

Ambarish R Kulkarni

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Machine Learning-Assisted Sampling of Surface-Enhanced Raman Scattering (SERS) Substrates Improve Data Collection Efficiency. <i>Applied Spectroscopy</i> , 2022, 76, 485-495.	2.2	11
2	Atomically Dispersed Platinum in Surface and Subsurface Sites on MgO Have Contrasting Catalytic Properties for CO Oxidation. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 3896-3903.	4.6	7
3	Near-Surface Imaging of the Multicomponent Gas Phase above a Silver Catalyst during Partial Oxidation of Methanol. <i>ACS Catalysis</i> , 2021, 11, 155-168.	11.2	16
4	Bridging adsorption analytics and catalytic kinetics for metal-exchanged zeolites. <i>Nature Catalysis</i> , 2021, 4, 144-156.	34.4	27
5	Simplifying computational workflows with the Multiscale Atomic Zeolite Simulation Environment (MAZE). <i>SoftwareX</i> , 2021, 16, 100797.	2.6	3
6	A Theory-Guided X-ray Absorption Spectroscopy Approach for Identifying Active Sites in Atomically Dispersed Transition-Metal Catalysts. <i>Journal of the American Chemical Society</i> , 2021, 143, 20144-20156.	13.7	28
7	Near-Surface Gas-Phase Methoxymethanol Is Generated by Methanol Oxidation over Pd-Based Catalysts. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 11252-11258.	4.6	5
8	Cs-RHO Goes from Worst to Best as Water Enhances Equilibrium CO ₂ Adsorption via Phase Change. <i>Langmuir</i> , 2021, 37, 13903-13908.	3.5	9
9	Metal-promoted Mo ₆ S ₈ clusters: a platform for probing ensemble effects on the electrochemical conversion of CO ₂ and CO to methanol. <i>Materials Horizons</i> , 2020, 7, 193-202.	12.2	25
10	Supported Metal Pair-Site Catalysts. <i>ACS Catalysis</i> , 2020, 10, 9065-9085.	11.2	67
11	Circumventing Scaling Relations in Oxygen Electrochemistry Using Metal-Organic Frameworks. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 10029-10036.	4.6	32
12	Two-Dimensional Conductive Ni-HAB as a Catalyst for the Electrochemical Oxygen Reduction Reaction. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 39074-39081.	8.0	41
13	Highly Active Bifunctional Oxygen Electrocatalytic Sites Realized in Ceria-Functionalized Graphene. <i>Advanced Sustainable Systems</i> , 2020, 4, 2000048.	5.3	8
14	Direct solid-state nucleation and charge-transport dynamics of alkali metal-intercalated M ₂ Mo ₆ S ₆ (M = K, Rb, Cs) nanorods. <i>Journal of Materials Chemistry C</i> , 2020, 8, 10742-10748.	5.5	6
15	Improved Oxygen Reduction Reaction Activity of Nanostructured CoS ₂ through Electrochemical Tuning. <i>ACS Applied Energy Materials</i> , 2019, 2, 8605-8614.	5.1	42
16	X-ray absorption spectroscopy study of the electronic structure and local coordination of 1st row transition metal-promoted Chevrel-phase sulfides. <i>Journal of Coordination Chemistry</i> , 2019, 72, 1322-1335.	2.2	9
17	Trends in Oxygen Electrocatalysis of 3d-Layered (Oxy)(Hydro)Oxides. <i>ChemCatChem</i> , 2019, 11, 3423-3431.	3.7	33
18	Screening Diffusion of Small Molecules in Flexible Zeolitic Imidazolate Frameworks Using a DFT-Parameterized Force Field. <i>Journal of Physical Chemistry C</i> , 2019, 123, 9153-9167.	3.1	30

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19	An electronic structure descriptor for oxygen reactivity at metal and metal-oxide surfaces. <i>Surface Science</i> , 2019, 681, 122-129.	1.9	145
20	Single Metal Atoms Anchored in Two-Dimensional Materials: Bifunctional Catalysts for Fuel Cell Applications. <i>ChemCatChem</i> , 2018, 10, 3034-3039.	3.7	50
21	Understanding Catalytic Activity Trends in the Oxygen Reduction Reaction. <i>Chemical Reviews</i> , 2018, 118, 2302-2312.	47.7	1,666
22	Ultrathin Cobalt Oxide Overlayer Promotes Catalytic Activity of Cobalt Nitride for the Oxygen Reduction Reaction. <i>Journal of Physical Chemistry C</i> , 2018, 122, 4783-4791.	3.1	46
23	Robust and conductive two-dimensional metal-organic frameworks with exceptionally high volumetric and areal capacitance. <i>Nature Energy</i> , 2018, 3, 30-36.	39.5	786
24	Cation-exchanged zeolites for the selective oxidation of methane to methanol. <i>Catalysis Science and Technology</i> , 2018, 8, 114-123.	4.1	135
25	Theoretical Approaches to Describing the Oxygen Reduction Reaction Activity of Single-Atom Catalysts. <i>Journal of Physical Chemistry C</i> , 2018, 122, 29307-29318.	3.1	68
26	Direct Methane to Methanol: The Selectivity-Conversion Limit and Design Strategies. <i>ACS Catalysis</i> , 2018, 8, 6894-6907.	11.2	211
27	Nature of Lone-Pair-Surface Bonds and Their Scaling Relations. <i>Inorganic Chemistry</i> , 2018, 57, 7222-7238.	4.0	43
28	Mechanistic insights into heterogeneous methane activation. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 3575-3581.	2.8	89
29	Understanding trends in C-H bond activation in heterogeneous catalysis. <i>Nature Materials</i> , 2017, 16, 225-229.	27.5	387
30	Identification of High-CO ₂ -Capacity Cationic Zeolites by Accurate Computational Screening. <i>Chemistry of Materials</i> , 2016, 28, 3887-3896.	6.7	57
31	Theoretical Insights into the Selective Oxidation of Methane to Methanol in Copper-Exchanged Mordenite. <i>ACS Catalysis</i> , 2016, 6, 3760-3766.	11.2	139
32	Screening of Copper Open Metal Site MOFs for Olefin/Paraffin Separations Using DFT-Derived Force Fields. <i>Journal of Physical Chemistry C</i> , 2016, 120, 23044-23054.	3.1	61
33	Monocopper Active Site for Partial Methane Oxidation in Cu-Exchanged 8MR Zeolites. <i>ACS Catalysis</i> , 2016, 6, 6531-6536.	11.2	173
34	Computational Prediction of Metal Organic Frameworks Suitable for Molecular Infiltration as a Route to Development of Conductive Materials. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 1586-1591.	4.6	39
35	Analysis of Equilibrium-Based TSA Processes for Direct Capture of CO ₂ from Air. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 8631-8645.	3.7	163
36	Role of Amine Structure on Carbon Dioxide Adsorption from Ultradilute Gas Streams such as Ambient Air. <i>ChemSusChem</i> , 2012, 5, 2058-2064.	6.8	180