Matthew M Montemore

List of Publications by Year
in descending order

38 papers	1,468 citations	430442 18 h-index	329751 37 g-index
40 all docs	40 docs citations	40 times ranked	2020 citing authors

#	Article	IF	Citations
1	Combining Citation Network Information and Text Similarity for Research Article Recommender Systems. IEEE Access, 2022, 10, 16-23.	2.6	8
2	Alloy Catalyst Design beyond the Volcano Plot by Breaking Scaling Relations. Journal of Physical Chemistry C, 2022, 126, 3993-3999.	1.5	10
3	Dilute Alloys Based on Au, Ag, or Cu for Efficient Catalysis: From Synthesis to Active Sites. Chemical Reviews, 2022, 122, 8758-8808.	23.0	50
4	Recent progress towards a universal machine learning model for reaction energetics in heterogeneous catalysis. Current Opinion in Chemical Engineering, 2022, 36, 100821.	3.8	7
5	Factors controlling oxophilicity and carbophilicity of transition metals and main group metals. Journal of Materials Chemistry A, 2021, 9, 22325-22333.	5.2	16
6	Predicting X-ray Photoelectron Peak Shapes: the Effect of Electronic Structure. Journal of Physical Chemistry C, 2021, 125, 10685-10692.	1.5	16
7	When more is less: Nonmonotonic trends in adsorption on clusters in alloy surfaces. Journal of Chemical Physics, 2020, 153, 111102.	1.2	12
8	PTML Model for Selection of Nanoparticles, Anticancer Drugs, and Vitamins in the Design of Drugâ€“Vitamin Nanoparticle Release Systems for Cancer Cotherapy. Molecular Pharmaceutics, 2020, 17, 2612-2627.	2.3	12
9	General screening of surface alloys for catalysis. Catalysis Science and Technology, 2020, 10, 4467-4476.	2.1	21
10	Stabilization of a nanoporous NiCu dilute alloy catalyst for non-oxidative ethanol dehydrogenation. Catalysis Science and Technology, 2020, 10, 5207-5217.	2.1	17
11	Density Functional Theory Investigation of Oxidation Intermediates on Gold and Goldâ€“Silver Surfaces. Journal of Physical Chemistry C, 2020, 124, 8843-8853.	1.5	9
12	New Experimental and Computational Tools for Drug Discovery. From Old Way to New Series â€“ Part-X. Current Topics in Medicinal Chemistry, 2020, 20, 2279-2280.	1.0	0
13	Integrated Catalysis-Surface Science-Theory Approach to Understand Selectivity in the Hydrogenation of 1-Hexyne to 1-Hexene on PdAu Single-Atom Alloy Catalysts. ACS Catalysis, 2019, 9, 8757-8765.	5.5	63
14	Evolution of steady-state material properties during catalysis: Oxidative coupling of methanol over nanoporous Ag0.03Au0.97. Journal of Catalysis, 2019, 380, 366-374.	3.1	24
15	Machine Learning Prediction of H Adsorption Energies on Ag Alloys. Journal of Chemical Information and Modeling, 2019, 59, 1357-1365.	2.5	38
16	Oxygen adsorption on spontaneously reconstructed Au(511). Surface Science, 2019, 679, 296-303.	0.8	5
17	A Comparative Ab Initio Study of Anhydrous Dehydrogenation of Linear-Chain Alcohols on Cu(110). Journal of Physical Chemistry C, 2018, 122, 7806-7815.	1.5	18
18	O₂ Activation by Metal Surfaces: Implications for Bonding and Reactivity on Heterogeneous Catalysts. Chemical Reviews, 2018, 118, 2816-2862.	23.0	363

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19	Reaction-Induced Excitations and Their Effect on Surface Chemistry. ACS Catalysis, 2018, 8, 10358-10363.	5.5	8
20	Anhydrous Methanol and Ethanol Dehydrogenation at Cu(111) Step Edges. Journal of Physical Chemistry C, 2018, 122, 21952-21962.	1.5	21
21	Nonadiabatic Hydrogen Dissociation on Copper Nanoclusters. Journal of Physical Chemistry Letters, 2018, 9, 5339-5343.	2.1	10
22	Macroscopic 3D Nanoporosity Formation by Dry Oxidation of AgAu Alloys. Journal of Physical Chemistry C, 2017, 121, 5115-5122.	1.5	18
23	Effect of nanoscale flows on the surface structure of nanoporous catalysts. Journal of Chemical Physics, 2017, 146, 214703.	1.2	24
24	Hydrocarbon adsorption in an aqueous environment: A computational study of alkyls on Cu(111). Journal of Chemical Physics, 2016, 145, 074702.	1.2	20
25	Direct visualization of quasi-ordered oxygen chain structures on Au(110)-(1 Ã— 2). Surface Science, 2016, 650, 5-10.	0.8	29
26	Controlling O coverage and stability by alloying Au and Ag. Physical Chemistry Chemical Physics, 2016, 18, 26844-26853.	1.3	16
27	How Does Nanoporous Gold Dissociate Molecular Oxygen?. Journal of Physical Chemistry C, 2016, 120, 16636-16640.	1.5	46
28	Catalyst design for enhanced sustainability through fundamental surface chemistry. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20150077.	1.6	15
29	Enhanced dry reforming of methane on Ni and Ni-Pt catalysts synthesized by atomic layer deposition. Applied Catalysis A: General, 2015, 492, 107-116.	2.2	89
30	Scaling the rough heights. Nature Chemistry, 2015, 7, 378-380.	6.6	10
31	Predicting and Comparing Câ€“M and Oâ€“M Bond Strengths for Adsorption on Transition Metal Surfaces. Journal of Physical Chemistry C, 2014, 118, 2666-2672.	1.5	36
32	Scaling relations between adsorption energies for computational screening and design of catalysts. Catalysis Science and Technology, 2014, 4, 3748-3761.	2.1	225
33	A Unified Picture of Adsorption on Transition Metals through Different Atoms. Journal of the American Chemical Society, 2014, 136, 9272-9275.	6.6	55
34	The selective oxidation of ethylene glycol and 1,2-propanediol on Au, Pd, and Auâ€“Pd bimetallic catalysts. Journal of Catalysis, 2013, 307, 111-120.	3.1	82
35	Interactions of Hydrogen, CO, Oxygen, and Water with Molybdenum-Modified Pt(111). Journal of Physical Chemistry C, 2013, 117, 26716-26724.	1.5	14
36	A Simple, Accurate Model for Alkyl Adsorption on Late Transition Metals. Journal of Physical Chemistry C, 2013, 117, 2835-2843.	1.5	12

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37	Site-Specific Scaling Relations for Hydrocarbon Adsorption on Hexagonal Transition Metal Surfaces. Journal of Physical Chemistry C, 2013, 117, 20078-20088.	1.5	36
38	A density functional study of C1â€“C4 alkyl adsorption on Cu(111). Journal of Chemical Physics, 2012, 136, 204710.	1.2	13