Wen-Jyi Hwang

List of Publications by Year
in descending order

55 papers	419 citations	840119 11 h-index	839053 18 g-index
55 all docs	55 docs citations	55 times ranked	361 citing authors

#	Article	IF	Citations
1	An efficient VLSI architecture for H.264 variable block size motion estimation. IEEE Transactions on Consumer Electronics, 2005, 51, 1291-1299.	3.0	64
2	Scalable medical data compression and transmission using wavelet transform for telemedicine applications. IEEE Transactions on Information Technology in Biomedicine, 2003, 7, 54-63.	3.6	40
3	Continuous Finger Gesture Recognition Based on Flex Sensors. Sensors, 2019, 19, 3986.	2.1	29
4	A Fragile Watermarking Algorithm for Hologram Authentication. Journal of Display Technology, 2014, 10, 263-271.	1.3	25
5	Sensor-Based Continuous Hand Gesture Recognition by Long Short-Term Memory. , 2018, 2, 1-4.		24
6	Digital Hologram Authentication Using a Hadamard-Based Reversible Fragile Watermarking Algorithm. Journal of Display Technology, 2015, 11, 193-203.	1.3	23
7	Efficient FPGA-Based Fresnel Transform Architecture for Digital Holography. Journal of Display Technology, 2014, 10, 272-281.	1.3	17
8	Efficient Architecture for Spike Sorting in Reconfigurable Hardware. Sensors, 2013, 13, 14860-14887.	2.1	15
9	Shift-Or Circuit for Efficient Network Intrusion Detection Pattern Matching. , 2006, , .		14
10	Recognition of Hand Gesture Sequences by Accelerometers and Gyroscopes. Applied Sciences (Switzerland), 2020, 10, 6507.	1.3	14
11	Genetic entropy-constrained vector quantizer design algorithm. Optical Engineering, 1999, 38, 233.	0.5	12
12	Efficient Fuzzy C-Means Architecture for Image Segmentation. Sensors, 2011, 11, 6697-6718.	2.1	12
13	Efficient VLSI Architecture for Training Radial Basis Function Networks. Sensors, 2013, 13, 3848-3877.	2.1	11
14	Spike Detection Based on Normalized Correlation with Automatic Template Generation. Sensors, 2014, 14, 11049-11069.	2.1	8
15	Efficient hardware architecture based on generalized Hebbian algorithm for texture classification. Neurocomputing, 2011, 74, 3248-3256.	3.5	7
16	Efficient Phase Unwrapping Architecture for Digital Holographic Microscopy. Sensors, 2011, 11, 9160-9181.	2.1	7
17	An Efficient VLSI Architecture for Multi-Channel Spike Sorting Using a Generalized Hebbian Algorithm. Sensors, 2015, 15, 19830-19851.	2.1	7
18	An Efficient FPGA-Based Parallel Phase Unwrapping Hardware Architecture. IEEE Transactions on Computational Imaging, 2017, 3, 996-1007.	2.6	7

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19	Super fast hardware string matching. , 2006, , .		6
20	Storage- and entropy-constrained multi-stage vector quantization and its applications to progressive image transmission. IEEE Transactions on Consumer Electronics, 1997, 43, 17-23.	3.0	5
21	Fuzzy channel-optimized vector quantization. IEEE Communications Letters, 2000, 4, 408-410.	2.5	5
22	Robust transmission based on variable-rate error control and genetic programming. IEEE Communications Letters, 2002, 6, 25-27.	2.5	5
23	FPGA Implementation of Generalized Hebbian Algorithm for Texture Classification. Sensors, 2012, 12, 6244-6268.	2.1	5
24	Region-referenced phase unwrapping architecture for digital holographic microscopy. Applied Optics, 2015, 54, A67.	0.9	5
25	An efficient FPGA-Based architecture for convolutional neural networks. , 2017, , .		5
26	An FPGA-Based Autofocusing Hardware Architecture for Digital Holography. IEEE Transactions on Computational Imaging, 2019, 5, 287-300.	2.6	5
27	An Efficient Hardware Circuit for Spike Sorting Based on Competitive Learning Networks. Sensors, 2017, 17, 2232.	2.1	4
28	An Intelligent QoS Algorithm for Home Networks. IEEE Communications Letters, 2019, 23, 588-591.	2.5	4
29	Robust block-based EZW image compression with channel noise optimized rate-distortion functions. , 1999, , .		3
30	VLSI architecture for motion vector quantization. IEEE Transactions on Consumer Electronics, 2003, 49, 237-242.	3.0	3
31	FPGA-based ROM-free network intrusion detection using shift-OR circuit. Journal of Embedded Computing, 2009, 3, 99-107.	0.2	3
32	Real-time middle wave infrared aerial image capturing and stitching system for vegetation observation. , 2015, , .		3
33	A Novel User-Oriented Quality of Service Algorithm for Home Networks. IEEE Systems Journal, 2018, 12, 548-559.	2.9	3
34	Layered Video Coding Based on Displaced Frame Difference Prediction and Multiresolution Block Matching. IEEE Transactions on Communications, 2004, 52, 1504-1513.	4.9	2
35	Hardware Implementation of k-Winner-Take-All Neural Network with On-chip Learning. , 2010, , .		2
36	A Low Cost VLSI Architecture for Spike Sorting Based on Feature Extraction with Peak Search. Sensors, 2016, 16, 2084.	2.1	2

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37	Quality of Service Management for Home Networks Using Online Service Response Prediction. IEEE Internet of Things Journal, 2017, 4, 1773-1786.	5.5	2
38	Automated Surface Defect Inspection Based on Autoencoders and Fully Convolutional Neural Networks. Applied Sciences (Switzerland), 2021, 11, 7838.	1.3	2
39	SOURCE CODING THEOREM FOR CYCLOSTATIONARY GAUSSIAN SOURCES. Journal of the Chinese Institute of Engineers, Transactions of the Chinese Institute of Engineers,Series A/Chung-kuo Kung Ch'eng Hsuch K'an, 1997, 20, 27-37.	0.6	1
40	Multiresolution progressive image transmission with storage and transmission time constraints. IEEE Transactions on Consumer Electronics, 1997, 43, 1132-1142.	3.0	1
41	A new block-matching algorithm based on subspace and partial distance search techniques in the wavelet domain. IEEE Transactions on Consumer Electronics, 1998, 44, 353-359.	3.0	1
42	Designing an Integrated Voice, Video, and Instant Message Service System in SIP-Based IP Networks. , 2006, , .		1
43	Efficient VLSI Architecture for Fuzzy C-Means Clustering in Reconfigurable Hardware. , 2009, , .		1
44	Fast Fuzzy C-Means Clustering Based on Low-Cost High-Performance VLSI Architecture in Reconfigurable Hardware. , 2010, , .		1
45	Efficient k-Winner-Take-All Competitive Learning Hardware Architecture for On-Chip Learning. Sensors, 2012, 12, 11661-11683.	2.1	1
46	A Novel QoS Mapping Algorithm for Heterogeneous Home Networks Using General Regression Neural Networks. , 2014, , .		1
47	An FPGA-Assisted Intelligent QoS Management System for Local Area Networks. IEEE Systems Journal, 2022, 16, 3882-3893.	2.9	1
48	A fast search algorithm for vector quantization using wavelet transform. , 0, , .		0
49	Entropy-constrained vector quantizer design algorithm using competitive learning technique. , 0, , .		0
50	A multi-channel channel-optimized scheme for EZW using rate-distortion functions. , 0, , .		0
51	An ARQ-based diversity system for transmission of EZW compressed images over noisy channels. , 0, , .		0
52	Concurrent genetic optimization for joint design of source and channel codes. Neurocomputing, 2006, 70, 130-138.	3.5	0
53	Efficient memetic vector quantizer design based on reconfigurable hardware and softcore processor. Journal of the Chinese Institute of Engineers, Transactions of the Chinese Institute of Engineers,Series A/Chung-kuo Kung Ch'eng Hsuch K'an, 2009, 32, 905-914.	0.6	0
54	Efficient Hardware Architecture for Correlation-Based Spike Detection and Unsupervised Clustering. , 2017, , .		0

#	Article	IF	Citations
55	Novel Record Replacement Algorithm and Architecture for QoS Management over Local Area Networks. Micromachines, 2022, 13, 594.	1.4	0