

# Hayden K Taylor

## List of Publications by Year in descending order

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54  
papers

1,740  
citations

430442

18  
h-index

288905

40  
g-index

56  
all docs

56  
docs citations

56  
times ranked

2392  
citing authors

#	ARTICLE	IF	CITATIONS
1	Volumetric additive manufacturing via tomographic reconstruction. <i>Science</i> , 2019, 363, 1075-1079.	6.0	584
2	A practical guide for the fabrication of microfluidic devices using glass and silicon. <i>Biomicrofluidics</i> , 2012, 6, 16505-1650516.	1.2	281
3	Volumetric additive manufacturing of silica glass with microscale computed axial lithography. <i>Science</i> , 2022, 376, 308-312.	6.0	94
4	Metallic glasses: viable tool materials for the production of surface microstructures in amorphous polymers by micro-hot-embossing. <i>Journal of Micromechanics and Microengineering</i> , 2009, 19, 115030.	1.5	59
5	Polymer lattice-reinforcement for enhancing ductility of concrete. <i>Materials and Design</i> , 2020, 196, 109184.	3.3	57
6	Friction of Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> MXenes. <i>Nano Letters</i> , 2022, 22, 3356-3363.	4.5	46
7	Recent advances in microfluidic methods in cancer liquid biopsy. <i>Biomicrofluidics</i> , 2019, 13, 041503.	1.2	39
8	Bioinspired fibrillar adhesives: a review of analytical models and experimental evidence for adhesion enhancement by surface patterns. <i>Journal of Adhesion Science and Technology</i> , 2016, 30, 362-391.	1.4	35
9	Advances in biofabrication techniques towards functional bioprinted heterogeneous engineered tissues: A comprehensive review. <i>Bioprinting</i> , 2021, 23, e00147.	2.9	35
10	Variation. <i>IEEE Transactions on Semiconductor Manufacturing</i> , 2008, 21, 63-71.	1.4	30
11	Utilization of waste materials in a novel mortar polymer laminar composite to be applied in construction 3D-printing. <i>Composite Structures</i> , 2020, 253, 112764.	3.1	28
12	Controlled Folding of Graphene: GraFold Printing. <i>Nano Letters</i> , 2015, 15, 857-863.	4.5	27
13	Highlighting the uniqueness in dielectrophoretic enrichment of circulating tumor cells. <i>Electrophoresis</i> , 2019, 40, 1457-1477.	1.3	23
14	Spatially Precise Transfer of Patterned Monolayer WS <sub>2</sub> and MoS <sub>2</sub> with Features Larger than 10 <sup>4</sup> μm <sup>2</sup> Directly from Multilayer Sources. <i>ACS Applied Electronic Materials</i> , 2019, 1, 407-416.	2.0	23
15	A computationally simple method for simulating the micro-embossing of thermoplastic layers. <i>Journal of Micromechanics and Microengineering</i> , 2009, 19, 075007.	1.5	21
16	Characterizing and Predicting Spatial Nonuniformity in the Deep Reactive Ion Etching of Silicon. <i>Journal of the Electrochemical Society</i> , 2006, 153, C575.	1.3	19
17	3Y-TZP DLP Additive Manufacturing: Solvent-free Slurry Development and Characterization. <i>Materials Research</i> , 2021, 24, .	0.6	18
18	High fidelity volumetric additive manufacturing. <i>Additive Manufacturing</i> , 2021, 47, 102299.	1.7	18

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19	Theory of thin-film-mediated exfoliation of van der Waals bonded layered materials. <i>Physical Review Materials</i> , 2018, 2, .	0.9	18
20	Mechanical Properties and Flexural Behavior of Sustainable Bamboo Fiber-Reinforced Mortar. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 6587.	1.3	17
21	Object-space optimization of tomographic reconstructions for additive manufacturing. <i>Additive Manufacturing</i> , 2021, 48, 102367.	1.7	17
22	Latent image volumetric additive manufacturing. <i>Optics Letters</i> , 2022, 47, 1279.	1.7	17
23	Three-dimensional profile stitching based on the fiducial markers for microfluidic devices. <i>Optics Communications</i> , 2009, 282, 493-499.	1.0	16
24	An investigation of the detrimental impact of trapped air in thermoplastic micro-embossing. <i>Journal of Micromechanics and Microengineering</i> , 2010, 20, 065014.	1.5	15
25	Review Article: Capturing the physiological complexity of the brain's neuro-vascular unit <i>in vitro</i>. <i>Biomicrofluidics</i> , 2018, 12, 051502.	1.2	15
26	Towards nanoimprint lithography-aware layout design checking. <i>Proceedings of SPIE</i> , 2010, , .	0.8	13
27	A razor-blade test of the demolding energy in a thermoplastic embossing process. <i>Journal of Micromechanics and Microengineering</i> , 2011, 21, 067002.	1.5	13
28	An Octet-Truss Engineered Concrete (OTEC) for lightweight structures. <i>Composite Structures</i> , 2019, 207, 373-384.	3.1	13
29	Modeling and simulation of stamp deflections in nanoimprint lithography: Exploiting backside grooves to enhance residual layer thickness uniformity. <i>Microelectronic Engineering</i> , 2011, 88, 2154-2157.	1.1	12
30	Multilayered microcasting of agarose-collagen composites for neurovascular modeling. <i>Bioprinting</i> , 2020, 17, e00069.	2.9	12
31	Stable dropwise condensation observed on a hierarchically structured superhydrophobic surface incorporating micro-domes. <i>Microelectronic Engineering</i> , 2020, 225, 111252.	1.1	12
32	Deterministic Assembly of Arrays of Lithographically Defined WS <sub>2</sub> and MoS <sub>2</sub> Monolayer Features Directly From Multilayer Sources Into Van Der Waals Heterostructures. <i>Journal of Micro and Nano-Manufacturing</i> , 2019, 7, .	0.8	12
33	Computed axial lithography: volumetric 3D printing of arbitrary geometries (Conference) Tj ETQq1 1 0.784314 rgBT /Overlock <sub>10</sub> Tf 50		12
34	Cell therapy using an array of ultrathin hollow microneedles. <i>Microsystem Technologies</i> , 2018, 24, 2905-2912.	1.2	10
35	2D and 3D growth of carbon nanotubes on substrates, from nanometre to millimetre scales. <i>International Journal of Nanomanufacturing</i> , 2007, 1, 701.	0.3	7
36	Computationally efficient modelling of pattern dependencies in the micro-embossing of thermoplastic polymers. <i>Microelectronic Engineering</i> , 2008, 85, 1453-1456.	1.1	7

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37	A method for the accelerated simulation of micro-embossed topographies in thermoplastic polymers. <i>Journal of Micromechanics and Microengineering</i> , 2010, 20, 065001.	1.5	7
38	Thermal and mechanical performance of a novel 3D printed macro-encapsulation method for phase change materials. <i>Journal of Building Engineering</i> , 2021, 43, 103124.	1.6	7
39	Superlubricity-activated thinning of graphite flakes compressed by passivated crystalline silicon substrates for graphene exfoliation. <i>Carbon</i> , 2014, 80, 68-74.	5.4	6
40	A statistical model for the wettability of surfaces with heterogeneous pore geometries. <i>Materials Research Express</i> , 2016, 3, 105039.	0.8	6
41	A nanoporous, ultrahydrophobic aluminum-coating process with exceptional dropwise condensation and shedding properties. <i>Materials Research Express</i> , 2017, 4, 045003.	0.8	6
42	Nonsolvent-induced phase separation synthesis of superhydrophobic coatings composed of polyvinylidene difluoride microspheres with tunable size and roughness. <i>Progress in Organic Coatings</i> , 2018, 119, 230-238.	1.9	6
43	Large-area and high-resolution distortion measurement based on moiré fringe method for hot embossing process. <i>Optics Express</i> , 2009, 17, 18394.	1.7	5
44	Simulation and Mitigation of Pattern and Process Dependencies in Nanoimprint Lithography. <i>Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]</i> , 2011, 24, 47-55.	0.1	5
45	Defectivity prediction for droplet-dispensed UV nanoimprint lithography, enabled by fast simulation of resin flow at feature, droplet, and template scales. <i>Proceedings of SPIE</i> , 2016, , .	0.8	4
46	Tomographic color Schlieren refractive index mapping for computed axial lithography. , 2020, , .		3
47	Modeling pattern dependencies in the micron-scale embossing of polymeric layers. <i>Proceedings of SPIE</i> , 2008, , .	0.8	2
48	Fusion of metrology data for large-scale high-volume manufacturing of polymer-based microfluidic devices. <i>International Journal of Nanomanufacturing</i> , 2009, 3, 312.	0.3	1
49	Fast Simulation of Pattern Formation and Process Dependencies in Roller Nanoimprint Lithography. <i>Materials Research Society Symposia Proceedings</i> , 2013, 1529, 1.	0.1	1
50	A computational design framework for two-layered elastic stamps in nanoimprint lithography and microcontact printing. <i>Journal of Applied Physics</i> , 2019, 125, .	1.1	1
51	Micro-engineering a platform to reconstruct physiology and functionality of the human brain microvasculature in vitro. , 2018, , .		1
52	Moiré fringe method for the measurement of distortions of hot-embossed polymeric substrates. , 2008, , .		0
53	Computational optimization and the role of optical metrology in tomographic additive manufacturing. , 2022, , .		0
54	Sectorization of Macromolecular Single Crystals Unveiled by Probing Shear Anisotropy. <i>ACS Macro Letters</i> , 2022, 11, 53-59.	2.3	0