Tyler R Ray

List of Publications by Year
in descending order

31 papers	3,414 citations	318942 23 h-index	536525 29 g-index
31 all docs	31 docs citations	31 times ranked	4896 citing authors

#	Article	IF	Citations
1	Soft, skin-interfaced sweat stickers for cystic fibrosis diagnosis and management. Science Translational Medicine, 2021, 13, .	5.8	65
2	Recent progress, challenges, and opportunities for wearable biochemical sensors for sweat analysis. Sensors and Actuators B: Chemical, 2021, 332, 129447.	4.0	112
3	Recent progress in acoustic field-assisted 3D-printing of functional composite materials. MRS Advances, 2021, 6, 636-643.	0.5	11
4	State of Sweat: Emerging Wearable Systems for Real-Time, Noninvasive Sweat Sensing and Analytics. ACS Sensors, 2021, 6, 2787-2801.	4.0	76
5	Skin-interfaced soft microfluidic systems with modular and reusable electronics for in situ capacitive sensing of sweat loss, rate and conductivity. Lab on A Chip, 2020, 20, 4391-4403.	3.1	23
6	Microfluidics for interrogating live intact tissues. Microsystems and Nanoengineering, 2020, 6, 69.	3.4	25
7	Bridging functional nanocomposites to robust macroscale devices. Science, 2019, 364, .	6.0	118
8	Flexible Conductive Composites with Programmed Electrical Anisotropy Using Acoustophoresis. Advanced Materials Technologies, 2019, 4, 1900586.	3.0	30
9	Bio-Integrated Wearable Systems: A Comprehensive Review. Chemical Reviews, 2019, 119, 5461-5533.	23.0	822
10	Soft, Skin-Integrated Multifunctional Microfluidic Systems for Accurate Colorimetric Analysis of Sweat Biomarkers and Temperature. ACS Sensors, 2019, 4, 379-388.	4.0	239
11	Waterproof, electronics-enabled, epidermal microfluidic devices for sweat collection, biomarker analysis, and thermography in aquatic settings. Science Advances, 2019, 5, eaau6356.	4.7	208
12	Soft, Skinâ€Interfaced Microfluidic Systems with Passive Galvanic Stopwatches for Precise Chronometric Sampling of Sweat. Advanced Materials, 2019, 31, e1902109.	11.1	62
13	Soft, skin-interfaced wearable systems for sports science and analytics. Current Opinion in Biomedical Engineering, 2019, 9, 47-56.	1.8	84
14	Battery-free, skin-interfaced microfluidic/electronic systems for simultaneous electrochemical, colorimetric, and volumetric analysis of sweat. Science Advances, 2019, 5, eaav3294.	4.7	497
15	Scaling relationships for acoustic control of two-phase microstructures during direct-write printing. Materials Research Letters, 2018, 6, 191-198.	4.1	23
16	Superâ€Absorbent Polymer Valves and Colorimetric Chemistries for Timeâ€Sequenced Discrete Sampling and Chloride Analysis of Sweat via Skinâ€Mounted Soft Microfluidics. Small, 2018, 14, e1703334.	5.2	119
17	Epidermal Electronics: Wireless, Batteryâ€Free Epidermal Electronics for Continuous, Quantitative, Multimodal Thermal Characterization of Skin (Small 47/2018). Small, 2018, 14, 1870226.	5.2	9
18	Fully implantable optoelectronic systems for battery-free, multimodal operation in neuroscience research. Nature Electronics, 2018, 1, 652-660.	13.1	157

#	Article	IF	Citations
19	Wireless, Batteryâ€Free Epidermal Electronics for Continuous, Quantitative, Multimodal Thermal Characterization of Skin. Small, 2018, 14, e1803192.	5.2	73
20	Epidermal electronics for noninvasive, wireless, quantitative assessment of ventricular shunt function in patients with hydrocephalus. Science Translational Medicine, 2018, 10, .	5.8	68
21	A fluorometric skin-interfaced microfluidic device and smartphone imaging module for in situ quantitative analysis of sweat chemistry. Lab on A Chip, 2018, 18, 2178-2186.	3.1	166
22	Soft, skin-mounted microfluidic systems for measuring secretory fluidic pressures generated at the surface of the skin by eccrine sweat glands. Lab on A Chip, 2017, 17, 2572-2580.	3.1	117
23	Acoustic control of microstructures during direct ink writing of two-phase materials. Sensors and Actuators A: Physical, 2017, 268, 213-221.	2.0	40
24	Scaling Relationships for Direct Ink Writing with Acoustic Focusing. Minerals, Metals and Materials Series, 2017, , 137-145.	0.3	0
25	Deposition of ordered two-phase materials using microfluidic print nozzles with acoustic focusing. Extreme Mechanics Letters, 2016, 8, 96-106.	2.0	72
26	A simple microfluidic aggregation analyzer for the specific, sensitive and multiplexed quantification of proteins in a serum environment. Biosensors and Bioelectronics, 2016, 77, 1062-1069.	5.3	14
27	Quantitative Characterization of the Colloidal Stability of Metallic Nanoparticles Using UVâ€“vis Absorbance Spectroscopy. Langmuir, 2015, 31, 3577-3586.	1.6	47
28	Acoustic field controlled patterning and assembly of anisotropic particles. Extreme Mechanics Letters, 2015, 5, 37-46.	2.0	71
29	Dynamic Modeling of Storm Surge and Inland Flooding in a Texas Coastal Floodplain. Journal of Hydraulic Engineering, 2011, 137, 1103-1110.	0.7	40
30	Diffusion Linked Solidification Model of Axisymmetric Growth of Gold Nanorods. Solid Mechanics and Its Applications, 2009, , 199-210.	0.1	0
31	Influence of the nature of quantum dot surface cations on interactions with DNA. Journal of Inorganic Biochemistry, 2007, 101, 559-564.	1.5	26