

Matthew R Begley

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3599477/publications.pdf>

Version: 2024-02-01

26
papers

819
citations

687363

13
h-index

552781

26
g-index

26
all docs

26
docs citations

26
times ranked

813
citing authors

#	ARTICLE	IF	CITATIONS
1	Mechanisms of Ytterbium Monosilicate/Mullite/Silicon Coating Failure During Thermal Cycling in Water Vapor. <i>Journal of the American Ceramic Society</i> , 2015, 98, 4066-4075.	3.8	159
2	Characterizing Three-Dimensional Textile Ceramic Composites Using Synchrotron X-Ray Micro-Computed Tomography. <i>Journal of the American Ceramic Society</i> , 2012, 95, 392-402.	3.8	128
3	Deposition of ordered two-phase materials using microfluidic print nozzles with acoustic focusing. <i>Extreme Mechanics Letters</i> , 2016, 8, 96-106.	4.1	72
4	Acoustic field controlled patterning and assembly of anisotropic particles. <i>Extreme Mechanics Letters</i> , 2015, 5, 37-46.	4.1	71
5	Engineered jumpers overcome biological limits via work multiplication. <i>Nature</i> , 2022, 604, 657-661.	27.8	51
6	Acoustic control of microstructures during direct ink writing of two-phase materials. <i>Sensors and Actuators A: Physical</i> , 2017, 268, 213-221.	4.1	40
7	GPU-based simulations of fracture in idealized brick and mortar composites. <i>Journal of the Mechanics and Physics of Solids</i> , 2015, 80, 68-85.	4.8	36
8	Flexible Conductive Composites with Programmed Electrical Anisotropy Using Acoustophoresis. <i>Advanced Materials Technologies</i> , 2019, 4, 1900586.	5.8	30
9	In situ characterization of low-viscosity direct ink writing: Stability, wetting, and rotational flows. <i>Journal of Colloid and Interface Science</i> , 2018, 529, 599-609.	9.4	26
10	Detachment of compliant films adhered to stiff substrates via van der Waals interactions: role of frictional sliding during peeling. <i>Journal of the Royal Society Interface</i> , 2014, 11, 20140453.	3.4	25
11	Scaling relationships for acoustic control of two-phase microstructures during direct-write printing. <i>Materials Research Letters</i> , 2018, 6, 191-198.	8.7	23
12	Multilevel fluidic flow control in a rotationally-driven polyester film microdevice created using laser print, cut and laminate. <i>Lab on A Chip</i> , 2016, 16, 377-387.	6.0	22
13	Toward optimal acoustophoretic microparticle manipulation by exploiting asymmetry. <i>Journal of the Acoustical Society of America</i> , 2020, 148, 359-373.	1.1	22
14	Corner accuracy in direct ink writing with support material. <i>Bioprinting</i> , 2020, 19, e00086.	5.8	13
15	Changes in Filament Microstructures During Direct Ink Writing with a Yield Stress Fluid Support. <i>ACS Applied Polymer Materials</i> , 2020, 2, 2528-2540.	4.4	12
16	Inkjet printing on transparency films for reagent storage with polyester toner microdevices. <i>Analytical Methods</i> , 2016, 8, 7061-7068.	2.7	11
17	Recent progress in acoustic field-assisted 3D-printing of functional composite materials. <i>MRS Advances</i> , 2021, 6, 636-643.	0.9	11
18	Printing direction dependent microstructures in direct ink writing. <i>Additive Manufacturing</i> , 2020, 34, 101192.	3.0	10

#	ARTICLE	IF	CITATIONS
19	The Buckling and Postbuckling of Fibrils Adhering to a Rigid Surface. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2013, 80, .	2.2	9
20	Recession of BN coatings in SiC/SiC composites through reaction with water vapor. <i>Journal of the American Ceramic Society</i> , 2022, 105, 498-511.	3.8	9
21	High-performance simulation of fracture in idealized "brick and mortar" composites using adaptive Monte Carlo minimization on the GPU. <i>International Journal of High Performance Computing Applications</i> , 2016, 30, 186-199.	3.7	8
22	Modeling meso- and microstructure in materials patterned with acoustic focusing. <i>Materials and Design</i> , 2021, 202, 109512.	7.0	8
23	Comprehensive Solutions for the Response of Freestanding Beams With Tensile Residual Stress Subject to Point-Loading. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2014, 81, .	2.2	6
24	Subsidence of Additively-Manufactured Cages in Foam Substrates: Effect of Contact Topology. <i>Journal of Biomechanical Engineering</i> , 2020, 142, .	1.3	6
25	Anisotropic Thermally Conductive Composites Enabled by Acoustophoresis and Stereolithography. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	6
26	High Strength Alumina Microbeams Fabricated by Inkjet Printing. <i>Journal of the American Ceramic Society</i> , 2012, 95, 3016-3018.	3.8	5