Kevin W Boyack

List of Publications by Year
in descending order

78	7,344	87888 38	85541 71
papers	citations	h-index	g-index

85	85	85	5621
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Visualizing knowledge domains. Annual Review of Information Science & Technology, 2005, 37, 179-255.	2.2	1,024
2	Coâ€¢citation analysis, bibliographic coupling, and direct citation: Which citation approach represents the research front most accurately?. Journal of the Association for Information Science and Technology, 2010, 61, 2389-2404.	2.6	880
3	Mapping the backbone of science. Scientometrics, 2005, 64, 351-374.	3.0	693
4	Approaches to understanding and measuring interdisciplinary scientific research (IDR): A review of the literature. Journal of Informetrics, 2011, 5, 14-26.	2.9	524
5	Identifying emerging topics in science and technology. Research Policy, 2014, 43, 1450-1467.	6.4	275
6	Which Type of Citation Analysis Generates the Most Accurate Taxonomy of Scientific and Technical Knowledge?. Journal of the Association for Information Science and Technology, 2017, 68, 984-998.	2.9	213
7	Clustering More than Two Million Biomedical Publications: Comparing the Accuracies of Nine Text-Based Similarity Approaches. PLoS ONE, 2011, 6, e18029.	2.5	207
8	Toward a consensus map of science. Journal of the Association for Information Science and Technology, 2009, 60, 455-476.	2.6	180
9	Reproducible research practices, transparency, and open access data in the biomedical literature, 2015â€“2017. PLoS Biology, 2018, 16, e2006930.	5.6	174
10	A standardized citation metrics author database annotated for scientific field. PLoS Biology, 2019, 17, e3000384.	5.6	173
11	Design and Update of a Classification System: The UCSD Map of Science. PLoS ONE, 2012, 7, e39464.	2.5	154
12	Thousands of scientists publish a paper every five days. Nature, 2018, 561, 167-169.	27.8	149
13	OpenOrd: an open-source toolbox for large graph layout. Proceedings of SPIE, 2011, , .	0.8	144
14	Domain visualization using VxInsightÂ® for science and technology management. Journal of the Association for Information Science and Technology, 2002, 53, 764-774.	2.6	123
15	Identifying a better measure of relatedness for mapping science. Journal of the Association for Information Science and Technology, 2006, 57, 251-263.	2.6	115
16	Updated science-wide author databases of standardized citation indicators. PLoS Biology, 2020, 18, e3000918.	5.6	110
17	Mapping knowledge domains: Characterizing PNAS. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 5192-5199.	7.1	101
18	Mapping the structure and evolution of chemistry research. Scientometrics, 2009, 79, 45-60.	3.0	100

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19	Indicator-assisted evaluation and funding of research: Visualizing the influence of grants on the number and citation counts of research papers. Journal of the Association for Information Science and Technology, 2003, 54, 447-461.	2.6	99
20	Creation of a highly detailed, dynamic, global model and map of science. Journal of the Association for Information Science and Technology, 2014, 65, 670-685.	2.9	97
21	Bibliometrics: Is your most cited work your best?. Nature, 2014, 514, 561-562.	27.8	95
22	Estimates of the Continuously Publishing Core in the Scientific Workforce. PLoS ONE, 2014, 9, e101698.	2.5	91
23	Improving the accuracy of coâ€citation clustering using full text. Journal of the Association for Information Science and Technology, 2013, 64, 1759-1767.	2.6	90
24	Characterizing in-text citations in scientific articles: A large-scale analysis. Journal of Informetrics, 2018, 12, 59-73.	2.9	89
25	Quantitative evaluation of large maps of science. Scientometrics, 2006, 68, 475-499.	3.0	79
26	Assessment of transparency indicators across the biomedical literature: How open is open?. PLoS Biology, 2021, 19, e3001107.	5.6	75
27	Multiple Citation Indicators and Their Composite across Scientific Disciplines. PLoS Biology, 2016, 14, e1002501.	5.6	74
28	Using detailed maps of science to identify potential collaborations. Scientometrics, 2009, 79, 27-44.	3.0	70
29	Using global mapping to create more accurate document-level maps of research fields. Journal of the Association for Information Science and Technology, 2011, 62, 1-18.	2.6	69
30	Metrics associated with NIH funding: a high-level view. Journal of the American Medical Informatics Association: JAMIA, 2011, 18, 423-431.	4.4	67
31	Dynamics of co-authorship and productivity across different fields of scientific research. PLoS ONE, 2018, 13, e0189742.	2.5	64
32	Research portfolio analysis and topic prominence. Journal of Informetrics, 2017, 11, 1158-1174.	2.9	58
33	Comparison of topic extraction approaches and their results. Scientometrics, 2017, 111, 1169-1221.	3.0	56
34	Citation Metrics: A Primer on How (Not) to Normalize. PLoS Biology, 2016, 14, e1002542.	5.6	55
35	The rapid, massive growth of COVID-19 authors in the scientific literature. Royal Society Open Science, 2021, 8, 210389.	2.4	55
36	Measuring scienceâ€“technology interaction using rare inventorâ€“author names. Journal of Informetrics, 2008, 2, 173-182.	2.9	53

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37	Toward an objective, reliable and accurate method for measuring research leadership. Scientometrics, 2010, 82, 539-553.	3.0	40
38	Characterizing the emergence of two nanotechnology topics using a contemporaneous global micro-model of science. Journal of Engineering and Technology Management - JET-M, 2014, 32, 147-159.	2.7	40
39	A list of highly influential biomedical researchers, 1996â€“2011. European Journal of Clinical Investigation, 2013, 43, 1339-1365.	3.4	38
40	Including cited non-source items in a large-scale map of science: What difference does it make?. Journal of Informetrics, 2014, 8, 569-580.	2.9	37
41	Massive covidization of research citations and the citation elite. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	37
42	Classification of individual articles from all of science by research level. Journal of Informetrics, 2014, 8, 1-12.	2.9	34
43	A principled methodology for comparing relatedness measures for clustering publications. Quantitative Science Studies, 0, , 1-23.	3.3	30
44	Thought leadership: A new indicator for national and institutional comparison. Scientometrics, 2008, 75, 239-250.	3.0	27
45	Comparative Analysis of Multiple Genome-Scale Data Sets. Genome Research, 2002, 12, 1564-1573.	5.5	26
46	Toward predicting research proposal success. Scientometrics, 2018, 114, 449-461.	3.0	26
47	Investigating the effect of global data on topic detection. Scientometrics, 2017, 111, 999-1015.	3.0	22
48	Investigating disagreement in the scientific literature. ELife, 2021, 10, .	6.0	22
49	Citations and certainty: a new interpretation of citation counts. Scientometrics, 2019, 118, 1079-1092.	3.0	21
50	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.	2.9	20
51	Mapping science introduction: Past, present and future. Bulletin of the Association for Information Science & Technology, 2015, 41, 12-16.	0.1	18
52	An Introduction to Modeling Science: Basic Model Types, Key Definitions, and a General Framework for the Comparison of Process Models. Understanding Complex Systems, 2012, , 3-22.	0.6	17
53	The Research Focus of Nations: Economic vs. Altruistic Motivations. PLoS ONE, 2017, 12, e0169383.	2.5	17
54	A detailed open access model of the PubMed literature. Scientific Data, 2020, 7, 408.	5.3	17

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55	Galileo's stream: A framework for understanding knowledge production. Research Policy, 2008, 37, 330-352.	6.4	16
56	Thesaurus-based methods for mapping contents of publication sets. Scientometrics, 2017, 111, 1141-1155.	3.0	16
57	A novel approach to predicting exceptional growth in research. PLoS ONE, 2020, 15, e0239177.	2.5	16
58	Topic identification challenge. Scientometrics, 2017, 111, 1223-1224.	3.0	14
59	Citation metrics for appraising scientists: misuse, gaming and proper use. Medical Journal of Australia, 2020, 212, 247.	1.7	14
60	Dual-stokes cars system for simulataneous measurement of temperature and multiple species in turbulent flames. Proceedings of the Combustion Institute, 1991, 23, 1893-1899.	0.3	11
61	Mapping altruism. Journal of Informetrics, 2014, 8, 431-447.	2.9	11
62	Work honored by Nobel prizes clusters heavily in a few scientific fields. PLoS ONE, 2020, 15, e0234612.	2.5	10
63	Creation and Analysis of Large-Scale Bibliometric Networks. Springer Handbooks, 2019, , 187-212.	0.6	9
64	A comparison of large-scale science models based on textual, direct citation and hybrid relatedness. Quantitative Science Studies, 2020, 1, 1570-1585.	3.3	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. PLoS ONE, 2014, 9, e104244.	2.5	5
67	A recursive process for mapping and clustering technology literatures: case study in solid-state lighting. International Journal of Technology Transfer and Commercialisation, 2009, 8, 51.	0.2	4
68	A Call to Researchers. D-Lib Magazine, 2001, 7, .	0.5	4
69	Prosperity Game to Teach Global Competitiveness to University Students. Journal of Teaching in International Business, 1997, 8, 5-19.	0.5	3
70	AI Research Funding Portfolios and Extreme Growth. Frontiers in Research Metrics and Analytics, 2021, 6, 630124.	1.9	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. Bulletin of the Association for Information Science & Technology, 2015, 41, 30-33.	0.1	2

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73	Evaluation of Laboratory Directed Research and Development investment areas at Sandia. Technological Forecasting and Social Change, 2005, 72, 1122-1136.	11.6	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