

Arjuna Madanayake

List of Publications by Year in descending order

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times ranked

2242
citing authors

#	ARTICLE	IF	CITATIONS
1	General Framework for Array Noise Analysis and Noise Performance of a Two-Element Interferometer With a Mutual-Coupling Canceler. IEEE Transactions on Antennas and Propagation, 2022, 70, 8059-8068.	5.1	0
2	Proof of Sense: A Novel Consensus Mechanism for Spectrum Misuse Detection. IEEE Transactions on Industrial Informatics, 2022, 18, 9206-9216.	11.3	10
3	A Real-Time Ultra-broadband Software-Defined Radio Platform for Terahertz Communications. , 2022, , .		5
4	Compressed Beam Alignment with Out-of-Band Assistance in Millimeter Wave Cellular Networks. IEEE Transactions on Mobile Computing, 2021, 20, 117-129.	5.8	1
5	Adaptive Filtering of 4-D Light Field Images for Depth-Based Image Enhancement. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 787-791.	3.0	3
6	A Radio Frequency Analog Computer for Computational Electromagnetics. IEEE Journal of Solid-State Circuits, 2021, 56, 440-454.	5.4	6
7	Real-Time Light Field Signal Processing Using 4D/5D Linear Digital Filter FPGA Circuits. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 2735-2741.	3.0	8
8	Low-Complexity Scaling Methods for DCT-II Approximations. IEEE Transactions on Signal Processing, 2021, 69, 4557-4566.	5.3	7
9	Impact of bandwidth on antenna array noise matching. Electronics Letters, 2021, 57, 158-160.	1.0	1
10	A Broadband Multistage Self-Interference Canceller for Full-Duplex MIMO Radios. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 2253-2266.	4.6	9
11	WLS Design of M-D Complex-Coefficient FIR Filters with Low Group Delay Using Second-Order Cone Programming. , 2021, , .		3
12	Analog Switched-Capacitor Circuits for Solving the Schrödinger Equation. , 2021, , .		0
13	A versatile experimental testbed for ultrabroadband communication networks above 100 GHz. Computer Networks, 2021, 193, 108092.	5.1	23
14	A Fast and Fully Parallel Analog CMOS Solver for Nonlinear PDEs. IEEE Transactions on Circuits and Systems I: Regular Papers, 2021, 68, 3363-3376.	5.4	4
15	A Comparison of AI-Enabled Digital Twins for DSP-based Self-Interference Cancellation in Wideband Full-Duplex Communications. , 2021, , .		0
16	Framework for the Cosimulation of Antenna Arrays and Receivers. IEEE Transactions on Antennas and Propagation, 2021, 69, 5090-5094.	5.1	1
17	Spacetime Frequency-Multiplexed Digital-RF Array Receivers With Reduced ADC Count. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 2840-2844.	3.0	1
18	A Fast Algorithm to Solve Delay Vandermonde Systems in Phased-Array Digital Receivers. IEEE Transactions on Aerospace and Electronic Systems, 2021, 57, 2288-2297.	4.7	5

#	ARTICLE	IF	CITATIONS
19	An Offset-Cancelling Discrete-Time Analog Computer for Solving 1-D Wave Equations. IEEE Journal of Solid-State Circuits, 2021, 56, 2881-2894.	5.4	7
20	Wave-digital filter circuits for single-chip 4-D light field depth-based enhancement. Multidimensional Systems and Signal Processing, 2021, 32, 607-631.	2.6	4
21	Massive-MIMO and Digital mm-Wave Arrays on RF-SoCs using FDM for M-Fold Increase in Antennas per ADC/DAC. , 2021, , .		3
22	Frequency-Multiplexed Array Digitization for MIMO Receivers: 4-Antennas/ADC at 28 GHz on Xilinx ZCU-1285 RF SoC. IEEE Access, 2021, 9, 142743-142753.	4.2	3
23	Towards a Low-SWaP 1024-Beam Digital Array: A 32-Beam Subsystem at 5.8 GHz. IEEE Transactions on Antennas and Propagation, 2020, 68, 900-912.	5.1	4
24	Multi-depth filtering and occlusion suppression in 4-D light fields: Algorithms and architectures. Signal Processing, 2020, 167, 107294.	3.7	17
25	Multi Depth-Velocity Filters for Enhancing Multiple Moving Objects in 5-D Light Field Videos. , 2020, , .		1
26	Spatio-Temporal \hat{r}^m - \hat{r}^l N²-Port ADC Noise Shaping for N \hat{r}^m - N Antenna Arrays. , 2020, , .		0
27	RF-Rate Hybrid CNN Accelerator Based on Analog-CMOS and Xilinx RFSoc. , 2020, , .		2
28	A Switched-Capacitor-Based Analog Computer for Solving the 1-D Wave Equation. , 2020, , .		1
29	Xilinx RF-SoC-based Digital Multi-Beam Array Processors for 28/60 GHz Wireless Testbeds. , 2020, , .		1
30	Low-Complexity Real-Time Light Field Compression using 4-D Approximate DCT. , 2020, , .		0
31	A 1.0-8.3 GHz Cochlea-Based Real-Time Spectrum Analyzer With \hat{r}^m - \hat{r}^l -Modulated Digital Outputs. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 2934-2947.	5.4	4
32	Fast Radix-32 Approximate DFTs for 1024-Beam Digital RF Beamforming. IEEE Access, 2020, 8, 96613-96627.	4.2	10
33	A Low-SWaP 16-Beam 2.4GHz Digital Phased Array Receiver Using DFT Approximation. IEEE Transactions on Aerospace and Electronic Systems, 2020, 56, 3645-3654.	4.7	13
34	Efficient and Self-Recursive Delay Vandermonde Algorithm for Multi-Beam Antenna Arrays. IEEE Open Journal of Signal Processing, 2020, 1, 64-76.	3.5	9
35	Power-Efficient ELF Wireless Communications Using Electro-Mechanical Transmitters. IEEE Access, 2020, 8, 2455-2471.	4.2	38
36	Radix-2 Self-Recursive Sparse Factorizations of Delay Vandermonde Matrices for Wideband Multi-Beam Antenna Arrays. IEEE Access, 2020, 8, 25498-25508.	4.2	13

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37	Experimental Wireless Testbed for Ultrabroadband Terahertz Networks. , 2020, , .		12
38	Physics-Aware Processing of Rotational Micro-Doppler Signatures for DBN-Based UAS Classification Radar. , 2020, , .		1
39	Low-complexity 8-point DCT approximation based on angle similarity for image and video coding. Multidimensional Systems and Signal Processing, 2019, 30, 1363-1394.	2.6	24
40	Design and Digital Implementation of Fast and Recursive DCT II-IV Algorithms. Circuits, Systems, and Signal Processing, 2019, 38, 529-555.	2.0	5
41	Low-Complexity Wideband Transmit Array using Variable-Precision 2-D Sparse FIR Digital Filters. , 2019, , .		2
42	Design of 28 GHz 64-QAM Digital Receiver. , 2019, , .		4
43	MillimeTera. , 2019, , .		17
44	Real-Time FPGA-Based Multi-Beam Directional Sensing of 2.4 GHz ISM RF Sources. , 2019, , .		1
45	Continuous-Time Algorithms for Solving Maxwell's Equations Using Analog Circuits. IEEE Transactions on Circuits and Systems I: Regular Papers, 2019, 66, 3941-3954.	5.4	13
46	Wireless Communications and Applications Above 100 GHz: Opportunities and Challenges for 6G and Beyond. IEEE Access, 2019, 7, 78729-78757.	4.2	1,228
47	A 16-Element 2.4-GHz Multibeam Array Receiver Using 2-D Spatially Bandpass Digital Filters. IEEE Transactions on Aerospace and Electronic Systems, 2019, 55, 3029-3038.	4.7	13
48	Impact of Noise Bandwidth on Noise Figure. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 2662-2664.	4.7	5
49	A Direct-Conversion Digital Beamforming Array Receiver with 800 MHz Channel Bandwidth at 28 GHz using Xilinx RF SoC. , 2019, , .		16
50	32-Element Array Receiver for 2-D Spatio-Temporal $\hat{\rho}$ - $\hat{\lambda}$ Noise-Shaping. , 2019, , .		0
51	Towards Efficient Medium Access for Millimeter-Wave Networks. IEEE Journal on Selected Areas in Communications, 2019, 37, 2786-2798.	14.0	5
52	Multibeam Digital Array Receiver Using a 16-Point Multiplierless DFT Approximation. IEEE Transactions on Antennas and Propagation, 2019, 67, 925-933.	5.1	16
53	Deep Learning Based Radio-Signal Identification With Hardware Design. IEEE Transactions on Aerospace and Electronic Systems, 2019, 55, 2516-2531.	4.7	57
54	$\vec{\Delta}$ noise-shaping in 3-D space-time for 2-D wideband antenna array receivers. Multidimensional Systems and Signal Processing, 2019, 30, 1609-1631.	2.6	0

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55	Δ -Sigma Noise-Shaping in 2-D Space-Time for Wideband Antenna Array Receivers. IEEE Transactions on Circuits and Systems I: Regular Papers, 2019, 66, 569-582.	5.4	8
56	Pruned Discrete Tchebichef Transform Approximation for Image Compression. Circuits, Systems, and Signal Processing, 2018, 37, 4363-4383.	2.0	13
57	Analog Approximate-FFT 8/16-Beam Algorithms, Architectures and CMOS Circuits for 5G Beamforming MIMO Transceivers. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2018, 8, 466-479.	3.6	24
58	Array signal processing and systems. Multidimensional Systems and Signal Processing, 2018, 29, 467-473.	2.6	17
59	Mixed microwave-digital and multi-rate approach for wideband beamforming applications using 2-D IIR beam filters and nested uniform linear arrays. Multidimensional Systems and Signal Processing, 2018, 29, 703-718.	2.6	4
60	Low-Complexity 4-D IIR Filters for Multi-Depth Filtering and Occlusion Suppression in Light Fields. , 2018, , .		9
61	Low-Complexity Loeffler DCT Approximations for Image and Video Coding. Journal of Low Power Electronics and Applications, 2018, 8, 46.	2.0	10
62	Sampling H- & V-Polarized Antennas using a Single ADC for Digital Antenna Arrays by Exploiting Multi-Dimensional Signal Processing RF Circuits. , 2018, , .		1
63	Multipoint ADCs for Microwave Focal Plane Array Dish Receivers. , 2018, , .		1
64	Computation of 2D 8 \tilde{A} -8 DCT Based on the Loeffler Factorization Using Algebraic Integer Encoding. IEEE Transactions on Computers, 2018, 67, 1692-1702.	3.4	6
65	An Offset-Canceling Approximate-DFT Beamforming Architecture for Wireless Transceivers. , 2018, , .		3
66	Continuous-time Analog Computing Circuits for Solving The Electromagnetic Wave Equation. , 2018, , .		3
67	Low-Complexity Wideband Transmit Beamforming Using Network-Resonant Digital Plane-Wave Filters. IEEE Antennas and Wireless Propagation Letters, 2018, 17, 1300-1304.	4.0	2
68	Wideband \tilde{A} -Beam Arrays Using Low-Complexity Algorithms and Mixed-Signal Integrated Circuits. IEEE Journal on Selected Topics in Signal Processing, 2018, 12, 368-382.	10.8	38
69	An 8-Beam 2.4 GHz Digital Array Receiver Based on a Fast Multiplierless Spatial DFT Approximation. , 2018, , .		5
70	A 16-Element 2.4-GHz Digital Array Receiver using 2-D IIR Spatially-Bandpass Plane-Wave Filter. , 2018, , .		3
71	Low-Complexity Image and Video Coding Based on an Approximate Discrete Tchebichef Transform. IEEE Transactions on Circuits and Systems for Video Technology, 2017, 27, 1066-1076.	8.3	41
72	Fast FPGA-architecture for fan/beam-steering in wave-digital RF aperture arrays. Multidimensional Systems and Signal Processing, 2017, 28, 771-789.	2.6	0

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73	DFT Computation Using Gauss-Eisenstein Basis: FFT Algorithms and VLSI Architectures. IEEE Transactions on Computers, 2017, 66, 1442-1448.	3.4	12
74	Digital architecture for real-time CNN-based face detection for video processing. , 2017, , .		2
75	Deep learning cognitive radar for micro UAS detection and classification. , 2017, , .		18
76	Deep belief network for automated modulation classification in cognitive radio. , 2017, , .		10
77	Improving ADC figure-of-merit in wideband antenna array receivers using multidimensional space-time delta-sigma multiport circuits. , 2017, , .		11
78	Applications of RF aperture-array spatially-bandpass 2-D IIR filters in sub-Nyquist spectrum sensing, wideband doppler radar and radio astronomy beamforming. Multidimensional Systems and Signal Processing, 2017, 28, 1523-1548.	2.6	2
79	Multiplierless 16-point DCT approximation for low-complexity image and video coding. Signal, Image and Video Processing, 2017, 11, 227-233.	2.7	17
80	Design and prototype implementation of an 8-beam 2.4 GHz array receiver for digital beamforming. , 2017, , .		1
81	Low-complexity N-port ADCs using 2-D $\hat{\eta}$ - $\hat{\xi}$ noise-shaping for N-element array receivers. , 2017, , .		5
82	Continuous-time algorithms for solving the electromagnetic wave equation in analog ICs. , 2017, , .		5
83	All-Pass Filter Based Synthesis of Multifunctional Microwave Active Circuits. , 2017, , .		4
84	Design of a low-complexity wideband analog true-time-delay 5-beam array in 65nm CMOS. , 2017, , .		4
85	A Parallel Method for the Computation of Matrix Exponential Based on Truncated Neumann Series. , 2017, , .		3
86	Multidimensional-DSP Beamformers Using the ROACH-2 FPGA Platform. Electronics (Switzerland), 2017, 6, 49.	3.1	2
87	N-port LNAs for mmW array processors using 2-D spatio-temporal $\hat{\eta}$ $\hat{\xi}$ noise-shaping. , 2017, , .		4
88	An orthogonal 16-point approximate DCT for image and video compression. Multidimensional Systems and Signal Processing, 2016, 27, 87-104.	2.6	23
89	Linear RF apertures using 2-D analog beam filters. , 2016, , .		1
90	Wideband aperture array using a four-channel manifold-type planar multiplexer and digital 2-D IIR filterbank. International Journal of Circuit Theory and Applications, 2016, 44, 2085-2100.	2.0	1

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91	Deep learning based doppler radar for micro UAS detection and classification. , 2016, , .		57
92	Deep learning-based automated modulation classification for cognitive radio. , 2016, , .		108
93	Error-free computation of 8-point discrete cosine transform based on the Loeffler factorisation and algebraic integers. IET Signal Processing, 2016, 10, 633-640.	1.5	7
94	Delta-sigma noise shaping in 2D spacetime for uniform linear aperture array receivers. , 2016, , .		6
95	A 480MHz ROACH-2 FPGA realization of 2-phase 2-D IIR beam filters for digital RF apertures. , 2016, , .		0
96	Energy-Efficient 8-Point DCT Approximations: Theory and Hardware Architectures. Circuits, Systems, and Signal Processing, 2016, 35, 4009-4029.	2.0	14
97	A New Second-Order All-Pass Filter in 130-nm CMOS. IEEE Transactions on Circuits and Systems II: Express Briefs, 2016, 63, 249-253.	3.0	45
98	A multiplierless pruned DCT-like transformation for image and video compression that requires ten additions only. Journal of Real-Time Image Processing, 2016, 12, 247-255.	3.5	20
99	Increasing SINR of microwave Applebaum adaptive arrays using analog 2D-IIR space-time network-resonant beam filters. , 2015, , .		0
100	Wideband mixed microwave-digital 2-D IIR beam filters for nested uniform linear array processing. , 2015, , .		2
101	Keynote address: Multi-dimensional RF signal-processing and analog/digital circuits. , 2015, , .		0
102	Wideband 32-element 200-MHz 2-D IIR beam filters using ROACH-2 Virtex-6 sx475t FPGA. , 2015, , .		2
103	Design of a millimeter-wave dish-antenna based 3-D IIR radar digital velocity filter. , 2015, , .		1
104	A Discrete Tchebichef Transform Approximation for Image and Video Coding. IEEE Signal Processing Letters, 2015, 22, 1137-1141.	3.6	25
105	A $0.13\text{-}\mu\text{m}$ CMOS Current-Mode All-Pass Filter for Multi-GHz Operation. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2015, 23, 2813-2818.	3.1	29
106	Low-Power VLSI Architectures for DCT/DWT: Precision vs Approximation for HD Video, Biomedical, and Smart Antenna Applications. IEEE Circuits and Systems Magazine, 2015, 15, 25-47.	2.3	50
107	Low-Noise Amplifier Design Considerations For Use in Antenna Arrays. IEEE Transactions on Antennas and Propagation, 2015, 63, 2508-2520.	5.1	30
108	Aperture-array directional sensing using 2-D beam digital filters with doppler-radar front-ends. , 2015, , .		0

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109	Tunable multiband RF CMOS active filter arrays. , 2015, , .		0
110	Electronically steerable directed energy using space-time network resonant digital systems. , 2015, , .		1
111	Multi-beam 4 GHz microwave apertures using current-mode DFT approximation on 65 nm CMOS. , 2015, , .		10
112	An overview of multi-dimensional RF signal processing for array receivers. , 2015, , .		1
113	Recent advances in multidimensional systems and signal processing: An overview. , 2015, , .		2
114	Multi-beam receiver apertures using multiplierless 8-point approximate DFT. , 2015, , .		9
115	Multiway wideband power dividers. International Journal of RF and Microwave Computer-Aided Engineering, 2015, 25, 730-738.	1.2	1
116	Low-complexity pruned 8-point DCT approximations for image encoding. , 2015, , .		12
117	Fast computation of residual complexity image similarity metric using low-complexity transforms. IET Image Processing, 2015, 9, 699-708.	2.5	6
118	Multi-beam 8×8 RF aperture digital beamformers using multiplierless 2-D FFT approximations. , 2015, , .		4
119	FPGA-based network-resonance applebaum adaptive arrays for directional spectrum sensing. , 2015, , .		0
120	Integral form 4-D light field filters using Xilinx FPGAs and 45 nm CMOS technology. Multidimensional Systems and Signal Processing, 2015, 26, 47-65.	2.6	15
121	VLSI architecture for 4-D depth filtering. Signal, Image and Video Processing, 2015, 9, 809-818.	2.7	11
122	VLSI Computational Architectures for the Arithmetic Cosine Transform. IEEE Transactions on Computers, 2015, 64, 2708-2715.	3.4	2
123	2-D-IIR Time-Delay-Sum Linear Aperture Arrays. IEEE Antennas and Wireless Propagation Letters, 2014, 13, 591-594.	4.0	9
124	Hexagonal multi-beam analog RF aperture array. , 2014, , .		0
125	Multi-beam RF aperture using multiplierless FFT approximation. Electronics Letters, 2014, 50, 1788-1790.	1.0	22
126	Analog 2-D IIR beam filters for EARS in UAS ecosystems. , 2014, , .		2

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127	Directional cyclostationary feature detectors using 2-D IIR RF spiral-antenna beam digital filters. , 2014, , .		1
128	Combined time-delay FIR and 2-D IIR filters for EARS, radar, and imaging applications. , 2014, , .		1
129	2D space-time wave-digital multi-fan filter banks for signals consisting of multiple plane waves. Multidimensional Systems and Signal Processing, 2014, 25, 17-39.	2.6	31
130	Electronically scanned RF-to-bits beam aperture arrays using 2-D IIR spatially bandpass digital filters. Multidimensional Systems and Signal Processing, 2014, 25, 313-335.	2.6	3
131	Improved 8-Point Approximate DCT for Image and Video Compression Requiring Only 14 Additions. IEEE Transactions on Circuits and Systems I: Regular Papers, 2014, 61, 1727-1740.	5.4	102
132	6-GHz all-pass-filter-based delay-and-sum beamformer in 130nm CMOS. , 2014, , .		11
133	A 3-D spatially-FIR RF frustum digital filter with microwave channelization for FPAs. , 2014, , .		0
134	Algebraic integer architecture with minimum adder count for the 2-D Daubechies 4-tap filters banks. Multidimensional Systems and Signal Processing, 2014, 25, 829-845.	2.6	2
135	All-Pass Filter-Based 2-D IIR Filter-Enhanced Beamformers for AESA Receivers. IEEE Transactions on Circuits and Systems I: Regular Papers, 2014, 61, 1331-1342.	5.4	22
136	Precise VLSI Architecture for AI Based 1-D/ 2-D Daub-6 Wavelet Filter Banks With Low Adder-Count. IEEE Transactions on Circuits and Systems I: Regular Papers, 2014, 61, 1984-1993.	5.4	19
137	Reconfigurable phase-linearizer for 2-D IIR RF-to-bits antenna-array digital beam filters. , 2013, , .		1
138	Multidimensional (MD) Circuits and Systems for Emerging Applications Including Cognitive Radio, Radio Astronomy, Robot Vision and Imaging. IEEE Circuits and Systems Magazine, 2013, 13, 10-43.	2.3	44
139	VLSI Architectures for the 4-Tap and 6-Tap 2-D Daubechies Wavelet Filters Using Algebraic Integers. IEEE Transactions on Circuits and Systems I: Regular Papers, 2013, 60, 1455-1468.	5.4	16
140	A 2-D Signal Processing Model to Predict the Effect of Mutual Coupling on Array Factor. IEEE Antennas and Wireless Propagation Letters, 2013, 12, 1264-1267.	4.0	6
141	A Steerable DC-1 GHz all-pass filter-Sum RF space-time 2-D beam filter in 65 nm CMOS. , 2013, , .		16
142	FFT-based phase compensation of 2-D beam digital filters for electronically steerable RF arrays. , 2013, , .		1
143	10-GHz current-mode 1 st - and 2 nd -order allpass filters on 130nm CMOS. , 2013, , .		8
144	Systolic architectures for RF antenna apertures using integral-form 2-D IIR beam filters. , 2013, , .		0

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145	Space-Time Spectral White Spaces in Cognitive Radio: Theory, Algorithms, and Circuits. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2013, 3, 640-653.	3.6	13
146	Discrete space continuous time 2D delay block using 2D all-pass frequency planar networks. , 2012, , .		0
147	A combined approach to research and graduate-level teaching of multidimensional signal processing, circuits and systems. , 2012, , .		0
148	A systolic-array architecture for first-order 4-D IIR frequency-planar digital filters. , 2012, , .		9
149	Towards RF analog IC realization of wave-discrete filters on 65nm CMOS. , 2012, , .		0
150	A Row-Parallel 8 \times 8 2-D DCT Architecture Using Algebraic Integer-Based Exact Computation. IEEE Transactions on Circuits and Systems for Video Technology, 2012, 22, 915-929.	8.3	29
151	Broadband Multiple Cone-Beam 3-D IIR Digital Filters Applied to Planar Dense Aperture Arrays. IEEE Transactions on Antennas and Propagation, 2012, 60, 5136-5146.	5.1	28
152	Directional spectrum sensing using tunable multi-D space-time discrete filters. , 2012, , .		5
153	Continuous-Time Analog Two-Dimensional IIR Beam Filters. IEEE Transactions on Circuits and Systems II: Express Briefs, 2012, 59, 419-423.	3.0	12
154	Synthesis and Array Processor Realization of a 2-D IIR Beam Filter for Wireless Applications. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2012, 20, 2241-2254.	3.1	24
155	RF Analog Beamforming Fan Filters Using CMOS All-Pass Time Delay Approximations. IEEE Transactions on Circuits and Systems I: Regular Papers, 2012, 59, 1061-1073.	5.4	57
156	Wideband LNA With an Active -C Element. IEEE Microwave and Wireless Components Letters, 2012, 22, 524-526.	3.2	20
157	High-voltage class-D direct-drive audio amplifier for electrostatic loudspeakers. , 2012, , .		0
158	VLSI Architecture for 8-Point AI-based Arai DCT having Low Area-Time Complexity and Power at Improved Accuracy. Journal of Low Power Electronics and Applications, 2012, 2, 127-142.	2.0	9
159	Reducing the Multiplier-Complexity of Massively Parallel Polyphase 2D IIR Broadband Beam Filters. Circuits, Systems, and Signal Processing, 2012, 31, 1229-1243.	2.0	3
160	Massively parallel systolicâ€”array architectures for 2d IIR polyphase spaceâ€”time planeâ€”wave beam digital filters. International Journal of Circuit Theory and Applications, 2012, 40, 455-475.	2.0	6
161	Discrete-space continuous-time analog circuits for spatially-bandpass 2D IIR beam filters. , 2011, , .		4
162	A 2D IIR spatially-bandpass antenna beamformer on a 65 nm Achronix SPD60 asynchronous FPGA. , 2011, , .		1

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163	An asynchronous array architecture for 16 \times 1 DCT-4/DST-4 on a 65nm Achronix SPD60 FPGA. , 2011, , .		0
164	Modelling of wideband inter-element EM coupling in 2D space-time frequency domain. , 2011, , .		4
165	A new class of spatially-discrete time-continuous 2D IIR filters based on wave-digital-filter theory. , 2011, , .		3
166	Recent progress on analog/digital VLSI 2D filter circuits for beamforming antenna arrays. , 2011, , .		0
167	Design and FPGA-implementation of 1 st -order 4D IIR frequency-hyperplanar digital filters. , 2011, , .		7
168	Analog 2D fan filters from discrete domain transfer functions. , 2011, , .		7
169	Multidimensional raster-scanned LC-ladder wave-digital filter hardware for directional filtering in space-time. , 2010, , .		5
170	Scanned-array audio beamforming using 2 nd - and 3 rd -order 2D IIR beam filters on FPGA. , 2010, , .		0
171	FPGA-prototypes of differential-form 2D-IIR systolic-array DSP architectures for multi-beam plane-wave filters. , 2010, , .		9
172	Systolic-array 3D wave-digital beam filters. , 2010, , .		0
173	Systolic-array architecture for 2D IIR Wideband dual-beam space-time plane-wave filters. , 2010, , .		4
174	A real-time systolic array processor implementation of two-dimensional IIR filters for radio-frequency smart antenna applications. , 2008, , .		9
175	UWB beamforming using digital 2D IIR frequency-planar filters. , 2008, , .		3
176	FPGA architectures for real-time 2D/3D FIR/IIR plane wave filters. , 0, , .		15
177	A review of 2D/3D IIR plane-wave real-time digital filter circuits. , 0, , .		7