Hoi-Jun Yoo

List of Publications by Year in descending order

63 papers	2,861 citations	279798 23 h-index	414414 32 g-index
65 all docs	65 docs citations	65 times ranked	2083 citing authors

#	Article	IF	Citations
1	Neuro-inspired computing chips. Nature Electronics, 2020, 3, 371-382.	26.0	402
2	The Hardware and Algorithm Co-Design for Energy-Efficient DNN Processor on Edge/Mobile Devices. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 3458-3470.	5.4	25
3	A Four-Camera VGA-Resolution Capsule Endoscope System With 80-Mb/s Body Channel Communication Transceiver and Sub-Centimeter Range Capsule Localization. IEEE Journal of Solid-State Circuits, 2019, 54, 538-549.	5.4	37
4	Analysis of Channel Characteristic for Body Channel Communication Transceiver Design. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2019, , 374-383.	0.3	0
5	A battery-less 31 ÂµW HBC receiver with RF energy harvester for implantable devices. , 2019, , .		0
6	A Capsule Endoscope System for Wide Visualization Field and Location Tracking. , 2018, , .		3
7	The effects of electrode impedance on receiver sensitivity in body channel communication. Microelectronics Journal, 2016, 53, 73-80.	2.0	5
8	A 540-<inline-formula> <tex-math notation="LaTeX">$muext{W}$</tex-math> </inline-formula> Duty Controlled RSSI With Current Reusing Technique for Human Body Communication. IEEE Transactions on Biomedical Circuits and Systems, 2016, 10, 893-901.	4.0	3
9	79pJ/b 80Mb/s full-duplex transceiver and 42.5jiW 100kb/s super-regenerative transceiver for body channel communication. , 2015, , .		3
10	The Effects of Electrode Configuration on Body Channel Communication Based on Analysis of Vertical and Horizontal Electric Dipoles. IEEE Transactions on Microwave Theory and Techniques, 2015, 63, 1409-1420.	4.6	35
11	A 45 <formula formulatype="inline"><tex Notation="TeX">mu</tex></formula>W Injection-Locked FSK Wake-Up Receiver With Frequency-to-Envelope Conversion for Crystal-Less Wireless Body Area Network. IEEE Journal of Solid-State Circuits, 2015, 50, 1351-1360.	5.4	40
12	21.1 A 79pJ/b 80Mb/s full-duplex transceiver and a 42.5μW 100kb/s super-regenerative transceiver for body channel communication. , 2015, , .		10
13	A 5.2 mW IEEE 802.15.6 HBC Standard Compatible Transceiver With Power Efficient Delay-Locked-Loop Based BPSK Demodulator. IEEE Journal of Solid-State Circuits, 2015, 50, 2549-2559.	5.4	33
14	Human Body Communication Transceiver for Energy Efficient BAN. Integrated Circuits and Systems, 2015, , 281-311.	0.2	2
15	Intelligent Network-on-Chip With Online Reinforcement Learning for Portable HD Object Recognition Processor. IEEE Transactions on Circuits and Systems I: Regular Papers, 2014, 61, 476-484.	5.4	11
16	A 33μW/node Duty Cycle Controlled HBC Transceiver system for medical BAN with 64 sensor nodes. , 2014, , .		6
17	Your Heart on Your Sleeve: Advances in Textile-Based Electronics Are Weaving Computers Right into the Clothes We Wear. IEEE Solid-State Circuits Magazine, 2013, 5, 59-70.	0.4	45
18	A 37.5 /spl mu/W Body Channel Communication Wake-Up Receiver With Injection-Locking Ring Oscillator for Wireless Body Area Network. IEEE Transactions on Circuits and Systems I: Regular Papers, 2013, 60, 1200-1208.	5.4	45

#	Article	IF	Citations
19	Low energy wireless body area network systems. , 2013, , .		7
20	Wireless body area network and its healthcare applications. , 2013, , .		10
21	A Low-Energy Crystal-Less Double-FSK Sensor Node Transceiver for Wireless Body-Area Network. IEEE Journal of Solid-State Circuits, 2012, 47, 2678-2692.	5.4	54
22	An energy-efficient body channel communication based on Maxwell's equations analysis of on-body transmission mechanism. , 2012, , .		7
23	Live demonstration: Wearable mental health monitoring system with planar-fashonable circuit board. , 2012, , .		0
24	The Signal Transmission Mechanism on the Surface of Human Body for Body Channel Communication. IEEE Transactions on Microwave Theory and Techniques, 2012, 60, 582-593.	4.6	235
25	A 45μW injection-locked FSK Wake-Up receiver for crystal-less wireless body-area-network. , 2012, , .		7
26	A 0.24-nJ/b Wireless Body-Area-Network Transceiver With Scalable Double-FSK Modulation. IEEE Journal of Solid-State Circuits, 2012, 47, 310-322.	5.4	117
27	A 20 µW contact impedance sensor for wireless body-area-network transceiver. , 2011, , .		7
28	A low energy crystal-less double-FSK transceiver for wireless body-area-network. , 2011, , .		7
29	A 5.3 µW contact monitoring sensor with BCC electrode and MICS antenna for energy efficient unified WBAN transceiver. , 2011, , .		0
30	A Low Energy Injection-Locked FSK Transceiver With Frequency-to-Amplitude Conversion for Body Sensor Applications. IEEE Journal of Solid-State Circuits, 2011, 46, 928-937.	5.4	112
31	Fabric circuit board-based dry electrode and its characteristics for long-term physiological signal recording. , 2011, 2011, 2497-500.		13
32	Wearable Healthcare System. Integrated Circuits and Systems, 2011, , 339-370.	0.2	2
33	Wireless fabric patch sensors for wearable healthcare. , 2010, 2010, 5254-7.		10
34	A lMb/s,. , 2010, , .		1
35	Electrical Characterization of Screen-Printed Circuits on the Fabric. IEEE Transactions on Advanced Packaging, 2010, 33, 196-205.	1.6	134
36	A 201.4 GOPS 496 mW Real-Time Multi-Object Recognition Processor With Bio-Inspired Neural Perception Engine. IEEE Journal of Solid-State Circuits, 2010, 45, 32-45.	5.4	100

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37	A 118.4 GB/s Multi-Casting Network-on-Chip With Hierarchical Star-Ring Combined Topology for Real-Time Object Recognition. IEEE Journal of Solid-State Circuits, 2010, 45, 1399-1409.	5.4	18
38	Emerging low energy Wearable Body Sensor Networks using patch sensors for continuous healthcare applications. , 2010, 2010, 6381-4.		18
39	A Low-Power Portable ECG Touch Sensor with Two Dry Metal Contact Electrodes. Journal of Semiconductor Technology and Science, 2010, 10, 300-308.	0.4	14
40	A 54GOPS 51.8mW analog-digital mixed mode Neural Perception Engine for fast object detection. , 2009, , .		0
41	A Wearable ECG Acquisition System With Compact Planar-Fashionable Circuit Board-Based Shirt. IEEE Transactions on Information Technology in Biomedicine, 2009, 13, 897-902.	3.2	154
42	A 10.8 mW Body Channel Communication/MICS Dual-Band Transceiver for a Unified Body Sensor Network Controller. IEEE Journal of Solid-State Circuits, 2009, 44, 3459-3468.	5.4	96
43	A 10.8mW body-channel-communication/MICS dual-band transceiver for a unified body-sensor-network controller. , 2009, , .		1
44	81.6 GOPS Object Recognition Processor Based on a Memory-Centric NoC. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2009, 17, 370-383.	3.1	18
45	A Planar MICS Band Antenna Combined With a Body Channel Communication Electrode for Body Sensor Network. IEEE Transactions on Microwave Theory and Techniques, 2009, 57, 2515-2522.	4.6	46
46	A Configurable Heterogeneous Multicore Architecture With Cellular Neural Network for Real-Time Object Recognition. IEEE Transactions on Circuits and Systems for Video Technology, 2009, 19, 1612-1622.	8.3	11
47	A 125 GOPS 583 mW Network-on-Chip Based Parallel Processor With Bio-Inspired Visual Attention Engine. IEEE Journal of Solid-State Circuits, 2009, 44, 136-147.	5.4	43
48	A 60 kb/sâ€“10 Mb/s Adaptive Frequency Hopping Transceiver for Interference-Resilient Body Channel Communication. IEEE Journal of Solid-State Circuits, 2009, 44, 708-717.	5.4	113
49	A 76.8 GB/s 46 mW low-latency network-on-chip for real-time object recognition processor. , 2008, , .		3
50	Body channel communication for low energy BSN/BAN. , 2008, , .		10
51	A 60kb/s-to-10Mb/s 0.37nJ/b Adaptive-Frequency-Hopping Transceiver for Body-Area Network. , 2008, , .		21
52	A two-electrode 2.88nJ/conversion biopotential acquisition system for portable healthcare device. , 2008, , .		11
53	A 125GOPS 583mW Network-on-Chip Based Parallel Processor with Bio-inspired Visual-Attention Engine. , 2008, , .		23
54	Vision platform for mobile intelligent robot based on 81.6 GOPS object recognition processor. , 2008, , .		1

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55	A low cost quadratic level ECG compression algorithm and its hardware optimization for body sensor network system. , 2008, 2008, 5490-3.		21
56	A 0.2-mW 2-Mb/s Digital Transceiver Based on Wideband Signaling for Human Body Communications. IEEE Journal of Solid-State Circuits, 2007, 42, 2021-2033.	5.4	94
57	Solutions for Real Chip Implementation Issues of NoC and Their Application to Memory-Centric NoC. , 2007, , .		31
58	An 81.6 GOPS Object Recognition Processor Based on NoC and Visual Image Processing Memory. , 2007, , .		30
59	A 0.9V 2.6mW Body-Coupled Scalable PHY Transceiver for Body Sensor Applications. , 2007, , .		38
60	The Human Body Characteristics as a Signal Transmission Medium for Intrabody Communication. IEEE Transactions on Microwave Theory and Techniques, 2007, 55, 1080-1086.	4.6	308
61	Low-power network-on-chip for high-performance SoC design. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2006, 14, 148-160.	3.1	141
62	A 4-gb/s CMOS clock and data recovery circuit using 1 = 8 -rate clock technique. IEEE Journal of Solid-State Circuits, 2003, 38, 1213-1219.	5.4	60
63	A Reconfigurable Crossbar Switch with Adaptive Bandwidth Control for Networks-on-Chip. , 0, , .		9