Bedir Tekinerdogan

List of Publications by Year
in descending order

195 papers	3,246 citations	218381 26 h-index	205818 48 g-index
201 all docs	201 docs citations	201 times ranked	1873 citing authors

#	ARTICLE	IF	CITATIONS
1	Analysis of transfer learning for deep neural network based plant classification models. Computers and Electronics in Agriculture, 2019, 158, 20-29.	3.7	276
2	Digital twins in smart farming. Agricultural Systems, 2021, 189, 103046.	3.2	235
3	Discovering early aspects. IEEE Software, 2006, 23, 61-70.	2.1	135
4	Systematic reviews in sentiment analysis: a tertiary study. Artificial Intelligence Review, 2021, 54, 4997-5053.	9.7	112
5	Architecture design approach for IoT-based farm management information systems. Precision Agriculture, 2019, 20, 926-958.	3.1	111
6	Machine learning applications in production lines: A systematic literature review. Computers and Industrial Engineering, 2020, 149, 106773.	3.4	100
7	Automation of systematic literature reviews: A systematic literature review. Information and Software Technology, 2021, 136, 106589.	3.0	96
8	Architecture framework of IoT-based food and farm systems: A multiple case study. Computers and Electronics in Agriculture, 2019, 165, 104939.	3.7	86
9	Obstacles and features of Farm Management Information Systems: A systematic literature review. Computers and Electronics in Agriculture, 2019, 157, 189-204.	3.7	83
10	Effect of Attention Mechanism in Deep Learning-Based Remote Sensing Image Processing: A Systematic Literature Review. Remote Sensing, 2021, 13, 2965.	1.8	77
11	Internet of Things in agriculture.. CAB Reviews: Perspectives in Agriculture, Veterinary Science, Nutrition and Natural Resources, 0, , 1-12.	0.6	77
12	Predictive maintenance using digital twins: A systematic literature review. Information and Software Technology, 2022, 151, 107008.	3.0	74
13	Precision nutrition: A systematic literature review. Computers in Biology and Medicine, 2021, 133, 104365.	3.9	68
14	Design of a reference architecture for developing smart warehouses in industry 4.0. Computers in Industry, 2021, 124, 103343.	5.7	67
15	Systems Architecture Design Pattern Catalog for Developing Digital Twins. Sensors, 2020, 20, 5103.	2.1	52
16	Model-based testing for software safety: a systematic mapping study. Software Quality Journal, 2018, 26, 1327-1372.	1.4	51
17	A systematic approach to evaluating domain-specific modeling language environments for multi-agent systems. Software Quality Journal, 2016, 24, 755-795.	1.4	50
18	Remaining Useful Life (RUL) Prediction of Equipment in Production Lines Using Artificial Neural Networks. Sensors, 2021, 21, 932.	2.1	50

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19	Aligning Education for the Life Sciences Domain to Support Digitalization and Industry 4.0. Procedia Computer Science, 2019, 158, 99-106.	1.2	46
20	Digital Twins in greenhouse horticulture: A review. Computers and Electronics in Agriculture, 2022, 199, 107183.	3.7	46
21	Analyzing the effectiveness of semi-supervised learning approaches for opinion spam classification. Applied Soft Computing Journal, 2021, 101, 107023.	4.1	41
22	Augmented Reality in Precision Farming: Concepts and Applications. Smart Cities, 2021, 4, 1454-1468.	5.5	37
23	Coronaviruses and people with intellectual disability: an exploratory data analysis. Journal of Intellectual Disability Research, 2020, 64, 475-481.	1.2	35
24	Editorial: Early aspects: aspect-oriented requirements engineering and architecture design. IET Software, 2004, 151, 153.	1.0	33
25	Characterizing industry-academia collaborations in software engineering: evidence from 101 projects. Empirical Software Engineering, 2019, 24, 2540-2602.	3.0	33
26	ASAAM: aspectual software architecture analysis method. , 0, , .		32
27	Exploring the Challenges Posed by Regulations for the Use of Drones in Agriculture in the African Context. Land, 2021, 10, 164.	1.2	31
28	Software architecture reliability analysis using failure scenarios. Journal of Systems and Software, 2008, 81, 558-575.	3.3	30
29	Applications of deep learning for phishing detection: a systematic literature review. Knowledge and Information Systems, 2022, 64, 1457-1500.	2.1	30
30	Development of a recurrent neural networks-based calving prediction model using activity and behavioral data. Computers and Electronics in Agriculture, 2020, 170, 105285.	3.7	27
31	Deployment and communication patterns in microservice architectures: A systematic literature review. Journal of Systems and Software, 2021, 180, 111014.	3.3	26
32	Obstacles in Data Distribution Service Middleware: A Systematic Review. Future Generation Computer Systems, 2017, 68, 191-210.	4.9	25
33	Empirical evaluation of a decision support model for adopting software product line engineering. Information and Software Technology, 2015, 60, 77-101.	3.0	24
34	Realizing chain-wide transparency in meat supply chains based on global standards and a reference architecture. Computers and Electronics in Agriculture, 2016, 123, 275-291.	3.7	24
35	Model-driven architecture based testing: A systematic literature review. Information and Software Technology, 2018, 102, 30-48.	3.0	24
36	Development of Semantic Web-Enabled BDI Multi-Agent Systems Using SEA_ML: An Electronic Bartering Case Study. Applied Sciences (Switzerland), 2018, 8, 688.	1.3	20

#	Article	IF	Citations
37	Software architectures for big data: a systematic literature review. Big Data Analytics, 2020, 5, .	2.2	19
38	Developing a policy framework for adoption and management of drones for agriculture in Africa. Technology Analysis and Strategic Management, 2021, 33, 970-987.	2.0	19
39	Modeling Traceability of Concerns for Synchronizing Architectural Views.. Journal of Object Technology, 2007, 6, 7.	0.8	19
40	Deep learning-based multi-task prediction system for plant disease and species detection. Ecological Informatics, 2022, 69, 101679.	2.3	19
41	Adopting integrated application lifecycle management within a large-scale software company: An action research approach. Journal of Systems and Software, 2019, 149, 63-82.	3.3	18
42	Sensor Failure Tolerable Machine Learning-Based Food Quality Prediction Model. Sensors, 2020, 20, 3173.	2.1	18
43	Integrating Platform Selection Rules in the Model Driven Architecture Approach. Lecture Notes in Computer Science, 2005, , 159-173.	1.0	18
44	Smart Warehouses: Rationale, Challenges and Solution Directions. Applied Sciences (Switzerland), 2022, 12, 219.	1.3	18
45	Reference architecture design for farm management information systems: a multi-case study approach. Precision Agriculture, 2021, 22, 22-50.	3.1	17
46	Aspect-oriented Programming Using Composition-Filters. Lecture Notes in Computer Science, 1998, , 435-435.	1.0	16
47	Optimizing decomposition of software architecture for local recovery. Software Quality Journal, 2013, 21, 203-240.	1.4	16
48	A Firewall Policy Anomaly Detection Framework for Reliable Network Security. IEEE Transactions on Reliability, 2022, 71, 339-347.	3.5	16
49	Introducing Recovery Style for Modeling and Analyzing System Recovery. , 2008, , .		15
50	Systematic Approach for Generation of Feasible Deployment Alternatives for Microservices. IEEE Access, 2021, 9, 29505-29529.	2.6	15
51	Model-Driven Approach for Supporting the Mapping of Parallel Algorithms to Parallel Computing Platforms. Lecture Notes in Computer Science, 2013, , 757-773.	1.0	15
52	Obstacles and features of health information systems: A systematic literature review. Computers in Biology and Medicine, 2021, 137, 104785.	3.9	14
53	Synthesis-Based Software Architecture Design. , 2002, , 143-173.		14
54	Experiences in teaching a graduate course on model-driven software development. Computer Science Education, 2011, 21, 363-387.	2.7	13

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55	Aspect-Oriented Programming Workshop Report. Lecture Notes in Computer Science, 1998, , 483-496.	1.0	13
56	A domain-specific language framework for farm management information systems in precision agriculture. Precision Agriculture, 2021, 22, 1067-1106.	3.1	12
57	A Multi-Channel Convolutional Neural Network approach to automate the citation screening process. Applied Soft Computing Journal, 2021, 112, 107765.	4.1	12
58	Tarski. , 2017, , .		12
59	Data analytics platforms for agricultural systems: A systematic literature review. Computers and Electronics in Agriculture, 2022, 195, 106813.	3.7	12
60	FLORA: a framework for decomposing software architecture to introduce local recovery. Software - Practice and Experience, 2009, 39, 869-889.	2.5	11
61	Evaluation framework for software architecture viewpoint languages. , 2013, , .		11
62	Domain-Driven Design of Big Data Systems Based on a Reference Architecture. , 2017, , 49-68.		11
63	Machine learning-based farm risk management: A systematic mapping review. Computers and Electronics in Agriculture, 2022, 192, 106631.	3.7	11
64	Developing object-oriented framworks using domain models. ACM Computing Surveys, 2000, 32, 11.	16.1	10
65	Software Architecture Reliability Analysis Using Failure Scenarios. , 0, , .		10
66	ParDSL: a domain-specific language framework for supporting deployment of parallel algorithms. Software and Systems Modeling, 2019, 18, 2907-2935.	2.2	10
67	Business processes and information systems in the Ghana cocoa supply chain: A survey study. Njas - Wageningen Journal of Life Sciences, 2020, 92, 1-11.	7.9	10
68	A decision support system for automating document retrieval and citation screening. Expert Systems With Applications, 2021, 182, 115261.	4.4	10
69	Classifying and Evaluating Architecture Design Methods. , 2002, , 3-27.		10
70	Software Language Engineering of Architectural Viewpoints. Lecture Notes in Computer Science, 2011, , 336-343.	1.0	10
71	Market-driven approach based on Markov decision theory for optimal use of resources in software development. IET Software, 2004, 151, 85.	1.0	9
72	Impact of Evolution of Concerns in the Model-Driven Architecture Design Approach. Electronic Notes in Theoretical Computer Science, 2007, 163, 45-64.	0.9	9

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73	Feature-Driven Domain Analysis of Session Layer Protocols of Internet of Things. , 2017, , .		9
74	Pattern Based Integration of Internet of Things Systems. Lecture Notes in Computer Science, 2018, , 19-33.	1.0	9
75	Feature-Driven Design of SaaS Architectures. Computer Communications and Networks, 2013, , 189-212.	0.8	9
76	Extending Failure Modes and Effects Analysis Approach for Reliability Analysis at the Software Architecture Design Level. Lecture Notes in Computer Science, 2007, , 409-433.	1.0	9
77	Defining Architectural Viewpoints for Quality Concerns. Lecture Notes in Computer Science, 2011, , 26-34.	1.0	9
78	An Approach for Detecting Inconsistencies between Behavioral Models of the Software Architecture and the Code. , 2012, , .		8
79	S-IDE: A tool framework for optimizing deployment architecture of High Level Architecture based simulation systems. Journal of Systems and Software, 2013, 86, 2520-2541.	3.3	8
80	Analyzing impact of experience curve on ROI in the software product line adoption process. Information and Software Technology, 2015, 59, 136-148.	3.0	8
81	Generation of feasible deployment configuration alternatives for Data Distribution Service based systems. Computer Standards and Interfaces, 2018, 58, 126-145.	3.8	8
82	Product failure detection for production lines using a data-driven model. Expert Systems With Applications, 2022, 202, 117398.	4.4	8
83	Supporting Incremental Product Development using Multiple Product Line Architecture. International Journal of Knowledge and Systems Science, 2014, 5, 1-16.	0.5	7
84	Models, More Models, and Then a Lot More. Lecture Notes in Computer Science, 2018, , 129-135.	1.0	7
85	Situational Method Engineering for Constructing Internet of Things Development Methods. Lecture Notes in Business Information Processing, 2018, , 221-239.	0.8	7
86	Obstacles of On-Premise Enterprise Resource Planning Systems and Solution Directions. Journal of Computer Information Systems, 2022, 62, 141-152.	2.0	7
87	Model-Driven Specification of Software Services. , 2007, , .		6
88	Concern-oriented analysis and refactoring of software architectures using dependency structure matrices. , 2009, , .		6
89	Modeling and Reasoning about Design Alternatives of Software as a Service Architectures. , 2011, , .		6
90	Supporting Performance Isolation in Software as a Service Systems with Rich Clients. , 2015, , .		6

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91	Systematic approach for mapping software development methods to the essence framework. , 2016, , .		6
92	Configuring Supply Chain Business Processes Using the SCOR Reference Model. Lecture Notes in Business Information Processing, 2018, , 338-351.	0.8	6
93	Software Architecture. , 2014, , 1-16.		6
94	Metamodel for Tracing Concerns Across the Life Cycle. , 2007, , 175-194.		6
95	Modeling traceability of concerns in architectural views. , 2007, , .		5
96	Designing Cyber-Physical Systems with aDSL: a Domain-Specific Language and Tool Support. , 2018, , .		5
97	Multi-Dimensional Classification of System-of-Systems. , 2019, , .		5
98	Architecture conformance analysis using model‐based testing: A case study approach. Software - Practice and Experience, 2019, 49, 423-448.	2.5	5
99	Designing a reference architecture for health information systems. BMC Medical Informatics and Decision Making, 2021, 21, 210.	1.5	5
100	Blockchain Applications in the Agri-Food Domain: The First Wave. Frontiers in Blockchain, 2020, 3, .	1.6	5
101	Applications of deep learning for mobile malware detection: A systematic literature review. Neural Computing and Applications, 0, , 1.	3.2	5
102	State of the practice of health information systems: a survey study amongst health care professionals in intellectual disability care. BMC Health Services Research, 2021, 21, 1247.	0.9	5
103	SAVE: Software Architecture Environment for Modeling Views. , 2011, , .		4
104	Variability viewpoint for introducing variability in software architecture viewpoints. , 2012, , .		4
105	A Tool Framework for Deriving the Application Architecture for Global Software Development Projects. , 2012, , .		4
106	Decision support for adopting SPLE with Transit-PL. , 2013, , .		4
107	A tool for automated reasoning about traces based on configurable formal semantics. , 2017, , .		4
108	The impact of feature types, classifiers, and data balancing techniques on software vulnerability prediction models. Journal of Software: Evolution and Process, 2019, 31, e2164.	1.2	4

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109	Customizing a Feature Ontology for Product Line Engineering within a System-of-Systems Context. , 2019, , .		4
110	Systems Engineering Architecture Framework for Physical Protection Systems. , 2020, , .		4
111	Perceptions on Smart Gas Meters in Smart Cities for Reducing the Carbon Footprint. Smart Cities, 2020, 3, 1173-1186.	5.5	4
112	A Model-Driven Architecture for Automated Deployment of Microservices. Applied Sciences (Switzerland), 2021, 11, 9617.	1.3	4
113	Architecture Viewpoint for Modeling Business Collaboration Concerns using Workflow Patterns. , 2016, , .		4
114	Architectural drift analysis using architecture reflexion viewpoint and design structure reflexion matrices. , 2016, , 221-236.		4
115	Analyzing and Designing Business Processes in the Ghana Cocoa Supply Chain for Supporting Inclusiveness. Sustainability, 2021, 13, 12440.	1.6	4
116	Domain Specific Language for Deployment of Parallel Applications on Parallel Computing Platforms. , 2014, , .		3
117	Architectural Viewpoints for Global Software Development. , 2011, , .		3
118	FEATURE-BASED RATIONALE MANAGEMENT SYSTEM FOR SUPPORTING SOFTWARE ARCHITECTURE ADAPTATION. International Journal of Software Engineering and Knowledge Engineering, 2012, 22, 945-964.	0.6	3
119	Deriving Feasible Deployment Alternatives for Parallel and Distributed Simulation Systems. ACM Transactions on Modeling and Computer Simulation, 2013, 23, 1-24.	0.6	3
120	Quality concerns in large-scale and complex software-intensive systems. , 2016, , 1-17.		3
121	Performance Isolation in Cloud-Based Big Data Architectures. , 2017, , 127-145.		3
122	Adopting the Essence Framework to Derive a Practice Library for the Development of IoT Systems. Computer Communications and Networks, 2017, , 151-168.	0.8	3
123	Analyzing Systems Engineering Concerns in Architecture Frameworks â€" A Survey Study. , 2018, , .		3
124	Devising Integrated Process Models for Systems Product Line Engineering. , 2019, , .		3
125	Runtime Adaptability of Ambient Intelligence Systems Based on Component-Oriented Approach. Computer Communications and Networks, 2019, , 69-92.	0.8	3
126	Safety Perspective for Supporting Architectural Design of Safety-Critical Systems. Lecture Notes in Computer Science, 2014, , 365-373.	1.0	3

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127	Architecture Framework for Software Safety. Lecture Notes in Computer Science, 2014, , 64-79.	1.0	3
128	An Aspect-Oriented Tool Framework for Developing Process-Sensitive Embedded User Assistance Systems. Lecture Notes in Computer Science, 2011, , 196-220.	1.0	3
129	Feature Driven Survey of Big Data Systems. , 2016, , .		3
130	IoT System Development Methods. , 2017, , 141-159.		3
131	Integrated Process Model for Systems Product Line Engineering of Physical Protection Systems. Lecture Notes in Business Information Processing, 2020, , 137-151.	0.8	3
132	Circular Business Processes in the State-of-the-Practice: A Survey Study. Sustainability, 2021, 13, 13307.	1.6	3
133	Automated Classification of Unstructured Bilingual Software Bug Reports: An Industrial Case Study Research. Applied Sciences (Switzerland), 2022, 12, 338.	1.3	3
134	Challenges and Solution Directions of Microservice Architectures: A Systematic Literature Review. Applied Sciences (Switzerland), 2022, 12, 5507.	1.3	3
135	Architecting in global software engineering. Software Engineering Notes: an Informal Newsletter of the Special Interest Committee on Software Engineering / ACM, 2012, 37, 1-7.	0.5	2
136	Software Metrics for Green Parallel Computing of Big Data Systems. , 2016, , .		2
137	Architectural Perspective for Design and Analysis of Scalable Software as a Service Architectures. , 2017, , 223-245.		2
138	AlloyInEcore: embedding of first-order relational logic into meta-object facility for automated model reasoning. , 2018, , .		2
139	A Cloud-Based Big Data System to Support Visually Impaired People. , 2018, , 1-22.		2
140	Product Line Architecture Design of Software-Intensive Physical Protection Systems. , 2020, , .		2
141	BITA*: Business-IT alignment framework of multiple collaborating organisations. Information and Software Technology, 2020, 127, 106345.	3.0	2
142	A feature-based approach for guiding the selection of Internet of Things cybersecurity standards using text mining. Concurrency Computation Practice and Experience, 0, , e6385.	1.4	2
143	Runtime Verification of Component-Based Embedded Software. , 2011, , 471-477.		2
144	Managing Heterogeneous Communication Challenges in the Internet of Things Using Connector Variability. Computer Communications and Networks, 2017, , 127-149.	0.8	2

#	Article	IF	Citations
145	Design of Variable Big Data Architectures for E-Government Domain. , 2019, , 251-274.		2
146	Automating Object-Oriented Software Development Methods. Lecture Notes in Computer Science, 2002, , 41-56.	1.0	2
147	Multidimensional Classification Approach for Defining Product Line Engineering Transition Strategies. Lecture Notes in Computer Science, 2010, , 461-465.	1.0	2
148	Data Distribution Service-Based Architecture Design for the Internet of Things Systems. Computer Communications and Networks, 2017, , 269-285.	0.8	2
149	Modeling traceability in system of systems. , 2017, , .		2
150	Architecting Feasible Deployment Alternatives for Publish-Subscribe Systems. International Journal of Computer & Software Engineering, 2017, 2, .	0.4	2
151	Feature-Driven Characterization of Microservice Architectures: A Survey of the State of the Practice. Applied Sciences (Switzerland), 2022, 12, 4424.	1.3	2
152	Early aspects at ICSE 2008. , 2008, , .		1
153	Software architecture tool demonstrations. , 2012, , .		1
154	A run-time verification framework for smart grid applications implemented on simulation frameworks. , 2013, , .		1
155	Archample—Architectural Analysis Approach for Multiple Product Line Engineering. , 2014, , 263-285.		1
156	Systematic approach for deriving feasible mappings of parallel algorithms to parallel computing platforms. Concurrency Computation Practice and Experience, 2017, 29, e3821.	1.4	1
157	OneService - Generic Cache Aggregator Framework for Service Dependent Cloud Applications. , 2017, , .		1
158	ModelWriter: Text and model-synchronized document engineering platform. , 2017, , .		1
159	An Architecture Viewpoint for Modeling Dynamically Configurable Software Systems. , 2017, , 79-97.		1
160	Comparative analysis of variability modelling approaches in component models. IET Software, 2018, 12, 437-445.	1.5	1
161	Automated reasoning framework for traceability management of system of systems. Science of Computer Programming, 2020, 191, 102416.	1.5	1
162	Model–Based Systems Product Line Engineering of Physical Protection Systems. Incose International Symposium, 2021, 31, 1-15.	0.2	1

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163	Parallel Application Development Using Architecture View Driven Model Transformations. Communications in Computer and Information Science, 2015, , 82-96.	0.4	1
164	Model Driven Architecture based Testing Tool based on Architecture Views. , 2018, , .		1
165	Deriving Design Alternatives Based on Quality Factors. , 2002, , 225-257.		1
166	Architecture Framework for Modeling the Deployment of Parallel Applications on Parallel Computing Platforms. , 2015, , .		1
167	Architectural View Driven Model Transformations for Supporting the Lifecycle of Parallel Applications. , 2015, , .		1
168	Collaboration Viewpoint for Modeling Cross-Organizational Business Concerns. Communications in Computer and Information Science, 2017, , 3-21.	0.4	1
169	Architecture Modeling of Industrial IoT Systems Using Data Distribution Service UML Profile. Computer Communications and Networks, 2019, , 103-119.	0.8	1
170	Assessment of environmental factors affecting software reliability: a survey study. Turkish Journal of Electrical Engineering and Computer Sciences, 2020, 28, 1841-1858.	0.9	1
171	Model-Based Development of Design Basis Threat for Physical Protection Systems. , 2021, , .		1
172	Exploration of Data Analytics for Ground Segment in Space Systems. Lecture Notes in Business Information Processing, 2020, , 352-361.	0.8	1
173	MoDSEL. , 0, , 572-594.		1
174	A Comparative Analysis of Software Engineering with Mature Engineering Disciplines using a Problem-Solving Perspective. Advances in Computer and Electrical Engineering Book Series, 0, , 1-18.	0.2	1
175	Predicting Plasma Vitamin C Using Machine Learning. Applied Artificial Intelligence, 2022, 36, .	2.0	1
176	Evaluating architecture implementation alternatives based on adaptability concerns. , 0, , .		0
177	Deploy-DDS. , 2007, , .		0
178	Early Aspects at ICSE 2007: Workshop on Aspect-Oriented Requirements Engineering and Architecture Design. , 2007, , .		0
179	Early Aspects: Aspect-Oriented Requirements and Architecture for Product Lines (EA@SPLC.08). , 2008, , .		0
180	Interaction-based feature-driven model-transformations for generating e-forms. , 2009, , .		0

#	Article	IF	Citations
181	Managing aspect orderings to support multiple quality concerns. , 2009, , .		0
182	Architecture-Based Testing and System Validation - Workshop Summary. , 2011, , .		0
183	Introducing Global Software Development in Turkey: Why and How?. , 2012, , .		0
184	First International Workshop on Multi Product Line Engineering (MultiPLE 2013). , 2013, , .		0
185	Architecture Conformance Analysis Approach within the Context of Multiple Product Line Engineering. , 2014, , .		0
186	Message from the Poster and Panel Chairs. , 2014, , .		0
187	Software Architecture Tool Demonstrations. , 2015, , .		0
188	On devising an architecture framework for system-of-systems. , 2016, , .		0
189	Message from the QRASA 2016 Chairs. , 2016, , .		0
190	XChorChoreography Language for Integration of Variable Orchestration Specifications. , 2013, , .		0
191	MoDSEL. , 2014, , 528-550.		0
192	Active Software Artifacts. Lecture Notes in Computer Science, 1998, , 307-310.	1.0	0
193	Adopting Workflow Patterns for Modelling the Allocation of Data in Multi-Organizational Collaborations. , 2016, , .		0
194	Model-Driven Product Line Engineering for Mapping Parallel Algorithms to Parallel Computing Platforms. , 2016, , .		0
195	Microâ€IDE: A tool platform for generating efficient deployment alternatives based on microservices. Software - Practice and Experience, 0, , .	2.5	0