

# Ingo M Weber

## List of Publications by Year in descending order

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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  | BPMN in healthcare: Challenges and best practices. Information Systems, 2022, 107, 102013.   | 2.4 | 19        |
| 2  | Every apprentice needs a master: Feedback-based effectiveness improvements for process model matching. Information Systems, 2021, 95, 101612.                        | 2.4 | 5         |
| 3  | Integrated model-driven engineering of blockchain applications for business processes and asset management. Software - Practice and Experience, 2021, 51, 1059-1079. | 2.5 | 34        |
| 4  | 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         |
| 5  | Enabling Financing in Agricultural Supply Chains Through Blockchain. , 2021, , 41-56.  |     | 5         |
| 6  | A Decision Model for Choosing Patterns in Blockchain-Based Applications. , 2021, , .   |     | 17        |
| 7  | Process Mining on Blockchain Data: A Case Study of Augur. Lecture Notes in Computer Science, 2021, , 306-323.  | 1.0 | 6         |
| 8  | Introduction and Background: Blockchain and Smart Contracts. , 2021, , 1-11.   |     | 0         |
| 9  | Runtime verification for business processes utilizing the Bitcoin blockchain. Future Generation Computer Systems, 2020, 107, 816-831.                                | 4.9 | 84        |
| 10 | Rollback Mechanisms for Cloud Management APIs Using AI Planning. IEEE Transactions on Dependable and Secure Computing, 2020, 17, 148-161.                            | 3.7 | 1         |
| 11 | Quantifying the Cost of Distrust: Comparing Blockchain and Cloud Services for Business Process Execution. Information Systems Frontiers, 2020, 22, 489-507.          | 4.1 | 33        |
| 12 | Discovering process models for the analysis of application failures under uncertainty of event logs. Knowledge-Based Systems, 2020, 189, 105054.                     | 4.0 | 13        |
| 13 | Controlled flexibility in blockchain-based collaborative business processes. Information Systems, 2020, 104, 101622.   | 2.4 | 29        |
| 14 | Hyper-parameter optimization in classification: To-do or not-to-do. Pattern Recognition, 2020, 103, 107245.  | 5.1 | 24        |
| 15 | Foundational Oracle Patterns: Connecting Blockchain to the Off-Chain World. Lecture Notes in Business Information Processing, 2020, , 35-51.                         | 0.8 | 42        |
| 16 | External Data Monitoring Using Oracles in Blockchain-Based Process Execution. Lecture Notes in Business Information Processing, 2020, , 67-81.                       | 0.8 | 9         |
| 17 | Patterns for Blockchain Data Migration. , 2020, , .  |     | 13        |
| 18 | Incentive Alignment of Business Processes. Lecture Notes in Computer Science, 2020, , 93-110.  | 1.0 | 1         |

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|----|---|-----|-----------|
| 19 | Business process improvement with the AB-BPM methodology. Information Systems, 2019, 84, 283-298.   | 2.4 | 29        |
| 20 | Digital-Physical Parity for Food Fraud Detection. Lecture Notes in Computer Science, 2019, , 65-79.   | 1.0 | 8         |
| 21 | Blockchain Support for Collaborative Business Processes. Informatik-Spektrum, 2019, 42, 182-190.  | 1.0 | 53        |
| 22 | Dynamic Role Binding in Blockchain-Based Collaborative Business Processes. Lecture Notes in Computer Science, 2019, , 399-414.                              | 1.0 | 28        |
| 23 | A Platform Architecture for Multi-Tenant Blockchain-Based Systems. , 2019, , .  |     | 31        |
| 24 | uBaaS: A unified blockchain as a service platform. Future Generation Computer Systems, 2019, 101, 564-575.  | 4.9 | 68        |
| 25 | Caterpillar: A business process execution engine on the Ethereum blockchain. Software - Practice and Experience, 2019, 49, 1162-1193.                       | 2.5 | 98        |
| 26 | Architecture for Blockchain Applications. , 2019, , .   |     | 150       |
| 27 | Interpreted Execution of Business Process Models on Blockchain. , 2019, , .   |     | 31        |
| 28 | Modeling and Enforcing Blockchain-Based Choreographies. Lecture Notes in Computer Science, 2019, , 69-85.   | 1.0 | 34        |
| 29 | Mining Blockchain Processes: Extracting Process Mining Data from Blockchain Applications. Lecture Notes in Business Information Processing, 2019, , 71-86.  | 0.8 | 24        |
| 30 | Blockchain and Services – Exploring the Links. Lecture Notes in Business Information Processing, 2019, , 13-21.   | 0.8 | 1         |
| 31 | Optimising Architectures for Performance, Cost, and Security. Lecture Notes in Computer Science, 2019, , 161-177.   | 1.0 | 1         |
| 32 | Blockchains for Business Process Management - Challenges and Opportunities. ACM Transactions on Management Information Systems, 2018, 9, 1-16.              | 2.1 | 404       |
| 33 | 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         |
| 34 | 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        |
| 35 | Contextual anomaly detection for a critical industrial system based on logs and metrics. , 2018, , .  |     | 10        |
| 36 | A Pattern Collection for Blockchain-based Applications. , 2018, , .   |     | 80        |

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|----|--|-----|-----------|
| 37 | Shadow Testing for Business Process Improvement. Lecture Notes in Computer Science, 2018, , 153-171.   | 1.0 | 4         |
| 38 | Towards Reliable Predictive Process Monitoring. Lecture Notes in Business Information Processing, 2018, , 163-181.                               | 0.8 | 7         |
| 39 | Predicting the Performance of Privacy-Preserving Data Analytics Using Architecture Modelling and Simulation. , 2018, , .                         |     | 3         |
| 40 | AB Testing for Process Versions with Contextual Multi-armed Bandit Algorithms. Lecture Notes in Computer Science, 2018, , 19-34.                 | 1.0 | 1         |
| 41 | Predicting Latency of Blockchain-Based Systems Using Architectural Modelling and Simulation. , 2017, , .   |     | 62        |
| 42 | A Taxonomy of Blockchain-Based Systems for Architecture Design. , 2017, , .  |     | 402       |
| 43 | Comparing Blockchain and Cloud Services for Business Process Execution. , 2017, , .  |     | 52        |
| 44 | On Availability for Blockchain-Based Systems. , 2017, , .  |     | 92        |
| 45 | Optimized Execution of Business Processes on Blockchain. Lecture Notes in Computer Science, 2017, , 130-146.                                     | 1.0 | 100       |
| 46 | Analyzing control flow information to improve the effectiveness of process model matching techniques. Decision Support Systems, 2017, 100, 6-14. | 3.5 | 17        |
| 47 | Behavioral Classification of Business Process Executions at Runtime. Lecture Notes in Business Information Processing, 2017, , 339-353.          | 0.8 | 3         |
| 48 | AB-BPM: Performance-Driven Instance Routing for Business Process Improvement. Lecture Notes in Computer Science, 2017, , 113-129.                | 1.0 | 4         |
| 49 | Developing Dependable and Secure Cloud Applications. IEEE Internet Computing, 2016, 20, 74-79.   | 3.2 | 15        |
| 50 | Untrusted Business Process Monitoring and Execution Using Blockchain. Lecture Notes in Computer Science, 2016, , 329-347.                        | 1.0 | 279       |
| 51 | Process-Oriented Non-intrusive Recovery for Sporadic Operations on Cloud. , 2016, , .  |     | 1         |
| 52 | Activity Matching with Human Intelligence. Lecture Notes in Business Information Processing, 2016, , 124-140.                                    | 0.8 | 7         |
| 53 | Discovering and Visualizing Operations Processes with POD-Discovery and POD-Viz. , 2015, , .   |     | 9         |
| 54 | Experience report: Anomaly detection of cloud application operations using log and cloud metric correlation analysis. , 2015, , .                |     | 58        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 55 | Error Diagnosis of Cloud Application Operation Using Bayesian Networks and Online Optimisation. , 2015, , .  |     | 1         |
| 56 | Scalable Rollback for Cloud Operations Using AI Planning. , 2015, , .  |     | 2         |
| 57 | Four-Fold Auto-Scaling on a Contemporary Deployment Platform Using Docker Containers. Lecture Notes in Computer Science, 2015, , 316-323.            | 1.0 | 35        |
| 58 | Achieving Reliable High-Frequency Releases in Cloud Environments. IEEE Software, 2015, 32, 73-80.  | 2.1 | 14        |
| 59 | Mining processes with multi-instantiation. , 2015, , .   |     | 13        |
| 60 | 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        |
| 61 | Optimizing the Performance of Automated Business Processes Executed on Virtualized Infrastructure. , 2014, , .                                       |     | 11        |
| 62 | POD-Diagnosis: Error Diagnosis of Sporadic Operations on Cloud Applications. , 2014, , .   |     | 39        |
| 63 | Scalable Business Process Execution in the Cloud. , 2014, , .  |     | 15        |
| 64 | Report: The Process Model Matching Contest 2013. Lecture Notes in Business Information Processing, 2014, , 442-463.                                  | 0.8 | 35        |
| 65 | Web Service Composition. , 2014, , 2389-2399.  |     | 2         |
| 66 | Listen to Me: Improving Process Model Matching through User Feedback. Lecture Notes in Computer Science, 2014, , 84-100.                             | 1.0 | 17        |
| 67 | Negotiation and Argumentation in Multi-Agent Systems. , 2014, , .  |     | 19        |
| 68 | Increasing Recall of Process Model Matching by Improved Activity Label Matching. Lecture Notes in Computer Science, 2013, , 211-218.                 | 1.0 | 44        |
| 69 | Context-Aware UI Component Reuse. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2013, , 68-83.                                    | 0.2 | 1         |
| 70 | Eliciting operations requirements for applications. , 2013, , .  |     | 10        |
| 71 | Form-Based Web Service Composition for Domain Experts. ACM Transactions on the Web, 2013, 8, 1-40.   | 2.0 | 17        |
| 72 | Detecting cloud provisioning errors using an annotated process model. , 2013, , .  |     | 10        |

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|----|---|-----|-----------|
| 73 | BPMashup: Dynamic Execution of RESTful Processes. Lecture Notes in Computer Science, 2013, , 447-450.   | 1.0 | 4         |
| 74 | Entity-Centric Search for Enterprise Services. Lecture Notes in Computer Science, 2013, , 404-412.  | 1.0 | 0         |
| 75 | On compliance checking for clausal constraints in annotated process models. Information Systems Frontiers, 2012, 14, 155-177.                             | 4.1 | 45        |
| 76 | Extending Enterprise Service Design Knowledge Using Clustering. Lecture Notes in Computer Science, 2012, , 142-157.                                       | 1.0 | 1         |
| 77 | Facilitating Enterprise Service Discovery for Non-technical Business Users. Lecture Notes in Computer Science, 2011, , 100-110.                           | 1.0 | 3         |
| 78 | Forms-based Service Composition. Lecture Notes in Computer Science, 2011, , 627-635.  | 1.0 | 1         |
| 79 | Beyond soundness: on the verification of semantic business process models. Distributed and Parallel Databases, 2010, 27, 271-343.                         | 1.0 | 79        |
| 80 | FormSys. , 2010, , .  |     | 7         |
| 81 | Managing Long-Tail Processes Using FormSys. Lecture Notes in Computer Science, 2010, , 702-703.   | 1.0 | 2         |
| 82 | Semantic Methods for Execution-level Business Process Modeling. Lecture Notes in Business Information Processing, 2009, , .                               | 0.8 | 10        |
| 83 | Composing Services for Third-party Service Delivery. , 2009, , .  |     | 7         |
| 84 | Towards a Methodology for Semantic Business Process Modeling and Configuration. Lecture Notes in Computer Science, 2009, , 176-187.                       | 1.0 | 10        |
| 85 | Detecting Regulatory Compliance for Business Process Models through Semantic Annotations. Lecture Notes in Business Information Processing, 2009, , 5-17. | 0.8 | 46        |
| 86 | Auto-completion for Executable Business Process Models. Lecture Notes in Business Information Processing, 2009, , 510-515.                                | 0.8 | 16        |
| 87 | Supporting Execution-Level Business Process Modeling with Semantic Technologies. Lecture Notes in Computer Science, 2009, , 759-763.                      | 1.0 | 5         |
| 88 | Towards an Implementation of the EU Services Directive with Semantic Web Services. Lecture Notes in Business Information Processing, 2009, , 217-227.     | 0.8 | 3         |
| 89 | Task Composition. Lecture Notes in Business Information Processing, 2009, , 149-200.  | 0.8 | 1         |
| 90 | Combining Scalability and Expressivity in the Automatic Composition of Semantic Web Services. , 2008, , .   |     | 33        |

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|-----|--|-----|-----------|
| 91  | Beyond Soundness: On the Semantic Consistency of Executable Process Models. , 2008, , .  |     | 11        |
| 92  | 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        |
| 93  | Semantic Annotation and Composition of Business Processes with Maestro. Lecture Notes in Computer Science, 2008, , 772-776.  | 1.0 | 17        |
| 94  | Modelling, Simulation, and Performance Analysis of Business Processes Involving Ubiquitous Systems. Lecture Notes in Computer Science, 2008, , 579-582.  | 1.0 | 4         |
| 95  | Information Gathering for Semantic Service Discovery and Composition in Business Process Modeling. Lecture Notes in Business Information Processing, 2008, , 46-60.                                    | 0.8 | 1         |
| 96  | Polynomial-Time Reasoning for Semantic Web Service Composition. , 2007, , .  |     | 3         |
| 97  | Requirements for Implementing Business Process Models through Composition of Semantic Web Services. , 2007, , 3-14.  |     | 3         |
| 98  | A Conceptual Framework for Composition in Business Process Management. Lecture Notes in Computer Science, 2007, , 54-66.   | 1.0 | 10        |
| 99  | User-Friendly Semantic Annotation in Business Process Modeling. Lecture Notes in Computer Science, 2007, , 260-271.  | 1.0 | 54        |
| 100 | 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        |