

Arnaud Desmedt

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Water Dynamics in Hardened Ordinary Portland Cement Paste or Concrete: From Quasielastic Neutron Scattering. <i>Journal of Physical Chemistry B</i> , 2006, 110, 17966-17976.	2.6	111
2	Low-energy spin excitations in the molecular magnetic cluster V 15. <i>Europhysics Letters</i> , 2002, 59, 291-297.	2.0	70
3	Direct Time-Resolved and Spatially Resolved Monitoring of Molecular Transport in a Crystalline Nanochannel System. <i>Journal of the American Chemical Society</i> , 2004, 126, 11124-11125.	13.7	44
4	Water diffusion in fully hydrated porcine stratum corneum. <i>Chemical Physics</i> , 2003, 292, 465-476.	1.9	35
5	Inelastic Neutron Scattering Study of Electron Reduction in Mn ²⁺ Derivatives. <i>Inorganic Chemistry</i> , 2005, 44, 649-653.	4.0	34
6	Gas Hydrate Crystallization in Thin Glass Capillaries: Roles of Supercooling and Wettability. <i>Langmuir</i> , 2019, 35, 12569-12581.	3.5	29
7	Guest Partitioning and Metastability of the Nitrogen Gas Hydrate. <i>Journal of Physical Chemistry C</i> , 2018, 122, 566-573.	3.1	25
8	Bidirectional Transport of Guest Molecules through the Nanoporous Tunnel Structure of a Solid Inclusion Compound. <i>Journal of Physical Chemistry C</i> , 2009, 113, 736-743.	3.1	23
9	Proton dynamics in the perchloric acid clathrate hydrate HClO ₄ ·5.5H ₂ O. <i>Journal of Chemical Physics</i> , 2004, 121, 11916-11926.	3.0	22
10	Guest Partitioning in Carbon Monoxide Hydrate by Raman Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2017, 121, 13798-13802.	3.1	22
11	Kinetics of Molecular Transport in a Nanoporous Crystal Studied by Confocal Raman Microspectrometry: Single-File Diffusion in a Densely Filled Tunnel. <i>Journal of Physical Chemistry B</i> , 2007, 111, 12339-12344.	2.6	21
12	Diffusive Motions of Molecular Hydrogen Confined in THF Clathrate Hydrate. <i>Journal of Physical Chemistry C</i> , 2012, 116, 16823-16829.	3.1	20
13	Phase transitions and molecular dynamics in the cyclohexane/thiourea inclusion compound. <i>Physical Review B</i> , 2001, 64, .	3.2	19
14	Coexistence of sl and sll in methane-propane hydrate former systems at high pressures. <i>Chemical Engineering Science</i> , 2019, 208, 115149.	3.8	19
15	Significant Conformational Changes Associated with Molecular Transport in a Crystalline Solid. <i>Journal of Physical Chemistry B</i> , 2006, 110, 10708-10713.	2.6	18
16	Hydronium dynamics in the perchloric acid clathrate hydrate. <i>Solid State Ionics</i> , 2013, 252, 19-25.	2.7	17
17	Complex Dynamics in Polyisobutylene Melts. <i>Macromolecules</i> , 2002, 35, 7039-7043.	4.8	16
18	Proton Diffusion in the Hexafluorophosphoric Acid Clathrate Hydrate. <i>Journal of Physical Chemistry B</i> , 2014, 118, 13357-13364.	2.6	16

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19	Molecular dynamics simulation study of cyclohexane guest molecules in the cyclohexane/thiourea inclusion compound. <i>Chemical Physics</i> , 2000, 261, 125-135.	1.9	15
20	Water dynamics in cement pastes. <i>Physica B: Condensed Matter</i> , 2004, 350, E565-E568.	2.7	15
21	Selective trapping of CO ₂ gas and cage occupancy in CO ₂ and N ₂ and CO ₂ mixed gas hydrates. <i>Chemical Communications</i> , 2018, 54, 4290-4293.	4.1	15
22	Dynamics of Methyl Iodide Clathrate Hydrate, Investigated by MD Simulations and QENS Experiments. <i>Journal of Physical Chemistry C</i> , 2011, 115, 12689-12701.	3.1	14
23	Energy landscape of clathrate hydrates. <i>European Physical Journal: Special Topics</i> , 2012, 213, 103-127.	2.6	14
24	¹²⁹ Xe nuclear resonance scattering on solid Xe and ¹²⁹ Xe clathrate hydrate. <i>Europhysics Letters</i> , 2013, 103, 36001.	2.0	14
25	Modifying the Flexibility of Water Cages by Co-Including Acidic Species within Clathrate Hydrate. <i>Journal of Physical Chemistry C</i> , 2015, 119, 8904-8911.	3.1	14
26	Local Dynamics of Polyethylene and Its Oligomers: A Molecular Dynamics Interpretation of the Incoherent Dynamic Structure Factor. <i>Macromolecules</i> , 2003, 36, 8864-8875.	4.8	12
27	Probing adsorption sites in a cubic II water clathrate cage by methyl group rotation of CH ₃ I guest molecules. <i>Journal of Physics Condensed Matter</i> , 2004, 16, 7045-7061.	1.8	12
28	Structural Properties of Low-Temperature Phase Transitions in the Prototypical Thiourea Inclusion Compound: Cyclohexane/Thiourea. <i>Journal of Physical Chemistry C</i> , 2008, 112, 839-847.	3.1	12
29	Unraveling the metastability of the SI and SII carbon monoxide hydrate with a combined DFT-neutron diffraction investigation. <i>Journal of Chemical Physics</i> , 2019, 150, 184705.	3.0	12
30	QENS investigation of filled rubbers. <i>Applied Physics A: Materials Science and Processing</i> , 2002, 74, s490-s492.	2.3	11
31	Promoting the Insertion of Molecular Hydrogen in Tetrahydrofuran Hydrate With the Help of Acidic Additives. <i>Frontiers in Chemistry</i> , 2020, 8, 550862.	3.6	10
32	Hydrogen Inter-Cage Hopping and Cage Occupancies inside Hydrogen Hydrate: Molecular-Dynamics Analysis. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 282.	2.5	10
33	Methyl rotational potentials as a probe of the cage potential surface in methyl iodide clathrate. <i>Physica B: Condensed Matter</i> , 2004, 350, E399-E402.	2.7	9
34	Enhancement of the Raman Scattering Signal Due to a Nanolens Effect. <i>Applied Spectroscopy</i> , 2007, 61, 621-623.	2.2	9
35	Methyl group rotation and whole molecule dynamics in methyl bromide hydrate. <i>Phase Transitions</i> , 2007, 80, 473-488.	1.3	9
36	Insights into the porous structure of surfactant-promoted gas hydrate. <i>Chemical Engineering Science</i> , 2022, 248, 117193.	3.8	9

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37	MD simulation of the dynamics of chlorocyclohexane guest molecules in the thiourea inclusion compound. <i>Chemical Physics</i> , 2003, 292, 201-216.	1.9	8
38	Rotational dynamics of methyl groups in m-xylene. <i>Journal of Chemical Physics</i> , 2005, 122, 014502.	3.0	8
39	In-situ Monitoring of Alkane-Alkane Guest Exchange in Urea Inclusion Compounds using Confocal Raman Microspectrometry. <i>Molecular Crystals and Liquid Crystals</i> , 2006, 456, 139-147.	0.9	8
40	Ageing and Langmuir Behavior of the Cage Occupancy in the Nitrogen Gas Hydrate. <i>Crystals</i> , 2018, 8, 145.	2.2	8
41	Revealing CO-Preferential Encapsulation in the Mixed CO ₂ -N ₂ Clathrate Hydrate. <i>Journal of Physical Chemistry C</i> , 2019, 123, 4871-4878.	3.1	8
42	Dynamic Properties of Solid Ammonium Cyanate. <i>Journal of Physical Chemistry C</i> , 2008, 112, 15870-15879.	3.1	7
43	Mechanism of hydrogen formation during the corrosion of Mg ₁₇ Al ₁₂ . <i>Electrochemistry Communications</i> , 2020, 119, 106813.	4.7	7
44	Molecular Selectivity of CO ₂ -N ₂ Mixed Hydrates: Raman Spectroscopy and GCMC Studies. <i>Journal of Physical Chemistry C</i> , 2020, 124, 11886-11891.	3.1	7
45	Methyl group rotation in trimethylaluminium. <i>Journal of Physics Condensed Matter</i> , 2002, 14, 1833-1845.	1.8	6
46	Mechanistic Aspects of the Solid-State Transformation of Ammonium Cyanate to Urea at High Pressure. <i>Journal of Physical Chemistry B</i> , 2007, 111, 3960-3968.	2.6	6
47	Quasi-elastic neutron scattering investigation of the guest molecule dynamics in the bromomethane clathrate hydrate. <i>Fluid Phase Equilibria</i> , 2016, 413, 116-122.	2.5	6
48	Modeling the THF clathrate hydrate dynamics by combining molecular dynamics and quasi-elastic neutron scattering. <i>Chemical Physics</i> , 2017, 496, 24-34.	1.9	6
49	A high resolution quasielastic neutron scattering study of the guest molecules dynamics in the cyclohexane/thiourea inclusion compound. <i>Physica B: Condensed Matter</i> , 2001, 301, 59-64.	2.7	5
50	Dynamics and adsorption sites for guest molecules in methyl chloride hydrate. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 125219.	1.8	4
51	Cage occupancy of methane clathrate hydrates in the ternary H ₂ O-NH ₃ -CH ₄ system. <i>Chemical Communications</i> , 2020, 56, 12391-12394.	4.1	4
52	A combined MD-IQNS investigation of rotational disorder of guest molecules in thiourea inclusion compounds. <i>Applied Physics A: Materials Science and Processing</i> , 2002, 74, s1357-s1359.	2.3	3
53	Methyl rotational potentials of trimethyl metal compounds studied by inelastic and quasielastic neutron scattering. <i>Chemical Physics</i> , 2003, 292, 161-169.	1.9	3
54	The dynamical properties of the aromatic hydrogen bond in NH ₄ (C ₆ H ₅) ₄ B from quasielastic neutron scattering. <i>Journal of Chemical Physics</i> , 2006, 125, 184513.	3.0	3

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55	Nitrogen Hydrate Cage Occupancy and Bulk Modulus Inferred from Density Functional Theory-Derived Cell Parameters. <i>Journal of Physical Chemistry C</i> , 2021, 125, 6433-6441.	3.1	3
56	The methyl rotational potentials of Ga(CH ₃) ₃ derived by neutron spectroscopy. <i>Journal of Physics Condensed Matter</i> , 2002, 14, 10145-10157.	1.8	2
57	Temperature dependence of the dynamic scattering function in glycerol studied by quasi-elastic slow neutron scattering. <i>Applied Physics A: Materials Science and Processing</i> , 2002, 74, s1342-s1344.	2.3	1
58	Dynamic correlations around the glass transition in systems with different degrees of fragility. <i>Applied Physics A: Materials Science and Processing</i> , 2002, 74, s1192-s1193.	2.3	1
59	Free NH ₃ quantum rotations in Hofmann clathrates: structure factors and line widths studied by inelastic neutron scattering. <i>Chemical Physics</i> , 2005, 308, 147-157.	1.9	1
60	Reply to the "Comment on Cage occupancy of methane clathrate hydrates in the ternary H ₂ O-NH ₃ -CH ₄ system" by S. Alavi and J. Ripmeester, <i>Chem. Commun.</i> , 2022, 58, DOI: 10.1039/D1CC06526B. <i>Chemical Communications</i> , 2022, 58, 4099-4102.	4.1	1
61	NH ₃ quantum rotators in Hofmann clathrates: intensity and width of rotational transition lines. <i>Physica B: Condensed Matter</i> , 2004, 350, E391-E393.	2.7	0
62	JDN24, the 24th Annual Meeting of the French Neutron Scattering Society: Science, Future French Neutron Landscape and Sun. <i>Neutron News</i> , 2016, 27, 9-10.	0.2	0
63	Les clathrates hydrates. , 2010, , .		0