

Sergio Saponara

List of Publications by Year in descending order

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256
papers

3,729
citations

147801

31
h-index

223800

46
g-index

262
all docs

262
docs citations

262
times ranked

2814
citing authors

#	ARTICLE	IF	CITATIONS
1	Sensing Devices and Sensor Signal Processing for Remote Monitoring of Vital Signs in CHF Patients. IEEE Transactions on Instrumentation and Measurement, 2013, 62, 553-569.	4.7	125
2	Batteries and battery management systems for electric vehicles. , 2012, , .		117
3	(+/-)Naringenin as large conductance Ca ²⁺ -activated K ⁺ (BKCa) channel opener in vascular smooth muscle cells. British Journal of Pharmacology, 2006, 149, 1013-1021.	5.4	109
4	Recent Advances and Trends in On-Board Embedded and Networked Automotive Systems. IEEE Transactions on Industrial Informatics, 2019, 15, 1038-1051.	11.3	109
5	Real-time video fire/smoke detection based on CNN in antifire surveillance systems. Journal of Real-Time Image Processing, 2021, 18, 889-900.	3.5	105
6	Implementing a real-time, AI-based, people detection and social distancing measuring system for Covid-19. Journal of Real-Time Image Processing, 2021, 18, 1937-1947.	3.5	79
7	Time-Sensitive Networking in automotive embedded systems: State of the art and research opportunities. Journal of Systems Architecture, 2021, 117, 102137.	4.3	65
8	Radar Sensor Signal Acquisition and Multidimensional FFT Processing for Surveillance Applications in Transport Systems. IEEE Transactions on Instrumentation and Measurement, 2017, 66, 604-615.	4.7	63
9	Design and Verification of Hardware Building Blocks for High-Speed and Fault-Tolerant In-Vehicle Networks. IEEE Transactions on Industrial Electronics, 2011, 58, 792-801.	7.9	59
10	Predictive Diagnosis of High-Power Transformer Faults by Networking Vibration Measuring Nodes With Integrated Signal Processing. IEEE Transactions on Instrumentation and Measurement, 2016, 65, 1749-1760.	4.7	59
11	The beneficial health effects of flavonoids on the cardiovascular system: Focus on K ⁺ channels. Pharmacological Research, 2020, 152, 104625.	7.1	55
12	Design and Test of an HV-CMOS Intelligent Power Switch With Integrated Protections and Self-Diagnostic for Harsh Automotive Applications. IEEE Transactions on Industrial Electronics, 2011, 58, 2715-2727.	7.9	54
13	A Flexible LED Driver for Automotive Lighting Applications: IC Design and Experimental Characterization. IEEE Transactions on Power Electronics, 2012, 27, 1071-1075.	7.9	53
14	2,5-Di- <i>t</i> -butyl-1,4-benzohydroquinone (BHQ) inhibits vascular L-type Ca ²⁺ channel via superoxide anion generation. British Journal of Pharmacology, 2001, 133, 988-996.	5.4	51
15	Fine-Grained Modulation Classification Using Multi-Scale Radio Transformer With Dual-Channel Representation. IEEE Communications Letters, 2022, 26, 1298-1302.	4.1	50
16	Characterization of voltage-gated calcium currents in freshly isolated smooth muscle cells from rat tail main artery. Acta Physiologica Scandinavica, 2001, 173, 257-265.	2.2	48
17	Data-adaptive motion estimation algorithm and VLSI architecture design for low-power video systems. IEE Proceedings: Computers and Digital Techniques, 2004, 151, 51.	1.6	47
18	Performance and Complexity Co-evaluation of the Advanced Video Coding Standard for Cost-Effective Multimedia Communications. Eurasip Journal on Advances in Signal Processing, 2004, 2004, 1.	1.7	46

#	ARTICLE	IF	CITATIONS
19	Application-Specific Instruction-Set Processor for Retinex-Like Image and Video Processing. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2007, 54, 596-600.	2.2	46
20	Dynamic control of motion estimation search parameters for low complex h.264 video coding. IEEE Transactions on Consumer Electronics, 2006, 52, 83-90.	3.6	45
21	Cogging Torque Reduction in Brushless Motors by a Nonlinear Control Technique. Energies, 2019, 12, 2224.	3.1	44
22	Radar-on-Chip/in-Package in Autonomous Driving Vehicles and Intelligent Transport Systems: Opportunities and Challenges. IEEE Signal Processing Magazine, 2019, 36, 71-84.	5.6	44
23	Network Architecture, Security Issues, and Hardware Implementation of a Home Area Network for Smart Grid. Journal of Computer Networks and Communications, 2012, 2012, 1-19.	1.6	43
24	Sensor Modeling, Low-Complexity Fusion Algorithms, and Mixed-Signal IC Prototyping for Gas Measures in Low-Emission Vehicles. IEEE Transactions on Instrumentation and Measurement, 2011, 60, 372-384.	4.7	42
25	Algorithmic and architectural design for real-time and power-efficient Retinex image/video processing. Journal of Real-Time Image Processing, 2007, 1, 267-283.	3.5	41
26	Low-Complexity Link Microarchitecture for Mesochronous Communication in Networks-on-Chip. IEEE Transactions on Computers, 2008, 57, 1196-1201.	3.4	40
27	The flavonoid scaffold as a template for the design of modulators of the vascular Ca ^v 1.2 channels. British Journal of Pharmacology, 2011, 164, 1684-1697.	5.4	40
28	Motion estimation and CABAC VLSI co-processors for real-time high-quality H.264/AVC video coding. Microprocessors and Microsystems, 2010, 34, 316-328.	2.8	37
29	Radiation Tolerant SpaceWire Router for Satellite On-Board Networking. IEEE Aerospace and Electronic Systems Magazine, 2007, 22, 3-12.	1.3	35
30	Architectural-Level Power Optimization of Microcontroller Cores in Embedded Systems. IEEE Transactions on Industrial Electronics, 2007, 54, 680-683.	7.9	33
31	Wearable Biometric Performance Measurement System for Combat Sports. IEEE Transactions on Instrumentation and Measurement, 2017, 66, 2545-2555.	4.7	33
32	Exploiting mm-Wave Communications to Boost the Performance of Industrial Wireless Networks. IEEE Transactions on Industrial Informatics, 2017, 13, 1460-1470.	11.3	31
33	Electric Drives and Power Chargers: Recent Solutions to Improve Performance and Energy Efficiency for Hybrid and Fully Electric Vehicles. IEEE Vehicular Technology Magazine, 2020, 15, 73-83.	3.4	31
34	L-type Ca ^v 2+ channel current characteristics are preserved in rat tail artery myocytes after one-day storage. Acta Physiologica, 2014, 211, 334-345.	3.8	30
35	Toward Green Vehicles Digitalization for the Next Generation of Connected and Electrified Transport Systems. Energies, 2018, 11, 3124.	3.1	29
36	Processor-in-the-Loop Validation of a Gradient Descent-Based Model Predictive Control for Assisted Driving and Obstacles Avoidance Applications. IEEE Access, 2022, 10, 67958-67975.	4.2	29

#	ARTICLE	IF	CITATIONS
37	Integrated video motion estimator with Retinex-like pre-processing for robust motion analysis in automotive scenarios: algorithmic and real-time architecture design. <i>Journal of Real-Time Image Processing</i> , 2010, 5, 275-289.	3.5	28
38	Design of Adaptive Controller Exploiting Learning Concepts Applied to a BLDC-Based Drive System. <i>Energies</i> , 2020, 13, 2512.	3.1	28
39	VLSI architecture for a low-power video codec system. <i>Microelectronics Journal</i> , 2002, 33, 417-427.	2.0	27
40	Is Consumer Electronics Redesigning Our Cars?: Challenges of Integrated Technologies for Sensing, Computing, and Storage. <i>IEEE Consumer Electronics Magazine</i> , 2018, 7, 8-17.	2.3	27
41	Formal Verification and Co-Simulation in the Design of a Synchronous Motor Control Algorithm. <i>Energies</i> , 2020, 13, 4057.	3.1	27
42	Electro-Thermal Model-Based Design of Bidirectional On-Board Chargers in Hybrid and Full Electric Vehicles. <i>Electronics (Switzerland)</i> , 2022, 11, 112.	3.1	27
43	Quercetin relaxes rat tail main artery partly <i>via</i> a Ca^{2+} -mediated stimulation of Ca^{2+} channels. <i>Acta Physiologica</i> , 2013, 208, 329-339.	3.8	26
44	Secure Elliptic Curve Crypto-Processor for Real-Time IoT Applications. <i>Energies</i> , 2021, 14, 4676.	3.1	26
45	Power Optimization of an 8051-Compliant IP Microcontroller. <i>IEICE Transactions on Electronics</i> , 2005, E88-C, 597-600.	0.6	26
46	A parametric VLSI architecture for video motion estimation. <i>The Integration VLSI Journal</i> , 2001, 31, 79-100.	2.1	25
47	Exploiting Posit Arithmetic for Deep Neural Networks in Autonomous Driving Applications. , 2018, , .		25
48	A Telemedicine Service System Exploiting BT/BLE Wireless Sensors for Remote Management of Chronic Patients. <i>Technologies</i> , 2019, 7, 13.	5.1	25
49	Architectural Exploration and Design of Time-Interleaved SAR Arrays for Low-Power and High Speed A/D Converters. <i>IEICE Transactions on Electronics</i> , 2009, E92-C, 843-851.	0.6	25
50	A RISC-V Post Quantum Cryptography Instruction Set Extension for Number Theoretic Transform to Speed-Up CRYSTALS Algorithms. <i>IEEE Access</i> , 2021, 9, 150798-150808.	4.2	25
51	Parametrized and reusable VLSI macro cells for the low-power realization of 2-D discrete-cosine-transform. <i>Microelectronics Journal</i> , 2001, 32, 1035-1045.	2.0	24
52	Design and Characterization of a Robotized Gearbox System Based on Voice Coil Actuators for a Formula SAE Race Car. <i>IEEE/ASME Transactions on Mechatronics</i> , 2013, 18, 53-61.	5.8	24
53	Design of an Observer-Based Architecture and Non-Linear Control Algorithm for Cogging Torque Reduction in Synchronous Motors. <i>Energies</i> , 2020, 13, 2077.	3.1	24
54	HV-CMOS Design and Characterization of a Smart Rotor Coil Driver for Automotive Alternators. <i>IEEE Transactions on Industrial Electronics</i> , 2013, 60, 2309-2317.	7.9	22

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55	Design and Measurement of Integrated Converters for Belt-Driven Starter-Generator in 48 V Micro/Mild Hybrid Vehicles. IEEE Transactions on Industry Applications, 2017, 53, 3936-3949.	4.9	22
56	True Random Number Generator Based on Fibonacci-Galois Ring Oscillators for FPGA. Applied Sciences (Switzerland), 2021, 11, 3330.	2.5	22
57	VLSI design investigation for low-cost, low-power FFT/IFFT processing in advanced VDSL transceivers. Microelectronics Journal, 2003, 34, 133-148.	2.0	21
58	A multi-processor NoC-based architecture for real-time image/video enhancement. Journal of Real-Time Image Processing, 2013, 8, 111-125.	3.5	21
59	Hybrid Micro-Grids Exploiting Renewables Sources, Battery Energy Storages, and Bi-Directional Converters. Applied Sciences (Switzerland), 2019, 9, 4973.	2.5	21
60	Cryptographically Secure Pseudo-Random Number Generator IP-Core Based on SHA2 Algorithm. Sensors, 2020, 20, 1869.	3.8	21
61	Model-Based Design of an Improved Electric Drive Controller for High-Precision Applications Based on Feedback Linearization Technique. Electronics (Switzerland), 2021, 10, 2954.	3.1	21
62	Design and coverage-driven verification of a novel network-interface IP macrocell for network-on-chip interconnects. Microprocessors and Microsystems, 2011, 35, 579-592.	2.8	20
63	An Embedded Sensing and Communication Platform, and a Healthcare Model for Remote Monitoring of Chronic Diseases. Electronics (Switzerland), 2016, 5, 47.	3.1	20
64	Performance Evaluation of Attribute-Based Encryption in Automotive Embedded Platform for Secure Software Over-The-Air Update. Sensors, 2021, 21, 515.	3.8	20
65	Automatic Synthesis of Cost Effective FFT/IFFT Cores for VLSI OFDM Systems. IEICE Transactions on Electronics, 2008, E91-C, 487-496.	0.6	20
66	Design and Testing Novel One-Class Classifier Based on Polynomial Interpolation With Application to Networking Security. IEEE Access, 2022, 10, 67910-67924.	4.2	20
67	A Multichannel and Compact Time to Digital Converter for Time of Flight Positron Emission Tomography. IEEE Transactions on Nuclear Science, 2015, 62, 814-823.	2.0	19
68	SHA2 and SHA-3 accelerator design in a 7 nm technology within the European Processor Initiative. Microprocessors and Microsystems, 2021, 87, 103444.	2.8	19
69	Novel Arithmetics in Deep Neural Networks Signal Processing for Autonomous Driving: Challenges and Opportunities. IEEE Signal Processing Magazine, 2021, 38, 97-110.	5.6	19
70	Data driven VLSI computation for low power DCT-based video coding. , 0, , .		18
71	Parametric Design of Compact Dual-Frequency Antennas for Wireless Sensor Networks. IEEE Transactions on Antennas and Propagation, 2011, 59, 2619-2627.	5.1	18
72	Fast Approximations of Activation Functions in Deep Neural Networks when using Posit Arithmetic. Sensors, 2020, 20, 1515.	3.8	18

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73	Developing a real-time social distancing detection system based on YOLOv4-tiny and bird-eye view for COVID-19. <i>Journal of Real-Time Image Processing</i> , 2022, 19, 551-563.	3.5	18
74	Design, testing and prototyping of a software programmable I2C/SPI IP on AMBA bus. , 0, , .		17
75	Recent progress of RD53 Collaboration towards next generation Pixel Read-Out Chip for HL-LHC. <i>Journal of Instrumentation</i> , 2016, 11, C12058-C12058.	1.2	17
76	Advances in technologies, architectures, and applications of highly-integrated low-power radars. <i>IEEE Aerospace and Electronic Systems Magazine</i> , 2012, 27, 25-36.	1.3	16
77	Real-time and low-power processing of 3D direct/inverse discrete cosine transform for low-complexity video codec. <i>Journal of Real-Time Image Processing</i> , 2012, 7, 43-53.	3.5	16
78	Low-power DSP system for real-time correction of fish-eye cameras in automotive driver assistance applications. <i>Journal of Real-Time Image Processing</i> , 2014, 9, 463-478.	3.5	16
79	Design of an NoC Interface Macrocell with Hardware Support of Advanced Networking Functionalities. <i>IEEE Transactions on Computers</i> , 2014, 63, 609-621.	3.4	16
80	AdViSED: Advanced Video Smoke Detection for Real-Time Measurements in Antifire Indoor and Outdoor Systems. <i>Energies</i> , 2020, 13, 2098.	3.1	16
81	Distributed Measuring System for Predictive Diagnosis of Uninterruptible Power Supplies in Safety-Critical Applications. <i>Energies</i> , 2016, 9, 327.	3.1	15
82	Fast deep neural networks for image processing using posits and ARM scalable vector extension. <i>Journal of Real-Time Image Processing</i> , 2020, 17, 759-771.	3.5	15
83	Optimized Energy and Air Quality Management of Shared Smart Buildings in the COVID-19 Scenario. <i>Energies</i> , 2021, 14, 2124.	3.1	15
84	Remote monitoring of vital signs in patients with Chronic Heart Failure: Sensor devices and data analysis perspective. , 2012, , .		14
85	Recreating Fingerprint Images by Convolutional Neural Network Autoencoder Architecture. <i>IEEE Access</i> , 2021, 9, 147888-147899.	4.2	14
86	Compact Triple-Frequency Antenna for Sub-GHz Wireless Communications. <i>IEEE Antennas and Wireless Propagation Letters</i> , 2012, 11, 14-17.	4.0	13
87	Real-Time and High-Accuracy Arctangent Computation Using CORDIC and Fast Magnitude Estimation. <i>Electronics (Switzerland)</i> , 2017, 6, 22.	3.1	13
88	A real-time video smoke detection algorithm based on Kalman filter and CNN. <i>Journal of Real-Time Image Processing</i> , 2021, 18, 2085-2095.	3.5	13
89	A Fast Approximation of the Hyperbolic Tangent When Using Posit Numbers and Its Application to Deep Neural Networks. <i>Lecture Notes in Electrical Engineering</i> , 2020, , 213-221.	0.4	13
90	A Lightweight Posit Processing Unit for RISC-V Processors in Deep Neural Network Applications. <i>IEEE Transactions on Emerging Topics in Computing</i> , 2022, 10, 1898-1908.	4.6	13

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91	Voice coil actuators: From model and simulation to automotive application. , 2009, , .		12
92	Modeling, Sensitivity Analysis, and Prototyping of Low-g Acceleration Acquisition Systems for Spacecraft Testing and Environmental-Noise Measurements. IEEE Transactions on Instrumentation and Measurement, 2011, 60, 385-397.	4.7	12
93	Crypto Accelerators for Power-Efficient and Real-Time on-Chip Implementation of Secure Algorithms. , 2019, , .		12
94	Design, Implementation, and Experimental Verification of 5 Gbps, 800 Mrad TID and SEU-Tolerant Optical Modulators Drivers. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 829-838.	5.4	12
95	VLSI Design of Advanced-Features AES Cryptoprocessor in the Framework of the European Processor Initiative. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2022, 30, 177-186.	3.1	12
96	Design and Experimental Measurement of EMI Reduction Techniques for Integrated Switching DC/DC Converters. Canadian Journal of Electrical and Computer Engineering, 2017, 40, 116-127.	2.0	12
97	Design and Test of an Integrated Random Number Generator with All-Digital Entropy Source. Entropy, 2022, 24, 139.	2.2	12
98	Double-loop antenna for wireless tyre pressure monitoring. Electronics Letters, 2008, 44, 1385.	1.0	11
99	An innovative detection module concept for PET. Journal of Instrumentation, 2012, 7, C08003-C08003.	1.2	11
100	Design and Verification of a 6.25 GHz LC-Tank VCO Integrated in 65 nm CMOS Technology Operating up to 1 Grad TID. IEEE Transactions on Nuclear Science, 2021, 68, 2524-2532.	2.0	11
101	Feasibility study and on-chip antenna for fully integrated μRFID tag at 60 GHz in 65 nm CMOS SOI. , 2011, , .		10
102	Homogeneous and Heterogeneous MPSoC Architectures with Network-On-Chip Connectivity for Low-Power and Real-Time Multimedia Signal Processing. VLSI Design, 2012, 2012, 1-17.	0.5	10
103	Radar sensor signal acquisition and 3D FFT processing for smart mobility surveillance systems. , 2016, , .		10
104	Electrical, Electromagnetic, and Thermal Measurements of 2-D and 3-D Integrated DC/DC Converters. IEEE Transactions on Instrumentation and Measurement, 2018, 67, 1078-1090.	4.7	10
105	IC Design and Measurement of an Inductorless 48 V DC/DC Converter in Low-Cost CMOS Technology Facing Harsh Environments. IEEE Transactions on Circuits and Systems I: Regular Papers, 2018, 65, 380-393.	5.4	10
106	Sensing and Connection Systems for Assisted and Autonomous Driving and Unmanned Vehicles. Sensors, 2018, 18, 1999.	3.8	10
107	A telemedicine service platform exploiting BT/BLE wearable sensors for remote monitoring of chronic patients. , 2018, , .		10
108	Design and Comparison of FFT VLSI Architectures for SoC Telecom Applications with Different Flexibility, Speed and Complexity Trade-Offs. Circuits, Systems, and Signal Processing, 2012, 31, 627-649.	2.0	9

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109	Exploiting CCTV camera system for advanced passenger services on-board trains. , 2016, , .		9
110	Design of compact and low-power X-band Radar for mobility surveillance applications. Computers and Electrical Engineering, 2016, 56, 46-63.	4.8	9
111	Design Exploration of mm-Wave Integrated Transceivers for Short-Range Mobile Communications Towards 5G. Journal of Circuits, Systems and Computers, 2017, 26, 1750069.	1.5	9
112	Novel Arithmetics to Accelerate Machine Learning Classifiers in Autonomous Driving Applications. , 2019, , .		9
113	LIME: A Low-latency and Low-complexity On-chip Mesochronous Link with Integrated Flow Control. , 2008, , .		8
114	Performance of digital adder architectures in 180nm CMOS standard-cell technology. , 2016, , .		8
115	mm-wave integrated wireless transceiver: enabling technology for high bandwidth short-range networking in cyber physical systems. Microsystem Technologies, 2016, 22, 1893-1903.	2.0	8
116	Co-simulation and Verification of a Non-linear Control System for Cogging Torque Reduction in Brushless Motors. Lecture Notes in Computer Science, 2020, , 3-19.	1.3	8
117	Digital Random Number Generator Hardware Accelerator IP-Core for Security Applications. Lecture Notes in Electrical Engineering, 2020, , 117-123.	0.4	8
118	Low-power FFT/IFFT VLSI macro cell for scalable broadband VDSL modem. , 0, , .		7
119	Hardware Building Blocks for High Data-Rate Fault-Tolerant In-vehicle Networking. , 2007, , .		7
120	INTEGRATED 60 GHZ ANTENNA, LNA AND FAST ADC ARCHITECTURE FOR EMBEDDED SYSTEMS WITH WIRELESS GBIT CONNECTIVITY. Journal of Circuits, Systems and Computers, 2012, 21, 1250047.	1.5	7
121	Development, Design and Characterization of a Novel Protocol and Interfaces for the Control and Readout of Front-End Electronics in High Energy Physics Experiments. IEEE Transactions on Nuclear Science, 2013, 60, 352-364.	2.0	7
122	Thermal, electric and durability characterization of supercaps for energy back-up of automotive ECU. , 2013, , .		7
123	Operating Protocol and Networking Issues of a Telemedicine Platform Integrating from Wireless Home Sensors to the Hospital Information System. Journal of Computer Networks and Communications, 2013, 2013, 1-12.	1.6	7
124	Hardware accelerator IP cores for real time Radar and camera-based ADAS. Journal of Real-Time Image Processing, 2019, 16, 1493-1510.	3.5	7
125	Inductorless DC/DC Converter for Aerospace Applications With Insulation Features. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 1659-1663.	3.0	7
126	Analysis and Comparison of Rad-Hard Ring and LC-Tank Controlled Oscillators in 65 nm for SpaceFibre Applications. Sensors, 2020, 20, 4612.	3.8	7

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127	Analysis and Design of Integrated Blocks for a 6.25 GHz Spacefibre PLL. <i>Sensors</i> , 2020, 20, 4013.	3.8	7
128	ATHENIS_3D: Automotive Tested High-voltage and Embedded Non-volatile Integrated SoC Platform with 3D Technology. , 2016, , .		7
129	An Embedded System for Acoustic Data Processing and AI-Based Real-Time Classification for Road Surface Analysis. <i>IEEE Access</i> , 2022, 10, 63073-63084.	4.2	7
130	Low-power VLSI architectures for 3D discrete cosine transform (DCT). , 0, , .		6
131	Design of a Low-Power VLSI Macrocell for Nonlinear Adaptive Video Noise Reduction. <i>Eurasip Journal on Advances in Signal Processing</i> , 2004, 2004, 1.	1.7	6
132	ASIP-based reconfigurable architectures for power-efficient and real-time image/video processing. <i>Journal of Real-Time Image Processing</i> , 2008, 3, 201-216.	3.5	6
133	Low-complexity FFT/IFFT IP hardware macrocells for OFDM and MIMO OFDM CMOS transceivers. <i>Microprocessors and Microsystems</i> , 2009, 33, 191-200.	2.8	6
134	BANDGAP VOLTAGE REFERENCE IC FOR HV AUTOMOTIVE APPLICATIONS WITH PSEUDO-REGULATED BIAS AND SERVICE REGULATOR. <i>Journal of Circuits, Systems and Computers</i> , 2013, 22, 1250069.	1.5	6
135	Design of a high radiation-hard driver for Mach-Zehnder Modulators based high-speed links for hadron collider applications. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2019, 936, 303-304.	1.6	6
136	Recent Trends in DC and Hybrid Microgrids: Opportunities from Renewables Sources, Battery Energy Storages and Bi-Directional Converters. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 4388.	2.5	6
137	Design and Characterization of 10 Gb/s and 1 Grad TID-Tolerant Optical Modulator Driver. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2022, 69, 3177-3189.	5.4	6
138	High-throughput, low complexity, parametrizable VLSI architecture for full search block matching algorithm for advanced multimedia applications. , 0, , .		5
139	8051 CPU core optimization for low power at register transfer level. , 0, , .		5
140	Cost-effective VLSI Design of Non Linear Image Processing Filters. , 0, , .		5
141	High-level modeling of resistor string based digital-to-analog converters. <i>Analog Integrated Circuits and Signal Processing</i> , 2011, 66, 407-416.	1.4	5
142	DESIGN OF AN INTEGRATED SCANNING MICROMIRROR DRIVER IN BCD TECHNOLOGY. <i>Journal of Circuits, Systems and Computers</i> , 2011, 20, 781-799.	1.5	5
143	A flexible home gateway system for telecare of patients affected by chronic heart failure. , 2011, , .		5
144	A novel time to digital converter architecture for time of flight positron emission tomography. , 2013, , .		5

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145	Design exploration and verification platform, based on high-level modeling and FPGA prototyping, for fast and flexible digital communication in physics experiments. Journal of Instrumentation, 2013, 8, P02021-P02021.	1.2	5
146	Early video smoke detection system to improve fire protection in rolling stocks. , 2014, , .		5
147	DC/DC converter integrated architecture for 48V supplies in micro/mild hybrid vehicle electrical engine control module. , 2016, , .		5
148	Design of a radiation-tolerant high-speed driver for Mach Zender Modulators in High Energy Physics. , 2018, , .		5
149	Vectorizing posit operations on RISC-V for faster deep neural networks: experiments and comparison with ARM SVE. Neural Computing and Applications, 2021, 33, 10575-10585.	5.6	5
150	Power Converters, Electric Drives and Energy Storage Systems for Electrified Transportation and Smart Grid Applications. Energies, 2021, 14, 4142.	3.1	5
151	Control System Design for Cogging Torque Reduction Based on Sensor-Less Architecture. Lecture Notes in Electrical Engineering, 2020, , 309-321.	0.4	5
152	Switching-based topologies for high-efficiency audio amplifiers. , 0, , .		4
153	Automatic Generation of Low-Complexity FFT/IFFT Cores for Multi-Band OFDM Systems. , 2007, , .		4
154	Design Methodologies and Innovative Architectures for Mixed-Signal Embedded Systems. Eurasip Journal on Embedded Systems, 2010, 2010, 1-2.	1.2	4
155	FF-LYNX: Fast and flexible electrical links for data acquisition and distribution of Timing, Trigger and Control signals in future High Energy Physics experiments. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 617, 289-290.	1.6	4
156	DESIGN, IMPLEMENTATION AND TESTING OF A FLEXIBLE FULLY-DIGITAL TRANSPONDER FOR LOW-EARTH ORBIT SATELLITE COMMUNICATIONS. Journal of Circuits, Systems and Computers, 2014, 23, 1450148.	1.5	4
157	Energy Storage Systems and Power Conversion Electronics for E-Transportation and Smart Grid. Energies, 2019, 12, 663.	3.1	4
158	Design and Performance Evaluation of Multi-Gb/s Silicon Photonics Transmitters for High Energy Physics. Energies, 2020, 13, 3569.	3.1	4
159	Improving care model for congenital heart diseases in paediatric patients using home telemonitoring of vital signs via biomedical sensors. , 2020, , .		4
160	An Instrument for the Characterization and Calibration of Optical Sensors. Sensors, 2021, 21, 5141.	3.8	4
161	Programmable and low power VLSI architectures for full search motion estimation in multimedia communications. , 0, , .		3
162	ASIP Design and Synthesis for Non Linear Filtering in Image Processing. , 2006, , .		3

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163	Oversampled and Noise-Shaped Pulse-Width Modulator for High-Fidelity Digital Audio Amplifier. , 2006, , .		3
164	FPGA-based Networking Systems for High Data-rate and Reliable In-vehicle Communications. , 2007, , .		3
165	A mesochronous physical link architecture for network-on-chip interconnects. , 2007, , .		3
166	Mitigating Radiation Effects on ICs at Device and Architectural Levels: the SpaceWire Router Case Study. , 2007, , .		3
167	Hardware/Software FPGA-based Network Emulator for High-speed On-board Communications. , 2008, , .		3
168	Experimental analysis towards the application of RFID technologies in industrial marble machines. , 2009, , .		3
169	Radiation tolerant IP Cores for the control and readout of Front-End electronics in High Energy Physics experiments. , 2011, , .		3
170	Coverage-Driven Verification of HDL IP Cores. Lecture Notes in Electrical Engineering, 2011, , 105-119.	0.4	3
171	Design of a Low Noise Amplifier with integrated antenna for 60 GHz wireless communications. , 2011, , .		3
172	Configurable array of low-complex SAR ADCs. Analog Integrated Circuits and Signal Processing, 2011, 67, 103-107.	1.4	3
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