

Michael M Porter

List of Publications by Year in descending order

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Version: 2024-02-01

25
papers

1,528
citations

394421

19
h-index

526287

27
g-index

28
all docs

28
docs citations

28
times ranked

1863
citing authors

#	ARTICLE	IF	CITATIONS
1	Structural Design Elements in Biological Materials: Application to Bioinspiration. <i>Advanced Materials</i> , 2015, 27, 5455-5476.	21.0	472
2	Magnetic freeze casting inspired by nature. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 556, 741-750.	5.6	121
3	Bioinspired Scaffolds with Varying Pore Architectures and Mechanical Properties. <i>Advanced Functional Materials</i> , 2014, 24, 1978-1987.	14.9	109
4	Structure and mechanical properties of selected protective systems in marine organisms. <i>Materials Science and Engineering C</i> , 2016, 59, 1143-1167.	7.3	83
5	Why the seahorse tail is square. <i>Science</i> , 2015, 349, aaa6683.	12.6	82
6	Highly deformable bones: Unusual deformation mechanisms of seahorse armor. <i>Acta Biomaterialia</i> , 2013, 9, 6763-6770.	8.3	64
7	3D-printing and mechanics of bio-inspired articulated and multi-material structures. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017, 73, 114-126.	3.1	64
8	The armored carapace of the boxfish. <i>Acta Biomaterialia</i> , 2015, 23, 1-10.	8.3	63
9	Biomimetic Materials by Freeze Casting. <i>Jom</i> , 2013, 65, 720-727.	1.9	60
10	Potential Bone Replacement Materials Prepared by Two Methods. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1418, 177.	0.1	57
11	Torsional properties of helix-reinforced composites fabricated by magnetic freeze casting. <i>Composite Structures</i> , 2015, 119, 174-184.	5.8	48
12	Stiff, porous scaffolds from magnetized alumina particles aligned by magnetic freeze casting. <i>Materials Science and Engineering C</i> , 2017, 77, 484-492.	7.3	45
13	Microstructural Control of Colloidal-Based Ceramics by Directional Solidification Under Weak Magnetic Fields. <i>Journal of the American Ceramic Society</i> , 2016, 99, 1917-1926.	3.8	37
14	External Field Assisted Freeze Casting. <i>Ceramics</i> , 2019, 2, 208-234.	2.6	34
15	Synergistic structures from magnetic freeze casting with surface magnetized alumina particles and platelets. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017, 76, 153-163.	3.1	32
16	Bioinspired composites from freeze casting with clathrate hydrates. <i>Materials & Design</i> , 2015, 71, 62-67.	5.1	29
17	Monitoring the in situ crystallization of native biopolyester granules in <i>Ralstonia eutropha</i> via infrared spectroscopy. <i>Journal of Microbiological Methods</i> , 2011, 87, 49-55.	1.6	27
18	Crystallization Kinetics of Poly(3-hydroxybutyrate) Granules in Different Environmental Conditions. <i>Journal of Biomaterials and Nanobiotechnology</i> , 2011, 02, 301-310.	0.5	24

#	ARTICLE	IF	CITATIONS
19	Multidimensional mechanics: Performance mapping of natural biological systems using permuted radar charts. PLoS ONE, 2018, 13, e0204309.	2.5	22
20	Sintering of bi-porous titanium dioxide scaffolds: Experimentation, modeling and simulation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 636, 148-156.	5.6	21
21	Microstructural evolution of paramagnetic materials by magnetic freeze casting. Journal of Materials Research and Technology, 2019, 8, 2247-2254.	5.8	13
22	3D-printing a "family"™ of biomimetic models to explain armored grasping in syngnathid fishes. Bioinspiration and Biomimetics, 2017, 12, 066007.	2.9	9
23	Porous Hydroxyapatite-Polyhydroxybutyrate Composites Fabricated by a Novel Method Via Centrifugation. Conference Proceedings of the Society for Experimental Mechanics, 2013, , 63-71.	0.5	7
24	Multidimensional Mechanics of Three-Dimensional Printed and Micro-Architected Scaffolds. Journal of Applied Mechanics, Transactions ASME, 2021, 88, .	2.2	2
25	Porous Scaffolds: Bioinspired Scaffolds with Varying Pore Architectures and Mechanical Properties (Adv. Funct. Mater. 14/2014). Advanced Functional Materials, 2014, 24, 2108-2108.	14.9	0