Matthew R Begley

List of Publications by Year
in descending order

26	819	687363 13	552781 26
papers	citations	h-index	g-index

26	26	26	813
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Recession of BN coatings in SiC/SiC composites through reaction with water vapor. Journal of the American Ceramic Society, 2022, 105, 498-511.	3.8	9
2	Engineered jumpers overcome biological limits via work multiplication. Nature, 2022, 604, 657-661.	27.8	51
3	Anisotropic Thermally Conductive Composites Enabled by Acoustophoresis and Stereolithography. Advanced Functional Materials, 2022, 32, .	14.9	6
4	Modeling meso- and microstructure in materials patterned with acoustic focusing. Materials and Design, 2021, 202, 109512.	7.0	8
5	Recent progress in acoustic field-assisted 3D-printing of functional composite materials. MRS Advances, 2021, 6, 636-643.	0.9	11
6	Toward optimal acoustophoretic microparticle manipulation by exploiting asymmetry. Journal of the Acoustical Society of America, 2020, 148, 359-373.	1.1	22
7	Changes in Filament Microstructures During Direct Ink Writing with a Yield Stress Fluid Support. ACS Applied Polymer Materials, 2020, 2, 2528-2540.	4.4	12
8	Printing direction dependent microstructures in direct ink writing. Additive Manufacturing, 2020, 34, 101192.	3.0	10
9	Corner accuracy in direct ink writing with support material. Bioprinting, 2020, 19, e00086.	5.8	13
10	Subsidence of Additively-ManufacturedÂCages in Foam Substrates: Effect of Contact Topology. Journal of Biomechanical Engineering, 2020, 142, .	1.3	6
11	Flexible Conductive Composites with Programmed Electrical Anisotropy Using Acoustophoresis. Advanced Materials Technologies, 2019, 4, 1900586.	5.8	30
12	Scaling relationships for acoustic control of two-phase microstructures during direct-write printing. Materials Research Letters, 2018, 6, 191-198.	8.7	23
13	In situ characterization of low-viscosity direct ink writing: Stability, wetting, and rotational flows. Journal of Colloid and Interface Science, 2018, 529, 599-609.	9.4	26
14	Acoustic control of microstructures during direct ink writing of two-phase materials. Sensors and Actuators A: Physical, 2017, 268, 213-221.	4.1	40
15	Deposition of ordered two-phase materials using microfluidic print nozzles with acoustic focusing. Extreme Mechanics Letters, 2016, 8, 96-106.	4.1	72
16	Inkjet printing on transparency films for reagent storage with polyesterâ€“toner microdevices. Analytical Methods, 2016, 8, 7061-7068.	2.7	11
17	High-performance simulation of fracture in idealized â€˜brick and mortarâ€™ composites using adaptive Monte Carlo minimization on the GPU. International Journal of High Performance Computing Applications, 2016, 30, 186-199.	3.7	8
18	Multilevel fluidic flow control in a rotationally-driven polyester film microdevice created using laser print, cut and laminate. Lab on A Chip, 2016, 16, 377-387.	6.0	22

#	Article	IF	Citations
19	Mechanisms of Ytterbium Monosilicate/Mullite/Silicon Coating Failure DuringÂThermal Cycling in Water Vapor. Journal of the American Ceramic Society, 2015, 98, 4066-4075.	3.8	159
20	GPU-based simulations of fracture in idealized brick and mortar composites. Journal of the Mechanics and Physics of Solids, 2015, 80, 68-85.	4.8	36
21	Acoustic field controlled patterning and assembly of anisotropic particles. Extreme Mechanics Letters, 2015, 5, 37-46.	4.1	71
22	Comprehensive Solutions for the Response of Freestanding Beams With Tensile Residual Stress Subject to Point-Loading. Journal of Applied Mechanics, Transactions ASME, 2014, 81, .	2.2	6
23	Detachment of compliant films adhered to stiff substrates via van der Waals interactions: role of frictional sliding during peeling. Journal of the Royal Society Interface, 2014, 11, 20140453.	3.4	25
24	The Buckling and Postbuckling of Fibrils Adhering to a Rigid Surface. Journal of Applied Mechanics, Transactions ASME, 2013, 80, .	2.2	9
25	High Strength Alumina Microâ€Beams Fabricated by Inkjet Printing. Journal of the American Ceramic Society, 2012, 95, 3016-3018.	3.8	5
26	Characterizing Threeâ€Dimensional Textile Ceramic Composites Using Synchrotron <scp>X</scp>â€Ray Microâ€Computedâ€Tomography. Journal of the American Ceramic Society, 2012, 95, 392-402.	3.8	128