

# Luis M Molina

## List of Publications by Year in descending order

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44  
papers

4,351  
citations

257450

24  
h-index

276875

41  
g-index

46  
all docs

46  
docs citations

46  
times ranked

4650  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ab initio studies of propene oxide formation at gold nanocatalysts supported on anatase-TiO <sub>2</sub> . <i>Molecular Catalysis</i> , 2020, 486, 110855.	2.0	0
2	Water adsorption and dissociation on gold catalysts supported on anatase-TiO <sub>2</sub> (101). <i>Applied Surface Science</i> , 2019, 487, 244-252.	6.1	27
3	Ab initio studies of ethanol dehydrogenation at binary AuPd nanocatalysts. <i>Molecular Catalysis</i> , 2018, 449, 8-13.	2.0	14
4	Theoretical Description and Modeling of Hydrogen Bonds at Solid Surfaces. , 2018, , 175-180.		0
5	Interaction of aromatic molecules with small gold clusters. <i>Chemical Physics Letters</i> , 2017, 684, 91-96.	2.6	10
6	Controlling the Adsorption of Carbon Monoxide on Platinum Clusters by Dopant-Induced Electronic Structure Modification. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 11059-11063.	13.8	55
7	Controlling the Adsorption of Carbon Monoxide on Platinum Clusters by Dopant-Induced Electronic Structure Modification. <i>Angewandte Chemie</i> , 2016, 128, 11225-11229.	2.0	25
8	Ab initio studies of propene epoxidation on oxidized silver surfaces. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 26546-26552.	2.8	17
9	Size-dependent selectivity and activity of silver nanoclusters in the partial oxidation of propylene to propylene oxide and acrolein: A joint experimental and theoretical study. <i>Catalysis Today</i> , 2011, 160, 116-130.	4.4	115
10	Hydrogen and Hydrogen Clusters Across Disciplines. <i>Science and Technology of Atomic, Molecular, Condensed Matter and Biological Systems</i> , 2010, , 299-342.	0.6	0
11	Selective Propene Epoxidation on Immobilized Au <sub>6</sub> Clusters: The Effect of Hydrogen and Water on Activity and Selectivity. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 1467-1471.	13.8	246
12	New insights on the reaction mechanisms for CO oxidation on Au catalysts. <i>Chemical Physics Letters</i> , 2009, 468, 201-204.	2.6	18
13	Chemical Properties of Small Au Clusters: An Analysis of the Local Site Reactivity. <i>Journal of Physical Chemistry C</i> , 2007, 111, 6668-6677.	3.1	72
14	The activity of the tetrahedral Au <sub>20</sub> cluster: charging and impurity effects. <i>Journal of Catalysis</i> , 2005, 233, 399-404.	6.2	124
15	Guanine Quartet Networks Stabilized by Cooperative Hydrogen Bonds. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 2270-2275.	13.8	275
16	Guanine Quartet Networks Stabilized by Cooperative Hydrogen Bonds. <i>Angewandte Chemie</i> , 2005, 117, 2310-2315.	2.0	64
17	Some recent theoretical advances in the understanding of the catalytic activity of Au. <i>Applied Catalysis A: General</i> , 2005, 291, 21-31.	4.3	240
18	Oxygen vacancies on TiO <sub>2</sub> (110) and their interaction with H <sub>2</sub> O and O <sub>2</sub> : A combined high-resolution STM and DFT study. <i>Surface Science</i> , 2005, 598, 226-245.	1.9	560

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19	Oxygen adsorption at anionic free and supported Au clusters. Journal of Chemical Physics, 2005, 123, 161104.	3.0	76
20	BeB2 nanostructures: A density functional study. Physical Review B, 2005, 72, .	3.2	6
21	Adsorption, diffusion, and dissociation of molecular oxygen at defected TiO <sub>2</sub> (110): A density functional theory study. Journal of Chemical Physics, 2004, 120, 988-997.	3.0	251
22	Promoting and poisoning effects of Na and Cl coadsorption on CO oxidation over MgO-supported Au nanoparticles. Journal of Catalysis, 2004, 227, 217-226.	6.2	61
23	Adsorption of O <sub>2</sub> and oxidation of CO at Au nanoparticles supported by TiO <sub>2</sub> (110). Journal of Chemical Physics, 2004, 120, 7673-7680.	3.0	294
24	Interaction of Molecular and Atomic Hydrogen With Single-Wall Carbon Nanotubes. IEEE Nanotechnology Magazine, 2004, 3, 304-310.	2.0	33
25	Interaction of lithium with graphene: An ab initio study. Physical Review B, 2004, 70, .	3.2	171
26	Theoretical study of CO oxidation on Au nanoparticles supported by MgO(100). Physical Review B, 2004, 69, .	3.2	246
27	Growth of Unidirectional Molecular Rows of Cysteine on Au(110) Driven by Adsorbate-Induced Surface Rearrangements. Physical Review Letters, 2004, 93, 086101.	7.8	112
28	Structural models of inorganic fullerene-like structures. Surface Science, 2003, 526, 243-247.	1.9	19
29	Active Role of Oxide Support during CO Oxidation at Au/MgO. Physical Review Letters, 2003, 90, 206102.	7.8	431
30	Structural and thermal properties of silicon-doped fullerenes. Journal of Chemical Physics, 2003, 119, 1127-1135.	3.0	39
31	Ab initio molecular dynamics simulations of the two-step melting of NaSn. Physical Review B, 2003, 68, .	3.2	1
32	Interaction of molecular and atomic hydrogen with single-wall carbon nanotubes. , 2003, , .		1
33	Conditions for the self-assembling of cluster materials. Nanotechnology, 2002, 13, 253-257.	2.6	23
34	Interaction of molecular and atomic hydrogen with (5,5) and (6,6) single-wall carbon nanotubes. Journal of Chemical Physics, 2002, 117, 2281-2288.	3.0	198
35	Octet composition in alkali-Pb solid alloys. Physical Review B, 2002, 66, .	3.2	1
36	Computer simulation of cluster assembling. International Journal of Quantum Chemistry, 2002, 86, 226-238.	2.0	18

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37	Theoretical study of thiol-induced reconstructions on the Au(111) surface. <i>Chemical Physics Letters</i> , 2002, 360, 264-271.	2.6	161
38	Melting behavior of large disordered sodium clusters. <i>European Physical Journal D</i> , 2001, 15, 221-227.	1.3	29
39	Assembling of hydrogenated aluminum clusters. <i>European Physical Journal D</i> , 2001, 16, 285-288.	1.3	16
40	Density functional study of adsorption of molecular hydrogen on graphene layers. <i>Journal of Chemical Physics</i> , 2000, 112, 8114-8119.	3.0	261
41	Assembling alkali-lead solid compounds from clusters. <i>Journal of Chemical Physics</i> , 1999, 111, 7053-7061.	3.0	10
42	Ab initio calculations for mixed clusters of lead and alkali elements, and implications for the structure of their solid and liquid alloys. <i>Chemical Physics Letters</i> , 1998, 289, 451-456.	2.6	17
43	Mixed lead-alkali clusters in the gas phase and in liquid alloys. <i>International Journal of Quantum Chemistry</i> , 1998, 69, 341-348.	2.0	5
44	Building alkali-lead intermetallic compounds from clusters. <i>Solid State Communications</i> , 1998, 108, 519-524.	1.9	8