

Charles Henry

List of Publications by Citations

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235
papers

12,750
citations

56
h-index

107
g-index

261
ext. papers

14,685
ext. citations

6.1
avg, IF

7.1
L-index

#	Paper	IF	Citations
235	Electrochemical detection for paper-based microfluidics. <i>Analytical Chemistry</i> , 2009 , 81, 5821-6	7.8	902
234	Recent developments in paper-based microfluidic devices. <i>Analytical Chemistry</i> , 2015 , 87, 19-41	7.8	843
233	A low-cost, simple, and rapid fabrication method for paper-based microfluidics using wax screen-printing. <i>Analyst, The</i> , 2011 , 136, 77-82	5	443
232	Development of a paper-based analytical device for colorimetric detection of select foodborne pathogens. <i>Analytical Chemistry</i> , 2012 , 84, 2900-7	7.8	346
231	Paper-Based Microfluidic Devices: Emerging Themes and Applications. <i>Analytical Chemistry</i> , 2017 , 89, 71-91	7.8	342
230	Use of multiple colorimetric indicators for paper-based microfluidic devices. <i>Analytica Chimica Acta</i> , 2010 , 674, 227-33	6.6	286
229	Dual-electrode electrochemical detection for poly(dimethylsiloxane)-fabricated capillary electrophoresis microchips. <i>Analytical Chemistry</i> , 2000 , 72, 3196-202	7.8	280
228	Dynamic coating using polyelectrolyte multilayers for chemical control of electroosmotic flow in capillary electrophoresis microchips. <i>Analytical Chemistry</i> , 2000 , 72, 5939-44	7.8	263
227	Multilayer paper-based device for colorimetric and electrochemical quantification of metals. <i>Analytical Chemistry</i> , 2014 , 86, 3555-62	7.8	256
226	Microfluidic paper-based analytical device for particulate metals. <i>Analytical Chemistry</i> , 2012 , 84, 4474-80	7.8	241
225	Simple, distance-based measurement for paper analytical devices. <i>Lab on A Chip</i> , 2013 , 13, 2397-404	7.2	237
224	Blood separation on microfluidic paper-based analytical devices. <i>Lab on A Chip</i> , 2012 , 12, 3392-8	7.2	236
223	Lab-on-paper with dual electrochemical/colorimetric detection for simultaneous determination of gold and iron. <i>Analytical Chemistry</i> , 2010 , 82, 1727-32	7.8	232
222	Multiplex Paper-Based Colorimetric DNA Sensor Using Pyrrolidinyl Peptide Nucleic Acid-Induced AgNPs Aggregation for Detecting MERS-CoV, MTB, and HPV Oligonucleotides. <i>Analytical Chemistry</i> , 2017 , 89, 5428-5435	7.8	219
221	Paper-based analytical devices for environmental analysis. <i>Analyst, The</i> , 2016 , 141, 1874-87	5	200
220	Sensitive electrochemical sensor using a graphene-polyaniline nanocomposite for simultaneous detection of Zn(II), Cd(II), and Pb(II). <i>Analytica Chimica Acta</i> , 2015 , 874, 40-8	6.6	194
219	Generation of hydrophilic poly(dimethylsiloxane) for high-performance microchip electrophoresis. <i>Analytical Chemistry</i> , 2006 , 78, 7446-52	7.8	185

218	Electrochemistry on Paper-based Analytical Devices: A Review. <i>Electroanalysis</i> , 2016 , 28, 1420-1436	3	182
217	Multiplexed paper analytical device for quantification of metals using distance-based detection. <i>Lab on A Chip</i> , 2015 , 15, 2808-18	7.2	170
216	Advances in microfluidics for environmental analysis. <i>Analyst, The</i> , 2012 , 137, 24-34	5	162
215	Electrochemical detection of glucose from whole blood using paper-based microfluidic devices. <i>Analytica Chimica Acta</i> , 2013 , 788, 39-45	6.6	159
214	Simple silver nanoparticle colorimetric sensing for copper by paper-based devices. <i>Talanta</i> , 2012 , 99, 552-7	6.2	151
213	Beyond the lateral flow assay: A review of paper-based microfluidics. <i>Microelectronic Engineering</i> , 2019 , 206, 45-54	2.5	146
212	Colorimetric and Electrochemical Bacteria Detection Using Printed Paper- and Transparency-Based Analytic Devices. <i>Analytical Chemistry</i> , 2017 , 89, 3613-3621	7.8	138
211	Electrochemical paper-based peptide nucleic acid biosensor for detecting human papillomavirus. <i>Analytica Chimica Acta</i> , 2017 , 952, 32-40	6.6	134
210	Electrochemical paper-based microfluidic devices. <i>Electrophoresis</i> , 2015 , 36, 1811-24	3.6	133
209	Highly Sensitive Detection of <i>Salmonella typhimurium</i> Using a Colorimetric Paper-Based Analytical Device Coupled with Immunomagnetic Separation. <i>Analytical Chemistry</i> , 2018 , 90, 1035-1043	7.8	127
208	Direct determination of carbohydrates, amino acids, and antibiotics by microchip electrophoresis with pulsed amperometric detection. <i>Analytical Chemistry</i> , 2003 , 75, 4778-83	7.8	122
207	One-step polymer screen-printing for microfluidic paper-based analytical device (PAD) fabrication. <i>Analyst, The</i> , 2014 , 139, 6580-8	5	121
206	Low cost, simple three dimensional electrochemical paper-based analytical device for determination of p-nitrophenol. <i>Electrochimica Acta</i> , 2014 , 130, 771-777	6.7	116
205	Electrochemical paper-based devices: sensing approaches and progress toward practical applications. <i>Lab on A Chip</i> , 2020 , 20, 9-34	7.2	109
204	Review: Microfluidic applications in metabolomics and metabolic profiling. <i>Analytica Chimica Acta</i> , 2009 , 653, 23-35	6.6	104
203	Advances in Paper-Based Analytical Devices. <i>Annual Review of Analytical Chemistry</i> , 2020 , 13, 85-109	12.5	97
202	A microfluidic paper-based analytical device for rapid quantification of particulate chromium. <i>Analytica Chimica Acta</i> , 2013 , 800, 50-5	6.6	83
201	Comparison of surfactants for dynamic surface modification of poly(dimethylsiloxane) microchips. <i>Electrophoresis</i> , 2005 , 26, 703-9	3.6	83

200	Sodium dodecyl sulfate-modified electrochemical paper-based analytical device for determination of dopamine levels in biological samples. <i>Analytica Chimica Acta</i> , 2012 , 744, 1-7	6.6	80
199	Role of Buffers in Protein Formulations. <i>Journal of Pharmaceutical Sciences</i> , 2017 , 106, 713-733	3.9	79
198	Simple and sensitive electrode design for microchip electrophoresis/electrochemistry. <i>Analytical Chemistry</i> , 2004 , 76, 1513-7	7.8	77
197	The analysis of uric acid in urine using microchip capillary electrophoresis with electrochemical detection. <i>Electrophoresis</i> , 2002 , 23, 767-73	3.6	75
196	Colloidal behavior of proteins: effects of the second virial coefficient on solubility, crystallization and aggregation of proteins in aqueous solution. <i>Current Pharmaceutical Biotechnology</i> , 2005 , 6, 427-36 ^{2.6}	2.6	75
195	Utilizing Paper-Based Devices for Antimicrobial-Resistant Bacteria Detection. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 6886-6890	16.4	74
194	Pesticide analysis using nanoceria-coated paper-based devices as a detection platform. <i>Analyst, The</i> , 2016 , 141, 1837-46	5	74
193	Electrochemical detection in paper-based analytical devices using microwire electrodes. <i>Analytica Chimica Acta</i> , 2015 , 891, 247-54	6.6	69
192	Selective Distance-Based K Quantification on Paper-Based Microfluidics. <i>Analytical Chemistry</i> , 2018 , 90, 4894-4900	7.8	69
191	Construction and electrochemical characterization of microelectrodes for improved sensitivity in paper-based analytical devices. <i>Analytical Chemistry</i> , 2013 , 85, 5233-9	7.8	69
190	Microfluidic paper-based analytical device for aerosol oxidative activity. <i>Environmental Science & Technology</i> , 2013 , 47, 932-40	10.3	68
189	Point-of-need simultaneous electrochemical detection of lead and cadmium using low-cost stencil-printed transparency electrodes. <i>Analytica Chimica Acta</i> , 2017 , 981, 24-33	6.6	66
188	Rapid flow in multilayer microfluidic paper-based analytical devices. <i>Lab on A Chip</i> , 2018 , 18, 793-802	7.2	66
187	Experimental studies of electroosmotic flow dynamics in microfabricated devices during current monitoring experiments. <i>Analytical Chemistry</i> , 2003 , 75, 361-70	7.8	65
186	Boron Doped Diamond Paste Electrodes for Microfluidic Paper-Based Analytical Devices. <i>Analytical Chemistry</i> , 2017 , 89, 4100-4107	7.8	64
185	Emerging applications of paper-based analytical devices for drug analysis: A review. <i>Analytica Chimica Acta</i> , 2020 , 1116, 70-90	6.6	63
184	Microfluidic electrochemical sensor for on-line monitoring of aerosol oxidative activity. <i>Journal of the American Chemical Society</i> , 2012 , 134, 10562-8	16.4	63
183	Review-Chemical and Biological Sensors for Viral Detection. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 037523	3.9	62

182	Determination of levoglucosan from smoke samples using microchip capillary electrophoresis with pulsed amperometric detection. <i>Environmental Science & Technology</i> , 2005 , 39, 618-23	10.3	61
181	Second virial coefficient studies of cosolvent-induced protein self-interaction. <i>Biophysical Journal</i> , 2005 , 89, 4211-8	2.9	59
180	Graphene-polyaniline modified electrochemical droplet-based microfluidic sensor for high-throughput determination of 4-aminophenol. <i>Analytica Chimica Acta</i> , 2016 , 925, 51-60	6.6	57
179	A selective distance-based paper analytical device for copper(II) determination using a porphyrin derivative. <i>Talanta</i> , 2017 , 174, 493-499	6.2	56
178	Development and evaluation of an ultrasonic personal aerosol sampler. <i>Indoor Air</i> , 2017 , 27, 409-416	5.4	55
177	Versatile 3-channel high-voltage power supply for microchip capillary electrophoresis. <i>Lab on A Chip</i> , 2003 , 3, 324-8	7.2	53
176	Electrochemical impedance-based DNA sensor using pyrrolidinyl peptide nucleic acids for tuberculosis detection. <i>Analytica Chimica Acta</i> , 2018 , 1044, 102-109	6.6	52
175	Microfabricated recessed microdisk electrodes: characterization in static and convective solutions. <i>Analytical Chemistry</i> , 1999 , 71, 550-6	7.8	52
174	Development of a Quasi-Steady Flow Electrochemical Paper-Based Analytical Device. <i>Analytical Chemistry</i> , 2016 , 88, 10639-10647	7.8	52
173	Enhanced determination of glucose by microchip electrophoresis with pulsed amperometric detection. <i>Analytica Chimica Acta</i> , 2004 , 508, 1-9	6.6	51
172	Pulsed amperometric detection of carbohydrates on an electrophoretic microchip. <i>Analyst, The</i> , 2002 , 127, 1021-3	5	51
171	Development of an Electrochemical Paper-Based Analytical Device for Trace Detection of Virus Particles. <i>Analytical Chemistry</i> , 2018 , 90, 7777-7783	7.8	50
170	Simplified current decoupler for microchip capillary electrophoresis with electrochemical and pulsed amperometric detection. <i>Electrophoresis</i> , 2005 , 26, 4641-7	3.6	48
169	Determination of aerosol oxidative activity using silver nanoparticle aggregation on paper-based analytical devices. <i>Analyst, The</i> , 2013 , 138, 6766-73	5	46
168	Analysis of natural flavonoids by microchip-micellar electrokinetic chromatography with pulsed amperometric detection. <i>Analyst, The</i> , 2005 , 130, 694-700	5	45
167	Development of Electrochemical Paper-based Glucose Sensor Using Cellulose-4-aminophenylboronic Acid-modified Screen-printed Carbon Electrode. <i>Electroanalysis</i> , 2016 , 28, 462-468	3	44
166	Solid-Phase Extraction Coupled to a Paper-Based Technique for Trace Copper Detection in Drinking Water. <i>Environmental Science & Technology</i> , 2018 , 52, 3567-3573	10.3	43
165	"Dip-and-read" paper-based analytical devices using distance-based detection with color screening. <i>Lab on A Chip</i> , 2018 , 18, 1485-1493	7.2	43

164	Poly(dimethylsiloxane) cross-linked carbon paste electrodes for microfluidic electrochemical sensing. <i>Analyst, The</i> , 2011 , 136, 3177-84	5	43
163	Effect of buffer species on the thermally induced aggregation of interferon-tau. <i>Journal of Pharmaceutical Sciences</i> , 2006 , 95, 1212-26	3.9	43
162	Direct detection of renal function markers using microchip CE with pulsed electrochemical detection. <i>Analyst, The</i> , 2004 , 129, 579-84	5	43
161	Ceramic microchips for capillary electrophoresis. <i>Electrochemistry. Analytical Communications</i> , 1999 , 36, 305-307		43
160	Powering ex vivo tissue models in microfluidic systems. <i>Lab on A Chip</i> , 2018 , 18, 1399-1410	7.2	42
159	Patternable Solvent-Processed Thermoplastic Graphite Electrodes. <i>Journal of the American Chemical Society</i> , 2017 , 139, 12623-12631	16.4	42
158	Microfluidic Paper-Based Analytical Devices: From Design to Applications. <i>Chemical Reviews</i> , 2021 , 121, 11835-11885	68.1	42
157	Electrode array detector for microchip capillary electrophoresis. <i>Analyst, The</i> , 2009 , 134, 486-92	5	41
156	Pseudomonas moraviensis subsp. stanleyae, a bacterial endophyte of hyperaccumulator Stanleya pinnata, is capable of efficient selenite reduction to elemental selenium under aerobic conditions. <i>Journal of Applied Microbiology</i> , 2015 , 119, 400-10	4.7	39
155	Competitive immunoassays for simultaneous detection of metabolites and proteins using micromosaic patterning. <i>Analytical Chemistry</i> , 2008 , 80, 444-50	7.8	39
154	Microcavities Containing Individually Addressable Recessed Microdisk and Tubular Nanoband Electrodes. <i>Journal of the Electrochemical Society</i> , 1999 , 146, 3367-3373	3.9	38
153	Versatile fabrication of paper-based microfluidic devices with high chemical resistance using scholar glue and magnetic masks. <i>Analytica Chimica Acta</i> , 2017 , 974, 63-68	6.6	37
152	Culturing and investigation of stress-induced lipid accumulation in microalgae using a microfluidic device. <i>Analytical and Bioanalytical Chemistry</i> , 2011 , 400, 245-53	4.4	37
151	High-throughput multi-analyte screening for renal disease using capillary electrophoresis. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2001 , 25, 795-801	3.5	37
150	Recent progress in the development of muTAS for clinical analysis. <i>Analyst, The</i> , 2003 , 128, 1002-8	5	36
149	A distance-based paper sensor for the determination of chloride ions using silver nanoparticles. <i>Analyst, The</i> , 2018 , 143, 3867-3873	5	36
148	High-sensitivity microchip electrophoresis determination of inorganic anions and oxalate in atmospheric aerosols with adjustable selectivity and conductivity detection. <i>Journal of Chromatography A</i> , 2009 , 1216, 1503-10	4.5	35
147	Janus electrochemistry: Simultaneous electrochemical detection at multiple working conditions in a paper-based analytical device. <i>Analytica Chimica Acta</i> , 2019 , 1056, 88-95	6.6	34

146	Rapid Bacteria Detection at Low Concentrations Using Sequential Immunomagnetic Separation and Paper-Based Isotachophoresis. <i>Analytical Chemistry</i> , 2019 , 91, 9623-9630	7.8	34
145	Integrated membrane filters for minimizing hydrodynamic flow and filtering in microfluidic devices. <i>Analytical Chemistry</i> , 2007 , 79, 6249-54	7.8	34
144	NFC-enabling smartphone-based portable amperometric immunosensor for hepatitis B virus detection. <i>Sensors and Actuators B: Chemical</i> , 2021 , 326, 128825	8.5	34
143	Uncovering the Formation of Color Gradients for Glucose Colorimetric Assays on Microfluidic Paper-Based Analytical Devices by Mass Spectrometry Imaging. <i>Analytical Chemistry</i> , 2018 , 90, 11949-11954	7.8	33
142	Detection of Analgesics and Sedation Drugs in Whiskey Using Electrochemical Paper-based Analytical Devices. <i>Electroanalysis</i> , 2018 , 30, 2250-2257	3	33
141	AgNP/Bi/Nafion-modified Disposable Electrodes for Sensitive Zn(II), Cd(II), and Pb(II) Detection in Aerosol Samples. <i>Electroanalysis</i> , 2017 , 29, 880-889	3	30
140	Detection of cardiac biomarkers using micellar electrokinetic chromatography and a cleavable tag immunoassay. <i>Analytical Chemistry</i> , 2007 , 79, 5249-56	7.8	30
139	Measuring protein interactions by microchip self-interaction chromatography. <i>Biotechnology Progress</i> , 2003 , 19, 1006-10	2.8	30
138	Conductivity detection for monitoring mixing reactions in microfluidic devices. <i>Analyst, The</i> , 2001 , 126, 1248-51	5	30
137	Label-free detection of C-reactive protein using an electrochemical DNA immunoassay. <i>Sensing and Bio-Sensing Research</i> , 2016 , 8, 14-19	3.3	30
136	Design considerations for reducing sample loss in microfluidic paper-based analytical devices. <i>Analytica Chimica Acta</i> , 2018 , 1017, 20-25	6.6	29
135	Quantitative colorimetric paper analytical devices based on radial distance measurements for aqueous metal determination. <i>Analyst, The</i> , 2018 , 143, 3085-3090	5	29
134	Thermoplastic Electrode Arrays in Electrochemical Paper-Based Analytical Devices. <i>Analytical Chemistry</i> , 2019 , 91, 2431-2438	7.8	29
133	Coupling Capillary Electrophoresis and Pulsed Electrochemical Detection. <i>Electroanalysis</i> , 2005 , 17, 1125-1131	2.8	28
132	Electrochemical paper-based analytical device for multiplexed, point-of-care detection of cardiovascular disease biomarkers. <i>Sensors and Actuators B: Chemical</i> , 2021 , 330, 129336	8.5	28
131	A paper-based colorimetric spot test for the identification of adulterated whiskeys. <i>Chemical Communications</i> , 2017 , 53, 7957-7960	5.8	27
130	Interfacing microchip electrophoresis to a growth tube particle collector for semicontinuous monitoring of aerosol composition. <i>Analytical Chemistry</i> , 2009 , 81, 10029-37	7.8	27
129	Plasma Modification of PDMS Microfluidic Devices for Control of Electroosmotic Flow. <i>Plasma Processes and Polymers</i> , 2007 , 4, 414-424	3.4	26

128	Janus Electrochemical Paper-Based Analytical Devices for Metals Detection in Aerosol Samples. <i>Analytical Chemistry</i> , 2020 , 92, 1439-1446	7.8	25
127	Laminated and infused Parafilm® - paper for paper-based analytical devices. <i>Sensors and Actuators B: Chemical</i> , 2018 , 255, 3654-3661	8.5	24
126	Rapid analysis of perchlorate in drinking water at parts per billion levels using microchip electrophoresis. <i>Analytical Chemistry</i> , 2010 , 82, 3426-9	7.8	24
125	Influence of polymer structure on electroosmotic flow and separation efficiency in successive multiple ionic layer coatings for microchip electrophoresis. <i>Electrophoresis</i> , 2008 , 29, 3128-34	3.6	24
124	Second virial coefficient determination of a therapeutic peptide by self-interaction chromatography. <i>Biopolymers</i> , 2006 , 84, 527-33	2.2	24
123	Evaporation from microreservoirs. <i>Lab on A Chip</i> , 2009 , 9, 1780-8	7.2	23
122	Comparison of Pulsed Electrochemical Detection Modes Coupled with Microchip Capillary Electrophoresis. <i>Electroanalysis</i> , 2005 , 17, 223-230	3	23
121	Rapid Analysis in Continuous-Flow Electrochemical Paper-Based Analytical Devices. <i>ACS Sensors</i> , 2020 , 5, 274-281	9.2	23
120	Simultaneous electrochemical detection in paper-based analytical devices. <i>Current Opinion in Electrochemistry</i> , 2020 , 23, 1-6	7.2	22
119	Spatiotemporal norepinephrine mapping using a high-density CMOS microelectrode array. <i>Lab on A Chip</i> , 2015 , 15, 4075-82	7.2	21
118	Electrochemical biosensor system using a CMOS microelectrode array provides high spatially and temporally resolved images. <i>Biosensors and Bioelectronics</i> , 2018 , 114, 78-88	11.8	21
117	IR-Compatible PDMS microfluidic devices for monitoring of enzyme kinetics. <i>Analytica Chimica Acta</i> , 2018 , 1021, 95-102	6.6	21
116	Multilayered Microfluidic Paper-Based Devices: Characterization, Modeling, and Perspectives. <i>Analytical Chemistry</i> , 2019 , 91, 8966-8972	7.8	21
115	Microfluidic mixing via transverse electrokinetic effects in a planar microchannel. <i>Microfluidics and Nanofluidics</i> , 2008 , 5, 493-505	2.8	21
114	Disposable glassy carbon stencil printed electrodes for trace detection of cadmium and lead. <i>Analytica Chimica Acta</i> , 2020 , 1103, 58-66	6.6	21
113	Manganese Detection Using Stencil-printed Carbon Ink Electrodes on Transparency Film. <i>Electroanalysis</i> , 2016 , 28, 679-684	3	21
112	An Instrument-free Detection of Antioxidant Activity Using Paper-based Analytical Devices Coated with Nanoceria. <i>Analytical Sciences</i> , 2018 , 34, 97-102	1.7	20
111	Read-by-eye quantification of aluminum (III) in distance-based microfluidic paper-based analytical devices. <i>Analytica Chimica Acta</i> , 2020 , 1100, 156-162	6.6	20

110	Personal Exposure to PM Black Carbon and Aerosol Oxidative Potential using an Automated Microenvironmental Aerosol Sampler (AMAS). <i>Environmental Science & Technology</i> , 2018 , 52, 11267-11275 ¹⁰³		
109	Paper-based microfluidics for experimental design: screening masking agents for simultaneous determination of Mn(II) and Co(II). <i>Analytical Methods</i> , 2017 , 9, 534-540	3.2	19
108	Development of Paper-Based Analytical Devices for Minimizing the Viscosity Effect in Human Saliva. <i>Theranostics</i> , 2018 , 8, 3797-3807	12.1	19
107	LABORATORY EVALUATION OF A MICROFLUIDIC ELECTROCHEMICAL SENSOR FOR AEROSOL OXIDATIVE LOAD. <i>Aerosol Science and Technology</i> , 2014 , 48, 489-497	3.4	19
106	Improving the compatibility of contact conductivity detection with microchip electrophoresis using a bubble cell. <i>Analytical Chemistry</i> , 2008 , 80, 7624-30	7.8	19
105	Screening for physical stability of a <i>Pseudomonas</i> amylase using self-interaction chromatography. <i>Analytical Biochemistry</i> , 2006 , 357, 35-42	3.1	19
104	Paper-Based Enzyme Competition Assay for Detecting Falsified β -Lactam Antibiotics. <i>ACS Sensors</i> , 2018 , 3, 1299-1307	9.2	19
103	Polycaprolactone-enabled sealing and carbon composite electrode integration into electrochemical microfluidics. <i>Lab on A Chip</i> , 2019 , 19, 2589-2597	7.2	18
102	Rapid detection of transition metals in welding fumes using paper-based analytical devices. <i>Annals of Occupational Hygiene</i> , 2014 , 58, 413-23		18
101	Separation of common organic and inorganic anions in atmospheric aerosols using a piperazine buffer and capillary electrophoresis. <i>Journal of Chromatography A</i> , 2007 , 1154, 400-6	4.5	18
100	Low-Cost Reusable Sensor for Cobalt and Nickel Detection in Aerosols Using Adsorptive Cathodic Square-Wave Stripping Voltammetry. <i>Journal of Electroanalytical Chemistry</i> , 2017 , 805, 75-82	4.1	17
99	An ultra-sensitive capacitive microwire sensor for pathogen-specific serum antibody responses. <i>Biosensors and Bioelectronics</i> , 2019 , 131, 46-52	11.8	17
98	Sensitive distance-based paper-based quantification of mercury ions using carbon nanodots and heating-based preconcentration.. <i>RSC Advances</i> , 2020 , 10, 9884-9893	3.7	17
97	Improving MCE with electrochemical detection using a bubble cell and sample stacking techniques. <i>Electrophoresis</i> , 2009 , 30, 3339-46	3.6	17
96	Sensors for detecting per- and polyfluoroalkyl substances (PFAS): A critical review of development challenges, current sensors, and commercialization obstacles. <i>Chemical Engineering Journal</i> , 2021 , 417, 129133	14.7	17
95	Fabrication of IR-transparent microfluidic devices by anisotropic etching of channels in CaF ₂ . <i>Lab on A Chip</i> , 2015 , 15, 4364-8	7.2	16
94	Pump-Free Microfluidic Rapid Mixer Combined with a Paper-Based Channel. <i>ACS Sensors</i> , 2020 , 5, 2230-2238 ¹⁰⁴	16	
93	Sensitive, selective analysis of selenium oxoanions using microchip electrophoresis with contact conductivity detection. <i>Analytical Chemistry</i> , 2014 , 86, 8425-32	7.8	15

92	Thermoset polyester as an alternative material for microchip electrophoresis/electrochemistry. <i>Electrophoresis</i> , 2007 , 28, 1123-9	3.6	15
91	A microfluidic organotypic device for culture of mammalian intestines ex vivo. <i>Analytical Methods</i> , 2020 , 12, 297-303	3.2	15
90	Colorimetric paper-based detection of Escherichia coli, Salmonella spp., and Listeria monocytogenes from large volumes of agricultural water. <i>Journal of Visualized Experiments</i> , 2014 ,	1.6	14
89	Electrophoretic separations in poly(dimethylsiloxane) microchips using a mixture of ionic and zwitterionic surfactants. <i>Electrophoresis</i> , 2012 , 33, 379-87	3.6	14
88	Highly transparent tetraaminophthalocyanine polymer films for DSSC cathodes. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 2767-2774	13	13
87	Observation of Dynamic Surfactant Adsorption Facilitated by Divalent Cation Bridging. <i>Langmuir</i> , 2018 , 34, 1550-1556	4	13
86	Microchip capillary electrophoresis: an introduction. <i>Methods in Molecular Biology</i> , 2006 , 339, 1-10	1.4	13
85	Viscosity measurements utilizing a fast-flow microfluidic paper-based device. <i>Sensors and Actuators B: Chemical</i> , 2020 , 319, 128240	8.5	13
84	A facile one-step gold nanoparticles enhancement based on sequential patterned lateral flow immunoassay device for C-reactive protein detection. <i>Sensors and Actuators B: Chemical</i> , 2021 , 329, 129245	8.5	13
83	Sealing 3D-printed parts to poly(dimethylsiloxane) for simple fabrication of Microfluidic devices. <i>Analytica Chimica Acta</i> , 2020 , 1124, 78-84	6.6	12
82	A Simple Microfluidic Electrochemical HPLC Detector for Quantifying Fenton Reactivity from Welding Fumes. <i>Analytical Methods</i> , 2014 , 6, 8180-8186	3.2	12
81	Characterization of Novel Microelectrode Geometries for Detection of Neurotransmitters. <i>IEEE Sensors Journal</i> , 2012 , 12, 1187-1192	4	12
80	Rotary manifold for automating a paper-based immunoassay.. <i>RSC Advances</i> , 2019 , 9, 29078-29086	3.7	12
79	Highly selective simultaneous determination of Cu(ii), Co(ii), Ni(ii), Hg(ii), and Mn(ii) in water samples using microfluidic paper-based analytical devices. <i>Analyst, The</i> , 2021 , 146, 2229-2239	5	12
78	Microfluidic devices containing thin rock sections for oil recovery studies. <i>Microfluidics and Nanofluidics</i> , 2018 , 22, 1	2.8	11
77	Photopatternable Carbon Electrodes for Chip-Based Electrochemical Detection. <i>Electroanalysis</i> , 2009 , 21, 2171-2174	3	11
76	Multi-analyte immunoassay using cleavable tags and microchip micellar electrokinetic chromatography. <i>Analyst, The</i> , 2006 , 131, 1091-3	5	11
75	Exploring carbon particle type and plasma treatment to improve electrochemical properties of stencil-printed carbon electrodes. <i>Talanta</i> , 2021 , 221, 121553	6.2	11

74	Analysis of oxidative stress biomarkers using a simultaneous competitive/non-competitive micromosaic immunoassay. <i>Analytica Chimica Acta</i> , 2009 , 640, 1-6	6.6	10
73	Microfluidic Protein Patterning on Silicon Nitride Using Solvent Extracted Poly(dimethylsiloxane) Channels. <i>Sensors and Actuators B: Chemical</i> , 2008 , 129, 811-817	8.5	10
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