David De Roure

List of Publications by Year
in descending order

200 papers	5,361 citations	168829 31 h-index	156644 58 g-index
207 all docs	207 docs citations	207 times ranked	5207 citing authors

#	Article	IF	Citations
1	Digital twins: artificial intelligence and the IoT cyber-physical systems in Industry 4.0. International Journal of Intelligent Robotics and Applications, 2022, 6, 171-185.	1.6	42
2	Methodology for integrating artificial intelligence in healthcare systems: learning from COVID-19 to prepare for Disease X. AI and Ethics, 2022, 2, 623-630.	4.6	3
3	Super-forecasting the 'technological singularity' risks from artificial intelligence. Evolving Systems, 2022, 13, 747-757.	2.4	12
4	Artificial intelligence in cyber physical systems. AI and Society, 2021, 36, 783-796.	3.1	66
5	Dynamic real-time risk analytics of uncontrollable states in complex internet of things systems: cyber risk at the edge. Environment Systems and Decisions, 2021, 41, 236-247.	1.9	8
6	Artificial Intelligence and the Internet of Things in Industry 4.0. CCF Transactions on Pervasive Computing and Interaction, 2021, 3, 329-338.	1.7	25
7	The ethics of shared Covid-19 risks: an epistemological framework for ethical health technology assessment of risk in vaccine supply chain infrastructures. Health and Technology, 2021, 11, 1083-1091.	2.1	25
8	Epistemological Equation for Analysing Uncontrollable States in Complex Systems: Quantifying Cyber Risks from the Internet of Things. The Review of Socionetwork Strategies, 2021, 15, 381-411.	1.0	25
9	Epistemological and Bibliometric Analysis of Ethics and Shared Responsibility—Health Policy and IoT Systems. Sustainability, 2021, 13, 8355.	1.6	31
10	Alternative mental health therapies in prolonged lockdowns: narratives from Covid-19. Health and Technology, 2021, 11, 1101-1107.	2.1	23
11	COVID-19 what have we learned? The rise of social machines and connected devices in pandemic management following the concepts of predictive, preventive and personalized medicine. EPMA Journal, 2020, 11, 311-332.	3.3	63
12	Cyber risk at the edge: current and future trends on cyber risk analytics and artificial intelligence in the industrial internet of things and industry 4.0 supply chains. Cybersecurity, 2020, 3, .	3.1	60
13	Artificial intelligence and machine learning in dynamic cyber risk analytics at the edge. SN Applied Sciences, 2020, 2, 1.	1.5	40
14	Data mining and analysis of scientific research data records on Covid-19 mortality, immunity, and vaccine development - In the first wave of the Covid-19 pandemic. Diabetes and Metabolic Syndrome: Clinical Research and Reviews, 2020, 14, 1121-1132.	1.8	45
15	What Determines the Perception of Segmentation in Contemporary Music?. Frontiers in Psychology, 2020, 11, 1001.	1.1	3
16	Design of a dynamic and self-adapting system, supported with artificial intelligence, machine learning and real-time intelligence for predictive cyber risk analytics in extreme environments – cyber risk in the colonisation of Mars. Safety in Extreme Environments, 2020, 2, 219-230.	1.8	19
17	Scholarly Social Machines: A Web Science Perspective on our Knowledge Infrastructure. , 2020, , .		3
18	Semantic Web Technology for New Experiences Throughout the Music Production-Consumption Chain. , 2019, , .		3

#	ARTICLE	IF	CITATIONS
19	Modelling Web Based Socio-Technical Systems Through Formalising Possible Sequences of Human Experience. , 2019, , .		1
20	Towards a Cyberphysical Web Science. , 2019, , .		5
21	The Future(s) of Social Machines: The Research Agenda. Lecture Notes in Social Networks, 2019, , 201-217.	0.8	0
22	Mapping the Values of IoT. Journal of Information Technology, 2018, 33, 345-360.	2.5	66
23	Music SOFA. , 2018, , .		5
24	The Design of Future Music Technologies. , 2018, , .		0
25	Lovelace's Legacy. , 2018, , .		0
26	A Music Theory Ontology. , 2018, , .		10
27	Future developments in cyber risk assessment for the internet of things. Computers in Industry, 2018, 102, 14-22.	5.7	111
28	Security Risk Assessment in Internet of Things Systems. IT Professional, 2017, 19, 20-26.	1.4	118
29	Experimental Humanities: An Adventure with Lovelace and Babbage. , 2017, , .		2
30	A Network of Noise. , 2017, , .		4
31	Audio Technology and Mobile Human Computer Interaction. International Journal of Mobile Human Computer Interaction, 2017, 9, 25-40.	0.1	21
32	A Framework for the Preservation of a Docker Container. International Journal of Digital Curation, 2017, 12, 125-135.	0.1	6
33	Numbers in places. , 2016, , .		4
34	Plans and performances: Parallels in the production of science and music. , 2016, , .		2
35	Observing Social Machines Part 2. , 2015, , .		12
36	Archetypal Narratives in Social Machines. , 2015, , .		9

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37	Music and Science. , 2015, , .		8
38	ReputationNet: Reputation-Based Service Recommendation for e-Science. IEEE Transactions on Services Computing, 2015, 8, 439-452.	3.2	12
39	Turning numbers into notes. , 2015, , .		3
40	Executable Music Documents. , 2014, , .		12
41	Structuring research methods and data with the research object model: genomics workflows as a case study. Journal of Biomedical Semantics, 2014, 5, 41.	0.9	26
42	Working out the plot. , 2014, , .		8
43	Zooniverse. , 2014, , .		156
44	Software in reproducible research. , 2014, , .		6
45	The future of scholarly communications. Insights: the UKSG Journal, 2014, 27, 233-238.	0.1	17
46	No technical understanding required: Helping users make informed choices about access to their personal data. , 2014, , .		22
47	Capturing the workflows of music information retrieval for repeatability and reuse. Journal of Intelligent Information Systems, 2013, 41, 435-459.	2.8	13
48	Hello cleveland! Linked data publication of live music archives. , 2013, , .		9
49	The Software Sustainability Institute: Changing Research Software Attitudes and Practices. Computing in Science and Engineering, 2013, 15, 74-80.	1.2	55
50	Why linked data is not enough for scientists. Future Generation Computer Systems, 2013, 29, 599-611.	4.9	230
51	The Web Science Observatory. IEEE Intelligent Systems, 2013, 28, 100-104.	4.0	51
52	Towards computational research objects. , 2013, , .		11
53	MyExperimentalScience, extending the â€˜workflowâ€™. Concurrency Computation Practice and Experience, 2013, 25, 481-496.	1.4	7
54	Observing social machines part 1. , 2013, , .		18

#	Article	IF	Citations
55	The Financial Clouds Review. , 2013, , 125-146.		0
56	The challenges of developing and evaluating complex care scenarios using simulation in nursing education. Journal of Research in Nursing, 2012, 17, 329-345.	0.3	5
57	Why workflows break &#x2014; Understanding and combating decay in Taverna workflows. , 2012, , .		48
58	ReputationNet: A Reputation Engine to Enhance ServiceMap by Recommending Trusted Services. , 2012, , .		13
59	The Financial Clouds Review. , 2012, , 1062-1083.		6
60	ServiceMap: Providing Map and GPS Assistance to Service Composition in Bioinformatics. , 2011, , .		20
61	Providing Map and GPS Assistance to Service Composition in Bioinformatics. , 2011, , .		7
62	Machines, methods and music: On the evolution of e-Research. , 2011, , .		5
63	A Semantic Sensor Web for Environmental Decision Support Applications. Sensors, 2011, 11, 8855-8887.	2.1	39
64	Case Studies and Organisational Sustainability Modelling Presented by Cloud Computing Business Framework. International Journal of Web Services Research, 2011, 8, 26-53.	0.5	36
65	Organisational Sustainability Modelling for Return on Investment (ROI): Case Studies Presented by a National Health Service (NHS) Trust UK. Journal of Computing and Information Technology, 2011, 19, .	0.2	37
66	An e-Research approach to Web-scale music analysis. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 3300-3317.	1.6	9
67	Simulating Taverna workflows using stochastic process algebras. Concurrency Computation Practice and Experience, 2011, 23, 1920-1935.	1.4	2
68	The segment ontology: Bridging music-generic and domain-specific. , 2011, , .		10
69	Scientific Social Objects: The Social Objects and Multidimensional Network of the myExperiment Website. , 2011, , .		10
70	Exploiting music structures for digital libraries. , 2011, , .		1
71	eScience. , 2011, , 701-736.		2
72	A Semantically Enabled Service Architecture for Mashups over Streaming and Stored Data. Lecture Notes in Computer Science, 2011, , 300-314.	1.0	32

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73	The Financial Clouds Review. International Journal of Cloud Applications and Computing, 2011, 1, 41-63.	1.1	35
74	Managing very large distributed data sets on a data grid. Concurrency Computation Practice and Experience, 2010, 22, 1338-1364.	1.4	2
75	A comparison of using Taverna and BPEL in building scientific workflows: the case of caGrid. Concurrency Computation Practice and Experience, 2010, 22, 1098-1117.	1.4	13
76	A pragmatic approach for the semantic description and matching of pervasive resources. International Journal of Pervasive Computing and Communications, 2010, 6, 19-46.	1.1	4
77	Elements of a computational infrastructure for social simulation. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 3797-3812.	1.6	19
78	e-Science and the Web. Computer, 2010, 43, 90-93.	1.2	8
79	Using audio to support animated route information in a hospital touch-screen kiosk. Computers in Human Behavior, 2010, 26, 753-759.	5.1	18
80	Towards open science: the myExperiment approach. Concurrency Computation Practice and Experience, 2010, 22, 2335-2353.	1.4	25
81	Research Objects: Towards Exchange and Reuse of Digital Knowledge. Nature Precedings, 2010, , .	0.1	105
82	myExperiment: a repository and social network for the sharing of bioinformatics workflows. Nucleic Acids Research, 2010, 38, W677-W682.	6.5	246
83	A Review of Cloud Business Models and Sustainability. , 2010, , .		54
84	A Categorisation of Cloud Computing Business Models. , 2010, , .		70
85	Semantic Grid and sensor Grid: Insights into the e-Research ecosystem. , 2010, , .		1
86	An Agent-Based Decentralisation Approach for the Electricity Power Market. , 2010, , .		0
87	A Model-Driven Architecture Approach to the Efficient Identification of Services on Service-Oriented Enterprise Architecture. , 2010, , .		7
88	The Evolution of myExperiment. , 2010, , .		11
89	Why Linked Data is Not Enough for Scientists. , 2010, , .		37
90	A Service Identification Framework for Legacy System Migration into SOA. , 2010, , .		24

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91	Supporting e-Science Using Semantic Web Technologies â€" The Semantic Grid. Annals of Information Systems, 2010, , 1-28.	0.5	1
92	2.2 The New e-Research. , 2010, , 72-74.		3
93	A Linked Data Approach to Sharing Workflows and Workflow Results. Lecture Notes in Computer Science, 2010, , 340-354.	1.0	2
94	Supporting the Running and Analysis of Trials of Web-Based Behavioural Interventions: The LifeGuide. , 2009, , .		4
95	A Dynamic Size Distributed Program Image Cache for Wireless Sensor Networks. , 2009, , .		2
96	Tracking and annotation in skills-based learning environments. , 2009, , .		3
97	Benchmarking workflow discovery: a case study from bioinformatics. Concurrency Computation Practice and Experience, 2009, 21, 2052-2069.	1.4	8
98	Building a Distributed Infrastructure for Scalable Triple Stores. Journal of Computer Science and Technology, 2009, 24, 447-462.	0.9	13
99	The design and realisation of the Virtual Research Environment for social sharing of workflows. Future Generation Computer Systems, 2009, 25, 561-567.	4.9	407
100	Ontology-Based Recommender Systems. , 2009, , 779-796.		62
101	Software Design for Empowering Scientists. IEEE Software, 2009, 26, 88-95.	2.1	61
102	Effects of language fluency and graphic animation on modality choices by adults when following online explanatory demonstrations. , 2009, , .		2
103	Enhancing Grid Service Discovery with a Semantic Wiki and the Concept Matching Approach. , 2009, , .		3
104	Centuryâ€‹ofâ€‹Information Research (CIR): A Strategy for Research and Innovation in the Century of Information. Prometheus, 2009, 27, 27-45.	0.2	5
105	An autonomic service discovery mechanism to support pervasive devices accessing the semantic grid. International Journal of Autonomic Computing, 2009, 1, 34.	0.2	1
106	The evolution of the Web and implications for eResearch. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2009, 367, 991-1001.	1.6	20
107	A decentralised DC optimal power flow model. , 2008, , .		6
108	Combining System Introspection with User-Provided Description to Support Configuration and Understanding of Pervasive systems. , 2008, , .		2

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109	myExperiment: Defining the Social Virtual Research Environment. , 2008, , .		46
110	Towards Computational Abstractions over a RESTful Architecture. , 2008, , .		2
111	A Pragmatic Approach for the Semantic Description and Matching of Pervasive Resources. Lecture Notes in Computer Science, 2008, , 434-446.	1.0	9
112	SemWeB: A Semantic Web Browser for Supporting the Browsing of Users Using Semantic and Adaptive Links. Lecture Notes in Computer Science, 2008, , 431-436.	1.0	2
113	Managing Very-Large Distributed Datasets. Lecture Notes in Computer Science, 2008, , 775-792.	1.0	4
114	Re-Evaluating The Grid: The Social Life of Programs. , 2008, , 201-211.		0
115	A Semantic Service Matching Middleware for Mobile Devices Discovering Grid Services. Lecture Notes in Computer Science, 2008, , 422-433.	1.0	6
116	Supporting ad-hoc resource sharing on the Web. ACM Transactions on Internet Technology, 2007, 7, 11.	3.0	5
117	Designing the myExperiment Virtual Research Environment for the Social Sharing of Workflows. , 2007, , .		52
118	An Autonomic Service Discovery Mechanism to Support Pervasive Device Accessing Semantic Grid. , 2007, , .		1
119	A Card Based Metaphor for Organising Pervasive Educational Experiences. , 2007, , .		17
120	Taverna Workflows: Syntax and Semantics. , 2007, , .		63
121	Supporting Domain Experts in Creating Pervasive Experiences. , 2007, , .		2
122	Grid 3.0: Services, semantics and society. , 2007, , .		4
123	Ontologies as facilitators for repurposing web documents. International Journal of Human Computer Studies, 2007, 65, 537-562.	3.7	12
124	FloodNet: Coupling Adaptive Sampling with Energy Aware Routing in a Flood Warning System. Journal of Computer Science and Technology, 2007, 22, 121-130.	0.9	37
125	Knowledge Discovery for Biology with Taverna. , 2007, , 355-395.		12
126	Intrusiveness Management for Focused, Efficient, andÂEnjoyable Activities. Lecture Notes in Computer Science, 2007, , 143-157.	1.0	3

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127	A Semantic Framework for Priority-Based Service Matching in Pervasive Environments. Lecture Notes in Computer Science, 2007, , 783-793.	1.0	4
128	Extending Pervasive Devices with the Semantic Grid: A Service Infrastructure Approach. , 2006, , .		8
129	Co-Presence Communities: Using Pervasive Computing to Support Weak Social Networks. , 2006, , .		16
130	Memetic: Semantic Meeting Memory. , 2006, , .		1
131	An E-Science Environment for Service Crystallographyfrom Submission to Dissemination. Journal of Chemical Information and Modeling, 2006, 46, 1006-1016.	2.5	36
132	User Choices for Modalities of Instructional Information. , 2006, , .		13
133	Semantic Grid†"The convergence of technologies. Web Semantics, 2006, 4, 82-83.	2.2	9
134	Bringing Chemical Data onto the Semantic Web. Journal of Chemical Information and Modeling, 2006, 46, 939-952.	2.5	52
135	Unfolding understandings. , 2006, , .		23
136	The literacy fieldtrip. , 2006, , .		32
137	UbiComp in opportunity spaces. , 2006, , .		27
138	Designing Energy-Aware Adaptive Routing for Wireless Sensor Networks. , 2006, , .		11
139	CombeChem: A Case Study in Provenance and Annotation Using the Semantic Web. Lecture Notes in Computer Science, 2006, , 270-277.	1.0	19
140	e-Science and the Semantic Web: A Symbiotic Relationship. Lecture Notes in Computer Science, 2006, , 1-12.	1.0	6
141	Web Service Grids: an evolutionary approach. Concurrency Computation Practice and Experience, 2005, 17, 377-389.	1.4	67
142	Contextually Aware Information Delivery in Pervasive Computing Environments. Lecture Notes in Computer Science, 2005, , 189-197.	1.0	7
143	COLLABORATION IN THE SEMANTIC GRID: A BASIS FOR e-LEARNING. Applied Artificial Intelligence, 2005, 19, 881-904.	2.0	19
144	The Semantic Grid: Past, Present, and Future. Proceedings of the IEEE, 2005, 93, 669-681.	16.4	167

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145	A semantic datagrid for combinatorial chemistry. , 2005, , .		8
146	A Grid Service Infrastructure for Mobile Devices. , 2005, , .		37
147	The Semantic Grid: Past, Present and Future. Lecture Notes in Computer Science, 2005, , 726-726.	1.0	16
148	E-Science: the grid and the Semantic Web. IEEE Intelligent Systems, 2004, 19, 65-71.	4.0	57
149	Ontology-based Recommender Systems. , 2004, , 477-498.		20
150	When open hypermedia meets peer-to-peer computing. , 2004, , .		4
151	The semantic smart laboratory: a system for supporting the chemical eScientist. Organic and Biomolecular Chemistry, 2004, 2, 3284.	1.5	43
152	Guest editors' introduction: E-Science. IEEE Intelligent Systems, 2004, 19, 24-25.	4.0	14
153	Ontological user profiling in recommender systems. ACM Transactions on Information Systems, 2004, 22, 54-88.	3.8	561
154	Enhancing Services and Applications with Knowledge and Semantics. , 2004, , 431-458.		28
155	On the use of agents in a BioInformatics grid. , 2003, , .		24
156	SoFAR. , 2003, , 49-67.		1
157	The Grid. SIGMOD Record, 2002, 31, 65-70.	0.7	49
158	Transparent Fault Tolerance for Web Services Based Architectures. Lecture Notes in Computer Science, 2002, , 889-898.	1.0	51
159	MEMOIR â€" an open framework for enhanced navigation of distributed information. Information Processing and Management, 2001, 37, 53-74.	5.4	28
160	Linking in context. , 2001, , .		25
161	Architectural design of a multi-agent system for handling metadata streams. , 2001, , .		5
162	Its about time. , 2001, , .		6

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163	Content-based navigation of music using melodic pitch contours. Multimedia Systems, 2000, 8, 190-200.	3.0	4
164	Musical Part Classification in Content Based Systems. Lecture Notes in Computer Science, 2000, , 66-76.	1.0	1
165	Weaving the Pervasive Information Fabric. Lecture Notes in Computer Science, 2000, , 87-95.	1.0	5
166	The evolution of hypertext link services. ACM Computing Surveys, 1999, 31, 9.	16.1	9
167	The significance of linking. ACM Computing Surveys, 1999, 31, 10.	16.1	5
168	Where have you been from here? Trials in hypertext systems. ACM Computing Surveys, 1999, 31, 11.	16.1	14
169	A multiagent system for content based navigation of music. , 1999, , .		0
170	Parallel implementation of a genetic-programming based tool for symbolic regression. Information Processing Letters, 1998, 66, 299-307.	0.4	23
171	Exact tests for two-way symmetriccontingency tables. Statistics and Computing, 1998, 8, 391-399.	0.8	7
172	An open framework for collaborative distributed information management. Computer Networks, 1998, 30, 624-625.	1.0	5
173	Application-independent link processing. Computer Networks, 1998, 30, 616-618.	1.0	2
174	Microcosm TNG. , 1997, , .		3
175	Distributed multimedia information systems. IEEE MultiMedia, 1997, 4, 68-73.	1.5	0
176	Introducing the declarative dungeon. Lecture Notes in Computer Science, 1997, , 407-417.	1.0	0
177	NeXeme: A distributed scheme based on Nexus. Lecture Notes in Computer Science, 1997, , 581-590.	1.0	10
178	A distributed hypermedia link service. , 1996, , .		13
179	Sharing code through first-class environments. ACM SIGPLAN Notices, 1996, 31, 251-261.	0.2	1
180	The role of distributed Lisp in open hypermedia information systems. Lecture Notes in Computer Science, 1996, , 330-335.	1.0	1

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181	Open information services. Computer Networks, 1996, 28, 1027-1036.	1.0	18
182	Sharing code through first-class environments. , 1996, , .		9
183	Applying Open Hypertext Principles to the WWW. Workshops in Computing, 1996, , 174-181.	0.4	5
184	Design of a concurrent and distributed language. Lecture Notes in Computer Science, 1993, , 233-259.	1.0	14
185	An open framework for integrating widely distributed hypermedia resources. , 0, , .		9
186	Enhancing the Distributed Link Service for multimedia and collaboration. , 0, , .		1
187	An open architecture for supporting collaboration on the Web. , 0, , .		9
188	An extensible interpreter for experimentation with the semantics of Prograph. , 0, , .		0
189	Mobile link services with MQSeries Everyplace. , 0, , .		0
190	A distance based semantic search algorithm for peer-to-peer open hypermedia systems. , 0, , .		2
191	The Semantic Grid: A Future e-Science Infrastructure. , 0, , 437-470.		126
192	The Evolution of the Grid. , 0, , 65-100.		90
193	Minimising intrusiveness in pervasive computing environments using multi-agent negotiation. , 0, , .		13
194	Grid-Enabling an Existing Instrument-Based National Service. , 0, , .		4
195	Experiences with GRIA â€" Industrial Applications on a Web Services Grid. , 0, , .		40
196	A Reusable, Extensible Infrastructure for Augmented Field Trips. , 0, , .		8
197	The Collaborative Semantic Grid. , 0, , .		3
198	Adaptive Sampling and Routing in a Floodplain Monitoring Sensor Network. , 0, , .		2

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199	A Storm in an IoT Cup: The Emergence of Cyber-Physical Social Machines. SSRN Electronic Journal, 0, , .	0.4	7
200	Research Objects: Towards Exchange and Reuse of Digital Knowledge. Nature Precedings, 0, , .	0.1	11