Arnaud Desmedt

List of Publications by Year
in descending order

63	899	516710 16	552781 26
papers	citations	h-index	g-index

65	65	65	968
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Insights into the porous structure of surfactant-promoted gas hydrate. Chemical Engineering Science, 2022, 248, 117193.	3.8	9
2	Reply to the â€˜Comment on Cage occupancy of methane clathrate hydrates in the ternary H₂Oâ€“NH₃â€“CH₄ systemâ€™ by S. Alavi and J. Ripmeester, Chem. Commun., 2022, 58, DOI: 10.1039/D1CC06526B. Chemical Communications, 2022, 58, 4099-4102.	4.1	1
3	Nitrogen Hydrate Cage Occupancy and Bulk Modulus Inferred from Density Functional Theory-Derived Cell Parameters. Journal of Physical Chemistry C, 2021, 125, 6433-6441.	3.1	3
4	Hydrogen Inter-Cage Hopping and Cage Occupancies inside Hydrogen Hydrate: Molecular-Dynamics Analysis. Applied Sciences (Switzerland), 2021, 11, 282.	2.5	10
5	Mechanism of hydrogen formation during the corrosion of Mg17Al12. Electrochemistry Communications, 2020, 119, 106813.	4.7	7
6	Promoting the Insertion of Molecular Hydrogen in Tetrahydrofuran Hydrate With the Help of Acidic Additives. Frontiers in Chemistry, 2020, 8, 550862.	3.6	10
7	Cage occupancy of methane clathrate hydrates in the ternary H2Oâ€“NH3â€“CH4 system. Chemical Communications, 2020, 56, 12391-12394.	4.1	4
8	Molecular Selectivity of COâ€“N₂ Mixed Hydrates: Raman Spectroscopy and GCMC Studies. Journal of Physical Chemistry C, 2020, 124, 11886-11891.	3.1	7
9	Gas Hydrate Crystallization in Thin Glass Capillaries: Roles of Supercooling and Wettability. Langmuir, 2019, 35, 12569-12581.	3.5	29
10	Coexistence of sI and sII in methane-propane hydrate former systems at high pressures. Chemical Engineering Science, 2019, 208, 115149.	3.8	19
11	Unraveling the metastability of the SI and SII carbon monoxide hydrate with a combined DFT-neutron diffraction investigation. Journal of Chemical Physics, 2019, 150, 184705.	3.0	12
12	Revealing CO-Preferential Encapsulation in the Mixed COâ€“N2 Clathrate Hydrate. Journal of Physical Chemistry C, 2019, 123, 4871-4878.	3.1	8
13	Guest Partitioning and Metastability of the Nitrogen Gas Hydrate. Journal of Physical Chemistry C, 2018, 122, 566-573.	3.1	25
14	Selective trapping of CO₂ gas and cage occupancy in CO₂â€“N₂ and CO₂â€“CO mixed gas hydrates. Chemical Communications, 2018, 54, 4290-4293.	4.1	15
15	Ageing and Langmuir Behavior of the Cage Occupancy in the Nitrogen Gas Hydrate. Crystals, 2018, 8, 145.	2.2	8
16	Modeling the THF clathrate hydrate dynamics by combining molecular dynamics and quasi-elastic neutron scattering. Chemical Physics, 2017, 496, 24-34.	1.9	6
17	Guest Partitioning in Carbon Monoxide Hydrate by Raman Spectroscopy. Journal of Physical Chemistry C, 2017, 121, 13798-13802.	3.1	22
18	Quasi-elastic neutron scattering investigation of the guest molecule dynamics in the bromomethane clathrate hydrate. Fluid Phase Equilibria, 2016, 413, 116-122.	2.5	6

#	Article	IF	Citations
19	JDN24, the 24th Annual Meeting of the French Neutron Scattering Society: Science, Future French Neutron Landscape and Sun. Neutron News, 2016, 27, 9-10.	0.2	0
20	Modifying the Flexibility of Water Cages by Co-Including Acidic Species within Clathrate Hydrate. Journal of Physical Chemistry C, 2015, 119, 8904-8911.	3.1	14
21	Proton Diffusion in the Hexafluorophosphoric Acid Clathrate Hydrate. Journal of Physical Chemistry B, 2014, 118, 13357-13364.	2.6	16
22	Hydronium dynamics in the perchloric acid clathrate hydrate. Solid State Ionics, 2013, 252, 19-25.	2.7	17
23	¹²⁹ Xe nuclear resonance scattering on solid Xe and ¹²⁹ Xe clathrate hydrate. Europhysics Letters, 2013, 103, 36001.	2.0	14
24	Diffusive Motions of Molecular Hydrogen Confined in THF Clathrate Hydrate. Journal of Physical Chemistry C, 2012, 116, 16823-16829.	3.1	20
25	Energy landscape of clathrate hydrates. European Physical Journal: Special Topics, 2012, 213, 103-127.	2.6	14
26	Dynamics of Methyl Iodide Clathrate Hydrate, Investigated by MD Simulations and QENS Experiments. Journal of Physical Chemistry C, 2011, 115, 12689-12701.	3.1	14
27	Les clathrates hydrates. , 2010, , .		0
28	Bidirectional Transport of Guest Molecules through the Nanoporous Tunnel Structure of a Solid Inclusion Compound. Journal of Physical Chemistry C, 2009, 113, 736-743.	3.1	23
29	Structural Properties of Low-Temperature Phase Transitions in the Prototypical Thiourea Inclusion Compound:â€‰ Cyclohexane/Thiourea. Journal of Physical Chemistry C, 2008, 112, 839-847.	3.1	12
30	Dynamic Properties of Solid Ammonium Cyanate. Journal of Physical Chemistry C, 2008, 112, 15870-15879.	3.1	7
31	Dynamics and adsorption sites for guest molecules in methyl chloride hydrate. Journal of Physics Condensed Matter, 2008, 20, 125219.	1.8	4
32	Enhancement of the Raman Scattering Signal Due to a Nanolens Effect. Applied Spectroscopy, 2007, 61, 621-623.	2.2	9
33	Kinetics of Molecular Transport in a Nanoporous Crystal Studied by Confocal Raman Microspectrometry:â€‰ Single-File Diffusion in a Densely Filled Tunnel. Journal of Physical Chemistry B, 2007, 111, 12339-12344.	2.6	21
34	Methyl group rotation and whole molecule dynamics in methyl bromide hydrateâ€¡â€¡. Phase Transitions, 2007, 80, 473-488.	1.3	9
35	Mechanistic Aspects of the Solid-State Transformation of Ammonium Cyanate to Urea at High Pressure. Journal of Physical Chemistry B, 2007, 111, 3960-3968.	2.6	6
36	Water Dynamics in Hardened Ordinary Portland Cement Paste or Concrete:Â From Quasielastic Neutron Scattering. Journal of Physical Chemistry B, 2006, 110, 17966-17976.	2.6	111

#	Article	IF	Citations
37	The dynamical properties of the aromatic hydrogen bond in NH4(C6H5)4B from quasielastic neutron scattering. Journal of Chemical Physics, 2006, 125, 184513.	3.0	3
38	Significant Conformational Changes Associated with Molecular Transport in a Crystalline Solid. Journal of Physical Chemistry B, 2006, 110, 10708-10713.	2.6	18
39	In-situ Monitoring of Alkane-Alkane Guest Exchange in Urea Inclusion Compounds using Confocal Raman Microspectrometry. Molecular Crystals and Liquid Crystals, 2006, 456, 139-147.	0.9	8
40	Free NH3 quantum rotations in Hofmann clathrates: structure factors and line widths studied by inelastic neutron scattering. Chemical Physics, 2005, 308, 147-157.	1.9	1
41	Rotational dynamics of methyl groups in m-xylene. Journal of Chemical Physics, 2005, 122, 014502.	3.0	8
42	Inelastic Neutron Scattering Study of Electron Reduction in Mn12Derivatives. Inorganic Chemistry, 2005, 44, 649-653.	4.0	34
43	Probing adsorption sites in a cubic II water clathrate cage by methyl group rotation of CH3I guest molecules. Journal of Physics Condensed Matter, 2004, 16, 7045-7061.	1.8	12
44	Proton dynamics in the perchloric acid clathrate hydrate HClO4â‹…5.5H2O. Journal of Chemical Physics, 2004, 121, 11916-11926.	3.0	22
45	Water dynamics in cement pastes. Physica B: Condensed Matter, 2004, 350, E565-E568.	2.7	15
46	NH3 quantum rotators in Hofmann clathrates: intensity and width of rotational transition lines. Physica B: Condensed Matter, 2004, 350, E391-E393.	2.7	0
47	Methyl rotational potentials as a probe of the cage potential surface in methyl iodide clathrate. Physica B: Condensed Matter, 2004, 350, E399-E402.	2.7	9
48	Direct Time-Resolved and Spatially Resolved Monitoring of Molecular Transport in a Crystalline Nanochannel System. Journal of the American Chemical Society, 2004, 126, 11124-11125.	13.7	44
49	MD simulation of the dynamics of chlorocyclohexane guest molecules in the thiourea inclusion compound. Chemical Physics, 2003, 292, 201-216.	1.9	8
50	Methyl rotational potentials of trimethyl metal compounds studied by inelastic and quasielastic neutron scattering. Chemical Physics, 2003, 292, 161-169.	1.9	3
51	Water diffusion in fully hydrated porcine stratum corneum. Chemical Physics, 2003, 292, 465-476.	1.9	35
52	Local Dynamics of Polyethylene and Its Oligomers:Â A Molecular Dynamics Interpretation of the Incoherent Dynamic Structure Factor. Macromolecules, 2003, 36, 8864-8875.	4.8	12
53	The methyl rotational potentials of Ga(CH3)3derived by neutron spectroscopy. Journal of Physics Condensed Matter, 2002, 14, 10145-10157.	1.8	2
54	Methyl group rotation in trimethylaluminium. Journal of Physics Condensed Matter, 2002, 14, 1833-1845.	1.8	6

#	Article	IF	Citations
55	Complex Dynamics in Polyisobutylene Melts. Macromolecules, 2002, 35, 7039-7043.	4.8	16
56	Low-energy spin excitations in the molecular magnetic cluster V 15. Europhysics Letters, 2002, 59, 291-297.	2.0	70
57	Temperature dependence of the dynamic scattering function in glycerol studied by quasi-elastic slow neutron scattering. Applied Physics A: Materials Science and Processing, 2002, 74, s1342-s1344.	2.3	1
58	A combined MD-IQNS investigation of rotational disorder of guest molecules in thiourea inclusion compounds. Applied Physics A: Materials Science and Processing, 2002, 74, s1357-s1359.	2.3	3
59	Dynamic correlations around the glass transition in systems with different degrees of fragility. Applied Physics A: Materials Science and Processing, 2002, 74, s1192-s1193.	2.3	1
60	QENS investigation of filled rubbers. Applied Physics A: Materials Science and Processing, 2002, 74, s490-s492.	2.3	11
61	A high resolution quasielastic neutron scattering study of the guest molecules dynamics in the cyclohexane/thiourea inclusion compound. Physica B: Condensed Matter, 2001, 301, 59-64.	2.7	5
62	Phase transitions and molecular dynamics in the cyclohexane/thiourea inclusion compound. Physical Review B, 2001, 64, .	3.2	19
63	Molecular dynamics simulation study of cyclohexane guest molecules in the cyclohexane/thiourea inclusion compound. Chemical Physics, 2000, 261, 125-135.	1.9	15