

# Kevin W Boyack

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1348199/publications.pdf>

Version: 2024-02-01

78  
papers

7,344  
citations

87723

38  
h-index

85405

71  
g-index

85  
all docs

85  
docs citations

85  
times ranked

5621  
citing authors

#	ARTICLE	IF	CITATIONS
1	Visualizing knowledge domains. <i>Annual Review of Information Science &amp; Technology</i> , 2005, 37, 179-255.	2.6	1,024
2	Co-citation analysis, bibliographic coupling, and direct citation: Which citation approach represents the research front most accurately?. <i>Journal of the Association for Information Science and Technology</i> , 2010, 61, 2389-2404.	2.6	880
3	Mapping the backbone of science. <i>Scientometrics</i> , 2005, 64, 351-374.	1.6	693
4	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
5	Identifying emerging topics in science and technology. <i>Research Policy</i> , 2014, 43, 1450-1467.	3.3	275
6	Which Type of Citation Analysis Generates the Most Accurate Taxonomy of Scientific and Technical Knowledge?. <i>Journal of the Association for Information Science and Technology</i> , 2017, 68, 984-998.	1.5	213
7	Clustering More than Two Million Biomedical Publications: Comparing the Accuracies of Nine Text-Based Similarity Approaches. <i>PLoS ONE</i> , 2011, 6, e18029.	1.1	207
8	Toward a consensus map of science. <i>Journal of the Association for Information Science and Technology</i> , 2009, 60, 455-476.	2.6	180
9	Reproducible research practices, transparency, and open access data in the biomedical literature, 2015-2017. <i>PLoS Biology</i> , 2018, 16, e2006930.	2.6	174
10	A standardized citation metrics author database annotated for scientific field. <i>PLoS Biology</i> , 2019, 17, e3000384.	2.6	173
11	Design and Update of a Classification System: The UCSD Map of Science. <i>PLoS ONE</i> , 2012, 7, e39464.	1.1	154
12	Thousands of scientists publish a paper every five days. <i>Nature</i> , 2018, 561, 167-169.	13.7	149
13	OpenOrd: an open-source toolbox for large graph layout. <i>Proceedings of SPIE</i> , 2011, , .	0.8	144
14	Domain visualization using VxInsight® for science and technology management. <i>Journal of the Association for Information Science and Technology</i> , 2002, 53, 764-774.	2.6	123
15	Identifying a better measure of relatedness for mapping science. <i>Journal of the Association for Information Science and Technology</i> , 2006, 57, 251-263.	2.6	115
16	Updated science-wide author databases of standardized citation indicators. <i>PLoS Biology</i> , 2020, 18, e3000918.	2.6	110
17	Mapping knowledge domains: Characterizing PNAS. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 5192-5199.	3.3	101
18	Mapping the structure and evolution of chemistry research. <i>Scientometrics</i> , 2009, 79, 45-60.	1.6	100

#	ARTICLE	IF	CITATIONS
19	Indicator-assisted evaluation and funding of research: Visualizing the influence of grants on the number and citation counts of research papers. <i>Journal of the Association for Information Science and Technology</i> , 2003, 54, 447-461.	2.6	99
20	Creation of a highly detailed, dynamic, global model and map of science. <i>Journal of the Association for Information Science and Technology</i> , 2014, 65, 670-685.	1.5	97
21	Bibliometrics: Is your most cited work your best?. <i>Nature</i> , 2014, 514, 561-562.	13.7	95
22	Estimates of the Continuously Publishing Core in the Scientific Workforce. <i>PLoS ONE</i> , 2014, 9, e101698.	1.1	91
23	Improving the accuracy of co-citation clustering using full text. <i>Journal of the Association for Information Science and Technology</i> , 2013, 64, 1759-1767.	2.6	90
24	Characterizing in-text citations in scientific articles: A large-scale analysis. <i>Journal of Informetrics</i> , 2018, 12, 59-73.	1.4	89
25	Quantitative evaluation of large maps of science. <i>Scientometrics</i> , 2006, 68, 475-499.	1.6	79
26	Assessment of transparency indicators across the biomedical literature: How open is open?. <i>PLoS Biology</i> , 2021, 19, e3001107.	2.6	75
27	Multiple Citation Indicators and Their Composite across Scientific Disciplines. <i>PLoS Biology</i> , 2016, 14, e1002501.	2.6	74
28	Using detailed maps of science to identify potential collaborations. <i>Scientometrics</i> , 2009, 79, 27-44.	1.6	70
29	Using global mapping to create more accurate document-level maps of research fields. <i>Journal of the Association for Information Science and Technology</i> , 2011, 62, 1-18.	2.6	69
30	Metrics associated with NIH funding: a high-level view. <i>Journal of the American Medical Informatics Association: JAMIA</i> , 2011, 18, 423-431.	2.2	67
31	Dynamics of co-authorship and productivity across different fields of scientific research. <i>PLoS ONE</i> , 2018, 13, e0189742.	1.1	64
32	Research portfolio analysis and topic prominence. <i>Journal of Informetrics</i> , 2017, 11, 1158-1174.	1.4	58
33	Comparison of topic extraction approaches and their results. <i>Scientometrics</i> , 2017, 111, 1169-1221.	1.6	56
34	Citation Metrics: A Primer on How (Not) to Normalize. <i>PLoS Biology</i> , 2016, 14, e1002542.	2.6	55
35	The rapid, massive growth of COVID-19 authors in the scientific literature. <i>Royal Society Open Science</i> , 2021, 8, 210389.	1.1	55
36	Measuring science's technology interaction using rare inventor's author names. <i>Journal of Informetrics</i> , 2008, 2, 173-182.	1.4	53

#	ARTICLE	IF	CITATIONS
37	Toward an objective, reliable and accurate method for measuring research leadership. <i>Scientometrics</i> , 2010, 82, 539-553.	1.6	40
38	Characterizing the emergence of two nanotechnology topics using a contemporaneous global micro-model of science. <i>Journal of Engineering and Technology Management - JET-M</i> , 2014, 32, 147-159.	1.4	40
39	A list of highly influential biomedical researchers, 1996–2011. <i>European Journal of Clinical Investigation</i> , 2013, 43, 1339-1365.	1.7	38
40	Including cited non-source items in a large-scale map of science: What difference does it make?. <i>Journal of Informetrics</i> , 2014, 8, 569-580.	1.4	37
41	Massive covidization of research citations and the citation elite. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	3.3	37
42	Classification of individual articles from all of science by research level. <i>Journal of Informetrics</i> , 2014, 8, 1-12.	1.4	34
43	A principled methodology for comparing relatedness measures for clustering publications. <i>Quantitative Science Studies</i> , 0, , 1-23.	1.6	30
44	Thought leadership: A new indicator for national and institutional comparison. <i>Scientometrics</i> , 2008, 75, 239-250.	1.6	27
45	Comparative Analysis of Multiple Genome-Scale Data Sets. <i>Genome Research</i> , 2002, 12, 1564-1573.	2.4	26
46	Toward predicting research proposal success. <i>Scientometrics</i> , 2018, 114, 449-461.	1.6	26
47	Investigating the effect of global data on topic detection. <i>Scientometrics</i> , 2017, 111, 999-1015.	1.6	22
48	Investigating disagreement in the scientific literature. <i>ELife</i> , 2021, 10, .	2.8	22
49	Citations and certainty: a new interpretation of citation counts. <i>Scientometrics</i> , 2019, 118, 1079-1092.	1.6	21
50	The Closer the Better: Similarity of Publication Pairs at Different Cocitation Levels. <i>Journal of the Association for Information Science and Technology</i> , 2018, 69, 600-609.	1.5	20
51	Mapping science introduction: Past, present and future. <i>Bulletin of the Association for Information Science &amp; Technology</i> , 2015, 41, 12-16.	0.3	18
52	An Introduction to Modeling Science: Basic Model Types, Key Definitions, and a General Framework for the Comparison of Process Models. <i>Understanding Complex Systems</i> , 2012, , 3-22.	0.3	17
53	The Research Focus of Nations: Economic vs. Altruistic Motivations. <i>PLoS ONE</i> , 2017, 12, e0169383.	1.1	17
54	A detailed open access model of the PubMed literature. <i>Scientific Data</i> , 2020, 7, 408.	2.4	17

#	ARTICLE	IF	CITATIONS
55	Galileo's stream: A framework for understanding knowledge production. <i>Research Policy</i> , 2008, 37, 330-352.	3.3	16
56	Thesaurus-based methods for mapping contents of publication sets. <i>Scientometrics</i> , 2017, 111, 1141-1155.	1.6	16
57	A novel approach to predicting exceptional growth in research. <i>PLoS ONE</i> , 2020, 15, e0239177.	1.1	16
58	Topic identification challenge. <i>Scientometrics</i> , 2017, 111, 1223-1224.	1.6	14
59	Citation metrics for appraising scientists: misuse, gaming and proper use. <i>Medical Journal of Australia</i> , 2020, 212, 247.	0.8	14
60	Dual-stokes cars system for simulataneous measurement of temperature and multiple species in turbulent flames. <i>Proceedings of the Combustion Institute</i> , 1991, 23, 1893-1899.	0.3	11
61	Mapping altruism. <i>Journal of Informetrics</i> , 2014, 8, 431-447.	1.4	11
62	Work honored by Nobel prizes clusters heavily in a few scientific fields. <i>PLoS ONE</i> , 2020, 15, e0234612.	1.1	10
63	Creation and Analysis of Large-Scale Bibliometric Networks. <i>Springer Handbooks</i> , 2019, , 187-212.	0.3	9
64	A comparison of large-scale science models based on textual, direct citation and hybrid relatedness. <i>Quantitative Science Studies</i> , 2020, 1, 1570-1585.	1.6	7
65	Mapping, illuminating, and interacting with science. , 2007, , .		6
66	Characterization of the Peer Review Network at the Center for Scientific Review, National Institutes of Health. <i>PLoS ONE</i> , 2014, 9, e104244.	1.1	5
67	A recursive process for mapping and clustering technology literatures: case study in solid-state lighting. <i>International Journal of Technology Transfer and Commercialisation</i> , 2009, 8, 51.	0.2	4
68	A Call to Researchers. <i>D-Lib Magazine</i> , 2001, 7, .	0.5	4
69	Prosperity Game to Teach Global Competitiveness to University Students. <i>Journal of Teaching in International Business</i> , 1997, 8, 5-19.	0.2	3
70	AI Research Funding Portfolios and Extreme Growth. <i>Frontiers in Research Metrics and Analytics</i> , 2021, 6, 630124.	0.9	3
71	Robust Methods for Microarray Analysis. , 0, , 99-130.		2
72	Exploring the relationships between a map of altruism and a map of science. <i>Bulletin of the Association for Information Science &amp; Technology</i> , 2015, 41, 30-33.	0.3	2

#	ARTICLE	IF	CITATIONS
73	Evaluation of Laboratory Directed Research and Development investment areas at Sandia. Technological Forecasting and Social Change, 2005, 72, 1122-1136.	6.2	1
74	Citations and certainty: a new interpretation of citation counts. , 2019, 118, 1079.		1
75	A novel approach to predicting exceptional growth in research. , 2020, 15, e0239177.		0
76	A novel approach to predicting exceptional growth in research. , 2020, 15, e0239177.		0
77	A novel approach to predicting exceptional growth in research. , 2020, 15, e0239177.		0
78	A novel approach to predicting exceptional growth in research. , 2020, 15, e0239177.		0