Piyali Datta

List of Publications by Year
in descending order

23 papers	44 citations	2682572 2 h-index	2272923 4 g-index
23 all docs	23 docs citations	23 times ranked	25 citing authors

#	Article	IF	Citations
1	An Integrated Co-Design of Flow-Based Biochips Considering Flow-Control Design Issues and Objectives. IETE Journal of Research, 2023, 69, 3165-3182.	2.6	1
2	Design Optimization for Programmable Microfluidic Devices Integrating Contamination Removal and Capacity-Wastage-Aware Washing. IETE Journal of Research, 2020, 66, 781-796.	2.6	0
3	A Design Optimization for Pin-Constrained Paper-based Digital Microfluidic Biochips Integrating Fluid-Control Co-Design Issues. , 2020, , .		0
4	A Predictive Model for Fluid-Control Codesign of Paper-Based Digital Biochips Following a Machine Learning Approach. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2020, 28, 2584-2597.	3.1	0
5	A Capacity-Aware Wash Optimization for Contamination Removal in Programmable Microfluidic Biochip Devices. , 2019, , .		3
6	An Efficient Multiple Fault Detection Technique in Digital Microfluidic Biochips. IETE Journal of Research, 2019, , 1-14.	2.6	2
7	Fluidâ€level synthesis unifying reliability, contamination avoidance, and capacityâ€wastageâ€aware washing for dropletâ€based microfluidic biochips. IET Computers and Digital Techniques, 2019, 13, 166-177.	1.2	6
8	Design Optimization at the Fluid-Level Synthesis for Safe and Low-Cost Droplet-Based Microfluidic Biochips. , 2018, , .		5
9	A low-cost fluid-level synthesis for droplet-based microfluidic biochips integrating design convergence, contamination avoidance, and washing. Design Automation for Embedded Systems, 2018, 22, 315-346.	1.0	1
10	A New Fluid-Chip Co-Design for Digital Microfluidic Biochips Considering Cost Drivers and Design Convergence. IEEE Transactions on Multi-Scale Computing Systems, 2018, 4, 548-564.	2.4	5
11	Multiple parallel assay operations with cross contamination avoidance in a given biochip. IET Computers and Digital Techniques, 2016, 10, 243-253.	1.2	2
12	An impressive approach for incorporating parallelism in designing DMFB with cross contamination avoidance. , 2015, , .		4
13	Gene regulatory networks using bat algorithm inspired particle swarm optimization. , 2015, , .		2
14	An innovative approach towards detection and exclusion of overlapped regions in guard zone computation. , 2015, , .		1
15	A cost-optimal algorithm for guard zone computation including detection and exclusion of overlapping. , 2015, , .		0
16	An algorithm for identifying two unequal heavier / lighter coins out of n given coins. , 2015, , .		1
17	An endeavour to find two unequal false coins. , 2014, , .		1
18	A technology shift towards triangular electrodes from square electrodes in design of Digital Microfluidic Biochip. , 2014, , .		6

#	Article	IF	Citations
19	An Algorithm for Parallel Assay Operations in a Restricted Sized Chip in Digital Microfluidics. , 2014, , .		2
20	A comprehensive approach towards guard zone computation detecting and excluding the overlapped regions. , 2014, , .		1
21	The first algorithm for solving two coins counterfeiting with ω(ΔH) = ω(ΔL). , 2014, , .		0
22	Enhancement of multiple parallel assay operations with cross contamination avoidance in a given biochip. , 2014, , .		0
23	A connect-5 structure based parallel assay operations in a restricted sized chip in digital microfluidics. , 2013, , .		1