Giorgio Pastore

List of Publications by Year
in descending order

115 papers	3,267 citations	159585 30 h-index	161849 54 g-index
116 all docs	116 docs citations	116 times ranked	1743 citing authors

#	Article	IF	Citations
1	Revisiting the replica theory of the liquid to ideal glass transition. Journal of Chemical Physics, 2019, 150, 154504.	3.0	5
2	Coexistence of low and high overlap phases in a supercooled liquid: An integral equation investigation. Journal of Chemical Physics, 2017, 146, 114504.	3.0	8
3	Reflections on the Glass Transition. , 2017, , .		0
4	Hypernetted-chain investigation of the random first-order transition of a Lennard-Jones liquid to an ideal glass. Physical Review E, 2015, 92, 042316.	2.1	7
5	Wertheim perturbation theory: thermodynamics and structure of patchy colloids. Molecular Physics, 2015, 113, 2593-2607.	1.7	14
6	Structure of trimers of group-2B metal dihalides from relativistic density-functional calculations. Physics and Chemistry of Liquids, 2015, 53, 1-9.	1.2	7
7	Comment on â€œAn investigation of the liquid to glass transition using integral equations for the pair structure of coupled replicaeâ€•[J. Chem. Phys. 141, 174505 (2014)]. Journal of Chemical Physics, 2015, 142, 107105.	3.0	6
8	An alternative scheme to find glass state solutions using integral equation theory for the pair structure. Molecular Physics, 2015, 113, 2770-2775.	1.7	3
9	An investigation of the liquid to glass transition using integral equations for the pair structure of coupled replicae. Journal of Chemical Physics, 2014, 141, 174505.	3.0	16
10	From square-well to Janus: Improved algorithm for integral equation theory and comparison with thermodynamic perturbation theory within the Kern-Frenkel model. Journal of Chemical Physics, 2014, 140, 094104.	3.0	19
11	Wertheim and Bjerrum-Tani-Henderson theories for associating fluids: A critical assessment. Journal of Chemical Physics, 2014, 141, 074108.	3.0	6
12	Probing the pair structure of supercooled fluids by integral equations: Evidence for an equilibrium liquid-ideal glass transition?. Europhysics Letters, 2014, 105, 36003.	2.0	6
13	The origins of tetrahedral coordination in molten and glassy ZnCl2 and other group-2B metal dihalides. Physics Letters, Section A: General, Atomic and Solid State Physics, 2014, 378, 431-433.	2.1	10
14	An interionic force law for HgCl2 from first-principles molecular calculations. Physics Letters, Section A: General, Atomic and Solid State Physics, 2013, 377, 813-816.	2.1	3
15	The restricted primitive model of ionic fluids with nonadditive diameters. Europhysics Letters, 2013, 101, 46003.	2.0	8
16	Monte Carlo simulation of the nonadditive restricted primitive model of ionic fluids: Phase diagram and clustering. Physical Review E, 2013, 87, 052303.	2.1	14
17	Static and dynamic structure of monomers, dimers and trimers of HgCl2 from density-functional calculations. European Physical Journal D, 2012, 66, 1.	1.3	11
18	Cluster theory of Janus particles. Soft Matter, 2011, 7, 2419.	2.7	41

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19	Structural connectivity and ionic transport in molten ZnCl2: Optimization of chlorine interaction parameters. Physica B: Condensed Matter, 2010, 405, 974-980.	2.7	4
20	Effects of patch size and number within a simple model of patchy colloids. Journal of Chemical Physics, 2010, 132, 174110.	3.0	107
21	Effective Forces in Square Well and Square Shoulder Fluids. Journal of Physical Chemistry B, 2010, 114, 12085-12095.	2.6	11
22	A numerical study of one-patch colloidal particles: from square-well to Janus. Physical Chemistry Chemical Physics, 2010, 12, 11869.	2.8	123
23	Phase Diagram of Janus Particles. Physical Review Letters, 2009, 103, 237801.	7.8	254
24	Liquidâ€“vapor coexistence in square-well fluids: an RHNC study. Molecular Physics, 2009, 107, 555-562.	1.7	17
25	Dynamics and energy landscape in a tetrahedral network glass-former: direct comparison with models of fragile liquids. Journal of Physics Condensed Matter, 2009, 21, 285107.	1.8	38
26	Phase diagram and structural properties of a simple model for one-patch particles. Journal of Chemical Physics, 2009, 131, 174114.	3.0	42
27	Covalent-to-ionic transition in liquid zinc dichloride. Physics Letters, Section A: General, Atomic and Solid State Physics, 2009, 373, 1083-1088.	2.1	10
28	Insulatorâ€“conductor transition in liquid aluminium trichloride. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 5215-5219.	2.1	1
29	Structural transitions in interionic force models of liquid AlCl₃. Physics and Chemistry of Liquids, 2008, 46, 548-563.	1.2	3
30	Molecular clusters in gaseous and liquid AlCl3. Physics and Chemistry of Liquids, 2008, 46, 1-8.	1.2	2
31	A flexible atomic and polarizable potential for water Application to small clusters. Molecular Physics, 2008, 106, 9-21.	1.7	2
32	Understanding fragility in supercooled Lennard-Jones mixtures. II. Potential energy surface. Journal of Chemical Physics, 2007, 127, 124505.	3.0	27
33	From molecular clusters to liquid structure in AlCl3and FeCl3. Physics and Chemistry of Liquids, 2007, 45, 487-501.	1.2	3
34	Understanding fragility in supercooled Lennard-Jones mixtures. I. Locally preferred structures. Journal of Chemical Physics, 2007, 127, 124504.	3.0	156
35	Structure and diffusion in aluminium and gallium trihalide melts from simulations based on intramolecular force laws. Molecular Physics, 2007, 105, 2383-2392.	1.7	8
36	Patchy sticky hard spheres: Analytical study and Monte Carlo simulations. Journal of Chemical Physics, 2007, 127, 234507.	3.0	46

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37	Are there localized saddles behind the heterogeneous dynamics of supercooled liquids?. Europhysics Letters, 2006, 75, 784-790.	2.0	27
38	Fluid-phase diagrams of binary mixtures from constant pressure integral equations. Journal of Chemical Physics, 2005, 122, 181104.	3.0	11
39	Numerical study of a binary Yukawa model in regimes characteristic of globular proteins in solutions. Physical Review E, 2005, 71, 031108.	2.1	10
40	Computer simulation study of the closure relations in hard sphere fluids. Journal of Chemical Physics, 2004, 120, 10681-10690.	3.0	17
41	Direct correlation functions of the Widomâ€“Rowlinson model. Physica A: Statistical Mechanics and Its Applications, 2004, 332, 349-359.	2.6	6
42	A fully polarizable and dissociable potential for water. Chemical Physics Letters, 2003, 381, 287-291.	2.6	19
43	Stability of the iterative solutions of integral equations as one phase freezing criterion. Physical Review E, 2003, 68, 046104.	2.1	2
44	Generating functionals, consistency, and uniqueness in the integral equation theory of liquids. Journal of Chemical Physics, 2003, 119, 3810-3819.	3.0	11
45	Optimal Monte Carlo sampling for simulation of classical fluids. Physica A: Statistical Mechanics and Its Applications, 2002, 313, 312-320.	2.6	5
46	Thermodynamics and Structure of Liquid Metals from a New Consistent Optimized Random Phase Approximation. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2001, 56, 605-612.	1.5	2
47	Pair distribution functions of a binary Yukawa mixture and their asymptotic behavior. Physical Review E, 2001, 63, 061110.	2.1	4
48	Ionic Interactions in Alkali -Aluminium Tetrafluoride Clusters. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1999, 54, 570-574.	1.5	8
49	A Theoretical Study of the Stabilization of the (AlF₅)^{2â€”} Complex Anion by Alkali Counterions. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1999, 54, 575-578.	1.5	6
50	Probing structural holes in disordered ionic systems. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1998, 20, 1337-1344.	0.4	0
51	Entropy and Fluidâ^'Fluid Separation in Nonadditive Hard-Sphere Mixtures. Journal of Physical Chemistry B, 1998, 102, 10368-10371.	2.6	30
52	Ionic Clusters in Aluminiumâ€“Sodium Fluoride Melts. Modern Physics Letters B, 1998, 12, 995-1002.	1.9	10
53	Density functional calculations for Zintl systems: structure, electronic structure and electrical conductivity of liquid NaSn alloys. Journal of Physics Condensed Matter, 1998, 10, 1175-1198.	1.8	25
54	Optimized random-phase approximations for arbitrary reference systems: Extremum conditions and thermodynamic consistence. Physical Review E, 1998, 57, 460-464.	2.1	10

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55	An Ionic Model for FECL3-Based Melts from a Study of the Molecular Dimer and Other Molecular Structures. Physics and Chemistry of Liquids, 1997, 35, 93-104.	1.2	6
56	Local Coordination and Medium Range Order in Molten Trivalent Metal Chlorides: The Role of Screening by the Chlorine Component. Physics and Chemistry of Liquids, 1996, 31, 189-200.	1.2	5
57	One-Shot Service Searches Preprint Repositories at a Mouseclick. Computers in Physics, 1996, 10, 520.	0.5	1
58	First-principles molecular dynamics simulation of liquid. Journal of Physics Condensed Matter, 1996, 8, 1879-1896.	1.8	10
59	An Ionic Model for Molecular Units in Molten Aluminium Trichloride and Alkali Chloroaluminates. Physics and Chemistry of Liquids, 1996, 32, 191-209.	1.2	10
60	Structure of Partly Quenched Molten Copper Chloride. Physics and Chemistry of Liquids, 1996, 31, 89-96.	1.2	3
61	Ab initiosimulations of liquid systems: concentration dependence of the electric conductivity of NaSn alloys. Journal of Physics Condensed Matter, 1996, 8, L653-L657.	1.8	11
62	Electron-Ion Correlation in Liquid Metals from First Principles: Liquid Mg and Liquid Bi. Physical Review Letters, 1995, 75, 4480-4483.	7.8	36
63	Firstâ€principles molecularâ€dynamics simulation of liquid CsPb. Journal of Chemical Physics, 1995, 103, 5031-5040.	3.0	38
64	Numerical solution of the optimized random phase approximation. Molecular Physics, 1995, 84, 653-661.	1.7	5
65	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
66	Poly-Anions in Liquid CsPb: An ab initio Molecular-Dynamics Simulation. Europhysics Letters, 1994, 27, 667-672.	2.0	27
67	Microstructural analysis of simulatedNi33Y67glass. Physical Review B, 1994, 49, 12625-12632.	3.2	17
68	How reliable is the HMSA integral equation for the pair structure of supercooled and amorphous mixtures?. Molecular Physics, 1994, 81, 1011-1016.	1.7	8
69	Non-additive Lennard-Jones model for the structure of Ni33Y67 metallic glass: integral equation and molecular dynamics calculations. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1993, 165, 183-187.	5.6	9
70	Ab initio molecular dynamics study of liquid Li12Si7. Journal of Non-Crystalline Solids, 1993, 156-158, 961-964.	3.1	1
71	Structure of ionic fluids in equilibrium with a microporous ionic matrix. Philosophical Magazine Letters, 1993, 68, 357-361.	1.2	19
72	First-principles molecular-dynamics simulation of liquidLi12Si7. Physical Review B, 1993, 48, 13459-13468.	3.2	21

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73	Highly Asymmetric Electrolyte Suspensions in the Primitive Model. , 1993, , 615-626.		1
74	Atomic size effects on local coordination and medium-range order in molten trivalent metal chlorides. Journal of Physics Condensed Matter, 1992, 4, 8933-8944.	1.8	32
75	Ab initio molecular dynamics simulation of liquid NaSn alloy. Journal of Physics Condensed Matter, 1992, 4, L179-L183.	1.8	23
76	Structure, electronic properties, and defects of amorphous gallium arsenide. Physical Review B, 1992, 45, 13378-13382.	3.2	47
77	Thermodynamics and structure of liquid metals: a critical assessment of the charged-hard-sphere reference system. Journal of Physics Condensed Matter, 1992, 4, 6173-6188.	1.8	10
78	Phase equilibrium in liquid binary mixtures of non-additive hard spheres. Physica Scripta, 1992, T45, 251-252.	2.5	7
79	Percus-Yevick pair-distribution functions of a binary hard-sphere system covering the whole r-range. Journal of Physics A, 1991, 24, 2995-3012.	1.6	17
80	Theory ofab initiomolecular-dynamics calculations. Physical Review A, 1991, 44, 6334-6347.	2.5	283
81	Liquid Structure and Melting of Trivalent Metal Chlorides. Physica Scripta, 1991, T39, 367-371.	2.5	21
82	Charged hard spheres in a uniform neutralizing background: the role of thermodynamic self consistence. Molecular Physics, 1991, 74, 1089-1096.	1.7	8
83	Structure of molten yttrium chloride in an ionic model. Journal of Physics Condensed Matter, 1991, 3, 8297-8304.	1.8	16
84	The role of excluded volume effects on the structure and chemical short-range order of Ni33Y67metallic glass. Journal of Physics Condensed Matter, 1990, 2, 8463-8476.	1.8	31
85	Density-functional theory of freezing for quantum systems: The Wigner crystallization. Physical Review Letters, 1990, 64, 303-306.	7.8	56
86	Transferability of bulk empirical potentials to silicon microclusters: A critical study. Physical Review B, 1990, 41, 10243-10246.	3.2	89
87	Theory of freezing for quantum systems. Journal of Non-Crystalline Solids, 1990, 117-118, 871-874.	3.1	0
88	Chemical short-range order in amorphous Ni-Ti alloys: an integral equation approach with a non-additive hard-sphere model. Journal of Physics Condensed Matter, 1989, 1, 3469-3487.	1.8	46
89	Equation of state for symmetric non-additive hard-sphere fluids: An approximate analytic expression and new Monte Carlo results. Chemical Physics Letters, 1989, 159, 388-392.	2.6	53
90	On the equilibrium structure of dense fluids. Molecular Physics, 1988, 63, 747-767.	1.7	120

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91	Uniqueness and the choice of the acceptable solutions of the MSA. Molecular Physics, 1988, 63, 731-741.	1.7	43
92	Soft-sphere model for the glass transition in binary alloys. II. Relaxation of the incoherent density-density correlation functions. Physical Review A, 1988, 38, 454-462.	2.5	75
93	A MHNC Analysis of the Temperature Variation of the Structure of Liquid Potassium. Europhysics Letters, 1988, 7, 37-42.	2.0	20
94	Thermodynamically self-consistent integral equations and the structure of liquid metals. Journal of Physics F: Metal Physics, 1987, 17, L267-L271.	1.6	21
95	Density functional theory of soft sphere freezing. Journal of Chemical Physics, 1987, 86, 6360-6365.	3.0	54
96	Soft-sphere model for the glass transition in binary alloys: Pair structure and self-diffusion. Physical Review A, 1987, 36, 4891-4903.	2.5	212
97	Structure of inverse-power fluids in analytical form. Molecular Physics, 1987, 61, 849-858.	1.7	6
98	Factorization of the Triplet Direct Correlation Function in Dense Fluids. Physical Review Letters, 1987, 58, 2075-2078.	7.8	70
99	Restricted primitive model for electrical double layers: Modified HNC theory of density profiles and Monte Carlo study of differential capacitance. Journal of Chemical Physics, 1986, 85, 2943-2950.	3.0	35
100	Pair structure and interionic forces in molten zinc chloride. Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics, 1986, 142, 294-300.	0.9	15
101	Pseudoclassical approach to electron and ion density correlations in simple liquid metals. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1986, 8, 59-75.	0.4	6
102	Structure and thermodynamic properties of molten strontium chloride. Journal of Physics C: Solid State Physics, 1986, 19, 487-494.	1.5	17
103	Ionic pairing in binary liquids of charged hard spheres with nonadditive diameters. Journal of Chemical Physics, 1986, 84, 1827-1832.	3.0	14
104	Additive and non-additive hard sphere mixtures. Molecular Physics, 1986, 59, 275-290.	1.7	154
105	Asymptotic density profile of a classical fluid against a hard wall. Journal of Statistical Physics, 1985, 38, 861-865.	1.2	1
106	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
107	Evidence for Many-Body Interactions in the Structure of Molten Alkali Chlorides. Physics and Chemistry of Liquids, 1985, 15, 31-40.	1.2	4
108	Structure and thermodynamic properties of molten rubidium chloride. Journal of Physics C: Solid State Physics, 1984, 17, L333-L336.	1.5	7

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109	Dependence of Capacitance of Metal-Molten Salt Interface on Local Density Profiles Near Electrode. Physics and Chemistry of Liquids, 1984, 13, 269-277.	1.2	31
110	Theory of the interface between a classical plasma and a hard wall. Physica A: Statistical Mechanics and Its Applications, 1984, 128, 631-642.	2.6	6
111	Structure factor of liquid alkali metals using a classical-plasma reference system. Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics, 1984, 124, 383-391.	0.9	21
112	Structure and thermodynamic properties of molten alkali chlorides. Journal of Chemical Physics, 1984, 81, 3174-3180.	3.0	55
113	Short-range correlations in multicomponent plasmas. Physics Letters, Section A: General, Atomic and Solid State Physics, 1981, 84, 369-370.	2.1	8
114	Electric resistivity and structure of liquid alkali metals and alloys as electron-ion plasmas. Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics, 1981, 111, 283-290.	0.9	4
115	On a consistent mean spherical model for plasmas. Physics Letters, Section A: General, Atomic and Solid State Physics, 1980, 78, 75-78.	2.1	20