Hyunwoo Yuk

List of Publications by Year
in descending order

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41 papers	11,576 citations	126708 33 h-index	276539 41 g-index
48 all docs	48 docs citations	48 times ranked	10565 citing authors

#	Article	IF	Citations
1	Printing ferromagnetic domains for untethered fast-transforming soft materials. Nature, 2018, 558, 274-279.	13.7	1,426
2	Hydrogel bioelectronics. Chemical Society Reviews, 2019, 48, 1642-1667.	18.7	1,267
3	Tough bonding of hydrogels to diverse non-porousÂsurfaces. Nature Materials, 2016, 15, 190-196.	13.3	807
4	Dry double-sided tape for adhesion of wet tissues and devices. Nature, 2019, 575, 169-174.	13.7	798
5	Hydraulic hydrogel actuators and robots optically and sonically camouflaged in water. Nature Communications, 2017, 8, 14230.	5.8	760
6	Skin-inspired hydrogelâ€“elastomer hybrids with robust interfaces and functional microstructures. Nature Communications, 2016, 7, 12028.	5.8	696
7	3D printing of conducting polymers. Nature Communications, 2020, 11, 1604.	5.8	568
8	Stretchable Hydrogel Electronics and Devices. Advanced Materials, 2016, 28, 4497-4505.	11.1	550
9	Pure PEDOT:PSS hydrogels. Nature Communications, 2019, 10, 1043.	5.8	528
10	Soft Materials by Design: Unconventional Polymer Networks Give Extreme Properties. Chemical Reviews, 2021, 121, 4309-4372.	23.0	472
11	Electrical bioadhesive interface for bioelectronics. Nature Materials, 2021, 20, 229-236.	13.3	361
12	Highly Stretchable, Strain Sensing Hydrogel Optical Fibers. Advanced Materials, 2016, 28, 10244-10249.	11.1	327
13	Anti-fatigue-fracture hydrogels. Science Advances, 2019, 5, eaau8528.	4.7	305
14	3D Printing of Living Responsive Materials and Devices. Advanced Materials, 2018, 30, 1704821.	11.1	277
15	Multifunctional â€œHydrogel Skinsâ€•on Diverse Polymers with Arbitrary Shapes. Advanced Materials, 2019, 31, e1807101.	11.1	258
16	Stretchable living materials and devices with hydrogelâ€“elastomer hybrids hosting programmed cells. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 2200-2205.	3.3	212
17	Instant tough bioadhesive with triggerable benign detachment. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 15497-15503.	3.3	210
18	A New 3D Printing Strategy by Harnessing Deformation, Instability, and Fracture of Viscoelastic Inks. Advanced Materials, 2018, 30, 1704028.	11.1	207

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19	Ingestible hydrogel device. Nature Communications, 2019, 10, 493.	5.8	168
20	Rapid and coagulation-independent haemostatic sealing by a paste inspired by barnacle glue. Nature Biomedical Engineering, 2021, 5, 1131-1142.	11.6	146
21	Strong adhesion of wet conducting polymers on diverse substrates. Science Advances, 2020, 6, eaay5394.	4.7	141
22	Adaptive and multifunctional hydrogel hybrid probes for long-term sensing and modulation of neural activity. Nature Communications, 2021, 12, 3435.	5.8	130
23	Predicting fracture energies and crack-tip fields of soft tough materials. Extreme Mechanics Letters, 2015, 4, 1-8.	2.0	116
24	Hydrogel-based biocontainment of bacteria for continuous sensing and computation. Nature Chemical Biology, 2021, 17, 724-731.	3.9	110
25	A strain-programmed patch for the healing of diabetic wounds. Nature Biomedical Engineering, 2022, 6, 1118-1133.	11.6	82
26	A Multifunctional Origami Patch for Minimally Invasive Tissue Sealing. Advanced Materials, 2021, 33, e2007667.	11.1	77
27	Kirigami enhances film adhesion. Soft Matter, 2018, 14, 2515-2525.	1.2	74
28	Shape memory alloy-based small crawling robots inspired by C. elegans. Bioinspiration and Biomimetics, 2011, 6, 046002.	1.5	67
29	An off-the-shelf bioadhesive patch for sutureless repair of gastrointestinal defects. Science Translational Medicine, 2022, 14, eabh2857.	5.8	67
30	Tough and tunable adhesion of hydrogels: experiments and models. Acta Mechanica Sinica/Lixue Xuebao, 2017, 33, 543-554.	1.5	62
31	A biomimetic elastomeric robot skin using electrical impedance and acoustic tomography for tactile sensing. Science Robotics, 2022, 7, .	9.9	61
32	Impermeable Robust Hydrogels via Hybrid Lamination. Advanced Healthcare Materials, 2017, 6, 1700520.	3.9	58
33	Hydration and swelling of dry polymers for wet adhesion. Journal of the Mechanics and Physics of Solids, 2020, 137, 103863.	2.3	50
34	An organosynthetic dynamic heart model with enhanced biomimicry guided by cardiac diffusion tensor imaging. Science Robotics, 2020, 5, .	9.9	30
35	Fringe instability in constrained soft elastic layers. Soft Matter, 2016, 12, 8899-8906.	1.2	21
36	Material-stiffening suppresses elastic fingering and fringe instabilities. International Journal of Solids and Structures, 2018, 139-140, 96-104.	1.3	12

#	Article	IF	Citations
37	Modular Integration of Hydrogel Neural Interfaces. ACS Central Science, 2021, 7, 1516-1523.	5.3	9
38	Design and control of thermal SMA based small crawling robot mimicking C. elegans. , 2010, , .		7
39	3D Printing: A New 3D Printing Strategy by Harnessing Deformation, Instability, and Fracture of Viscoelastic Inks (Adv. Mater. 6/2018). Advanced Materials, 2018, 30, 1870037.	11.1	7
40	Biocompatible hydrogel ostomy adhesive. Medical Devices & Sensors, 2020, 3, e10132.	2.7	4
41	Bioadhesives: A Multifunctional Origami Patch for Minimally Invasive Tissue Sealing (Adv. Mater.) Tj ETQq1 1 0.784314 rgBT /Overlock	11.1	0