Daniele Colognesi

List of Publications by Year
in descending order

43 papers	500 citations	623734 14 h-index	677142 22 g-index
43 all docs	43 docs citations	43 times ranked	522 citing authors

#	Article	IF	Citations
1	Microscopic collective dynamics in liquid neon-deuterium mixtures: Inelastic neutron scattering and quantum simulations. Physical Review E, 2022, 105, .	2.1	0
2	Exploring ultra-fast proton dynamics in water under a static electric field. Europhysics Letters, 2021, 133, 57002.	2.0	0
3	Irreversible structural changes of recovered hydrogen hydrate transforming from C0 phase to ice XVII. Chemical Physics, 2021, 544, 111092.	1.9	4
4	Density of Phonon States in Cubic Ice Ic. Journal of Physical Chemistry C, 2021, 125, 23533-23538.	3.1	4
5	Collective dynamics of liquid deuterium: Neutron scattering and approximate quantum simulation methods. Physical Review B, 2021, 104, .	3.2	8
6	Proton Dynamics in Palladiumâ€“Silver: An Inelastic Neutron Scattering Investigation. Molecules, 2020, 25, 5587.	3.8	3
7	Time dependence of quantum correlation functions. Physical Review E, 2020, 101, 052110.	2.1	3
8	Dynamic coherence effects in deep inelastic neutron scattering: Many-body treatment and intra-molecular terms. Physica B: Condensed Matter, 2020, 585, 412112.	2.7	0
9	Dynamical Origin of the Total and Zero-Point Kinetic Energy in a Quantum Fluid. Physical Review Letters, 2019, 123, 135301.	7.8	7
10	Hydrogen self-dynamics in diluted liquid mixtures with neon: An inelastic neutron scattering study. Physical Review E, 2019, 99, 012138.	2.1	2
11	Density dependence of the dynamical processes governing the velocity autocorrelation function of a quantum fluid. Physical Review E, 2019, 100, 062111.	2.1	6
12	Wavelet imaging of transient energy localization in nonlinear systems at thermal equilibrium: The case study of NaI crystals at high temperature. Physical Review B, 2019, 99, .	3.2	18
13	High-pressure vibrational properties of dense rubidium. Physical Review B, 2018, 98, .	3.2	2
14	Microscopic self dynamics in liquids: Connections between the Gaussian approximation and the asymptotic impulsive regime. Physica B: Condensed Matter, 2017, 515, 56-66.	2.7	1
15	The high energy-transfer region in neutron scattering vibrational spectra: What does it mean and what could it be useful for?. Journal of Neutron Research, 2017, 19, 147-167.	1.1	2
16	Dynamics of hydrogen guests in ice XVII nanopores. Physical Review Materials, 2017, 1, .	2.4	9
17	VESPA: The vibrational spectrometer for the European Spallation Source. Review of Scientific Instruments, 2016, 87, 065101.	1.3	11
18	Refined Structure of Metastable Ice XVII from Neutron Diffraction Measurements. Journal of Physical Chemistry C, 2016, 120, 26955-26959.	3.1	43

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19	Impact of the Condensed-Phase Environment on the Translationâ€“Rotation Eigenstates and Spectra of a Hydrogen Molecule in Clathrate Hydrates. Journal of Physical Chemistry Letters, 2016, 7, 308-313.	4.6	18
20	Hydrogen self-dynamics in liquidH2â^'D2mixtures studied through inelastic neutron scattering. Physical Review E, 2015, 92, 012311.	2.1	10
21	VSI@ESS: Case study for a vibrational spectroscopy instrument at the european spallation source. EPJ Web of Conferences, 2015, 83, 03021.	0.3	1
22	The HD molecule in small and medium cages of clathrate hydrates: Quantum dynamics studied by neutron scattering measurements and computation. Journal of Chemical Physics, 2014, 141, 134501.	3.0	16
23	Neutron Scattering Measurements and Computation of the Quantum Dynamics of Hydrogen Molecules Trapped in the Small and Large Cages of Clathrate Hydrates. Journal of Physical Chemistry A, 2013, 117, 7314-7326.	2.5	33
24	Rigorous quantum treatment of inelastic neutron scattering spectra of a heteronuclear diatomic molecule in a nanocavity: HD in the small cage of structure II clathrate hydrate. Chemical Physics Letters, 2013, 563, 1-8.	2.6	32
25	Inelastic neutron scattering from solid molecular hydrogen at various densities. Chemical Physics, 2013, 427, 101-105.	1.9	2
26	Experimental inelastic neutron scattering spectrum of hydrogen hexagonal clathrate-hydrate compared with rigorous quantum simulations. Journal of Chemical Physics, 2013, 139, 164507.	3.0	20
27	Neutron study of non-Gaussian self dynamics in liquid parahydrogen. Journal of Physics: Conference Series, 2012, 340, 012076.	0.4	1
28	Quantum calculation of inelastic neutron scattering spectra of a hydrogen molecule inside a nanoscale cavity based on rigorous treatment of the coupled translation-rotation dynamics. Physical Review B, 2011, 83, .	3.2	52
29	Non-Gaussian self-dynamics of liquid hydrogen. Physical Review B, 2011, 84, .	3.2	10
30	Inelastic neutron scattering and DFT study of potassium hydrogen phthalate. Journal of Molecular Structure, 2010, 967, 89-93.	3.6	2
31	Nuclear quantum effects inab initiodynamics: Theory and experiments for lithium imide. Physical Review B, 2010, 82, .	3.2	43
32	ELECTRONIC PRINCIPLES OF SOME TRENDS IN PROPERTIES OF METALLIC HYDRIDES. International Journal of Modern Physics B, 2010, 24, 703-710.	2.0	6
33	The vibrational spectroscopy of indigo: A reassessment. Vibrational Spectroscopy, 2009, 50, 268-276.	2.2	31
34	Hydrogen and Hydrogen-Storage Materials. Neutron Scattering Applications and Techniques, 2007, , 417-437.	0.2	0
35	Can non-Bornâ€“Oppenheimer effects cause anomalous neutron cross-sections in molecular hydrogen?. Physica B: Condensed Matter, 2005, 358, 114-125.	2.7	18
36	Anomalous H/D cross-sections in deep inelastic neutron scattering: some critical remarks on two current theoretical explanations. Physica B: Condensed Matter, 2004, 344, 73-81.	2.7	20

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37	Binuclear Hydridoplatinum(II): One-Pot Synthesis, INS Spectra and X-ray Crystal Structure of [Pt2(dcype)2(H)3][BPh4] {dcype = 1,2-Bis(dicyclohexylphosphanyl)ethane}. European Journal of Inorganic Chemistry, 2003, 2003, 3958-3967.	2.0	10
38	The Microscopic Dynamics of Liquid and Solid Parahydrogen. Journal of Low Temperature Physics, 2002, 126, 585-590.	1.4	6
39	Microscopic Structure in Liquid Hydrogen and Deuterium: An X-Ray Scattering Study. Journal of Low Temperature Physics, 2002, 129, 117-131.	1.4	16
40	Vibrational Spectroscopy of Superconducting MgB2by Neutron Inelastic Scattering. Journal of the Physical Society of Japan, 2001, 70, 1480-1482.	1.6	18
41	The measurement of the translational kinetic energy of liquid hydrogen using TOSCA. Physica B: Condensed Matter, 2000, 276-278, 814-815.	2.7	0
42	The reverse Monte Carlo technique applied to fluids of diatomic molecules. Molecular Physics, 1996, 88, 465-476.	1.7	9
43	Simple and Binary Hydrogen Clathrate Hydrates: Synthesis and Microscopic Characterization through Neutron and Raman Scattering. Advances in Science and Technology, 0, , .	0.2	3