Stamatis Karnouskos

List of Publications by Year in descending order

166 papers	6,232 citations	257357 24 h-index	133188 59 g-index
183 all docs	183 docs citations	183 times ranked	4649 citing authors

#	Article	IF	Citations
1	Interacting with the SOA-Based Internet of Things: Discovery, Query, Selection, and On-Demand Provisioning of Web Services. IEEE Transactions on Services Computing, 2010, 3, 223-235.	3.2	578
2	Industrial automation based on cyber-physical systems technologies: Prototype implementations and challenges. Computers in Industry, 2016, 81, 11-25.	5.7	508
3	Smart Agents in Industrial Cyberâ€“Physical Systems. Proceedings of the IEEE, 2016, 104, 1086-1101.	16.4	327
4	Stuxnet worm impact on industrial cyber-physical system security. , 2011, , .		285
5	Industrial Cyberphysical Systems: A Backbone of the Fourth Industrial Revolution. IEEE Industrial Electronics Magazine, 2017, 11, 6-16.	2.3	275
6	SOA-Based Integration of the Internet of Things in Enterprise Services. , 2009, , .		238
7	The Internet of Things in an Enterprise Context. Lecture Notes in Computer Science, 2009, , 14-28.	1.0	235
8	The Impact of Smart Grid Prosumer Grouping on Forecasting Accuracy and Its Benefits for Local Electricity Market Trading. IEEE Transactions on Smart Grid, 2014, 5, 402-410.	6.2	174
9	SOCRADES: A Web Service Based Shop Floor Integration Infrastructure. Lecture Notes in Computer Science, 2008, , 50-67.	1.0	172
10	Industrial Cloud-Based Cyber-Physical Systems. , 2014, , .		172
11	Mobile payment: A journey through existing procedures and standardization initiatives. IEEE Communications Surveys and Tutorials, 2004, 6, 44-66.	24.8	167
12	An energy market for trading electricity in smart grid neighbourhoods. , 2012, , .		147
13	Simulation of a Smart Grid City with Software Agents. , 2009, , .		125
14	A Survey on Edge and Edge-Cloud Computing Assisted Cyber-Physical Systems. IEEE Transactions on Industrial Informatics, 2021, 17, 7806-7819.	7.2	118
15	Cyber-Physical Systems in the SmartGrid. , 2011, , .		111
16	Architecting the next generation of service-based SCADA/DCS system of systems. , 2011, , .		93
17	Integration of SOA-ready networked embedded devices in enterprise systems via a cross-layered web service infrastructure. , 2007, , .		85
18	A SOA-based architecture for empowering future collaborative cloud-based industrial automation. , 2012, , .		74

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19	Industrial Cyberphysical Systems: Realizing Cloud-Based Big Data Infrastructures. IEEE Industrial Electronics Magazine, 2018, 12, 25-35.	2.3	73
20	Industrial Agents as a Key Enabler for Realizing Industrial Cyber-Physical Systems: Multiagent Systems Entering Industry 4.0. IEEE Industrial Electronics Magazine, 2020, 14, 18-32.	2.3	67
21	Towards an architecture for service-oriented process monitoring and control. , 2010, , .		57
22	Privacy and Integrity Considerations in Hyperconnected Autonomous Vehicles. Proceedings of the IEEE, 2018, 106, 160-170.	16.4	57
23	Artificial Intelligence in Digital Media: The Era of Deepfakes. IEEE Transactions on Technology and Society, 2020, 1, 138-147.	2.4	57
24	A time-series compression technique and its application to the smart grid. VLDB Journal, 2015, 24, 193-218.	2.7	56
25	Self-Driving Car Acceptance and the Role of Ethics. IEEE Transactions on Engineering Management, 2020, 67, 252-265.	2.4	56
26	Key Contributing Factors to the Acceptance of Agents in Industrial Environments. IEEE Transactions on Industrial Informatics, 2017, 13, 696-703.	7.2	54
27	Demand Side Management via prosumer interactions in a smart city energy marketplace. , 2011, , .		51
28	Smart Houses in the Smart Grid: Developing an interactive network. IEEE Electrification Magazine, 2014, 2, 81-93.	1.8	51
29	Factory of the Future: A Service-oriented System of Modular, Dynamic Reconfigurable and Collaborative Systems. Springer Series in Advanced Manufacturing, 2010, , 459-481.	0.2	48
30	An Advanced Metering Infrastructure for Future Energy Networks. , 2007, , 597-606.		47
31	Process-Based Design and Integration of Wireless Sensor Network Applications. Lecture Notes in Computer Science, 2012, , 134-149.	1.0	43
32	Towards the Next Generation of Industrial Cyber-Physical Systems. , 2014, , 1-22.		43
33	Energy services for the smart grid city. , 2012, , .		42
34	A system of systems view on collaborative industrial automation. , 2013, , .		40
35	Towards the energy efficient future factory. , 2009, , .		39
36	The need for a digital rights management framework for the next generation of e-government services. Electronic Government, 2004, 1, 8.	0.1	38

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37	A roadmap for research in mobile business. International Journal of Mobile Communications, 2005, 3, 350.	0.2	38
38	Smart houses for a smart grid. , 2009, , .		37
39	Real-world Service Interaction with Enterprise Systems in Dynamic Manufacturing Environments. Springer Series in Advanced Manufacturing, 2010, , 423-457.	0.2	37
40	Massive open online courses (MOOCs) as an enabler for competent employees and innovation in industry. Computers in Industry, 2017, 91, 1-10.	5.7	35
41	A migration approach towards a SOA-based next generation process control and monitoring. , 2011, , .		34
42	The Future Internet. Lecture Notes in Computer Science, 2011, , .	1.0	33
43	The IMC-AESOP Architecture for Cloud-Based Industrial Cyber-Physical Systems. , 2014, , 49-88.		32
44	Cross benefits from cyber-physical systems and intelligent products for future smart industries. , 2016, , .		31
45	Energy efficiency driven process analysis and optimization in discrete manufacturing. , 2009, , .		30
46	Technologies for SOA-based distributed large scale process monitoring and control systems. , 2012, , .		29
47	IMC-AESOP outcomes: Paving the way to collaborative manufacturing systems. , 2014, , .		29
48	Key Directions for Industrial Agent Based Cyber-Physical Production Systems. , 2019, , .		29
49	Industrial Agents in the Era of Service-Oriented Architectures and Cloud-Based Industrial Infrastructures. , 2015, , 67-87.		26
50	A survey towards understanding residential prosumers in smart grid neighbourhoods. , 2012, , .		25
51	State of the Art in Industrial Automation. , 2014, , 23-47.		25
52	Integration of Legacy Devices in the Future SOA-based Factory. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 2113-2118.	0.4	23
53	Towards the Real-Time Enterprise: Service-based Integration of Heterogeneous SOA-ready Industrial Devices with Enterprise Applications. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 2131-2136.	0.4	23
54	Common practices for integrating industrial agents and low level automation functions. , 2017, , .		23

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55	Industrial Cyberâ€“Physical Systems [Scanning the Issue]. Proceedings of the IEEE, 2016, 104, 899-903.	16.4	21
56	Engineering ethical behaviors in autonomous industrial cyber-physical human systems. Cognition, Technology and Work, 2022, 24, 113-126.	1.7	20
57	Using flexible energy infrastructures for demand response in a Smart Grid city. , 2012, , .		19
58	Quo Vadis Industry 4.0? Position, Trends, and Challenges. IEEE Open Journal of the Industrial Electronics Society, 2020, 1, 298-310.	4.8	19
59	SEMOPS: design of a new payment service. , 2003, , .		18
60	Trends and Challenges for Cloud-Based Industrial Cyber-Physical Systems. , 2014, , 231-240.		18
61	An Agent-Based Simulation of SOA-Ready Devices. , 2008, , .		17
62	Towards business processes orchestrating the physical enterprise with wireless sensor networks. , 2012, , .		17
63	Smart houses in the smart grid and the search for value-added services in the cloud of things era. , 2013, , .		17
64	A 70-Year Industrial Electronics Society Evolution Through Industrial Revolutions: The Rise and Flourishing of Information and Communication Technologies. IEEE Industrial Electronics Magazine, 2021, 15, 115-126.	2.3	17
65	Simulation of web service enabled smart meters in an event-based infrastructure. , 2009, , .		16
66	Assessing the Integration of Software Agents and Industrial Automation Systems with ISO/IEC 25010. , 2018, , .		16
67	Integration Patterns for Interfacing Software Agents with Industrial Automation Systems. , 2018, , .		15
68	The Applicability of ISO/IEC 25023 Measures to the Integration of Agents and Automation Systems. , 2018, , .		15
69	makeSense: Simplifying the Integration of Wireless Sensor Networks into Business Processes. IEEE Transactions on Software Engineering, 2019, 45, 576-596.	4.3	15
70	Maximizing the Business Value of Networked Embedded Systems through Process-Level Integration into Enterprise Software. , 2007, , .		14
71	Evaluating the potential of a service oriented infrastructure for the factory of the future. , 2010, , .		14
72	Asset monitoring in the service-oriented Internet of Things empowered smartgrid. Service Oriented Computing and Applications, 2012, 6, 207-214.	1.3	14

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73	Performance assessment of integration in the cloud of things via web services. , 2013, , .		14
74	Impact assessment of smart meter grouping on the accuracy of forecasting algorithms. , 2013, , .		14
75	The Future Internet. Lecture Notes in Computer Science, 2012, , .	1.0	14
76	A Survey on Factors that Impact Industrial Agent Acceptance. , 2015, , 401-429.		14
77	Crowdsourcing information via mobile devices as a migration enabler towards the SmartGrid. , 2011, , .		13
78	Assessment of high-performance smart metering for the web service enabled smart grid era. , 2011, , .		13
79	Engineering of Next Generation Cyber-Physical Automation System Architectures. , 2017, , 185-206.		13
80	Monitoring and Control for Energy Efficiency in the Smart House. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2011, , 197-207.	0.2	13
81	Component-based execution environments of network elements and a protocol for their configuration. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2004, 34, 82-96.	3.3	12
82	Sensing in power distribution networks via large numbers of smart meters. , 2012, , .		12
83	Symbiosis with artificial intelligence via the prism of law, robots, and society. Artificial Intelligence and Law, 2022, 30, 93-115.	3.0	12
84	Industrial Agents Cybersecurity. , 2015, , 109-120.		12
85	Security implications of implementing active network infrastructures using agent technology. Computer Networks, 2001, 36, 87-100.	3.2	11
86	Using a privilege management infrastructure for secure web-based e-health applications. Computer Communications, 2003, 26, 1863-1872.	3.1	11
87	The European perspective on mobile payments. , 0, , .		11
88	Requirement Considerations for Ubiquitous Integration of Cooperating Objects. , 2011, , .		11
89	Using a 6LoWPAN smart meter mesh network for event-driven monitoring of power quality. , 2012, , .		11
90	The Future Internet. Lecture Notes in Computer Science, 2013, , .	1.0	11

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91	Realising next-generation web service-driven industrial systems. International Journal of Advanced Manufacturing Technology, 2012, 60, 409-419.	1.5	10
92	The role of utilitarianism, self-safety, and technology in the acceptance of self-driving cars. Cognition, Technology and Work, 2021, 23, 659-667.	1.7	10
93	Engineering human-focused Industrial Cyber-Physical Systems in Industry 4.0 context. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200366.	1.6	10
94	Using multi-agent systems to simulate dynamic infrastructures populated with large numbers of web service enabled devices. , 2009, , .		9
95	Discovery and On-demand Provisioning of Real-World Web Services. , 2009, , .		9
96	Promising Technologies for SOA-Based Industrial Automation Systems. , 2014, , 89-109.		9
97	Dynamic e-Maintenance in the era of SOA-ready device dominated industrial environments. , 2010, , 411-419.		9
98	A comparative analysis of smart metering data aggregation performance. , 2013, , .		8
99	Applications and Markets for Cooperating Objects. Springer Briefs in Electrical and Computer Engineering, 2014, , .	0.3	8
100	Performance Assessment Of The Integration Between Industrial Agents And Low-Level Automation Functions. , 2018, , .		8
101	Migration of SCADA/DCS Systems to the SOA Cloud. , 2014, , 111-135.		8
102	Web-service enabledwireless sensors in SOA environments. , 2008, , .		7
103	Future smart grid prosumer services. , 2011, , .		7
104	Next Generation of Engineering Methods and Tools for SOA-Based Large-Scale and Distributed Process Applications. , 2014, , 137-165.		7
105	A community analysis of the IEEE IES industrial agents technical committee. , 2017, , .		7
106	Charging Strategies and Implications for Corporate Electric Vehicle Fleets. , 2018, , .		7
107	Ethical Behaviour Aspects of Autonomous Intelligent Cyber-Physical Systems. Studies in Computational Intelligence, 2020, , 55-71.	0.7	7
108	Recommendation of Best Practices for Industrial Agent Systems based on the IEEE 2660.1 Standard. , 2021, , .		7

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109	A System for Enabling Facility Management to Achieve Deterministic Energy Behaviour in the Smart Grid Era. , 2014, , .		7
110	Dynamically Optimized Production Planning Using Cross-Layer SOA. , 2008, , .		6
111	Plant Energy Management. , 2014, , 203-218.		6
112	SeMoPS. , 2005, , 236-262.		6
113	Place oriented virtual private networks. , 0, , .		5
114	Realization of a secure active and programmable network infrastructure via mobile agent technology. Computer Communications, 2002, 25, 1465-1476.	3.1	5
115	Guest Editorial: Research advances for the mobile payments arena. Electronic Commerce Research and Applications, 2008, 7, 137-140.	2.5	5
116	Event-driven IPv6 communication for the smart grid infrastructure. , 2011, , .		5
117	Assessment of an enterprise energy service platform in a Smart Grid city pilot. , 2013, , .		5
118	The Cloud of Things Empowered Smart GridÂCities. Internet of Things, 2014, , 129-142.	1.3	5
119	Charging optimization of enterprise electric vehicles for participation in demand response. , 2015, , .		5
120	A Cloud-based Development Environment using HLA and Kubernetes for the Co-simulation of a Corporate Electric Vehicle Fleet. , 2019, , .		5
121	Agent Based Security for the Active Network Infrastructure. Lecture Notes in Computer Science, 1999, , 330-344.	1.0	4
122	Predicting Energy Measurements of Service-Enabled Devices in the Future Smartgrid. , 2010, , .		4
123	Service-oriented SCADA and MES supporting Petri nets based orchestrated automation systems. , 2012, , .		4
124	Evaluation of the scalability of an energy market for Smart Grid neighborhoods. , 2013, , .		4
125	Developing a web application for monitoring and management of Smart Grid neighborhoods. , 2013, , .		4
126	Investigating Electric Vehicles as a promising alternative to static storage solutions. , 2014, , .		4

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127	A model and an evolutionary algorithmic approach towards optimization of Electric Vehicle fleet charging. , 2015, , .		4
128	Blockchain for Development in the Era of the COVID-19 Pandemic. IEEE Open Journal of the Industrial Electronics Society, 2021, 2, 556-567.	4.8	4
129	Trade-off or invention: Experimental integration of active networking and programmable networks. Journal of Communications and Networks, 2001, 3, 19-27.	1.8	3
130	Reliable execution of business processes on dynamic networks of service-enabled devices. , 2009, , .		3
131	Improving accuracy of energy forecasting through the presence of an electric vehicle fleet. Electric Power Systems Research, 2015, 120, 32-38.	2.1	3
132	Experiences in integrating Internet of Things and cloud services with the robot operating system. , 2017, , .		3
133	Technology Fundamentals. , 2019, , 67-126.		3
134	Decentralized Intelligence in Energy Efficient Power Systems. Energy Systems, 2012, , 467-486.	0.5	3
135	Advancing an Artificial Intelligence Ethics Framework for Operator 4.0 in Sustainable Factory Automation. Studies in Computational Intelligence, 2022, , 363-375.	0.7	3
136	Active electronic mail. , 2002, , .		2
137	Guest Editorial - Special issue on computational intelligence in telecommunications networks and internet services - Part II. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2003, 33, 429-431.	3.3	2
138	Guest Editorial Special Issue on Computational Intelligence in Telecommunications Networks and Internet Servicesâ€"Part III. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2004, 34, 1-3.	3.3	2
139	Reactive business processes for factory automation. , 2009, , .		2
140	Agent-based mediated control in smart grids. , 2011, , .		2
141	Addressing energy forecast errors: an empirical investigation of the capacity distribution impact in a variable storage. Energy Systems, 2014, 5, 643-656.	1.8	2
142	Enable QoS for Distributed Object Applications by ORB-Based Active Networking. Lecture Notes in Computer Science, 2000, , 225-238.	1.0	2
143	Dealing with denial-of-service attacks in agent-enabled active and programmable infrastructures. , 0, , .		1
144	A security architecture for future active IP networks. , 2002, , .		1

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145	Self-forecasting energy-load stakeholders. , 2014, , .		1
146	Industrial Automation. , 2019, , 249-256.		1
147	Smart Grid. , 2019, , 257-268.		1
148	Information Use-Control in E-Government Applications. , 2007, , 1076-1082.		1
149	Wesentliche Technologische Eigenschaften und Trends. , 2009, , 75-95.		1
150	A Cross-Disciplinary View of Industrial Electronics: Change, Chance, and Challenge. , 2021, , .		1
151	Supporting nomadic users within virtual private networks. , 0, , .		0
152	Guest editorial special issue on computational intelligence in telecommunications networks and internet services-part I. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2003, 33, 294-296.	3.3	0
153	Security-enabled code deployment for heterogeneous networks. Computer Standards and Interfaces, 2005, 27, 547-560.	3.8	0
154	Instant Messaging Enabled Mobile Payments. , 2006, , 349-366.		0
155	Introduction to IES panel discussion on Smart Grids. , 2010, , .		0
156	Conclusions and Looking Ahead. , 2019, , 317-320.		0
157	Universal Approach to Mobile Payments. , 2006, , 1114-1119.		0
158	TOWARDS ENTERPRISE APPLICATIONS USING WIRELESS SENSOR NETWORKS. , 2007, , .		0
159	Towards Autonomic Infrastructures via Mobile Agents and Active Networks. , 2008, , 633-639.		0
160	Information Use-Control in E-Government Applications. , 2008, , 1926-1934.		0
161	Towards Autonomic Infrastructures via Mobile Agents and Active Networks. , 2009, , 642-649.		0
162	Universal Approach to Mobile Payments. , 2009, , 2280-2288.		0

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163	Markets for Cooperating Objects. Springer Briefs in Electrical and Computer Engineering, 2014, , 99-115.	0.3	0
164	Guest Editorial Industrial Agents: Concepts, Technologies, and Applications. IEEE Journal of Emerging and Selected Topics in Industrial Electronics, 2022, 3, 2-4.	3.0	0
165	A Cross-Disciplinary Outlook of Directions and Challenges in Industrial Electronics. IEEE Open Journal of the Industrial Electronics Society, 2022, 3, 375-391.	4.8	0
166	NFC-Capable Mobile Devices for Mobile Payment Services. , 0, , .		0