

Blake N Johnson

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9416127/publications.pdf>

Version: 2024-02-01

50
papers

3,419
citations

279487

23
h-index

189595

50
g-index

54
all docs

54
docs citations

54
times ranked

5502
citing authors

#	ARTICLE	IF	CITATIONS
1	Three-dimensional (3D) printed scaffold and material selection for bone repair. <i>Acta Biomaterialia</i> , 2019, 84, 16-33.	4.1	547
2	Electrochemical biosensors for pathogen detection. <i>Biosensors and Bioelectronics</i> , 2020, 159, 112214.	5.3	509
3	3D Printed Quantum Dot Light-Emitting Diodes. <i>Nano Letters</i> , 2014, 14, 7017-7023.	4.5	371
4	Biosensing using dynamic-mode cantilever sensors: A review. <i>Biosensors and Bioelectronics</i> , 2012, 32, 1-18.	5.3	255
5	3D Printed Anatomical Nerve Regeneration Pathways. <i>Advanced Functional Materials</i> , 2015, 25, 6205-6217.	7.8	228
6	3D printed nervous system on a chip. <i>Lab on A Chip</i> , 2016, 16, 1393-1400.	3.1	150
7	3D Printed Programmable Release Capsules. <i>Nano Letters</i> , 2015, 15, 5321-5329.	4.5	140
8	Biosensor-based microRNA detection: techniques, design, performance, and challenges. <i>Analyst</i> , The, 2014, 139, 1576.	1.7	136
9	3D printed bionic nanodevices. <i>Nano Today</i> , 2016, 11, 330-350.	6.2	116
10	Microphysiological Human Brain and Neural Systems-on-a-Chip: Potential Alternatives to Small Animal Models and Emerging Platforms for Drug Discovery and Personalized Medicine. <i>Stem Cell Reviews and Reports</i> , 2017, 13, 381-406.	5.6	96
11	3D printed stretchable triboelectric nanogenerator fibers and devices. <i>Nano Energy</i> , 2020, 75, 104973.	8.2	79
12	Sample Preparation-Free, Real-Time Detection of microRNA in Human Serum Using Piezoelectric Cantilever Biosensors at Attomole Level. <i>Analytical Chemistry</i> , 2012, 84, 10426-10436.	3.2	70
13	Process- and bio-inspired hydrogels for 3D bioprinting of soft free-standing neural and glial tissues. <i>Biofabrication</i> , 2019, 11, 025009.	3.7	70
14	3D printed conformal microfluidics for isolation and profiling of biomarkers from whole organs. <i>Lab on A Chip</i> , 2017, 17, 2561-2571.	3.1	57
15	Programming of Multicomponent Temporal Release Profiles in 3D Printed Polypills via Core-Shell, Multilayer, and Gradient Concentration Profiles. <i>Advanced Healthcare Materials</i> , 2018, 7, e1800213.	3.9	42
16	Piezoelectric cantilever sensors with asymmetric anchor exhibit picogram sensitivity in liquids. <i>Sensors and Actuators B: Chemical</i> , 2011, 153, 64-70.	4.0	41
17	3D Printed Functionally Graded Plasmonic Constructs. <i>Advanced Optical Materials</i> , 2017, 5, 1700367.	3.6	37
18	Additive manufacturing of pharmaceuticals for precision medicine applications: A review of the promises and perils in implementation. <i>Additive Manufacturing</i> , 2018, 23, 319-328.	1.7	36

#	ARTICLE	IF	CITATIONS
19	pH Effect on Protein G Orientation on Gold Surfaces and Characterization of Adsorption Thermodynamics. <i>Langmuir</i> , 2012, 28, 6928-6934.	1.6	33
20	Additive Manufacturing of Mechanically Isotropic Thin Films and Membranes via Microextrusion 3D Printing of Polymer Solutions. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 6652-6661.	4.0	33
21	Additive manufacturing of three-dimensional (3D) microfluidic-based microelectromechanical systems (MEMS) for acoustofluidic applications. <i>Lab on A Chip</i> , 2018, 18, 2087-2098.	3.1	31
22	Thermally Drawn Stretchable Electrical and Optical Fiber Sensors for Multimodal Extreme Deformation Sensing. <i>Advanced Optical Materials</i> , 2021, 9, 2001815.	3.6	31
23	Low-cost sensor-integrated 3D-printed personalized prosthetic hands for children with amniotic band syndrome: A case study in sensing pressure distribution on an anatomical human-machine interface (AHMI) using 3D-printed conformal electrode arrays. <i>PLoS ONE</i> , 2019, 14, e0214120.	1.1	26
24	The origin of low-order and high-order impedance-coupled resonant modes in piezoelectric-excited millimeter-sized cantilever (PEMC) sensors: Experiments and finite element models. <i>Sensors and Actuators B: Chemical</i> , 2011, 155, 868-877.	4.0	25
25	A Cantilever Biosensor-Based Assay for Toxin-Producing Cyanobacteria <i>Microcystis aeruginosa</i> using 16S rRNA. <i>Environmental Science & Technology</i> , 2013, 47, 12333-12341.	4.6	23
26	In situ electrochemical polymerization of poly(3,4-ethylenedioxythiophene) (PEDOT) for peripheral nerve interfaces. <i>MRS Communications</i> , 2018, 8, 1043-1049.	0.8	21
27	Regeneration of Gold Surfaces Covered by Adsorbed Thiols and Proteins Using Liquid-Phase Hydrogen Peroxide-Mediated UV-Photooxidation. <i>Journal of Physical Chemistry C</i> , 2013, 117, 1335-1341.	1.5	20
28	Persistence of bending and torsional modes in piezoelectric-excited millimeter-sized cantilever (PEMC) sensors in viscous liquids - 1 to 103 cP. <i>Journal of Applied Physics</i> , 2011, 109, .	1.1	17
29	Torsional and Lateral Resonant Modes of Cantilevers as Biosensors: Alternatives to Bending Modes. <i>Analytical Chemistry</i> , 2013, 85, 1760-1766.	3.2	17
30	3D printed nerve guidance channels: computer-aided control of geometry, physical cues, biological supplements and gradients. <i>Neural Regeneration Research</i> , 2016, 11, 1568.	1.6	16
31	Therapeutic effects of peripherally administrated neural crest stem cells on pain and spinal cord changes after sciatic nerve transection. <i>Stem Cell Research and Therapy</i> , 2021, 12, 180.	2.4	12
32	Expression of picogram sensitive bending modes in piezoelectric cantilever sensors with nonuniform electric fields generated by asymmetric electrodes. <i>Review of Scientific Instruments</i> , 2010, 81, 125108.	0.6	11
33	A novel experimental technique for determining node location in resonant mode cantilevers. <i>Journal of Micromechanics and Microengineering</i> , 2011, 21, 065027.	1.5	11
34	Real-time characterization of hydrogel viscoelastic properties and sol-gel phase transitions using cantilever sensors. <i>Journal of Rheology</i> , 2020, 64, 837-850.	1.3	11
35	Reduction of nonspecific protein adsorption on cantilever biosensors caused by transverse resonant mode vibration. <i>Analyst</i> , 2014, 139, 1112.	1.7	10
36	A Hybrid 3D Printing and Robotic-assisted Embedding Approach for Design and Fabrication of Nerve Cuffs with Integrated Locking Mechanisms. <i>MRS Advances</i> , 2018, 3, 2365-2372.	0.5	9

#	ARTICLE	IF	CITATIONS
37	Real-time monitoring of hydrogel rheological property changes and gelation processes using high-order modes of cantilever sensors. <i>Journal of Applied Physics</i> , 2020, 128, .	1.1	9
38	3D Printed Mask Frames Improve the Inward Protection Efficiency of a Cloth Mask. <i>ACS ES&T Engineering</i> , 2021, 1, 1000-1008.	3.7	8
39	Closed-Loop Controlled Photopolymerization of Hydrogels. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 40365-40378.	4.0	8
40	Electrochemical piezoelectric-excited millimeter-sized cantilever (ePEMC) for simultaneous dual transduction biosensing. <i>Analyst, The</i> , 2013, 138, 6365.	1.7	7
41	3D bioprinting using hollow multifunctional fiber impedimetric sensors. <i>Biofabrication</i> , 2020, 12, 035026.	3.7	7
42	Piezoelectric Cantilever Biosensors for Label-free, Real-time Detection of DNA and RNA. <i>Methods in Molecular Biology</i> , 2017, 1572, 247-262.	0.4	6
43	Brain-on-a-chip systems for modeling disease pathogenesis. , 2020, , 215-232.		6
44	Conformal 3D printing of non-planar antennas on wrinkled and folded kapton films using point cloud data. <i>Flexible and Printed Electronics</i> , 2021, 6, 044002.	1.5	6
45	3D Printed Multiplexed Competitive Migration Assays with Spatially Programmable Release Sources. <i>Advanced Biology</i> , 2020, 4, 1900225.	3.0	4
46	Macrophage Activation in the Dorsal Root Ganglion in Rats Developing Autotomy after Peripheral Nerve Injury. <i>International Journal of Molecular Sciences</i> , 2021, 22, 12801.	1.8	4
47	Acoustofluidic particle trapping, manipulation, and release using dynamic-mode cantilever sensors. <i>Analyst, The</i> , 2017, 142, 123-131.	1.7	3
48	Polypill: Programming of Multicomponent Temporal Release Profiles in 3D Printed Polypills via Core-Shell, Multilayer, and Gradient Concentration Profiles (<i>Adv. Healthcare Mater.</i> 16/2018). <i>Advanced Healthcare Materials</i> , 2018, 7, 1870066.	3.9	1
49	Effect of Mechanical Properties On the Dynamics of Self-Oscillating Synthetic Vocal Folds. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2020, , .	0.9	1
50	Comparison of Bulk- vs Layer-by-Layer-Cured Stimuli-Responsive PNIPAM-Alginate Hydrogel Dynamic Viscoelastic Property Response via Embedded Sensors. <i>ACS Applied Polymer Materials</i> , 0, , .	2.0	1