

Walter E Voit

List of Publications by Year in descending order

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Version: 2024-02-01

82
papers

4,103
citations

159358

30
h-index

114278

63
g-index

84
all docs

84
docs citations

84
times ranked

5675
citing authors

#	ARTICLE	IF	CITATIONS
1	Electrically, Chemically, and Photonically Powered Torsional and Tensile Actuation of Hybrid Carbon Nanotube Yarn Muscles. <i>Science</i> , 2012, 338, 928-932.	6.0	585
2	Ultraflexible, large-area, physiological temperature sensors for multipoint measurements. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 14533-14538.	3.3	313
3	High-Strain Shape-Memory Polymers. <i>Advanced Functional Materials</i> , 2010, 20, 162-171.	7.8	214
4	On reducing anisotropy in 3D printed polymers via ionizing radiation. <i>Polymer</i> , 2014, 55, 5969-5979.	1.8	192
5	Triple-Shape Memory Polymers Based on Self-Complementary Hydrogen Bonding. <i>Macromolecules</i> , 2012, 45, 1062-1069.	2.2	175
6	Mechanically Adaptive Organic Transistors for Implantable Electronics. <i>Advanced Materials</i> , 2014, 26, 4967-4973.	11.1	162
7	Nano ZnO@reduced graphene oxide composite for high performance supercapacitor: Green synthesis in supercritical fluid. <i>Electrochimica Acta</i> , 2014, 120, 65-72.	2.6	148
8	Fabrication of Responsive, Softening Neural Interfaces. <i>Advanced Functional Materials</i> , 2012, 22, 3470-3479.	7.8	127
9	Diels-Alder Reversible Thermoset 3D Printing: Isotropic Thermoset Polymers via Fused Filament Fabrication. <i>Advanced Functional Materials</i> , 2017, 27, 1700318.	7.8	127
10	Three-Dimensional Flexible Electronics Enabled by Shape Memory Polymer Substrates for Responsive Neural Interfaces. <i>Macromolecular Materials and Engineering</i> , 2012, 297, 1193-1202.	1.7	120
11	Thiol-ene/acrylate substrates for softening intracortical electrodes. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2014, 102, 1-11.	1.6	108
12	Metamorphic Superomniphobic Surfaces. <i>Advanced Materials</i> , 2017, 29, 1700295.	11.1	104
13	Direct electrochemistry of cytochrome c immobilized on titanium nitride/multi-walled carbon nanotube composite for amperometric nitrite biosensor. <i>Biosensors and Bioelectronics</i> , 2016, 79, 543-552.	5.3	100
14	Design Paradigm Utilizing Reversible Diels-Alder Reactions to Enhance the Mechanical Properties of 3D Printed Materials. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 16961-16966.	4.0	94
15	3D printed remendable polylactic acid blends with uniform mechanical strength enabled by a dynamic Diels-Alder reaction. <i>Polymer Chemistry</i> , 2017, 8, 2087-2092.	1.9	70
16	Thin Film Multi-Electrode Softening Cuffs for Selective Neuromodulation. <i>Scientific Reports</i> , 2018, 8, 16390.	1.6	69
17	A Mosquito Inspired Strategy to Implant Microprobes into the Brain. <i>Scientific Reports</i> , 2018, 8, 122.	1.6	67
18	Smart Polymers for Neural Interfaces. <i>Polymer Reviews</i> , 2013, 53, 108-129.	5.3	63

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19	Radiation crosslinked shape-memory polymers. <i>Polymer</i> , 2010, 51, 3551-3559.	1.8	56
20	Design and demonstration of an intracortical probe technology with tunable modulus. <i>Journal of Biomedical Materials Research - Part A</i> , 2017, 105, 159-168.	2.1	52
21	A comparison of polymer substrates for photolithographic processing of flexible bioelectronics. <i>Biomedical Microdevices</i> , 2013, 15, 925-939.	1.4	50
22	The changes in flexural properties and microstructures of carbon fiber bismaleimide composite after exposure to a high temperature. <i>Composite Structures</i> , 2014, 108, 57-64.	3.1	48
23	Chronic Intracortical Recording and Electrochemical Stability of Thiol-ene/Acrylate Shape Memory Polymer Electrode Arrays. <i>Micromachines</i> , 2018, 9, 500.	1.4	47
24	Integration of High-Charge-Injection-Capacity Electrodes onto Polymer Softening Neural Interfaces. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 26614-26623.	4.0	45
25	3D, Reconfigurable, Multimodal Electronic Whiskers via Directed Air Assembly. <i>Advanced Materials</i> , 2018, 30, 1706733.	11.1	45
26	Chronic softening spinal cord stimulation arrays. <i>Journal of Neural Engineering</i> , 2018, 15, 045002.	1.8	41
27	Organic light-emitting diodes on shape memory polymer substrates for wearable electronics. <i>Organic Electronics</i> , 2015, 25, 151-155.	1.4	38
28	Platinized titanium nitride/graphene ternary hybrids for direct methanol fuel cells and titanium nitride/graphene composites for high performance supercapacitors. <i>Electrochimica Acta</i> , 2016, 220, 465-474.	2.6	36
29	High- T_g Thiol-Click Thermoset Networks via the Thiol-Maleimide Michael Addition. <i>Macromolecular Rapid Communications</i> , 2016, 37, 1027-1032.	2.0	34
30	Thiol-Click Chemistries for Responsive Neural Interfaces. <i>Macromolecular Bioscience</i> , 2013, 13, 1640-1647.	2.1	33
31	Effects of sensitizer length on radiation crosslinked shape-memory polymers. <i>Radiation Physics and Chemistry</i> , 2010, 79, 446-453.	1.4	30
32	Sterilization of Thiol-ene/Acrylate Based Shape Memory Polymers for Biomedical Applications. <i>Macromolecular Materials and Engineering</i> , 2017, 302, 1600331.	1.7	30
33	Characterization of the Neuroinflammatory Response to Thiol-ene Shape Memory Polymer Coated Intracortical Microelectrodes. <i>Micromachines</i> , 2018, 9, 486.	1.4	30
34	Mechanical Cycling Stability of Organic Thin Film Transistors on Shape Memory Polymers. <i>Advanced Materials</i> , 2013, 25, 3095-3099.	11.1	29
35	Characterization of a Thiol-Ene/Acrylate-Based Polymer for Neuroprosthetic Implants. <i>ACS Omega</i> , 2017, 2, 4604-4611.	1.6	29
36	Recent advances in neural interfaces—Materials chemistry to clinical translation. <i>MRS Bulletin</i> , 2020, 45, 655-668.	1.7	29

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37	Highly Stable Indium-Gallium-Zinc Oxide Thin Film Transistors on Deformable Softening Polymer Substrates. <i>Advanced Electronic Materials</i> , 2017, 3, 1700221.	2.6	28
38	From softening polymers to multimaterial based bioelectronic devices. <i>Multifunctional Materials</i> , 2019, 2, 012001.	2.4	28
39	Advances in Piezoelectric Polymer Composites for Vibrational Energy Harvesting. <i>ACS Symposium Series</i> , 2014, , 1-27.	0.5	27
40	Electron Beam Crosslinked Polyurethane Shape Memory Polymers with Tunable Mechanical Properties. <i>Macromolecular Chemistry and Physics</i> , 2013, 214, 1258-1272.	1.1	25
41	Degradable, silyl ether thiol-ene networks. <i>RSC Advances</i> , 2014, 4, 39991-40002.	1.7	23
42	Tunable thiol-epoxy shape memory polymer foams. <i>Smart Materials and Structures</i> , 2015, 24, 055001.	1.8	23
43	Electrical Properties of Thiol-ene-based Shape Memory Polymers Intended for Flexible Electronics. <i>Polymers</i> , 2019, 11, 902.	2.0	23
44	Mechanically Robust, Softening Shape Memory Polymer Probes for Intracortical Recording. <i>Micromachines</i> , 2020, 11, 619.	1.4	23
45	Solution-processed oxide thin film transistors on shape memory polymer enabled by photochemical self-patterning. <i>Journal of Materials Research</i> , 2018, 33, 2454-2462.	1.2	22
46	High Performance and Multipurpose Triarylamine-Enchained Semifluorinated Polymers. <i>ACS Macro Letters</i> , 2013, 2, 35-39.	2.3	21
47	In vitro compatibility testing of thiol-ene/acrylate-based shape memory polymers for use in implantable neural interfaces. <i>Journal of Biomedical Materials Research - Part A</i> , 2018, 106, 2891-2898.	2.1	21
48	Plasticization for melt viscosity reduction of melt processable carbon fiber precursor. <i>Carbon</i> , 2016, 98, 681-688.	5.4	20
49	Hydrolytically Stable Thiol-ene Networks for Flexible Bioelectronics. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 28673-28681.	4.0	19
50	Teaching science through video games. <i>Nature Chemistry</i> , 2017, 9, 97-102.	6.6	18
51	A Structural Approach to Establishing a Platform Chemistry for the Tunable, Bulk Electron Beam Cross-Linking of Shape Memory Polymer Systems. <i>Macromolecules</i> , 2013, 46, 8905-8916.	2.2	17
52	Understanding the Effects of Both CD14-Mediated Innate Immunity and Device/Tissue Mechanical Mismatch in the Neuroinflammatory Response to Intracortical Microelectrodes. <i>Frontiers in Neuroscience</i> , 2018, 12, 772.	1.4	17
53	Shape Memory Polymer-Inorganic Hybrid Nanocomposites. <i>Advances in Polymer Science</i> , 2014, , 313-350.	0.4	15
54	Tough thiourethane thermoplastics for fused filament fabrication. <i>Journal of Applied Polymer Science</i> , 2018, 135, 45574.	1.3	15

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55	Light-Activated Hydrophobic Adhesive for Shape-Memory Polymer Nerve Cuffs. <i>MRS Advances</i> , 2016, 1, 1-7.	0.5	14
56	Development of flexible and wide-range polymer-based temperature sensor for human bodies. , 2016, , .		14
57	Thiol-epoxy/maleimide ternary networks as softening substrates for flexible electronics. <i>Journal of Materials Chemistry B</i> , 2016, 4, 5367-5374.	2.9	14
58	Softening Shape Memory Polymer Substrates for Bioelectronic Devices With Improved Hydrolytic Stability. <i>Frontiers in Materials</i> , 2018, 5, .	1.2	13
59	Towards an ankle-foot orthosis powered by a dielectric elastomer actuator. <i>Mechatronics</i> , 2021, 76, 102551.	2.0	12
60	Mechanical Simplification of Variable-Stiffness Actuators Using Dielectric Elastomer Transducers. <i>Actuators</i> , 2019, 8, 44.	1.2	11
61	Electrical characterization of flexible hafnium oxide capacitors on deformable softening polymer substrate. <i>Microelectronic Engineering</i> , 2021, 249, 111618.	1.1	11
62	Indium-Gallium-Zinc Oxide Schottky Diodes Operating across the Glass Transition of Stimuli-Responsive Polymers. <i>Advanced Electronic Materials</i> , 2020, 6, 1901210.	2.6	10
63	Novel disposable microelectrode array for cultured neuronal network recording exhibiting equivalent performance to commercially available arrays. <i>Sensors and Actuators B: Chemical</i> , 2016, 226, 232-238.	4.0	9
64	Characterization of Triboelectric Charge Generation between PTFE and Nylon after Repeated Contacts. <i>Energy Harvesting and Systems</i> , 2018, 4, 165-176.	1.7	7
65	Adjacent Swaps on Strings. <i>Lecture Notes in Computer Science</i> , 2008, , 299-308.	1.0	7
66	Towards a series elastic actuator with electrically modulated stiffness for Powered Ankle-Foot Orthoses. , 2016, , .		6
67	Study of a melt processable polymer precursor for carbon fiber. <i>Carbon Letters</i> , 2019, 29, 605-612.	3.3	5
68	Solution-deposited Al ₂ O ₃ dielectric towards fully-patterned thin film transistors on shape memory polymer. , 2017, , .		4
69	Environmental Dynamic Mechanical Analysis to Predict the Softening Behavior of Neural Implants. <i>Journal of Visualized Experiments</i> , 2019, , .	0.2	4
70	Stable softening bioelectronics: A paradigm for chronically viable ester-free neural interfaces such as spinal cord stimulation implants. <i>Biomaterials</i> , 2021, 277, 121073.	5.7	4
71	Robotic Insertion Aid for Self-Coiling Cochlear Implants. <i>MRS Advances</i> , 2016, 1, 51-56.	0.5	3
72	Electronic Whiskers: 3D, Reconfigurable, Multimodal Electronic Whiskers via Directed Air Assembly (Adv. Mater. 11/2018). <i>Advanced Materials</i> , 2018, 30, 1870078.	11.1	3

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73	Structural response of 3D-printed rubber lattice structures under compressive fatigue. MRS Communications, 2021, 11, 168-172.	0.8	3
74	Organic, Flexible, Polymer Composites for High-Temperature Piezoelectric Applications. Energy Harvesting and Systems, 2014, 1, .	1.7	2
75	Top-gate organic field-effect transistors fabricated on shape-memory polymer substrates. , 2015, , .		2
76	Measuring the Electric Properties of Thin Film Shape Memory Polymers in Simulated Physiological Conditions. , 2019, , .		2
77	Elastographic assessment of micromotion-induced strain in tissue adjacent to intracortical implants in rat. , 2019, , .		2
78	Lithographically patterned stretchable metallic microwiring on electrospun nanofiber mats. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2021, 39, .	0.6	2
79	Thermoset Polymers for Bioelectronic Interfaces - Engineering of Thermomechanical Properties. , 2019, , .		1
80	Investigating thiol-epoxy composites for semiconductor die attach adhesives. Materials Research Society Symposia Proceedings, 2015, 1718, 27-31.	0.1	0
81	Hybrid cured thiol-ene/epoxy networks for core-shell semiconductor packaging. MRS Advances, 2016, 1, 57-62.	0.5	0
82	Inter-layer coatings for softening polymer-based neural interfaces. MRS Advances, 2021, 6, 918.	0.5	0