Marco Montali

List of Publications by Year
in descending order

114 papers	2,762 citations	304602 22 h-index	223716 46 g-index
124 all docs	124 docs citations	124 times ranked	1253 citing authors

#	Article	IF	Citations
1	Process Mining Manifesto. Lecture Notes in Business Information Processing, 2012, , 169-194.	0.8	546
2	Declarative specification and verification of service choreographiess. ACM Transactions on the Web, 2010, 4, 1-62.	2.0	178
3	Compliance monitoring in business processes: Functionalities, application, and tool-support. Information Systems, 2015, 54, 209-234.	2.4	146
4	Monitoring Business Constraints with Linear Temporal Logic: An Approach Based on Colored Automata. Lecture Notes in Computer Science, 2011, , 132-147.	1.0	133
5	Foundations of data-aware process analysis. , 2013, , .		86
6	Specification and Verification of Declarative Open Interaction Models. Lecture Notes in Business Information Processing, 2010, , .	0.8	83
7	Verification of relational data-centric dynamic systems with external services. , 2013, , .		67
8	Exploiting Inductive Logic Programming Techniques for Declarative Process Mining. Lecture Notes in Computer Science, 2009, , 278-295.	1.0	63
9	Resolving inconsistencies and redundancies in declarative process models. Information Systems, 2017, 64, 425-446.	2.4	58
10	Discovering Data-Aware Declarative Process Models from Event Logs. Lecture Notes in Computer Science, 2013, , 81-96.	1.0	55
11	Representing and monitoring social commitments using the event calculus. Autonomous Agents and Multi-Agent Systems, 2013, 27, 85-130.	1.3	54
12	Monitoring business constraints with the event calculus. ACM Transactions on Intelligent Systems and Technology, 2013, 5, 1-30.	2.9	52
13	Runtime Verification of LTL-Based Declarative Process Models. Lecture Notes in Computer Science, 2012, , 131-146.	1.0	47
14	Formal verification of wastewater treatment processes using events detected from continuous signals by means of artificial neural networks. Case study: SBR plant. Environmental Modelling and Software, 2010, 25, 648-660.	1.9	42
15	Multi-party business process compliance monitoring through IoT-enabled artifacts. Information Systems, 2018, 73, 61-78.	2.4	42
16	A Framework for the Systematic Comparison and Evaluation of Compliance Monitoring Approaches. , 2013, , .		40
17	Towards data-aware constraints in declare. , 2013, , .		40
18	Declarative Process Modeling in BPMN. Lecture Notes in Computer Science, 2015, , 84-100.	1.0	36

#	ARTICLE	IF	CITATIONS
19	Inducing Declarative Logic-Based Models from Labeled Traces. Lecture Notes in Computer Science, 2007, , 344-359.	1.0	36
20	Semantics, Analysis and Simplification of DMN Decision Tables. Information Systems, 2018, 78, 112-125.	2.4	35
21	DB-Nets: On the Marriage of Colored Petri Nets and Relational Databases. Lecture Notes in Computer Science, 2017, , 91-118.	1.0	34
22	An Operational Decision Support Framework for Monitoring Business Constraints. Lecture Notes in Computer Science, 2012, , 146-162.	1.0	32
23	A Logic-Based, Reactive Calculus of Events. Fundamenta Informaticae, 2010, 105, 135-161.	0.3	27
24	A Holistic Approach for Soundness Verification of Decision-Aware Process Models. Lecture Notes in Computer Science, 2018, , 219-235.	1.0	26
25	Monitoring data-aware business constraints with finite state automata. , 2014, , .		24
26	Monitoring Business Metaconstraints Based on LTL and LDL for Finite Traces. Lecture Notes in Computer Science, 2014, , 1-17.	1.0	24
27	Checking Compliance of Execution Traces to Business Rules. Lecture Notes in Business Information Processing, 2009, , 134-145.	0.8	24
28	Social Commitments in Time: Satisfied or Compensated. Lecture Notes in Computer Science, 2010, , 228-243.	1.0	24
29	Conformance Checking of Executed Clinical Guidelines in Presence of Basic Medical Knowledge. Lecture Notes in Business Information Processing, 2012, , 200-211.	0.8	22
30	Verifiable UML Artifact-Centric Business Process Models. , 2014, , .		21
31	First-order μ-calculus over generic transition systems and applications to the situation calculus. Information and Computation, 2018, 259, 328-347.	0.5	19
32	Petri Nets with Parameterised Data. Lecture Notes in Computer Science, 2020, , 55-74.	1.0	19
33	Expressing and Verifying Business Contracts with Abductive Logic Programming. International Journal of Electronic Commerce, 2008, 12, 9-38.	1.4	16
34	Verification of Artifact-Centric Systems: Decidability and Modeling Issues. Lecture Notes in Computer Science, 2013, , 252-266.	1.0	16
35	An abductive framework for a-priori verification of web services. , 2006, , .		15
36	Soundness of data-aware, case-centric processes. International Journal on Software Tools for Technology Transfer, 2016, 18, 535-558.	1.7	15

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37	On the relevance of a business constraint to an event log. Information Systems, 2018, 78, 144-161.	2.4	15
38	Ontology-Based Governance of Data-Aware Processes. Lecture Notes in Computer Science, 2012, , 25-41.	1.0	15
39	Abductive Logic Programming as an Effective Technology for the Static Verification of Declarative Business Processes. Fundamenta Informaticae, 2010, 102, 325-361.	0.3	14
40	SMT-based verification of data-aware processes: a model-theoretic approach. Mathematical Structures in Computer Science, 2020, 30, 271-313.	0.5	14
41	Verification from Declarative Specifications Using Logic Programming. Lecture Notes in Computer Science, 2008, , 440-454.	1.0	14
42	An Hybrid Architecture Integrating Forward Rules with Fuzzy Ontological Reasoning. Lecture Notes in Computer Science, 2010, , 438-445.	1.0	14
43	Reactive Event Calculus for Monitoring Global Computing Applications. Lecture Notes in Computer Science, 2012, , 123-146.	1.0	14
44	Ensuring Model Consistency in Declarative Process Discovery. Lecture Notes in Computer Science, 2015, , 144-159.	1.0	13
45	Model checking Petri nets with names using data-centric dynamic systems. Formal Aspects of Computing, 2016, 28, 615-641.	1.4	13
46	From Model Completeness to Verification of Data Aware Processes. Lecture Notes in Computer Science, 2019, , 212-239.	1.0	13
47	Formal Reasoning on Natural Language Descriptions of Processes. Lecture Notes in Computer Science, 2019, , 86-101.	1.0	13
48	A Hybrid Approach to Clinical Guideline and to Basic Medical Knowledge Conformance. Lecture Notes in Computer Science, 2009, , 91-95.	1.0	13
49	Recency-Bounded Verification of Dynamic Database-Driven Systems. , 2016, , .		12
50	Soundness Verification of Decision-Aware Process Models with Variable-to-Variable Conditions. , 2019, , .		12
51	Modeling and Reasoning over Declarative Data-Aware Processes with Object-Centric Behavioral Constraints. Lecture Notes in Computer Science, 2019, , 139-156.	1.0	12
52	Testing Careflow Process Execution Conformance by Translating a Graphical Language to Computational Logic. Lecture Notes in Computer Science, 2007, , 479-488.	1.0	11
53	A Computational Logic Application Framework for Service Discovery and Contracting. International Journal of Web Services Research, 2011, 8, 1-25.	0.5	11
54	Engineering and verifying agent-oriented requirements augmented by business constraints with $\mathcal{B}$ -Tropos. Autonomous Agents and Multi-Agent Systems, 2011, 23, 193-223.	1.3	11

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55	Verifying the manipulation of data objects according to business process and data models. Knowledge and Information Systems, 2020, 62, 2653-2683.	2.1	11
56	Petri net-based object-centric processes with read-only data. Information Systems, 2022, 107, 102011.	2.4	10
57	Declarative Process Specifications: Reasoning, Discovery, Monitoring. Lecture Notes in Business Information Processing, 2022, , 108-152.	0.8	9
58	Model Completeness, Covers and Superposition. Lecture Notes in Computer Science, 2019, , 142-160.	1.0	8
59	Web Service Contracting: Specification and Reasoning with SCIFF. Lecture Notes in Computer Science, 2007, , 68-83.	1.0	8
60	Fuzzy Conformance Checking of Observed Behaviour with Expectations. Lecture Notes in Computer Science, 2011, , 80-91.	1.0	8
61	Monitoring Constraints and Metaconstraints with Temporal Logics on Finite Traces. ACM Transactions on Software Engineering and Methodology, 2022, 31, 1-44.	4.8	8
62	Analysis of the GLARE and GPROVE Approaches to Clinical Guidelines. Lecture Notes in Computer Science, 2010, , 76-87.	1.0	7
63	Formalizing Application Integration Patterns. , 2018, , .		7
64	Formal foundations for responsible application integration. Information Systems, 2021, 101, 101439.	2.4	7
65	Integrating BPMN and DMN: Modeling and Analysis. Journal on Data Semantics, 2021, 10, 165-188.	2.0	7
66	Combined Covers and Beth Definability. Lecture Notes in Computer Science, 2020, , 181-200.	1.0	7
67	Semantical Vacuity Detection in Declarative Process Mining. Lecture Notes in Computer Science, 2016, , 158-175.	1.0	7
68	Verification and Synthesis in Description Logic Based Dynamic Systems. Lecture Notes in Computer Science, 2013, , 50-64.	1.0	7
69	Verification of Semantically-Enhanced Artifact Systems. Lecture Notes in Computer Science, 2013, , 600-607.	1.0	7
70	Strategy Synthesis for Data-Aware Dynamic Systems with Multiple Actors. , 2020, , .		7
71	Implementing and Running Data-Centric Dynamic Systems. , 2013, , .		6
72	Semantic Enrichment of GSM-Based Artifact-Centric Models. Journal on Data Semantics, 2015, 4, 3-27.	2.0	6

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73	Modeling and In-Database Management of Relational, Data-Aware Processes. Lecture Notes in Computer Science, 2019, , 328-345.	1.0	6
74	Compliance Monitoring of Multi-Perspective Declarative Process Models. , 2019, , .		6
75	Abducing Compliance of Incomplete Event Logs. Lecture Notes in Computer Science, 2016, , 208-222.	1.0	6
76	${cal B}$ -Tropos. Lecture Notes in Computer Science, 2008, , 157-176.	1.0	6
77	IoT-Based Compliance Checking of Multi-party Business Processes Modeled with Commitments. Lecture Notes in Computer Science, 2017, , 179-195.	1.0	6
78	Extending Temporal Business Constraints with Uncertainty. Lecture Notes in Computer Science, 2020, , 35-54.	1.0	6
79	A Framework for Defining and Verifying Clinical Guidelines: A Case Study on Cancer Screening. Lecture Notes in Computer Science, 2006, , 338-343.	1.0	5
80	Integrating Abductive Logic Programming and Description Logics in a Dynamic Contracting Architecture. , 2009, , .		5
81	MONITORING TIME-AWARE COMMITMENTS WITHIN AGENT-BASED SIMULATION ENVIRONMENTS. Cybernetics and Systems, 2011, 42, 546-566.	1.6	5
82	Semantic DMN: Formalizing and Reasoning About Decisions in the Presence of Background Knowledge. Theory and Practice of Logic Programming, 2019, 19, 536-573.	1.1	5
83	Unleashing textual descriptions of business processes. Software and Systems Modeling, 2021, 20, 2131-2153.	2.2	5
84	Verification of Context-Sensitive Knowledge and Action Bases. Lecture Notes in Computer Science, 2014, , 514-528.	1.0	5
85	Event Condition Expectation (ECE-) Rules for Monitoring Observable Systems. Lecture Notes in Computer Science, 2011, , 267-281.	1.0	5
86	Probabilistic declarative process mining. Information Systems, 2022, 109, 102033.	2.4	5
87	On the integration of declarative choreographies and Commitment-based agent societies into the SCIFF logic programming framework. Multiagent and Grid Systems, 2010, 6, 165-190.	0.5	4
88	Delta-BPMN: A Concrete Language and Verifier for Data-Aware BPMN. Lecture Notes in Computer Science, 2021, , 179-196.	1.0	4
89	RuM: Declarative Process Mining, Distilled. Lecture Notes in Computer Science, 2021, , 23-29.	1.0	4
90	Model Completeness, Uniform Interpolants and Superposition Calculus. Journal of Automated Reasoning, 2021, 65, 941-969.	1.1	4

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91	Soundness of Data-Aware Processes with Arithmetic Conditions. Lecture Notes in Computer Science, 2022, , 389-406.	1.0	4
92	Multi-model Monitoring Framework for Hybrid Process Specifications. Lecture Notes in Computer Science, 2022, , 319-335.	1.0	4
93	A Tool for Computing Probabilistic Trace Alignments. Lecture Notes in Business Information Processing, 2021, , 118-126.	0.8	3
94	Towards a Reference Implementation for Data Centric Dynamic Systems. Lecture Notes in Business Information Processing, 2014, , 141-154.	0.8	3
95	Towards Data- and Norm-Aware Multiagent Systems. Lecture Notes in Computer Science, 2016, , 22-38.	1.0	3
96	Role Monitoring in Open Agent Societies. Lecture Notes in Computer Science, 2010, , 112-121.	1.0	3
97	Static Verification of Declarative Open Interaction Models. Lecture Notes in Business Information Processing, 2010, , 177-199.	0.8	3
98	Verifying MSMAS Model Using $\mathcal{S}$ CIFF. Lecture Notes in Computer Science, 2013, , 44-58.	1.0	3
99	Data and Process Resonance. Lecture Notes in Computer Science, 2022, , 369-392.	1.0	3
100	Gamified children universities. , 2014, , .		2
101	Run-Time Verification of MSMAS Norms Using Event Calculus. , 2014, , .		2
102	Reachability in Database-driven Systems with Numerical Attributes under Recency Bounding. , 2019, , .		2
103	A Retrospective on the Reactive Event Calculus and Commitment Modeling Language. Lecture Notes in Computer Science, 2012, , 120-127.	1.0	2
104	Combination of Uniform Interpolants via Beth Definability. Journal of Automated Reasoning, 0, , .	1.1	2
105	Evaluating Compliance: From LTL to Abductive Logic Programming. Fundamenta Informaticae, 2018, 159, 35-63.	0.3	1
106	Representing and Querying Norm States Using Temporal Ontology-Based Data Access. , 2019, , .		1
107	Putting Decisions in Perspective. Lecture Notes in Business Information Processing, 2019, , 355-361.	0.8	1
108	A Preliminary Framework for Strategic and Compliance Monitoring. , 2019, , .		0

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109	On DB-Nets and Their Applications. Communications in Computer and Information Science, 2021, , 81-87.	0.4	0
110	Declarative Technologies for Open Agent Systems and Beyond. Lecture Notes in Computer Science, 2010, , 1-5.	1.0	0
111	Formal Verification of Petri Nets with Names. Lecture Notes in Computer Science, 2016, , 29-47.	1.0	0
112	Abductive Reasoning on Compliance Monitoring. Lecture Notes in Computer Science, 2017, , 3-16.	1.0	0
113	A Tool for the Verification of Data-Aware Business Processes. Lecture Notes in Computer Science, 2018, , 266-276.	1.0	0
114	Introduction to the Special Issue on the International Joint Conference on Rules and Reasoning, RuleML+RR 2019. Theory and Practice of Logic Programming, 2022, 22, 158-161.	1.1	0