Fausto Martelli

List of Publications by Year
in descending order

33 papers	1,320 citations	430874 18 h-index	434195 31 g-index
33 all docs	33 docs citations	33 times ranked	1380 citing authors

#	Article	IF	Citations
1	Metastable liquidâ€“liquid transition in a molecular model of water. Nature, 2014, 510, 385-388.	27.8	431
2	Local structure analysis in ab initio liquid water. Molecular Physics, 2015, 113, 2829-2841.	1.7	96
3	Hydration Properties and Ionic Radii of Actinide(III) Ions in Aqueous Solution. Inorganic Chemistry, 2013, 52, 10318-10324.	4.0	80
4	Comment on â€œThe putative liquid-liquid transition is a liquid-solid transition in atomistic models of waterâ€• [I and II: J. Chem. Phys. 135, 134503 (2011); J. Chem. Phys. 138, 214504 (2013)]. Journal of Chemical Physics, 2018, 148, 137101.	3.0	58
5	Unravelling the contribution of local structures to the anomalies of water: The synergistic action of several factors. Journal of Chemical Physics, 2019, 150, 094506.	3.0	52
6	Large-Scale Structure and Hyperuniformity of Amorphous Ices. Physical Review Letters, 2017, 119, 136002.	7.8	50
7	Local-order metric for condensed-phase environments. Physical Review B, 2018, 97, .	3.2	41
8	Electronic structure and bonding of lanthanoid(iii) carbonates. Physical Chemistry Chemical Physics, 2012, 14, 14822.	2.8	38
9	Network Topology in Water Nanoconfined between Phospholipid Membranes. ACS Nano, 2020, 14, 8616-8623.	14.6	37
10	Searching for crystal-ice domains in amorphous ices. Physical Review Materials, 2018, 2, .	2.4	37
11	Structural properties of water confined by phospholipid membranes. Frontiers of Physics, 2018, 13, 1.	5.0	34
12	Effective spectral densities for system-environment dynamics at conical intersections: S2â€“S1 conical intersection in pyrazine. Chemical Physics, 2010, 377, 21-29.	1.9	33
13	Lanthanoids(III) and actinoids(III) in water: Diffusion coefficients and hydration enthalpies from polarizable molecular dynamics simulations. Pure and Applied Chemistry, 2012, 85, 237-246.	1.9	33
14	Polarizable interaction potential for molecular dynamics simulations of actinoids(III) in liquid water. Journal of Chemical Physics, 2011, 135, 044503.	3.0	28
15	Probing the network topology in network-forming materials: The case of water. AIP Advances, 2020, 10, .	1.3	26
16	Connection between liquid and non-crystalline solid phases in water. Journal of Chemical Physics, 2020, 153, 104503.	3.0	25
17	Role of Long-Range Electrostatic Interactions and Local Topology of the Hydrogen Bond Network in the Wettability of Fully and Partially Wetted Single and Multilayer Graphene. Journal of Physical Chemistry C, 2021, 125, 6367-6377.	3.1	20
18	Topology and complexity of the hydrogen bond network in classical models of water. Journal of Molecular Liquids, 2021, 329, 115530.	4.9	20

#	Article	IF	Citations
19	The physics of empty liquids: from patchy particles to water. Reports on Progress in Physics, 2022, 85, 016601.	20.1	20
20	Root-growth of boron nitride nanotubes: experiments and ab initio simulations. Nanoscale, 2018, 10, 22223-22230.	5.6	19
21	Redefining the concept of hydration water near soft interfaces. Biointerphases, 2021, 16, 020801.	1.6	18
22	Palmer et al. reply. Nature, 2016, 531, E2-E3.	27.8	17
23	Switching Cytolytic Nanopores into Antimicrobial Fractal Ruptures by a Single Side Chain Mutation. ACS Nano, 2021, 15, 9679-9689.	14.6	17
24	Hydration properties of lanthanoid(iii) carbonate complexes in liquid water determined by polarizable molecular dynamics simulations. Physical Chemistry Chemical Physics, 2014, 16, 3693.	2.8	15
25	Density and bond-orientational relaxations in supercooled water. Molecular Physics, 2016, 114, 2580-2585.	1.7	14
26	Modulation of Antimicrobial Peptide Potency in Stressed Lipid Bilayers. Physical Review Letters, 2019, 122, 208103.	7.8	13
27	Wettability of graphite under 2D confinement. Carbon, 2022, 198, 132-141.	10.3	13
28	Varying the charge of small cations in liquid water: Structural, transport, and thermodynamical properties. Journal of Chemical Physics, 2012, 137, 164501.	3.0	9
29	Signatures of sluggish dynamics and local structural ordering during ice nucleation. Journal of Chemical Physics, 2022, 156, 114502.	3.0	7
30	Steady-like topology of the dynamical hydrogen bond network in supercooled water. , 2022, 1, .		7
31	Observing the spontaneous formation of a sub-critical nucleus in a phase-change amorphous material from ab initio molecular dynamics. Materials Science in Semiconductor Processing, 2021, 136, 106102.	4.0	5
32	Water between Membranes. , 2019, , 69-88.		4
33	Simulation of large molecular systems with electronically-derived forces. Computer Physics Communications, 2021, 264, 107959.	7.5	3