

Kuangwen Hsieh

List of Publications by Year in descending order

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Version: 2024-02-01

60
papers

2,676
citations

236912

25
h-index

189881

50
g-index

66
all docs

66
docs citations

66
times ranked

3554
citing authors

#	ARTICLE	IF	CITATIONS
1	Real-Time, Aptamer-Based Tracking of Circulating Therapeutic Agents in Living Animals. <i>Science Translational Medicine</i> , 2013, 5, 213ra165.	12.4	291
2	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> , 2012, 51, 4896-4900.	13.8	230
3	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> , 2011, 133, 9129-9135.	13.7	178
4	Simultaneous elimination of carryover contamination and detection of DNA with uracil-DNA-glycosylase-supplemented loop-mediated isothermal amplification (UDG-LAMP). <i>Chemical Communications</i> , 2014, 50, 3747.	4.1	146
5	Integrated Electrochemical Microsystems for Genetic Detection of Pathogens at the Point of Care. <i>Accounts of Chemical Research</i> , 2015, 48, 911-920.	15.6	135
6	Integrated Microfluidic Electrochemical DNA Sensor. <i>Analytical Chemistry</i> , 2009, 81, 6503-6508.	6.5	130
7	Digital CRISPR/Cas-Assisted Assay for Rapid and Sensitive Detection of SARS-CoV-2. <i>Advanced Science</i> , 2021, 8, 2003564.	11.2	116
8	Accelerating bacterial growth detection and antimicrobial susceptibility assessment in integrated picoliter droplet platform. <i>Biosensors and Bioelectronics</i> , 2017, 97, 260-266.	10.1	112
9	Quantification of Transcription Factor Binding in Cell Extracts Using an Electrochemical, Structure-Switching Biosensor. <i>Journal of the American Chemical Society</i> , 2012, 134, 3346-3348.	13.7	81
10	Controlled Delivery of DNA Origami on Patterned Surfaces. <i>Small</i> , 2009, 5, 1942-1946.	10.0	80
11	Electrochemical DNA Detection via Exonuclease and Target-Catalyzed Transformation of Surface-Bound Probes. <i>Langmuir</i> , 2010, 26, 10392-10396.	3.5	72
12	Simple and Precise Counting of Viable Bacteria by Resazurin-Amplified Picoarray Detection. <i>Analytical Chemistry</i> , 2018, 90, 9449-9456.	6.5	65
13	Point-of-care CRISPR-Cas-assisted SARS-CoV-2 detection in an automated and portable droplet magnetofluidic device. <i>Biosensors and Bioelectronics</i> , 2021, 190, 113390.	10.1	65
14	Wash-free, Electrochemical Platform for the Quantitative, Multiplexed Detection of Specific Antibodies. <i>Analytical Chemistry</i> , 2012, 84, 1098-1103.	6.5	64
15	Electrochemical real-time nucleic acid amplification: towards point-of-care quantification of pathogens. <i>Trends in Biotechnology</i> , 2013, 31, 704-712.	9.3	63
16	Nanoarray Digital Polymerase Chain Reaction with High-Resolution Melt for Enabling Broad Bacteria Identification and Phenotypic Molecular Antimicrobial Susceptibility Test. <i>Analytical Chemistry</i> , 2019, 91, 12784-12792.	6.5	63
17	Integrated Bacterial Identification and Antimicrobial Susceptibility Testing Using PCR and High-Resolution Melt. <i>Analytical Chemistry</i> , 2017, 89, 11529-11536.	6.5	61
18	Droplet microfluidics for high-sensitivity and high-throughput detection and screening of disease biomarkers. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2018, 10, e1522.	6.1	60

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19	Polarity-Switching Electrochemical Sensor for Specific Detection of Single-Nucleotide Mismatches. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 11176-11180.	13.8	51
20	Emerging Analytical Techniques for Rapid Pathogen Identification and Susceptibility Testing. <i>Annual Review of Analytical Chemistry</i> , 2019, 12, 41-67.	5.4	45
21	Applying biosensor development concepts to improve preamplification-free CRISPR/Cas12a-Dx. <i>Analyst</i> , 2020, 145, 4880-4888.	3.5	30
22	Accurate Zygote-Specific Discrimination of Single-Nucleotide Polymorphisms Using Microfluidic Electrochemical DNA Melting Curves. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 3163-3167.	13.8	29
23	Droplet-Based Single-Cell Measurements of 16S rRNA Enable Integrated Bacteria Identification and Phenotypic Molecular Antimicrobial Susceptibility Testing from Clinical Samples in 30 min. <i>Advanced Science</i> , 2021, 8, 2003419.	11.2	29
24	Advances in Directly Amplifying Nucleic Acids from Complex Samples. <i>Biosensors</i> , 2019, 9, 117.	4.7	27
25	Optimizing peptide nucleic acid probes for hybridization-based detection and identification of bacterial pathogens. <i>Analyst</i> , 2019, 144, 1565-1574.	3.5	27
26	Manipulation of magnetic particles by patterned arrays of magnetic spin-valve traps. <i>Journal of Magnetism and Magnetic Materials</i> , 2007, 311, 401-404.	2.3	23
27	A parallelized microfluidic DNA bisulfite conversion module for streamlined methylation analysis. <i>Biomedical Microdevices</i> , 2016, 18, 5.	2.8	22
28	Customizing droplet contents and dynamic ranges via integrated programmable picodroplet assembler. <i>Microsystems and Nanoengineering</i> , 2019, 5, 22.	7.0	20
29	Combating Antimicrobial Resistance via Single-Cell Diagnostic Technologies Powered by Droplet Microfluidics. <i>Accounts of Chemical Research</i> , 2022, 55, 123-133.	15.6	19
30	Microfluidic platforms for discovery and detection of molecular biomarkers. <i>Microfluidics and Nanofluidics</i> , 2014, 16, 941-963.	2.2	18
31	Digital electrical impedance analysis for single bacterium sensing and antimicrobial susceptibility testing. <i>Lab on A Chip</i> , 2021, 21, 1073-1083.	6.0	18
32	Magnetofluidic immuno-PCR for point-of-care COVID-19 serological testing. <i>Biosensors and Bioelectronics</i> , 2022, 195, 113656.	10.1	18
33	Toward Decentralizing Antibiotic Susceptibility Testing via Ready-to-Use Microwell Array and Resazurin-Aided Colorimetric Readout. <i>Analytical Chemistry</i> , 2021, 93, 1260-1265.	6.5	17
34	A Cascaded Droplet Microfluidic Platform Enables High-Throughput Single Cell Antibiotic Susceptibility Testing at Scale. <i>Small Methods</i> , 2022, 6, e2101254.	8.6	17
35	Ratiometric Fluorescence Coding for Multiplex Nucleic Acid Amplification Testing. <i>Analytical Chemistry</i> , 2018, 90, 12180-12186.	6.5	16
36	An integrated microfluidic platform for negative selection and enrichment of cancer cells. <i>Journal of Micromechanics and Microengineering</i> , 2015, 25, 084007.	2.6	15

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37	Portable Magnetofluidic Device for Point-of-Need Detection of African Swine Fever. <i>Analytical Chemistry</i> , 2021, 93, 10940-10946.	6.5	13
38	Bridging the gap between development of point-of-care nucleic acid testing and patient care for sexually transmitted infections. <i>Lab on A Chip</i> , 2022, 22, 476-511.	6.0	13
39	Combinatorial nanodroplet platform for screening antibiotic combinations. <i>Lab on A Chip</i> , 2022, 22, 621-631.	6.0	12
40	Programmable microfluidic genotyping of plant DNA samples for marker-assisted selection. <i>Microsystems and Nanoengineering</i> , 2018, 4, .	7.0	11
41	Facile Coupling of Droplet Magnetofluidic-Enabled Automated Sample Preparation for Digital Nucleic Acid Amplification Testing and Analysis. <i>Analytical Chemistry</i> , 2020, 92, 13254-13261.	6.5	11
42	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</i> , The, 2021, 146, 2475-2483.	3.5	11
43	Filtration-assisted magnetofluidic cartridge platform for HIV RNA detection from blood. <i>Lab on A Chip</i> , 2022, 22, 945-953.	6.0	11
44	Compliant electrodes based on platinum salt reduction in a urethane matrix. <i>Smart Materials and Structures</i> , 2007, 16, S272-S279.	3.5	10
45	Rapid Microbiology Screening in Pharmaceutical Workflows. <i>SLAS Technology</i> , 2018, 23, 387-394.	1.9	10
46	A vacuum-assisted, highly parallelized microfluidic array for performing multi-step digital assays. <i>Lab on A Chip</i> , 2021, 21, 4716-4724.	6.0	7
47	Enhancing Throughput of Combinatorial Droplet Devices via Droplet Bifurcation, Parallelized Droplet Fusion, and Parallelized Detection. <i>Micromachines</i> , 2015, 6, 1490-1504.	2.9	6
48	Novel compliant electrodes based on platinum salt reduction. , 2006, 6168, 474.		5
49	Electrode-Free Concentration and Recovery of DNA at Physiologically Relevant Ionic Concentrations. <i>Analytical Chemistry</i> , 2020, 92, 6150-6157.	6.5	4
50	Ratiometric PCR in a Portable Sample-to-Result Device for Broad-Based Pathogen Identification. <i>Analytical Chemistry</i> , 0, , .	6.5	4
51	Emerging platforms for high-throughput enzymatic bioassays. <i>Trends in Biotechnology</i> , 2023, 41, 120-133.	9.3	4
52	A Portable Droplet Magnetofluidic Device for Point-of-Care Detection of Multidrug-Resistant <i>Candida auris</i> . <i>Frontiers in Bioengineering and Biotechnology</i> , 2022, 10, 826694.	4.1	3
53	Spatially encoded picoliter droplet groups for high-throughput combinatorial analysis. , 2017, , .		1
54	Integrated Bacterial Identification and Antimicrobial Susceptibility Testing for Polymicrobial Infections Using Digital PCR and Digital High-Resolution Melt in a Microfluidic Array Platform. , 2018, 2018, 5346-5349.		1

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55	Rapid Pathogen Detection and Antimicrobial Susceptibility Assessment from Urine Samples Via Amplification-Free Detection of Ribosomal RNA of Single-Bacteria. , 2019, , .		1
56	A Tubing-Free Sample-to-Droplet Interface Enables Facile Sample Loading of Droplet Microfluidics Device Toward High-Throughput Screening. , 2021, , .		1
57	A Highly Sensitive Point-of-Care Covid-19 Serological Test using Immuno-PCR in 35 Mins. , 2021, , .		1
58	A Programmable Nanodroplet Device with Direct Sample-to-Droplet Interface toward High-Throughput Screening. , 2020, , .		1
59	DropPNA-GO: A Single-cell Uropathogen Sensor Based on PNA Probes and Graphene Oxide in Picoliter Droplets. , 2020, , .		0
60	Robotic Printed Combinatorial Droplet (RoboDrop) for Antibiotic Combination Screening. , 2022, , .		0