

# John F Zimmerman

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9144043/publications.pdf>

Version: 2024-02-01

24  
papers

1,239  
citations

516710

16  
h-index

610901

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27  
all docs

27  
docs citations

27  
times ranked

2025  
citing authors

#	ARTICLE	IF	CITATIONS
1	Photoelectrochemical modulation of neuronal activity with free-standing coaxial silicon nanowires. <i>Nature Nanotechnology</i> , 2018, 13, 260-266.	31.5	185
2	A tissue-engineered scale model of the heart ventricle. <i>Nature Biomedical Engineering</i> , 2018, 2, 930-941.	22.5	162
3	Muscle tissue engineering in fibrous gelatin: implications for meat analogs. <i>Npj Science of Food</i> , 2019, 3, 20.	5.5	115
4	An autonomously swimming biohybrid fish designed with human cardiac biophysics. <i>Science</i> , 2022, 375, 639-647.	12.6	95
5	Cellular uptake and dynamics of unlabeled freestanding silicon nanowires. <i>Science Advances</i> , 2016, 2, e1601039.	10.3	84
6	Atomic gold-enabled three-dimensional lithography for silicon mesostructures. <i>Science</i> , 2015, 348, 1451-1455.	12.6	82
7	Synchronized stimulation and continuous insulin sensing in a microfluidic human Islet on a Chip designed for scalable manufacturing. <i>Lab on A Chip</i> , 2019, 19, 2993-3010.	6.0	74
8	Inhibition of mTOR Signaling Enhances Maturation of Cardiomyocytes Derived From Human-Induced Pluripotent Stem Cells via p53-Induced Quiescence. <i>Circulation</i> , 2020, 141, 285-300.	1.6	72
9	Mussel-inspired 3D fiber scaffolds for heart-on-a-chip toxicity studies of engineered nanomaterials. <i>Analytical and Bioanalytical Chemistry</i> , 2018, 410, 6141-6154.	3.7	66
10	Recreating the heart's helical structure-function relationship with focused rotary jet spinning. <i>Science</i> , 2022, 377, 180-185.	12.6	47
11	Free-Standing Kinked Silicon Nanowires for Probing Inter- and Intracellular Force Dynamics. <i>Nano Letters</i> , 2015, 15, 5492-5498.	9.1	43
12	para-Aramid Fiber Sheets for Simultaneous Mechanical and Thermal Protection in Extreme Environments. <i>Matter</i> , 2020, 3, 742-758.	10.0	43
13	High-throughput coating with biodegradable antimicrobial pullulan fibres extends shelf life and reduces weight loss in an avocado model. <i>Nature Food</i> , 2022, 3, 428-436.	14.0	38
14	Nongenetic Optical Methods for Measuring and Modulating Neuronal Response. <i>ACS Nano</i> , 2018, 12, 4086-4095.	14.6	35
15	Nanoscale semiconductor devices as new biomaterials. <i>Biomaterials Science</i> , 2014, 2, 619-626.	5.4	25
16	Scatter Enhanced Phase Contrast Microscopy for Discriminating Mechanisms of Active Nanoparticle Transport in Living Cells. <i>Nano Letters</i> , 2019, 19, 793-804.	9.1	17
17	Quantifying the effects of engineered nanomaterials on endothelial cell architecture and vascular barrier integrity using a cell pair model. <i>Nanoscale</i> , 2019, 11, 17878-17893.	5.6	14
18	Mapping 2D- and 3D-distributions of metal/metal oxide nanoparticles within cleared human ex vivo skin tissues. <i>NanoImpact</i> , 2020, 17, 100208.	4.5	11

#	ARTICLE	IF	CITATIONS
19	Optical Determination of Silicon Nanowire Diameters for Intracellular Applications. Journal of Physical Chemistry C, 2015, 119, 29105-29115.	3.1	8
20	Human brain microvascular endothelial cell pairs model tissue-level blood-brain barrier function. Integrative Biology (United Kingdom), 2020, 12, 64-79.	1.3	8
21	Multifunctional optofluidic brain probes. Nature Biomedical Engineering, 2019, 3, 596-597.	22.5	3
22	Differential modulation of endothelial cytoplasmic protrusions after exposure to graphene-family nanomaterials. NanoImpact, 2022, 26, 100401.	4.5	3
23	Addendum: A tissue-engineered scale model of the heart ventricle. Nature Biomedical Engineering, 2022, 6, 1318-1318.	22.5	2
24	Nanowire Biosensors. RSC Smart Materials, 2014, , 167-199.	0.1	0