Mauro Rovere

List of Publications by Year
in descending order

107	3,541	117625	144013
papers	citations	34 h-index	57 g-index

108	108	108	2054
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Spontaneous NaCl-doped ices I_h, I_c, III, V and VI. Understanding the mechanism of ion inclusion and its dependence on the crystalline structure of ice. Physical Chemistry Chemical Physics, 2021, 23, 22897-22911.	2.8	7
2	Supercooled Liquids: Glass Transition and Mode Coupling Theory. Soft and Biological Matter, 2021, , 265-300.	0.3	0
3	Supercooled Water. Soft and Biological Matter, 2021, , 301-321.	0.3	0
4	Methods of Computer Simulation. Soft and Biological Matter, 2021, , 131-193.	0.3	0
5	Structure and dynamics of nanoconfined water and aqueous solutions. European Physical Journal E, 2021, 44, 136.	1.6	38
6	Advances in the study of supercooled water. European Physical Journal E, 2021, 44, 143.	1.6	40
7	Slow dynamics of supercooled hydration water in contact with lysozyme: examining the cage effect at different length scales. Philosophical Magazine, 2020, 100, 2582-2595.	1.6	6
8	Characterization of hydration water in supercooled water-trehalose solutions: The role of the hydrogen bonds network. Journal of Chemical Physics, 2019, 151, 044507.	3.0	8
9	Molecular dynamics simulations of freezing-point depression of TIP4P/2005 water in solution with NaCl. Journal of Molecular Liquids, 2018, 261, 513-519.	4.9	43
10	High density liquid structure enhancement in glass forming aqueous solution of LiCl. Journal of Chemical Physics, 2018, 148, 222829.	3.0	5
11	Structural Properties of Ionic Aqueous Solutions. , 2018, , 153-162.		0
12	Fragile to strong crossover and Widom line in supercooled water: A comparative study. Frontiers of Physics, 2018, 13, 1.	5.0	18
13	Structural properties and fragile to strong transition in confined water. Journal of Chemical Physics, 2017, 146, 084505.	3.0	24
14	Spontaneous NaCl-doped ice at seawater conditions: focus on the mechanisms of ion inclusion. Physical Chemistry Chemical Physics, 2017, 19, 9566-9574.	2.8	53
15	Microscopic origin of the fragile to strong crossover in supercooled water: The role of activated processes. Journal of Chemical Physics, 2017, 146, 084502.	3.0	38
16	Freezing Temperatures, Ice Nanotubes Structures, and Proton Ordering of TIP4P/ICE Water inside Single Wall Carbon Nanotubes. Journal of Physical Chemistry B, 2017, 121, 10371-10381.	2.6	28
17	High precision determination of the melting points of water TIP4P/2005 and water TIP4P/Ice models by the direct coexistence technique. Journal of Chemical Physics, 2017, 147, 244506.	3.0	60
18	Slow Dynamics and Structure of Supercooled Water in Confinement. Entropy, 2017, 19, 185.	2.2	5

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19	Mode coupling theory and fragile to strong transition in supercooled TIP4P/2005 water. Journal of Chemical Physics, 2016, 144, 074503.	3.0	63
20	The Widom line and dynamical crossover in supercritical water: Popular water models versus experiments. Journal of Chemical Physics, 2015, 143, 114502.	3.0	35
21	Relation between the two-body entropy and the relaxation time in supercooled water. Physical Review E, 2015, 91, 012107.	2.1	18
22	Widom line and dynamical crossovers as routes to understand supercritical water. Nature Communications, 2014, 5, 5806.	12.8	116
23	Do ions affect the structure of water? The case of potassium halides. Journal of Molecular Liquids, 2014, 189, 52-56.	4.9	31
24	Computer Simulation Study of the Structure of LiCl Aqueous Solutions: Test of Non-Standard Mixing Rules in the Ion Interaction. Journal of Physical Chemistry B, 2014, 118, 7680-7691.	2.6	36
25	Fragile to strong crossover at the Widom line in supercooled aqueous solutions of NaCl. Journal of Chemical Physics, 2013, 139, 204503.	3.0	30
26	Mode coupling and fragile to strong transition in supercooled TIP4P water. Journal of Chemical Physics, 2012, 137, 164503.	3.0	58
27	Water confined in MCM-41: a mode coupling theory analysis. Journal of Physics Condensed Matter, 2012, 24, 064109.	1.8	43
28	Ion hydration and structural properties of water in aqueous solutions at normal and supercooled conditions: a test of the structure making and breaking concept. Physical Chemistry Chemical Physics, 2011, 13, 19814.	2.8	75
29	Structural Properties of High and Low Density Water in a Supercooled Aqueous Solution of Salt. Journal of Physical Chemistry B, 2011, 115, 1461-1468.	2.6	43
30	Excess entropy of water in a supercooled solution of salt. Molecular Physics, 2011, 109, 2969-2979.	1.7	8
31	Structure and thermodynamics of supercooled aqueous solutions: Ionic solutes compared with water in a hydrophobic environment. Journal of Molecular Liquids, 2011, 159, 18-23.	4.9	4
32	Lennard-Jones binary mixture in disordered matrices: exploring the mode coupling scenario at increasing confinement. Journal of Physics Condensed Matter, 2011, 23, 234118.	1.8	2
33	Water at interfaces. Journal of Physics Condensed Matter, 2010, 22, 280301.	1.8	2
34	Anomalous dynamics of water confined in MCM-41 at different hydrations. Journal of Physics Condensed Matter, 2010, 22, 284102.	1.8	49
35	Dynamic Crossover in Supercooled Confined Water: Understanding Bulk Properties through Confinement. Journal of Physical Chemistry Letters, 2010, 1, 729-733.	4.6	148
36	A route to explain water anomalies from results on an aqueous solution of salt. Journal of Chemical Physics, 2010, 132, 134508.	3.0	99

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37	Molecular dynamics studies on the thermodynamics of supercooled sodium chloride aqueous solution at different concentrations. Journal of Physics Condensed Matter, 2010, 22, 284104.	1.8	10
38	Mode-coupling behavior of a Lennard-Jones binary mixture upon increasing confinement. Physical Review E, 2009, 80, 061502.	2.1	16
39	Thermodynamics of supercooled water in solutions. Journal of Physics: Conference Series, 2009, 177, 012003.	0.4	5
40	Effect of concentration on the thermodynamics of sodium chloride aqueous solutions in the supercooled regime. Journal of Chemical Physics, 2009, 130, 154511.	3.0	15
41	Thermodynamic behavior and structural properties of an aqueous sodium chloride solution upon supercooling. Journal of Chemical Physics, 2008, 128, 244508.	3.0	28
42	Structural properties and liquid spinodal of water confined in a hydrophobic environment. Physical Review E, 2007, 76, 061202.	2.1	40
43	Spinodal of supercooled polarizable water. Physical Review E, 2007, 75, 011201.	2.1	12
44	The phase diagram of confined fluids. Journal of Molecular Liquids, 2007, 134, 90-93.	4.9	8
45	Supercooled water: A molecular dynamics simulation study with a polarizable potential. Journal of Molecular Liquids, 2006, 127, 28-32.	4.9	3
46	Glass Transition in Confinement. AIP Conference Proceedings, 2006, , .	0.4	1
47	Liquid-liquid coexistence in the phase diagram of a fluid confined in fractal porous materials. Europhysics Letters, 2006, 75, 901-907.	2.0	8
48	Glass transition in confinement: a Lennardâ€“Jones binary mixture study. Computer Physics Communications, 2005, 169, 214-217.	7.5	3
49	Local order in aqueous solutions of rare gases and the role of the solute concentration: a computer simulation study with a polarizable potential. Molecular Physics, 2005, 103, 501-506.	1.7	5
50	Inherent structures and Kauzmann temperature of confined liquids. Physical Review E, 2005, 71, 031204.	2.1	10
51	Mode coupling behavior of a Lennard-Jones binary mixture: A comparison between bulk and confined phases. Journal of Chemical Physics, 2005, 123, 174510.	3.0	11
52	Slow dynamics of a confined supercooled binary mixture in comparison with the bulk phase. Philosophical Magazine, 2004, 84, 1397-1404.	1.6	3
53	Computer simulation of the phase diagram for a fluid confined in a fractal and disordered porous material. Physical Review E, 2004, 70, 061505.	2.1	18
54	Effects of confinement on static and dynamical properties of water. European Physical Journal E, 2003, 12, 77-81.	1.6	53

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55	Computer simulation of structural properties of dilute aqueous solutions of argon at supercritical conditions. Journal of Chemical Physics, 2003, 118, 3646-3650.	3.0	10
56	Slow dynamics of a confined supercooled binary mixture: Direct space analysis. Physical Review E, 2003, 67, 041202.	2.1	36
57	Slow dynamics of a confined supercooled binary mixture. II.Qspace analysis. Physical Review E, 2003, 68, 061209.	2.1	17
58	Strong layering effects and anomalous dynamical behaviour in confined water at low hydration. Journal of Physics Condensed Matter, 2003, 15, S145-S150.	1.8	12
59	Anomalous dynamics of confined water at low hydration. Journal of Physics Condensed Matter, 2003, 15, 7625-7633.	1.8	50
60	Double dynamical regime of confined water. Journal of Physics Condensed Matter, 2003, 15, 1521-1529.	1.8	14
61	Microscopic two-dimensional lattice model of dimer granular compaction with friction. Physical Review E, 2002, 66, 031301.	2.1	7
62	Stretched exponential relaxation in a diffusive lattice model. Physical Review E, 2002, 65, 026127.	2.1	5
63	Slow dynamics of k -mers on a square lattice. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2002, 82, 375-381.	0.6	2
64	Mode Coupling relaxation scenario in a confined glass former. Europhysics Letters, 2002, 57, 212-218.	2.0	29
65	Confined water in the low hydration regime. Journal of Chemical Physics, 2002, 117, 369-375.	3.0	86
66	Layer analysis of the structure of water confined in vycor glass. Journal of Chemical Physics, 2002, 116, 342.	3.0	143
67	Supercooled confined water and the mode coupling scenario. Physica A: Statistical Mechanics and Its Applications, 2002, 304, 53-58.	2.6	3
68	Single particle dynamics of a confined Lennardâ€“Jones mixture in the supercooled regime. Physica A: Statistical Mechanics and Its Applications, 2002, 314, 530-538.	2.6	1
69	Random sequential adsorption and diffusion of dimers and k-mers on a square lattice. Journal of Chemical Physics, 2001, 114, 7563-7569.	3.0	19
70	Modifications of the hydrogen bond network of liquid water in a cylindrical SiO2 pore. Journal of Molecular Liquids, 2000, 85, 127-137.	4.9	92
71	Molecular dynamics study of the glass transition in confined water. European Physical Journal Special Topics, 2000, 10, Pr7-203-Pr7-206.	0.2	2
72	Non-exponential kinetic behaviour of confined water. Europhysics Letters, 2000, 49, 183-188.	2.0	52

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73	Supercooled Confined Water and the Mode Coupling Crossover Temperature. Physical Review Letters, 2000, 85, 4317-4320.	7.8	142
74	Glass transition and layering effects in confined water: A computer simulation study. Journal of Chemical Physics, 2000, 113, 11324-11335.	3.0	172
75	Water in confined geometries: experiments and simulations. Journal of Physics Condensed Matter, 2000, 12, A345-A350.	1.8	74
76	Studies of water in confinement by experiments and simulations. European Physical Journal Special Topics, 2000, 10, Pr7-187-Pr7-193.	0.2	13
77	Water in porous glasses. A computer simulation study. Journal of Molecular Liquids, 1999, 80, 165-178.	4.9	65
78	Evidence of glassy behaviour of water molecules in confined states. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1999, 79, 1923-1930.	0.6	23
79	Water in porous glasses. A computer simulation Study. Journal of Molecular Liquids, 1999, 80, 165-178.	4.9	33
80	A molecular dynamics simulation of water confined in a cylindrical SiO2 pore. Journal of Chemical Physics, 1998, 108, 9859-9867.	3.0	127
81	Theory of gasâ€“gas phase transition in rareâ€gas binary mixtures. Journal of Chemical Physics, 1996, 105, 2020-2027.	3.0	4
82	Inelasticity effects in the neutron diffraction measurements from water steam using pulsed sources. Journal of Molecular Liquids, 1995, 64, 221-240.	4.9	11
83	Translational absorption band in low density mixtures of noble gases: the He-Xe case. Molecular Physics, 1995, 84, 1065-1075.	1.7	3
84	Fluid-fluid phase separation in binary mixtures of asymmetric non-additive hard spheres. Journal of Physics Condensed Matter, 1994, 6, A163-A166.	1.8	31
85	Simulation studies of gas-liquid transitions in two dimensions via a subsystem-block-density distribution analysis. European Physical Journal B, 1993, 90, 215-228.	1.5	58
86	A mean-field study of the temperature dependence of the layer magnetizations in a semi-infinite ising model. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1993, 15, 541-546.	0.4	1
87	Computer simulation of critical phenomena in fluids. Journal of Physics Condensed Matter, 1993, 5, B193-B200.	1.8	10
88	Liquid-solid transition in the bond-particle model for elemental semiconductors. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1992, 65, 921-932.	0.6	2
89	Magnetic-Phase Transitions of Ising Surfaces with Modified Surface-Bulk Coupling: a Monte Carlo Study. Europhysics Letters, 1992, 20, 547-552.	2.0	14
90	Phase equilibrium in liquid binary mixtures of non-additive hard spheres. Physica Scripta, 1992, T45, 251-252.	2.5	7

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91	Freezing of liquid alkali metals as screened ionic plasmas. Journal of Physics Condensed Matter, 1991, 3, 1627-1636.	1.8	5
92	Statistical mechanical models for liquid and amorphous structure in covalently bonded systems. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1990, 12, 619-632.	0.4	1
93	Hybrid molecular dynamics. Computer Physics Communications, 1990, 60, 311-318.	7.5	29
94	The gas-liquid transition of the two-dimensional Lennard-Jones fluid. Journal of Physics Condensed Matter, 1990, 2, 7009-7032.	1.8	147
95	Ordering Transitions Induced by Coulomb Interactions. Physics and Chemistry of Materials With Low-dimensional Structures, 1989, , 221-238.	1.0	5
96	Liquid Structure and Freezing of Metals and Salts*. Zeitschrift Fur Physikalische Chemie, 1988, 156, 411-424.	2.8	4
97	Block Density Distribution Function Analysis of Two-Dimensional Lennard-Jones Fluids. Europhysics Letters, 1988, 6, 585-590.	2.0	104
98	Thermodynamic Consistency and Entropy Change in the Density-Wave Theory of Freezing. Physics and Chemistry of Liquids, 1987, 16, 157-162.	1.2	1
99	Liquid Dichlorides and Dichloride-Monochloride Mixtures. ECS Proceedings Volumes, 1987, 1987-7, 195-199.	0.1	0
100	Structure and dynamics of molten salts. Reports on Progress in Physics, 1986, 49, 1001-1081.	20.1	218
101	Freezing of a modulated liquid: The superionic-to-normal transition of strontium chloride. Solid State Communications, 1985, 55, 1109-1111.	1.9	12
102	On the density-wave theory of classical Wigner crystallisation. Journal of Physics C: Solid State Physics, 1985, 18, 3445-3455.	1.5	50
103	Liquid structure and freezing of the two-dimensional classical electron fluid. Journal of Physics C: Solid State Physics, 1985, 18, 4011-4019.	1.5	9
104	Freezing of Ionic Melts into Normal and Superionic Phases. Physics and Chemistry of Liquids, 1983, 13, 113-122.	1.2	20
105	Dynamic corrections for neutron scattering of water in the free molecule approximation. Journal of Chemical Physics, 1982, 77, 2647-2655.	3.0	19
106	Liquid alkali metals and alloys as electron-ion plasmas. Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics, 1981, 111, 11-23.	0.9	48
107	The inelasticity correction for heavy water. Journal of Chemical Physics, 1980, 73, 3729-3734.	3.0	17