

# Howon Lee

## List of Publications by Year in descending order

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Version: 2024-02-01

37  
papers

4,254  
citations

377584

21  
h-index

488211

31  
g-index

38  
all docs

38  
docs citations

38  
times ranked

6388  
citing authors

#	ARTICLE	IF	CITATIONS
1	Experiments and modeling of the thermo-mechanically coupled behavior of VHB. International Journal of Solids and Structures, 2022, 242, 111523.	1.3	7
2	Multimaterial Printing for Cephalopod-Inspired Light-Responsive Artificial Chromatophores. ACS Applied Materials & Interfaces, 2021, 13, 12735-12745.	4.0	19
3	High resolution stereolithography fabrication of perfusable scaffolds to enable long-term meso-scale hepatic culture for disease modeling. Biofabrication, 2021, 13, 045024.	3.7	12
4	Rapid Processing and Drug Evaluation in Glioblastoma Patient-Derived Organoid Models with 4D Bioprinted Arrays. IScience, 2020, 23, 101365.	1.9	46
5	4D-Printed Transformable Tube Array for High-Throughput 3D Cell Culture and Histology. Advanced Materials, 2020, 32, e2004285.	11.1	26
6	Recent advances in multi-material additive manufacturing: methods and applications. Current Opinion in Chemical Engineering, 2020, 28, 158-166.	3.8	130
7	Self-Limiting Electrospray Deposition for the Surface Modification of Additively Manufactured Parts. ACS Applied Materials & Interfaces, 2020, 12, 20901-20911.	4.0	29
8	4D Printing of a Bioinspired Microneedle Array with Backward-Facing Barbs for Enhanced Tissue Adhesion. Advanced Functional Materials, 2020, 30, 1909197.	7.8	180
9	Spatial Uncertainty Modeling for Surface Roughness of Additively Manufactured Microstructures via Image Segmentation. Applied Sciences (Switzerland), 2019, 9, 1093.	1.3	4
10	4D printing reconfigurable, deployable and mechanically tunable metamaterials. Materials Horizons, 2019, 6, 1244-1250.	6.4	182
11	Improving Surface Roughness of Additively Manufactured Parts Using a Photopolymerization Model and Multi-Objective Particle Swarm Optimization. Applied Sciences (Switzerland), 2019, 9, 151.	1.3	25
12	Rapid multi-material 3D printing with projection micro-stereolithography using dynamic fluidic control. Additive Manufacturing, 2019, 27, 606-615.	1.7	106
13	Modeling of fiber-reinforced polymeric gels. Mechanics Research Communications, 2019, 96, 7-18.	1.0	22
14	Temperature-responsive thermal metamaterials enabled by modular design of thermally tunable unit cells. International Journal of Heat and Mass Transfer, 2019, 130, 469-482.	2.5	35
15	Abstract 2691: 4D printing of programmable smart material for drug screening in patient-derived organoids. , 2019, , .		0
16	Micro 3D Printing of a Temperature-Responsive Hydrogel Using Projection Micro-Stereolithography. Scientific Reports, 2018, 8, 1963.	1.6	178
17	Rapid Pulsed Light Sintering of Silver Nanowires on Woven Polyester for personal thermal management with enhanced performance, durability and cost-effectiveness. Scientific Reports, 2018, 8, 17159.	1.6	24
18	Lightweight Microlattice With Tunable Mechanical Properties Using 3D Printed Shape Memory Polymer. , 2018, , .		0

#	ARTICLE	IF	CITATIONS
19	Layer-by-layer assembled carbon nanotube-polyethyleneimine coatings inside copper-sintered heat pipes for enhanced thermal performance. Carbon, 2018, 140, 521-532.	5.4	23
20	Soft Robotic Manipulation and Locomotion with a 3D Printed Electroactive Hydrogel. ACS Applied Materials & Interfaces, 2018, 10, 17512-17518.	4.0	258
21	Tunable Multifunctional Thermal Metamaterials: Manipulation of Local Heat Flux via Assembly of Unit-Cell Thermal Shifters. Scientific Reports, 2017, 7, 41000.	1.6	48
22	Projection Micro-Stereolithography of Temperature Responsive Mechanically Tough Hydrogels. , 2016, , .		1
23	Ultra-sensitive detection of zinc oxide nanowires using a quartz crystal microbalance and phosphoric acid DNA. Nanotechnology, 2016, 27, 365501.	1.3	5
24	Multimaterial 4D Printing with Tailorable Shape Memory Polymers. Scientific Reports, 2016, 6, 31110.	1.6	751
25	Highly sensitive, direct and real-time detection of silver nanowires by using a quartz crystal microbalance. Nanotechnology, 2016, 27, 475506.	1.3	2
26	Polytope Sector-Based Synthesis and Analysis of Microstructural Architectures With Tunable Thermal Conductivity and Expansion. Journal of Mechanical Design, Transactions of the ASME, 2016, 138, .	1.7	25
27	Design, Development and Evaluation of a Two Way Actuated Steerable Needle. , 2015, , .		1
28	Polytope Sector-Based Synthesis and Analysis of Microarchitected Materials With Tunable Thermal Conductivity and Expansion. , 2015, , .		0
29	A highly sensitive, direct and label-free technique for Hg <sup>2+</sup> detection using Kelvin probe force microscopy. Nanotechnology, 2015, 26, 305501.	1.3	18
30	Ultralight, ultrastiff mechanical metamaterials. Science, 2014, 344, 1373-1377.	6.0	1,592
31	Micro 3D Printing Using a Digital Projector and its Application in the Study of Soft Materials Mechanics. Journal of Visualized Experiments, 2012, , e4457.	0.2	20
32	Prescribed Pattern Transformation in Swelling Gel Tubes by Elastic Instability. Physical Review Letters, 2012, 108, 214304.	2.9	51
33	Design and optimization of a light-emitting diode projection micro-stereolithography three-dimensional manufacturing system. Review of Scientific Instruments, 2012, 83, 125001.	0.6	205
34	Coupled Non-Fickian Diffusion and Large Deformation of Hydrogels. Conference Proceedings of the Society for Experimental Mechanics, 2011, , 25-28.	0.3	0
35	Solvent-driven polymeric micro beam device. Journal of Micromechanics and Microengineering, 2010, 20, 085030.	1.5	21
36	First jump of microgel; actuation speed enhancement by elastic instability. Soft Matter, 2010, 6, 4342.	1.2	204

#	ARTICLE	IF	CITATIONS
37	Biomimetic Microactuator Powered by Polymer Swelling. , 2008, , .		0