

Florian Bouville

List of Publications by Year in descending order

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Version: 2024-02-01

34
papers

2,732
citations

361388

20
h-index

377849

34
g-index

38
all docs

38
docs citations

38
times ranked

3684
citing authors

#	ARTICLE	IF	CITATIONS
1	Strong, tough and stiff bioinspired ceramics from brittle constituents. <i>Nature Materials</i> , 2014, 13, 508-514.	27.5	716
2	Magnetically aligned graphite electrodes for high-rate performance Li-ion batteries. <i>Nature Energy</i> , 2016, 1, .	39.5	480
3	Magnetically assisted slip casting of bioinspired heterogeneous composites. <i>Nature Materials</i> , 2015, 14, 1172-1179.	27.5	291
4	3D Printing of Materials with Tunable Failure via Bioinspired Mechanical Gradients. <i>Advanced Materials</i> , 2018, 30, e1705808.	21.0	146
5	Geologically-inspired strong bulk ceramics made with water at room temperature. <i>Nature Communications</i> , 2017, 8, 14655.	12.8	138
6	Transparent and tough bulk composites inspired by nacre. <i>Nature Communications</i> , 2019, 10, 2794.	12.8	109
7	Hierarchical Toughening of Nacre-like Composites. <i>Advanced Functional Materials</i> , 2019, 29, 1806800.	14.9	89
8	Mineral Nano-interconnectivity Stiffens and Toughens Nacre-like Composite Materials. <i>Advanced Materials</i> , 2017, 29, 1605039.	21.0	85
9	Role of the polymer phase in the mechanics of nacre-like composites. <i>Journal of the Mechanics and Physics of Solids</i> , 2016, 96, 133-146.	4.8	83
10	3D printing of sacrificial templates into hierarchical porous materials. <i>Scientific Reports</i> , 2019, 9, 409.	3.3	81
11	Self-Assembly of Faceted Particles Triggered by a Moving Ice Front. <i>Langmuir</i> , 2014, 30, 8656-8663.	3.5	65
12	Templated Grain Growth in Macroporous Materials. <i>Journal of the American Ceramic Society</i> , 2014, 97, 1736-1742.	3.8	47
13	Quantifying the role of mineral bridges on the fracture resistance of nacre-like composites. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 12698-12703.	7.1	44
14	Strong and tough nacre-like aluminas: Process-structure-performance relationships and position within the nacre-inspired composite landscape. <i>Journal of Materials Research</i> , 2020, 35, 1076-1094.	2.6	36
15	Iron-based particles for the magnetically-triggered crack healing of bituminous materials. <i>Construction and Building Materials</i> , 2018, 164, 775-782.	7.2	30
16	Nacre-like ceramic refractories for high temperature applications. <i>Journal of the European Ceramic Society</i> , 2018, 38, 2186-2193.	5.7	29
17	Design of textured multi-layered structures via magnetically assisted slip casting. <i>Soft Matter</i> , 2019, 15, 3886-3896.	2.7	24
18	Transparent Nacre-like Composites Toughened through Mineral Bridges. <i>Advanced Functional Materials</i> , 2020, 30, 2002149.	14.9	24

#	ARTICLE	IF	CITATIONS
19	Lightweight and stiff cellular ceramic structures by ice templating. <i>Journal of Materials Research</i> , 2014, 29, 175-181.	2.6	21
20	Cold densification and sintering of nanovaterite by pressing with water. <i>Journal of the European Ceramic Society</i> , 2020, 40, 893-900.	5.7	20
21	Carbon ablators with porosity tailored for aerospace thermal protection during atmospheric re-entry. <i>Carbon</i> , 2022, 195, 80-91.	10.3	20
22	Dispersion of Boron Nitride Powders in Aqueous Suspensions with Cellulose. <i>Journal of the American Ceramic Society</i> , 2014, 97, 394-398.	3.8	19
23	Processing of dense bioinspired ceramics with deliberate microstructure. <i>Journal of the American Ceramic Society</i> , 2019, 102, 7253-7263.	3.8	19
24	Broadband, High-Temperature Stable Reflector for Aerospace Thermal Radiation Protection. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 9925-9934.	8.0	18
25	Tough Bioinspired Composites That Self-Report Damage. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 27481-27490.	8.0	17
26	Tough metal-ceramic composites with multifunctional nacre-like architecture. <i>Scientific Reports</i> , 2021, 11, 1621.	3.3	13
27	Refractory interphase and its role on the mechanical properties of boron containing nacre-like ceramic. <i>Journal of the European Ceramic Society</i> , 2020, 40, 165-172.	5.7	12
28	Porous silicon carbide and aluminum oxide with unidirectional open porosity as model target materials for radioisotope beam production. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2013, 317, 385-388.	1.4	11
29	Fracture of hierarchical multi-layered bioinspired composites. <i>Journal of the Mechanics and Physics of Solids</i> , 2022, 159, 104750.	4.8	9
30	Multiscale deformation processes during cold sintering of nanovaterite compacts. <i>Acta Materialia</i> , 2020, 189, 266-273.	7.9	8
31	Transparent materials with stiff and tough hierarchical structures. <i>Open Ceramics</i> , 2021, 6, 100109.	2.0	8
32	Freezing of Gelled Suspensions: a Facile Route toward Mesoporous TiO ₂ Particles for High-Capacity Lithium-Ion Electrodes. <i>ACS Applied Nano Materials</i> , 2018, 1, 6622-6629.	5.0	5
33	Architected ZnO@Cu particles for facile manufacturing of integrated Li-ion electrodes. <i>Scientific Reports</i> , 2020, 10, 12401.	3.3	0
34	Broadband, Temperature-Stable, Reflective Additives to Enhance Thermal Radiation Protection Systems. , 2020, , .		0