oxide matrix. <i>Journal of Nanoparticle Research</i> , 2011, 13, 5321-5333.	0.8	23
20	Influence of friction on the surface characteristics of EPDM elastomers with different carbon black contents. <i>Tribology International</i> , 2011, 44, 996-1003.	3.0	23
21	Corrosion behaviour of different hot rolled steels. <i>Corrosion Science</i> , 2006, 48, 472-480.	3.0	22
22	Raman amplification in the ultra-small limit of Ag nanoparticles on SiO <sub>2</sub> and graphene: Size and inter-particle distance effects. <i>Materials and Design</i> , 2020, 192, 108702.	3.3	22
23	Ion implantation as a surface modification technique to improve localised corrosion of different stainless steels. <i>Surface and Coatings Technology</i> , 2002, 155, 250-259.	2.2	21
24	Surface analysis of NBR and HNBR elastomers modified with different plasma treatments. <i>Vacuum</i> , 2007, 81, 1489-1492.	1.6	21
25	Influence of thermal ageing on surface degradation of ethylene- $\epsilon$ -propylene- $\epsilon$ -diene elastomer. <i>Journal of Applied Polymer Science</i> , 2011, 119, 242-251.	1.3	20
26	The effect of nitrogen ion implantation on the corrosion behaviour of stainless steels in chloride media. <i>Surface and Coatings Technology</i> , 2005, 200, 1609-1615.	2.2	18
27	Understanding the role of thiol and disulfide self-assembled DNA receptor monolayers for biosensing applications. <i>European Biophysics Journal</i> , 2010, 39, 1433-1444.	1.2	18
28	Synergic antibacterial coatings combining titanium nanocolumns and tellurium nanorods. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2019, 17, 36-46.	1.7	17
29	Nitrogen ion implantation on stainless steel: AFM study of surface modification. <i>Applied Surface Science</i> , 2005, 243, 409-414.	3.1	16
30	Aloe Vera-Mediated Te Nanostructures: Highly Potent Antibacterial Agents and Moderated Anticancer Effects. <i>Nanomaterials</i> , 2021, 11, 514.	1.9	16
31	Broad-band high-resolution rotational spectroscopy for laboratory astrophysics. <i>Astronomy and Astrophysics</i> , 2019, 626, A34.	2.1	15
32	Growth and magnetic characterization of Co nanoparticles obtained by femtosecond pulsed laser deposition. <i>Physical Review B</i> , 2009, 79, .	1.1	14
33	X-ray absorption and magnetic circular dichroism characterization of a novel ferromagnetic MnNx phase in Mn/Si <sub>3</sub> N <sub>4</sub> multilayers. <i>Applied Physics Letters</i> , 2008, 93, .	1.5	12
34	Dispersion and Functionalization of Nanoparticles Synthesized by Gas Aggregation Source: Opening New Routes Toward the Fabrication of Nanoparticles for Biomedicine. <i>Langmuir</i> , 2015, 31, 13813-13820.	1.6	12
35	Using radio astronomical receivers for molecular spectroscopic characterization in astrochemical laboratory simulations: A proof of concept. <i>Astronomy and Astrophysics</i> , 2018, 609, A15.	2.1	12
36	Photoinduced Charge Transfer and Trapping on Single Gold Metal Nanoparticles on TiO <sub>2</sub> . <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 50531-50538.	4.0	12

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37	Influence of the linker type on the Au-S binding properties of thiol and disulfide-modified DNA self-assembly on polycrystalline gold. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 3301.	1.3	11
38	Tuning the size, composition and structure of Au and Co <sub>50</sub> Au <sub>50</sub> nanoparticles by high-power impulse magnetron sputtering in gas-phase synthesis. <i>Nanotechnology</i> , 2019, 30, 065606.	1.3	11
39	Photo-Induced Self-Cleaning and Wettability in TiO <sub>2</sub> Nanocolumn Arrays Obtained by Glancing-Angle Deposition with Sputtering. <i>Advanced Sustainable Systems</i> , 2021, 5, 2100071.	2.7	11
40	Morphology and capping effects in the magnetic and magneto-optical properties of nanoparticulate Co films. <i>Physical Review B</i> , 2008, 77, .	1.1	10
41	Green synthesis of starch-capped Cu <sub>2</sub> O nanocubes and their application in the direct electrochemical detection of glucose. <i>RSC Advances</i> , 2021, 11, 13711-13721.	1.7	10
42	Silicon and Hydrogen Chemistry under Laboratory Conditions Mimicking the Atmosphere of Evolved Stars. <i>Astrophysical Journal</i> , 2021, 906, 44.	1.6	10
43	Composition-Dependent Cytotoxic and Antibacterial Activity of Biopolymer-Capped Ag/Au Bimetallic Nanoparticles against Melanoma and Multidrug-Resistant Pathogens. <i>Nanomaterials</i> , 2022, 12, 779.	1.9	10
44	Growth and characterization of FeB nanoparticles for potential application as magnetic resonance imaging contrast agent. <i>Materials Research Express</i> , 2014, 1, 025008.	0.8	9
45	Versatile Graphene-Based Platform for Robust Nanobiohybrid Interfaces. <i>ACS Omega</i> , 2019, 4, 3287-3297.	1.6	9
46	Electrocatalytic Behavior of PtCu Clusters Produced by Nanoparticle Beam Deposition. <i>Journal of Physical Chemistry C</i> , 2020, 124, 23683-23689.	1.5	9
47	Steering Hydrocarbon Selectivity in CO <sub>2</sub> Electroreduction over Soft-Landed CuO Nanoparticle-Functionalized Gas Diffusion Electrodes. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 2691-2702.	4.0	9
48	Silicon ion implantation on austenitic and ferritic stainless steels against localized aqueous corrosion. <i>Surface and Coatings Technology</i> , 2000, 133-134, 344-350.	2.2	8
49	Asymmetric magnetization reversal process in Co nanohill arrays. <i>Journal of Applied Physics</i> , 2009, 106, 103906.	1.1	8
50	Orientation symmetry breaking in self-assembled Ce <sub>x</sub> Gd <sub>x</sub> O <sub>2y</sub> nanowires derived from chemical solutions. <i>RSC Advances</i> , 2016, 6, 97226-97236.	1.7	8
51	Core-Satellite Gold Nanoparticle Complexes Grown by Inert Gas-Phase Condensation. <i>Journal of Physical Chemistry C</i> , 2020, 124, 24441-24450.	1.5	8
52	Metal-catalyst-free gas-phase synthesis of long-chain hydrocarbons. <i>Nature Communications</i> , 2021, 12, 5937.	5.8	7
53	Sinergistic effect of ion implantation as a surface modification technique to improve localised corrosion of AISI 304 austenitic stainless steel. <i>Surface and Coatings Technology</i> , 2005, 195, 70-80.	2.2	6
54	Optical and magneto-optical properties of Co-SiO <sub>x</sub> thin films. <i>Journal of Nanoparticle Research</i> , 2011, 13, 2653-2659.	0.8	6

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55	Investigation of the Working Parameters of a Single Magnetron of a Multiple Ion Cluster Source: Determination of the Relative Influence of the Parameters on the Size and Density of Nanoparticles. Dataset Papers in Science, 2013, 2013, 1-8.	1.0	5
56	Ar-implantation on AISI 304 stainless steel against pit initiation processes. Surface and Coatings Technology, 2006, 201, 1671-1678.	2.2	4
57	Redox Properties of Ordered Macroporous Ce-Zr Mixed Oxides. Journal of the Electrochemical Society, 2010, 157, B1499.	1.3	4
58	Spontaneous Formation of Core@shell Co@Cr Nanoparticles by Gas Phase Synthesis. Applied Nano, 2020, 1, 87-101.	0.9	4
59	Multiple Ion Cluster Source for the Generation of Magnetic Nanoparticles: Investigation of the Efficiency as a Function of the Working Parameters for the Case of Cobalt. Dataset Papers in Science, 2014, 2014, 1-9.	1.0	4
60	Photoemission study of fluorination atmospheric pressure plasma processes on EPDM: Influence of the carrier and fluorinating gas. Applied Surface Science, 2010, 257, 832-836.	3.1	3
61	Redox Properties of Ordered Macroporous Ce-Zr Mixed Oxides. ECS Transactions, 2009, 25, 1573-1582.	0.3	2
62	INFRA-ICE: An ultra-high vacuum experimental station for laboratory astrochemistry. Review of Scientific Instruments, 2020, 91, 124101.	0.6	2
63	Corrosion studies of different ferrous alloys for rolling cylinders. Materials & Design, 2007, 28, 196-202.	5.1	1
64	Compositional and structural medium energy ion scattering study of the temperature mediated diffusion determination at the Co/V interface in Co/V/MgO(100). Surface Science, 2010, 604, 2177-2183.	0.8	1
65	(Co, Zn)O compound obtained from ZnTe vapor deposition on Co/Si substrates. Applied Physics A: Materials Science and Processing, 2010, 99, 657-664.	1.1	0