

# Robert N Barnett

## List of Publications by Year in descending order

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33  
papers

2,939  
citations

331259

21  
h-index

360668

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docs citations

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times ranked

3176  
citing authors

#	ARTICLE	IF	CITATIONS
1	Cluster Size Dependent Interaction of Free Manganese Oxide Clusters with Acetic Acid and Methyl Acetate. <i>Journal of Physical Chemistry A</i> , 2021, 125, 4435-4445.	1.1	2
2	Size, Stoichiometry, Dimensionality, and Ca Doping of Manganese Oxide-Based Water Oxidation Clusters: An Oxyl/Hydroxy Mechanism for Oxygen–Oxygen Coupling. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 5248-5255.	2.1	5
3	Room-Temperature Methane Activation Mediated by Free Tantalum Cluster Cations: Size-by-Size Reactivity. <i>Journal of Physical Chemistry A</i> , 2021, 125, 5289-5302.	1.1	9
4	Carbide Dihydrides: Carbonaceous Species Identified in Ta <sub>4</sub> –Mediated Methane Dehydrogenation. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 23631-23635.	7.2	10
5	Infrared Spectroscopy of Gas-Phase Mn <sub>x</sub> O <sub>y</sub> (CO <sub>2</sub> ) <sub>z</sub> Complexes. <i>Journal of Physical Chemistry A</i> , 2020, 124, 1561-1566.	1.1	13
6	Energetic Stabilization of Carboxylic Acid Conformers by Manganese Atoms and Clusters. <i>Journal of Physical Chemistry A</i> , 2020, 124, 4990-4997.	1.1	3
7	Carbid–Dihydride: kohlenstoffhaltige Spezies identifiziert in der Ta <sub>4</sub> + –vermittelten Methandehydrierung. <i>Angewandte Chemie</i> , 2020, 132, 23838-23842.	1.6	2
8	A Gas-Phase Ca <sub>n</sub> Mn <sub>4</sub> O <sub>4</sub> Cluster Model for the Oxygen–Evolving Complex of Photosystem II. <i>Angewandte Chemie</i> , 2019, 131, 8592-8597.	1.6	9
9	A Gas-Phase Ca <sub>n</sub> Mn <sub>4</sub> O <sub>4</sub> Cluster Model for the Oxygen–Evolving Complex of Photosystem II. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 8504-8509.	7.2	10
10	Oxygen Sensitivity of Free Nonligated Iron–Sulfur Clusters. <i>Journal of Physical Chemistry C</i> , 2019, 123, 27681-27689.	1.5	2
11	Thermal Dehydrogenation of Methane Enhanced by 1/2-Oxo Ligands in Tantalum Cluster Cations [Ta <sub>x</sub> O] <sub>n</sub> <sup>+</sup> , x = 4, 5. <i>Journal of Physical Chemistry C</i> , 2018, 122, 25628-25637.	1.5	16
12	Selective C–H Bond Cleavage in Methane by Small Gold Clusters. <i>Angewandte Chemie</i> , 2017, 129, 13591-13595.	1.6	31
13	Selective C–H Bond Cleavage in Methane by Small Gold Clusters. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 13406-13410.	7.2	71
14	Confirmation of a de novo structure prediction for an atomically precise monolayer-coated silver nanoparticle. <i>Science Advances</i> , 2016, 2, e1601609.	4.7	39
15	Interaction of Iron–Sulfur Clusters with N <sub>2</sub> : Biomimetic Systems in the Gas Phase. <i>Journal of Physical Chemistry C</i> , 2016, 120, 12549-12558.	1.5	30
16	The Interaction of Water with Free Mn <sub>4</sub> O <sub>4</sub> Clusters: Deprotonation and Adsorption–Induced Structural Transformations. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 15113-15117.	7.2	24
17	M <sub>4</sub> Ag <sub>44</sub> (p-MBA) <sub>30</sub> Molecular Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2015, 119, 11238-11249.	1.5	37
18	Water Deprotonation via Oxo-Bridge Hydroxylation and <sup>18</sup> O-Exchange in Free Tetra-Manganese Oxide Clusters. <i>Journal of Physical Chemistry C</i> , 2015, 119, 10881-10887.	1.5	22

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19	Low-Temperature CO Oxidation Catalyzed by Free Palladium Clusters: Similarities and Differences to Pd Surfaces and Supported Particles. <i>ACS Catalysis</i> , 2015, 5, 2275-2289.	5.5	47
20	M <sub>3</sub> Ag <sub>17</sub> (SPh) <sub>12</sub> Nanoparticles and Their Structure Prediction. <i>Journal of the American Chemical Society</i> , 2015, 137, 11550-11553.	6.6	33
21	Hydrogen-bonded structure and mechanical chiral response of a silver nanoparticle superlattice. <i>Nature Materials</i> , 2014, 13, 807-811.	13.3	128
22	Ultrastable silver nanoparticles. <i>Nature</i> , 2013, 501, 399-402.	13.7	1,023
23	Oxidative Thymine Mutation in DNA: Water-Wire-Mediated Proton-Coupled Electron Transfer. <i>Journal of the American Chemical Society</i> , 2013, 135, 3904-3914.	6.6	31
24	Temperature-Tunable Selective Methane Catalysis on Au <sub>2</sub> <sup>+</sup> : From Cryogenic Partial Oxidation Yielding Formaldehyde to Cold Ethylene Production. <i>Journal of Physical Chemistry C</i> , 2011, 115, 6788-6795.	1.5	57
25	Dielectron Attachment and Hydrogen Evolution Reaction in Water Clusters. <i>Journal of Physical Chemistry A</i> , 2011, 115, 7378-7391.	1.1	37
26	Structural and transport properties of Nb nanowires. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2007, 204, 1712-1720.	0.8	1
27	Hydrogen Welding and Hydrogen Switches in a Monatomic Gold Nanowire. <i>Nano Letters</i> , 2004, 4, 1845-1852.	4.5	66
28	Structure, collective hydrogen transfer, and formation of Si(OH) <sub>4</sub> in SiO <sub>2</sub> ·(H <sub>2</sub> O) <sub>n</sub> clusters. <i>Journal of Chemical Physics</i> , 2002, 116, 9300-9304.	1.2	41
29	Metal-Semiconductor Nanocontacts: Silicon Nanowires. <i>Physical Review Letters</i> , 2000, 85, 1958-1961.	2.9	188
30	Nanowire Gold Chains: Formation Mechanisms and Conductance. <i>Journal of Physical Chemistry B</i> , 2000, 104, 9063-9066.	1.2	106
31	Gold Nanowires and Their Chemical Modifications. <i>Journal of Physical Chemistry B</i> , 1999, 103, 8814-8816.	1.2	135
32	Born-Oppenheimer molecular-dynamics simulations of finite systems: Structure and dynamics of (H <sub>2</sub> O) <sub>2</sub> . <i>Physical Review B</i> , 1993, 48, 2081-2097.	1.1	551
33	Dynamics, Spectra, and Relaxation Phenomena of Excess Electrons in Clusters. <i>Israel Journal of Chemistry</i> , 1990, 30, 85-105.	1.0	22