AndrÃ© R Studart

List of Publications by Year
in descending order

117 papers	13,566 citations	38742 50 h-index	20961 115 g-index
118 all docs	118 docs citations	118 times ranked	14066 citing authors

#	Article	IF	Citations
1	Stretchable Soft Composites with Strainâ€Induced Architectured Color. Advanced Materials, 2022, 34, e2104874.	21.0	13
2	Fracture of hierarchical multi-layered bioinspired composites. Journal of the Mechanics and Physics of Solids, 2022, 159, 104750.	4.8	9
3	Carbon ablators with porosity tailored for aerospace thermal protection during atmospheric re-entry. Carbon, 2022, 195, 80-91.	10.3	20
4	Magnetic Manipulation of Nanowires for Engineered Stretchable Electronics. ACS Nano, 2022, 16, 837-846.	14.6	8
5	Flax-based natural composites hierarchically reinforced by cast or printed carbon fibres. Composites Science and Technology, 2022, 226, 109527.	7.8	9
6	Lightâ€Based Printing of Leachable Salt Molds for Facile Shaping of Complex Structures. Advanced Materials, 2022, 34, .	21.0	10
7	Giving life to robotic skins. Matter, 2022, 5, 1990-1992.	10.0	1
8	Magnetic propulsion of colloidal microrollers controlled by electrically modulated friction. Soft Matter, 2021, 17, 1037-1047.	2.7	12
9	Digital light 3D printing of customized bioresorbable airway stents with elastomeric properties. Science Advances, 2021, 7, .	10.3	69
10	Facile Manufacturing Route for Magnetoâ€Responsive Soft Actuators. Advanced Intelligent Systems, 2021, 3, 2000283.	6.1	14
11	Tough Bioinspired Composites That Self-Report Damage. ACS Applied Materials & Interfaces, 2021, 13, 27481-27490.	8.0	17
12	Self-Grown Bacterial Cellulose Capsules Made through Emulsion Templating. ACS Biomaterials Science and Engineering, 2021, 7, 3221-3228.	5.2	10
13	Transparent materials with stiff and tough hierarchical structures. Open Ceramics, 2021, 6, 100109.	2.0	8
14	Solvent-Free Three-Dimensional Printing of Biodegradable Elastomers Using Liquid Macrophotoinitiators. Macromolecules, 2021, 54, 7830-7839.	4.8	25
15	Fabrication of Three-Dimensional Polymer-Brush Gradients within Elastomeric Supports by Cu⁰-Mediated Surface-Initiated ATRP. ACS Macro Letters, 2021, 10, 1099-1106.	4.8	10
16	Facile Manufacturing Route for Magnetoâ€Responsive Soft Actuators. Advanced Intelligent Systems, 2021, 3, 2170061.	6.1	2
17	Spinâ€Printing of Liquid Crystal Polymer into Recyclable and Strong Allâ€Fiber Materials. Advanced Functional Materials, 2021, 31, 2104574.	14.9	12
18	Tough metal-ceramic composites with multifunctional nacre-like architecture. Scientific Reports, 2021, 11, 1621.	3.3	13

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19	Hierarchical porous materials made by stereolithographic printing of photo-curable emulsions. Scientific Reports, 2021, 11, 22316.	3.3	18
20	Cold densification and sintering of nanovaterite by pressing with water. Journal of the European Ceramic Society, 2020, 40, 893-900.	5.7	20
21	CaO-Based CO₂ Sorbents with a Hierarchical Porous Structure Made via Microfluidic Droplet Templating. Industrial & Engineering Chemistry Research, 2020, 59, 7182-7188.	3.7	29
22	Complexâ€Shaped Cellulose Composites Made by Wet Densification of 3D Printed Scaffolds. Advanced Functional Materials, 2020, 30, 1904127.	14.9	54
23	Three-dimensional printing of multicomponent glasses using phase-separating resins. Nature Materials, 2020, 19, 212-217.	27.5	172
24	Celluloseâ€Based Microparticles for Magnetically Controlled Optical Modulation and Sensing. Small, 2020, 16, 1904251.	10.0	9
25	Domeâ€Patterned Metamaterial Sheets. Advanced Science, 2020, 7, 2001955.	11.2	34
26	Ultrastrong Hierarchical Porous Materials via Colloidal Assembly and Oxidation of Metal Particles. Advanced Functional Materials, 2020, 30, 2003550.	14.9	31
27	Bio-Inspired Platelet-Reinforced Polymers with Enhanced Stiffness and Damping Behavior. ACS Applied Polymer Materials, 2020, 2, 3557-3565.	4.4	7
28	Optical properties and structural coloration of chocolate. Applied Physics Letters, 2020, 117, .	3.3	6
29	Architectured ZnOâ€"Cu particles for facile manufacturing of integrated Li-ion electrodes. Scientific Reports, 2020, 10, 12401.	3.3	0
30	Transparent Nacreâ€like Composites Toughened through Mineral Bridges. Advanced Functional Materials, 2020, 30, 2002149.	14.9	24
31	Conformal Bacterial Cellulose Coatings as Lubricious Surfaces. ACS Nano, 2020, 14, 3885-3895.	14.6	42
32	Multiscale deformation processes during cold sintering of nanovaterite compacts. Acta Materialia, 2020, 189, 266-273.	7.9	8
33	Oxide-Free Copper Pastes for the Attachment of Large-Area Power Devices. Journal of Electronic Materials, 2019, 48, 6823-6834.	2.2	19
34	3D Printing of Salt as a Template for Magnesium with Structured Porosity. Advanced Materials, 2019, 31, e1903783.	21.0	52
35	Foaming of Recyclable Clays into Energy-Efficient Low-Cost Thermal Insulators. ACS Sustainable Chemistry and Engineering, 2019, 7, 15597-15606.	6.7	15
36	3D printing of sacrificial templates into hierarchical porous materials. Scientific Reports, 2019, 9, 409.	3.3	81

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37	High-Power Adsorption Heat Pumps Using Magnetically Aligned Zeolite Structures. ACS Applied Materials & Interfaces, 2019, 11, 24037-24046.	8.0	11
38	Transparent and tough bulk composites inspired by nacre. Nature Communications, 2019, 10, 2794.	12.8	109
39	Design of textured multi-layered structures via magnetically assisted slip casting. Soft Matter, 2019, 15, 3886-3896.	2.7	24
40	Programming soft robots with flexible mechanical metamaterials. Science Robotics, 2019, 4, .	17.6	118
41	Filtered Mechanosensing Using Snapping Composites with Embedded Mechano-Electrical Transduction. ACS Nano, 2019, 13, 4752-4760.	14.6	24
42	Hierarchical Toughening of Nacreâ€Like Composites. Advanced Functional Materials, 2019, 29, 1806800.	14.9	89
43	Sorption rate enhancement in SAPO-34 zeolite by directed mass transfer channels. International Journal of Heat and Mass Transfer, 2019, 130, 25-32.	4.8	19
44	Controlled Massive Encapsulation via Tandem Step Emulsification in Glass. Advanced Functional Materials, 2019, 29, 1806821.	14.9	35
45	3D printing of robotic soft actuators with programmable bioinspired architectures. Nature Communications, 2018, 9, 878.	12.8	346
46	3D Printing of Materials with Tunable Failure via Bioinspired Mechanical Gradients. Advanced Materials, 2018, 30, e1705808.	21.0	146
47	Strong Dual-Compartment Microcapsules Loaded with High Cargo Contents. Langmuir, 2018, 34, 205-212.	3.5	4
48	Emulsions Stabilized by Chitosan-Modified Silica Nanoparticles: pH Control of Structureâ€“Property Relations. Langmuir, 2018, 34, 6147-6160.	3.5	51
49	Bioinspired spring origami. Science, 2018, 359, 1386-1391.	12.6	263
50	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.	4.8	18
51	Designer liquid-liquid interfaces made from transient double emulsions. Nature Communications, 2018, 9, 4763.	12.8	22
52	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.	7.1	44
53	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.	5.0	5
54	3D Printing of Strong Lightweight Cellular Structures Using Polysaccharide-Based Composite Foams. ACS Sustainable Chemistry and Engineering, 2018, 6, 17160-17167.	6.7	28

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55	Three-dimensional printing of hierarchical liquid-crystal-polymer structures. Nature, 2018, 561, 226-230.	27.8	267
56	Active cargo transport with Janus colloidal shuttles using electric and magnetic fields. Soft Matter, 2018, 14, 4741-4749.	2.7	74
57	Dynamics of Cellulose Nanocrystal Alignment during 3D Printing. ACS Nano, 2018, 12, 6926-6937.	14.6	203
58	On the Evaporation of Colloidal Suspensions in Confined Pillar Arrays. Transport in Porous Media, 2018, 125, 173-192.	2.6	3
59	Microcompartments with Strong and Dynamic Selfâ€Repairing Shells. Advanced Materials Interfaces, 2018, 5, 1800813.	3.7	5
60	3D printing of concentrated emulsions into multiphase biocompatible soft materials. Soft Matter, 2017, 13, 1794-1803.	2.7	82
61	Strong Microcapsules with Permeable Porous Shells Made through Phase Separation in Double Emulsions. Langmuir, 2017, 33, 2402-2410.	3.5	34
62	Cellulose Nanocrystal Inks for 3D Printing of Textured Cellular Architectures. Advanced Functional Materials, 2017, 27, 1604619.	14.9	447
63	Programmable snapping composites with bio-inspired architecture. Bioinspiration and Biomimetics, 2017, 12, 026012.	2.9	33
64	Geologically-inspired strong bulk ceramics made with water at room temperature. Nature Communications, 2017, 8, 14655.	12.8	138
65	Mineral Nanoâ€Interconnectivity Stiffens and Toughens Nacreâ€like Composite Materials. Advanced Materials, 2017, 29, 1605039.	21.0	85
66	Highâ€Throughput Step Emulsification for the Production of Functional Materials Using a Glass Microfluidic Device. Macromolecular Chemistry and Physics, 2017, 218, 1600472.	2.2	113
67	One-Step Bulk Fabrication of Polymer-Based Microcapsules with Hardâ€"Soft Bilayer Thick Shells. ACS Applied Materials & Interfaces, 2017, 9, 37364-37373.	8.0	12
68	Functional Microcapsules with Hybrid Shells Made via Solâ€"Gel Reaction within Double Emulsions. Langmuir, 2017, 33, 9007-9017.	3.5	15
69	3D printing of bacteria into functional complex materials. Science Advances, 2017, 3, eaao6804.	10.3	314
70	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.	3.5	6
71	Colloidal shuttles for programmable cargo transport. Nature Communications, 2017, 8, 1872.	12.8	28
72	Explosive Raspberries: Controlled Magnetically Triggered Bursting of Microcapsules. Advanced Functional Materials, 2016, 26, 4007-4015.	14.9	27

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73	Enhanced Percolating Thermal Underfills Achieved by Means of Nanoparticle Bridging Necks. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2016, 6, 1785-1795.	2.5	8
74	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.	7.1	34
75	3D Printing of Emulsions and Foams into Hierarchical Porous Ceramics. Advanced Materials, 2016, 28, 9993-9999.	21.0	373
76	Pickering and Network Stabilization of Biocompatible Emulsions Using Chitosan-Modified Silica Nanoparticles. Langmuir, 2016, 32, 13446-13457.	3.5	77
77	Magnetically aligned graphite electrodes for high-rate performance Li-ion batteries. Nature Energy, 2016, 1, .	39.5	480
78	Magnetic assembly of transparent and conducting graphene-based functional composites. Nature Communications, 2016, 7, 12078.	12.8	97
79	Role of the polymer phase in the mechanics of nacre-like composites. Journal of the Mechanics and Physics of Solids, 2016, 96, 133-146.	4.8	83
80	Additive manufacturing of biologically-inspired materials. Chemical Society Reviews, 2016, 45, 359-376.	38.1	344
81	Biologically Inspired Dynamic Material Systems. Angewandte Chemie - International Edition, 2015, 54, 3400-3416.	13.8	142
82	Robust Microcompartments with Hydrophobically Gated Shells. Langmuir, 2015, 31, 6965-6970.	3.5	11
83	Magnetically assisted slip casting of bioinspired heterogeneous composites. Nature Materials, 2015, 14, 1172-1179.	27.5	291
84	Multimaterial magnetically assisted 3D printing of composite materials. Nature Communications, 2015, 6, 8643.	12.8	630
85	Mechanics of thick-shell microcapsules made by microfluidics. Polymer, 2014, 55, 6837-6843.	3.8	18
86	Multiwalled functional colloidosomes made small and in large quantities via bulk emulsification. Soft Matter, 2014, 10, 60-68.	2.7	26
87	Encapsulation of Aliphatic Amines Using Microfluidics. Langmuir, 2014, 30, 2346-2350.	3.5	42
88	Ultrahigh Magnetically Responsive Microplatelets with Tunable Fluorescence Emission. Langmuir, 2013, 29, 14674-14680.	3.5	14
89	Temporal response of magnetically labeled platelets under dynamic magnetic fields. Soft Matter, 2013, 9, 498-505.	2.7	44
90	Self-shaping composites with programmable bioinspired microstructures. Nature Communications, 2013, 4, 1712.	12.8	543

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91	Mechanics of Platelet-Reinforced Composites Assembled Using Mechanical and Magnetic Stimuli. ACS Applied Materials & Interfaces, 2013, 5, 10794-10805.	8.0	85
92	Stretchable heterogeneous composites with extreme mechanical gradients. Nature Communications, 2012, 3, 1265.	12.8	156
93	Injectable Materials with Magnetically Controlled Anisotropic Porosity. ACS Applied Materials & Interfaces, 2012, 4, 5086-5091.	8.0	31
94	Locally Reinforced Polymer-Based Composites for Elastic Electronics. ACS Applied Materials & Interfaces, 2012, 4, 2860-2864.	8.0	40
95	Designer Polymer-Based Microcapsules Made Using Microfluidics. Langmuir, 2012, 28, 144-152.	3.5	96
96	Non-linear alignment dynamics in suspensions of platelets under rotating magnetic fields. Soft Matter, 2012, 8, 7604-7609.	2.7	101
97	Pickering emulsions stabilized by in situ grown biologically active alkyl gallate microneedles. RSC Advances, 2012, 2, 8614.	3.6	10
98	Composites Reinforced in Three Dimensions by Using Low Magnetic Fields. Science, 2012, 335, 199-204.	12.6	555
99	Towards Highâ€Performance Bioinspired Composites. Advanced Materials, 2012, 24, 5024-5044.	21.0	332
100	Hierarchical reinforcement of polyurethane-based composites with inorganic micro- and nanoplatelets. Composites Science and Technology, 2012, 72, 435-445.	7.8	62
101	Yielding of weakly attractive nanoparticle networks. Soft Matter, 2011, 7, 6408.	2.7	16
102	Predicting sizes of droplets made by microfluidic flow-induced dripping. Soft Matter, 2011, 7, 8757.	2.7	64
103	Hierarchical Porous Materials Made by Drying Complex Suspensions. Langmuir, 2011, 27, 955-964.	3.5	55
104	Monodisperse Functional Colloidosomes with Tailored Nanoparticle Shells. Langmuir, 2011, 27, 3301-3307.	3.5	62
105	Unifying Model for the Electrokinetic and Phase Behavior of Aqueous Suspensions Containing Short and Long Amphiphiles. Langmuir, 2011, 27, 11835-11844.	3.5	18
106	Drying of Complex Suspensions. Physical Review Letters, 2010, 104, 128303.	7.8	18
107	Arrested Coalescence of Particle-coated Droplets into Nonspherical Supracolloidal Structures. Journal of Physical Chemistry B, 2009, 113, 3914-3919.	2.6	98
108	Macroporous Ceramics from Particleâ€stabilized Emulsions. Advanced Materials, 2008, 20, 4714-4718.	21.0	130

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109	Stabilization of Oil-in-Water Emulsions by Colloidal Particles Modified with Short Amphiphiles. Langmuir, 2008, 24, 7161-7168.	3.5	177
110	Bioinspired Design and Assembly of Platelet Reinforced Polymer Films. Science, 2008, 319, 1069-1073.	12.6	946
111	Tailoring the Microstructure of Particle-Stabilized Wet Foams. Langmuir, 2007, 23, 1025-1032.	3.5	164
112	Materials from foams and emulsions stabilized by colloidal particles. Journal of Materials Chemistry, 2007, 17, 3283.	6.7	132
113	Macroporous Ceramics from Particle-Stabilized Wet Foams. Journal of the American Ceramic Society, 2007, 90, 16-22.	3.8	241
114	Processing of Particleâ€Stabilized Wet Foams Into Porous Ceramics. Journal of the American Ceramic Society, 2007, 90, 3407-3414.	3.8	155
115	Stabilization of Foams with Inorganic Colloidal Particles. Langmuir, 2006, 22, 10983-10988.	3.5	319
116	Processing Routes to Macroporous Ceramics: A Review. Journal of the American Ceramic Society, 2006, 89, 1771-1789.	3.8	1,567
117	Ultrastable Particle-Stabilized Foams. Angewandte Chemie - International Edition, 2006, 45, 3526-3530.	13.8	542