Federico Cabitza

List of Publications by Year
in descending order

138 papers	3,009 citations	201575 27 h-index	206029 48 g-index
141 all docs	141 docs citations	141 times ranked	3240 citing authors

#	Article	IF	Citations
1	Unintended Consequences of Machine Learning in Medicine. JAMA - Journal of the American Medical Association, 2017, 318, 517.	3.8	574
2	Detection of COVID-19 Infection from Routine Blood Exams with Machine Learning: A Feasibility Study. Journal of Medical Systems, 2020, 44, 135.	2.2	240
3	Machine Learning in Orthopedics: A Literature Review. Frontiers in Bioengineering and Biotechnology, 2018, 6, 75.	2.0	148
4	The need to separate the wheat from the chaff in medical informatics. International Journal of Medical Informatics, 2021, 153, 104510.	1.6	128
5	Development, evaluation, and validation of machine learning models for COVID-19 detection based on routine blood tests. Clinical Chemistry and Laboratory Medicine, 2021, 59, 421-431.	1.4	109
6	Infectious and thromboembolic complications of arthroscopic shoulder surgery. Journal of Shoulder and Elbow Surgery, 2010, 19, 97-101.	1.2	93
7	The importance of being external. methodological insights for the external validation of machine learning models in medicine. Computer Methods and Programs in Biomedicine, 2021, 208, 106288.	2.6	72
8	Machine learning in laboratory medicine: waiting for the flood?. Clinical Chemistry and Laboratory Medicine, 2018, 56, 516-524.	1.4	70
9	Data work in healthcare: An Introduction. Health Informatics Journal, 2019, 25, 465-474.	1.1	60
10	When once is not enough. , 2005, , .		53
11	The Revival of the Notes Field: Leveraging the Unstructured Content in Electronic Health Records. Frontiers in Medicine, 2019, 6, 66.	1.2	52
12	Bridging the â€œlast mileâ€•gap between AI implementation and operation: â€œdata awarenessâ€•that matters. Annals of Translational Medicine, 2020, 8, 501-501.	0.7	52
13	Applications of deep learning in dentistry. Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology, 2021, 132, 225-238.	0.2	42
14	Artificial intelligence-based tools to control healthcare associated infections: A systematic review of the literature. Journal of Infection and Public Health, 2020, 13, 1061-1077.	1.9	41
15	Interpretable heartbeat classification using local model-agnostic explanations on ECGs. Computers in Biology and Medicine, 2021, 133, 104393.	3.9	41
16	The proof of the pudding: in praise of a culture of real-world validation for medical artificial intelligence. Annals of Translational Medicine, 2019, 7, 161-161.	0.7	41
17	Leveraging underspecification in knowledge artifacts to foster collaborative activities in professional communities. International Journal of Human Computer Studies, 2013, 71, 24-45.	3.7	40
18	Affording Mechanisms: An Integrated View of Coordination and Knowledge Management. Computer Supported Cooperative Work, 2012, 21, 227-260.	1.9	38

#	ARTICLE	IF	CITATIONS
19	Leveraging Coordinative Conventions to Promote Collaboration Awareness. Computer Supported Cooperative Work, 2009, 18, 301-330.	1.9	35
20	Current practice in shoulder pathology: results of a web-based survey among a community of 1,084 orthopedic surgeons. Knee Surgery, Sports Traumatology, Arthroscopy, 2012, 20, 803-815.	2.3	35
21	Rule-based tools for the configuration of ambient intelligence systems: a comparative user study. Multimedia Tools and Applications, 2017, 76, 5221-5241.	2.6	35
22	Fostering participation and co-evolution in sentient multimedia systems. Journal of Visual Languages and Computing, 2014, 25, 684-694.	1.8	34
23	Ground truthing from multi-rater labeling with three-way decision and possibility theory. Information Sciences, 2021, 545, 771-790.	4.0	34
24	Computational Coordination Mechanisms: A tale of a struggle for flexibility. Computer Supported Cooperative Work, 2013, 22, 475-529.	1.9	33
25	User-driven prioritization of features for a prospective InterPersonal Health Record: Perceptions from the Italian context. Computers in Biology and Medicine, 2015, 59, 202-210.	3.9	33
26	Exploiting collective knowledge with three-way decision theory: Cases from the questionnaire-based research. International Journal of Approximate Reasoning, 2017, 83, 356-370.	1.9	31
27	The three-way-in and three-way-out framework to treat and exploit ambiguity in data. International Journal of Approximate Reasoning, 2020, 119, 292-312.	1.9	30
28	Static and interactive infographics in daily tasks: A value-in-use and quality of interaction user study. Computers in Human Behavior, 2017, 71, 240-257.	5.1	29
29	Building Socially Embedded Technologies: Implications About Design. Computer Supported Cooperative Work / Series Ed By: Dan Diaper and Colston Sanger, 2015, , 217-270.	1.1	24
30	â€œEach to His Ownâ€: Distinguishing Activities, Roles and Artifacts in EUD Practices. Lecture Notes in Information Systems and Organisation, 2014, , 193-205.	0.4	23
31	Machine Learning for Health: Algorithm Auditing & Quality Control. Journal of Medical Systems, 2021, 45, 105.	2.2	23
32	As if sand were stone. New concepts and metrics to probe the ground on which to build trustable AI. BMC Medical Informatics and Decision Making, 2020, 20, 219.	1.5	22
33	Has the Flood Entered the Basement? A Systematic Literature Review about Machine Learning in Laboratory Medicine. Diagnostics, 2021, 11, 372.	1.3	20
34	A comprehensive data quality methodology for web and structured data. International Journal of Innovative Computing and Applications, 2008, 1, 205.	0.2	19
35	How is test laboratory data used and characterised by machine learning models? A systematic review of diagnostic and prognostic models developed for COVID-19 patients using only laboratory data. Clinical Chemistry and Laboratory Medicine, 2022, 60, 1887-1901.	1.4	19
36	The Elephant in the Machine: Proposing a New Metric of Data Reliability and its Application to a Medical Case to Assess Classification Reliability. Applied Sciences (Switzerland), 2020, 10, 4014.	1.3	18

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37	Assessment and prediction of spine surgery invasiveness with machine learning techniques. Computers in Biology and Medicine, 2020, 121, 103796.	3.9	18
38	Providing awareness through situated process maps. , 2007, , .		17
39	WOAD. Journal of Organizational and End User Computing, 2010, 22, 1-20.	1.6	17
40	A Giant with Feet of Clay: On the Validity of the Data that Feed Machine Learning in Medicine. Lecture Notes in Information Systems and Organisation, 2019, , 121-136.	0.4	17
41	The need to move away from agential-AI: Empirical investigations, useful concepts and open issues. International Journal of Human Computer Studies, 2021, 155, 102696.	3.7	17
42	Three-Way Decision for Handling Uncertainty in Machine Learning: A Narrative Review. Lecture Notes in Computer Science, 2020, , 137-152.	1.0	17
43	The elephant in the record: On the multiplicity of data recording work. Health Informatics Journal, 2019, 25, 475-490.	1.1	16
44	"…and do it the usual way" fostering awareness of work conventions in document-mediated collaboration. , 2007, , 119-138.		16
45	External validation of Machine Learning models for COVID-19 detection based on Complete Blood Count. Health Information Science and Systems, 2021, 9, 37.	3.4	16
46	Information Quality in Healthcare. Data-centric Systems and Applications, 2016, , 403-419.	0.2	14
47	DJess - a context-sharing middleware to deploy distributed inference systems in pervasive computing domains. , 0, , .		13
48	PROs in the wild: Assessing the validity of patient reported outcomes in an electronic registry. Computer Methods and Programs in Biomedicine, 2019, 181, 104837.	2.6	12
49	Studying human-AI collaboration protocols: the case of the Kasparov's law in radiological double reading. Health Information Science and Systems, 2021, 9, 8.	3.4	12
50	Prediction of ICU admission for COVID-19 patients: a Machine Learning approach based on Complete Blood Count data. , 2021, , .		12
51	ProDoc: an Electronic Patient Record to Foster Process-Oriented Practices. , 2009, , 85-104.		12
52	"Remain Faithful to the Earth!": Reporting Experiences of Artifact-Centered Design in Healthcare. Computer Supported Cooperative Work, 2011, 20, 231-263.	1.9	11
53	Supporting artifact-mediated discourses through a recursive annotation tool. , 2012, , .		11
54	A User Study to Assess the Situated Social Value of Open Data in Healthcare. Procedia Computer Science, 2015, 64, 306-313.	1.2	11

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55	Three-way decision and conformal prediction: Isomorphisms, differences and theoretical properties of cautious learning approaches. Information Sciences, 2021, 579, 347-367.	4.0	11
56	Knowledge Artifacts as Bridges between Theory and Practice: The Clinical Pathway Case. International Federation for Information Processing, 2008, , 37-50.	0.4	11
57	A robust and parsimonious machine learning method to predict ICU admission of COVID-19 patients. Medical and Biological Engineering and Computing, 2022, , 1.	1.6	11
58	On a QUESt for a web-based tool promoting knowledge-sharing in medical communities. Behaviour and Information Technology, 2015, 34, 598-612.	2.5	10
59	Supporting Practices of Positive Redundancy for Seamless Care. , 2008, , .		9
60	End-User Development in Ambient Intelligence. , 2015, , .		9
61	The multicenter European Biological Variation Study (EuBIVAS): a new glance provided by the Principal Component Analysis (PCA), a machine learning unsupervised algorithms, based on the basic metabolic panel linked measurands. Clinical Chemistry and Laboratory Medicine, 2022, 60, 556-568.	1.4	9
62	Biases Affecting Human Decision Making in AI-Supported Second Opinion Settings. Lecture Notes in Computer Science, 2019, , 283-294.	1.0	9
63	Gamification Techniques for Rule Management in Ambient Intelligence. Lecture Notes in Computer Science, 2015, , 353-356.	1.0	9
64	The Knowledge-stream Model - A Comprehensive Model for Knowledge Circulation in Communities of Knowledgeable Practitioners. , 2014, , .		9
65	â€œDrops Hollowing the Stoneâ€• Workarounds as Resources for Better Task-Artifact Fit. , 2013, , 103-122.		8
66	Malleability in the Hands of End-Users. , 2017, , 137-163.		8
67	â€œWhatever Worksâ€•. , 2012, , 79-110.		8
68	CASMAS: Supporting Collaboration in Pervasive Environments. , 0, , .		7
69	Active artifacts as bridges between context and community knowledge sources. , 2009, , .		7
70	Data-work in Healthcare: The New Work Ecologies of Healthcare Infrastructures. , 2016, , .		7
71	Valuable Visualization of Healthcare Information. , 2016, , .		7
72	Questionnaires in the design and evaluation of community-oriented technologies. International Journal of Web Based Communities, 2017, 13, 4.	0.2	7

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73	Morphological and molecular characterization of human hamstrings shows that tendon features are not influenced by donor age. Knee Surgery, Sports Traumatology, Arthroscopy, 2018, 26, 343-352.	2.3	7
74	Making Open Data more Personal Through a Social Value Perspective: a Methodological Approach. Information Systems Frontiers, 2020, 22, 131-148.	4.1	7
75	New Frontiers in Explainable AI: Understanding the GI to Interpret the GO. Lecture Notes in Computer Science, 2019, , 27-47.	1.0	7
76	Web of Active Documents: An Architecture for Flexible Electronic Patient Records. Communications in Computer and Information Science, 2011, , 44-56.	0.4	7
77	A Comprehensive Data Quality Methodology for Web and Structured Data. , 2007, , .		6
78	Investigating the role of a Web-based tool to promote collective knowledge in medical communities. Knowledge Management Research and Practice, 2012, 10, 392-404.	2.7	6
79	Management of knee injuries: consensus-based indications from a large community of orthopaedic surgeons. Knee Surgery, Sports Traumatology, Arthroscopy, 2013, 21, 708-719.	2.3	6
80	When the web supports communities of place: the 'Social Street' case in Italy. International Journal of Web Based Communities, 2016, 12, 216.	0.2	6
81	The semiotics of configurations for the immanent design of interactive computational systems. Journal of Visual Languages and Computing, 2017, 40, 65-90.	1.8	6
82	Spine surgery registries: hope for evidence-based spinal care?. Journal of Spine Surgery, 2018, 4, 456-458.	0.6	6
83	Ordinal labels in machine learning: a user-centered approach to improve data validity in medical settings. BMC Medical Informatics and Decision Making, 2020, 20, 142.	1.5	6
84	LWOAD: A Specification Language to Enable the End-User Develoment of Coordinative Functionalities. Lecture Notes in Computer Science, 2009, , 146-165.	1.0	6
85	Exploring Medical Data Classiﬁcation with Three-Way Decision Trees. , 2019, , .		6
86	Repetita Iuvant: Exploring and Supporting Redundancy in Hospital Practices. Computer Supported Cooperative Work, 2019, 28, 61-94.	1.9	5
87	Questionnaires in the design and evaluation of community-oriented technologies. International Journal of Web Based Communities, 2017, 13, 1.	0.2	5
88	â€œMade with Knowledgeâ€• Disentangling the IT Knowledge Artifact by a Qualitative Literature Review. , 2014, , .		5
89	An Information Reliability Index as a Simple Consumer-Oriented Indication of Quality of Medical Web Sites. Intelligent Systems Reference Library, 2013, , 159-177.	1.0	4
90	Knowledge artifacts within knowing communities to foster collective knowledge. , 2014, , .		4

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91	Touch&Screen. , 2016, , .		4
92	3D printing objects as knowledge artifacts for a do-it-yourself approach in clinical practice. Data Technologies and Applications, 2018, 52, 163-186.	0.9	4
93	Personal Health Records and Patient-Oriented Infrastructures: Building Technology, Shaping (New) Patients, and Healthcare Practitioners. Computer Supported Cooperative Work, 2019, 28, 1001-1009.	1.9	4
94	â€œThrough the Glassy Boxâ€• Supporting Appropriation in User Communities. , 2014, , 173-187.		4
95	To Err is (only) Human. Reflections onÂHow to Move from Accuracy to Trust forÂMedical AI. Lecture Notes in Information Systems and Organisation, 2021, , 36-49.	0.4	4
96	Programmed Inefficiencies in DSS-Supported Human Decision Making. Lecture Notes in Computer Science, 2019, , 201-212.	1.0	4
97	Decisions are not all equalâ€"Introducing a utility metric based on case-wise ratersâ€™ perceptions. Computer Methods and Programs in Biomedicine, 2022, 221, 106930.	2.6	4
98	Designing Computational Places for Communities within Organizations. , 2006, , .		3
99	Providing end-users with a visual editor to make their electronic documents active. , 2012, , .		3
100	Tendon-Derived Stem Cells for Rotator Cuff Repair. Operative Techniques in Orthopaedics, 2016, 26, 147-154.	0.2	3
101	What Arthroscopic Skills Need to Be Trained Before Continuing Safe Training in the Operating Room?. Journal of Knee Surgery, 2017, 30, 718-724.	0.9	3
102	Benefits and Risks of Machine Learning Decision Support Systemsâ€"Reply. JAMA - Journal of the American Medical Association, 2017, 318, 2356.	3.8	3
103	Unity Is Intelligence: A Collective Intelligence Experiment on ECG Reading to Improve Diagnostic Performance in Cardiology. Journal of Intelligence, 2021, 9, 17.	1.3	3
104	Reporting a User Study on a Visual Editor to Compose Rules in Active Documents. Advances in Human and Social Aspects of Technology Book Series, 2014, , 182-203.	0.3	3
105	Human-Data Interaction in Healthcare. Advances in Business Information Systems and Analytics Book Series, 2017, , 184-203.	0.3	3
106	At the Boundary of Communities and Roles: Boundary Objects and Knowledge Artifacts as Resources for IS Design. Lecture Notes in Information Systems and Organisation, 2015, , 149-160.	0.4	3
107	From Care for Design to Becoming Matters: New Perspectives for the Development of Socio-technical Systems. Lecture Notes in Information Systems and Organisation, 2016, , 113-127.	0.4	3
108	Back to the Feature: A Neural-Symbolic Perspective on Explainable AI. Lecture Notes in Computer Science, 2020, , 39-55.	1.0	3

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109	Much undo about nothing?. , 2008, , .		2
110	Seams and Sutures in IT Artifacts. International Journal of Systems and Society, 2016, 3, 18-31.	0.1	2
111	Trading off between control and autonomy: a narrative review around de-design. Behaviour and Information Technology, 2020, 39, 5-26.	2.5	2
112	IGV Short Scale to Assess Implicit Value of Visualizations through Explicit Interaction. Applied Sciences (Switzerland), 2020, 10, 6189.	1.3	2
113	Harvesting Collective Agreement in Community Oriented Surveys: The Medical Case. , 2012, , 81-96.		2
114	Sliding Knots. , 2018, , 161-174.		1
115	Faithful to the Earth: Reporting Experiences of Artifact-Centered Design in Healthcare. , 2010, , 25-44.		1
116	Ensemble Learning, Social Choice and Collective Intelligence. Lecture Notes in Computer Science, 2020, , 53-65.	1.0	1
117	Assessing the impact of medical AI: a survey of physiciansâ€™ perceptions. , 2021, , .		1
118	Promoting Process-Based Collaboration Awareness to Integrate Care Teams. Lecture Notes in Business Information Processing, 2009, , 385-396.	0.8	1
119	Needs and Wishes from the Arthroscopy Community. , 2015, , 7-15.		1
120	â€œMade with Knowledgeâ€¹ Reporting a Qualitative Literature Review on the Concept of the IT Knowledge Artifact. Communications in Computer and Information Science, 2015, , 571-585.	0.4	1
121	â€œYou Cannot Grow Viscum on Soilâ€¹ The â€œGoodâ€¹Corporate Social Media Also Fail. , 2016, , 57-74.		1
122	Human-Data Interaction in Healthcare. , 2020, , 1148-1167.		1
123	Artificial Intelligence in Laboratory Medicine. , 2022, , 803-812.		1
124	HDQ: A meta-model for the quality improvement of heterogeneous data. , 2007, , .		0
125	A pervasive computing architecture fostering integration in patient centred communities of care. International Journal of Healthcare Technology and Management, 2009, 10, 49.	0.1	0
126	Tell Me Another Story, Granpa! Requirements for Sharing Lived Lives Online. I-com, 2012, 11, 14-18.	0.9	0

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127	Determining factors in ICT adoption by MSME's in agriculture clusters: An exploratory case study. , 2013, , .		0
128	Erratum to "Infectious and thromboembolic complications of arthroscopic shoulder surgery" [J Shoulder Elbow Surg 2010 Jan;19(1):97-101]. Journal of Shoulder and Elbow Surgery, 2014, 23, 598.	1.2	0
129	A User Study on How to Render Criticality in Interfaces that Visualize Process Maps. , 2010, , 379-386.		0
130	WOAD. , 2012, , 127-147.		0
131	Back to the Future of EUD: The Logic of Bricolage for the Paving of EUD Roadmaps. Lecture Notes in Computer Science, 2013, , 254-259.	1.0	0
132	Virtual Patients for Knowledge Sharing and Clinical Practice Training: A Gamified Approach. Lecture Notes in Computer Science, 2016, , 329-335.	1.0	0
133	Moving Western Neighborliness to East?. , 2016, , .		0
134	Fuzzification of Ordinal Classes. The Case of the HL7 Severity Grading. Lecture Notes in Computer Science, 2018, , 64-77.	1.0	0
135	Drift of a Corporate Social Media: The Design and Outcomes of a Longitudinal Study. Lecture Notes in Information Systems and Organisation, 2019, , 189-201.	0.4	0
136	Reporting Some Marginal Discourses to Root a De-design Approach in IS Development. Lecture Notes in Information Systems and Organisation, 2020, , 273-288.	0.4	0
137	Routine blood tests as an active surveillance to monitor COVID-19 prevalence. A retrospective study. Acta Biomedica, 2020, 91, e2020009.	0.2	0
138	Evidence of significant difference in key COVID-19 biomarkers during the Italian lockdown strategy. A retrospective study on patients admitted to a hospital emergency department in Northern Italy. Acta Biomedica, 2020, 91, e2020156.	0.2	0