Lee Belding

List of Publications by Citations

48 papers	12,510 citations	36 h-index	49 g-index
49 ext. papers	14,833 ext. citations	14.5 avg, IF	6.63 L-index

#	Paper	IF	Citations
48	Multigait soft robot. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 20400-3	11.5	1309
47	Stretchable, transparent, ionic conductors. *Science*, **2013**, 341, 984-7	33.3	1133
46	An integrated design and fabrication strategy for entirely soft, autonomous robots. *Nature*, **2016**, 536, 451-5	50.4	1073
45	Eutectic Gallium-Indium (EGaIn): A Liquid Metal Alloy for the Formation of Stable Structures in Microchannels at Room Temperature. *Advanced Functional Materials*, **2008**, 18, 1097-1104	15.6	927
44	Pneumatic Networks for Soft Robotics that Actuate Rapidly. *Advanced Functional Materials*, **2014**, 24, 2163-2170	15.6	763
43	Soft robotics for chemists. *Angewandte Chemie - International Edition*, **2011**, 50, 1890-5	16.4	691
42	A Resilient, Untethered Soft Robot. *Soft Robotics*, **2014**, 1, 213-223	9.2	612
41	SOFT ROBOTICS. A 3D-printed, functionally graded soft robot powered by combustion. *Science*, **2015**, 349, 161-5	33.3	608
40	Camouflage and display for soft machines. *Science*, **2012**, 337, 828-32	33.3	514
39	Components for integrated poly(dimethylsiloxane) microfluidic systems. *Electrophoresis*, **2002**, 23, 3461-73	3.8	496
38	Robotic tentacles with three-dimensional mobility based on flexible elastomers. *Advanced Materials*, **2013**, 25, 205-12	24	457
37	Soft Robotics for Chemists. *Angewandte Chemie*, **2011**, 123, 1930-1935	3.6	421
36	Elastomeric Origami: Programmable Paper-Elastomer Composites as Pneumatic Actuators. *Advanced Functional Materials*, **2012**, 22, 1376-1384	15.6	384
35	Soft lithographic methods for nano-fabrication. *Journal of Materials Chemistry*, **1997**, 7, 1069-1074		364
34	Soft Robotics. *Angewandte Chemie - International Edition*, **2018**, 57, 4258-4273	16.4	307
33	Dynamic control of liquid-core/liquid-cladding optical waveguides. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 12434-8	11.5	226
32	Buckling of Elastomeric Beams Enables Actuation of Soft Machines. *Advanced Materials*, **2015**, 27, 6323-7	24	182

31	A soft, bistable valve for autonomous control of soft actuators. *Science Robotics*, **2018**, 3,	18.6	169
30	Using explosions to power a soft robot. *Angewandte Chemie - International Edition*, **2013**, 52, 2892-6	16.4	166
29	Pneumatic Energy Sources for Autonomous and Wearable Soft Robotics. *Soft Robotics*, **2014**, 1, 263-274	9.2	160
28	A Hybrid Combining Hard and Soft Robots. *Soft Robotics*, **2014**, 1, 70-74	9.2	157
27	A multi-color fast-switching microfluidic droplet dye laser. *Lab on A Chip*, **2009**, 9, 2767-71	7.2	154
26	Buckling Pneumatic Linear Actuators Inspired by Muscle. *Advanced Materials Technologies*, **2016**, 1, 1600055	6.8	151
25	Soft machines that are resistant to puncture and that self seal. *Advanced Materials*, **2013**, 25, 6709-13	24	129
24	Electrically Activated Paper Actuators. *Advanced Functional Materials*, **2016**, 26, 2446-2453	15.6	113
23	Cofabrication of electromagnets and microfluidic systems in poly(dimethylsiloxane). *Angewandte Chemie - International Edition*, **2006**, 45, 6877-82	16.4	105
22	Digital logic for soft devices. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 7750-7759	11.5	89
21	Using Explosions to Power a Soft Robot. *Angewandte Chemie*, **2013**, 125, 2964-2968	3.6	66
20	A soft ring oscillator. *Science Robotics*, **2019**, 4,	18.6	64
19	Using "click-e-bricks" to make 3D elastomeric structures. *Advanced Materials*, **2014**, 26, 5991-9	24	58
18	Soft Mobile Robots with On-Board Chemical Pressure Generation. *Springer Tracts in Advanced Robotics*, **2017**, 525-540	0.5	52
17	Cofabrication: a strategy for building multicomponent microsystems. *Accounts of Chemical Research*, **2010**, 43, 518-28	24.3	49
16	Arthrobots. *Soft Robotics*, **2017**, 4, 183-190	9.2	45
15	Negative-Pressure Soft Linear Actuator with a Mechanical Advantage. *Advanced Materials Technologies*, **2017**, 2, 1600164	6.8	45
14	Slit Tubes for Semisoft Pneumatic Actuators. *Advanced Materials*, **2018**, 30, 1704446	24	44

13	Autocatalytic Cycles in a Copper-Catalyzed Azide-Alkyne Cycloaddition Reaction. *Journal of the American Chemical Society*, **2018**, 140, 10221-10232	16.4	37
12	Cofabrication of Electromagnets and Microfluidic Systems in Poly(dimethylsiloxane). *Angewandte Chemie*, **2006**, 118, 7031-7036	3.6	35
11	Stretchable Conductive Composites Based on Metal Wools for Use as Electrical Vias in Soft Devices. *Advanced Functional Materials*, **2015**, 25, 1418-1425	15.6	31
10	Dipole-Induced Rectification Across Ag/SAM//GaO/EGaIn Junctions. *Journal of the American Chemical Society*, **2019**, 141, 8969-8980	16.4	29
9	Fabricating 3D Structures by Combining 2D Printing and Relaxation of Strain. *Advanced Materials Technologies*, **2019**, 4, 1800299	6.8	26
8	Rectification in Molecular Tunneling Junctions Based on Alkanethiolates with Bipyridine-Metal Complexes. *Journal of the American Chemical Society*, **2021**, 143, 2156-2163	16.4	15
7	Soft kink valves. *Journal of the Mechanics and Physics of Solids*, **2019**, 131, 230-239	5	14
6	Soft-Robotik. *Angewandte Chemie*, **2018**, 130, 4336-4353	3.6	13
5	Titelbild: Soft Robotics for Chemists (Angew. Chem. 8/2011). *Angewandte Chemie*, **2011**, 123, 1765-1765	3.6	8
4	Curiosity and Science. *Angewandte Chemie - International Edition*, **2018**, 57, 4126-4129	16.4	7
3	Neugier und Wissenschaft. *Angewandte Chemie*, **2018**, 130, 4192-4196	3.6	5
2	Elastic-instability-enabled locomotion. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	4
1	Characterizing Chelation at Surfaces by Charge Tunneling. *Journal of the American Chemical Society*, **2021**, 143, 5967-5977	16.4	3