

Ismael Rafols

List of Publications by Year in descending order

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Version: 2024-02-01

79
papers

7,336
citations

126858

33
h-index

143943

57
g-index

87
all docs

87
docs citations

87
times ranked

5140
citing authors

#	ARTICLE	IF	CITATIONS
1	Bibliometrics: The Leiden Manifesto for research metrics. <i>Nature</i> , 2015, 520, 429-431.	13.7	1,465
2	Is science becoming more interdisciplinary? Measuring and mapping six research fields over time. <i>Scientometrics</i> , 2009, 81, 719-745.	1.6	546
3	Approaches to understanding and measuring interdisciplinary scientific research (IDR): A review of the literature. <i>Journal of Informetrics</i> , 2011, 5, 14-26.	1.4	524
4	Diversity and network coherence as indicators of interdisciplinarity: case studies in bionanoscience. <i>Scientometrics</i> , 2010, 82, 263-287.	1.6	467
5	How journal rankings can suppress interdisciplinary research: A comparison between <i>Innovation Studies and Business & Management</i> . <i>Research Policy</i> , 2012, 41, 1262-1282.	3.3	406
6	A global map of science based on the ISI subject categories. <i>Journal of the Association for Information Science and Technology</i> , 2009, 60, 348-362.	2.6	386
7	Science overlay maps: A new tool for research policy and library management. <i>Journal of the Association for Information Science and Technology</i> , 2010, 61, 1871-1887.	2.6	309
8	Five ways to ensure that models serve society: a manifesto. <i>Nature</i> , 2020, 582, 482-484.	13.7	249
9	Global maps of science based on the new Web-of-Science categories. <i>Scientometrics</i> , 2013, 94, 589-593.	1.6	209
10	Distributions of avalanches in martensitic transformations. <i>Physical Review Letters</i> , 1994, 72, 1694-1697.	2.9	205
11	Indicators of the interdisciplinarity of journals: Diversity, centrality, and citations. <i>Journal of Informetrics</i> , 2011, 5, 87-100.	1.4	201
12	Does Interdisciplinary Research Lead to Higher Citation Impact? The Different Effect of Proximal and Distal Interdisciplinarity. <i>PLoS ONE</i> , 2015, 10, e0135095.	1.1	188
13	Interactive overlay maps for US patent (USPTO) data based on International Patent Classification (IPC). <i>Scientometrics</i> , 2014, 98, 1583-1599.	1.6	142
14	Content-based and algorithmic classifications of journals: Perspectives on the dynamics of scientific communication and indexer effects. <i>Journal of the Association for Information Science and Technology</i> , 2009, 60, 1823-1835.	2.6	132
15	Interface growth and pattern formation in bacterial colonies. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1998, 249, 517-524.	1.2	120
16	How cross-disciplinary is bionanotechnology? Explorations in the specialty of molecular motors. <i>Scientometrics</i> , 2007, 70, 633-650.	1.6	110
17	Patent overlay mapping: Visualizing technological distance. <i>Journal of the Association for Information Science and Technology</i> , 2014, 65, 2432-2443.	1.5	110
18	Big Pharma, little science?. <i>Technological Forecasting and Social Change</i> , 2014, 81, 22-38.	6.2	105

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19	Interactive overlays: A new method for generating global journal maps from Web-of-Science data. Journal of Informetrics, 2012, 6, 318-332.	1.4	97
20	Interactive overlays of journals and the measurement of interdisciplinarity on the basis of aggregated journalâ€™journal citations. Journal of the Association for Information Science and Technology, 2013, 64, 2573-2586.	2.6	92
21	Local emergence and global diffusion of research technologies: An exploration of patterns of network formation. Journal of the Association for Information Science and Technology, 2011, 62, 846-860.	2.6	73
22	Can epidemic models describe the diffusion of topics across disciplines?. Journal of Informetrics, 2010, 4, 74-82.	1.4	71
23	To what extent is inclusion in the Web of Science an indicator of journal â€™qualityâ€™?. Research Evaluation, 2018, 27, 106-118.	1.3	68
24	Bibliometric perspectives on medical innovation using the medical subject Headings of <scp>P</scp>ub<scp>M</scp>ed. Journal of the Association for Information Science and Technology, 2012, 63, 2239-2253.	2.6	67
25	Why researchers publish in non-mainstream journals: Training, knowledge bridging, and gap filling. Research Policy, 2017, 46, 1666-1680.	3.3	65
26	Strategic intelligence on emerging technologies: Scientometric overlay mapping. Journal of the Association for Information Science and Technology, 2017, 68, 214-233.	1.5	58
27	Using altmetrics for contextualised mapping of societal impact: From hits to networks. Science and Public Policy, 2018, 45, 815-826.	1.2	56
28	The relation between research priorities and societal demands: The case of rice. Research Policy, 2019, 48, 949-967.	3.3	46
29	Exploring why global health needs are unmet by research efforts: the potential influences of geography, industry and publication incentives. Health Research Policy and Systems, 2020, 18, 47.	1.1	45
30	A framework for knowledge integration and diffusion. Journal of Documentation, 2012, 68, 31-44.	0.9	43
31	Research Portfolio Analysis in Science Policy: Moving from Financial Returns to Societal Benefits. Minerva, 2015, 53, 89-115.	1.4	40
32	Statistics of avalanches in martensitic transformations. I. Acoustic emission experiments. Physical Review B, 1995, 52, 12644-12650.	1.1	39
33	Experimental Investigation on the Formation of Dense-Branching-Morphology-Like Colonies in Bacteria. Journal of the Physical Society of Japan, 1998, 67, 3630-3636.	0.7	39
34	Visualization of Disciplinary Profiles: Enhanced Science Overlay Maps. Journal of Data and Information Science, 2017, 2, 68-111.	0.5	36
35	S&T indicators in the wild: Contextualization and participation for responsible metrics. Research Evaluation, 2019, 28, 7-22.	1.3	36
36	Cell type proportioning in Dictyostelium slugs: lack of regulation within a 2.5-fold tolerance range. Differentiation, 2001, 67, 107-116.	1.0	35

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37	Interdisciplinarity and research on local issues: evidence from a developing country. Research Evaluation, 2014, 23, 195-209.	1.3	32
38	Knowledge Integration and Diffusion: Measures and Mapping of Diversity and Coherence. , 2014, , 169-190.		31
39	Institutional shaping of research priorities: A case study on avian influenza. Research Policy, 2018, 47, 1975-1989.	3.3	31
40	Improving fitness: Mapping research priorities against societal needs on obesity. Journal of Informetrics, 2017, 11, 1095-1113.	1.4	29
41	STRATEGIES FOR KNOWLEDGE ACQUISITION IN BIONANOTECHNOLOGY. Innovation: the European Journal of Social Science Research, 2007, 20, 395-412.	0.9	28
42	Towards an alternative framework for the evaluation of translational research initiatives. Research Evaluation, 2016, 25, 235-243.	1.3	26
43	Letter: A call for a radical change in research evaluation in Spain. Profesional De La Informacion, 0, , .	2.7	24
44	On the Dominance of Quantitative Evaluation in Peripherall Countries: Auditing Research with Technologies of Distance. SSRN Electronic Journal, 0, , .	0.4	23
45	Statistics of avalanches in martensitic transformations. II. Modeling. Physical Review B, 1995, 52, 12651-12656.	1.1	20
46	Bridging the divide between qualitative and quantitative science studies. Quantitative Science Studies, 2020, 1, 918-926.	1.6	16
47	Interdisciplinarity in Research Evaluation. , 2017, , .		13
48	Do synthesis centers synthesize? A semantic analysis of topical diversity in research. Research Policy, 2021, 50, 104069.	3.3	13
49	Dynamics of Granular Flow through a Vertical Pipe: Effect of Medium Flow. Journal of the Physical Society of Japan, 1998, 67, 1616-1624.	0.7	11
50	Missing links in nanomaterials governance: bringing industrial dynamics and downstream policies into view. Journal of Technology Transfer, 2011, 36, 624-639.	2.5	11
51	Scientometric Mapping as a Strategic Intelligence Tool for the Governance of Emerging Technologies.. SSRN Electronic Journal, 0, , .	0.4	11
52	Heat conduction in a metallic rod with Newtonian losses. American Journal of Physics, 1992, 60, 846-852.	0.3	9
53	DARE to be different? A novel approach for analysing diversity in collaborative research projects. Research Evaluation, 2020, 29, 300-315.	1.3	9
54	Research Portfolios in Science Policy: Moving from Financial Returns to Societal Benefits. SSRN Electronic Journal, 0, , .	0.4	9

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55	Sequential partitioning: An alternative to understanding size distributions of avalanches in first-order phase transitions. <i>Physical Review E</i> , 1995, 52, 5671-5674.	0.8	8
56	Quantitative analysis of technology futures: A review of techniques, uses and characteristics. <i>Science and Public Policy</i> , 2016, 43, 630-645.	1.2	8
57	Is Research Responding to Health Needs?. <i>SSRN Electronic Journal</i> , 0, , .	0.4	8
58	Why bibliometric indicators break down : unstable parameters, incorrect models and irrelevant prope. <i>BiD</i> , 2018, , .	0.1	8
59	Mapping graphene science and development: Focused research with multiple application areas. <i>Bulletin of the Association for Information Science & Technology</i> , 2015, 41, 22-25.	0.3	7
60	Mapping research in assisted reproduction worldwide. <i>Reproductive BioMedicine Online</i> , 2020, 40, 71-81.	1.1	7
61	The Differing Meanings of Indicators Under Different Policy Contexts. The Case of Internationalisation. , 2020, , 213-232.		6
62	Big Pharma, Little Science? A Bibliometric Perspective on Big Pharma's R&D Decline. <i>SSRN Electronic Journal</i> , 2012, , .	0.4	5
63	Strategies for Knowledge Acquisition in Bionanotechnology: Why Are Interdisciplinary Practices Less Widespread Than Expected?. <i>SSRN Electronic Journal</i> , 2007, , .	0.4	4
64	To What Extent is Inclusion in the Web of Science an Indicator of Journal 'Quality'?. <i>SSRN Electronic Journal</i> , 0, , .	0.4	4
65	To what extent is inclusion in the Web of Science an indicator of journal 'quality'?. <i>Research Evaluation</i> , 2018, 27, 284-284.	1.3	4
66	Why Bibliometric Indicators Break Down: Unstable Parameters, Incorrect Models and Irrelevant Properties. <i>SSRN Electronic Journal</i> , 0, , .	0.4	4
67	Mapping the De Facto Governance of Emerging Science and Technologies. <i>SSRN Electronic Journal</i> , 0, , .	0.4	4
68	Exploring Why Global Health Needs Are Unmet by Public Research Efforts: The Potential Influences of Geography, Industry, and Publication Incentives. <i>SSRN Electronic Journal</i> , 0, , .	0.4	3
69	Medidas insuficientes para un cambio en la evaluación de la investigación en España: glosando las nuevas directrices de la ANECA. <i>Recerca</i> , 0, , .	0.2	3
70	Dare to be Different? Applying Diversity Heuristics to the Evaluation of Collaborative Research. <i>SSRN Electronic Journal</i> , 0, , .	0.4	2
71	Designing indicators for opening up evaluation: insights from research assessment. , 2021, , 165-193.		2
72	Research Portfolios in Science Policy: Moving from Financial Returns to Societal Benefits. <i>SSRN Electronic Journal</i> , 0, , .	0.4	2

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73	Visual Analysis of Patent Data Through Global Maps and Overlays. The Kluwer International Series on Information Retrieval, 2017, , 281-295.	1.0	1
74	Using Almetrics for Contextualised Mapping of Societal Impact: From Hits to Networks. SSRN Electronic Journal, 0, , .	0.4	1
75	Disciplinary Diversity and Topic Coherence: The Case of Hybrid Nanomaterials Research. Collnet Journal of Scientometrics and Information Management, 2009, 3, 79-88.	0.4	0
76	Interdisciplinarity and Research on Local Issues: Evidence from a Developing Country. SSRN Electronic Journal, 0, , .	0.4	0
77	Institutional Shaping of Research Priorities: A Case Study on Avian Influenza. SSRN Electronic Journal, 0, , .	0.4	0
78	S&T Indicators â€œIn the Wildâ€™: Contextualisation and Participation for Responsible Metrics. SSRN Electronic Journal, 2018, , .	0.4	0
79	To What Extent is Inclusion in the Web of Science an Indicator of Journal â€™Qualityâ€™?. SSRN Electronic Journal, 0, , .	0.4	0