

Umer Hassan

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3143717/publications.pdf>

Version: 2024-02-01

42
papers

771
citations

759055

12
h-index

526166

27
g-index

45
all docs

45
docs citations

45
times ranked

1078
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Microfluidic CD4 and CD8 T Lymphocyte Counters for Point-of-Care HIV Diagnostics Using Whole Blood. <i>Science Translational Medicine</i> , 2013, 5, 214ra170. | 5.8 | 128 |
| 2 | Point-of-care sensors for the management of sepsis. <i>Nature Biomedical Engineering</i> , 2018, 2, 640-648. | 11.6 | 100 |
| 3 | Reducing noise by repetition: introduction to signal averaging. <i>European Journal of Physics</i> , 2010, 31, 453-465. | 0.3 | 62 |
| 4 | Combining Biomarkers with EMR Data to Identify Patients in Different Phases of Sepsis. <i>Scientific Reports</i> , 2017, 7, 10800. | 1.6 | 59 |
| 5 | Salvadora persica mediated synthesis of silver nanoparticles and their antimicrobial efficacy. <i>Scientific Reports</i> , 2021, 11, 5996. | 1.6 | 54 |
| 6 | Flow metering characterization within an electrical cell counting microfluidic device. <i>Lab on A Chip</i> , 2014, 14, 1469. | 3.1 | 45 |
| 7 | A microfluidic biochip for complete blood cell counts at the point-of-care. <i>Technology</i> , 2015, 03, 201-213. | 1.4 | 43 |
| 8 | Microfluidic differential immunocapture biochip for specific leukocyte counting. <i>Nature Protocols</i> , 2016, 11, 714-726. | 5.5 | 39 |
| 9 | Coincidence detection of heterogeneous cell populations from whole blood with coplanar electrodes in a microfluidic impedance cytometer. <i>Lab on A Chip</i> , 2014, 14, 4370-4381. | 3.1 | 32 |
| 10 | Electrical cell counting process characterization in a microfluidic impedance cytometer. <i>Biomedical Microdevices</i> , 2014, 16, 697-704. | 1.4 | 27 |
| 11 | A microfluidic biochip platform for electrical quantification of proteins. <i>Lab on A Chip</i> , 2018, 18, 1461-1470. | 3.1 | 26 |
| 12 | Smartphone-imaged microfluidic biochip for measuring CD64 expression from whole blood. <i>Analyst, The</i> , 2019, 144, 3925-3935. | 1.7 | 23 |
| 13 | Video-based spatial portraits of a nonlinear vibrating string. <i>American Journal of Physics</i> , 2012, 80, 862-869. | 0.3 | 13 |
| 14 | Design of a Multiplexed Analyte Biosensor using Digital Barcoded Particles and Impedance Spectroscopy. <i>Scientific Reports</i> , 2020, 10, 6109. | 1.6 | 12 |
| 15 | A modular microscopic smartphone attachment for imaging and quantification of multiple fluorescent probes using machine learning. <i>Analyst, The</i> , 2021, 146, 2531-2541. | 1.7 | 12 |
| 16 | Multivariate computational analysis of biosensor's data for improved CD64 quantification for sepsis diagnosis. <i>Lab on A Chip</i> , 2018, 18, 1231-1240. | 3.1 | 10 |
| 17 | Point-of-care diagnostics for sepsis enabled by multiplexed micro and nano sensing technologies. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2021, 13, e1701. | 3.3 | 10 |
| 18 | Time-domain signal averaging to improve microparticles detection and enumeration accuracy in a microfluidic impedance cytometer. <i>Biotechnology and Bioengineering</i> , 2021, 118, 4428-4440. | 1.7 | 9 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | De-novo fabrication of sunlight irradiated silver nanoparticles and their efficacy against E. coli and S. epidermidis. Scientific Reports, 2022, 12, 676. | 1.6 | 9 |
| 20 | Biochip with multi-planar electrodes geometry for differentiation of non-spherical bioparticles in a microchannel. Scientific Reports, 2021, 11, 11880. | 1.6 | 7 |
| 21 | Functionalization of hybrid surface microparticles for in vitro cellular antigen classification. Analytical and Bioanalytical Chemistry, 2021, 413, 555-564. | 1.9 | 6 |
| 22 | Circular shaped microelectrodes for single cell electrical measurements for lab-on-a-chip applications. Biomedical Microdevices, 2021, 23, 35. | 1.4 | 6 |
| 23 | Profiling single-cell level phagocytic activity distribution with blood lactate levels. RSC Advances, 2021, 11, 21315-21322. | 1.7 | 5 |
| 24 | Inexpensive Data Acquisition with a Sound Card. Physics Teacher, 2011, 49, 537-539. | 0.2 | 4 |
| 25 | A microfluidic technique to estimate antigen expression on particles. APL Bioengineering, 2017, 1, 016103. | 3.3 | 4 |
| 26 | Detecting sepsis by observing neutrophil motility. Nature Biomedical Engineering, 2018, 2, 197-198. | 11.6 | 4 |
| 27 | Smartphone Based Microfluidic Biosensor for Leukocyte Quantification at the Point-of-Care. , 2019, , . | | 4 |
| 28 | Point-of-Care 3-D Printed Spectrophotometer for Therapeutic Drug Monitoring in Tuberculosis Patients. , 2021, 5, 1-4. | | 4 |
| 29 | Exceedingly Sensitive Restructured Electrodes Design for Pathogen Morphology Detection using Impedance Flow Cytometry. , 2020, 2020, 2500-2503. | | 3 |
| 30 | Particle Quantification from a Smartphone-based Biosensor using Deep Convolutional Neural Network for Clinical Diagnosis. , 2022, , . | | 3 |
| 31 | Aluminum Oxide-Coated Particle Differentiation Employing Supervised Machine Learning and Impedance Cytometry. , 2022, , . | | 3 |
| 32 | Investigating properties of white noise in the undergraduate laboratory. European Journal of Physics, 2009, 30, 1143-1151. | 0.3 | 1 |
| 33 | Magnetic Phagocyte Quantification Framework for Point-of-Care Diagnostics. , 2019, , . | | 1 |
| 34 | Investigating Cell-Particle Conjugate Orientations in a Microfluidic Channel to Ameliorate Impedance-based Signal Acquisition and Detection*. , 2021, 2021, 7233-7236. | | 1 |
| 35 | Frequency-Time Domain (FTD) Impedance Data Analysis to Improve Accuracy of Microparticle Enumeration in a Microfluidic Electronic Counter. , 2021, 2021, 1201-1204. | | 1 |
| 36 | Bioelectronic Sensor with Magnetic Modulation to Quantify Phagocytic Activity of Blood Cells Employing Machine Learning. ACS Sensors, 2022, 7, 1936-1945. | 4.0 | 1 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Electrical flow metering of blood for point-of-care diagnostics. , 2012, 2012, 3255-7. | | 0 |
| 38 | Research Highlights: Highlights from the latest articles in nanomedicine. Nanomedicine, 2013, 8, 1369-1371. | 1.7 | 0 |
| 39 | Biomedical micro and nanotechnology: From lab-on-chip to building with cells. , 2013, , . | | 0 |
| 40 | Conjugated Barcoded Particles for Multiplexed Biomarker Quantification with a Microfluidic Biochip. , 2019, , . | | 0 |
| 41 | A Bioelectronic Hand-Held Spectrophotometer for Biospecimen Analysis for Global Health Applications. , 2022, , . | | 0 |
| 42 | Synthesis and Immobilization of Silver Nanoparticles on Filter Paper and Surgical Masks for Antimicrobial Applications. , 2022, , . | | 0 |