Alexander Kaiser

List of Publications by Citations

46 papers	597 citations	13 h-index	22 g-index
46 ext. papers	699 ext. citations	4 avg, IF	3.7 L-index

#	Paper	IF	Citations
46	Cold physics and chemistry: Collisions, ionization and reactions inside helium nanodroplets close to zero K. *Physics Reports*, **2018**, 751, 1-90	27.7	83
45	Plasma□wall interaction studies within the EUROfusion consortium: progress on plasma-facing components development and qualification. *Nuclear Fusion*, **2017**, 57, 116041	3.3	50
44	Ethylene glycol revisited: Molecular dynamics simulations and visualization of the liquid and its hydrogen-bond network. *Journal of Molecular Liquids*, **2014**, 189, 20-29	6	49
43	Adsorption of hydrogen on neutral and charged fullerene: experiment and theory. *Journal of Chemical Physics*, **2013**, 138, 074311	3.9	49
42	On enhanced hydrogen adsorption on alkali (cesium) doped C60 and effects of the quantum nature of the H2 molecule on physisorption energies. *International Journal of Hydrogen Energy*, **2017**, 42, 3078-3086	6.7	27
41	Adsorption of Polar and Nonpolar Molecules on Isolated Cationic C , C , and Their Aggregates. *ChemPlusChem*, **2013**, 78, 910-920	2.8	27
40	Isomeric Broadening of C Electronic Excitation in Helium Droplets: Experiments Meet Theory. *Journal of Physical Chemistry Letters*, **2018**, 9, 1237-1242	6.4	23
39	Methane Adsorption on Graphitic Nanostructures: Every Molecule Counts. *Journal of Physical Chemistry Letters*, **2012**, 3, 2598-2603	6.4	21
38	Communication: Dopant-induced solvation of alkalis in liquid helium nanodroplets. *Journal of Chemical Physics*, **2016**, 145, 181101	3.9	21
37	Methane adsorption on aggregates of fullerenes: site-selective storage capacities and adsorption energies. *ChemSusChem*, **2013**, 6, 1235-44	8.3	18
36	Hydrogen Bonding and Dielectric Spectra of Ethylene Glycol-Water Mixtures from Molecular Dynamics Simulations. *Journal of Physical Chemistry B*, **2016**, 120, 10515-10523	3.4	16
35	Electron impact ionization cross sections of beryllium and beryllium hydrides. *European Physical Journal D*, **2013**, 67, 1	1.3	14
34	Building Carbon Bridges on and between Fullerenes in Helium Nanodroplets. *Journal of Physical Chemistry Letters*, **2016**, 7, 1440-5	6.4	14
33	Ordered phases of ethylene adsorbed on charged fullerenes and their aggregates. *Carbon*, **2014**, 69, 206-220	10.4	12
32	s-wave scattering for deep potentials with attractive tails falling off faster than □/r2. *Physical Review A*, **2011**, 84,	2.6	12
31	Vibrational Predissociation Spectroscopy of Cold Protonated Tryptophan with Different Messenger Tags. *Journal of Physical Chemistry A*, **2018**, 122, 8037-8046	2.8	12
30	Ion formation upon electron collisions with valine embedded in helium nanodroplets. *European Physical Journal D*, **2016**, 70, 1	1.3	11

29	Cs+ Solvated in Hydrogen: Evidence for Several Distinct Solvation Shells. *Journal of Physical Chemistry C*, **2017**, 121, 10887-10892	3.8	10
28	Surface binding energies of beryllium/tungsten alloys. *Journal of Nuclear Materials*, **2016**, 472, 76-81	3.3	10
27	Experimental evidence for the influence of charge on the adsorption capacity of carbon dioxide on charged fullerenes. *Physical Chemistry Chemical Physics*, **2016**, 18, 3048-55	3.6	10
26	Electron impact ionization cross sections of beryllium-tungsten clusters. *European Physical Journal D*, **2016**, 70, 1	1.3	10
25	Ion-neutral reaction of the C2H2N+ cation with C2H2: An experimental and theoretical study. *Molecular Astrophysics*, **2016**, 2, 1-11	1.7	9
24	Spin filter properties of armchair graphene nanoribbons with substitutional Fe atoms. *Molecular Physics*, **2017**, 115, 2231-2241	1.7	8
23	Magic Numbers for Packing Adamantane in Helium Droplets: Cluster Cations, Dications, and Trications. *Journal of Physical Chemistry C*, **2017**, 121, 10767-10772	3.8	7
22	Iterative training set refinement enables reactive molecular dynamics machine learned forces.. *RSC Advances*, **2020**, 10, 4293-4299	3.7	6
21	Highly Stable [CAuC] Dumbbells. *Journal of Physical Chemistry Letters*, **2018**, 9, 2703-2706	6.4	6
20	Decorating (C) , -1-3, with CO at low temperatures: Sterically enhanced physisorption. *International Journal of Mass Spectrometry*, **2013**, 354-355, 271-274	1.9	6
19	Electron-Induced Chemistry of Cobalt Tricarbonyl Nitrosyl (Co(CO)NO) in Liquid Helium Nanodroplets. *Journal of Physical Chemistry C*, **2015**, 119, 20917-20922	3.8	6
18	Uptake and accommodation of water clusters by adamantane clusters in helium droplets: interplay between magic number clusters. *Physical Chemistry Chemical Physics*, **2018**, 20, 21573-21579	3.6	5
17	Vacancy patterning and patterning vacancies: controlled self-assembly of fullerenes on metal surfaces. *Nanoscale*, **2014**, 6, 10850-8	7.7	5
16	Aggregates of PCBM molecules: A computational study. *International Journal of Mass Spectrometry*, **2014**, 365-366, 225-231	1.9	5
15	Energetics and reactivity of small beryllium deuterides. *Journal of Molecular Modeling*, **2017**, 23, 203	2	4
14	Quantization rule for highly excited vibrational states of H. *Molecular Physics*, **2013**, 111, 878-887	1.7	4
13	Addendum to -wave scattering for deep potentials with attractive tails falling off faster than 1/r2*Physical Review A*, **2011**, 84,	2.6	4
12	Sputtering of the beryllium tungsten alloy Be2W by deuterium atoms: molecular dynamics simulations using machine learned forces. *Nuclear Fusion*, **2021**, 61, 016031	3.3	4

11	Dynamics of proton transfer from ArH+ to CO. *International Journal of Mass Spectrometry*, **2019**, 438, 175-185	1.9	4
10	A neural network interface for DL_POLY and its application to liquid water. *Molecular Simulation*, **2021**, 47, 113-118	2	4
9	Performance of DFT functionals for properties of small molecules containing beryllium, tungsten and hydrogen. *Nuclear Materials and Energy*, **2020**, 22, 100731	2.1	3
8	Beryllium, tungsten and their alloys Be2W and Be12W: Surface defect energetics from density functional theory calculations. *Nuclear Materials and Energy*, **2018**, 16, 149-157	2.1	2
7	Influence of higher-order dispersion coefficients on near-threshold bound and continuum states: application to 88Sr2. *Journal of Chemical Physics*, **2011**, 135, 214302	3.9	2
6	Chiral recognition via abundances of mixed chiral clusters. *International Journal of Mass Spectrometry*, **2019**, 446, 116215	1.9	1
5	Time-Dependent Perspective for the Intramolecular Couplings of the N-H Stretches of Protonated Tryptophan. *Journal of Physical Chemistry A*, **2020**, 124, 4062-4067	2.8	1
4	Charge dependent adsorption of carbon dioxide on fullerenes. *Journal of Physics: Conference Series*, **2015**, 635, 072048	0.3	1
3	Modelling the sputtering and reflection from a beryllium surface: atomistic analysis. *Nuclear Fusion*, **2021**, 61, 086013	3.3	1
2	Clusters of betaine with positive and negative ions: Evidence for the betaine tetramer being magic. *Journal of Chemical Physics*, **2019**, 151, 184303	3.9	
1	Combinations of density functionals for accurate molecular properties of Be/W/H compounds. *Nuclear Materials and Energy*, **2021**, 28, 101026	2.1	