Toms Bures

List of Publications by Citations

93 papers	789 citations	14 h-index	23 g-index
117 ext. papers	975 ext. citations	1.2 avg, IF	4.22 L-index

#	Paper	IF	Citations
93	SOFA 2.0: Balancing Advanced Features in a Hierarchical Component Model **2006**,		84
92	DEECO **2013**,		56
91	A Component Model for Control-Intensive Distributed Embedded Systems. *Lecture Notes in Computer Science*, **2008**, 310-317	0.9	56
90	Self-adaptation in software-intensive cyber-physical systems: From system goals to architecture configurations. *Journal of Systems and Software*, **2016**, 122, 378-397	3.3	34
89	Software Engineering for Smart Cyber-Physical Systems. *Software Engineering Notes: an Informal Newsletter of the Special Interest Committee on Software Engineering / ACM*, **2017**, 42, 19-24	0.4	32
88	Software Engineering for Smart Cyber-Physical Systems -- Towards a Research Agenda. *Software Engineering Notes: an Informal Newsletter of the Special Interest Committee on Software Engineering / ACM*, **2015**, 40, 28-32	0.4	24
87	Software Abstractions for Component Interaction in the Internet of Things. *Computer*, **2016**, 49, 50-59	1.6	23
86	Self-Adaptation Based on Big Data Analytics: A Model Problem and Tool **2017**,		22
85	Capturing performance assumptions using stochastic performance logic **2012**,		18
84	Patterns for Self-Adaptation in Cyber-Physical Systems **2017**, 331-368		17
83	A Life Cycle for the Development of Autonomic Systems: The E-mobility Showcase **2013**,		17
82	An Architecture Framework for Experimentations with Self-Adaptive Cyber-physical Systems **2015**,		16
81	Comparison of Component Frameworks for Real-Time Embedded Systems. *Lecture Notes in Computer Science*, **2010**, 21-36	0.9	15
80	**2005**,		14
79	Design of ensemble-based component systems by invariant refinement **2013**,		13
78	The Autonomic Cloud. *Lecture Notes in Computer Science*, **2015**, 495-512	0.9	13
77	Unit testing performance with Stochastic Performance Logic. *Automated Software Engineering*, **2017**, 24, 139-187	1.5	12

76	Architectural Homeostasis in Self-Adaptive Software-Intensive Cyber-Physical Systems. *Lecture Notes in Computer Science*, **2016**, 113-128	0.9	12
75	Tuning self-adaptation in cyber-physical systems through architectural homeostasis. *Journal of Systems and Software*, **2019**, 148, 37-55	3.3	12
74	Component-based design of cyber-physical applications with safety-critical requirements. *Microprocessors and Microsystems*, **2016**, 42, 70-86	2.4	11
73	High-level mission specification for multiple robots **2019**,		11
72	The Invariant Refinement Method. *Lecture Notes in Computer Science*, **2015**, 405-428	0.9	11
71	Adapting a system with noisy outputs with statistical guarantees **2018**,		11
70	A language and framework for dynamic component ensembles in smart systems. *International Journal on Software Tools for Technology Transfer*, **2020**, 22, 497-509	1.3	9
69	Logic-based modeling of information transfer in cyber-physical multi-agent systems. *Future Generation Computer Systems*, **2016**, 56, 124-139	7.5	9
68	CoCoME in SOFA. *Lecture Notes in Computer Science*, **2008**, 388-417	0.9	9
67	The E-mobility Case Study. *Lecture Notes in Computer Science*, **2015**, 513-533	0.9	8
66	Strengthening architectures of smart CPS by modeling them as runtime product-lines **2014**,		8
65	Towards Dependable Emergent Ensembles of Components: The DEECo Component Model **2012**,		8
64	Communication Style Driven Connector Configurations. *Lecture Notes in Computer Science*, **2004**, 102-116	0.9	8
63	CoCoME in Fractal. *Lecture Notes in Computer Science*, **2008**, 357-387	0.9	8
62	Strengthening Adaptation in Cyber-Physical Systems via Meta-Adaptation Strategies. *ACM Transactions on Cyber-Physical Systems*, **2017**, 1, 1-25	2.3	7
61	Intelligent Ensembles - A Declarative Group Description Language and Java Framework **2017**,		7
60	Performance Modelling of Smart Cyber-Physical Systems **2018**,		7
59	SOFA 2 Component Framework and Its Ecosystem. *Electronic Notes in Theoretical Computer Science*, **2013**, 295, 101-106	0.7	7

58	Property networks allowing oracle-based mode-change propagation in hierarchical components **2012**,		7
57	PROMISE **2020**,		7
56	Gossiping Components for Cyber-Physical Systems. *Lecture Notes in Computer Science*, **2014**, 250-266	0.9	7
55	Meta-Adaptation Strategies for Adaptation in Cyber-Physical Systems. *Lecture Notes in Computer Science*, **2015**, 45-52	0.9	7
54	DEECo: an ecosystem for cyber-physical systems **2014**,		6
53	Toward autonomically composable and context-dependent access control specification through ensembles. *International Journal on Software Tools for Technology Transfer*, **2020**, 22, 511-522	1.3	5
52	Comparison of component frameworks for real-time embedded systems. *Knowledge and Information Systems*, **2014**, 40, 127-170	2.4	5
51	Using a product line for creating component systems **2009**,		5
50	Dynamic Security Specification Through Autonomic Component Ensembles. *Lecture Notes in Computer Science*, **2018**, 172-185	0.9	5
49	Architecture Adaptation Based on Belief Inaccuracy Estimation **2014**,		4
48	**2017**,		4
47	1st International Workshop on Software Engineering for Smart Cyber-Physical Systems (SEsCPS 2015) **2015**,		4
46	Performance Awareness in Component Systems: Vision Paper **2012**,		4
45	A Component Model Family for Vehicular Embedded Systems **2008**,		4
44	Runtime Support for Advanced Component Concepts **2007**,		4
43	Model problem and testbed for experiments with adaptation in smart cyber-physical systems **2016**,		4
42	Cost-Aware Stage-Based Experimentation: Challenges and Emerging Results **2018**,		4
41	Using DSL for Automatic Generation of Software Connectors **2008**,		3

40	The Two-Hemisphere Modelling Approach to the Composition of Cyber-Physical Systems **2017**,		3
39	Using component ensembles for modeling autonomic component collaboration in smart farming **2020**,		3
38	Supporting Performance Awareness in Autonomous Ensembles. *Lecture Notes in Computer Science*, **2015**, 291-322	0.9	3
37	Supporting Real-Life Applications in Hierarchical Component Systems. *Studies in Computational Intelligence*, **2009**, 107-118	0.8	3
36	From Textual Use-Cases to Component-Based Applications. *Studies in Computational Intelligence*, **2010**, 23-37	0.8	3
35	Managing latency in edge□loud environment. *Journal of Systems and Software*, **2021**, 172, 110872	3.3	3
34	Smart Coordination of Autonomic Component Ensembles in the Context of Ad-Hoc Communication. *Lecture Notes in Computer Science*, **2016**, 642-656	0.9	2
33	Statistical Approach to Architecture Modes in Smart Cyber Physical Systems **2016**,		2
32	Automated resolution of connector architectures using constraint solving (ARCAS method). *Software and Systems Modeling*, **2014**, 13, 843-872	1.9	2
31	Employing Domain Knowledge for Optimizing Component Communication **2015**,		2
30	Formal Verification of Annotated Textual Use-Cases. *Computer Journal*, **2015**, 58, 1495-1529	1.3	2
29	Towards Intelligent Ensembles **2015**,		2
28	Adaptive deployment in ad-hoc systems using emergent component ensembles **2013**,		2
27	Forming Ensembles at Runtime: A Machine Learning Approach. *Lecture Notes in Computer Science*, **2020**, 440-456	0.9	2
26	Automated Dynamic Formation of Component Ensembles - Taking Advantage of Component Cooperation Locality **2017**,		2
25	Towards Verification of Ensemble-Based Component Systems. *Lecture Notes in Computer Science*, **2014**, 41-60	0.9	2
24	Verifying Temporal Properties of Use-Cases in Natural Language. *Lecture Notes in Computer Science* , **2012**, 350-367	0.9	2
23	Towards Performance-Aware Engineering of Autonomic Component Ensembles. *Lecture Notes in Computer Science*, **2014**, 131-146	0.9	2

22	Self-Adaptation 2.0 **2021**,		2
21	Towards systematic live experimentation in software-intensive systems of systems **2016**,		2
20	Software Engineering for Smart Cyber-Physical Systems. *Software Engineering Notes: an Informal Newsletter of the Special Interest Committee on Software Engineering / ACM*, **2019**, 43, 42-44	0.4	2
19	A Tool for Online Experiment-Driven Adaptation **2018**,		2
18	Experimenting with Adaptation in Smart Cyber-Physical Systems: A Model Problem and Testbed **2019**, 149-169		1
17	Interoperable domain-specific languages families for code generation. *Software - Practice and Experience*, **2013**, 43, 479-499	2.5	1
16	Strengthening Component Architectures by Modeling Fine-Grained Entities **2011**,		1
15	Bridging the Component-Based and Service-Oriented Worlds **2009**,		1
14	Capturing Dynamicity and Uncertainty in Security and Trust via Situational Patterns. *Lecture Notes in Computer Science*, **2020**, 295-310	0.9	1
13	Six Software Engineering Principles for Smarter Cyber-Physical Systems **2021**,		1
12	Eliminating Execution Overhead of Disabled Optional Features in Connectors. *Lecture Notes in Computer Science*, **2006**, 50-65	0.9	1
11	Continuous Data-driven Software Engineering - Towards a Research Agenda. *Software Engineering Notes: an Informal Newsletter of the Special Interest Committee on Software Engineering / ACM*, **2019** , 44, 60-64	0.4	1
10	Low-cost IoT, Big Data, and Cloud Platform for Developing Countries. *Lecture Notes in Computer Science*, **2017**, 285-299	0.9	1
9	Targeting uncertainty in smart CPS by confidence-based logic. *Journal of Systems and Software*, **2021**, 181, 111065	3.3	0
8	Special issue on software quality of advanced software applications. *Software Quality Journal*, **2020** , 28, 503-504	1.2	
7	Report of the 2nd International Workshop on Context-aware Autonomous and Smart Architectures (CASA@ECSA 2018). *Software Engineering Notes: an Informal Newsletter of the Special Interest Committee on Software Engineering / ACM*, **2020**, 45, 14-17	0.4	
6	Preserving Intentions in SOA Business Process Development. *Studies in Computational Intelligence*, **2008**, 59-72	0.8	
5	Logic-Based Modeling of Information Transfer in Cyber-Physical Multi-Agent Systems. *Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering*, **2015**, 42-52	0.2	

List of Publications

4	Formalization of Invariant Patterns for the Invariant Refinement Method. *Lecture Notes in Computer Science*, **2015**, 602-618	0.9
3	Using Connectors to Address Transparent Distribution in Enterprise Systems Pitfalls and Options. *Studies in Computational Intelligence*, **2009**, 81-92	0.8
2	CoDIT: Bridging the Gap between System-Level and Component-Level Development. *Studies in Computational Intelligence*, **2012**, 159-175	0.8
1	Using Connectors for Deployment of Heterogeneous Applications in the Context of OMG D&C Specification349-360	