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	Theory ofab initiomolecular-dynamics calculations. Physical Review A, 1991, 44, 6334-6347.	2.5	283
2	Phase Diagram of Janus Particles. Physical Review Letters, 2009, 103, 237801.	7.8	254
3	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
4	Understanding fragility in supercooled Lennard-Jones mixtures. I. Locally preferred structures. Journal of Chemical Physics, 2007, 127, 124504.	3.0	156
5	Additive and non-additive hard sphere mixtures. Molecular Physics, 1986, 59, 275-290.	1.7	154
6	A numerical study of one-patch colloidal particles: from square-well to Janus. Physical Chemistry Chemical Physics, 2010, 12, 11869.	2.8	123
7	On the equilibrium structure of dense fluids. Molecular Physics, 1988, 63, 747-767.	1.7	120
8	Effects of patch size and number within a simple model of patchy colloids. Journal of Chemical Physics, 2010, 132, 174110.	3.0	107
9	Transferability of bulk empirical potentials to silicon microclusters: A critical study. Physical Review B, 1990, 41, 10243-10246.	3.2	89
10	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
11	Factorization of the Triplet Direct Correlation Function in Dense Fluids. Physical Review Letters, 1987, 58, 2075-2078.	7.8	70
12	Density-functional theory of freezing for quantum systems: The Wigner crystallization. Physical Review Letters, 1990, 64, 303-306.	7.8	56
13	Structure and thermodynamic properties of molten alkali chlorides. Journal of Chemical Physics, 1984, 81, 3174-3180.	3.0	55
14	Density functional theory of soft sphere freezing. Journal of Chemical Physics, 1987, 86, 6360-6365.	3.0	54
15	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
16	Structure, electronic properties, and defects of amorphous gallium arsenide. Physical Review B, 1992, 45, 13378-13382.	3.2	47
17	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
18	Patchy sticky hard spheres: Analytical study and Monte Carlo simulations. Journal of Chemical Physics, 2007, 127, 234507.	3.0	46

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19	Uniqueness and the choice of the acceptable solutions of the MSA. Molecular Physics, 1988, 63, 731-741.	1.7	43
20	Phase diagram and structural properties of a simple model for one-patch particles. Journal of Chemical Physics, 2009, 131, 174114.	3.0	42
21	Cluster theory of Janus particles. Soft Matter, 2011, 7, 2419.	2.7	41
22	Firstâ€principles molecularâ€dynamics simulation of liquid CsPb. Journal of Chemical Physics, 1995, 103, 5031-5040.	3.0	38
23	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
24	Electron-Ion Correlation in Liquid Metals from First Principles: Liquid Mg and Liquid Bi. Physical Review Letters, 1995, 75, 4480-4483.	7.8	36
25	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
26	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
27	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
28	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
29	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
30	Entropy and Fluidâ˜Fluid Separation in Nonadditive Hard-Sphere Mixtures. Journal of Physical Chemistry B, 1998, 102, 10368-10371.	2.6	30
31	Poly-Anions in Liquid CsPb: An ab initio Molecular-Dynamics Simulation. Europhysics Letters, 1994, 27, 667-672.	2.0	27
32	Are there localized saddles behind the heterogeneous dynamics of supercooled liquids?. Europhysics Letters, 2006, 75, 784-790.	2.0	27
33	Understanding fragility in supercooled Lennard-Jones mixtures. II. Potential energy surface. Journal of Chemical Physics, 2007, 127, 124505.	3.0	27
34	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
35	Ab initio molecular dynamics simulation of liquid NaSn alloy. Journal of Physics Condensed Matter, 1992, 4, L179-L183.	1.8	23
36	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

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37	Thermodynamically self-consistent integral equations and the structure of liquid metals. Journal of Physics F: Metal Physics, 1987, 17, L267-L271.	1.6	21
38	Liquid Structure and Melting of Trivalent Metal Chlorides. Physica Scripta, 1991, T39, 367-371.	2.5	21
39	First-principles molecular-dynamics simulation of liquidLi12Si7. Physical Review B, 1993, 48, 13459-13468.	3.2	21
40	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
41	A MHNC Analysis of the Temperature Variation of the Structure of Liquid Potassium. Europhysics Letters, 1988, 7, 37-42.	2.0	20
42	Structure of ionic fluids in equilibrium with a microporous ionic matrix. Philosophical Magazine Letters, 1993, 68, 357-361.	1.2	19
43	A fully polarizable and dissociable potential for water. Chemical Physics Letters, 2003, 381, 287-291.	2.6	19
44	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
45	Structure and thermodynamic properties of molten strontium chloride. Journal of Physics C: Solid State Physics, 1986, 19, 487-494.	1.5	17
46	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
47	Microstructural analysis of simulatedNi33Y67glass. Physical Review B, 1994, 49, 12625-12632.	3.2	17
48	Computer simulation study of the closure relations in hard sphere fluids. Journal of Chemical Physics, 2004, 120, 10681-10690.	3.0	17
49	Liquidâ€“vapor coexistence in square-well fluids: an RHNC study. Molecular Physics, 2009, 107, 555-562.	1.7	17
50	Structure of molten yttrium chloride in an ionic model. Journal of Physics Condensed Matter, 1991, 3, 8297-8304.	1.8	16
51	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
52	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
53	Ionic pairing in binary liquids of charged hard spheres with nonadditive diameters. Journal of Chemical Physics, 1986, 84, 1827-1832.	3.0	14
54	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

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55	Wertheim perturbation theory: thermodynamics and structure of patchy colloids. Molecular Physics, 2015, 113, 2593-2607.	1.7	14
56	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
57	Generating functionals, consistency, and uniqueness in the integral equation theory of liquids. Journal of Chemical Physics, 2003, 119, 3810-3819.	3.0	11
58	Fluid-phase diagrams of binary mixtures from constant pressure integral equations. Journal of Chemical Physics, 2005, 122, 181104.	3.0	11
59	Effective Forces in Square Well and Square Shoulder Fluids. Journal of Physical Chemistry B, 2010, 114, 12085-12095.	2.6	11
60	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
61	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
62	First-principles molecular dynamics simulation of liquid. Journal of Physics Condensed Matter, 1996, 8, 1879-1896.	1.8	10
63	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
64	Ionic Clusters in Aluminiumâ€“Sodium Fluoride Melts. Modern Physics Letters B, 1998, 12, 995-1002.	1.9	10
65	Optimized random-phase approximations for arbitrary reference systems: Extremum conditions and thermodynamic consistence. Physical Review E, 1998, 57, 460-464.	2.1	10
66	Numerical study of a binary Yukawa model in regimes characteristic of globular proteins in solutions. Physical Review E, 2005, 71, 031108.	2.1	10
67	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
68	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
69	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
70	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
71	Short-range correlations in multicomponent plasmas. Physics Letters, Section A: General, Atomic and Solid State Physics, 1981, 84, 369-370.	2.1	8
72	Charged hard spheres in a uniform neutralizing background: the role of thermodynamic self consistence. Molecular Physics, 1991, 74, 1089-1096.	1.7	8

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73	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
74	Ionic Interactions in Alkali -Aluminium Tetrafluoride Clusters. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1999, 54, 570-574.	1.5	8
75	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
76	The restricted primitive model of ionic fluids with nonadditive diameters. Europhysics Letters, 2013, 101, 46003.	2.0	8
77	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
78	Structure and thermodynamic properties of molten rubidium chloride. Journal of Physics C: Solid State Physics, 1984, 17, L333-L336.	1.5	7
79	Phase equilibrium in liquid binary mixtures of non-additive hard spheres. Physica Scripta, 1992, T45, 251-252.	2.5	7
80	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
81	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
82	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
83	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
84	Structure of inverse-power fluids in analytical form. Molecular Physics, 1987, 61, 849-858.	1.7	6
85	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
86	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
87	Direct correlation functions of the Widomâ€“Rowlinson model. Physica A: Statistical Mechanics and Its Applications, 2004, 332, 349-359.	2.6	6
88	Wertheim and Bjerrum-Tani-Henderson theories for associating fluids: A critical assessment. Journal of Chemical Physics, 2014, 141, 074108.	3.0	6
89	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
90	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

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91	Numerical solution of the optimized random phase approximation. Molecular Physics, 1995, 84, 653-661.	1.7	5
92	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
93	Optimal Monte Carlo sampling for simulation of classical fluids. Physica A: Statistical Mechanics and Its Applications, 2002, 313, 312-320.	2.6	5
94	Revisiting the replica theory of the liquid to ideal glass transition. Journal of Chemical Physics, 2019, 150, 154504.	3.0	5
95	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
96	Evidence for Many-Body Interactions in the Structure of Molten Alkali Chlorides. Physics and Chemistry of Liquids, 1985, 15, 31-40.	1.2	4
97	Pair distribution functions of a binary Yukawa mixture and their asymptotic behavior. Physical Review E, 2001, 63, 061110.	2.1	4
98	Structural connectivity and ionic transport in molten ZnCl2: Optimization of chlorine interaction parameters. Physica B: Condensed Matter, 2010, 405, 974-980.	2.7	4
99	Structure of Partly Quenched Molten Copper Chloride. Physics and Chemistry of Liquids, 1996, 31, 89-96.	1.2	3
100	From molecular clusters to liquid structure in AlCl3and FeCl3. Physics and Chemistry of Liquids, 2007, 45, 487-501.	1.2	3
101	Structural transitions in interionic force models of liquid AlCl₃. Physics and Chemistry of Liquids, 2008, 46, 548-563.	1.2	3
102	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
103	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
104	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
105	Stability of the iterative solutions of integral equations as one phase freezing criterion. Physical Review E, 2003, 68, 046104.	2.1	2
106	Molecular clusters in gaseous and liquid AlCl3. Physics and Chemistry of Liquids, 2008, 46, 1-8.	1.2	2
107	A flexible atomic and polarizable potential for water Application to small clusters. Molecular Physics, 2008, 106, 9-21.	1.7	2
108	Asymptotic density profile of a classical fluid against a hard wall. Journal of Statistical Physics, 1985, 38, 861-865.	1.2	1

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109	Ab initio molecular dynamics study of liquid Li12Si7. Journal of Non-Crystalline Solids, 1993, 156-158, 961-964.	3.1	1
110	One-Shot Service Searches Preprint Repositories at a Mouseclick. Computers in Physics, 1996, 10, 520.	0.5	1
111	Insulatorâ€“conductor transition in liquid aluminium trichloride. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 5215-5219.	2.1	1
112	Highly Asymmetric Electrolyte Suspensions in the Primitive Model. , 1993, , 615-626.		1
113	Theory of freezing for quantum systems. Journal of Non-Crystalline Solids, 1990, 117-118, 871-874.	3.1	0
114	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
115	Reflections on the Glass Transition. , 2017, , .		0