

Paper-Based Microfluidic Devices: Emerging Themes and

Analytical Chemistry

89, 71-91

DOI: [10.1021/acs.analchem.6b04581](https://doi.org/10.1021/acs.analchem.6b04581)

Citation Report

#	ARTICLE	IF	CITATIONS
1	A paper-based nanomodified electrochemical biosensor for ethanol detection in beers. <i>Analytica Chimica Acta</i> , 2017, 960, 123-130.	2.6	151
2	Toward practical application of paper-based microfluidics for medical diagnostics: state-of-the-art and challenges. <i>Lab on A Chip</i> , 2017, 17, 1206-1249.	3.1	345
3	Instrument-free quantitative detection of alkaline phosphatase using paper-based devices. <i>Analytical Methods</i> , 2017, 9, 3375-3379.	1.3	12
4	Using the Rubik's Cube to directly produce paper analytical devices for quantitative point-of-care aptamer-based assays. <i>Biosensors and Bioelectronics</i> , 2017, 96, 194-200.	5.3	21
5	Multiplexed Point-of-Care Testing "xPOCT. <i>Trends in Biotechnology</i> , 2017, 35, 728-742.	4.9	386
6	Biochemical-immunological hybrid biosensor based on two-dimensional chromatography for on-site sepsis diagnosis. <i>Biosensors and Bioelectronics</i> , 2017, 98, 7-14.	5.3	28
7	Turning the Page: Advancing Paper-Based Microfluidics for Broad Diagnostic Application. <i>Chemical Reviews</i> , 2017, 117, 8447-8480.	23.0	439
8	A selective distance-based paper analytical device for copper(II) determination using a porphyrin derivative. <i>Talanta</i> , 2017, 174, 493-499.	2.9	70
9	True lab-in-a-syringe technology for bioassays. <i>Talanta</i> , 2017, 174, 285-288.	2.9	7
10	Heat release at the wetting front during capillary filling of cellulosic micro-substrates. <i>Journal of Colloid and Interface Science</i> , 2017, 504, 751-757.	5.0	13
11	Fabrication of paper devices via laser-heating-wax-printing for high-tech enzyme-linked immunosorbent assays with low-tech pen-type pH meter readout. <i>Analyst, The</i> , 2017, 142, 511-516.	1.7	22
12	Performance of electrokinetic stacking enhanced paper-based analytical device with smartphone for fast detection of fluorescent whitening agent. <i>Analytica Chimica Acta</i> , 2017, 995, 85-90.	2.6	30
13	A review on wax printed microfluidic paper-based devices for international health. <i>Biomicrofluidics</i> , 2017, 11, 041501.	1.2	69
14	Addressing the distribution of proteins spotted on 1/4PADs. <i>Analyst, The</i> , 2017, 142, 3899-3905.	1.7	16
15	Open channel deterministic lateral displacement for particle and cell sorting. <i>Lab on A Chip</i> , 2017, 17, 3592-3600.	3.1	44
16	Digitally Controlled Procedure for Assembling Fully Drawn Paper-Based Electroanalytical Platforms. <i>Analytical Chemistry</i> , 2017, 89, 10454-10460.	3.2	36
17	Detection of a cancer biomarker protein on modified cellulose paper by fluorescence using aptamer-linked quantum dots. <i>Analyst, The</i> , 2017, 142, 3132-3135.	1.7	39
18	Biosensors-on-chip: a topical review. <i>Journal of Micromechanics and Microengineering</i> , 2017, 27, 083001.	1.5	75

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19	An Ionophore-Based Anion-Selective Optode Printed on Cellulose Paper. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 11826-11830.	7.2	64
20	Reconfigurable Pipet for Customized, Cost-Effective Liquid Handling. <i>Analytical Chemistry</i> , 2017, 89, 8656-8661.	3.2	6
21	An Ionophore-Based Anion-Selective Optode Printed on Cellulose Paper. <i>Angewandte Chemie</i> , 2017, 129, 11988-11992.	1.6	6
22	Integrated Distance-Based Origami Paper Analytical Device for One-Step Visualized Analysis. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 30480-30487.	4.0	79
23	Smart Test Strips: Next-Generation Inkjet-Printed Wireless Comprehensive Liquid Sensing Platforms. <i>IEEE Transactions on Industrial Electronics</i> , 2017, 64, 7359-7367.	5.2	10
24	Inkjet-Printed Paper-Based Colorimetric Polyion Sensor Using a Smartphone as a Detector. <i>Analytical Chemistry</i> , 2017, 89, 12334-12341.	3.2	41
25	Geometrical Alignment of Multiple Fabrication Steps for Rapid Prototyping of Microfluidic Paper-Based Analytical Devices. <i>Analytical Chemistry</i> , 2017, 89, 11918-11923.	3.2	26
26	A paper-based colorimetric spot test for the identification of adulterated whiskeys. <i>Chemical Communications</i> , 2017, 53, 7957-7960.	2.2	38
27	Microfluidics: A new tool for microbial single cell analyses in human microbiome studies. <i>Biomicrofluidics</i> , 2017, 11, .	1.2	23
28	Carbon Black-Modified Electrodes Screen-Printed onto Paper Towel, Waxed Paper and Parafilm M [®] . <i>Sensors</i> , 2017, 17, 2267.	2.1	52
29	An All-Glass Microfluidic Network with Integrated Amorphous Silicon Photosensors for on-Chip Monitoring of Enzymatic Biochemical Assay. <i>Biosensors</i> , 2017, 7, 58.	2.3	11
30	Luminescence: Solid Phase \hat{a}^{\dagger} . , 2018, , 281-281.		0
31	Sensitive colorimetric assay for uric acid and glucose detection based on multilayer-modified paper with smartphone as signal readout. <i>Analytical and Bioanalytical Chemistry</i> , 2018, 410, 2647-2655.	1.9	110
32	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.	4.6	68
33	Headspace Solid-Phase Microextraction Coupled to Miniaturized Microplasma Optical Emission Spectrometry for Detection of Mercury and Lead. <i>Analytical Chemistry</i> , 2018, 90, 3683-3691.	3.2	69
34	Electrokinetic stacking of electrically neutral analytes with paper-based analytical device. <i>Talanta</i> , 2018, 182, 247-252.	2.9	9
35	Paper-Based Polymer Electrodes for Bioanalysis and Electrochemistry of Neurotransmitters. <i>ChemPhysChem</i> , 2018, 19, 1164-1172.	1.0	11
36	\hat{a} -Dip-and-read \hat{a} -paper-based analytical devices using distance-based detection with color screening. <i>Lab on A Chip</i> , 2018, 18, 1485-1493.	3.1	57

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37	Editable TiO ₂ Nanomaterial-Modified Paper in Situ for Highly Efficient Detection of Carcinoembryonic Antigen by Photoelectrochemical Method. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 14594-14601.	4.0	52
38	Test for arsenic speciation in waters based on a paper-based analytical device with scanometric detection. <i>Analytica Chimica Acta</i> , 2018, 1011, 1-10.	2.6	50
39	Rapid flow in multilayer microfluidic paper-based analytical devices. <i>Lab on A Chip</i> , 2018, 18, 793-802.	3.1	95
40	Advances in Microfluidics-Based Assisted Reproductive Technology: From Sperm Sorter to Reproductive System-on-a-Chip. <i>Advanced Biology</i> , 2018, 2, 1700197.	3.0	64
41	General Strategy To Make an On-Demand Library of Structurally and Functionally Diverse SERS Substrates. <i>ACS Applied Nano Materials</i> , 2018, 1, 960-968.	2.4	11
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45	Implementation of a plasticized PVC-based cation-selective optode system into a paper-based analytical device for colorimetric sodium detection. <i>Analyst, The</i> , 2018, 143, 678-686.	1.7	43
46	Rapid Analysis of Unsaturated Fatty Acids on Paper-Based Analytical Devices via Online Epoxidation and Ambient Mass Spectrometry. <i>Analytical Chemistry</i> , 2018, 90, 2070-2078.	3.2	41
47	Rapid Veterinary Diagnosis of Bovine Reproductive Infectious Diseases from Semen Using Paper-Origami DNA Microfluidics. <i>ACS Sensors</i> , 2018, 3, 403-409.	4.0	75
48	Ultrasensitive Enzyme-free Biosensor by Coupling Cyclodextrin Functionalized Au Nanoparticles and High-Performance Au-Paper Electrode. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 3333-3340.	4.0	60
49	Simultaneous pre-concentration and separation on simple paper-based analytical device for protein analysis. <i>Analytical and Bioanalytical Chemistry</i> , 2018, 410, 1689-1695.	1.9	28
50	Characteristics of Microfluidic Paper-based Analytical Devices Fabricated by Four Different Methods. <i>Analytical Sciences</i> , 2018, 34, 39-44.	0.8	19
51	A lab-on-a-tip approach to make electroanalysis user-friendly and de-centralized: Detection of copper ions in river water. <i>Analytica Chimica Acta</i> , 2018, 1029, 1-7.	2.6	28
52	Colorimetric paper-based device for gaseous hydrogen cyanide quantification based on absorbance measurements. <i>Sensors and Actuators B: Chemical</i> , 2018, 268, 392-397.	4.0	33
53	Practical High-Performance Lateral Flow Assay Based on Autonomous Microfluidic Replacement on a Film. <i>Analytical Sciences</i> , 2018, 34, 57-63.	0.8	7
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57	Development of novel complementary metal-oxide semiconductor-based colorimetric sensors for rapid detection of industrially important gases. <i>Sensors and Actuators B: Chemical</i> , 2018, 265, 600-608.	4.0	14
58	Selective Distance-Based K^{+} Quantification on Paper-Based Microfluidics. <i>Analytical Chemistry</i> , 2018, 90, 4894-4900.	3.2	99
59	Enzymatic amplification of oligonucleotides in paper substrates. <i>Talanta</i> , 2018, 186, 568-575.	2.9	6
60	Laminated and infused Parafilm [®] paper for paper-based analytical devices. <i>Sensors and Actuators B: Chemical</i> , 2018, 255, 3654-3661.	4.0	41
61	Developments of microfluidic paper-based analytical devices (µPADs) for water analysis: A review. <i>Talanta</i> , 2018, 177, 176-190.	2.9	194
62	Paper-Based All-Solid-State Ion-Sensing Platform with a Solid Contact Comprising Colloid-Imprinted Mesoporous Carbon and a Redox Buffer. <i>ACS Applied Nano Materials</i> , 2018, 1, 293-301.	2.4	19
63	Sensing Parts per Million Level Ammonia and Parts per Billion Level Acetic Acid in the Gas Phase by Common Black Film with a Fluorescent pH Probe. <i>Analytical Chemistry</i> , 2018, 90, 1356-1362.	3.2	7
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65	An Ultra-Fast and Large-Scale Fabrication Method for Paper-Based Microfluidic Chips. <i>Mechanisms and Machine Science</i> , 2018, , 1561-1572.	0.3	1
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67	Quantitative evaluation of analyte transport on microfluidic paper-based analytical devices (µPADs). <i>Analyst</i> , 2018, 143, 643-653.	1.7	37
68	Review on microfluidic paper-based analytical devices towards commercialisation. <i>Analytica Chimica Acta</i> , 2018, 1001, 1-17.	2.6	379
69	Improvement in the Reproducibility of a Paper-based Analytical Device (PAD) Using Stable Covalent Binding between Proteins and Cellulose Paper. <i>Biotechnology and Bioprocess Engineering</i> , 2018, 23, 686-692.	1.4	30
70	Single board computing system for automated colorimetric analysis on low-cost analytical devices. <i>Analytical Methods</i> , 2018, 10, 5282-5290.	1.3	11
71	Paper-Based Origami Photoelectrochemical Sensing Platform with TiO ₂ /Bi ₄ NbO ₈ /Cl/Co-Pi Cascade Structure Enabling of Bidirectional Modulation of Charge Carrier Separation. <i>Analytical Chemistry</i> , 2018, 90, 14116-14120.	3.2	33
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74	A Portable Smartphone-Based Sensing System Using a 3D-Printed Chip for On-Site Biochemical Assays. Sensors, 2018, 18, 4002.	2.1	13
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76	Copper-Plated Paper for High-Performance Lithium-Ion Batteries. Small, 2018, 14, e1803313.	5.2	18
77	Paper-Based Strips for the Electrochemical Detection of Single and Double Stranded DNA. Analytical Chemistry, 2018, 90, 13680-13686.	3.2	64
78	Subtractive Manufacturing of Microfluidic 3D Braid Mixers. Advanced Engineering Materials, 2018, 20, 1800243.	1.6	5
79	Uncovering the Formation of Color Gradients for Glucose Colorimetric Assays on Microfluidic Paper-Based Analytical Devices by Mass Spectrometry Imaging. Analytical Chemistry, 2018, 90, 11949-11954.	3.2	46
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82	Pen-on-paper strategies for point-of-care testing of human health. TrAC - Trends in Analytical Chemistry, 2018, 108, 50-64.	5.8	47
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84	Paper-Based Antibody Detection Devices Using Bioluminescent BRET-Switching Sensor Proteins. Angewandte Chemie - International Edition, 2018, 57, 15369-15373.	7.2	116
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90	Integrated paper-based microfluidic devices for point-of-care testing. Analytical Methods, 2018, 10, 3567-3581.	1.3	65

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92	Gold nanoparticles-enhanced ion-transmission mass spectrometry for highly sensitive detection of chemical warfare agent simulants. <i>Talanta</i> , 2018, 190, 403-409.	2.9	9
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94	Wax-printed paper-based device for direct electrochemical detection of 3-nitrotyrosine. <i>Electrochimica Acta</i> , 2018, 284, 60-68.	2.6	40
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97	Electrophoretic separations on Parafilm-paper-based analytical devices. <i>Sensors and Actuators B: Chemical</i> , 2018, 273, 1022-1028.	4.0	13
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105	Where are modern flow techniques heading to?. <i>Analytical and Bioanalytical Chemistry</i> , 2018, 410, 6361-6370.	1.9	29
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110	Tubular Au-TTF solid contact layer synthesized in a microfluidic device improving electrochemical behaviors of paper-based potassium potentiometric sensors. <i>Electrochimica Acta</i> , 2019, 322, 134683.	2.6	14
111	Programmable Paper-Based Microfluidic Devices for Biomarker Detections. <i>Micromachines</i> , 2019, 10, 516.	1.4	57
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115	Vacuum pouch microfluidic system and its application for thin-film micromixers. <i>Lab on A Chip</i> , 2019, 19, 2834-2843.	3.1	12
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117	Rapid Bacteria Detection at Low Concentrations Using Sequential Immunomagnetic Separation and Paper-Based Isotachophoresis. <i>Analytical Chemistry</i> , 2019, 91, 9623-9630.	3.2	57
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120	Multilayered Microfluidic Paper-Based Devices: Characterization, Modeling, and Perspectives. <i>Analytical Chemistry</i> , 2019, 91, 8966-8972.	3.2	31
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122	Disposable electrodes from waste materials and renewable sources for (bio)electroanalytical applications. <i>Biosensors and Bioelectronics</i> , 2019, 146, 111758.	5.3	48
123	Microfluidic technology for investigation of protein function in single adherent cells. <i>Methods in Enzymology</i> , 2019, 628, 145-172.	0.4	1
124	A review of smartphone point-of-care adapter design. <i>Engineering Reports</i> , 2019, 1, e12039.	0.9	30
125	Microfluidic Paper-based Analytical Devices (µPADs): Miniaturization and Enzyme Storage Studies. <i>Analytical Sciences</i> , 2019, 35, 379-384.	0.8	5
126	A versatile, cost-effective, and flexible wearable biosensor for <i>in situ</i> and <i>ex situ</i> sweat analysis, and personalized nutrition assessment. <i>Lab on A Chip</i> , 2019, 19, 3448-3460.	3.1	55

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128	Long-term stabilization of hydrogen peroxide by poly(vinyl alcohol) on paper-based analytical devices. <i>Scientific Reports</i> , 2019, 9, 12951.	1.6	6
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130	Disposable Paper-Based Analytical Device for Visual Speciation Analysis of Ag(I) and Silver Nanoparticles (AgNPs). <i>Analytical Chemistry</i> , 2019, 91, 3359-3366.	3.2	49
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141	Disposable Sensors in Diagnostics, Food, and Environmental Monitoring. <i>Advanced Materials</i> , 2019, 31, e1806739.	11.1	540
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143	Sensitivity Enhancement of Nucleic Acid Lateral Flow Assays through a Physical-Chemical Coupling Method: Dissolvable Saline Barriers. <i>ACS Sensors</i> , 2019, 4, 1691-1700.	4.0	29
144	Design and Optimization of Colorimetric Paper-Based Analytical Device for Rapid Detection of Allopurinol in Herbal Medicine. <i>International Journal of Analytical Chemistry</i> , 2019, 2019, 1-7.	0.4	6

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146	Electrophoretic Separation on an Origami Paper-Based Analytical Device Using a Portable Power Bank. <i>Sensors</i> , 2019, 19, 1724.	2.1	6
147	Paper-Based Electrochemical Biosensors for Point-of-Care Testing of Neurotransmitters. <i>Journal of Analysis and Testing</i> , 2019, 3, 19-36.	2.5	30
148	A 96-well wax printed Prussian Blue paper for the visual determination of cholinesterase activity in human serum. <i>Biosensors and Bioelectronics</i> , 2019, 134, 97-102.	5.3	21
149	Chemical traffic light: A self-calibrating naked-eye sensor for fluoride. <i>Journal of Porphyrins and Phthalocyanines</i> , 2019, 23, 117-124.	0.4	9
150	Development of a Paper-Based Viscometer for Blood Plasma Using Colorimetric Analysis. <i>Analytical Chemistry</i> , 2019, 91, 4868-4875.	3.2	16
151	Instrument-free argentometric determination of chloride via trapezoidal distance-based microfluidic paper devices. <i>Analytica Chimica Acta</i> , 2019, 1063, 1-8.	2.6	53
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