

# Armando Walter Colombo

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

60 papers	1,564 citations	21 h-index	38 g-index
64 ext. papers	1,891 ext. citations	4.8 avg, IF	5.15 L-index

#	Paper	IF	Citations
60	Industrial automation based on cyber-physical systems technologies: Prototype implementations and challenges. <i>Computers in Industry</i> , <b>2016</b> , 81, 11-25	11.6	379
59	An agent-based intelligent control platform for industrial holonic manufacturing systems. <i>IEEE Transactions on Industrial Electronics</i> , <b>2006</b> , 53, 322-337	8.9	102
58	Service-Oriented Infrastructure to Support the Deployment of Evolvable Production Systems. <i>IEEE Transactions on Industrial Informatics</i> , <b>2011</b> , 7, 759-767	11.9	99
57	Interoperability for Industrial Cyber-Physical Systems: An Approach for Legacy Systems. <i>IEEE Transactions on Industrial Informatics</i> , <b>2017</b> , 13, 3370-3378	11.9	84
56	Architecting the next generation of service-based SCADA/DCS system of systems <b>2011</b> ,		69
55	A SOA-based architecture for empowering future collaborative cloud-based industrial automation <b>2012</b> ,		62
54	SOA in reconfigurable supply chains: A research roadmap. <i>Engineering Applications of Artificial Intelligence</i> , <b>2009</b> , 22, 939-949	7.2	57
53	Industrial Artificial Intelligence in Industry 4.0 - Systematic Review, Challenges and Outlook. <i>IEEE Access</i> , <b>2020</b> , 8, 220121-220139	3.5	55
52	Towards an architecture for service-oriented process monitoring and control <b>2010</b> ,		48
51	A service- and multi-agent-oriented manufacturing automation architecture. <i>Computers in Industry</i> , <b>2012</b> , 63, 813-823	11.6	37
50	Big Data Analysis in Smart Manufacturing: A Review. <i>International Journal of Communications, Network and System Sciences</i> , <b>2017</b> , 10, 31-58	0.2	32
49	Towards the energy efficient future factory <b>2009</b> ,		30
48	Specification, design, and implementation of logic controllers based on colored Petri net models and the standard IEC 1131. I. Specification and design. <i>IEEE Transactions on Control Systems Technology</i> , <b>1999</b> , 7, 657-665	4.8	29
47	. <i>IEEE Industrial Electronics Magazine</i> , <b>2020</b> , 14, 18-32	6.2	29
46	Supporting agile supply chains using a service-oriented shop floor. <i>Engineering Applications of Artificial Intelligence</i> , <b>2009</b> , 22, 950-960	7.2	28
45	Engineering framework for agent-based manufacturing control. <i>Engineering Applications of Artificial Intelligence</i> , <b>2006</b> , 19, 625-640	7.2	26
44	IMC-AESOP outcomes: Paving the way to collaborative manufacturing systems <b>2014</b> ,		25

43	<b>2016,</b>		23
42	A Survey on Edge and Edge-Cloud Computing Assisted Cyber-Physical Systems. <i>IEEE Transactions on Industrial Informatics</i> , <b>2021</b> , 17, 7806-7819	11.9	22
41	Integration of virtual and real environments for engineering service-oriented manufacturing systems. <i>Journal of Intelligent Manufacturing</i> , <b>2012</b> , 23, 2551-2563	6.7	21
40	High-level Petri nets for the process description and control in service-oriented manufacturing systems. <i>International Journal of Production Research</i> , <b>2012</b> , 50, 1650-1665	7.8	21
39	Using an interdisciplinary demonstration platform for teaching Industry 4.0. <i>Procedia Manufacturing</i> , <b>2019</b> , 31, 302-308	1.5	20
38	Industrial Agents in the Era of Service-Oriented Architectures and Cloud-Based Industrial Infrastructures <b>2015</b> , 67-87		20
37	Design and simulation of a SOA-based system of systems for automation in the residential sector <b>2013</b> ,		19
36	An approach for integrating real and virtual production automation devices applying the service-oriented architecture paradigm <b>2007</b> ,		17
35	A generic communication interface for DPWS-based web services <b>2008</b> ,		16
34	Diagnosis using Service Oriented Architectures (SOA) <b>2007</b> ,		16
33	A temporised Petri net approach for design, modelling and analysis of flexible production systems. <i>International Journal of Advanced Manufacturing Technology</i> , <b>1997</b> , 13, 214-226	3.2	14
32	Impact of new ICT trends for the educational curriculum in the area of Industrial Automation and engineering <b>2015</b> ,		13
31	Specification, design, and implementation of logic controllers based on colored Petri net models and the standard IEC 1131. II. Design and implementation. <i>IEEE Transactions on Control Systems Technology</i> , <b>1999</b> , 7, 666-674	4.8	13
30	MAS and SOA: A Case Study Exploring Principles and Technologies to Support Self-Properties in Assembly Systems <b>2008</b> ,		12
29	Quo Vadis Industry 4.0? Position, Trends, and Challenges. <i>IEEE Open Journal of the Industrial Electronics Society</i> , <b>2020</b> , 1, 298-310	3.6	11
28	Concept and case study for teaching and learning industrial digitalization. <i>Procedia Manufacturing</i> , <b>2019</b> , 31, 97-102	1.5	10
27	Engineering of Next Generation Cyber-Physical Automation System Architectures <b>2017</b> , 185-206		9
26	COLLABORATIVE AUTOMATION FROM RIGID COUPLING TOWARDS DYNAMIC RECONFIGURABLE PRODUCTION SYSTEMS. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2005</b> , 38, 184-192		9

25	Monitoring of flexible production systems using high-level Petri net specifications. <i>Control Engineering Practice</i> , <b>1999</b> , 7, 1449-1466	3.9	9
24	A 70-Year Industrial Electronics Society Evolution Through Industrial Revolutions: The Rise and Flourishing of Information and Communication Technologies. <i>IEEE Industrial Electronics Magazine</i> , <b>2021</b> , 15, 115-126	6.2	9
23	Assessment of industrial middleware technologies for the PERFoRM project <b>2016</b> ,		9
22	<b>2014</b> ,		6
21	A formal engineering approach for control and monitoring systems in a service-oriented environment <b>2013</b> ,		5
20	An engineering approach for industrial SoA-based systems of systems <b>2013</b> ,		5
19	Learning Industrial Cyber-Physical Systems and Industry 4.0-Compliant Solutions <b>2020</b> ,		5
18	Collaborative (Agent- Based) Factory Automation. <i>Industrial Electronics Series</i> , <b>2004</b> , 1725-1745		5
17	A DIN Spec 91345 RAMI 4.0 Compliant Data Pipelining Model: An Approach to Support Data Understanding and Data Acquisition in Smart Manufacturing Environments. <i>IEEE Access</i> , <b>2020</b> , 8, 223114-223129	3.5	5
16	. <i>IEEE Transactions on Industrial Informatics</i> , <b>2021</b> , 17, 7802-7805	11.9	5
15	Configuration of SoA-based devices in virtual production cells. <i>International Journal of Production Research</i> , <b>2011</b> , 49, 7397-7423	7.8	3
14	Agent-based Control for Desktop Assembly Factories <b>2009</b> , 265-291		3
13	A Service-Oriented Architecture Implementation in the Digital Factory of the University. <i>Lecture Notes in Computer Science</i> , <b>2015</b> , 73-83	0.9	3
12	Developing Interfaces Based on Services to the Cloud Manufacturing: Plug and Produce. <i>Lecture Notes in Electrical Engineering</i> , <b>2015</b> , 821-831	0.2	3
11	Engineering human-focused Industrial Cyber-Physical Systems in Industry 4.0 context. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2021</b> , 379, 20200366	3	3
10	Using a semi-automated job-shop production system model to prepare students for the challenges of Industrial Cyber-Physical Systems. <i>Procedia Manufacturing</i> , <b>2019</b> , 31, 377-383	1.5	2
9	Blockchain: What Does It Mean to Industrial Electronics?: Technologies, Challenges, and Opportunities. <i>IEEE Industrial Electronics Magazine</i> , <b>2021</b> , 2-12	6.2	2
8	T-CHAT educational framework for teaching cyber-physical system engineering. <i>European Journal of Engineering Education</i> , 1-30	1.5	2

7	An Approach for Implementing ISA 95-Compliant Big Data Observation, Analysis and Diagnosis Features in Industry 4.0 Vision Following Manufacturing Systems. <i>IFIP Advances in Information and Communication Technology</i> , <b>2016</b> , 116-123	0.5	1
6	SoA-based production monitoring systems for energy efficiency: A case-study using Ford's POSMon system <b>2010</b> ,		1
5	Screening Process Mining and Value Stream Techniques on Industrial Manufacturing Processes: Process Modelling and Bottleneck Analysis. <i>IEEE Access</i> , <b>2022</b> , 10, 24203-24214	3.5	1
4	Improving Energy Efficiency in the Production Floor Using SoA-Based Monitoring Techniques. <i>IFIP Advances in Information and Communication Technology</i> , <b>2010</b> , 159-166	0.5	
3	A Service Enabled Approach to Automation Management. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2009</b> , 42, 1620-1624		
2	Guest Editorial Industrial Agents: Concepts, Technologies, and Applications. <i>IEEE Journal of Emerging and Selected Topics in Industrial Electronics</i> , <b>2022</b> , 3, 2-4	2.6	
1	Forschung und Lehre im Bereich industrielle Fertigung. <i>Informatik Aktuell</i> , <b>2012</b> , 59-68	0.3	