

Stephen E Sadow

List of Publications by Year in descending order

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Version: 2024-02-01

45
papers

559
citations

840776

11
h-index

677142

22
g-index

48
all docs

48
docs citations

48
times ranked

750
citing authors

#	ARTICLE	IF	CITATIONS
1	Silicon Carbide Technology for Advanced Human Healthcare Applications. <i>Micromachines</i> , 2022, 13, 346.	2.9	22
2	Low Complexity Beam Steering Antenna Array Using Beamforming Network Subarrays. , 2022, , .		0
3	A monolithic all-SiC neural interface for long-term human applications. , 2022, , 125-159.		0
4	Ultrathin neural interfaces constructed from carbon and amorphous silicon carbide. , 2022, , 197-216.		0
5	The development of a fully MRI-compatible silicon carbide neural interface. , 2022, , 161-195.		0
6	Recent advances in SiC biomedical devices. , 2022, , 1-48.		2
7	Silicon Carbide and MRI: Towards Developing a MRI Safe Neural Interface. <i>Micromachines</i> , 2021, 12, 126.	2.9	10
8	Enhancement of X-ray-Excited Red Luminescence of Chromium-Doped Zinc Gallate via Ultrasmall Silicon Carbide Nanocrystals. <i>Chemistry of Materials</i> , 2021, 33, 2457-2465.	6.7	9
9	Silicon Carbide for Advanced In-Vivo Medical Devices. <i>Engineering Proceedings</i> , 2021, 4, .	0.4	0
10	Electronic Nose With Detection Method for Alcohol, Acetone, and Carbon Monoxide in Coronavirus Disease 2019 Breath Simulation Model. <i>IEEE Sensors Journal</i> , 2021, 21, 15935-15943.	4.7	23
11	A Flexible a-SiC-Based Neural Interface Utilizing Pyrolyzed-Photoresist Film (C) Active Sites. <i>Micromachines</i> , 2021, 12, 821.	2.9	10
12	Technical advance in silico and in vitro development of a new bipolar radiofrequency ablation device for renal denervation. <i>BMC Cardiovascular Disorders</i> , 2021, 21, 500.	1.7	1
13	Editorial for the Special Issue on SiC Based Miniaturized Devices. <i>Micromachines</i> , 2020, 11, 405.	2.9	0
14	Valence and conduction band offsets at beryllium oxide interfaces with silicon carbide and III-V nitrides. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2019, 37, 041206.	1.2	2
15	Fabrication of a Monolithic Implantable Neural Interface from Cubic Silicon Carbide. <i>Micromachines</i> , 2019, 10, 430.	2.9	25
16	Development of SOI FETs Based on Core-Shell Si/SiC Nanowires for Sensing in Liquid Environments. <i>Materials Science Forum</i> , 2019, 963, 701-706.	0.3	1
17	Demonstration of a Robust All-Silicon-Carbide Intracortical Neural Interface. <i>Micromachines</i> , 2018, 9, 412.	2.9	24
18	Development of an all-SiC neuronal interface device. <i>MRS Advances</i> , 2016, 1, 3679-3684.	0.9	6

#	ARTICLE	IF	CITATIONS
19	SiC RF Sensor for Continuous Glucose Monitoring. MRS Advances, 2016, 1, 3691-3696.	0.9	3
20	Photosensitive Capacitance Effect In High-purity Semi-insulating 4H-SiC. Materials Research Society Symposia Proceedings, 2014, 1693, 148.	0.1	1
21	Investigating the surface changes of silicon in vitro within physiological environments for neurological application. Materials Research Society Symposia Proceedings, 2014, 1621, 237-242.	0.1	1
22	Silicon carbide: a versatile material for biosensor applications. Biomedical Microdevices, 2013, 15, 353-368.	2.8	172
23	Patterned substrate with inverted silicon pyramids for 3C-SiC epitaxial growth: A comparison with conventional (001) Si substrate. Journal of Materials Research, 2013, 28, 94-103.	2.6	14
24	Stress nature investigation on heteroepitaxial 3C-SiC film on (100) Si substrates. Journal of Materials Research, 2013, 28, 129-135.	2.6	6
25	Silicon Carbide Waveguides for Optogenetic Neural Stimulation. Materials Research Society Symposia Proceedings, 2012, 1433, 19.	0.1	2
26	A Biocompatible SiC RF Antenna for In-Vivo Sensing Applications. Materials Research Society Symposia Proceedings, 2012, 1433, 119.	0.1	8
27	Characterization of 3C-SiC (100) as a platform for detecting the onset of acute myocardial infarction (AMI). Materials Research Society Symposia Proceedings, 2012, 1433, 49.	0.1	1
28	Atomic layer deposition of Pb(Zr,Ti)Ox on 4H-SiC for metal-ferroelectric-insulator-semiconductor diodes. Journal of Applied Physics, 2011, 109, .	2.5	26
29	Demonstration of 3C-SiC MEMS Structures on Polysilicon-on-oxide Substrates. Materials Research Society Symposia Proceedings, 2010, 1246, 1.	0.1	6
30	Single-crystal Silicon Carbide: A Biocompatible and Hemocompatible Semiconductor for Advanced Biomedical Applications. Materials Research Society Symposia Proceedings, 2010, 1246, 1.	0.1	39
31	Study of the Adhesion and Biocompatibility of Nanocrystalline Diamond (NCD) Films on 3C-SiC Substrates. Materials Research Society Symposia Proceedings, 2009, 1203, 1.	0.1	2
32	Biocompatibility Assessment of SiC Surfaces After Functionalization with Self Assembled Organic Monolayers. Materials Research Society Symposia Proceedings, 2009, 1235, 1.	0.1	5
33	The Development of Silicon Carbide Based Electrode Devices for Central Nervous System Biomedical Implants. Materials Research Society Symposia Proceedings, 2009, 1236, 1.	0.1	4
34	Nondestructive defect measurement and surface analysis of 3C-SiC on Si (001) by electron channeling contrast imaging. Materials Research Society Symposia Proceedings, 2008, 1068, 1.	0.1	0
35	Mechanical Properties of 3C-SiC Films for MEMS Applications. Materials Research Society Symposia Proceedings, 2007, 1049, 1.	0.1	14
36	Multiplication of Basal Plane Dislocations via Interaction with c-Axis Threading Dislocations in 4H-SiC. Materials Research Society Symposia Proceedings, 2006, 911, 4.	0.1	2

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37	Surface morphology and structure of hydrogen etched 3C-SiC(001) on Si(001). Materials Research Society Symposia Proceedings, 2006, 911, 2.	0.1	3
38	Culture of Mammalian Cells on Single Crystal SiC Substrates. Materials Research Society Symposia Proceedings, 2006, 950, 1.	0.1	15
39	Atomic Structure of Non-Basal-Plane SiC Surfaces: Hydrogen Etching and Surface Phase Transformations. Materials Research Society Symposia Proceedings, 2006, 911, 1.	0.1	2
40	Thermal detection mechanism of SiC-Based Resistive Gas Sensors. Materials Research Society Symposia Proceedings, 2006, 911, 6.	0.1	1
41	Thermal detection mechanism of SiC based hydrogen resistive gas sensors. Applied Physics Letters, 2006, 89, 182102.	3.3	17
42	Wide-range (0.33%â€“100%) 3Câ€“SiC resistive hydrogen gas sensor development. Applied Physics Letters, 2004, 85, 416-418.	3.3	27
43	Afterglow Thermal Oxidation of Silicon Carbide. Materials Research Society Symposia Proceedings, 2002, 742, 471.	0.1	0
44	A Comprehensive Study of Hydrogen Etching on the Major SiC Polytypes and Crystal Orientations. Materials Science Forum, 0, 615-617, 589-592.	0.3	46
45	The Development of Monolithic Silicon Carbide Intracortical Neural Interfaces for Long-Term Human Implantation. Materials Science Forum, 0, 1062, 195-203.	0.3	1