Guang-Jun Guo

List of Publications by Year
in descending order

37	1,274	393982	360668
papers	citations	19 h-index	35 g-index

37	37	37	898
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Why can water cages adsorb aqueous methane? A potential of mean force calculation on hydrate nucleation mechanisms. Physical Chemistry Chemical Physics, 2009, 11, 10427.	1.3	121
2	Using the face-saturated incomplete cage analysis to quantify the cage compositions and cage linking structures of amorphous phase hydrates. Physical Chemistry Chemical Physics, 2011, 13, 12048.	1.3	105
3	Microcanonical molecular simulations of methane hydrate nucleation and growth: evidence that direct nucleation to sI hydrate is among the multiple nucleation pathways. Physical Chemistry Chemical Physics, 2015, 17, 8870-8876.	1.3	94
4	Solubility of Aqueous Methane under Metastable Conditions: Implications for Gas Hydrate Nucleation. Journal of Physical Chemistry B, 2013, 117, 6498-6504.	1.2	89
5	Equilibrium molecular dynamics calculation of the bulk viscosity of liquid water. Molecular Physics, 2001, 99, 283-289.	0.8	70
6	Effect of Methane Adsorption on the Lifetime of a Dodecahedral Water Cluster Immersed in Liquid Water:â€‰ A Molecular Dynamics Study on the Hydrate Nucleation Mechanisms. Journal of Physical Chemistry C, 2007, 111, 2595-2606.	1.5	70
7	Metallogenic geodynamic background of Mesozoic gold deposits in granite-greenstone terrains of North China Craton. Science in China Series D: Earth Sciences, 1998, 41, 113-120.	0.9	64
8	Can the dodecahedral water cluster naturally form in methane aqueous solutions? A molecular dynamics study on the hydrate nucleation mechanisms. Journal of Chemical Physics, 2008, 128, 194504.	1.2	63
9	Lifetimes of cagelike water clusters immersed in bulk liquid water: A molecular dynamics study on gas hydrate nucleation mechanisms. Journal of Chemical Physics, 2004, 121, 1542-1547.	1.2	60
10	Effects of ensembles on methane hydrate nucleation kinetics. Physical Chemistry Chemical Physics, 2016, 18, 15602-15608.	1.3	53
11	Viscosity and stress autocorrelation function in supercooled water: a molecular dynamics study. Molecular Physics, 2002, 100, 2617-2627.	0.8	34
12	The effects of ice on methane hydrate nucleation: a microcanonical molecular dynamics study. Physical Chemistry Chemical Physics, 2017, 19, 19496-19505.	1.3	33
13	Bridging solution properties to gas hydrate nucleation through guest dynamics. Physical Chemistry Chemical Physics, 2018, 20, 24535-24538.	1.3	33
14	Mechanolysis mechanisms of the fused aromatic rings of anthracite coal under shear stress. Fuel, 2019, 253, 1247-1255.	3.4	33
15	Molecular Insight into the Growth of Hydrogen and Methane Binary Hydrates. Journal of Physical Chemistry C, 2018, 122, 7771-7778.	1.5	30
16	A molecular dynamics study of bulk and shear viscosity of liquid iron using embedded-atom potential. Physics and Chemistry of Minerals, 2000, 27, 164-169.	0.3	25
17	Finite-size effect at both high and low temperatures in molecular dynamics calculations of the self-diffusion coefficient and viscosity of liquid silica. Journal of Physics Condensed Matter, 2004, 16, 9127-9135.	0.7	25
18	Insight on the stability of polycrystalline natural gas hydrates by molecular dynamics simulations. Fuel, 2021, 289, 119946.	3.4	23

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19	Molecular dynamics calculation of the bulk viscosity of liquid ironâ€“nickel alloy and the mechanisms for the bulk attenuation of seismic waves in the Earthâ€™s outer core. Physics of the Earth and Planetary Interiors, 2000, 122, 289-298.	0.7	21
20	Mechanisms of methane generation from anthracite at low temperatures: Insights from quantum chemistry calculations. International Journal of Hydrogen Energy, 2017, 42, 18922-18929.	3.8	20
21	Molecular Insights into Guest and Composition Dependence of Mixed Hydrate Nucleation. Journal of Physical Chemistry C, 2020, 124, 25078-25086.	1.5	20
22	Gas generation mechanisms of bituminous coal under shear stress based on ReaxFF molecular dynamics simulation. Fuel, 2021, 298, 120240.	3.4	20
23	Does Local Structure Bias How a Crystal Nucleus Evolves?. Journal of Physical Chemistry Letters, 2018, 9, 6991-6998.	2.1	19
24	Might a 2,2-Dimethylbutane Molecule Serve as a Site to Promote Gas Hydrate Nucleation?. Journal of Physical Chemistry C, 2019, 123, 20579-20586.	1.5	19
25	Nanopore Surfaces Control the Shale Gas Adsorption via Roughness and Layer-Accumulated Adsorption Potential: A Molecular Dynamics Study. Energy & Fuels, 2021, 35, 4893-4900.	2.5	16
26	Open questions on methane hydrate nucleation. Communications Chemistry, 2021, 4, .	2.0	15
27	Effects of cage type and adsorption face on the cageâ€“methane adsorption interaction: Implications for hydrate nucleation studies. Chemical Physics Letters, 2013, 575, 54-58.	1.2	14
28	Effect of H-bond topology on the lifetimes of cagelike water clusters immersed in liquid water and the probability distribution of these lifetimes: Implications for hydrate nucleation mechanisms. Chemical Physics Letters, 2005, 413, 415-419.	1.2	13
29	Effect of guests on the adsorption interaction between a hydrate cage and guests. RSC Advances, 2016, 6, 106443-106452.	1.7	13
30	Equations of state of CaSiO3 Perovskite: a molecular dynamics study. Physics and Chemistry of Minerals, 2006, 33, 126-137.	0.3	10
31	Partitioning of Si and O between liquid iron and silicate melt: A twoâ€phase abâ€initio molecular dynamics study. Geophysical Research Letters, 2009, 36, .	1.5	9
32	Stress Sensitivity for the Occurrence of Coalbed Gas Outbursts: A Reactive Force Field Molecular Dynamics Study. Energy & Fuels, 2021, 35, 5801-5807.	2.5	9
33	Effects of gas reservoir configuration and pore radius on shale gas nanoflow: A molecular dynamics study. Journal of Chemical Physics, 2018, 148, 204703.	1.2	8
34	Comment on â€œComputation of the viscosity of a liquid from time averages of stress fluctuationsâ€• Physical Review E, 2003, 67, 043101.	0.8	7
35	Effects of italicized angle and turning angle on shale gas nanoflows in non-straight nanopores: A nonequilibrium molecular dynamics study. Fuel, 2020, 278, 118275.	3.4	6
36	Strong temperature dependence of the first pressure derivative of isothermal bulk modulus at zero pressure. Journal of Geophysical Research, 2007, 112, .	3.3	5

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37	Comment on â€œIterative Cup Overlapping: An Efficient Identification Algorithm for Cage Structures of Amorphous Phase Hydratesâ€. Journal of Physical Chemistry B, 2021, 125, 5451-5453.	1.2	5