AndrÃ© R Studart

List of Publications by Year
in descending order

117 papers	13,566 citations	38660 50 h-index	21474 114 g-index
118 all docs	118 docs citations	118 times ranked	14066 citing authors

#	Article	IF	Citations
1	Processing Routes to Macroporous Ceramics: A Review. Journal of the American Ceramic Society, 2006, 89, 1771-1789.	1.9	1,567
2	Bioinspired Design and Assembly of Platelet Reinforced Polymer Films. Science, 2008, 319, 1069-1073.	6.0	946
3	Multimaterial magnetically assisted 3D printing of composite materials. Nature Communications, 2015, 6, 8643.	5.8	630
4	Composites Reinforced in Three Dimensions by Using Low Magnetic Fields. Science, 2012, 335, 199-204.	6.0	555
5	Self-shaping composites with programmable bioinspired microstructures. Nature Communications, 2013, 4, 1712.	5.8	543
6	Ultrastable Particle-Stabilized Foams. Angewandte Chemie - International Edition, 2006, 45, 3526-3530.	7.2	542
7	Magnetically aligned graphite electrodes for high-rate performance Li-ion batteries. Nature Energy, 2016, 1, .	19.8	480
8	Cellulose Nanocrystal Inks for 3D Printing of Textured Cellular Architectures. Advanced Functional Materials, 2017, 27, 1604619.	7.8	447
9	3D Printing of Emulsions and Foams into Hierarchical Porous Ceramics. Advanced Materials, 2016, 28, 9993-9999.	11.1	373
10	3D printing of robotic soft actuators with programmable bioinspired architectures. Nature Communications, 2018, 9, 878.	5.8	346
11	Additive manufacturing of biologically-inspired materials. Chemical Society Reviews, 2016, 45, 359-376.	18.7	344
12	Towards Highâ€Performance Bioinspired Composites. Advanced Materials, 2012, 24, 5024-5044.	11.1	332
13	Stabilization of Foams with Inorganic Colloidal Particles. Langmuir, 2006, 22, 10983-10988.	1.6	319
14	3D printing of bacteria into functional complex materials. Science Advances, 2017, 3, eaao6804.	4.7	314
15	Magnetically assisted slip casting of bioinspired heterogeneous composites. Nature Materials, 2015, 14, 1172-1179.	13.3	291
16	Three-dimensional printing of hierarchical liquid-crystal-polymer structures. Nature, 2018, 561, 226-230.	13.7	267
17	Bioinspired spring origami. Science, 2018, 359, 1386-1391.	6.0	263
18	Macroporous Ceramics from Particle-Stabilized Wet Foams. Journal of the American Ceramic Society, 2007, 90, 16-22.	1.9	241

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19	Dynamics of Cellulose Nanocrystal Alignment during 3D Printing. ACS Nano, 2018, 12, 6926-6937.	7.3	203
20	Stabilization of Oil-in-Water Emulsions by Colloidal Particles Modified with Short Amphiphiles. Langmuir, 2008, 24, 7161-7168.	1.6	177
21	Three-dimensional printing of multicomponent glasses using phase-separating resins. Nature Materials, 2020, 19, 212-217.	13.3	172
22	Tailoring the Microstructure of Particle-Stabilized Wet Foams. Langmuir, 2007, 23, 1025-1032.	1.6	164
23	Stretchable heterogeneous composites with extreme mechanical gradients. Nature Communications, 2012, 3, 1265.	5.8	156
24	Processing of Particleâ€Stabilized Wet Foams Into Porous Ceramics. Journal of the American Ceramic Society, 2007, 90, 3407-3414.	1.9	155
25	3D Printing of Materials with Tunable Failure via Bioinspired Mechanical Gradients. Advanced Materials, 2018, 30, e1705808.	11.1	146
26	Biologically Inspired Dynamic Material Systems. Angewandte Chemie - International Edition, 2015, 54, 3400-3416.	7.2	142
27	Geologically-inspired strong bulk ceramics made with water at room temperature. Nature Communications, 2017, 8, 14655.	5.8	138
28	Materials from foams and emulsions stabilized by colloidal particles. Journal of Materials Chemistry, 2007, 17, 3283.	6.7	132
29	Macroporous Ceramics from Particleâ€stabilized Emulsions. Advanced Materials, 2008, 20, 4714-4718.	11.1	130
30	Programming soft robots with flexible mechanical metamaterials. Science Robotics, 2019, 4, .	9.9	118
31	Highâ€Throughput Step Emulsification for the Production of Functional Materials Using a Glass Microfluidic Device. Macromolecular Chemistry and Physics, 2017, 218, 1600472.	1.1	113
32	Transparent and tough bulk composites inspired by nacre. Nature Communications, 2019, 10, 2794.	5.8	109
33	Non-linear alignment dynamics in suspensions of platelets under rotating magnetic fields. Soft Matter, 2012, 8, 7604-7609.	1.2	101
34	Arrested Coalescence of Particle-coated Droplets into Nonspherical Supracolloidal Structures. Journal of Physical Chemistry B, 2009, 113, 3914-3919.	1.2	98
35	Magnetic assembly of transparent and conducting graphene-based functional composites. Nature Communications, 2016, 7, 12078.	5.8	97
36	Designer Polymer-Based Microcapsules Made Using Microfluidics. Langmuir, 2012, 28, 144-152.	1.6	96

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37	Hierarchical Toughening of Nacreâ€Like Composites. Advanced Functional Materials, 2019, 29, 1806800.	7.8	89
38	Mechanics of Platelet-Reinforced Composites Assembled Using Mechanical and Magnetic Stimuli. ACS Applied Materials & Interfaces, 2013, 5, 10794-10805.	4.0	85
39	Mineral Nanoâ€Interconnectivity Stiffens and Toughens Nacreâ€like Composite Materials. Advanced Materials, 2017, 29, 1605039.	11.1	85
40	Role of the polymer phase in the mechanics of nacre-like composites. Journal of the Mechanics and Physics of Solids, 2016, 96, 133-146.	2.3	83
41	3D printing of concentrated emulsions into multiphase biocompatible soft materials. Soft Matter, 2017, 13, 1794-1803.	1.2	82
42	3D printing of sacrificial templates into hierarchical porous materials. Scientific Reports, 2019, 9, 409.	1.6	81
43	Pickering and Network Stabilization of Biocompatible Emulsions Using Chitosan-Modified Silica Nanoparticles. Langmuir, 2016, 32, 13446-13457.	1.6	77
44	Active cargo transport with Janus colloidal shuttles using electric and magnetic fields. Soft Matter, 2018, 14, 4741-4749.	1.2	74
45	Digital light 3D printing of customized bioresorbable airway stents with elastomeric properties. Science Advances, 2021, 7, .	4.7	69
46	Predicting sizes of droplets made by microfluidic flow-induced dripping. Soft Matter, 2011, 7, 8757.	1.2	64
47	Monodisperse Functional Colloidosomes with Tailored Nanoparticle Shells. Langmuir, 2011, 27, 3301-3307.	1.6	62
48	Hierarchical reinforcement of polyurethane-based composites with inorganic micro- and nanoplatelets. Composites Science and Technology, 2012, 72, 435-445.	3.8	62
49	Hierarchical Porous Materials Made by Drying Complex Suspensions. Langmuir, 2011, 27, 955-964.	1.6	55
50	Complexâ€Shaped Cellulose Composites Made by Wet Densification of 3D Printed Scaffolds. Advanced Functional Materials, 2020, 30, 1904127.	7.8	54
51	3D Printing of Salt as a Template for Magnesium with Structured Porosity. Advanced Materials, 2019, 31, e1903783.	11.1	52
52	Emulsions Stabilized by Chitosan-Modified Silica Nanoparticles: pH Control of Structureâ€“Property Relations. Langmuir, 2018, 34, 6147-6160.	1.6	51
53	Temporal response of magnetically labeled platelets under dynamic magnetic fields. Soft Matter, 2013, 9, 498-505.	1.2	44
54	Quantifying the role of mineral bridges on the fracture resistance of nacre-like composites. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 12698-12703.	3.3	44

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55	Encapsulation of Aliphatic Amines Using Microfluidics. Langmuir, 2014, 30, 2346-2350.	1.6	42
56	Conformal Bacterial Cellulose Coatings as Lubricious Surfaces. ACS Nano, 2020, 14, 3885-3895.	7.3	42
57	Locally Reinforced Polymer-Based Composites for Elastic Electronics. ACS Applied Materials & Interfaces, 2012, 4, 2860-2864.	4.0	40
58	Controlled Massive Encapsulation via Tandem Step Emulsification in Glass. Advanced Functional Materials, 2019, 29, 1806821.	7.8	35
59	Periodically microstructured composite films made by electric- and magnetic-directed colloidal assembly. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 4623-4628.	3.3	34
60	Strong Microcapsules with Permeable Porous Shells Made through Phase Separation in Double Emulsions. Langmuir, 2017, 33, 2402-2410.	1.6	34
61	Domeâ€Patterned Metamaterial Sheets. Advanced Science, 2020, 7, 2001955.	5.6	34
62	Programmable snapping composites with bio-inspired architecture. Bioinspiration and Biomimetics, 2017, 12, 026012.	1.5	33
63	Injectable Materials with Magnetically Controlled Anisotropic Porosity. ACS Applied Materials & Interfaces, 2012, 4, 5086-5091.	4.0	31
64	Ultrastrong Hierarchical Porous Materials via Colloidal Assembly and Oxidation of Metal Particles. Advanced Functional Materials, 2020, 30, 2003550.	7.8	31
65	CaO-Based CO₂ Sorbents with a Hierarchical Porous Structure Made via Microfluidic Droplet Templating. Industrial & Engineering Chemistry Research, 2020, 59, 7182-7188.	1.8	29
66	Colloidal shuttles for programmable cargo transport. Nature Communications, 2017, 8, 1872.	5.8	28
67	3D Printing of Strong Lightweight Cellular Structures Using Polysaccharide-Based Composite Foams. ACS Sustainable Chemistry and Engineering, 2018, 6, 17160-17167.	3.2	28
68	Explosive Raspberries: Controlled Magnetically Triggered Bursting of Microcapsules. Advanced Functional Materials, 2016, 26, 4007-4015.	7.8	27
69	Multiwalled functional colloidosomes made small and in large quantities via bulk emulsification. Soft Matter, 2014, 10, 60-68.	1.2	26
70	Solvent-Free Three-Dimensional Printing of Biodegradable Elastomers Using Liquid Macrophotoinitiators. Macromolecules, 2021, 54, 7830-7839.	2.2	25
71	Design of textured multi-layered structures via magnetically assisted slip casting. Soft Matter, 2019, 15, 3886-3896.	1.2	24
72	Filtered Mechanosensing Using Snapping Composites with Embedded Mechano-Electrical Transduction. ACS Nano, 2019, 13, 4752-4760.	7.3	24

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73	Transparent Nacreâ€like Composites Toughened through Mineral Bridges. Advanced Functional Materials, 2020, 30, 2002149.	7.8	24
74	Designer liquid-liquid interfaces made from transient double emulsions. Nature Communications, 2018, 9, 4763.	5.8	22
75	Cold densification and sintering of nanovaterite by pressing with water. Journal of the European Ceramic Society, 2020, 40, 893-900.	2.8	20
76	Carbon ablators with porosity tailored for aerospace thermal protection during atmospheric re-entry. Carbon, 2022, 195, 80-91.	5.4	20
77	Oxide-Free Copper Pastes for the Attachment of Large-Area Power Devices. Journal of Electronic Materials, 2019, 48, 6823-6834.	1.0	19
78	Sorption rate enhancement in SAPO-34 zeolite by directed mass transfer channels. International Journal of Heat and Mass Transfer, 2019, 130, 25-32.	2.5	19
79	Drying of Complex Suspensions. Physical Review Letters, 2010, 104, 128303.	2.9	18
80	Unifying Model for the Electrokinetic and Phase Behavior of Aqueous Suspensions Containing Short and Long Amphiphiles. Langmuir, 2011, 27, 11835-11844.	1.6	18
81	Mechanics of thick-shell microcapsules made by microfluidics. Polymer, 2014, 55, 6837-6843.	1.8	18
82	Quantification of heat and mass transport limitations in adsorption heat exchangers: Application to the silica gel/water working pair. International Journal of Heat and Mass Transfer, 2018, 123, 331-341.	2.5	18
83	Hierarchical porous materials made by stereolithographic printing of photo-curable emulsions. Scientific Reports, 2021, 11, 22316.	1.6	18
84	Tough Bioinspired Composites That Self-Report Damage. ACS Applied Materials & Interfaces, 2021, 13, 27481-27490.	4.0	17
85	Yielding of weakly attractive nanoparticle networks. Soft Matter, 2011, 7, 6408.	1.2	16
86	Functional Microcapsules with Hybrid Shells Made via Solâ€“Gel Reaction within Double Emulsions. Langmuir, 2017, 33, 9007-9017.	1.6	15
87	Foaming of Recyclable Clays into Energy-Efficient Low-Cost Thermal Insulators. ACS Sustainable Chemistry and Engineering, 2019, 7, 15597-15606.	3.2	15
88	Ultrahigh Magnetically Responsive Microplatelets with Tunable Fluorescence Emission. Langmuir, 2013, 29, 14674-14680.	1.6	14
89	Facile Manufacturing Route for Magnetoâ€Responsive Soft Actuators. Advanced Intelligent Systems, 2021, 3, 2000283.	3.3	14
90	Tough metal-ceramic composites with multifunctional nacre-like architecture. Scientific Reports, 2021, 11, 1621.	1.6	13

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91	Stretchable Soft Composites with Strainâ€Induced Architectured Color. Advanced Materials, 2022, 34, e2104874.	11.1	13
92	One-Step Bulk Fabrication of Polymer-Based Microcapsules with Hardâ€“Soft Bilayer Thick Shells. ACS Applied Materials & Interfaces, 2017, 9, 37364-37373.	4.0	12
93	Magnetic propulsion of colloidal microrollers controlled by electrically modulated friction. Soft Matter, 2021, 17, 1037-1047.	1.2	12
94	Spinâ€Printing of Liquid Crystal Polymer into Recyclable and Strong Allâ€Fiber Materials. Advanced Functional Materials, 2021, 31, 2104574.	7.8	12
95	Robust Microcompartments with Hydrophobically Gated Shells. Langmuir, 2015, 31, 6965-6970.	1.6	11
96	High-Power Adsorption Heat Pumps Using Magnetically Aligned Zeolite Structures. ACS Applied Materials & Interfaces, 2019, 11, 24037-24046.	4.0	11
97	Pickering emulsions stabilized by in situ grown biologically active alkyl gallate microneedles. RSC Advances, 2012, 2, 8614.	1.7	10
98	Self-Grown Bacterial Cellulose Capsules Made through Emulsion Templating. ACS Biomaterials Science and Engineering, 2021, 7, 3221-3228.	2.6	10
99	Fabrication of Three-Dimensional Polymer-Brush Gradients within Elastomeric Supports by Cu⁰-Mediated Surface-Initiated ATRP. ACS Macro Letters, 2021, 10, 1099-1106.	2.3	10
100	Lightâ€Based Printing of Leachable Salt Molds for Facile Shaping of Complex Structures. Advanced Materials, 2022, 34, .	11.1	10
101	Celluloseâ€Based Microparticles for Magnetically Controlled Optical Modulation and Sensing. Small, 2020, 16, 1904251.	5.2	9
102	Fracture of hierarchical multi-layered bioinspired composites. Journal of the Mechanics and Physics of Solids, 2022, 159, 104750.	2.3	9
103	Flax-based natural composites hierarchically reinforced by cast or printed carbon fibres. Composites Science and Technology, 2022, 226, 109527.	3.8	9
104	Enhanced Percolating Thermal Underfills Achieved by Means of Nanoparticle Bridging Necks. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2016, 6, 1785-1795.	1.4	8
105	Multiscale deformation processes during cold sintering of nanovaterite compacts. Acta Materialia, 2020, 189, 266-273.	3.8	8
106	Transparent materials with stiff and tough hierarchical structures. Open Ceramics, 2021, 6, 100109.	1.0	8
107	Magnetic Manipulation of Nanowires for Engineered Stretchable Electronics. ACS Nano, 2022, 16, 837-846.	7.3	8
108	Bio-Inspired Platelet-Reinforced Polymers with Enhanced Stiffness and Damping Behavior. ACS Applied Polymer Materials, 2020, 2, 3557-3565.	2.0	7

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109	Early Dynamics and Stabilization Mechanisms of Oil-in-Water Emulsions Containing Colloidal Particles Modified with Short Amphiphiles: A Numerical Study. Langmuir, 2017, 33, 14347-14357.	1.6	6
110	Optical properties and structural coloration of chocolate. Applied Physics Letters, 2020, 117, .	1.5	6
111	Freezing of Gelled Suspensions: a Facile Route toward Mesoporous TiO2 Particles for High-Capacity Lithium-Ion Electrodes. ACS Applied Nano Materials, 2018, 1, 6622-6629.	2.4	5
112	Microcompartments with Strong and Dynamic Selfâ€Repairing Shells. Advanced Materials Interfaces, 2018, 5, 1800813.	1.9	5
113	Strong Dual-Compartment Microcapsules Loaded with High Cargo Contents. Langmuir, 2018, 34, 205-212.	1.6	4
114	On the Evaporation of Colloidal Suspensions in Confined Pillar Arrays. Transport in Porous Media, 2018, 125, 173-192.	1.2	3
115	Facile Manufacturing Route for Magnetoâ€Responsive Soft Actuators. Advanced Intelligent Systems, 2021, 3, 2170061.	3.3	2
116	Giving life to robotic skins. Matter, 2022, 5, 1990-1992.	5.0	1
117	Architectured ZnOâ€“Cu particles for facile manufacturing of integrated Li-ion electrodes. Scientific Reports, 2020, 10, 12401.	1.6	0