

# Tsung-Yi Ho

## List of Publications by Year in descending order

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268  
papers

3,447  
citations

279701

23  
h-index

360920

35  
g-index

279  
all docs

279  
docs citations

279  
times ranked

715  
citing authors

#	ARTICLE	IF	CITATIONS
1	PathDriver+: Enhanced Path-Driven Architecture Design for Flow-Based Microfluidic Biochips. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2022, 41, 2185-2198.	1.9	9
2	Computer-aided Design Techniques for Flow-based Microfluidic Lab-on-a-chip Systems. ACM Computing Surveys, 2022, 54, 1-29.	16.1	17
3	Demand-Driven Multi-Target Sample Preparation on Resource-Constrained Digital Microfluidic Biochips. ACM Transactions on Design Automation of Electronic Systems, 2022, 27, 1-21.	1.9	1
4	Flow-Based Microfluidic Biochips With Distributed Channel Storage: Synthesis, Physical Design, and Wash Optimization. IEEE Transactions on Computers, 2022, 71, 464-478.	2.4	13
5	Contamination-Aware Synthesis for Programmable Microfluidic Devices. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2022, 41, 5016-5029.	1.9	1
6	NR-Router: Non-Regular Electrode Routing with Optimal Pin Selection for Electrowetting-on-Dielectric Chips. , 2022, , .		3
7	Design-for-Reliability and Probability-Based Fault Tolerance for Paper-Based Digital Microfluidic Biochips with Multiple Faults. , 2022, , .		0
8	Trojan Insertions of Fully Programmable Valve Arrays. , 2022, , .		1
9	DCSA: Distributed Channel-Storage Architecture for Flow-Based Microfluidic Biochips. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2021, 40, 115-128.	1.9	18
10	Predicting the fluid behavior of random microfluidic mixers using convolutional neural networks. Lab on A Chip, 2021, 21, 296-309.	3.1	20
11	A Multi-Commodity Network Flow Based Routing Algorithm for Paper-Based Digital Microfluidic Biochips. , 2021, , .		0
12	ATM. , 2021, , .		1
13	Robustness of Neuromorphic Computing with RRAM-based Crossbars and Optical Neural Networks. , 2021, , .		1
14	Interference-Free Design Methodology for Paper-Based Digital Microfluidic Biochips. , 2021, , .		1
15	Double DQN for Chip-Level Synthesis of Paper-Based Digital Microfluidic Biochips. , 2021, , .		1
16	Automated calibration of 3D-printed microfluidic devices based on computer vision. Biomicrofluidics, 2021, 15, 024102.	1.2	6
17	Holistic and In-Context Design Flow for 2.5D Chiplet-Package Interaction Co-Optimization. , 2021, , .		0
18	Ct Image Denoising With Encoder-Decoder Based Graph Convolutional Networks. , 2021, , .		5

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19	Conquering the Tyranny of Number With Digital Microfluidics. <i>Frontiers in Chemistry</i> , 2021, 9, 676365.	1.8	2
20	Robust Roadside Physical Adversarial Attack Against Deep Learning in Lidar Perception Modules. , 2021, , .		7
21	Placement of Digital Microfluidic Biochips via a New Evolutionary Algorithm. <i>ACM Transactions on Design Automation of Electronic Systems</i> , 2021, 26, 1-22.	1.9	2
22	Ensemble Learning Based Electric Components Footprint Analysis. , 2021, , .		0
23	Splitter-Aware Multiterminal Routing With Length-Matching Constraint for RSFQ Circuits. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , 2021, 40, 2251-2264.	1.9	4
24	3D-Adv: Black-Box Adversarial Attacks against Deep Learning Models through 3D Sensors. , 2021, , .		2
25	Relative-Scheduling-Based High-Level Synthesis for Flow-Based Microfluidic Biochips. , 2021, , .		0
26	BigIntegr: One-Pass Architectural Synthesis for Continuous-Flow Microfluidic Lab-on-a-Chip Systems. , 2021, , .		5
27	An Optimal Algorithm for Splitter and Buffer Insertion in Adiabatic Quantum-Flux-Parametron Circuits. , 2021, , .		9
28	“One-Shot” Reduction of Additive Artifacts in Medical Images. , 2021, , .		0
29	Integrated Control-Fluidic Codesign Methodology for Paper-Based Digital Microfluidic Biochips. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , 2020, 39, 613-625.	1.9	5
30	Timing-Driven Flow-Channel Network Construction for Continuous-Flow Microfluidic Biochips. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , 2020, 39, 1314-1327.	1.9	24
31	URBER: Ultrafast Rule-Based Escape Routing Method for Large-Scale Sample Delivery Biochips. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , 2020, 39, 157-170.	1.9	5
32	Microfluidic Design for Concentration Gradient Generation Using Artificial Neural Network. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , 2020, 39, 2544-2557.	1.9	12
33	Multitarget Sample Preparation Using MEDA Biochips. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , 2020, 39, 2682-2695.	1.9	11
34	Multicontrol: Advanced Control-Logic Synthesis for Flow-Based Microfluidic Biochips. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , 2020, 39, 2489-2502.	1.9	19
35	Test Generation for Flow-Based Microfluidic Biochips With General Architectures. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , 2020, 39, 2530-2543.	1.9	4
36	Lookup Table-Based Fast Reliability-Aware Sample Preparation Using Digital Microfluidic Biochips. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , 2020, 39, 2708-2721.	1.9	5

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37	Statistical Training for Neuromorphic Computing using Memristor-based Crossbars Considering Process Variations and Noise. , 2020, , .		24
38	A Survey of DMFBs Security: State-of-the-Art Attack and Defense. , 2020, , .		14
39	Watermarking for Paper-Based Digital Microfluidic Biochips. , 2020, , .		0
40	Transfer Learning-Based Microfluidic Design System for Concentration Generation. , 2020, , .		1
41	Zero-Shot Medical Image Artifact Reduction. , 2020, , .		10
42	How Secure Is Split Manufacturing in Preventing Hardware Trojan?. ACM Transactions on Design Automation of Electronic Systems, 2020, 25, 1-23.	1.9	6
43	CloudLeak: Large-Scale Deep Learning Models Stealing Through Adversarial Examples. , 2020, , .		57
44	Do Noises Bother Human and Neural Networks In the Same Way? A Medical Image Analysis Perspective. , 2020, , .		2
45	HTcatcher: Finite State Machine and Feature Verification for Large-scale Neuromorphic Computing Systems. , 2020, , .		2
46	Reliable and Robust RRAM-based Neuromorphic Computing. , 2020, , .		6
47	Footprint Classification of Electric Components on Printed Circuit Boards. , 2020, , .		3
48	ASAP. , 2020, , .		8
49	Countering variations and thermal effects for accurate optical neural networks. , 2020, , .		16
50	PathDriver. , 2020, , .		9
51	Scheduling algorithms for reservoir- and mixer-aware sample preparation with microfluidic biochips. The Integration VLSI Journal, 2019, 65, 428-443.	1.3	4
52	Efficient Generation of Dilution Gradients With Digital Microfluidic Biochips. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2019, 38, 874-887.	1.9	8
53	Co-placement optimization in sensor-reusable cyber-physical digital microfluidic biochips. Microelectronics Journal, 2019, 83, 185-196.	1.1	4
54	Block-Flushing: A Block-based Washing Algorithm for Programmable Microfluidic Devices. , 2019, , .		8

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55	Vehicle Sequence Reordering with Cooperative Adaptive Cruise Control. , 2019, , .		0
56	MiniControl. , 2019, , .		20
57	Detailed profiling of carbon fixation of in silico synthetic autotrophy with reductive tricarboxylic acid cycle and Calvin-Benson-Bassham cycle in Esherichia coli using hydrogen as an energy source. Synthetic and Systems Biotechnology, 2019, 4, 165-172.	1.8	4
58	A General Cache Framework for Efficient Generation of Timing Critical Paths. , 2019, , .		4
59	Supervised-Learning Congestion Predictor For Routability-Driven Global Routing. , 2019, , .		5
60	Autonomous vehicle routing in multiple intersections. , 2019, , .		6
61	Sample preparation for multiple-reactant bioassays on micro-electrode-dot-array biochips. , 2019, , .		11
62	Congestion-aware Global Routing using Deep Convolutional Generative Adversarial Networks. , 2019, , .		9
63	VOM: Flow-Path Validation and Control-Sequence Optimization for Multilayered Continuous-Flow Microfluidic Biochips. , 2019, , .		5
64	Cloud Columba: Accessible Design Automation Platform for Production and Inspiration: Invited Paper. , 2019, , .		2
65	Physical Synthesis of Flow-Based Microfluidic Biochips Considering Distributed Channel Storage. , 2019, , .		20
66	Open-Source Incubation Ecosystem for Digital Microfluidics â€™ Status and Roadmap: Invited Paper. , 2019, , .		5
67	Droplet Size-Aware High-Level Synthesis. , 2019, , 21-51.		0
68	Design Methodology for TFT-Based Pseudo-CMOS Logic Array With Multilayer Interconnection Architecture and Optimization Algorithms. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2019, 38, 2043-2057.	1.9	1
69	Micro-Electro-Dot-Array Digital Microfluidic Biochips: Technology, Design Automation, and Test Techniques. IEEE Transactions on Biomedical Circuits and Systems, 2019, 13, 292-313.	2.7	38
70	Fault Modeling, Structural Testing, and Functional Testing. , 2019, , 83-112.		0
71	Efficient and Adaptive Error Recovery. , 2019, , 53-81.		0
72	Mechanical strain and temperature aware design methodology for thin-film transistor based pseudo-CMOS logic array. , 2018, , .		1

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73	Flexible Droplet Routing in Active Matrix-Based Digital Microfluidic Biochips. ACM Transactions on Design Automation of Electronic Systems, 2018, 23, 1-25.	1.9	16
74	Module Placement under Completion-Time Uncertainty in Micro-Electrode-Dot-Array Digital Microfluidic Biochips. IEEE Transactions on Multi-Scale Computing Systems, 2018, 4, 811-821.	2.5	11
75	Columba 2.0: A Co-Layout Synthesis Tool for Continuous-Flow Microfluidic Biochips. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2018, 37, 1588-1601.	1.9	36
76	Sound valve-control for programmable microfluidic devices. , 2018, , .		14
77	AARF: Any-Angle Routing for Flow-Based Microfluidic Biochips. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2018, 37, 3042-3055.	1.9	12
78	Multi-level droplet routing in active-matrix based digital-microfluidic biochips. , 2018, , .		8
79	Structural and Functional Test Methods for Micro-Electrode-Dot-Array Digital Microfluidic Biochips. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2018, 37, 968-981.	1.9	21
80	Efficient and Adaptive Error Recovery in a Micro-Electrode-Dot-Array Digital Microfluidic Biochip. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2018, 37, 601-614.	1.9	30
81	Digital Rights Management for Paper-Based Microfluidic Biochips. , 2018, , .		3
82	Columba S. , 2018, , .		14
83	Multi-terminal routing with length-matching for rapid single flux quantum circuits. , 2018, , .		8
84	Multi-channel and fault-tolerant control multiplexing for flow-based microfluidic biochips. , 2018, , .		16
85	Reliability Hardening Mechanisms in Cyber-Physical Digital-Microfluidic Biochips. ACM Journal on Emerging Technologies in Computing Systems, 2018, 14, 1-22.	1.8	4
86	Design-for-testability for continuous-flow microfluidic biochips. , 2018, , .		3
87	A Comprehensive Security System for Digital Microfluidic Biochips. , 2018, , .		10
88	Test generation for microfluidic fully programmable valve arrays (FPVAs) with heuristic acceleration. , 2018, , .		0
89	Pump-aware flow routing algorithm for programmable microfluidic devices. , 2018, , .		11
90	Physical Co-Design of Flow and Control Layers for Flow-Based Microfluidic Biochips. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2018, 37, 1157-1170.	1.9	25

#	ARTICLE	IF	CITATIONS
91	More Effective Randomly-Designed Microfluidics. , 2018, , .		2
92	Design Automation and Test for Flow-Based Biochips: Past Successes and Future Challenges. , 2018, , .		2
93	SOLAR: Simultaneous optimization of control-layer pins placement and channel routing in flow-based microfluidic biochips. , 2018, , .		4
94	Delay-Bounded Intravehicle Network Routing Algorithm for Minimization of Wiring Weight and Wireless Transmit Power. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2017, 36, 551-561.	1.9	9
95	Control-Layer Routing and Control-Pin Minimization for Flow-Based Microfluidic Biochips. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2017, 36, 55-68.	1.9	45
96	Reservoir and mixer constrained scheduling for sample preparation on digital microfluidic biochips. , 2017, , .		6
97	Piracy prevention of digital microfluidic biochips. , 2017, , .		23
98	On reliability hardening in cyber-physical digital-microfluidic biochips. , 2017, , .		3
99	Hamming-distance-based valve-switching optimization for control-layer multiplexing in flow-based microfluidic biochips. , 2017, , .		19
100	Close-to-optimal placement and routing for continuous-flow microfluidic biochips. , 2017, , .		45
101	Computer-Aided Design of Microfluidic Very Large Scale Integration (mVLSI) Biochips. , 2017, , .		9
102	Droplet Size-Aware High-Level Synthesis for Micro-Electrode-Dot-Array Digital Microfluidic Biochips. IEEE Transactions on Biomedical Circuits and Systems, 2017, 11, 612-626.	2.7	50
103	Sample Preparation on Micro-Electrode-Dot-Array Digital Microfluidic Biochips. , 2017, , .		13
104	Component-Oriented High-level Synthesis for Continuous-Flow Microfluidics Considering Hybrid-Scheduling. , 2017, , .		14
105	Testing microfluidic Fully Programmable Valve Arrays (FPVAs). , 2017, , .		28
106	Fast architecture-level synthesis of fault-tolerant flow-based microfluidic biochips. , 2017, , .		10
107	Scheduling and optimization of genetic logic circuits on flow-based microfluidic biochips. , 2017, , .		1
108	Droplet Size-Aware and Error-Correcting Sample Preparation Using Micro-Electrode-Dot-Array Digital Microfluidic Biochips. IEEE Transactions on Biomedical Circuits and Systems, 2017, 11, 1380-1391.	2.7	20

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109	Pressure-Aware Control Layer Optimization for Flow-Based Microfluidic Biochips. IEEE Transactions on Biomedical Circuits and Systems, 2017, 11, 1488-1499.	2.7	14
110	Design-for-testability for paper-based digital microfluidic biochips. , 2017, , .		3
111	Transport or Store?. , 2017, , .		19
112	LUTOSAP. , 2017, , .		10
113	Smart Microfluidic Biochips: Cyberphysical Sensor Integration for Dynamic Error Recovery. , 2017, , 23-71.		0
114	Control-Layer Optimization. , 2017, , 25-52.		1
115	Fault Modeling, Testing, and Design for Testability. , 2017, , 81-115.		2
116	Wash Optimization for Cross-Contamination Removal. , 2017, , 53-79.		1
117	A Full-Flexibility-Guaranteed Pin-Count Reduction Design for General-Purpose Digital Microfluidic Biochips. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2016, E99.A, 570-578.	0.2	0
118	Parasitic-Aware Common-Centroid FinFET Placement and Routing for Current-Ratio Matching. ACM Transactions on Design Automation of Electronic Systems, 2016, 21, 1-22.	1.9	4
119	Columba. , 2016, , .		35
120	Built-in self-test for micro-electrode-dot-array digital microfluidic biochips. , 2016, , .		21
121	Error recovery in a micro-electrode-dot-array digital microfluidic biochip?. , 2016, , .		33
122	Placement optimization of cyber-physical digital microfluidic biochips. , 2016, , .		6
123	Control-fluidic CoDesign for paper-based digital microfluidic biochips. , 2016, , .		18
124	How secure is split manufacturing in preventing hardware trojan?. , 2016, , .		3
125	Thermal optimization for memristor-based hybrid neuromorphic computing systems. , 2016, , .		1
126	Congestion- and timing-driven droplet routing for pin-constrained paper-based microfluidic biochips. , 2016, , .		12



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127	Reliability-Aware Synthesis With Dynamic Device Mapping and Fluid Routing for Flow-Based Microfluidic Biochips. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2016, 35, 1981-1994.	1.9	28
128	Adaptation of Biochemical Protocols to Handle Technology-Change for Digital Microfluidics. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2016, , 1-1.	1.9	3
129	Obstacle-Avoiding Wind Turbine Placement for Power Loss and Wake Effect Optimization. ACM Transactions on Design Automation of Electronic Systems, 2016, 22, 1-24.	1.9	0
130	High-level synthesis for micro-electrode-dot-array digital microfluidic biochips. , 2016, , .		52
131	Test and diagnosis of paper-based microfluidic biochips. , 2016, , .		7
132	Integrated Functional and Washing Routing Optimization for Cross-Contamination Removal in Digital Microfluidic Biochips. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2016, 35, 1283-1296.	1.9	22
133	Wash Optimization and Analysis for Cross-Contamination Removal Under Physical Constraints in Flow-Based Microfluidic Biochips. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2016, 35, 559-572.	1.9	22
134	Design of Microfluidic Biochips: Connecting Algorithms and Foundations of Chip Design to Biochemistry and the Life Sciences. , 2016, , .		0
135	Sequence-pair-based placement and routing for flow-based microfluidic biochips. , 2016, , .		5
136	Optimization of 3D Digital Microfluidic Biochips for the Multiplexed Polymerase Chain Reaction. ACM Transactions on Design Automation of Electronic Systems, 2016, 21, 1-27.	1.9	16
137	A routability-driven flow routing algorithm for programmable microfluidic devices. , 2016, , .		14
138	Leveraging Strategic Detection Techniques for Smart Home Pricing Cyberattacks. IEEE Transactions on Dependable and Secure Computing, 2016, 13, 220-235.	3.7	46
139	Sieve-valve-aware Synthesis of Flow-based Microfluidic Biochips Considering Specific Biological Execution Limitations. , 2016, , .		19
140	A Verification Guided Approach for Selective Program Transformations for Approximate Computing. , 2016, , .		2
141	Special session: Continuous-flow biochips: Current platforms and emerging research challenges. , 2015, , .		0
142	Design and optimization of 3D digital microfluidic biochips for the polymerase chain reaction. , 2015, , .		2
143	Integrated Flow-Control Codesign Methodology for Flow-Based Microfluidic Biochips. IEEE Design and Test, 2015, 32, 60-68.	1.1	32
144	Guest Editors' Introduction: Microfluidics: Design and Test Solutions for Enabling Biochemistry on a Chip. IEEE Design and Test, 2015, 32, 6-7.	1.1	0

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145	A general testing method for digital microfluidic biochips under physical constraints. , 2015, , .		15
146	Cyber-physical integration in programmable microfluidic biochips. , 2015, , .		2
147	A Novel Analog Physical Synthesis Methodology Integrating Existent Design Expertise. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2015, 34, 199-212.	1.9	34
148	Reliability-Driven Chip-Level Design for High-Frequency Digital Microfluidic Biochips. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2015, 34, 529-539.	1.9	16
149	EDA Challenges for Memristor-Crossbar based Neuromorphic Computing. , 2015, , .		6
150	An Optimal Pin-Count Design With Logic Optimization for Digital Microfluidic Biochips. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2015, 34, 629-641.	1.9	12
151	ILP-Based Alleviation of Dense Meander Segments With Prioritized Shifting and Progressive Fixing in PCB Routing. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2015, 34, 1000-1013.	1.9	6
152	Obstacle-avoiding wind turbine placement for power-loss and wake-effect optimization. , 2015, , .		1
153	Storage and Caching: Synthesis of Flow-Based Microfluidic Biochips. IEEE Design and Test, 2015, 32, 69-75.	1.1	34
154	Testing of digital microfluidic biochips with arbitrary layouts. , 2015, , .		1
155	Common-Centroid FinFET Placement Considering the Impact of Gate Misalignment. , 2015, , .		2
156	PACOR. , 2015, , .		33
157	Analog layout synthesis with knowledge mining. , 2015, , .		13
158	Intra-vehicle network routing algorithm for wiring weight and wireless transmit power minimization. , 2015, , .		4
159	SVM-Based Routability-Driven Chip-Level Design for Voltage-Aware Pin-Constrained EWOD Chips. , 2015, , .		10
160	An EDA framework for large scale hybrid neuromorphic computing systems. , 2015, , .		34
161	Reliability-aware synthesis for flow-based microfluidic biochips by dynamic-device mapping. , 2015, , .		33
162	Design and Optimization of a Cyberphysical Digital-Microfluidic Biochip for the Polymerase Chain Reaction. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2015, 34, 29-42.	1.9	35

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163	Hardware/Software Co-Design and Optimization for Cyberphysical Integration in Digital Microfluidic Biochips. , 2015, , .		12
164	Biochemistry Synthesis Under Completion-Time Uncertainties in Fluidic Operations. , 2015, , 95-116.		0
165	Optimization of On-Chip Polymerase Chain Reaction. , 2015, , 117-146.		0
166	Pin-Count Minimization for Application-Independent Chips. , 2015, , 147-183.		0
167	Pin-Limited Cyberphysical Microfluidic Biochip. , 2015, , 185-193.		1
168	A logic integrated optimal pin-count design for digital microfluidic biochips. , 2014, , .		3
169	Vulnerability assessment and defense technology for smart home cybersecurity considering pricing cyberattacks. , 2014, , .		22
170	Wash optimization for cross-contamination removal in flow-based microfluidic biochips. , 2014, , .		11
171	Biochip Synthesis and Dynamic Error Recovery for Sample Preparation Using Digital Microfluidics. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2014, 33, 183-196.	1.9	36
172	Exact One-pass Synthesis of Digital Microfluidic Biochips. , 2014, , .		58
173	Placement optimization of flexible TFT circuits with mechanical strain and temperature consideration. ACM Journal on Emerging Technologies in Computing Systems, 2014, 11, 1-28.	1.8	4
174	Practical Functional and Washing Droplet Routing for Cross-Contamination Avoidance in Digital Microfluidic Biochips. , 2014, , .		11
175	Reliability-Driven Pipelined Scan-Like Testing of Digital Microfluidic Biochips. , 2014, , .		24
176	An efficient bi-criteria flow channel routing algorithm for flow-based microfluidic biochips. , 2014, , .		4
177	Practical functional and washing droplet routing for cross-contamination avoidance in digital microfluidic biochips. , 2014, , .		3
178	Reliability-driven chip-level design for high-frequency digital microfluidic biochips. , 2014, , .		4
179	An Efficient Bi-criteria Flow Channel Routing Algorithm For Flow-based Microfluidic Biochips. , 2014, , .		10
180	Recent trends in chip-level design automation for digital microfluidic biochips. , 2014, , .		1

#	ARTICLE	IF	CITATIONS
181	Triangle-based process hotspot classification with dummification in EUVL. , 2014, , .		1
182	ACER: An Agglomerative Clustering Based Electrode Addressing and Routing Algorithm for Pin-Constrained EWOD Chips. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2014, 33, 1316-1327.	1.9	15
183	Efficient building identification using structural and spatial information on mobile devices. , 2014, , .		0
184	Exploring Feasibilities of Symmetry Islands and Monotonic Current Paths in Slicing Trees for Analog Placement. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2014, 33, 879-892.	1.9	22
185	Voltage-Aware Chip-Level Design for Reliability-Driven Pin-Constrained EWOD Chips. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2014, 33, 1302-1315.	1.9	14
186	A thermal resilient integration of many-core microprocessors and main memory by 2.5D TSI I/Os. , 2014, , .		1
187	Optimization of heaters in a digital microfluidic biochip for the polymerase chain reaction. , 2014, , .		3
188	NBTI tolerance and leakage reduction using gate sizing. ACM Journal on Emerging Technologies in Computing Systems, 2014, 11, 1-12.	1.8	5
189	A network-flow-based optimal sample preparation algorithm for digital microfluidic biochips. , 2014, , .		38
190	Control-layer optimization for flow-based mVLSI microfluidic biochips. , 2014, , .		25
191	A logic integrated optimal pin-count design for digital microfluidic biochips. , 2014, , .		2
192	Biochemistry Synthesis on a Cyberphysical Digital Microfluidics Platform Under Completion-Time Uncertainties in Fluidic Operations. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2014, 33, 903-916.	1.9	5
193	Test generation and design-for-testability for flow-based mVLSI microfluidic biochips. , 2014, , .		17
194	A topology-based ECO routing methodology for mask cost minimization. , 2014, , .		6
195	Testing of Flow-Based Microfluidic Biochips: Fault Modeling, Test Generation, and Experimental Demonstration. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2014, 33, 1463-1475.	1.9	64
196	Tutorial T5: Microfluidic Biochips: Connecting VLSI and Embedded Systems to the Life Sciences. , 2014, , .		0
197	Pulsed-Latch Utilization for Clock-Tree Power Optimization. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2014, 22, 721-733.	2.1	10
198	Design Automation for Digital Microfluidic Biochips. IPSJ Transactions on System LSI Design Methodology, 2014, 7, 16-26.	0.5	6

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199	A thermal resilient integration of many-core microprocessors and main memory by 2.5D TSI I/Os. , 2014, , .		2
200	Error Recovery in Cyberphysical Digital Microfluidic Biochips. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2013, 32, 59-72.	1.9	126
201	Bus-driven floorplanning with thermal consideration. The Integration VLSI Journal, 2013, 46, 369-381.	1.3	3
202	Testing of flow-based microfluidic biochips. , 2013, , .		5
203	Tutorial: Digital microfluidic biochips: Towards hardware/software co-design and cyber-physical system integration. , 2013, , .		0
204	Optimization of polymerase chain reaction on a cyberphysical digital microfluidic biochip. , 2013, , .		13
205	On Producing Linear Dilution Gradient of a Sample with a Digital Microfluidic Biochip. , 2013, , .		16
206	Control synthesis for the flow-based microfluidic large-scale integration biochips. , 2013, , .		43
207	1-D Cell Generation With Printability Enhancement. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2013, 32, 419-432.	1.9	8
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