Antonio M Puertas

List of Publications by Year
in descending order

98 papers	2,617 citations	293460 24 h-index	214428 50 g-index
101 all docs	101 docs citations	101 times ranked	2203 citing authors

#	Article	IF	Citations
1	Microrheology of colloidal suspensions via dynamic Monte Carlo simulations. Journal of Colloid and Interface Science, 2022, 605, 182-192.	5.0	7
2	Active microrheology in corrugated channels: Comparison of thermal and colloidal baths. Journal of Colloid and Interface Science, 2022, 608, 2694-2702.	5.0	5
3	Volatility Co-Movement in Stock Markets. Mathematics, 2021, 9, 598.	1.1	5
4	Linear response theory in stock markets. Scientific Reports, 2021, 11, 23076.	1.6	3
5	On solving the unrelated parallel machine scheduling problem: active microrheology as a case study. Journal of Supercomputing, 2020, 76, 8494-8509.	2.4	9
6	A New Look on Financial Markets Co-Movement through Cooperative Dynamics in Many-Body Physics. Entropy, 2020, 22, 954.	1.1	7
7	Development and Results from Application of PCM-Based Storage Tanks in a Solar Thermal Comfort System of an Institutional Buildingâ€"A Case Study. Energies, 2020, 13, 3877.	1.6	3
8	Model for the Discharging of a Dual PCM Heat Storage Tank and Its Experimental Validation. Energies, 2020, 13, 5687.	1.6	5
9	Dynamics and friction of a large colloidal particle in a bath of hard spheres: Langevin dynamics simulations and hydrodynamic description. Physical Review E, 2020, 101, 052607.	0.8	4
10	Stock markets: A view from soft matter. Physical Review E, 2020, 101, 032307.	0.8	5
11	Critical force in active microrheology. Physical Review E, 2020, 101, 012612.	0.8	11
12	Kinetics of freezing and melting of encapsulated phase change materials with effective convection: Experiments and simulations. Numerical Heat Transfer; Part A: Applications, 2019, 76, 909-924.	1.2	2
13	Industrial food chamber cooling and power system integrated with renewable energy as an example of power grid sustainability improvement. Renewable Energy, 2019, 138, 697-708.	4.3	6
14	Finite size effects in active microrheology in colloids. Computer Physics Communications, 2019, 236, 8-14.	3.0	7
15	Modeling of Discharging Process of Heat Storage Tank Filled with PCM, to Cover Heat Demand of the Building. , 2019, , .		1
16	Active microrheology in corrugated channels. Journal of Chemical Physics, 2018, 149, 174908.	1.2	10
17	Time-dependent active microrheology in dilute colloidal suspensions. Physical Review Fluids, 2018, 3, .	1.0	7
18	Diffusive and Arrestedlike Dynamics in Currency Exchange Markets. Physical Review Letters, 2017, 118, 068301.	2.9	11

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19	Describing magnetorheology under a colloidal glass approach. Physical Review E, 2017, 95, 052601.	0.8	4
20	Accelerating the problem of microrheology in colloidal systems on a GPU. Journal of Supercomputing, 2017, 73, 370-383.	2.4	5
21	Simulations of Melting of Encapsulated CaCl2Â·6H2O for Thermal Energy Storage Technologies. Energies, 2017, 10, 568.	1.6	7
22	A model for foreign exchange markets based on glassy Brownian systems. PLoS ONE, 2017, 12, e0188814.	1.1	7
23	Emulsions. , 2016, , 293-306.		1
24	Colloidal Interactions with Optical Fields: Optical Tweezers. , 2016, , 111-130.		0
25	Colloidal Gelation. , 2016, , 279-292.		4
26	An Introduction to the Physics of Liquid Crystals. , 2016, , 307-340.		2
27	Entangled Granular Media. , 2016, , 341-354.		3
28	Nematics on Curved Surfaces - Computer Simulations of Nematic Shells. , 2016, , 387-402.		2
29	Colloidal Dispersions in Shear Flow. , 2016, , 81-110.		1
30	Electric Field Effects. , 2016, , 19-28.		3
31	Fluid Flows for Engineering Complex Materials. , 2016, , 29-42.		0
32	Active microrheology in a colloidal glass. Physical Review E, 2016, 94, 042602.	0.8	28
33	Rheology of Soft Materials. , 2016, , 149-164.		6
34	Drop Generation in Controlled Fluid Flows. , 2016, , 1-18.		0
35	Optical Microscopy of Soft Matter Systems. , 2016, , 165-186.		6
36	Crystals and Liquid Crystals Confined to Curved Geometries. , 2016, , 369-386.		3

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37	Fluctuations in Particle Sedimentation. , 2016, , 43-58.		1
38	Computer simulations of charged colloids in confinement. Journal of Colloid and Interface Science, 2015, 440, 292-298.	5.0	1
39	Microrheology of colloidal systems. Journal of Physics Condensed Matter, 2014, 26, 243101.	0.7	70
40	Specific Heat in Two-Dimensional Melting. Physical Review Letters, 2014, 113, 127801.	2.9	42
41	Brownian dynamics simulations in magnetorheology and comparison with experiments. Soft Matter, 2013, 9, 6970.	1.2	24
42	Brownian dynamic simulations and experiments of MR fluids. Journal of Physics: Conference Series, 2013, 412, 012056.	0.3	1
43	Fluctuation theorem for an optically trapped tracer in dense colloids. A simulation study. EPJ Web of Conferences, 2013, 44, 04001.	0.1	0
44	Nanoemulsion stability: Experimental evaluation of the flocculation rate from turbidity measurements. Advances in Colloid and Interface Science, 2012, 178, 1-20.	7.0	66
45	Probability Densities of a Forced Probe Particle in Glass: Results from Mode Coupling Theory and Simulations of Active Microrheology. Zeitschrift Fur Physikalische Chemie, 2012, 226, 779-795.	1.4	9
46	Schematic models for active nonlinear microrheology. Soft Matter, 2011, 7, 1390.	1.2	44
47	Microrheology and the fluctuation theorem in dense colloids. Europhysics Letters, 2011, 93, 58007.	0.7	37
48	Aging of a hard-sphere glass: effect of the microscopic dynamics. Journal of Physics Condensed Matter, 2010, 22, 104121.	0.7	18
49	Internal and free energy in a pair of like-charged colloids: Monte Carlo simulations. Journal of Chemical Physics, 2010, 133, 154906.	1.2	10
50	Strength of the neighbour cage in a dense hard sphere system. , 2010, , .		5
51	Structural relaxation of polydisperse hard spheres: Comparison of the mode-coupling theory to a Langevin dynamics simulation. Physical Review E, 2010, 82, 011504.	0.8	87
52	Multiple time scales and cluster formation mechanisms in charge-heteroaggregation processes. Soft Matter, 2010, 6, 3568.	1.2	4
53	Colloidal permeability of liquid membranes consisting of hard particles by nonequilibrium simulations. Journal of Chemical Physics, 2009, 131, 164903.	1.2	2
54	Active and Nonlinear Microrheology in Dense Colloidal Suspensions. Physical Review Letters, 2009, 102, 248302.	2.9	111

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55	Comparison of structure and transport properties of concentrated hard and soft sphere fluids. Journal of Chemical Physics, 2009, 130, 174903.	1.2	42
56	Phase behaviour of a model colloidâ€“polymer mixture at low colloid concentration. Soft Matter, 2008, 4, 1242.	1.2	8
57	Viscoelasticity and Stokes-Einstein relation in repulsive and attractive colloidal glasses. Journal of Chemical Physics, 2007, 127, 144906.	1.2	37
58	Competition between glass transition and liquidâ€“gas separation in attracting colloids. Journal of Physics Condensed Matter, 2007, 19, 205140.	0.7	8
59	Aging in attraction-driven colloidal glasses. Physical Review E, 2007, 75, 031401.	0.8	22
60	Bond formation and slow heterogeneous dynamics in adhesive spheres with long-ranged repulsion: Quantitative test of mode coupling theory. Physical Review E, 2007, 76, 031404.	0.8	6
61	Low temperature behavior and glass line in the symmetrical colloidal electrolyte. Physical Review E, 2007, 76, 011401.	0.8	6
62	Linking Phase Behavior and Reversible Colloidal Aggregation at Low Concentrations:Â Simulations and Stochastic Mean Field Theory. Journal of Physical Chemistry B, 2007, 111, 5564-5572.	1.2	17
63	Liquid-gas separation in colloidal electrolytes. Journal of Chemical Physics, 2006, 124, 054909.	1.2	9
64	Experimental Phase Diagram of Symmetric Binary Colloidal Mixtures with Opposite Charges. Journal of Physical Chemistry B, 2006, 110, 13220-13226.	1.2	9
65	Dynamical heterogeneities in an attraction driven colloidal glass. Journal of Non-Crystalline Solids, 2006, 352, 4830-4834.	1.5	7
66	Stability of the liquid phase in colloidal electrolytes. Computational and Theoretical Chemistry, 2006, 769, 157-163.	1.5	2
67	Density anomaly and liquid-liquid transition from perturbation theories. Physical Review E, 2006, 74, 051506.	0.8	16
68	Viscoelastic properties of attractive and repulsive colloidal glasses. Journal of Physics Condensed Matter, 2005, 17, L271-L277.	0.7	24
69	Formation of clusters in a mixture of spherical colloidal particles oppositely charged. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2005, 270-271, 285-290.	2.3	6
70	Structure factor scaling in colloidal charge heteroaggregation. European Physical Journal E, 2005, 18, 335-341.	0.7	5
71	Mode Coupling and Dynamical Heterogeneity in Colloidal Gelation:Â A Simulation Studyâ€. Journal of Physical Chemistry B, 2005, 109, 6666-6675.	1.2	45
72	Tagged-particle dynamics in a hard-sphere system: Mode-coupling theory analysis. Physical Review E, 2004, 70, 061506.	0.8	105

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73	Dynamical heterogeneities close to a colloidal gel. Journal of Chemical Physics, 2004, 121, 2813.	1.2	111
74	Internal structure of clusters from charge heteroaggregation. Journal of Colloid and Interface Science, 2004, 274, 346-348.	5.0	2
75	Colloidal Aggregation Induced by Long Range Attractions. Langmuir, 2004, 20, 9861-9867.	1.6	12
76	Oppositely charged colloidal binary mixtures: A colloidal analog of the restricted primitive model. Journal of Chemical Physics, 2004, 121, 2428-2435.	1.2	27
77	Theory and simulation of gelation, arrest and yielding in attracting colloids. Journal of Physics Condensed Matter, 2004, 16, S4861-S4875.	0.7	71
78	Induced asymmetries in the heteroaggregation of oppositely charged colloidal particles. Journal of Colloid and Interface Science, 2003, 265, 36-43.	5.0	22
79	Simulation study of nonergodicity transitions: Gelation in colloidal systems with short-range attractions. Physical Review E, 2003, 67, 031406.	0.8	115
80	Multiple Glassy States in a Simple Model System. Science, 2002, 296, 104-106.	6.0	703
81	Comparative Simulation Study of Colloidal Gels And Glasses. Physical Review Letters, 2002, 88, 098301.	2.9	201
82	Kinetics of colloidal heteroaggregation. Physica A: Statistical Mechanics and Its Applications, 2002, 304, 340-354.	1.2	26
83	Colloidal aggregation induced by attractive interactions. Journal of Chemical Physics, 2001, 115, 5662-5668.	1.2	42
84	Kinetics of charge heteroaggregation by Brownian dynamics simulation: role of the interaction potential profile. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2001, 195, 189-195.	2.3	4
85	Charged colloidal heteroaggregation kinetics. Journal of Chemical Physics, 2001, 114, 591.	1.2	23
86	Colloidal aggregation under steric interactions: Simulation and experiments. Journal of Chemical Physics, 2000, 112, 8654-8659.	1.2	34
87	Aggregation between oppositely charged colloidal particles. , 2000, , 55-58.		5
88	Particle interactions in colloidal aggregation by Brownian dynamics simulation. Physical Review E, 1999, 59, 1943-1947.	0.8	26
89	On the kinetics of heteroaggregation versus electrolyte concentration: comparison between simulation and experiment. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1999, 151, 473-481.	2.3	15
90	Brownian dynamics simulation of diffusive mesoscopic particle aggregation. Computer Physics Communications, 1999, 121-122, 353-357.	3.0	15

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91	Colloidal Stability of Polymer Colloids with Variable Surface Charge. Journal of Colloid and Interface Science, 1999, 216, 221-229.	5.0	38
92	A new method for calculating kinetic constants within the Rayleigh - Gans - Debye approximation from turbidity measurements. Journal of Physics Condensed Matter, 1997, 9, 3313-3320.	0.7	20
93	Foams. , 0, , 355-368.		0
94	Scattering Techniques. , 0, , 131-148.		3
95	The Glass Transition. , 0, , 249-278.		0
96	Particles in Electric Fields. , 0, , 59-80.		2
97	Colloidal Fluids. , 0, , 187-202.		1
98	Colloidal Crystallization. , 0, , 203-248.		2