Kevin W Boyack

List of Publications by Year in Descending Order

79 papers	4,951 citations	35 h-index	70 g-index
85 ext. papers	6,056 ext. citations	6 avg, IF	6.26 L-index

#	Paper	IF	Citations
79	Assessment of transparency indicators across the biomedical literature: How open is open?. *PLoS Biology*, **2021**, 19, e3001107	9.7	19
78	AI Research Funding Portfolios and Extreme Growth. *Frontiers in Research Metrics and Analytics*, **2021**, 6, 630124	1.3	0
77	The rapid, massive growth of COVID-19 authors in the scientific literature. *Royal Society Open Science*, **2021**, 8, 210389	3.3	11
76	Investigating disagreement in the scientific literature.. *ELife*, **2021**, 10,	8.9	8
75	A detailed open access model of the PubMed literature. *Scientific Data*, **2020**, 7, 408	8.2	7
74	Citation metrics for appraising scientists: misuse, gaming and proper use. *Medical Journal of Australia*, **2020**, 212, 247-249.e1	4	7
73	Updated science-wide author databases of standardized citation indicators. *PLoS Biology*, **2020**, 18, e3000918	9.7	37
72	Work honored by Nobel prizes clusters heavily in a few scientific fields. *PLoS ONE*, **2020**, 15, e0234612	3.7	6
71	A novel approach to predicting exceptional growth in research. *PLoS ONE*, **2020**, 15, e0239177	3.7	9
70	A comparison of large-scale science models based on textual, direct citation and hybrid relatedness. *Quantitative Science Studies*, **2020**, 1, 1570-1585	3.8	3
69	A novel approach to predicting exceptional growth in research **2020**, 15, e0239177		
68	A novel approach to predicting exceptional growth in research **2020**, 15, e0239177		
67	A novel approach to predicting exceptional growth in research **2020**, 15, e0239177		
66	A novel approach to predicting exceptional growth in research **2020**, 15, e0239177		
65	Citations and certainty: a new interpretation of citation counts. *Scientometrics*, **2019**, 118, 1079-1092	3	10
64	A standardized citation metrics author database annotated for scientific field. *PLoS Biology*, **2019**, 17, e3000384	9.7	80
63	Creation and Analysis of Large-Scale Bibliometric Networks. *Springer Handbooks*, **2019**, 187-212	1.3	5

62			
61	Dynamics of co-authorship and productivity across different fields of scientific research. *PLoS ONE*, **2018**, 13, e0189742	3.7	39
60	Characterizing in-text citations in scientific articles: A large-scale analysis. *Journal of Informetrics*, **2018**, 12, 59-73	3.1	62
59	Toward predicting research proposal success. *Scientometrics*, **2018**, 114, 449-461	3	11
58	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
57	Reproducible research practices, transparency, and open access data in the biomedical literature, 2015-2017. *PLoS Biology*, **2018**, 16, e2006930	9.7	109
56	Comparison of topic extraction approaches and their results. *Scientometrics*, **2017**, 111, 1169-1221	3	40
55	Investigating the effect of global data on topic detection. *Scientometrics*, **2017**, 111, 999-1015	3	16
54	Thesaurus-based methods for mapping contents of publication sets. *Scientometrics*, **2017**, 111, 1141-1155	3	12
53	Topic identification challenge. *Scientometrics*, **2017**, 111, 1223-1224	3	11
52	Research portfolio analysis and topic prominence. *Journal of Informetrics*, **2017**, 11, 1158-1174	3.1	42
51	The Research Focus of Nations: Economic vs. Altruistic Motivations. *PLoS ONE*, **2017**, 12, e0169383	3.7	14
50	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	2.7	148
49	Citation Metrics: A Primer on How (Not) to Normalize. *PLoS Biology*, **2016**, 14, e1002542	9.7	37
48	Multiple Citation Indicators and Their Composite across Scientific Disciplines. *PLoS Biology*, **2016**, 14, e1002501	9.7	40
47	Mapping science introduction: Past, present and future **2015**, 41, 12-16		16
46	Exploring the relationships between a map of altruism and a map of science **2015**, 41, 30-33		1
45	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	2.7	77

44	Identifying emerging topics in science and technology. *Research Policy*, **2014**, 43, 1450-1467	7.5	200
43	Classification of individual articles from all of science by research level. *Journal of Informetrics*, **2014**, 8, 1-12	3.1	26
42	Mapping altruism. *Journal of Informetrics*, **2014**, 8, 431-447	3.1	10
41	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	3.7	37
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	3.1	34
39	Characterization of the peer review network at the Center for Scientific Review, National Institutes of Health. *PLoS ONE*, **2014**, 9, e104244	3.7	4
38	Estimates of the continuously publishing core in the scientific workforce. *PLoS ONE*, **2014**, 9, e101698	3.7	69
37	Bibliometrics: Is your most cited work your best?. *Nature*, **2014**, 514, 561-2	50.4	67
36	Improving the accuracy of co-citation clustering using full text. *Journal of the Association for Information Science and Technology*, **2013**, 64, 1759-1767		79
35	A list of highly influential biomedical researchers, 1996-2011. *European Journal of Clinical Investigation*, **2013**, 43, 1339-65	4.6	28
34	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	0.4	11
33	Design and update of a classification system: the UCSD map of science. *PLoS ONE*, **2012**, 7, e39464	3.7	130
32	OpenOrd: an open-source toolbox for large graph layout **2011**,		85
31	Clustering more than two million biomedical publications: comparing the accuracies of nine text-based similarity approaches. *PLoS ONE*, **2011**, 6, e18029	3.7	163
30	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		51
29	Approaches to understanding and measuring interdisciplinary scientific research (IDR): A review of the literature. *Journal of Informetrics*, **2011**, 5, 14-26	3.1	382
28	Metrics associated with NIH funding: a high-level view. *Journal of the American Medical Informatics Association: JAMIA*, **2011**, 18, 423-31	8.6	44
27	Toward an objective, reliable and accurate method for measuring research leadership. *Scientometrics*, **2010**, 82, 539-553	3	35

26	Co-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		556
25	Toward a consensus map of science. *Journal of the Association for Information Science and Technology*, **2009**, 60, 455-476		155
24	Using detailed maps of science to identify potential collaborations. *Scientometrics*, **2009**, 79, 27-44	3	58
23	Mapping the structure and evolution of chemistry research. *Scientometrics*, **2009**, 79, 45-60	3	68
22	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	0.5	4
21	Galileo's stream: A framework for understanding knowledge production. *Research Policy*, **2008**, 37, 330-352	7.5	11
20	Thought leadership: A new indicator for national and institutional comparison. *Scientometrics*, **2008**, 75, 239-250	3	20
19	Measuring science–technology interaction using rare inventor–author names. *Journal of Informetrics*, **2008**, 2, 173-182	3.1	48
18	Mapping, illuminating, and interacting with science **2007**,		2
17	Identifying a better measure of relatedness for mapping science. *Journal of the Association for Information Science and Technology*, **2006**, 57, 251-263		87
16	Quantitative evaluation of large maps of science. *Scientometrics*, **2006**, 68, 475-499	3	53
15	Evaluation of Laboratory Directed Research and Development investment areas at Sandia. *Technological Forecasting and Social Change*, **2005**, 72, 1122-1136	9.5	1
14	Visualizing knowledge domains. *Annual Review of Information Science & Technology*, **2005**, 37, 179-255		640
13	Mapping the backbone of science. *Scientometrics*, **2005**, 64, 351-374	3	520
12	Mapping knowledge domains: characterizing PNAS. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101 Suppl 1, 5192-9	11.5	75
11	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		75
10	Domain visualization using VxInsight® for science and technology management. *Journal of the Association for Information Science and Technology*, **2002**, 53, 764-774		84
9	Comparative analysis of multiple genome-scale data sets. *Genome Research*, **2002**, 12, 1564-73	9.7	19

8	Information Visualization, Human-Computer Interaction, and Cognitive Psychology: Domain Visualizations. *Lecture Notes in Computer Science*, **2002**, 145-158	0.9	5
7	A Call to Researchers. *D-Lib Magazine*, **2001**, 7,		4
6	Prosperity Game to Teach Global Competitiveness to University Students. *Journal of Teaching in International Business*, **1997**, 8, 5-19	0.9	2
5	Dual-stokes cars system for simulataneous measurement of temperature and multiple species in turbulent flames. *Proceedings of the Combustion Institute*, **1991**, 23, 1893-1899		6
4	Robust Methods for Microarray Analysis99-130		
3	A principled methodology for comparing relatedness measures for clustering publications. *Quantitative Science Studies*,1-23	3.8	14
2	Assessment of transparency indicators across the biomedical literature: how open is open?		1
1	The rapid, massive growth of COVID-19 authors in the scientific literature		7