

# Kuangwen Hsieh

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

52  
papers

1,839  
citations

21  
h-index

42  
g-index

66  
ext. papers

2,335  
ext. citations

8.7  
avg, IF

4.93  
L-index

#	Paper	IF	Citations
52	A Cascaded Droplet Microfluidic Platform Enables High-Throughput Single Cell Antibiotic Susceptibility Testing at Scale.. <i>Small Methods</i> , <b>2022</b> , 6, e2101254	12.8	2
51	Magnetofluidic immuno-PCR for point-of-care COVID-19 serological testing. <i>Biosensors and Bioelectronics</i> , <b>2022</b> , 195, 113656	11.8	2
50	A Portable Droplet Magnetofluidic Device for Point-of-Care Detection of Multidrug-Resistant .. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2022</b> , 10, 826694	5.8	0
49	A vacuum-assisted, highly parallelized microfluidic array for performing multi-step digital assays. <i>Lab on A Chip</i> , <b>2021</b> , 21, 4716-4724	7.2	1
48	Toward Decentralizing Antibiotic Susceptibility Testing via Ready-to-Use Microwell Array and Resazurin-Aided Colorimetric Readout. <i>Analytical Chemistry</i> , <b>2021</b> , 93, 1260-1265	7.8	3
47	A Highly Sensitive Point-of-Care Covid-19 Serological Test using Immuno-PCR in 35 Mins <b>2021</b> ,		1
46	Portable Magnetofluidic Device for Point-of-Need Detection of African Swine Fever. <i>Analytical Chemistry</i> , <b>2021</b> , 93, 10940-10946	7.8	1
45	Digital CRISPR/Cas-Assisted Assay for Rapid and Sensitive Detection of SARS-CoV-2. <i>Advanced Science</i> , <b>2021</b> , 8, 2003564	13.6	36
44	Digital electrical impedance analysis for single bacterium sensing and antimicrobial susceptibility testing. <i>Lab on A Chip</i> , <b>2021</b> , 21, 1073-1083	7.2	2
43	Droplet-Based Single-Cell Measurements of 16S rRNA Enable Integrated Bacteria Identification and Pheno-Molecular Antimicrobial Susceptibility Testing from Clinical Samples in 30min. <i>Advanced Science</i> , <b>2021</b> , 8, 2003419	13.6	7
42	Point-of-care CRISPR-Cas-assisted SARS-CoV-2 detection in an automated and portable droplet magnetofluidic device. <i>Biosensors and Bioelectronics</i> , <b>2021</b> , 190, 113390	11.8	23
41	Facile syringe filter-enabled bacteria separation, enrichment, and buffer exchange for clinical isolation-free digital detection and characterization of bacterial pathogens in urine. <i>Analyst, The</i> , <b>2021</b> , 146, 2475-2483	5	2
40	Applying biosensor development concepts to improve preamplification-free CRISPR/Cas12a-Dx. <i>Analyst, The</i> , <b>2020</b> , 145, 4880-4888	5	16
39	Electrode-Free Concentration and Recovery of DNA at Physiologically Relevant Ionic Concentrations. <i>Analytical Chemistry</i> , <b>2020</b> , 92, 6150-6157	7.8	1
38	Facile Coupling of Droplet Magnetofluidic-Enabled Automated Sample Preparation for Digital Nucleic Acid Amplification Testing and Analysis. <i>Analytical Chemistry</i> , <b>2020</b> , 92, 13254-13261	7.8	3
37	Nanoarray Digital Polymerase Chain Reaction with High-Resolution Melt for Enabling Broad Bacteria Identification and Pheno-Molecular Antimicrobial Susceptibility Test. <i>Analytical Chemistry</i> , <b>2019</b> , 91, 12784-12792	7.8	32
36	Optimizing peptide nucleic acid probes for hybridization-based detection and identification of bacterial pathogens. <i>Analyst, The</i> , <b>2019</b> , 144, 1565-1574	5	21

35	Emerging Analytical Techniques for Rapid Pathogen Identification and Susceptibility Testing. <i>Annual Review of Analytical Chemistry</i> , <b>2019</b> , 12, 41-67	12.5	19
34	Customizing droplet contents and dynamic ranges via integrated programmable picodroplet assembler. <i>Microsystems and Nanoengineering</i> , <b>2019</b> , 5, 22	7.7	7
33	Advances in Directly Amplifying Nucleic Acids from Complex Samples. <i>Biosensors</i> , <b>2019</b> , 9,	5.9	12
32	Programmable microfluidic genotyping of plant DNA samples for marker-assisted selection. <i>Microsystems and Nanoengineering</i> , <b>2018</b> , 4,	7.7	6
31	Rapid Microbiology Screening in Pharmaceutical Workflows. <i>SLAS Technology</i> , <b>2018</b> , 23, 387-394	3	7
30	Integrated Bacterial Identification and Antimicrobial Susceptibility Testing for Polymicrobial Infections Using Digital PCR and Digital High-Resolution Melt in a Microfluidic Array Platform. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2018</b> , 2018, 5314-5319	0.9	0
29	Ratiometric Fluorescence Coding for Multiplex Nucleic Acid Amplification Testing. <i>Analytical Chemistry</i> , <b>2018</b> , 90, 12180-12186	7.8	8
28	Droplet microfluidics for high-sensitivity and high-throughput detection and screening of disease biomarkers. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , <b>2018</b> , 10, e1522	9.2	36
27	Simple and Precise Counting of Viable Bacteria by Resazurin-Amplified Picoarray Detection. <i>Analytical Chemistry</i> , <b>2018</b> , 90, 9449-9456	7.8	33
26	Integrated Bacterial Identification and Antimicrobial Susceptibility Testing Using PCR and High-Resolution Melt. <i>Analytical Chemistry</i> , <b>2017</b> , 89, 11529-11536	7.8	41
25	Spatially encoded picoliter droplet groups for high-throughput combinatorial analysis <b>2017</b> ,		1
24	Accelerating bacterial growth detection and antimicrobial susceptibility assessment in integrated picoliter droplet platform. <i>Biosensors and Bioelectronics</i> , <b>2017</b> , 97, 260-266	11.8	65
23	A parallelized microfluidic DNA bisulfite conversion module for streamlined methylation analysis. <i>Biomedical Microdevices</i> , <b>2016</b> , 18, 5	3.7	16
22	Integrated electrochemical microsystems for genetic detection of pathogens at the point of care. <i>Accounts of Chemical Research</i> , <b>2015</b> , 48, 911-20	24.3	116
21	An integrated microfluidic platform for negative selection and enrichment of cancer cells. <i>Journal of Micromechanics and Microengineering</i> , <b>2015</b> , 25, 084007	2	13
20	Enhancing Throughput of Combinatorial Droplet Devices via Droplet Bifurcation, Parallelized Droplet Fusion, and Parallelized Detection. <i>Micromachines</i> , <b>2015</b> , 6, 1490-1504	3.3	5
19	Microfluidic platforms for discovery and detection of molecular biomarkers. <i>Microfluidics and Nanofluidics</i> , <b>2014</b> , 16, 941-963	2.8	13
18	Simultaneous elimination of carryover contamination and detection of DNA with uracil-DNA-glycosylase-supplemented loop-mediated isothermal amplification (UDG-LAMP). <i>Chemical Communications</i> , <b>2014</b> , 50, 3747-9	5.8	110

17	Accurate Zygote-Specific Discrimination of Single-Nucleotide Polymorphisms Using Microfluidic Electrochemical DNA Melting Curves. <i>Angewandte Chemie</i> , <b>2014</b> , 126, 3227-3231	3.6	10
16	Accurate zygote-specific discrimination of single-nucleotide polymorphisms using microfluidic electrochemical DNA melting curves. <i>Angewandte Chemie - International Edition</i> , <b>2014</b> , 53, 3163-7	16.4	22
15	Real-time, aptamer-based tracking of circulating therapeutic agents in living animals. <i>Science Translational Medicine</i> , <b>2013</b> , 5, 213ra165	17.5	202
14	Electrochemical real-time nucleic acid amplification: towards point-of-care quantification of pathogens. <i>Trends in Biotechnology</i> , <b>2013</b> , 31, 704-12	15.1	50
13	Wash-free, electrochemical platform for the quantitative, multiplexed detection of specific antibodies. <i>Analytical Chemistry</i> , <b>2012</b> , 84, 1098-103	7.8	57
12	Quantification of transcription factor binding in cell extracts using an electrochemical, structure-switching biosensor. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 3346-8	16.4	71
11	Rapid, Sensitive, and Quantitative Detection of Pathogenic DNA at the Point of Care through Microfluidic Electrochemical Quantitative Loop-Mediated Isothermal Amplification. <i>Angewandte Chemie</i> , <b>2012</b> , 124, 4980-4984	3.6	55
10	Rapid, sensitive, and quantitative detection of pathogenic DNA at the point of care through microfluidic electrochemical quantitative loop-mediated isothermal amplification. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 4896-900	16.4	193
9	Polarity-Switching Electrochemical Sensor for Specific Detection of Single-Nucleotide Mismatches. <i>Angewandte Chemie</i> , <b>2011</b> , 123, 11372-11376	3.6	6
8	Polarity-switching electrochemical sensor for specific detection of single-nucleotide mismatches. <i>Angewandte Chemie - International Edition</i> , <b>2011</b> , 50, 11176-80	16.4	49
7	Genetic analysis of H1N1 influenza virus from throat swab samples in a microfluidic system for point-of-care diagnostics. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 9129-35	16.4	160
6	Electrochemical DNA detection via exonuclease and target-catalyzed transformation of surface-bound probes. <i>Langmuir</i> , <b>2010</b> , 26, 10392-6	4	70
5	Controlled delivery of DNA origami on patterned surfaces. <i>Small</i> , <b>2009</b> , 5, 1942-6	11	76
4	Integrated microfluidic electrochemical DNA sensor. <i>Analytical Chemistry</i> , <b>2009</b> , 81, 6503-8	7.8	114
3	Manipulation of magnetic particles by patterned arrays of magnetic spin-valve traps. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2007</b> , 311, 401-404	2.8	20
2	Compliant electrodes based on platinum salt reduction in a urethane matrix. <i>Smart Materials and Structures</i> , <b>2007</b> , 16, S272-S279	3.4	9
1	Novel compliant electrodes based on platinum salt reduction <b>2006</b> , 6168, 474		5