Ludo Waltman

List of Publications by Citations

94 papers	13,486 citations	44 h-index	105 g-index
105 ext. papers	19,130 ext. citations	5.8 avg, IF	7.5 L-index

#	Paper	IF	Citations
94	Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, **2010**, 84, 523-538	3	3982
93	Bibliometrics: The Leiden Manifesto for research metrics. *Nature*, **2015**, 520, 429-31	50.4	908
92	A unified approach to mapping and clustering of bibliometric networks. *Journal of Informetrics*, **2010**, 4, 629-635	3.1	739
91	From Louvain to Leiden: guaranteeing well-connected communities. *Scientific Reports*, **2019**, 9, 5233	4.9	707
90	A review of the literature on citation impact indicators. *Journal of Informetrics*, **2016**, 10, 365-391	3.1	476
89	Citation-based clustering of publications using CitNetExplorer and VOSviewer. *Scientometrics*, **2017**, 111, 1053-1070	3	452
88	A smart local moving algorithm for large-scale modularity-based community detection. *European Physical Journal B*, **2013**, 86, 1	1.2	411
87	Visualizing Bibliometric Networks **2014**, 285-320		375
86	Science of science. *Science*, **2018**, 359,	33.3	373
85	How to normalize cooccurrence data? An analysis of some well-known similarity measures. *Journal of the Association for Information Science and Technology*, **2009**, 60, 1635-1651		354
84	Constructing bibliometric networks: A comparison between full and fractional counting. *Journal of Informetrics*, **2016**, 10, 1178-1195	3.1	311
83	A comparison of two techniques for bibliometric mapping: Multidimensional scaling and VOS. *Journal of the Association for Information Science and Technology*, **2010**, 61, 2405-2416		309
82	A new methodology for constructing a publication-level classification system of science. *Journal of the Association for Information Science and Technology*, **2012**, 63, 2378-2392		290
81	CitNetExplorer: A new software tool for analyzing and visualizing citation networks. *Journal of Informetrics*, **2014**, 8, 802-823	3.1	254
80	Towards a new crown indicator: Some theoretical considerations. *Journal of Informetrics*, **2011**, 5, 37-47	3.1	249
79	The Leiden ranking 2011/2012: Data collection, indicators, and interpretation. *Journal of the Association for Information Science and Technology*, **2012**, 63, 2419-2432		228
78	The inconsistency of the h-index. *Journal of the Association for Information Science and Technology*, **2012**, 63, 406-415		182

77	Towards a new crown indicator: an empirical analysis. *Scientometrics*, **2011**, 87, 467-481	3	152
76	Citation analysis may severely underestimate the impact of clinical research as compared to basic research. *PLoS ONE*, **2013**, 8, e62395	3.7	137
75	Large-scale analysis of the accuracy of the journal classification systems of Web of Science and Scopus. *Journal of Informetrics*, **2016**, 10, 347-364	3.1	132
74	Automatic term identification for bibliometric mapping. *Scientometrics*, **2010**, 82, 581-596	3	129
73	VOS: A New Method for Visualizing Similarities Between Objects. *Studies in Classification, Data Analysis, and Knowledge Organization*, **2007**, 299-306	0.2	129
72	BIBLIOMETRIC MAPPING OF THE COMPUTATIONAL INTELLIGENCE FIELD. *International Journal of Uncertainty, Fuzziness and Knowlege-Based Systems*, **2007**, 15, 625-645	0.8	128
71	Field-normalized citation impact indicators and the choice of an appropriate counting method. *Journal of Informetrics*, **2015**, 9, 872-894	3.1	127
70	Some modifications to the SNIP journal impact indicator. *Journal of Informetrics*, **2013**, 7, 272-285	3.1	116
69	An empirical analysis of the use of alphabetical authorship in scientific publishing. *Journal of Informetrics*, **2012**, 6, 700-711	3.1	101
68	Generalizing the h- and g-indices. *Journal of Informetrics*, **2008**, 2, 263-271	3.1	96
67	On the calculation of percentile-based bibliometric indicators. *Journal of the Association for Information Science and Technology*, **2013**, 64, 372-379		93
66	A systematic empirical comparison of different approaches for normalizing citation impact indicators. *Journal of Informetrics*, **2013**, 7, 833-849	3.1	83
65	Source normalized indicators of citation impact: an overview of different approaches and an empirical comparison. *Scientometrics*, **2013**, 96, 699-716	3	81
64	Field-normalized citation impact indicators using algorithmically constructed classification systems of science. *Journal of Informetrics*, **2015**, 9, 102-117	3.1	76
63	F1000 Recommendations as a Potential New Data Source for Research Evaluation: A Comparison With Citations. *Journal of the Association for Information Science and Technology*, **2014**, 65, 433-445	2.7	76
62	Rivals for the crown: Reply to Opthof and Leydesdorff. *Journal of Informetrics*, **2010**, 4, 431-435	3.1	70
61	Large-scale comparison of bibliographic data sources: Scopus, Web of Science, Dimensions, Crossref, and Microsoft Academic. *Quantitative Science Studies*, **2021**, 2, 20-41	3.8	64
60	Clustering Scientific Publications Based on Citation Relations: A Systematic Comparison of Different Methods. *PLoS ONE*, **2016**, 11, e0154404	3.7	63

59	Predicting the long-term citation impact of recent publications. *Journal of Informetrics*, **2015**, 9, 642-657	3.1	62
58	Characterizing in-text citations in scientific articles: A large-scale analysis. *Journal of Informetrics*, **2018**, 12, 59-73	3.1	62
57	Globalisation of science in kilometres. *Journal of Informetrics*, **2011**, 5, 574-582	3.1	54
56	Universality of citation distributions revisited. *Journal of the Association for Information Science and Technology*, **2012**, 63, 72-77		53
55	The detection of "hot regions" in the geography of science—A visualization approach by using density maps. *Journal of Informetrics*, **2011**, 5, 547-553	3.1	49
54	-learning agents in a Cournot oligopoly model. *Journal of Economic Dynamics and Control*, **2008**, 32, 3275-3293	1.3	48
53	A Large-Scale Analysis of Impact Factor Biased Journal Self-Citations. *PLoS ONE*, **2016**, 11, e0161021	3.7	46
52	Mapping patient safety: a large-scale literature review using bibliometric visualisation techniques. *BMJ Open*, **2014**, 4, e004468	3	45
51	A recursive field-normalized bibliometric performance indicator: an application to the field of library and information science. *Scientometrics*, **2011**, 89, 301-314	3	44
50	Appropriate similarity measures for author co-citation analysis. *Journal of the Association for Information Science and Technology*, **2008**, 59, 1653-1661		43
49	Counting publications and citations: Is more always better?. *Journal of Informetrics*, **2013**, 7, 635-641	3.1	42
48	Visualizing the computational intelligence field [Application Notes]. *IEEE Computational Intelligence Magazine*, **2006**, 1, 6-10	5.6	38
47	The relation between Eigenfactor, audience factor, and influence weight. *Journal of the Association for Information Science and Technology*, **2010**, 61, 1476-1486		27
46	A scientometric overview of CORD-19. *PLoS ONE*, **2021**, 16, e0244839	3.7	27
45	Rethinking impact factors: better ways to judge a journal. *Nature*, **2019**, 569, 621-623	50.4	25
44	Systematic analysis of agreement between metrics and peer review in the UK REF. *Palgrave Communications*, **2019**, 5,	5.3	24
43	The correlation between citation-based and expert-based assessments of publication channels: SNIP and SJR vs. Norwegian quality assessments. *Journal of Informetrics*, **2014**, 8, 985-996	3.1	22
42	Relations between the shape of a size-frequency distribution and the shape of a rank-frequency distribution. *Information Processing and Management*, **2011**, 47, 238-245	6.3	16

41	On the correlation between bibliometric indicators and peer review: reply to Opthof and Leydesdorff. *Scientometrics*, **2011**, 88, 1017-1022	3	16
40	The Closer the Better: Similarity of Publication Pairs at Different Cocitation Levels. *Journal of the Association for Information Science and Technology*, **2018**, 69, 600-609	2.7	16
39	Visualizing the Computational Intelligence Field. *IEEE Computational Intelligence Magazine*, **2006**, 1, 6-10	5.6	15
38	Economic modeling using evolutionary algorithms: the effect of a binary encoding of strategies. *Journal of Evolutionary Economics*, **2011**, 21, 737-756	1.9	14
37	Some comments on Egghe's derivation of the impact factor distribution. *Journal of Informetrics*, **2009**, 3, 363-366	3.1	14
36	A principled methodology for comparing relatedness measures for clustering publications. *Quantitative Science Studies*,1-23	3.8	14
35	A scientometric overview of CORD-19		14
34	The elephant in the room: The problem of quantifying productivity in evaluative scientometrics. *Journal of Informetrics*, **2016**, 10, 671-674	3.1	14
33	Field Normalization of Scientometric Indicators. *Springer Handbooks*, **2019**, 281-300	1.3	13
32	Some comments on the question whether co-occurrence data should be normalized. *Journal of the Association for Information Science and Technology*, **2007**, 58, 1701-1703		12
31	Exploring the relationship between the engineering and physical sciences and the health and life sciences by advanced bibliometric methods. *PLoS ONE*, **2014**, 9, e111530	3.7	12
30	Topic identification challenge. *Scientometrics*, **2017**, 111, 1223-1224	3	11
29	Special issue on bibliographic data sources. *Quantitative Science Studies*, **2020**, 1, 360-362	3.8	10
28	A Novel Algorithm for Visualizing Concept Associations		10
27	Maximum likelihood parameter estimation in probabilistic fuzzy classifiers		10
26	Use of the journal impact factor for assessing individual articles need not be statistically wrong. *F1000Research*, **2020**, 9, 366	3.6	9
25	Conceptual difficulties in the use of statistical inference in citation analysis. *Journal of Informetrics*, **2016**, 10, 1249-1252	3.1	8
24	Some Limitations of the H Index: A Commentary on Ruscio and Colleagues' Analysis of Bibliometric Indices. *Measurement*, **2012**, 10, 172-175	1.3	8

23	Collaborations span 1,553 kilometres. *Nature*, **2011**, 473, 154	50.4	8
22	Investigating disagreement in the scientific literature.. *ELife*, **2021**, 10,	8.9	8
21	PageRank-Related Methods for Analyzing Citation Networks **2014**, 83-100		7
20	A Longitudinal Analysis of Publications on Maternal Mortality. *Paediatric and Perinatal Epidemiology* , **2015**, 29, 481-9	2.7	6
19	Robust Evolutionary Algorithm Design for Socio-Economic Simulation: Some Comments. *Computational Economics*, **2009**, 33, 103-105	1.4	6
18	A multidimensional framework for characterizing the citation impact of scientific publications. *Quantitative Science Studies*, **2021**, 2, 155-183	3.8	6
17	Use of the journal impact factor for assessing individual articles need not be statistically wrong. *F1000Research*, **2020**, 9, 366	3.6	5
16	A Theoretical Analysis of Cooperative Behavior in Multi-agent Q-learning **2007**,		4
15	Some comments on the journal weighted impact factor proposed by Habibzadeh and Yadollahie. *Journal of Informetrics*, **2008**, 2, 369-372	3.1	4
14	Visualizing the WCCI 2006 Knowledge Domain **2006**,		4
13	Intermediacy of publications. *Royal Society Open Science*, **2020**, 7, 190207	3.3	3
12	Opening science: The rebirth of a scholarly journal. *Quantitative Science Studies*, **2020**, 1, 1-3	3.8	3
11	The relationship between publication volume of biomedical research and burden of disease		3
10	An Evolutionary Model of Price Competition Among Spatially Distributed Firms. *Computational Economics*, **2013**, 42, 373-391	1.4	2
9	Algorithmic labeling in hierarchical classifications of publications: Evaluation of bibliographic fields and term weighting approaches. *Journal of the Association for Information Science and Technology*, **2021**, 72, 853-869	2.7	2
8	Impact factors: Is the Nature Index at odds with DORA?. *Nature*, **2017**, 545, 412	50.4	1
7	A mathematical analysis of the long-run behavior of genetic algorithms for social modeling. *Soft Computing*, **2012**, 16, 1071-1089	3.5	1
6	Analyzing the activities of visitors of the Leiden Ranking website. *Journal of Data and Information Science*, **2018**, 3, 81-98	1.2	1

5	A large-scale bibliometric analysis of global climate change research between 2001 and 2018. *Climatic Change*, **2022**, 170, 1	4.5	1
4	Innovations in peer review in scholarly publishing: a meta-summary. *Wellcome Open Research*,7, 82	4.8	1
3	Science of science. *Bibliosfera*, **2021**, 25-42	0.4	0
2	Improving the evaluation of worldwide biomedical research output: classification method and standardised bibliometric indicators by disease. *BMJ Open*, **2018**, 8, e020818	3	
1	On the proper understanding of the limiting behavior of generalizations of the h- and g-indices. *Journal of Informetrics*, **2009**, 3, 369-370	3.1	