

# Ioannis N Athanasiadis

## List of Publications by Year in descending order

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Version: 2024-02-01

107  
papers

2,638  
citations

218592

26  
h-index

214721

47  
g-index

119  
all docs

119  
docs citations

119  
times ranked

3304  
citing authors

#	ARTICLE	IF	CITATIONS
1	Introducing digital twins to agriculture. <i>Computers and Electronics in Agriculture</i> , 2021, 184, 105942.	3.7	213
2	Agricultural production systems modelling and software: Current status and future prospects. <i>Environmental Modelling and Software</i> , 2015, 72, 276-286.	1.9	165
3	Towards a new generation of agricultural system data, models and knowledge products: Information and communication technology. <i>Agricultural Systems</i> , 2017, 155, 200-212.	3.2	143
4	Modelling with knowledge: A review of emerging semantic approaches to environmental modelling. <i>Environmental Modelling and Software</i> , 2009, 24, 577-587.	1.9	109
5	Fuzzy lattice reasoning (FLR) classifier and its application for ambient ozone estimation. <i>International Journal of Approximate Reasoning</i> , 2007, 45, 152-188.	1.9	108
6	Machine learning for large-scale crop yield forecasting. <i>Agricultural Systems</i> , 2021, 187, 103016.	3.2	107
7	A Hybrid Agent-Based Model for Estimating Residential Water Demand. <i>Simulation</i> , 2005, 81, 175-187.	1.1	106
8	Machine learning for ecosystem services. <i>Ecosystem Services</i> , 2018, 33, 165-174.	2.3	103
9	Towards globally customizable ecosystem service models. <i>Science of the Total Environment</i> , 2019, 650, 2325-2336.	3.9	91
10	A review of Agent Based Modeling for agricultural policy evaluation. <i>Agricultural Systems</i> , 2018, 164, 95-106.	3.2	90
11	Enabling reusability of plant phenomic datasets with MIAPPE 1.1. <i>New Phytologist</i> , 2020, 227, 260-273.	3.5	84
12	Eight grand challenges in socio-environmental systems modeling. <i>Socio-Environmental Systems Modeling</i> , 0, 2, 16226.	0.0	82
13	Environmental Data Science. <i>Environmental Modelling and Software</i> , 2018, 106, 4-12.	1.9	71
14	A database for integrated assessment of European agricultural systems. <i>Environmental Science and Policy</i> , 2009, 12, 573-587.	2.4	63
15	An agent-based intelligent environmental monitoring system. <i>Management of Environmental Quality</i> , 2004, 15, 238-249.	2.2	60
16	A Miniature Data Repository on a Raspberry Pi. <i>Electronics (Switzerland)</i> , 2017, 6, 1.	1.8	50
17	Big data in agriculture: Between opportunity and solution. <i>Agricultural Systems</i> , 2022, 195, 103298.	3.2	47
18	Semantic links in integrated modelling frameworks. <i>Mathematics and Computers in Simulation</i> , 2008, 78, 412-423.	2.4	46

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19	Comparing regression, naive Bayes, and random forest methods in the prediction of individual survival to second lactation in Holstein cattle. <i>Journal of Dairy Science</i> , 2019, 102, 9409-9421.	1.4	46
20	Harmonization and translation of crop modeling data to ensure interoperability. <i>Environmental Modelling and Software</i> , 2014, 62, 495-508.	1.9	45
21	Blockchain Applications in the Agri-Food Domain: The First Wave. <i>Frontiers in Blockchain</i> , 2020, 3, .	1.6	43
22	Defining assessment projects and scenarios for policy support: Use of ontology in Integrated Assessment and Modelling. <i>Environmental Modelling and Software</i> , 2009, 24, 1491-1500.	1.9	40
23	Linking models for assessing agricultural land use change. <i>Computers and Electronics in Agriculture</i> , 2011, 76, 148-160.	3.7	40
24	Machine learning for regional crop yield forecasting in Europe. <i>Field Crops Research</i> , 2022, 276, 108377.	2.3	36
25	Data mining for agent reasoning: A synergy for training intelligent agents. <i>Engineering Applications of Artificial Intelligence</i> , 2007, 20, 1097-1111.	4.3	35
26	Privacy-preserving computation of participatory noise maps in the cloud. <i>Journal of Systems and Software</i> , 2014, 92, 170-183.	3.3	34
27	The misconception of ecosystem disservices: How a catchy term may yield the wrong messages for science and society. <i>Ecosystem Services</i> , 2014, 10, 52-53.	2.3	33
28	Machine learning for research on climate change adaptation policy integration: an exploratory UK case study. <i>Regional Environmental Change</i> , 2020, 20, 1.	1.4	31
29	The current and future uses of machine learning in ecosystem service research. <i>Science of the Total Environment</i> , 2021, 799, 149263.	3.9	25
30	A multi-agent system for meteorological radar data management and decision support. <i>Environmental Modelling and Software</i> , 2009, 24, 1264-1273.	1.9	23
31	A Component-Based Framework for Simulating Agricultural Production and Externalities. , 2010, , 63-108.		23
32	Conceptual advancement of socio-ecological modelling of ecosystem services for re-evaluating Brownfield land. <i>Ecosystem Services</i> , 2018, 33, 29-39.	2.3	23
33	Ontology for Seamless Integration of Agricultural Data and Models. <i>Communications in Computer and Information Science</i> , 2009, , 282-293.	0.4	22
34	A Privacy-Preserving Cloud Computing System for Creating Participatory Noise Maps. , 2012, , .		19
35	Semantics for interoperability of distributed data and models: Foundations for better-connected information. <i>F1000Research</i> , 0, 6, 686.	0.8	19
36	Knowledge Discovery for Operational Decision Support in Air Quality Management. <i>Journal of Environmental Informatics</i> , 2007, 9, 100-107.	6.0	19

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37	Simulation-assisted machine learning for operational digital twins. <i>Environmental Modelling and Software</i> , 2022, 148, 105274.	1.9	19
38	Policy attention to climate change impacts, adaptation and vulnerability: a global assessment of National Communications (1994â€“2019). <i>Climate Policy</i> , 2022, 22, 97-111.	2.6	17
39	Social influence and water conservation: an agent-based approach. <i>Computing in Science and Engineering</i> , 2005, 7, 65-70.	1.2	15
40	A retraining methodology for enhancing agent intelligence. <i>Knowledge-Based Systems</i> , 2007, 20, 388-396.	4.0	14
41	A Framework for Constructing Multi-agent Applications and Training Intelligent Agents. <i>Lecture Notes in Computer Science</i> , 2004, , 96-109.	1.0	13
42	Chapter Twelve Data Mining for Environmental Systems. <i>Developments in Integrated Environmental Assessment</i> , 2008, , 205-228.	0.0	13
43	Pythia: A Privacy-Enhanced Personalized Contextual Suggestion System for Tourism. , 2015, , .		13
44	Domain-Driven Design of Big Data Systems Based on a Reference Architecture. , 2017, , 49-68.		11
45	Air Quality Assessment Using Fuzzy Lattice Reasoning (FLR). , 2006, , .		10
46	Enriching environmental software model interfaces through ontology-based tools. <i>International Journal of Applied Systemic Studies</i> , 2011, 4, 94.	0.0	10
47	webXTREME : R -based web tool for calculating agroclimatic indices of extreme events. <i>Computers and Electronics in Agriculture</i> , 2017, 136, 111-116.	3.7	10
48	The Flows of Nature to People, and of People to Nature: Applying Movement Concepts to Ecosystem Services. <i>Land</i> , 2021, 10, 576.	1.2	10
49	Crop2ML: An open-source multi-language modeling framework for the exchange and reuse of crop model components. <i>Environmental Modelling and Software</i> , 2021, 142, 105055.	1.9	10
50	Ontologies, JavaBeans and Relational Databases for enabling semantic programming. <i>Proceedings - IEEE Computer Society's International Computer Software and Applications Conference</i> , 2007, , .	0.0	9
51	Chapter Seven Integrated Modelling Frameworks for Environmental Assessment and Decision Support. <i>Developments in Integrated Environmental Assessment</i> , 2008, , 101-118.	0.0	9
52	A Generic Farming System Simulator. , 2010, , 109-132.		9
53	An intelligent service layer upgrades environmental information management. <i>IT Professional</i> , 2006, 8, 34-39.	1.4	8
54	A Privacy-by-Design Contextual Suggestion System for Tourism. <i>Journal of Sensor and Actuator Networks</i> , 2016, 5, 10.	2.3	8

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55	Mixing process-based and data-driven approaches in yield prediction. <i>European Journal of Agronomy</i> , 2022, 139, 126569.	1.9	8
56	Indirectly driven knowledge modelling in ecology. <i>International Journal of Metadata, Semantics and Ontologies</i> , 2008, 3, 210.	0.2	7
57	A template framework for environmental timeseries data acquisition. <i>Environmental Modelling and Software</i> , 2019, 117, 237-249.	1.9	7
58	Impacts of Climate Variability and Change on Agricultural Systems in East Africa. <i>ICP Series on Climate Change Impacts, Adaptation, and Mitigation</i> , 2015, , 75-124.	0.4	6
59	The Fuzzy Lattice Reasoning (FLR) Classifier for Mining Environmental Data. , 2007, , 175-193.		6
60	Towards a Virtual Enterprise Architecture for the Environmental Sector. , 2008, , 256-266.		6
61	Simulating adaptation strategies to offset potential impacts of climate variability and change on maize yields in Embu County, Kenya. <i>PLoS ONE</i> , 2020, 15, e0241147.	1.1	6
62	A semantic approach for timeseries data fusion. <i>Computers and Electronics in Agriculture</i> , 2020, 169, 105171.	3.7	5
63	Improving predictive performance on survival in dairy cattle using an ensemble learning approach. <i>Computers and Electronics in Agriculture</i> , 2020, 177, 105675.	3.7	5
64	Towards a Semantically Unified Environmental Information Space. <i>IFIP Advances in Information and Communication Technology</i> , 2011, , 407-418.	0.5	5
65	Blockchain Applications in the Agri-Food Domain: The First Wave. <i>Frontiers in Blockchain</i> , 2020, 3, .	1.6	5
66	Information Technologies in Environmental Engineering. <i>Environmental Science and Engineering</i> , 2011, , .	0.1	4
67	Managing Variant Calling Files the Big Data Way. , 2017, , .		4
68	Invited review: Toward a common language in data-driven mastitis detection research. <i>Journal of Dairy Science</i> , 2021, 104, 10449-10461.	1.4	4
69	A Methodology for Developing Environmental Information Systems with Software Agents. , 2009, , 119-137.		4
70	A Web-Based Software System for Model Integration in Impact Assessments of Agricultural and Environmental Policies. , 2010, , 207-234.		4
71	Publishing and Linking Semantically Annotated Agro-environmental Resources to LOD with AGROPub. <i>Communications in Computer and Information Science</i> , 2011, , 478-488.	0.4	4
72	Reuse of process-based models: automatic transformation into many programming languages and simulation platforms. <i>In Silico Plants</i> , 2020, 2, .	0.8	4

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73	A roadmap to domain specific programming languages for environmental modeling. , 2013, , .		3
74	Storing, combining and analysing turkey experimental data in the Big Data era. Animal, 2020, 14, 2397-2403.	1.3	3
75	Investigation of Common Big Data Analytics and Decision-Making Requirements Across Diverse Precision Agriculture and Livestock Farming Use Cases. IFIP Advances in Information and Communication Technology, 2020, , 139-150.	0.5	3
76	Introducing a Content Integration Process for a Federation of Agricultural Institutional Repositories. Communications in Computer and Information Science, 2011, , 467-477.	0.4	3
77	Feature Driven Survey of Big Data Systems. , 2016, , .		3
78	Defining and Classifying Infrastructural Contestation: Towards a Synergy Between Anthropology and Data Science. IFIP Advances in Information and Communication Technology, 2020, , 32-47.	0.5	3
79	Training Intelligent Agents in the Semantic Web Era: The Golf Advisor Agent. , 2007, , .		2
80	Application of Data Mining and Intelligent Agent Technologies to Concurrent Engineering. International Journal of Product Lifecycle Management, 2007, 2, 173.	0.1	2
81	Information Enrichment Using TaToo™s Semantic Framework. Communications in Computer and Information Science, 2010, , 149-159.	0.4	2
82	A machine learning approach using random forest and LASSO to predict wine quality. International Journal of Sustainable Agricultural Management and Informatics, 2021, 7, 232.	0.1	2
83	Combining Telecom Data with Heterogeneous Data Sources for Traffic and Emission Assessments – An Agent-Based Approach. ISPRS International Journal of Geo-Information, 2022, 11, 366.	1.4	2
84	A retraining methodology for enhancing agent intelligence. , 0, , .		1
85	Publishing agro-environmental resources as linked data. International Journal of Metadata, Semantics and Ontologies, 2012, 7, 25.	0.2	1
86	Data Interoperability Tools for Regional Integrated Assessments. ICP Series on Climate Change Impacts, Adaptation, and Mitigation, 2015, , 147-171.	0.4	1
87	A Sensor Observation Service Extension for Internet of Things. Lecture Notes in Computer Science, 2017, , 56-71.	1.0	1
88	Semantic Modeling in Farming Systems Research - The Case of the Agricultural Management Definition Module. Environmental Science and Engineering, 2007, , 417-432.	0.1	1
89	Identifying Smart Solutions for Fighting Illegal Logging and Timber Trade. IFIP Advances in Information and Communication Technology, 2013, , 143-153.	0.5	1
90	Towards a Virtual Enterprise Architecture for the Environmental Sector. , 0, , .		1

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91	Data Mining Methods for Quality Assurance in an Environmental Monitoring Network. Lecture Notes in Computer Science, 2010, , 451-456.	1.0	0
92	Top 10 reviewers for environmental modelling and software in 2015. Environmental Modelling and Software, 2016, 83, iii.	1.9	0
93	Spatial classification with fuzzy lattice reasoning. , 2017, , .		0
94	Location-Specific vs Location-Agnostic Machine Learning Metamodels for Predicting Pasture Nitrogen Response Rate. Lecture Notes in Computer Science, 2021, , 45-54.	1.0	0
95	Towards a Virtual Enterprise Architecture for the Environmental Sector. , 2008, , 368-378.		0
96	Interoperable Multimedia Annotation and Retrieval for the Tourism Sector. Communications in Computer and Information Science, 2015, , 65-76.	0.4	0
97	Editorial: The inaugural issue of Socio-Environmental Systems Modelling (SESMO). Socio-Environmental Systems Modeling, 0, 1, 16399.	0.0	0
98	Training Intelligent Agents in the Semantic Web Era: The Golf Advisor Agent. , 2007, , .		0
99	Title is missing!. , 2020, 15, e0241147.		0
100	Title is missing!. , 2020, 15, e0241147.		0
101	Title is missing!. , 2020, 15, e0241147.		0
102	Title is missing!. , 2020, 15, e0241147.		0
103	Title is missing!. , 2020, 15, e0241147.		0
104	Title is missing!. , 2020, 15, e0241147.		0
105	Title is missing!. , 2020, 15, e0241147.		0
106	Title is missing!. , 2020, 15, e0241147.		0
107	Towards a Virtual Enterprise Architecture for the Environmental Sector. , 0, , 125-136.		0