Terrence Mak

List of Publications by Year
in descending order

29 papers	**608** citations	949033 **11** h-index	843174 **20** g-index
29 all docs	**29** docs citations	**29** times ranked	**865** citing authors

#	Article	IF	Citations
1	Thermal and Performance Efficient On-Chip Surface-Wave Communication for Many-Core Systems in Dark Silicon Era. ACM Journal on Emerging Technologies in Computing Systems, 2022, 18, 1-18.	1.8	4
2	Power density aware application mapping in mesh-based network-on-chip architecture: An evolutionary multi-objective approach. The Integration VLSI Journal, 2021, 81, 342-353.	1.3	10
3	A Lifetime Reliability-Constrained Runtime Mapping for Throughput Optimization in Many-Core Systems. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2019, 38, 1771-1784.	1.9	5
4	CoDAPT: A Concurrent Data And Power Transceiver for Fully Wireless 3D-ICs. , 2019, , .		4
5	On Runtime Communication and Thermal-Aware Application Mapping and Defragmentation in 3D NoC Systems. IEEE Transactions on Parallel and Distributed Systems, 2019, 30, 2775-2789.	4.0	18
6	A Low-Energy Inductive Transceiver using Spike-Latency Encoding for Wireless 3D Integration. , 2019, , .		1
7	A Non-Minimal Routing Algorithm for Aging Mitigation in 2D-Mesh NoCs. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2019, 38, 1373-1377.	1.9	9
8	Bubble Budgeting: Throughput Optimization for Dynamic Workloads by Exploiting Dark Cores in Many Core Systems. IEEE Transactions on Computers, 2018, 67, 178-192.	2.4	14
9	An integrated web-based air pollution decision support system â€" a prototype. International Journal of Geographical Information Science, 2018, 32, 1787-1814.	2.2	11
10	A neuro-inspired visual tracking method based on programmable system-on-chip platform. Neural Computing and Applications, 2018, 30, 2697-2708.	3.2	1
11	A Fault-Tolerant Routing Algorithm Using Tunnels in Fault Blocks for Network-on-Chip. Journal of Circuits, Systems and Computers, 2018, 27, 1850022.	1.0	1
12	Improving the efficiency of thermal covert channels in multi-/many-core systems. , 2018, , .		18
13	Globally Wireless Locally Wired (GloWiLoW): A Clock Distribution Network for Many-Core Systems. , 2018, , .		1
14	A high-speed design methodology for inductive coupling links in 3D-ICs. , 2018, , .		7
15	A Resilient 2-D Waveguide Communication Fabric for Hybrid Wired-Wireless NoC Design. IEEE Transactions on Parallel and Distributed Systems, 2017, 28, 359-373.	4.0	33
16	HRC: A 3D NoC Architecture with Genuine Support for Runtime Thermal-Aware Task Management. IEEE Transactions on Computers, 2017, 66, 1676-1688.	2.4	6
17	Runtime task mapping for lifetime budgeting in many-core systems. , 2017, , .		0
18	Extending the Performance of Hybrid NoCs beyond the Limitations of Network Heterogeneity. Journal of Low Power Electronics and Applications, 2017, 7, 8.	1.3	13

#	Article	IF	Citations
19	On the Nanocommunications at THz Band in Graphene-Enabled Wireless Network-on-Chip. Mathematical Problems in Engineering, 2017, 2017, 1-13.	0.6	15
20	Modular sensor system (MSS) for urban air pollution monitoring. , 2016, , .		7
21	Defragmentation for Efficient Runtime Resource Management in NoC-Based Many-Core Systems. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2016, 24, 3359-3372.	2.1	13
22	Adaptive Routing Algorithms for Lifetime Reliability Optimization in Network-on-Chip. IEEE Transactions on Computers, 2016, 65, 2896-2902.	2.4	20
23	A Survey of Emerging Interconnects for On-Chip Efficient Multicast and Broadcast in Many-Cores. IEEE Circuits and Systems Magazine, 2016, 16, 58-72.	2.6	113
24	IP Protection of Mesh NoCs Using Square Spiral Routing. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2016, 24, 1560-1573.	2.1	7
25	A Survey of Wireless Sensor Network Based Air Pollution Monitoring Systems. Sensors, 2015, 15, 31392-31427.	2.1	246
26	Power-Adaptive Computing System Design for Solar-Energy-Powered Embedded Systems. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2015, 23, 1402-1414.	2.1	14
27	Modeling and Tools for Power Supply Variations Analysis in Networks-on-Chip. IEEE Transactions on Computers, 2014, 63, 679-690.	2.4	14
28	Towards reliable hybrid bio-silicon integration using novel adaptive control system. , 2013, , .		0
29	A scalable FPGA-based design for field programmable large-scale ion channel simulations. , 2012, , .		3