# Weihua Guan

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6432254/publications.pdf

Version: 2024-02-01

| | | 270111 | 206121 |
|---|---|---|---|
| 68 | 2,656 | 25 | 51 |
| papers | citations | h-index | g-index |

| | | | |
|---|---|---|---|
| 69 | 69 | 69 | 3613 |
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Rapid detection of novel coronavirus SARS-CoV-2 by RT-LAMP coupled solid-state nanopores. Biosensors and Bioelectronics, 2022, 197, 113759. | 5.3 | 18 |
| 2 | An Ultracompact Real-Time Fluorescence Loop-Mediated Isothermal Amplification (LAMP) Analyzer. Methods in Molecular Biology, 2022, 2393, 257-278. | 0.4 | 3 |
| 3 | Sample-to-Answer Microfluidic Nucleic Acid Testing (NAT) on Lab-on-a-Disc for Malaria Detection at Point of Need. Methods in Molecular Biology, 2022, 2393, 297-313. | 0.4 | 5 |
| 4 | Rolling Circle Amplification-Coupled Glass Nanopore Counting of Mild Traumatic Brain Injury-Related Salivary miRNAs. Analytical Chemistry, 2022, 94, 3865-3871. | 3.2 | 6 |
| 5 | Figure of Merit for CRISPR-Based Nucleic Acid-Sensing Systems: Improvement Strategies and Performance Comparison. ACS Sensors, 2022, 7, 900-911. | 4.0 | 16 |
| 6 | Fingerpick Blood-Based Nucleic Acid Testing on A USB Interfaced Device towards HIV self-testing. Biosensors and Bioelectronics, 2022, 209, 114255. | 5.3 | 20 |
| 7 | On Stochastic Reduction in Laser-Assisted Dielectric Breakdown for Programmable Nanopore Fabrication. ACS Applied Materials & Interfaces, 2021, 13, 13383-13391. | 4.0 | 5 |
| 8 | CRISPR-based detection of SARS-CoV-2: A review from sample to result. Biosensors and Bioelectronics, 2021, 178, 113012. | 5.3 | 94 |
| 9 | Nanofluidic charged-coupled devices for controlled DNA transport and separation. Nanotechnology, 2021, 32, 345501. | 1.3 | 4 |
| 10 | Detection of SARS-CoV-2 with Solid-State CRISPR-Cas12a-Assisted Nanopores. Nano Letters, 2021, 21, 8393-8400. | 4.5 | 42 |
| 11 | Microfluidic high-throughput single-cell mechanotyping: Devices and applications. Nami Jishu Yu Jingmi Gongcheng/Nanotechnology and Precision Engineering, 2021, 4, . | 1.7 | 10 |
| 12 | Noise in nanopore sensors: Sources, models, reduction, and benchmarking. Nami Jishu Yu Jingmi Gongcheng/Nanotechnology and Precision Engineering, 2020, 3, 9-17. | 1.7 | 37 |
| 13 | Direct Observation of Redox-Induced Bubble Generation and Nanopore Formation Dynamics in Controlled Dielectric Breakdown. ACS Applied Electronic Materials, 2020, 2, 2954-2960. | 2.0 | 10 |
| 14 | Sequence-Specific Recognition of HIV-1 DNA with Solid-State CRISPR-Cas12a-Assisted Nanopores (SCAN). ACS Sensors, 2020, 5, 1273-1280. | 4.0 | 88 |
| 15 | Foreword to the special issue on micro/nano biosensors. Nami Jishu Yu Jingmi Gongcheng/Nanotechnology and Precision Engineering, 2020, 3, 1. | 1.7 | 1 |
| 16 | Confocal scanning photoluminescence for mapping electron and photon beam-induced microscopic changes in SiN <sub>x</sub>  during nanopore fabrication. Nanotechnology, 2020, 31, 395202. | 1.3 | 6 |
| 17 | Microfluidic deformability-activated sorting of single particles. Microsystems and Nanoengineering, 2020, 6, 11. | 3.4 | 13 |
| 18 | Calibration-Free Nanopore Digital Counting of Single Molecules. Analytical Chemistry, 2019, 91, 11178-11184. | 3.2 | 18 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Microfluidic Time-Division Multiplexing Accessing Resistive Pulse Sensor for Particle Analysis. ACS Sensors, 2019, 4, 1957-1963. | 4.0 | 12 |
| 20 | Quantitative Analysis of Factors Affecting the Event Rate in Glass Nanopore Sensors. ACS Sensors, 2019, 4, 3007-3013. | 4.0 | 12 |
| 21 | Non-Centrifugal Microfluidic Nucleic Acid Testing on Lab-on-a-Disc. , 2019, , . | | 0 |
| 22 | False Negative And False Positive Free Nanopore Fabrication Via Adaptive Learning Of The Controlled Dielectric Breakdown. , 2019, , . | | 2 |
| 23 | Loop-Mediated Isothermal Amplification-Coupled Glass Nanopore Counting Toward Sensitive and Specific Nucleic Acid Testing. Nano Letters, 2019, 19, 7927-7934. | 4.5 | 32 |
| 24 | Microfluidic multiple cross-correlated Coulter counter for improved particle size analysis. Sensors and Actuators B: Chemical, 2019, 296, 126615. | 4.0 | 22 |
| 25 | Nanopore Digital Counting of Amplicons for Ultrasensitive Electronic DNA Detection. , 2019, , . | | 0 |
| 26 | Calibration-Free Electrical Quantification of Single Molecules Using Nanopore Digital Counting. , 2019, , . | | 0 |
| 27 | Live Demonstration: Sample-to-Answer Nucleic Acid Testing Device for Point-of-Care Applications. , 2019, , . | | 0 |
| 28 | Time-division multiplexed resistive pulse sensor on a microfluidic chip. , 2019, , . | | 0 |
| 29 | High fidelity moving Z-score based controlled breakdown fabrication of solid-state nanopore. Nanotechnology, 2019, 30, 095502. | 1.3 | 23 |
| 30 | Older Adultsâ€™ Utilization of Community Resources Targeting Fall Prevention and Physical Activity. Gerontologist, The, 2019, 59, 436-446. | 2.3 | 12 |
| 31 | Sample-to-answer palm-sized nucleic acid testing device towards low-cost malaria mass screening. Biosensors and Bioelectronics, 2018, 115, 83-90. | 5.3 | 46 |
| 32 | Kirigamiâ€Inspired 3D Organic Lightâ€Emitting Diode (OLED) Lighting Concepts. Advanced Materials Technologies, 2018, 3, 1800067. | 3.0 | 11 |
| 33 | High-throughput and label-free parasitemia quantification and stage determination for plasmodium falciparum-infected red blood cells. , 2017, , . | | 0 |
| 34 | Extended Gate Field-Effect Transistor Biosensors for Point-Of-Care Testing of Uric Acid. Methods in Molecular Biology, 2017, 1572, 189-203. | 0.4 | 0 |
| 35 | High-throughput and label-free parasitemia quantification and stage differentiation for malaria-infected red blood cells. Biosensors and Bioelectronics, 2017, 98, 408-414. | 5.3 | 26 |
| 36 | Arbitrarily Accessible 3D Microfluidic Device for Combinatorial High-Throughput Drug Screening. Sensors, 2016, 16, 1616. | 2.1 | 19 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Mobile all-in-one malaria molecular diagnosis for field deployment in resource-limited areas. , 2016, , . | | 0 |
| 38 | A field-deployable mobile molecular diagnostic system for malaria at the point of need. Lab on A Chip, 2016, 16, 4341-4349. | 3.1 | 39 |
| 39 | Older Adultsâ€™ Experiences Using a Commercially Available Monitor to Self-Track Their Physical Activity. JMIR MHealth and UHealth, 2016, 4, e35. | 1.8 | 117 |
| 40 | Droplet Digital Enzyme-Linked Oligonucleotide Hybridization Assay for Absolute RNA Quantification. Scientific Reports, 2015, 5, 13795. | 1.6 | 28 |
| 41 | Direct Observation of Charge Inversion in Divalent Nanofluidic Devices. Nano Letters, 2015, 15, 5046-5051. | 4.5 | 74 |
| 42 | Digital droplet ELOHA for nucleic acid molecule counting and analysis. , 2015, , . | | 0 |
| 43 | Voltage gated ion and molecule transport in engineered nanochannels: theory, fabrication and applications. Nanotechnology, 2014, 25, 122001. | 1.3 | 71 |
| 44 | Highly specific and sensitive non-enzymatic determination of uric acid in serum and urine by extended gate field effect transistor sensors. Biosensors and Bioelectronics, 2014, 51, 225-231. | 5.3 | 69 |
| 45 | Quantitative probing of surface charges at dielectricâ€“electrolyte interfaces. Lab on A Chip, 2013, 13, 1431. | 3.1 | 25 |
| 46 | Fabrication and characterization of field effect reconfigurable nanofluidic ionic diodes: Towards digitally-programmed manipulation of biomolecules. , 2012, , . | | 0 |
| 47 | Electric Field Modulation of the Membrane Potential in Solid-State Ion Channels. Nano Letters, 2012, 12, 6441-6447. | 4.5 | 47 |
| 48 | Tunable Aqueous Virtual Micropore. Small, 2012, 8, 907-912. | 5.2 | 8 |
| 49 | Field-effect reconfigurable nanofluidic ionic diodes. Nature Communications, 2011, 2, 506. | 5.8 | 211 |
| 50 | Non-vanishing ponderomotive AC electrophoretic effect for particle trapping. Nanotechnology, 2011, 22, 245103. | 1.3 | 7 |
| 51 | Paul trapping of charged particles in aqueous solution. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 9326-9330. | 3.3 | 48 |
| 52 | A long DNA segment in a linear nanoscale Paul trap. Nanotechnology, 2010, 21, 015103. | 1.3 | 18 |
| 53 | Multilevel resistive switching with ionic and metallic filaments. Applied Physics Letters, 2009, 94, . | 1.5 | 152 |
| 54 | Resistive switching characteristics of MnO<sub>x</sub>-based ReRAM. Journal Physics D: Applied Physics, 2009, 42, 055112. | 1.3 | 67 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Resistance Switching Characteristics of Zirconium Oxide Containing Gold Nanocrystals for Nonvolatile Memory Applications. Journal of Nanoscience and Nanotechnology, 2009, 9, 723-726. | 0.9 | 1 |
| 56 | Charge storage characteristics of metal-induced nanocrystalline in erbium-doped amorphous silicon films. Thin Solid Films, 2008, 516, 7657-7660. | 0.8 | 3 |
| 57 | Resistive switching memory effect of ZrO2 films with Zr+ implanted. Applied Physics Letters, 2008, 92, . | 1.5 | 235 |
| 58 | Nonpolar Nonvolatile Resistive Switching in Cu Doped $hbox{ZrO}_{2}$. IEEE Electron Device Letters, 2008, 29, 434-437. | 2.2 | 260 |
| 59 | On the resistive switching mechanisms of Cu/ZrO2:Cu/Pt. Applied Physics Letters, 2008, 93, . | 1.5 | 190 |
| 60 | Resistance switching of Au-implanted-ZrO2 film for nonvolatile memory application. Journal of Applied Physics, 2008, 104, . | 1.1 | 39 |
| 61 | Excellent resistive switching characteristics of Cu doped ZrO<inf>2</inf> and its 64 bit cross-point integration. , 2008, , . | | 1 |
| 62 | Organic thin-film transistor memory with gold nanocrystals embedded in polyimide gate dielectric. Journal Physics D: Applied Physics, 2008, 41, 135111. | 1.3 | 51 |
| 63 | Nonvolatile resistive switching characteristics of HfO2 with Cu doping. Materials Research Society Symposia Proceedings, 2008, 1071, 1. | 0.1 | 3 |
| 64 | Comparison of discrete-storage nonvolatile memories: advantage of hybrid method for fabrication of Au nanocrystal nonvolatile memory. Journal Physics D: Applied Physics, 2008, 41, 035109. | 1.3 | 8 |
| 65 | Fabrication and charging characteristics of MOS capacitor structure with metal nanocrystals embedded in gate oxide. Journal Physics D: Applied Physics, 2007, 40, 2754-2758. | 1.3 | 56 |
| 66 | Nonvolatile resistive switching memory utilizing gold nanocrystals embedded in zirconium oxide. Applied Physics Letters, 2007, 91, 062111. | 1.5 | 182 |
| 67 | Analysis of Charge Retention Characteristics for Metal and Semiconductor Nanocrystal Non-volatile Memories. , 2007, , . | | 0 |
| 68 | Modeling of retention characteristics for metal and semiconductor nanocrystal memories. Solid-State Electronics, 2007, 51, 806-811. | 0.8 | 32 |