Marcelo M Mariscal

List of Publications by Year in Descending Order

68 papers	1,233 citations	21 h-index	32 g-index
69 ext. papers	1,358 ext. citations	4.9 avg, IF	4.23 L-index

#	Paper	IF	Citations
68	Bimetallic Synergy on Iridium–Gold Catalysts for the CO Oxidation Reaction. *Journal of Physical Chemistry C*, **2022**, 126, 1742-1750	3.8	0
67	MoS2 Effect on Nickel Electrochemical Activation: An Atomistic/Experimental Approach. *Journal of Physical Chemistry C*, **2021**, 125, 18640-18652	3.8	0
66	Electrochemical area of graphene-supported metal nanoparticles from an atomistic approach. *Journal of Applied Electrochemistry*, **2020**, 50, 421-429	2.6	3
65	Mechanistic Framework for the Formation of Different Sulfur Species by Electron Irradiation of n-Dodecanethiol Self-Assembled Monolayers on Au(111) and Au(100). *Journal of Physical Chemistry C*, **2020**, 124, 22591-22600	3.8	2
64	Structure stability of free copper nanoclusters: FSA-DFT Cu-building and FDM-XANES study. *Journal of Electron Spectroscopy and Related Phenomena*, **2019**, 235, 1-7	1.7	3
63	Avoiding oxidation with coating: graphene protected magnesium surfaces. *Physical Chemistry Chemical Physics*, **2019**, 21, 18660-18666	3.6	2
62	The unexpected effect of vacancies and wrinkling on the electronic properties of MoS layers. *Physical Chemistry Chemical Physics*, **2019**, 21, 24731-24739	3.6	3
61	Graphene on nickel (100) micrograins: Modulating the interface interaction by extended moiré superstructures. *Carbon*, **2018**, 130, 441-447	10.4	19
60	Real-time imaging of adatom-promoted graphene growth on nickel. *Science*, **2018**, 359, 1243-1246	33.3	95
59	A novel one-pot room-temperature synthesis route to produce very small photoluminescent silicon nanocrystals. *Journal of Nanoparticle Research*, **2018**, 20, 1	2.3	
58	A density functional study on the reactivity enhancement induced by gold in IrAu nanoalloys.. *RSC Advances*, **2018**, 8, 10450-10456	3.7	1
57	Atomic-level characterization and cilostazol affinity of poly(lactic acid) nanoparticles conjugated with differentially charged hydrophilic molecules. *Beilstein Journal of Nanotechnology*, **2018**, 9, 1328-1338	3	4
56	Effects of oxidation on the plasmonic properties of aluminum nanoclusters. *Nanoscale*, **2017**, 9, 17471-17480	7.7	21
55	The van der Waals Interactions of n-Alkanethiol-Covered Surfaces: From Planar to Curved Surfaces. *Angewandte Chemie - International Edition*, **2017**, 56, 16526-16530	16.4	10
54	Structure Determination of Superatom Metallic Clusters Using Rapid Scanning Electron Diffraction. *Journal of Physical Chemistry C*, **2016**, 120, 1902-1908	3.8	11
53	Mechanochemical stability of sub-nm ZnO chains. *Physical Chemistry Chemical Physics*, **2016**, 18, 7688-94	3.6	2
52	Immobilization of Au nanoparticles on graphite tunnels through nanocapillarity. *RSC Advances*, **2016**, 6, 77195-77200	3.7	4

51	Mechanical stability of zinc oxide nanowires under tensile loading: is wurtzite stable at the nanoscale?. *RSC Advances*, **2015**, 5, 43563-43570	3.7	7
50	Ultra-small rhenium clusters supported on graphene. *Physical Chemistry Chemical Physics*, **2015**, 17, 7898-906	3.6	15
49	Gold-palladium core@shell nanoalloys: experiments and simulations. *Physical Chemistry Chemical Physics*, **2015**, 17, 28060-7	3.6	12
48	Structural order in ultrathin films of the monolayer protected clusters based upon 4 nm gold nanocrystals: an experimental and theoretical study. *Physical Chemistry Chemical Physics*, **2014**, 16, 18098-104	3.6	7
47	Influence of Capping on the Atomistic Arrangement in Palladium Nanoparticles at Room Temperature. *Journal of Physical Chemistry C*, **2014**, 118, 24641-24647	3.8	13
46	Monolayer protected gold nanoparticles: the effect of the headgroup-Au interaction. *Physical Chemistry Chemical Physics*, **2014**, 16, 15979-87	3.6	22
45	Analysis of electron beam damage of exfoliated MoS_2 sheets and quantitative HAADF-STEM imaging. *Ultramicroscopy*, **2014**, 146, 33-8	3.1	46
44	Synthesis, characterization, and growth simulations of Cu-Pt bimetallic nanoclusters. *Beilstein Journal of Nanotechnology*, **2014**, 5, 1371-9	3	19
43	One-step/one-pot decoration of oxide microparticles with silver nanoparticles. *Journal of Colloid and Interface Science*, **2014**, 428, 32-5	9.3	3
42	Ultrasmooth, highly spherical monocrystalline gold particles for precision plasmonics. *ACS Nano*, **2013**, 7, 11064-70	16.7	102
41	Trimetallic nanostructures: the case of AgPd-Pt multiply twinned nanoparticles. *Nanoscale*, **2013**, 5, 12456-63	7.7	40
40	The role of ad-atoms in the coalescence of alkanethiol-passivated gold nanoparticles. *Electrochimica Acta*, **2013**, 101, 301-307	6.7	8
39	Anchoring sites to the STM tip can explain multiple peaks in single molecule conductance histograms. *Physical Chemistry Chemical Physics*, **2013**, 15, 1526-31	3.6	12
38	Modeling of Protected Nanoparticles. *Nanostructure Science and Technology*, **2013**, 275-304	0.9	
37	Structure and composition of Au/Co magneto-plasmonic nanoparticles. *MRS Communications*, **2013**, 3, 177-183	2.7	22
36	Underpotential deposition on free nanoparticles: Its meaning and measurement. *Electrochemistry Communications*, **2012**, 16, 1-5	5.1	23
35	Thermodynamic stability of electrochemically decorated Au@Pd core@shell nanoparticles. *Electrochimica Acta*, **2012**, 76, 424-429	6.7	12
34	Configurational Behavior and Conductance of Alkanedithiol Molecular Wires from Accelerated Dynamics Simulations. *Journal of Chemical Theory and Computation*, **2012**, 8, 4539-45	6.4	15

33	Growth mechanism of nanoparticles: theoretical calculations and experimental results. *CrystEngComm*, **2012**, 14, 544-549	3.3	20
32	Thermal Properties of Co/Au Nanoalloys and Comparison of Different Computer Simulation Techniques. *Journal of Physical Chemistry C*, **2012**, 116, 17210-17218	3.8	47
31	On the selective decoration of facets in metallic nanoparticles. *Journal of Materials Research*, **2012**, 27, 1777-1786	2.5	15
30	Calculation of the diffusion coefficient of thiophene oligomers using molecular dynamics. *Molecular Simulation*, **2012**, 38, 882-885	2	3
29	Development of a semiempirical potential for simulations of thiol-gold interfaces. Application to thiol-protected gold nanoparticles. *Physical Chemistry Chemical Physics*, **2011**, 13, 6500-6	3.6	30
28	Properties of rotating nanoalloys formed by cluster collision: a computer simulation study. *Journal of Chemical Physics*, **2011**, 134, 094701	3.9	14
27	Nanoalloying in real time. A high resolution STEM and computer simulation study. *Nanoscale*, **2011**, 3, 5013	7.7	21
26	On the atomic structure of thiol-protected gold nanoparticles: a combined experimental and theoretical study. *Physical Chemistry Chemical Physics*, **2010**, 12, 11785-90	3.6	38
25	A synthesis route of gold nanoparticles without using a reducing agent. *Applied Physics Letters*, **2010**, 96, 213115	3.4	24
24	The Co-Au interface in bimetallic nanoparticles: a high resolution STEM study. *Nanoscale*, **2010**, 2, 2647-51	7.7	43
23	On the occurrence of stable and supersaturated metastable states in metallic core-shell nanoparticles. *Physical Chemistry Chemical Physics*, **2010**, 12, 4580-9	3.6	16
22	Gold clusters showing pentagonal atomic arrays revealed by aberration-corrected scanning transmission electron microscopy. *Chemical Communications*, **2010**, 46, 8758-60	5.8	12
21	Theoretical studies of preparation of core□shell nanoparticles by electrochemical metal deposition. *Electrochimica Acta*, **2010**, 55, 8244-8251	6.7	22
20	Computer simulation of reversible electrochemical catalyst promoter dosing. *Electrochimica Acta*, **2010**, 55, 8673-8679	6.7	4
19	On the structural and mechanical properties of Fe-filled carbon nanotubes: a computer simulation approach. *Nanotechnology*, **2009**, 20, 165705	3.4	12
18	The behavior of single-molecule junctions predicted by atomistic simulations. *Electrochemistry Communications*, **2009**, 11, 987-989	5.1	4
17	Stochastic model for spontaneous formation of molecular wires. *Electrochimica Acta*, **2009**, 54, 2977-2982	6.7	9
16	Atomistic computer simulations on the generation of bimetallic nanoparticles. *Faraday Discussions*, **2008**, 138, 89-104; discussion 119-35, 433-4	3.6	16

15	Thermodynamic considerations and computer simulations on the formation of core-shell nanoparticles under electrochemical conditions. *Physical Chemistry Chemical Physics*, **2008**, 10, 3561-8	3.6	28
14	Diffusion mechanisms taking place at the early stages of cobalt deposition on Au(111). *Journal of Physics Condensed Matter*, **2008**, 20, 265010	1.8	3
13	Computer simulation of the effective double layer occurring on a catalyst surface under electro-chemical promotion conditions. *Journal of Applied Electrochemistry*, **2008**, 38, 1065-1073	2.6	14
12	Computer simulation of electrochemical nanostructuring induced by supersaturation conditions. *Journal of Electroanalytical Chemistry*, **2007**, 607, 10-16	4.1	4
11	The structure of electrodeposits – a computer simulation study. *Applied Physics A: Materials Science and Processing*, **2007**, 87, 385-389	2.6	12
10	A new simulation model for electrochemical metal deposition. *Chemical Physics*, **2006**, 320, 149-154	2.3	20
9	Collision as a way of forming bimetallic nanoclusters of various structures and chemical compositions. *Journal of Chemical Physics*, **2005**, 123, 184505	3.9	81
8	On the generation of metal clusters with the electrochemical scanning tunneling microscope. *Surface Science*, **2005**, 597, 133-155	1.8	26
7	Effects of tip structure on the generation of metal clusters by an STM tip: a way to control the orientation of nanocrystallites?. *Nanotechnology*, **2005**, 16, 974-980	3.4	10
6	A combined experimental and theoretical study of the generation of palladium clusters on Au(111) with a scanning tunnelling microscope. *Electrochimica Acta*, **2003**, 48, 1287-1294	6.7	20
5	The basis for the formation of stable metal clusters on an electrode surface. *Nanotechnology*, **2003**, 14, 1009-1013	3.4	21
4	Proton binding at clay surfaces in water. *Applied Clay Science*, **2003**, 24, 3-9	5.2	47
3	Generation of palladium clusters on Au(111) electrodes: Experiments and simulations. *Applied Physics Letters*, **2002**, 81, 2635-2637	3.4	37
2	Computer Simulations of Electrochemical Low-Dimensional Metal Phase Formation30-60		1
1	Soft or Hard? Investigating the Deformation Mechanisms of AuPd and Pd Nanocubes under Compression: An Experimental and Molecular Dynamics Study. *Journal of Physical Chemistry C*,	3.8	1