

Charles R Mace

List of Publications by Citations

Source: <https://exaly.com/author-pdf/8813480/charles-r-mace-publications-by-citations.pdf>

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

57
papers

1,816
citations

20
h-index

42
g-index

64
ext. papers

2,080
ext. citations

6.4
avg, IF

4.9
L-index

#	Paper	IF	Citations
57	Paper-based ELISA. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 4771-4	16.4	551
56	Separation of nanoparticles in aqueous multiphase systems through centrifugation. <i>Nano Letters</i> , 2012 , 12, 4060-4	11.5	166
55	Magnetic levitation in the analysis of foods and water. <i>Journal of Agricultural and Food Chemistry</i> , 2010 , 58, 6565-9	5.7	97
54	Aqueous multiphase systems of polymers and surfactants provide self-assembling step-gradients in density. <i>Journal of the American Chemical Society</i> , 2012 , 134, 9094-7	16.4	93
53	Measurement of the hematocrit using paper-based microfluidic devices. <i>Lab on A Chip</i> , 2016 , 16, 3689-94	7.2	62
52	A device architecture for three-dimensional, patterned paper immunoassays. <i>Lab on A Chip</i> , 2014 , 14, 4653-8	7.2	57
51	A proteomic biosensor for enteropathogenic E. coli. <i>Biosensors and Bioelectronics</i> , 2006 , 21, 1659-63	11.8	56
50	Measuring binding of protein to gel-bound ligands using magnetic levitation. <i>Journal of the American Chemical Society</i> , 2012 , 134, 5637-46	16.4	53
49	Beyond Wicking: Expanding the Role of Patterned Paper as the Foundation for an Analytical Platform. <i>Analytical Chemistry</i> , 2017 , 89, 5654-5664	7.8	52
48	Multiplexed, Patterned-Paper Immunoassay for Detection of Malaria and Dengue Fever. <i>Analytical Chemistry</i> , 2016 , 88, 6161-5	7.8	52
47	Analyzing forensic evidence based on density with magnetic levitation. <i>Journal of Forensic Sciences</i> , 2013 , 58, 40-5	1.8	46
46	Manufacturing prototypes for paper-based diagnostic devices. <i>Microfluidics and Nanofluidics</i> , 2014 , 16, 801-809	2.8	43
45	Enabling the Development and Deployment of Next Generation Point-of-Care Diagnostics. <i>PLoS Neglected Tropical Diseases</i> , 2015 , 9, e0003676	4.8	41
44	Magnetic Levitation in Chemistry, Materials Science, and Biochemistry. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 17810-17855	16.4	40
43	Theoretical and experimental analysis of arrayed imaging reflectometry as a sensitive proteomics technique. <i>Analytical Chemistry</i> , 2006 , 78, 5578-83	7.8	38
42	Enrichment of reticulocytes from whole blood using aqueous multiphase systems of polymers. <i>American Journal of Hematology</i> , 2015 , 90, 31-6	7.1	31
41	Denaturation of proteins by SDS and tetraalkylammonium dodecyl sulfates. <i>Langmuir</i> , 2011 , 27, 11560-74		25

40	Detection of human proteins using arrayed imaging reflectometry. <i>Biosensors and Bioelectronics</i> , 2008 , 24, 334-7	11.8	24
39	Detection of cardiovascular disease associated miR-29a using paper-based microfluidics and surface enhanced Raman scattering. <i>Analyst, The</i> , 2020 , 145, 983-991	5	24
38	Usability as a guiding principle for the design of paper-based, point-of-care devices - A review. <i>Analytica Chimica Acta</i> , 2020 , 1140, 236-249	6.6	20
37	Label-free, arrayed sensing of immune response to influenza antigens. <i>Talanta</i> , 2011 , 83, 1000-5	6.2	18
36	Validation of arrayed imaging reflectometry biosensor response for protein-antibody interactions: cross-correlation of theory, experiment, and complementary techniques. <i>Analytical Chemistry</i> , 2011 , 83, 3750-7	7.8	17
35	Investigation of non-nucleophilic additives for the reduction of morphological anomalies in protein arrays. <i>Langmuir</i> , 2008 , 24, 12754-7	4	16
34	Using Magnetic Levitation to Separate Mixtures of Crystal Polymorphs. <i>Angewandte Chemie</i> , 2013 , 125, 10398-10401	3.6	14
33	Overreliance on Cost Reduction as a Featured Element of Sensor Design. <i>ACS Sensors</i> , 2019 , 4, 1120-1125.2		12
32	Comparison of three indirect immunoassay formats on a common paper-based microfluidic device architecture. <i>Analytical Methods</i> , 2016 , 8, 5204-5211	3.2	12
31	An Open Software Platform for the Automated Design of Paper-Based Microfluidic Devices. <i>Scientific Reports</i> , 2017 , 7, 16224	4.9	12
30	Reduction of blood volume required to perform paper-based hematocrit assays guided by device design. <i>Analytical Methods</i> , 2019 , 11, 2057-2063	3.2	11
29	Enrichment and Recovery of Mammalian Cells from Contaminated Cultures Using Aqueous Two-Phase Systems. <i>Analytical Chemistry</i> , 2018 , 90, 2103-2110	7.8	10
28	Examining the interactions of the splicing factor MBNL1 with target RNA sequences via a label-free, multiplex method. <i>Analytical Chemistry</i> , 2014 , 86, 1067-75	7.8	10
27	Dual Sample Preconcentration for Simultaneous Quantification of Metal Ions Using Electrochemical and Colorimetric Assays. <i>ACS Sensors</i> , 2020 , 5, 3999-4008	9.2	10
26	Combining Step Gradients and Linear Gradients in Density. <i>Analytical Chemistry</i> , 2015 , 87, 6158-64	7.8	9
25	Scalable Methods for Device Patterning as an Outstanding Challenge in Translating Paper-Based Microfluidics from the Academic Benchtop to the Point-of-Care. <i>Journal of Analysis and Testing</i> , 2019 , 3, 50-60	3.2	7
24	Experimental and Theoretical Validation of System Variables That Control the Position of Particles at the Interface of Immiscible Liquids. <i>Langmuir</i> , 2018 , 34, 7673-7680	4	7
23	Directly Photopatternable Polythiophene as Dual-Tone Photoresist. <i>Macromolecules</i> , 2017 , 50, 7258-7267.5		6

22	A unique approach to business strategy as a means to enable change in global healthcare: a case study. <i>Clinical Chemistry</i> , 2012 , 58, 1302-5	5.5	6
21	Biophysical analysis of the EPEC translocated intimin receptor-binding domain. <i>Biochemical and Biophysical Research Communications</i> , 2007 , 362, 1073-8	3.4	6
20	High-Yielding Separation and Collection of Plasma from Whole Blood Using Passive Filtration. <i>Analytical Chemistry</i> , 2020 , 92, 16245-16252	7.8	6
19	Lateral Microscope Enables the Direct Observation of Cellular Interfaces and Quantification of Changes in Cell Morphology during Adhesion. <i>ACS Biomaterials Science and Engineering</i> , 2016 , 2, 1367-1375	5.5	6
18	Determination of sample stability for whole blood parameters using formal experimental design. <i>Analytical Methods</i> , 2019 , 11, 930-935	3.2	5
17	Reconfigurable Pipet for Customized, Cost-Effective Liquid Handling. <i>Analytical Chemistry</i> , 2017 , 89, 8656-8661	7.8	5
16	In situ hemolysis in a three-dimensional paper-based device for quantification of intraerythrocytic analytes. <i>Analytical Methods</i> , 2020 , 12, 281-287	3.2	5
15	Correlation of Cell Surface Biomarker Expression Levels with Adhesion Contact Angle Measured by Lateral Microscopy. <i>Analytical Chemistry</i> , 2018 , 90, 6572-6579	7.8	4
14	Fabrication of Three-dimensional Paper-based Microfluidic Devices for Immunoassays. <i>Journal of Visualized Experiments</i> , 2017 ,	1.6	4
13	Density separation of quiescent yeast using iodixanol. <i>BioTechniques</i> , 2017 , 63, 169-173	2.5	4
12	Early hMSC morphology and proliferation on model polyelectrolyte multilayers. <i>Colloids and Surfaces B: Biointerfaces</i> , 2019 , 178, 276-284	6	3
11	Open software platform for automated analysis of paper-based microfluidic devices. <i>Scientific Reports</i> , 2020 , 10, 11284	4.9	3
10	Thioether-stapled macrocyclic inhibitors of the EH domain of EHD1. <i>Bioorganic and Medicinal Chemistry</i> , 2018 , 26, 1206-1211	3.4	3
9	Single-Step Synthesis of Functional Organic Receptors via a Tridirectional Minisci Reaction. <i>Synthesis</i> , 2007 , 2007, 2287-2290	2.9	3
8	Magnetische Levitation in Chemie, Materialwissenschaft und Biochemie. <i>Angewandte Chemie</i> , 2020 , 132, 17962-18011	3.6	3
7	Developing a SARS-CoV-2 Antigen Test Using Engineered Affinity Proteins. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 38990-39002	9.5	3
6	Evidence for biological effects in the radiosensitization of leukemia cell lines by PEGylated gold nanoparticles. <i>Journal of Nanoparticle Research</i> , 2020 , 22, 1	2.3	2
5	Developing a SARS-CoV-2 Antigen Test Using Engineered Affinity Proteins. <i>ChemRxiv</i> , 2021 ,	4.4	2

4	Opportunities in the Synthesis and Design of Radioactive Thin Films and Nanoparticles. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 4017-4028	6.4	1
3	Antibody affinity as a driver of signal generation in a paper-based immunoassay for Ebola virus surveillance. <i>Analytical and Bioanalytical Chemistry</i> , 2021 , 413, 3695-3706	4.4	0
2	Patterned Dried Blood Spot Cards for the Improved Sampling of Whole Blood.. <i>ACS Measurement Science Au</i> , 2022 , 2, 31-38		0
1	Rapid Label-free Protein Detection Arrays on Coated Silicon Wafers. <i>Materials Research Society Symposia Proceedings</i> , 2006 , 951, 7		