

# Fabiano Passuelo Hessel

## List of Publications by Year in descending order

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Version: 2024-02-01

89  
papers

765  
citations

1039406

9  
h-index

839053

18  
g-index

91  
all docs

91  
docs citations

91  
times ranked

730  
citing authors

#	ARTICLE	IF	CITATIONS
1	A lightweight virtualization model to enable edge computing in deeply embedded systems. Software - Practice and Experience, 2021, 51, 1964.	2.5	8
2	Smart Check – COVID-19 triage system: Evaluation of the impact on the screening time and identification of clinical manifestations of SARS-CoV-2 infection in a public health service. International Journal of Clinical Practice, 2021, 75, e14610.	0.8	4
3	Context information sharing for the Internet of Things: A survey. Computer Networks, 2020, 166, 106988.	3.2	46
4	Lightweight Security Architecture Based on Embedded Virtualization and Trust Mechanisms for IoT Edge Devices. IEEE Communications Magazine, 2019, 57, 67-73.	4.9	60
5	Machine-learning-based system for multi-sensor 3D localisation of stationary objects. IET Cyber-Physical Systems: Theory and Applications, 2018, 3, 81-88.	1.9	10
6	Silicon Photonic Interconnects. , 2018, , .		0
7	A hybrid RFID and CV system for item-level localization of stationary objects. , 2017, , .		3
8	Evaluating the use of TLS and DTLS protocols in IoT middleware systems applied to E-health. , 2017, , .		19
9	A sensing-as-a-service context-aware system for Internet of Things environments. , 2017, , .		4
10	Context-Aware Systems: Technologies and Challenges in Internet of Everything Environments. Internet of Things, 2017, , 1-25.	1.3	9
11	Co-design of a Low-latency Centralized Controller for Silicon Photonic Multistage MZI-based Switches. , 2017, , .		7
12	Embedded virtualization for the design of secure IoT applications. , 2016, , .		12
13	The Role of Lightweight Approaches Towards the Standardization of a Security Architecture for IoT Middleware Systems. IEEE Communications Magazine, 2016, 54, 56-62.	4.9	21
14	Design and analysis of the HF-RISC processor targeting voltage scaling applications. , 2016, , .		0
15	The HF-RISC processor: Performance assessment. , 2016, , .		1
16	Middleware Technology for IoT Systems: Challenges and Perspectives Toward 5G. Modeling and Optimization in Science and Technologies, 2016, , 333-367.	0.7	9
17	Security Challenges in 5G-Based IoT Middleware Systems. Modeling and Optimization in Science and Technologies, 2016, , 399-418.	0.7	7
18	Co-design of an FPGA-based low-latency controller for MZI-based SiP switches. , 2016, , .		0

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19	Cluster-based architecture relying on Optical Integrated Networks with the provision of a low-latency arbiter. , 2016, , .		0
20	Automated Decision Support IoT Framework. , 2016, , .		3
21	Exploring embedded systems virtualization using MIPS virtualization module. , 2016, , .		3
22	A processor for IoT applications: An assessment of design space and trade-offs. Microprocessors and Microsystems, 2016, 42, 156-164.	1.8	6
23	Design and Modelling of a Low-Latency Centralized Controller for Optical Integrated Networks. IEEE Communications Letters, 2016, 20, 462-465.	2.5	13
24	Towards a Fast Centralized Controller for Integrated Silicon Photonic Multistage MZI-based Switches. , 2016, , .		4
25	Hardware-assisted interrupt delivery optimization for virtualized embedded platforms. , 2015, , .		3
26	RFID indoor localization based on Doppler effect. , 2015, , .		16
27	A low-latency centralized controller for MZI-based optical integrated networks. , 2015, , .		3
28	Context-aware system for information services provision in the Internet of Things. , 2015, , .		5
29	The importance of a standard security architecture for SOA-based iot middleware. IEEE Communications Magazine, 2015, 53, 20-26.	4.9	46
30	RFID indoor localization based on support vector regression and k-means. , 2015, , .		18
31	Context-based search engine for industrial IoT: Discovery, search, selection, and usage of devices. , 2015, , .		29
32	Deterministic propagation model for RFID using site-specific and FDTD. International Journal of Electronics, 2015, 102, 932-945.	0.9	0
33	Cooperative middleware platform as a service for internet of things applications. , 2015, , .		17
34	A hypervisor approach with real-time support to the MIPS M5150 processor. , 2015, , .		5
35	Full-Virtualization on MIPS-based MPSOCs embedded platforms with real-time support. , 2014, , .		3
36	Embedded cluster-based architecture with high level support - presenting the HC-MPSoC. , 2014, , .		1

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37	EME Electric Supervision Embedded on Gas Panel with Microshock Dangerousness Degree. , 2014, , .		3
38	Adding virtualization support in MIPS 4Kc-based MPSoCs. , 2014, , .		4
39	On the design space exploration through the Hellfire Framework. Journal of Systems Architecture, 2014, 60, 94-107.	2.5	2
40	Protegedem2: an extended platform based on RFID to identify EME and improve the detection of microshocks. Medical and Biological Engineering and Computing, 2013, 51, 719-727.	1.6	3
41	A virtualization approach for MIPS-based MPSoCs. , 2013, , .		0
42	Customizable RTOS to support communication infrastructures and to improve design space exploration in MPSoCs. , 2013, , .		0
43	BaBaNoC: An asynchronous network-on-chip described in Balsa. , 2013, , .		3
44	A flexible framework for modeling and simulation of multipurpose wireless networks. , 2013, , .		2
45	Communication support at the OS level to enhance design space exploration in multiprocessed embedded systems. , 2013, , .		0
46	Simplify: A Framework for Enabling Fast Functional/Behavioral Validation of Multiprocessor Architectures in the Cloud. , 2013, , .		3
47	Prediction of RFID systems coverage applied to smart cards scenario. , 2012, , .		1
48	An RTOS Methodology for NoC Based Systems' Support – The HellfireOS Case Study. , 2012, , .		1
49	Hardware-assisted virtualization targeting MIPS-based SoCs. , 2012, , .		1
50	Exploring embedded software concepts using the hellfire platform in an undergraduate course. , 2012, , .		0
51	NoC-based platform for embedded software design: An extension of the Hellfire Framework. , 2012, , .		1
52	Task model suitable for dynamic load balancing of real-time applications in NoC-based MPSoCs. , 2012, , .		3
53	Partitioning and dynamic mapping evaluation for energy consumption minimization on NoC-based MPSoC. , 2012, , .		8
54	Current techniques and future trends in embedded system's virtualization. Software - Practice and Experience, 2012, 42, 917-944.	2.5	7

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55	Virtual Hellfire Hypervisor: Extending Hellfire Framework for embedded virtualization support. , 2011, , .		4
56	eCloudRFID â€œ A mobile software framework architecture for pervasive RFID-based applications. Journal of Network and Computer Applications, 2011, 34, 972-979.	5.8	50
57	CAFES: A framework for intrachip application modeling and communication architecture design. Journal of Parallel and Distributed Computing, 2011, 71, 714-728.	2.7	9
58	Partitioning and mapping on NoC-Based MPSoC. , 2011, , .		3
59	Cooperative CEP-based RFID framework: A notification approach for sharing complex business events among organizations. , 2011, , .		5
60	Embedded virtualization for the next generation of cluster-based MPSoCs. , 2011, , .		6
61	RFIDâ€™Env: methods and software simulation for RFID environments. Business Process Management Journal, 2010, 16, 1014-1038.	2.4	5
62	Embedded systems' virtualization: The next challenge?. , 2010, , .		24
63	Hellfire: A design framework for critical embedded systems' applications. , 2010, , .		18
64	An Innovation Applied to the Simulation of RFID Environments as Used in the Logistics. , 2010, , 415-430.		0
65	Using CloudRFID middleware for fuel supply control of vehicles fleets. , 2009, , .		4
66	An Adaptative Framework Architecture for RFID Applications. , 2009, , .		7
67	Survey of Standardized ISO 18000-6 RFID Anti-collision Protocols. , 2008, , .		9
68	A Passive 915 MHz UHF RFID Tag. , 2008, , .		1
69	A QoS Scheduler for Real-Time Embedded Systems. , 2008, , .		1
70	High-Level Estimation of Execution Time and Energy Consumption for Fast Homogeneous MPSoCs Prototyping. , 2008, , .		10
71	A Communication Protocol and Physical Characteristics Simulator for an RFID Sensor Environment. , 2008, , .		2
72	A 915 MHz UHF low power RFID tag. , 2007, , .		1

#	ARTICLE	IF	CITATIONS
73	High Level RTOS Scheduler Modeling for a Fast Design Validation. , 2007, , .		3
74	A VHDL based approach for fast and accurate energy consumption estimations. , 2007, , .		0
75	A Flexible Design Flow for a Low Power RFID Tag. , 2007, , .		2
76	ER-EDF: A QoS Scheduler for Real-Time Embedded Systems. , 2007, , .		4
77	Scheduling refinement in abstract RTOS models. Transactions on Embedded Computing Systems, 2006, 5, 342-354.	2.1	7
78	Hardware/Software co-design. , 2006, , 133-158.		0
79	Interlanguage Communication Synthesis for Heterogeneous Specifications. Design Automation for Embedded Systems, 2000, 5, 223-236.	0.7	1
80	Hardware, software and mechanical cosimulation for automotive applications. , 0, , .		23
81	Communication interface synthesis for multilanguage specifications. , 0, , .		3
82	Multi-level communication synthesis of heterogeneous multilanguage specification. , 0, , .		1
83	Multilanguage design of a robot arm controller: Case study. , 0, , .		1
84	Prototyping of embedded digital systems from SDL language: a case study. , 0, , .		0
85	A heterogeneous and distributed co-simulation environment [hardware/software]. , 0, , .		10
86	From VHDL register transfer level to SystemC transaction level modeling: a comparative case study. , 0, , .		18
87	Abstract rtos modeling for embedded systems. , 0, , .		9
88	Exploring NoC Mapping Strategies: An Energy and Timing Aware Technique. , 0, , .		56
89	RTOS Scheduler Implementation in Hardware and Software for Real Time Applications. , 0, , .		30