Chunsun Zhang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4817406/publications.pdf

Version: 2024-02-01

54 papers	2,997 citations	186265 28 h-index	161849 54 g-index
56 all docs	56 docs citations	56 times ranked	3076 citing authors

#	Article	IF	Citations
1	PCR microfluidic devices for DNA amplification. Biotechnology Advances, 2006, 24, 243-284.	11.7	539
2	Miniaturized PCR chips for nucleic acid amplification and analysis: latest advances and future trends. Nucleic Acids Research, 2007, 35, 4223-4237.	14.5	369
3	Micropumps, microvalves, and micromixers within PCR microfluidic chips: Advances and trends. Biotechnology Advances, 2007, 25, 483-514.	11.7	326
4	Single-Molecule DNA Amplification and Analysis Using Microfluidics. Chemical Reviews, 2010, 110, 4910-4947.	47.7	132
5	Paper-based bipolar electrode-electrochemiluminescence (BPE-ECL) device with battery energy supply and smartphone read-out: A handheld ECL system for biochemical analysis at the point-of-care level. Sensors and Actuators B: Chemical, 2016, 237, 308-317.	7.8	104
6	Chemiluminescence cloth-based glucose test sensors (CCGTSs): A new class of chemiluminescence glucose sensors. Biosensors and Bioelectronics, 2017, 91, 268-275.	10.1	75
7	An electrochemiluminescence cloth-based biosensor with smartphone-based imaging for detection of lactate in saliva. Analyst, The, 2017, 142, 3715-3724.	3.5	70
8	Sensitivity enhancement of cloth-based closed bipolar electrochemiluminescence glucose sensor via electrode decoration with chitosan/multi-walled carbon nanotubes/graphene quantum dots-gold nanoparticles. Biosensors and Bioelectronics, 2019, 130, 55-64.	10.1	69
9	Open bipolar electrode-electrochemiluminescence imaging sensing using paper-based microfluidics. Sensors and Actuators B: Chemical, 2015, 216, 255-262.	7.8	67
10	A novel paper-based microfluidic enhanced chemiluminescence biosensor for facile, reliable and highly-sensitive gene detection of Listeria monocytogenes. Sensors and Actuators B: Chemical, 2015, 209, 399-406.	7.8	67
11	Electrochemiluminescence detection in microfluidic cloth-based analytical devices. Biosensors and Bioelectronics, 2016, 75, 247-253.	10.1	61
12	A low-cost, ultraflexible cloth-based microfluidic device for wireless electrochemiluminescence application. Lab on A Chip, 2016, 16, 2860-2870.	6.0	58
13	Understanding wax screen-printing: A novel patterning process for microfluidic cloth-based analytical devices. Analytica Chimica Acta, 2015, 891, 234-246.	5.4	55
14	A sample-to-answer, wearable cloth-based electrochemical sensor (WCECS) for point-of-care detection of glucose in sweat. Sensors and Actuators B: Chemical, 2021, 343, 130131.	7.8	55
15	Low-cost, high-throughput fabrication of cloth-based microfluidic devices using a photolithographical patterning technique. Lab on A Chip, 2015, 15, 1598-1608.	6.0	49
16	A novel screen-printed microfluidic paper-based electrochemical device for detection of glucose and uric acid in urine. Biomedical Microdevices, 2016, 18, 92.	2.8	46
17	Fast identification of foodborne pathogenic viruses using continuous-flow reverse transcription-PCR with fluorescence detection. Microfluidics and Nanofluidics, 2011, 10, 367-380.	2.2	42
18	A novel paperfluidic closed bipolar electrode-electrochemiluminescence sensing platform: Potential for multiplex detection at crossing-channel closed bipolar electrodes. Sensors and Actuators B: Chemical, 2018, 270, 341-352.	7.8	41

#	Article	IF	Citations
19	A sample-to-answer, real-time convective polymerase chain reaction system for point-of-care diagnostics. Biosensors and Bioelectronics, 2017, 97, 360-368.	10.1	40
20	Multichannel oscillatory-flow multiplex PCR microfluidics for high-throughput and fast detection of foodborne bacterial pathogens. Biomedical Microdevices, 2011, 13, 885-897.	2.8	38
21	Chemiluminescence detection for microfluidic cloth-based analytical devices (Î¼CADs). Biosensors and Bioelectronics, 2015, 72, 114-120.	10.1	38
22	Battery-triggered open wireless electrochemiluminescence in a microfluidic cloth-based bipolar device. Sensors and Actuators B: Chemical, 2017, 246, 327-335.	7.8	38
23	Segmented continuous-flow multiplex polymerase chain reaction microfluidics for high-throughput and rapid foodborne pathogen detection. Analytica Chimica Acta, 2014, 826, 51-60.	5.4	37
24	A handheld flow genetic analysis system (FGAS): towards rapid, sensitive, quantitative and multiplex molecular diagnosis at the point-of-care level. Lab on A Chip, 2015, 15, 2597-2605.	6.0	37
25	Integrated microfluidic reverse transcription-polymerase chain reaction for rapid detection of food- or waterborne pathogenic rotavirus. Analytical Biochemistry, 2011, 415, 87-96.	2.4	35
26	A Simple and Sensitive Paper-Based Bipolar Electrochemiluminescence Biosensor for Detection ofÂOxidase-Substrate Biomarkers in Serum. Journal of the Electrochemical Society, 2018, 165, B361-B369.	2.9	35
27	Rapid detection of genetically modified organisms on a continuous-flow polymerase chain reaction microfluidics. Analytical Biochemistry, 2009, 385, 42-49.	2.4	34
28	Simultaneous detection of Salmonella enterica, Escherichia coli O157:H7, and Listeria monocytogenes using oscillatory-flow multiplex PCR. Mikrochimica Acta, 2011, 173, 503-512.	5.0	33
29	Electrochemical Cloth-Based DNA Sensors (ECDSs): A New Class of Electrochemical Gene Sensors. Analytical Chemistry, 2020, 92, 7708-7716.	6.5	32
30	Lab-on-cloth integrated with gravity/capillary flow chemiluminescence (GCF-CL): towards simple, inexpensive, portable, flow system for measuring trivalent chromium in water. Sensors and Actuators B: Chemical, 2016, 236, 35-43.	7.8	26
31	Ultrasensitive cloth-based microfluidic chemiluminescence detection of Listeria monocytogenes hlyA gene by hemin/G-quadruplex DNAzyme and hybridization chain reaction signal amplification. Analytical and Bioanalytical Chemistry, 2020, 412, 3787-3797.	3.7	26
32	Parallel DNA amplification by convective polymerase chain reaction with various annealing temperatures on a thermal gradient device. Analytical Biochemistry, 2009, 387, 102-112.	2.4	25
33	Microfluidic cloth-based analytical devices: Emerging technologies and applications. Biosensors and Bioelectronics, 2020, 168, 112391.	10.1	24
34	Bipolar electrochemiluminescence on thread: A new class of electroanalytical sensors. Biosensors and Bioelectronics, 2017, 94, 335-343.	10.1	23
35	A three-dimensional cloth-based microfluidic label-free proximity hybridization-electrochemiluminescence biosensor for ultrasensitive detection of K-ras gene. Sensors and Actuators B: Chemical, 2019, 296, 126654.	7.8	23
36	Microfluidic gradient PCR (MG-PCR): a new method for microfluidic DNA amplification. Biomedical Microdevices, 2010, 12, 1-12.	2.8	22

#	Article	IF	Citations
37	A novel cloth-based supersandwich electrochemical aptasensor for direct, sensitive detection of pathogens. Analytica Chimica Acta, 2021, 1188, 339176.	5.4	21
38	A flow chemiluminescence paper-based microfluidic device for detection of chromium (III) in water. Journal of Innovative Optical Health Sciences, 2019, 12, .	1.0	18
39	A dry chemistry-based ultrasensitive electrochemiluminescence immunosensor for sample-to-answer detection of Cardiac Troponin I. Biosensors and Bioelectronics, 2022, 214, 114494.	10.1	18
40	Highly sensitive identification of foodborne pathogenic Listeria monocytogenes using single-phase continuous-flow nested PCR microfluidics with on-line fluorescence detection. Microfluidics and Nanofluidics, 2013, 15, 161-172.	2.2	17
41	Ultrasensitive electrochemiluminescence detection of p53 gene by a novel cloth-based microfluidic biosensor with luminol-gold nanoparticles and hybridization chain reaction amplification. Journal of Luminescence, 2020, 226, 117485.	3.1	17
42	A microfluidic cloth-based photoelectrochemical analytical device for the detection of glucose in saliva. Talanta, 2022, 238, 123052.	5.5	17
43	Micropatterned paper devices using amine-terminated polydiacetylene vesicles as colorimetric probes for enhanced detection of double-stranded DNA. Sensors and Actuators B: Chemical, 2016, 236, 27-34.	7.8	16
44	Facile and sensitive chemiluminescence detection of H₂O₂ and glucose by a gravity/capillary flow and cloth-based low-cost platform. RSC Advances, 2017, 7, 43245-43254.	3.6	12
45	Continuousâ€flow Polymerase Chain Reaction Microfluidics by Using Spiral Capillary Channel Embedded on Copper. Analytical Letters, 2007, 40, 497-511.	1.8	10
46	Novel cloth-based closed bipolar solid-state electrochemiluminescence (CBP-SS-ECL) aptasensor for detecting carcinoembryonic antigen. Analytica Chimica Acta, 2022, 1206, 339789.	5.4	10
47	Cloth-based closed bipolar electrochemiluminescence DNA sensors (CCBEDSs): A new class of electrochemiluminescence gene sensors. Journal of Luminescence, 2021, 238, 118209.	3.1	9
48	Shared-cathode closed bipolar electrochemiluminescence cloth-based chip for multiplex detection. Analytica Chimica Acta, 2022, 1206, 339446.	5.4	9
49	A Novel One-Step Fabricated, Droplet-Based Electrochemical Sensor for Facile Biochemical Assays. Sensors, 2016, 16, 1231.	3.8	8
50	Decreasing microfluidic evaporation loss using the HMDL method: open systems for nucleic acid amplification and analysis. Microfluidics and Nanofluidics, 2010, 9, 17-30.	2.2	7
51	A novel cloth-based multiway closed bipolar electrochemiluminescence biosensor for accurate detection of uric acid. Microchemical Journal, 2022, 179, 107657.	4.5	6
52	Programmable fluid transport on photolithographically micropatterned cloth devices: Towards the development of facile, multifunctional colorimetric diagnostic platforms. Sensors and Actuators B: Chemical, 2018, 255, 2416-2430.	7.8	5
53	Lab-on-cloth integrated with a photoelectrochemical cell and ion imprinting for point-of-care testing of Hg(â…¡). Sensors and Actuators B: Chemical, 2022, 361, 131689.	7.8	3
54	Chemiluminescence and Its Biomedical Applications. , 2021, , 143-195.		1