Yi Zhang

List of Publications by Year
in descending order

80 papers	1,882 citations	279701 23 h-index	302012 39 g-index
82 all docs	82 docs citations	82 times ranked	1122 citing authors

#	ARTICLE	IF	CITATIONS
1	Topic analysis and forecasting for science, technology and innovation: Methodology with a case study focusing on big data research. Technological Forecasting and Social Change, 2016, 105, 179-191.	6.2	132
2	â€œTerm clumpingâ€•for technical intelligence: A case study on dye-sensitized solar cells. Technological Forecasting and Social Change, 2014, 85, 26-39.	6.2	131
3	Does deep learning help topic extraction? A kernel k-means clustering method with word embedding. Journal of Informetrics, 2018, 12, 1099-1117.	1.4	105
4	Four dimensional Science and Technology planning: A new approach based on bibliometrics and technology roadmapping. Technological Forecasting and Social Change, 2014, 81, 39-48.	6.2	104
5	Consolidation in a crisis: Patterns of international collaboration in early COVID-19 research. PLoS ONE, 2020, 15, e0236307.	1.1	102
6	Exploring Topics in Bibliometric Research Through Citation Networks and Semantic Analysis. Frontiers in Research Metrics and Analytics, 2021, 6, 742311.	0.9	71
7	Detecting and predicting the topic change of Knowledge-based Systems: A topic-based bibliometric analysis from 1991 to 2016. Knowledge-Based Systems, 2017, 133, 255-268.	4.0	70
8	Scientific evolutionary pathways: Identifying and visualizing relationships for scientific topics. Journal of the Association for Information Science and Technology, 2017, 68, 1925-1939.	1.5	68
9	A hybrid method to trace technology evolution pathways: a case study of 3D printing. Scientometrics, 2017, 111, 185-204.	1.6	64
10	A hybrid visualisation model for technology roadmapping: bibliometrics, qualitative methodology and empirical study. Technology Analysis and Strategic Management, 2013, 25, 707-724.	2.0	63
11	How to combine term clumping and technology roadmapping for newly emerging science & technology competitive intelligence: â€œproblem & solutionâ€•pattern based semantic TRIZ tool and case study. Scientometrics, 2014, 101, 1375-1389.	1.6	59
12	A hybrid similarity measure method for patent portfolio analysis. Journal of Informetrics, 2016, 10, 1108-1130.	1.4	59
13	Technology roadmapping for competitive technical intelligence. Technological Forecasting and Social Change, 2016, 110, 175-186.	6.2	56
14	Triple Helix innovation in Chinaâ€™s dye-sensitized solar cell industry: hybrid methods with semantic TRIZ and technology roadmapping. Scientometrics, 2014, 99, 55-75.	1.6	50
15	A patent analysis method to trace technology evolutionary pathways. Scientometrics, 2014, 100, 705-721.	1.6	50
16	Discovering and forecasting interactions in big data research: A learning-enhanced bibliometric study. Technological Forecasting and Social Change, 2019, 146, 795-807.	6.2	50
17	How Does National Scientific Funding Support Emerging Interdisciplinary Research: A Comparison Study of Big Data Research in the US and China. PLoS ONE, 2016, 11, e0154509.	1.1	40
18	Parallel or Intersecting Lines? Intelligent Bibliometrics for Investigating the Involvement of Data Science in Policy Analysis. IEEE Transactions on Engineering Management, 2021, 68, 1259-1271.	2.4	38

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19	Ethics and privacy of artificial intelligence: Understandings from bibliometrics. Knowledge-Based Systems, 2021, 222, 106994.	4.0	31
20	Unraveling the capabilities that enable digital transformation: A data-driven methodology and the case of artificial intelligence. Advanced Engineering Informatics, 2021, 50, 101368.	4.0	31
21	An entropy-based indicator system for measuring the potential of patents in technological innovation: rejecting moderation. Scientometrics, 2017, 111, 1925-1946.	1.6	29
22	Identifying citation patterns of scientific breakthroughs: A perspective of dynamic citation process. Information Processing and Management, 2021, 58, 102428.	5.4	28
23	Exploring the knowledge spillovers of a technology in an entrepreneurial ecosystem—The case of artificial intelligence in Sydney. Thunderbird International Business Review, 2020, 62, 457-474.	0.9	27
24	Topic evolution, disruption and resilience in early COVID-19 research. Scientometrics, 2021, 126, 4225-4253.	1.6	25
25	A hybrid approach to detecting technological recombination based on text mining and patent network analysis. Scientometrics, 2019, 121, 699-737.	1.6	23
26	Requirement-oriented core technological components' identification based on SAO analysis. Scientometrics, 2017, 112, 1229-1248.	1.6	21
27	Text mining to gain technical intelligence for acquired target selection: A case study for China's computer numerical control machine tools industry. Technological Forecasting and Social Change, 2017, 116, 162-180.	6.2	19
28	Exploring Technology Evolution Pathways to Facilitate Technology Management: From a Technology Life Cycle Perspective. IEEE Transactions on Engineering Management, 2021, 68, 1347-1359.	2.4	19
29	Tracking and Mining the COVID-19 Research Literature. Frontiers in Research Metrics and Analytics, 2020, 5, 594060.	0.9	18
30	Explicating AI Literacy of Employees at Digital Workplaces. IEEE Transactions on Engineering Management, 2024, 71, 810-823.	2.4	18
31	Collaborative networks in gene editing. Nature Biotechnology, 2019, 37, 1107-1109.	9.4	17
32	Bi-layer network analytics: A methodology for characterizing emerging general-purpose technologies. Journal of Informetrics, 2021, 15, 101202.	1.4	16
33	Measuring interdisciplinarity of a research system: detecting distinction between publication categories and citation categories. Scientometrics, 2017, 111, 2023-2039.	1.6	15
34	What is behind the globalization of technology? Exploring the interplay of multi-level drivers of international patent extension in the solar photovoltaic industry. Renewable and Sustainable Energy Reviews, 2022, 163, 112510.	8.2	13
35	One-year in: COVID-19 research at the international level in CORD-19 data. PLoS ONE, 2022, 17, e0261624.	1.1	13
36	Mixed Similarity Diffusion for Recommendation on Bipartite Networks. IEEE Access, 2017, 5, 21029-21038.	2.6	12

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37	An assessment of technology forecasting: Revisiting earlier analyses on dye-sensitized solar cells (DSSCs). Technological Forecasting and Social Change, 2019, 146, 831-843.	6.2	12
38	Profiling COVID-19 Genetic Research: A Data-Driven Study Utilizing Intelligent Bibliometrics. Frontiers in Research Metrics and Analytics, 2021, 6, 683212.	0.9	12
39	Modeling technological topic changes in patent claims. , 2015, , .		11
40	Scientometrics for tech mining: an introduction. Scientometrics, 2017, 111, 1875-1878.	1.6	10
41	Predicting the dynamics of scientific activities: A diffusion–based network analytic methodology. Proceedings of the Association for Information Science and Technology, 2018, 55, 598-607.	0.3	10
42	Exploring the genetic basis of diseases through a heterogeneous bibliometric network: A methodology and case study. Technological Forecasting and Social Change, 2021, 164, 120513.	6.2	9
43	Text Clumping for Technical Intelligence. , 2012, , .		8
44	China's patterns of international technological collaboration 1976–2010: a patent analysis study. Technology Analysis and Strategic Management, 2014, 26, 531-546.	2.0	8
45	Forecasting technical emergence: An introduction. Technological Forecasting and Social Change, 2019, 146, 626-627.	6.2	8
46	Identification of topic evolution: network analytics with piecewise linear representation and word embedding. Scientometrics, 2022, 127, 5353-5383.	1.6	8
47	Profiling and predicting the problem-solving patterns in China's research systems: A methodology of intelligent bibliometrics and empirical insights. Quantitative Science Studies, 2021, 2, 409-432.	1.6	7
48	Consolidation in a Crisis: Patterns of International Collaboration in COVID-19 Research. SSRN Electronic Journal, 0, , .	0.4	7
49	Dynamic network analytics for recommending scientific collaborators. Scientometrics, 2021, 126, 8789-8814.	1.6	7
50	Extraction and Evaluation of Knowledge Entities from Scientific Documents. , 2020, , .		6
51	Overlapping Community Discovery for Identifying Key Research Themes. IEEE Transactions on Engineering Management, 2021, 68, 1321-1333.	2.4	5
52	Framework of Computational Intelligence-Enhanced Knowledge Base Construction: Methodology and A Case of Gene-Related Cardiovascular Disease. International Journal of Computational Intelligence Systems, 2020, 13, 1109.	1.6	5
53	Identifying target for technology mergers and acquisitions using patent information and semantic analysis. , 2015, , .		4
54	Topic Evolution, Disruption and Resilience in Early COVID-19 Research. SSRN Electronic Journal, 0, , .	0.4	4

#	Article	IF	Citations
55	Recommending scientific collaborators: Bibliometric networks for medical research entities. , 2020, , .		4
56	An introduction of advanced tech mining: Technical emergence indicators and measurements. Technological Forecasting and Social Change, 2022, 182, 121855.	6.2	4
57	Exploring Technology evolution pathways to facilitate Technology management: A study of Dye-sensitized solar cells (DSSCs). , 2016, , .		3
58	Generating Competitive Technical Intelligence Using Topical Analysis, Patent Citation Analysis, and Term Clumping Analysis. Innovation, Technology and Knowledge Management, 2016, , 153-172.	0.4	3
59	Multiloop Integral Controllability Analysis for Nonlinear Multiple-Input Single-Output Processes. Industrial & Engineering Chemistry Research, 2017, 56, 8054-8065.	1.8	3
60	Knowledge Entity Extraction and Text Mining in the Era of Big Data. Data and Information Management, 2021, 5, 309-311.	0.7	3
61	Guest Editorial: Tech Mining for Engineering Management: An Introduction. IEEE Transactions on Engineering Management, 2021, 68, 1211-1213.	2.4	3
62	One-Year In: COVID-19 Research at the International Level in CORD-19 Data. SSRN Electronic Journal, 0, , .	0.4	3
63	Determination of Factors Driving the Genome Editing Field in the CRISPR Era Using Bibliometrics. CRISPR Journal, 2021, 4, 728-738.	1.4	3
64	Multiple science data-oriented Technology Roadmapping method. , 2015, , .		2
65	Identifying Technological Topic Changes in Patent Claims Using Topic Modeling. Innovation, Technology and Knowledge Management, 2016, , 187-209.	0.4	2
66	Patent Network Analysis for Identifying Technological Evolution: A Case Study of China's Artificial Intelligence Technologies. , 2017, , .		2
67	A Link Prediction-Based Method for Identifying Potential Cooperation Partners: A Case Study on Four Journals of Informetrics. , 2018, , .		2
68	Technology-driven mergers and acquisitions of Chinese acquirers: development of a multi-dimensional framework for post-innovation performance. International Journal of Technology Management, 2018, 78, 280.	0.2	2
69	The Anniversary Tribute of PICMET: 1989â€"2018. IEEE Transactions on Engineering Management, 2021, 68, 612-627.	2.4	2
70	Bi-layer network analytics: A methodology for characterizing emerging general-purpose technologies. SSRN Electronic Journal, 0, , .	0.4	2
71	Extraction and Evaluation of Knowledge Entities from Scientific Documents. Journal of Data and Information Science, 2021, 6, 1-5.	0.5	2
72	Exploring Genetic Basis for Diseases Through a Heterogeneous Bibliometric Network: Methodology and a Case Study. SSRN Electronic Journal, 0, , .	0.4	2

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73	Identifying Targets for Technology Mergers and Acquisitions Using Patent Information and Semantic Analysis. Innovation, Technology and Knowledge Management, 2016, , 173-186.	0.4	1
74	Validating the Earlier Analyses and Forecasting on Dye-Sensitized Solar Cells (DSSCs). , 2017, , .		1
75	Discovering Interactions in Big Data Research: A Learning-Enhanced Bibliometric Study. , 2017, , .		1
76	How is Data Science Involved in Policy Analysis?: A Bibliometric Perspective. , 2018, , .		1
77	Cooperation as a Mediator Variable Between Research Fund and Scientific Outputs: Evidence from NSFC-Guangdong Joint Fund. , 2017, , .		0
78	Detecting Hotspots in Interdisciplinary Research Based on Overlapping Community Detection. , 2018, , .		0
79	Map-based medical practice behavior analysis: Methodology and a case study on Australia's medical practices. , 2018, , .		0
80	Editorial: Advanced Analytics and Decision Making for Research Policy and Strategic Management. Frontiers in Research Metrics and Analytics, 2021, 6, 778622.	0.9	0