Simeon D Stoyanov

List of Publications by Year
in descending order

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119 papers	5,420 citations	81743 39 h-index	91712 69 g-index
123 all docs	123 docs citations	123 times ranked	6803 citing authors

#	Article	IF	Citations
1	Electrospinning versus fibre production methods: from specifics to technological convergence. Chemical Society Reviews, 2012, 41, 4708.	18.7	548
2	An environmentally benign antimicrobial nanoparticle based on a silver-infused lignin core. Nature Nanotechnology, 2015, 10, 817-823.	15.6	493
3	Fabrication of Environmentally Biodegradable Lignin Nanoparticles. ChemPhysChem, 2012, 13, 4235-4243.	1.0	326
4	Synthesis and Characterization of Biodegradable Lignin Nanoparticles with Tunable Surface Properties. Langmuir, 2016, 32, 6468-6477.	1.6	220
5	Stabilization of foams and emulsions by mixtures of surface active food-grade particles and proteins. Food Hydrocolloids, 2011, 25, 627-638.	5.6	150
6	3D Printing by Multiphase Silicone/Water Capillary Inks. Advanced Materials, 2017, 29, 1701554.	11.1	140
7	On the link between foam coarsening and surface rheology: why hydrophobins are so different. Soft Matter, 2010, 6, 1799.	1.2	112
8	Super stable foams stabilized by colloidal ethyl cellulose particles. Soft Matter, 2012, 8, 2194-2205.	1.2	112
9	Emulsions stabilised by food colloid particles: Role of particle adsorption and wettability at the liquid interface. Journal of Colloid and Interface Science, 2007, 312, 381-389.	5.0	106
10	Photothermal Colloid Antibodies for Shape-Selective Recognition and Killing of Microorganisms. Journal of the American Chemical Society, 2013, 135, 5282-5285.	6.6	104
11	Remarkably high surface visco-elasticity of adsorption layers of triterpenoid saponins. Soft Matter, 2013, 9, 5738.	1.2	94
12	Nanoemulsions obtained via bubble-bursting at a compound interface. Nature Physics, 2014, 10, 606-612.	6.5	85
13	Measuring the three-phase contact angle of nanoparticles at fluid interfaces. Physical Chemistry Chemical Physics, 2010, 12, 328-331.	1.3	80
14	Sporopollenin micro-reactors for in-situ preparation, encapsulation and targeted delivery of active components. Journal of Materials Chemistry, 2007, 17, 609.	6.7	79
15	Unique Properties of Bubbles and Foam Films Stabilized by HFBII Hydrophobin. Langmuir, 2011, 27, 2382-2392.	1.6	78
16	Surface Shear Rheology of Saponin Adsorption Layers. Langmuir, 2012, 28, 12071-12084.	1.6	77
17	Interfacial layers from the protein HFBII hydrophobin: Dynamic surface tension, dilatational elasticity and relaxation times. Journal of Colloid and Interface Science, 2012, 376, 296-306.	5.0	72
18	Growth of wormlike micelles in nonionic surfactant solutions: Quantitative theory vs. experiment. Advances in Colloid and Interface Science, 2018, 256, 1-22.	7.0	72

#	Article	IF	Citations
19	From molecular dynamics to hydrodynamics: A novel Galilean invariant thermostat. Journal of Chemical Physics, 2005, 122, 114112.	1.2	71
20	Hierarchically structured composites and porous materials from soft templates: fabrication and applications. Journal of Materials Chemistry A, 2019, 7, 8030-8049.	5.2	68
21	Novel anisotropic materials from functionalised colloidal cellulose and cellulose derivatives. Journal of Materials Chemistry, 2010, 20, 10058.	6.7	66
22	Surface properties of adsorption layers formed from triterpenoid and steroid saponins. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 491, 18-28.	2.3	65
23	Foam Boosting by Amphiphilic Molecules in the Presence of Silicone Oil. Langmuir, 2001, 17, 969-979.	1.6	62
24	The role of the hydrophobic phase in the unique rheological properties of saponin adsorption layers. Soft Matter, 2014, 10, 7034-7044.	1.2	57
25	Fabrication of functional anisotropic food-grade micro-rods with micro-particle inclusions with potential application for enhanced stability of food foams. Soft Matter, 2009, 5, 1019.	1.2	56
26	Encapsulation of living cells into sporopollenin microcapsules. Journal of Materials Chemistry, 2011, 21, 18018.	6.7	55
27	Hydrophobic Modification of Chitin Whisker and Its Potential Application in Structuring Oil. Langmuir, 2015, 31, 1641-1648.	1.6	55
28	Lowering of cholesterol bioaccessibility and serum concentrations by saponins: in vitro and in vivo studies. Food and Function, 2015, 6, 501-512.	2.1	54
29	Soft dendritic microparticles with unusual adhesion and structuring properties. Nature Materials, 2019, 18, 1315-1320.	13.3	53
30	How Rigid Rods Selfâ€Assemble at Curved Surfaces. Angewandte Chemie - International Edition, 2009, 48, 378-381.	7.2	51
31	Nonequilibrium continuous phase transition in colloidal gelation with short-range attraction. Nature Communications, 2020, 11, 3558.	5.8	49
32	Stability of evaporating two-layered liquid film in the presence of surfactantâ€"II. Linear analysis. Chemical Engineering Science, 1998, 53, 2823-2837.	1.9	48
33	Scalable fabrication of anisotropic micro-rods from food-grade materials using an in shear flow dispersionâ€“solvent attrition technique. Journal of Materials Chemistry, 2008, 18, 4074.	6.7	48
34	Saponin Adsorption at the Airâ€"Water Interfaceâ€"Neutron Reflectivity and Surface Tension Study. Langmuir, 2018, 34, 9540-9547.	1.6	48
35	Self-Assembled Bilayers from the Protein HFBII Hydrophobin: Nature of the Adhesion Energy. Langmuir, 2011, 27, 4481-4488.	1.6	47
36	Effects of Emulsifier Charge and Concentration on Pancreatic Lipolysis: 2. Interplay of Emulsifiers and Biles. Langmuir, 2012, 28, 12140-12150.	1.6	46

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37	Shape recognition of microbial cells by colloidal cell imprints. Nanoscale, 2013, 5, 8560.	2.8	46
38	Role of surface properties for the kinetics of bubble Ostwald ripening in saponin-stabilized foams. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 534, 16-25.	2.3	45
39	Printable homocomposite hydrogels with synergistically reinforced molecular-colloidal networks. Nature Communications, 2021, 12, 2834.	5.8	41
40	Anisotropic nano-papier mache microcapsules. Soft Matter, 2007, 3, 188-190.	1.2	39
41	Capillary meniscus dynamometry â€“ Method for determining the surface tension of drops and bubbles with isotropic and anisotropic surface stress distributions. Journal of Colloid and Interface Science, 2015, 440, 168-178.	5.0	37
42	Fabrication of living soft matter by symbiotic growth of unicellular microorganisms. Journal of Materials Chemistry B, 2016, 4, 3685-3694.	2.9	36
43	Role of interfacial elasticity for the rheological properties of saponin-stabilized emulsions. Journal of Colloid and Interface Science, 2020, 564, 264-275.	5.0	36
44	Elastic Langmuir Layers and Membranes Subjected to Unidirectional Compression: Wrinkling and Collapse. Langmuir, 2010, 26, 143-155.	1.6	34
45	Colloids in Flatland: a perspective on 2D phase-separated systems, characterisation methods, and lineactant design. Chemical Society Reviews, 2013, 42, 2100-2129.	18.7	34
46	Triggered cell release from shellacâ€“cell composite microcapsules. Soft Matter, 2012, 8, 5069.	1.2	33
47	Natural Deep Eutectics as a â€œGreenâ€•Cellulose Cosolvent. ACS Sustainable Chemistry and Engineering, 2020, 8, 14166-14178.	3.2	33
48	Role of Surface Diffusion for the Drainage and Hydrodynamic Stability of Thin Liquid Films. Langmuir, 2001, 17, 1150-1156.	1.6	32
49	Surface Pressure and Elasticity of Hydrophobin HFBII Layers on the Airâ€“Water Interface: Rheology Versus Structure Detected by AFM Imaging. Langmuir, 2013, 29, 6053-6067.	1.6	32
50	Equation of state of surface-adsorbing colloids. Soft Matter, 2010, 6, 1682.	1.2	31
51	Analytical modeling of micelle growth. 1. Chain-conformation free energy of binary mixed spherical, wormlike and lamellar micelles. Journal of Colloid and Interface Science, 2019, 547, 245-255.	5.0	30
52	Adsorption of shape-anisotropic and porous particles at the airâ€“water and the decaneâ€“water interface studied by the gel trapping technique. RSC Advances, 2014, 4, 2205-2213.	1.7	29
53	Effects of Emulsifier Charge and Concentration on Pancreatic Lipolysis. 1. In the Absence of Bile Salts. Langmuir, 2012, 28, 8127-8139.	1.6	28
54	Surface shear rheology of hydrophobin adsorption layers: laws of viscoelastic behaviour with applications to long-term foam stability. Faraday Discussions, 2012, 158, 195.	1.6	28

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55	Surface Shear Rheology of Adsorption Layers from the Protein HFBII Hydrophobin: Effect of Added Î²-Casein. Langmuir, 2012, 28, 4168-4177.	1.6	27
56	Hardening of particle/oil/water suspensions due to capillary bridges: Experimental yield stress and theoretical interpretation. Advances in Colloid and Interface Science, 2018, 251, 80-96.	7.0	27
57	Fabrication of novel lightweight composites by a hydrogel templating technique. Materials Research Bulletin, 2012, 47, 980-986.	2.7	26
58	The mechanism of lowering cholesterol absorption by calcium studied by using an in vitro digestion model. Food and Function, 2016, 7, 151-163.	2.1	26
59	Mesoscopic model for colloidal particles, powders, and granular solids. Physical Review E, 2008, 78, 051403.	0.8	25
60	Sonicationâ€“Microfluidics for Fabrication of Nanoparticle-Stabilized Microbubbles. Langmuir, 2014, 30, 4262-4266.	1.6	24
61	Motion of the Front between Thick and Thin Film:Â Hydrodynamic Theory and Experiment with Vertical Foam Films. Langmuir, 1997, 13, 1400-1407.	1.6	23
62	Aerated drinks increase gastric volume and reduce appetite as assessed by MRI: a randomized, balanced, crossover trial. American Journal of Clinical Nutrition, 2015, 101, 270-278.	2.2	23
63	Analytical modeling of micelle growth. 2. Molecular thermodynamics of mixed aggregates and scission energy in wormlike micelles. Journal of Colloid and Interface Science, 2019, 551, 227-241.	5.0	23
64	Growth of Bubbles on a Solid Surface in Response to a Pressure Reduction. Langmuir, 2014, 30, 4223-4228.	1.6	21
65	Analytical modeling of micelle growth. 4. Molecular thermodynamics of wormlike micelles from ionic surfactants: Theory vs. experiment. Journal of Colloid and Interface Science, 2021, 584, 561-581.	5.0	21
66	Mechanisms of cholesterol and saturated fatty acid lowering by Quillaja saponaria extract, studied by in vitro digestion model. Food and Function, 2015, 6, 1319-1330.	2.1	20
67	Shear rheology of mixed protein adsorption layers vs their structure studied by surface force measurements. Advances in Colloid and Interface Science, 2015, 222, 148-161.	7.0	20
68	Polymers at the Water/Air Interface, Surface Pressure Isotherms, and Molecularly Detailed Modeling. Langmuir, 2010, 26, 11850-11861.	1.6	19
69	Electrospinning of ethyl cellulose fibres with glass and steel needle configurations. Food Research International, 2013, 54, 1761-1772.	2.9	19
70	Sound absorption of porous cement composites: effects of the porosity and the pore size. Journal of Materials Science, 2015, 50, 3495-3503.	1.7	19
71	A Scalable Platform for Functional Nanomaterials via Bubbleâ€Bursting. Advanced Materials, 2016, 28, 4047-4052.	11.1	19
72	Limited coalescence and Ostwald ripening in emulsions stabilized by hydrophobin HFBII and milk proteins. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 509, 521-538.	2.3	19

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73	Preparation and Characterization of the Foam-Stabilizing Properties of Celluloseâ€“Ethyl Cellulose Complexes for Use in Foods. Journal of Agricultural and Food Chemistry, 2011, 59, 13277-13288.	2.4	18
74	Fabrication of saltâ€“hydrogel marbles and hollow-shell microcapsules by an aerosol gelation technique. Journal of Materials Chemistry B, 2015, 3, 82-89.	2.9	18
75	Adhesion of bubbles and drops to solid surfaces, and anisotropic surface tensions studied by capillary meniscus dynamometry. Advances in Colloid and Interface Science, 2016, 233, 223-239.	7.0	18
76	Close packing density and fracture strength of adsorbed polydisperse particle layers. Soft Matter, 2011, 7, 4750.	1.2	17
77	An ultra melt-resistant hydrogel from food grade carbohydrates. RSC Advances, 2017, 7, 45535-45544.	1.7	17
78	Competitive adsorption of the protein hydrophobin and an ionic surfactant: Parallel vs sequential adsorption and dilatational rheology. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 457, 307-317.	2.3	16
79	Thermally Responsive Capillary Suspensions. ACS Applied Materials & Interfaces, 2017, 9, 44152-44160.	4.0	16
80	In vitro study of triglyceride lipolysis and phase distribution of the reaction products and cholesterol: effects of calcium and bicarbonate. Food and Function, 2012, 3, 1206.	2.1	15
81	Hydrodynamic cavitation: a bottom-up approach to liquid aeration. Soft Matter, 2012, 8, 4562.	1.2	15
82	Analytical modeling of micelle growth. 3. Electrostatic free energy of ionic wormlike micelles â€“ Effects of activity coefficients and spatially confined electric double layers. Journal of Colloid and Interface Science, 2021, 581, 262-275.	5.0	15
83	Role of surfactants on the approaching velocity of two small emulsion drops. Journal of Colloid and Interface Science, 2012, 368, 342-355.	5.0	14
84	Cyclodextrin-Based Solidâ€“Gas Clathrates. Journal of Agricultural and Food Chemistry, 2015, 63, 6603-6613.	2.4	14
85	Scalable Formation of Concentrated Monodisperse Lignin Nanoparticles by Recirculationâ€Enhanced Flash Nanoprecipitation. Particle and Particle Systems Characterization, 2020, 37, 2000122.	1.2	14
86	PMMA Highlights the Layering Transition of PDMS in Langmuir Films. Langmuir, 2011, 27, 2501-2508.	1.6	13
87	Production and characterization of stable foams with fine bubbles from solutions of hydrophobin HFBII and its mixtures with other proteins. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 521, 92-104.	2.3	13
88	Toward Scalable Fabrication of Hierarchical Silica Capsules with Integrated Microâ€, Mesoâ€, and Macropores. Small, 2016, 12, 1797-1805.	5.2	12
89	Multi-template synthesis of hierarchically porous carbon spheres with potential application in supercapacitors. RSC Advances, 2016, 6, 111406-111414.	1.7	12
90	Novel Multifunctional Microâ€Ampoules for Structuring and Encapsulation. ChemPhysChem, 2009, 10, 2599-2602.	1.0	11

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91	Shear rheology of hydrophobin adsorption layers at oil/water interfaces and data interpretation in terms of a viscoelastic thixotropic model. Soft Matter, 2014, 10, 5777.	1.2	11
92	Role of lysophospholipids on the interfacial and liquid film properties of enzymatically modified egg yolk solutions. Food Hydrocolloids, 2020, 99, 105319.	5.6	11
93	Rheology of particle/water/oil three-phase dispersions: Electrostatic vs. capillary bridge forces. Journal of Colloid and Interface Science, 2018, 513, 515-526.	5.0	11
94	Chitin nanowhiskers with improved properties obtained using natural deep eutectic solvent and mild mechanical processing. Green Chemistry, 2022, 24, 3834-3844.	4.6	11
95	Sound absorption properties of porous composites fabricated by a hydrogel templating technique. Journal of Materials Research, 2013, 28, 2409-2414.	1.2	10
96	Capillary Structured Suspensions from In Situ Hydrophobized Calcium Carbonate Particles Suspended in a Polar Liquid Media. Langmuir, 2018, 34, 442-452.	1.6	10
97	Origin of the extremely high elasticity of bulk emulsions, stabilized by Yucca Schidigera saponins. Food Chemistry, 2020, 316, 126365.	4.2	10
98	Polymer Compatibility in Two Dimensions. Modeling of Phase Behavior of Mixed Polymethacrylate Langmuir Films. Langmuir, 2012, 28, 5614-5621.	1.6	9
99	A novel hybrid system for the fabrication of a fibrous mesh with micro-inclusions. Carbohydrate Polymers, 2012, 89, 222-229.	5.1	9
100	Sustained hunger suppression from stable liquid food foams. Obesity, 2014, 22, 2131-2136.	1.5	9
101	Cell shape recognition by colloidal cell imprints: Energy of the cell-imprint interaction. Physical Review E, 2015, 92, 032730.	0.8	9
102	Hierarchically porous composites fabricated by hydrogel templating and viscous trapping techniques. Materials and Design, 2018, 137, 384-393.	3.3	9
103	A General Method for Calculating Bending Moduli and Spontaneous Curvature of Polymer Brushes in Terms of Local Density Functional Theory. Macromolecules, 2003, 36, 5032-5038.	2.2	8
104	Nanoantibiotic Particles for Shape and Size Recognition of Pathogens. Materials Research Society Symposia Proceedings, 2013, 1498, 127-132.	0.1	7
105	Triggered release kinetics of living cells from composite microcapsules. Physical Chemistry Chemical Physics, 2013, 15, 2337.	1.3	6
106	Sound transmission loss of hierarchically porous composites produced by hydrogel templating and viscous trapping techniques. Materials Chemistry Frontiers, 2017, 1, 2627-2637.	3.2	6
107	Threeâ€dimensional cancer cell culture in highâ€yield multiscale scaffolds by shear spinning. Biotechnology Progress, 2019, 35, e2750.	1.3	6
108	Structuring and calorie control of bakery products by templating batter with ultra melt-resistant food-grade hydrogel beads. Food and Function, 2017, 8, 2967-2973.	2.1	5

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109	Sustained satiety induced by food foams is independent of energy content, in healthy adults. Appetite, 2016, 97, 64-71.	1.8	4
110	Smart soaps: stimulus responsive soapâ€“hydrogel bead composites for controlled dissolution and release of actives. Materials Chemistry Frontiers, 2018, 2, 402-409.	3.2	4
111	Scaffold free fabrication of linear multicellular assemblies by dielectrophoretic hydrogel trapping technique. Biomaterials Science, 2013, 1, 996.	2.6	3
112	Sporopollenin microcapsules for microencapsulation of living cells. Materials Research Society Symposia Proceedings, 2013, 1499, 1.	0.1	2
113	Colloidal and Nanocellulose-Stabilized Emulsions. Materials and Energy, 2014, , 185-196.	2.5	2
114	Non-Invasive Rheo-MRI Study of Egg Yolk-Stabilized Emulsions: Yield Stress Decay and Protein Release. Molecules, 2022, 27, 3070.	1.7	2
115	Colloid fabrication by co-extrusion. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2008, 323, 94-98.	2.3	1
116	Innentitelbild: How Rigid Rods Self-Assemble at Curved Surfaces (Angew. Chem. 2/2009). Angewandte Chemie, 2009, 121, 244-244.	1.6	0
117	Inside Cover: How Rigid Rods Self-Assemble at Curved Surfaces (Angew. Chem. Int. Ed. 2/2009). Angewandte Chemie - International Edition, 2009, 48, 238-238.	7.2	0
118	Triggered Cell Release from Shellac-Cells Composite Microcapsules. Materials Research Society Symposia Proceedings, 2013, 1498, 177-182.	0.1	0
119	Gravity-driven syneresis in model low-fat mayonnaise. Soft Matter, 2019, 15, 9474-9481.	1.2	0