Ingo M Weber

List of Publications by Year
in descending order

100 papers	3,392 citations	257101 24 h-index	233125 45 g-index
107 all docs	107 docs citations	107 times ranked	2193 citing authors

#	Article	IF	Citations
1	Blockchains for Business Process Management - Challenges and Opportunities. ACM Transactions on Management Information Systems, 2018, 9, 1-16.	2.1	404
2	A Taxonomy of Blockchain-Based Systems for Architecture Design. , 2017, , .		402
3	Untrusted Business Process Monitoring and Execution Using Blockchain. Lecture Notes in Computer Science, 2016, , 329-347.	1.0	279
4	Architecture for Blockchain Applications. , 2019, , .		150
5	Optimized Execution of Business Processes on Blockchain. Lecture Notes in Computer Science, 2017, , 130-146.	1.0	100
6	Caterpillar: A business process execution engine on the Ethereum blockchain. Software - Practice and Experience, 2019, 49, 1162-1193.	2.5	98
7	On Availability for Blockchain-Based Systems. , 2017, , .		92
8	Runtime verification for business processes utilizing the Bitcoin blockchain. Future Generation Computer Systems, 2020, 107, 816-831.	4.9	84
9	A Pattern Collection for Blockchain-based Applications. , 2018, , .		80
10	Beyond soundness: on the verification of semantic business process models. Distributed and Parallel Databases, 2010, 27, 271-343.	1.0	79
11	Elastic Business Process Management: State of the art and open challenges for BPM in the cloud. Future Generation Computer Systems, 2015, 46, 36-50.	4.9	77
12	How do Machine Learning, Robotic Process Automation, and Blockchains Affect the Human Factor in Business Process Management?. Communications of the Association for Information Systems, 0, , 297-320.	0.7	70
13	uBaaS: A unified blockchain as a service platform. Future Generation Computer Systems, 2019, 101, 564-575.	4.9	68
14	Predicting Latency of Blockchain-Based Systems Using Architectural Modelling and Simulation. , 2017, , .		62
15	Experience report: Anomaly detection of cloud application operations using log and cloud metric correlation analysis. , 2015, , .		58
16	User-Friendly Semantic Annotation in Business Process Modeling. Lecture Notes in Computer Science, 2007, , 260-271.	1.0	54
17	Blockchain Support for Collaborative Business Processes. Informatik-Spektrum, 2019, 42, 182-190.	1.0	53
18	Comparing Blockchain and Cloud Services for Business Process Execution. , 2017, , .		52

#	Article	IF	Citations
19	Metric selection and anomaly detection for cloud operations using log and metric correlation analysis. Journal of Systems and Software, 2018, 137, 531-549.	3.3	47
20	Detecting Regulatory Compliance for Business Process Models through Semantic Annotations. Lecture Notes in Business Information Processing, 2009, , 5-17.	0.8	46
21	On compliance checking for clausal constraints in annotated process models. Information Systems Frontiers, 2012, 14, 155-177.	4.1	45
22	Increasing Recall of Process Model Matching by Improved Activity Label Matching. Lecture Notes in Computer Science, 2013, , 211-218.	1.0	44
23	Foundational Oracle Patterns: Connecting Blockchain to the Off-Chain World. Lecture Notes in Business Information Processing, 2020, , 35-51.	0.8	42
24	POD-Diagnosis: Error Diagnosis of Sporadic Operations on Cloud Applications. , 2014, , .		39
25	Report: The Process Model Matching Contest 2013. Lecture Notes in Business Information Processing, 2014, , 442-463.	0.8	35
26	Four-Fold Auto-Scaling on a Contemporary Deployment Platform Using Docker Containers. Lecture Notes in Computer Science, 2015, , 316-323.	1.0	35
27	Integrated modelâ€driven engineering of blockchain applications for business processes and asset management. Software - Practice and Experience, 2021, 51, 1059-1079.	2.5	34
28	Modeling and Enforcing Blockchain-Based Choreographies. Lecture Notes in Computer Science, 2019, , 69-85.	1.0	34
29	Combining Scalability and Expressivity in the Automatic Composition of Semantic Web Services. , 2008, , .		33
30	Quantifying the Cost of Distrust: Comparing Blockchain and Cloud Services for Business Process Execution. Information Systems Frontiers, 2020, 22, 489-507.	4.1	33
31	A Platform Architecture for Multi-Tenant Blockchain-Based Systems. , 2019, , .		31
32	Interpreted Execution of Business Process Models on Blockchain. , 2019, , .		31
33	Business process improvement with the AB-BPM methodology. Information Systems, 2019, 84, 283-298.	2.4	29
34	Controlled flexibility in blockchain-based collaborative business processes. Information Systems, 2020, 104, 101622.	2.4	29
35	Dynamic Role Binding in Blockchain-Based Collaborative Business Processes. Lecture Notes in Computer Science, 2019, , 399-414.	1.0	28
36	Automated derivation of executable business processes from choreographies in virtual organisations. International Journal of Business Process Integration and Management, 2008, 3, 85.	0.2	26

#	Article	IF	Citations
37	Hyper-parameter optimization in classification: To-do or not-to-do. Pattern Recognition, 2020, 103, 107245.	5.1	24
38	Mining Blockchain Processes: Extracting Process Mining Data from Blockchain Applications. Lecture Notes in Business Information Processing, 2019, , 71-86.	0.8	24
39	Negotiation and Argumentation in Multi-Agent Systems. , 2014, , .		19
40	BPMN in healthcare: Challenges and best practices. Information Systems, 2022, 107, 102013.	2.4	19
41	Form-Based Web Service Composition for Domain Experts. ACM Transactions on the Web, 2013, 8, 1-40.	2.0	17
42	Analyzing control flow information to improve the effectiveness of process model matching techniques. Decision Support Systems, 2017, 100, 6-14.	3.5	17
43	A Decision Model for Choosing Patterns in Blockchain-Based Applications. , 2021, , .		17
44	Listen to Me: Improving Process Model Matching through User Feedback. Lecture Notes in Computer Science, 2014, , 84-100.	1.0	17
45	Semantic Annotation and Composition of Business Processes with Maestro. Lecture Notes in Computer Science, 2008, , 772-776.	1.0	17
46	Auto-completion for Executable Business Process Models. Lecture Notes in Business Information Processing, 2009, , 510-515.	0.8	16
47	Scalable Business Process Execution in the Cloud. , 2014, , .		15
48	Developing Dependable and Secure Cloud Applications. IEEE Internet Computing, 2016, 20, 74-79.	3.2	15
49	Achieving Reliable High-Frequency Releases in Cloud Environments. IEEE Software, 2015, 32, 73-80.	2.1	14
50	Mining processes with multi-instantiation. , 2015, , .		13
51	Discovering process models for the analysis of application failures under uncertainty of event logs. Knowledge-Based Systems, 2020, 189, 105054.	4.0	13
52	Patterns for Blockchain Data Migration. , 2020, , .		13
53	Beyond Soundness: On the Semantic Consistency of Executable Process Models. , 2008, , .		11
54	Optimizing the Performance of Automated Business Processes Executed on Virtualized Infrastructure. , 2014, , .		11

#	Article	IF	Citations
55	Semantic Methods for Execution-level Business Process Modeling. Lecture Notes in Business Information Processing, 2009, , .	0.8	10
56	Eliciting operations requirements for applications. , 2013, , .		10
57	Detecting cloud provisioning errors using an annotated process model. , 2013, , .		10
58	Contextual anomaly detection for a critical industrial system based on logs and metrics. , 2018, , .		10
59	A Conceptual Framework for Composition in Business Process Management. Lecture Notes in Computer Science, 2007, , 54-66.	1.0	10
60	Towards a Methodology for Semantic Business Process Modeling and Configuration. Lecture Notes in Computer Science, 2009, , 176-187.	1.0	10
61	Discovering and Visualizing Operations Processes with POD-Discovery and POD-Viz. , 2015, , .		9
62	External Data Monitoring Using Oracles in Blockchain-Based Process Execution. Lecture Notes in Business Information Processing, 2020, , 67-81.	0.8	9
63	Digital-Physical Parity for Food Fraud Detection. Lecture Notes in Computer Science, 2019, , 65-79.	1.0	8
64	Composing Services for Third-party Service Delivery. , 2009, , .		7
65	FormSys. , 2010, , .		7
66	Towards Reliable Predictive Process Monitoring. Lecture Notes in Business Information Processing, 2018, , 163-181.	0.8	7
67	Activity Matching with Human Intelligence. Lecture Notes in Business Information Processing, 2016, , 124-140.	0.8	7
68	Process Mining on Blockchain Data: A Case Study of Augur. Lecture Notes in Computer Science, 2021, , 306-323.	1.0	6
69	Every apprentice needs a master: Feedback-based effectiveness improvements for process model matching. Information Systems, 2021, 95, 101612.	2.4	5
70	Enabling Financing in Agricultural Supply Chains Through Blockchain. , 2021, , 41-56.		5
71	Supporting Execution-Level Business Process Modeling with Semantic Technologies. Lecture Notes in Computer Science, 2009, , 759-763.	1.0	5
72	BPMashup: Dynamic Execution of RESTful Processes. Lecture Notes in Computer Science, 2013, , 447-450.	1.0	4

#	Article	IF	Citations
73	Shadow Testing for Business Process Improvement. Lecture Notes in Computer Science, 2018, , 153-171.	1.0	4
74	AB-BPM: Performance-Driven Instance Routing for Business Process Improvement. Lecture Notes in Computer Science, 2017, , 113-129.	1.0	4
75	Modelling, Simulation, and Performance Analysis of Business Processes Involving Ubiquitous Systems. Lecture Notes in Computer Science, 2008, , 579-582.	1.0	4
76	Polynomial-Time Reasoning for Semantic Web Service Composition. , 2007, , .		3
77	Predicting the Performance of Privacy-Preserving Data Analytics Using Architecture Modelling and Simulation. , 2018, , .		3
78	Requirements for Implementing Business Process Models through Composition of Semantic Web Services. , 2007, , 3-14.		3
79	Behavioral Classification of Business Process Executions at Runtime. Lecture Notes in Business Information Processing, 2017, , 339-353.	0.8	3
80	Towards an Implementation of the EU Services Directive with Semantic Web Services. Lecture Notes in Business Information Processing, 2009, , 217-227.	0.8	3
81	Facilitating Enterprise Service Discovery for Non-technical Business Users. Lecture Notes in Computer Science, 2011, , 100-110.	1.0	3
82	Scalable Rollback for Cloud Operations Using AI Planning. , 2015, , .		2
83	Web Service Composition. , 2014, , 2389-2399.		2
84	Managing Long-Tail Processes Using FormSys. Lecture Notes in Computer Science, 2010, , 702-703.	1.0	2
85	Context-Aware UI Component Reuse. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2013, , 68-83.	0.2	1
86	Error Diagnosis of Cloud Application Operation Using Bayesian Networks and Online Optimisation. , 2015, , .		1
87	Process-Oriented Non-intrusive Recovery for Sporadic Operations on Cloud. , 2016, , .		1
88	AB Testing for Process Versions with Contextual Multi-armed Bandit Algorithms. Lecture Notes in Computer Science, 2018, , 19-34.	1.0	1
89	Rollback Mechanisms for Cloud Management APIs Using AI Planning. IEEE Transactions on Dependable and Secure Computing, 2020, 17, 148-161.	3.7	1
90	A Method for Debugging Process Discovery Pipelines to Analyze the Consistency of Model Properties. Lecture Notes in Computer Science, 2021, , 65-84.	1.0	1

#	Article	IF	Citations
91	Forms-based Service Composition. Lecture Notes in Computer Science, 2011, , 627-635.	1.0	1
92	Information Gathering for Semantic Service Discovery and Composition in Business Process Modeling. Lecture Notes in Business Information Processing, 2008, , 46-60.	0.8	1
93	Task Composition. Lecture Notes in Business Information Processing, 2009, , 149-200.	0.8	1
94	Extending Enterprise Service Design Knowledge Using Clustering. Lecture Notes in Computer Science, 2012, , 142-157.	1.0	1
95	Blockchain and Services â€" Exploring theÂLinks. Lecture Notes in Business Information Processing, 2019, , 13-21.	0.8	1
96	Optimising Architectures for Performance, Cost, and Security. Lecture Notes in Computer Science, 2019, , 161-177.	1.0	1
97	Incentive Alignment of Business Processes. Lecture Notes in Computer Science, 2020, , 93-110.	1.0	1
98	Introduction to the Special Issue on Emerging Software Technologies for Internet-Based Systems. ACM Transactions on Internet Technology, 2018, 18, 1-2.	3.0	0
99	Entity-Centric Search for Enterprise Services. Lecture Notes in Computer Science, 2013, , 404-412.	1.0	0
100	Introduction and Background: Blockchain and Smart Contracts. , 2021, , 1-11.		0