Alessandro Patti

List of Publications by Year
in descending order

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50 papers	886 citations	430874 18 h-index	526287 27 g-index
51 all docs	51 docs citations	51 times ranked	716 citing authors

#	Article	IF	Citations
1	Brownian dynamics and dynamic Monte Carlo simulations of isotropic and liquid crystal phases of anisotropic colloidal particles: A comparative study. Physical Review E, 2012, 86, 011403.	2.1	64
2	Polydispersity Stabilizes Biaxial Nematic Liquid Crystals. Physical Review Letters, 2011, 107, 148303.	7.8	54
3	Stringlike Clusters and Cooperative Interlayer Permeation in Smectic Liquid Crystals Formed by Colloidal Rods. Physical Review Letters, 2009, 103, 248304.	7.8	46
4	Fundamental Investigation of the Drying of Solid Suspensions. Industrial & Engineering Chemistry Research, 2017, 56, 10506-10513.	3.7	37
5	Equivalence of Brownian dynamics and dynamic Monte Carlo simulations in multicomponent colloidal suspensions. Physical Review E, 2015, 92, 022302.	2.1	34
6	Monte Carlo Simulation of Self-Assembled Ordered Hybrid Materials. Langmuir, 2007, 23, 6771-6780.	3.5	33
7	Molecular Dynamics of Spherical Nanoparticles in Dense Polymer Melts. Journal of Physical Chemistry B, 2014, 118, 3731-3742.	2.6	32
8	Unveiling the impact of nanoparticle size dispersity on the behavior of polymer nanocomposites. Polymer, 2017, 113, 92-104.	3.8	32
9	Phase behaviour of hard board-like particles. Soft Matter, 2017, 13, 4720-4732.	2.7	31
10	Do Multilayer Crystals Nucleate in Suspensions of Colloidal Rods?. Physical Review Letters, 2009, 102, 128301.	7.8	30
11	Collective diffusion of colloidal hard rods in smectic liquid crystals: Effect of particle anisotropy. Journal of Chemical Physics, 2010, 132, 224907.	3.0	29
12	Relaxation dynamics in the columnar liquid crystal phase of hard platelets. Soft Matter, 2011, 7, 3533.	2.7	27
13	Modeling the Effect of Polymer Chain Stiffness on the Behavior of Polymer Nanocomposites. Journal of Physical Chemistry B, 2017, 121, 6245-6256.	2.6	25
14	Non-Gaussian dynamics in smectic liquid crystals of parallel hard rods. Physical Review E, 2010, 81, 021704.	2.1	24
15	Fickian yet non-Gaussian diffusion is not ubiquitous in soft matter. Physical Review E, 2018, 98, .	2.1	24
16	Frustration of the Isotropic-Columnar Phase Transition of Colloidal Hard Platelets by a Transient Cubatic Phase. Physical Review Letters, 2012, 108, 206101.	7.8	22
17	Phase Behavior of Model Surfactants in the Presence of Hybrid Particles. Journal of Physical Chemistry C, 2007, 111, 16035-16044.	3.1	21
18	Heterogeneous dynamics in columnar liquid crystals of parallel hard rods. Journal of Chemical Physics, 2010, 133, 154514.	3.0	20

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19	One-pot synthesis of amino functionalized mesoporous silica materials: using simulations to understand transitions between different structures. Journal of Materials Chemistry, 2009, 19, 724-732.	6.7	19
20	Monte Carlo simulation of binary mixtures of hard colloidal cuboids. Molecular Simulation, 2018, 44, 516-522.	2.0	19
21	Dynamic Monte Carlo algorithm for out-of-equilibrium processes in colloidal dispersions. Physical Chemistry Chemical Physics, 2018, 20, 15118-15127.	2.8	19
22	Monte Carlo simulations of self-assembling star-block copolymers in dilute solutions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2010, 361, 81-89.	4.7	18
23	Monte Carlo simulations of self-assembling hexagonal and cage-like bifunctional periodic mesoporous materials. Journal of Materials Chemistry, 2009, 19, 7848.	6.7	15
24	Phase evolution during one-pot synthesis of amine modified mesoporous silica materials: Preparation, properties, carbon dioxide adsorption. Applied Surface Science, 2019, 476, 886-896.	6.1	15
25	Helicoidal dynamics of biaxial curved rods in twist-bend nematic phases unveiled by unsupervised machine learning techniques. Physical Review E, 2020, 102, 040601.	2.1	15
26	Self-assembly of freely-rotating polydisperse cuboids: unveiling the boundaries of the biaxial nematic phase. Soft Matter, 2020, 16, 5565-5570.	2.7	15
27	Dynamics of hard colloidal cuboids in nematic liquid crystals. Physical Review E, 2020, 101, 052702.	2.1	14
28	Dynamic Monte Carlo simulations of inhomogeneous colloidal suspensions. Physical Review E, 2020, 102, 013302.	2.1	14
29	Transferable coarse-grained MARTINI model for methacrylate-based copolymers. Molecular Systems Design and Engineering, 2019, 4, 186-198.	3.4	13
30	Biaxial nematics of hard cuboids in an external field. Soft Matter, 2019, 15, 1922-1926.	2.7	13
31	Brownian dynamics simulations of oblate and prolate colloidal particles in nematic liquid crystals. Journal of Chemical Physics, 2019, 150, 204905.	3.0	10
32	New insights on the mechanisms of drug release from highly concentrated emulsions. Journal of Colloid and Interface Science, 2013, 394, 337-345.	9.4	9
33	Solvent-induced morphological transitions in methacrylate-based block-copolymer aggregates. Journal of Colloid and Interface Science, 2020, 572, 133-140.	9.4	9
34	Diffusion of globular macromolecules in liquid crystals of colloidal cuboids. Journal of Molecular Liquids, 2021, 338, 116640.	4.9	9
35	Dynamics of colloidal cubes and cuboids in cylindrical nanopores. Physics of Fluids, 2021, 33, .	4.0	9
36	Diffusion in highly concentrated emulsions. Current Opinion in Colloid and Interface Science, 2012, 17, 255-260.	7.4	8

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37	Nonconventional Phases of Colloidal Nanorods with a Soft Corona. Physical Review Letters, 2021, 126, 158001.	7.8	8
38	Microrheology of colloidal suspensions via dynamic Monte Carlo simulations. Journal of Colloid and Interface Science, 2022, 605, 182-192.	9.4	7
39	Self-diffusion of glycerol in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si25.svg"><mml:mrow><mml:mi>Î³</mml:mi></mml:mrow></mml:math>-alumina nanopores. The neglected role of pore saturation in the dynamics of confined polyalcohols. Applied Surface Science, 2020, 516, 146089.	6.1	6
40	Molecular Dynamics of Janus Nanodimers Dispersed in Lamellar Phases of a Block Copolymer. Polymers, 2021, 13, 1524.	4.5	6
41	Fast Overlap Detection between Hard-Core Colloidal Cuboids and Spheres. The OCSI Algorithm. Algorithms, 2021, 14, 72.	2.1	5
42	Polymer-induced microcolony compaction in early biofilms: A computer simulation study. Physical Review E, 2021, 103, 052407.	2.1	5
43	Dynamics of uniaxial-to-biaxial nematics switching in suspensions of hard cuboids. Physics of Fluids, 2021, 33, 067115.	4.0	5
44	Solvent-Free Model for Self-Assembling Amphiphilic Cyclodextrins. An Off-Lattice Monte Carlo Approach in Two Dimensions. Journal of Physical Chemistry B, 2012, 116, 2687-2695.	2.6	4
45	Effective short-range Coulomb correction to model the aggregation behavior of ionic surfactants. Journal of Chemical Physics, 2016, 144, 234904.	3.0	4
46	Molecular simulation study on the structure of templated porous materials obtained from different inorganic precursors. Studies in Surface Science and Catalysis, 2007, 160, 495-502.	1.5	3
47	Long-time relaxation dynamics in nematic and smectic liquid crystals of soft repulsive colloidal rods. Physical Review E, 2022, 105, 014703.	2.1	2
48	Modeling the aggregation behavior of amphiphiles in the continuous phase of highly concentrated emulsions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 437, 90-100.	4.7	1
49	Structural relaxation dynamics of colloidal nanotrimers. Physical Review E, 2022, 106, .	2.1	1
50	Modelling the synthesis of periodic mesoporous silicas. Studies in Surface Science and Catalysis, 2007, 170, 1652-1659.	1.5	0