Walter E Voit

List of Publications by Year
in descending order

82 papers	4,103 citations	159525 30 h-index	114418 63 g-index
84 all docs	84 docs citations	84 times ranked	5675 citing authors

#	Article	IF	Citations
1	Structural response of 3D-printed rubber lattice structures under compressive fatigue. MRS Communications, 2021, 11, 168-172.	0.8	3
2	Towards an ankle-foot orthosis powered by a dielectric elastomer actuator. Mechatronics, 2021, 76, 102551.	2.0	12
3	Electrical characterization of flexible hafnium oxide capacitors on deformable softening polymer substrate. Microelectronic Engineering, 2021, 249, 111618.	1.1	11
4	Stable softening bioelectronics: A paradigm for chronically viable ester-free neural interfaces such as spinal cord stimulation implants. Biomaterials, 2021, 277, 121073.	5.7	4
5	Lithographically patterned stretchable metallic microwiring on electrospun nanofiber mats. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2021, 39, .	0.6	2
6	Inter-layer coatings for softening polymer-based neural interfaces. MRS Advances, 2021, 6, 918.	0.5	0
7	Mechanically Robust, Softening Shape Memory Polymer Probes for Intracortical Recording. Micromachines, 2020, 11, 619.	1.4	23
8	Recent advances in neural interfacesâ€"Materials chemistry to clinical translation. MRS Bulletin, 2020, 45, 655-668.	1.7	29
9	Indiumâ€"Galliumâ€"Zinc Oxide Schottky Diodes Operating across the Glass Transition of Stimuliâ€Responsive Polymers. Advanced Electronic Materials, 2020, 6, 1901210.	2.6	10
10	Environmental Dynamic Mechanical Analysis to Predict the Softening Behavior of Neural Implants. Journal of Visualized Experiments, 2019, , .	0.2	4
11	Study of a melt processable polymer precursor for carbon fiber. Carbon Letters, 2019, 29, 605-612.	3.3	5
12	Thermoset Polymers for Bioelectronic Interfaces - Engineering of Thermomechanical Properties. , 2019, , .		1
13	Measuring the Electric Properties of Thin Film Shape Memory Polymers in Simulated Physiological Conditions. , 2019, , .		2
14	Mechanical Simplification of Variable-Stiffness Actuators Using Dielectric Elastomer Transducers. Actuators, 2019, 8, 44.	1.2	11
15	Electrical Properties of Thiol-ene-based Shape Memory Polymers Intended for Flexible Electronics. Polymers, 2019, 11, 902.	2.0	23
16	Elastrographic assessment of micromotion-induced strain in tissue adjacent to intracortical implants in rat. , 2019, , .		2
17	From softening polymers to multimaterial based bioelectronic devices. Multifunctional Materials, 2019, 2, 012001.	2.4	28
18	Characterization of Triboelectric Charge Generation between PTFE and Nylon after Repeated Contacts. Energy Harvesting and Systems, 2018, 4, 165-176.	1.7	7

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19	3D, Reconfigurable, Multimodal Electronic Whiskers via Directed Air Assembly. Advanced Materials, 2018, 30, 1706733.	11.1	45
20	A Mosquito Inspired Strategy to Implant Microprobes into the Brain. Scientific Reports, 2018, 8, 122.	1.6	67
21	Chronic softening spinal cord stimulation arrays. Journal of Neural Engineering, 2018, 15, 045002.	1.8	41
22	Electronic Whiskers: 3D, Reconfigurable, Multimodal Electronic Whiskers via Directed Air Assembly (Adv. Mater. 11/2018). Advanced Materials, 2018, 30, 1870078.	11.1	3
23	Tough thiourethane thermoplastics for fused filament fabrication. Journal of Applied Polymer Science, 2018, 135, 45574.	1.3	15
24	Softening Shape Memory Polymer Substrates for Bioelectronic Devices With Improved Hydrolytic Stability. Frontiers in Materials, 2018, 5, .	1.2	13
25	Understanding the Effects of Both CD14-Mediated Innate Immunity and Device/Tissue Mechanical Mismatch in the Neuroinflammatory Response to Intracortical Microelectrodes. Frontiers in Neuroscience, 2018, 12, 772.	1.4	17
26	Thin Film Multi-Electrode Softening Cuffs for Selective Neuromodulation. Scientific Reports, 2018, 8, 16390.	1.6	69
27	Chronic Intracortical Recording and Electrochemical Stability of Thiol-ene/Acrylate Shape Memory Polymer Electrode Arrays. Micromachines, 2018, 9, 500.	1.4	47
28	Characterization of the Neuroinflammatory Response to Thiol-ene Shape Memory Polymer Coated Intracortical Microelectrodes. Micromachines, 2018, 9, 486.	1.4	30
29	In vitro compatibility testing of thiolâ€ene/acrylateâ€based shape memory polymers for use in implantable neural interfaces. Journal of Biomedical Materials Research - Part A, 2018, 106, 2891-2898.	2.1	21
30	Solution-processed oxide thin film transistors on shape memory polymer enabled by photochemical self-patterning. Journal of Materials Research, 2018, 33, 2454-2462.	1.2	22
31	Solution-deposited Al2O3 dielectric towards fully-patterned thin film transistors on shape memory polymer. , 2017, , .		4
32	Metamorphic Superomniphobic Surfaces. Advanced Materials, 2017, 29, 1700295.	11.1	104
33	Dielsâ€“Alder Reversible Thermoset 3D Printing: Isotropic Thermoset Polymers via Fused Filament Fabrication. Advanced Functional Materials, 2017, 27, 1700318.	7.8	127
34	3D printed remendable polylactic acid blends with uniform mechanical strength enabled by a dynamic Dielsâ€“Alder reaction. Polymer Chemistry, 2017, 8, 2087-2092.	1.9	70
35	Teaching science through video games. Nature Chemistry, 2017, 9, 97-102.	6.6	18
36	Characterization of a Thiol-Ene/Acrylate-Based Polymer for Neuroprosthetic Implants. ACS Omega, 2017, 2, 4604-4611.	1.6	29

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37	Highly Stable Indiumâ€Galliumâ€Zincâ€Oxide Thinâ€Film Transistors on Deformable Softening Polymer Substrates. Advanced Electronic Materials, 2017, 3, 1700221.	2.6	28
38	Sterilization of Thiol-ene/Acrylate Based Shape Memory Polymers for Biomedical Applications. Macromolecular Materials and Engineering, 2017, 302, 1600331.	1.7	30
39	Design and demonstration of an intracortical probe technology with tunable modulus. Journal of Biomedical Materials Research - Part A, 2017, 105, 159-168.	2.1	52
40	Highâ€T_g Thiolâ€Click Thermoset Networks via the Thiolâ€Maleimide Michael Addition. Macromolecular Rapid Communications, 2016, 37, 1027-1032.	2.0	34
41	Platinized titanium nitride/graphene ternary hybrids for direct methanol fuel cells and titanium nitride/graphene composites for high performance supercapacitors. Electrochimica Acta, 2016, 220, 465-474.	2.6	36
42	Light-Activated Hydrophobic Adhesive for Shape-Memory Polymer Nerve Cuffs. MRS Advances, 2016, 1, 1-7.	0.5	14
43	Hybrid cured thiol-ene/epoxy networks for core-shell semiconductor packaging. MRS Advances, 2016, 1, 57-62.	0.5	0
44	Robotic Insertion Aid for Self-Coiling Cochlear Implants. MRS Advances, 2016, 1, 51-56.	0.5	3
45	Development of flexible and wide-range polymer-based temperature sensor for human bodies. , 2016, , .		14
46	Towards a series elastic actuator with electrically modulated stiffness for Powered Ankle-Foot Orthoses. , 2016, , .		6
47	Thiolâ€“epoxy/maleimide ternary networks as softening substrates for flexible electronics. Journal of Materials Chemistry B, 2016, 4, 5367-5374.	2.9	14
48	Design Paradigm Utilizing Reversible Dielsâ€“Alder Reactions to Enhance the Mechanical Properties of 3D Printed Materials. ACS Applied Materials & Interfaces, 2016, 8, 16961-16966.	4.0	94
49	Novel disposable microelectrode array for cultured neuronal network recording exhibiting equivalent performance to commercially available arrays. Sensors and Actuators B: Chemical, 2016, 226, 232-238.	4.0	9
50	Plasticization for melt viscosity reduction of melt processable carbon fiber precursor. Carbon, 2016, 98, 681-688.	5.4	20
51	Direct electrochemistry of cytochrome c immobilized on titanium nitride/multi-walled carbon nanotube composite for amperometric nitrite biosensor. Biosensors and Bioelectronics, 2016, 79, 543-552.	5.3	100
52	Investigating thiol-epoxy composites for semiconductor die attach adhesives. Materials Research Society Symposia Proceedings, 2015, 1718, 27-31.	0.1	0
53	Hydrolytically Stable Thiolâ€“ene Networks for Flexible Bioelectronics. ACS Applied Materials & Interfaces, 2015, 7, 28673-28681.	4.0	19
54	Organic light-emitting diodes on shape memory polymer substrates for wearable electronics. Organic Electronics, 2015, 25, 151-155.	1.4	38

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55	Tunable thiolâ€“epoxy shape memory polymer foams. Smart Materials and Structures, 2015, 24, 055001.	1.8	23
56	Top-gate organic field-effect transistors fabricated on shape-memory polymer substrates. , 2015, , .		2
57	Integration of High-Charge-Injection-Capacity Electrodes onto Polymer Softening Neural Interfaces. ACS Applied Materials & Interfaces, 2015, 7, 26614-26623.	4.0	45
58	Ultraflexible, large-area, physiological temperature sensors for multipoint measurements. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 14533-14538.	3.3	313
59	Thiolâ€ene/acrylate substrates for softening intracortical electrodes. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2014, 102, 1-11.	1.6	108
60	Organic, Flexible, Polymer Composites for High-Temperature Piezoelectric Applications. Energy Harvesting and Systems, 2014, 1, .	1.7	2
61	Advances in Piezoelectric Polymer Composites for Vibrational Energy Harvesting. ACS Symposium Series, 2014, , 1-27.	0.5	27
62	Mechanically Adaptive Organic Transistors for Implantable Electronics. Advanced Materials, 2014, 26, 4967-4973.	11.1	162
63	The changes in flexural properties and microstructures of carbon fiber bismaleimide composite after exposure to a high temperature. Composite Structures, 2014, 108, 57-64.	3.1	48
64	Nano ZnO@reduced graphene oxide composite for high performance supercapacitor: Green synthesis in supercritical fluid. Electrochimica Acta, 2014, 120, 65-72.	2.6	148
65	Shape Memory Polymerâ€“Inorganic Hybrid Nanocomposites. Advances in Polymer Science, 2014, , 313-350.	0.4	15
66	Degradable, silyl ether thiolâ€“ene networks. RSC Advances, 2014, 4, 39991-40002.	1.7	23
67	On reducing anisotropy in 3D printed polymers via ionizing radiation. Polymer, 2014, 55, 5969-5979.	1.8	192
68	A comparison of polymer substrates for photolithographic processing of flexible bioelectronics. Biomedical Microdevices, 2013, 15, 925-939.	1.4	50
69	Thiolâ€<scp>C</scp>lick Chemistries for Responsive Neural Interfaces. Macromolecular Bioscience, 2013, 13, 1640-1647.	2.1	33
70	A Structural Approach to Establishing a Platform Chemistry for the Tunable, Bulk Electron Beam Cross-Linking of Shape Memory Polymer Systems. Macromolecules, 2013, 46, 8905-8916.	2.2	17
71	Mechanical Cycling Stability of Organic Thin Film Transistors on Shape Memory Polymers. Advanced Materials, 2013, 25, 3095-3099.	11.1	29
72	Electron Beam Crosslinked Polyurethane Shape Memory Polymers with Tunable Mechanical Properties. Macromolecular Chemistry and Physics, 2013, 214, 1258-1272.	1.1	25

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73	Smart Polymers for Neural Interfaces. Polymer Reviews, 2013, 53, 108-129.	5.3	63
74	High Performance and Multipurpose Triarylamine-Enchained Semifluorinated Polymers. ACS Macro Letters, 2013, 2, 35-39.	2.3	21
75	Electrically, Chemically, and Photonically Powered Torsional and Tensile Actuation of Hybrid Carbon Nanotube Yarn Muscles. Science, 2012, 338, 928-932.	6.0	585
76	Threeâ€Dimensional Flexible Electronics Enabled by Shape Memory Polymer Substrates for Responsive Neural Interfaces. Macromolecular Materials and Engineering, 2012, 297, 1193-1202.	1.7	120
77	Triple-Shape Memory Polymers Based on Self-Complementary Hydrogen Bonding. Macromolecules, 2012, 45, 1062-1069.	2.2	175
78	Fabrication of Responsive, Softening Neural Interfaces. Advanced Functional Materials, 2012, 22, 3470-3479.	7.8	127
79	Highâ€Strain Shapeâ€Memory Polymers. Advanced Functional Materials, 2010, 20, 162-171.	7.8	214
80	Effects of sensitizer length on radiation crosslinked shapeâ€“memory polymers. Radiation Physics and Chemistry, 2010, 79, 446-453.	1.4	30
81	Radiation crosslinked shape-memory polymers. Polymer, 2010, 51, 3551-3559.	1.8	56
82	Adjacent Swaps on Strings. Lecture Notes in Computer Science, 2008, , 299-308.	1.0	7