So Young Sohn

List of Publications by Year
in descending order

122 papers	3,194 citations	147801 31 h-index	197818 49 g-index
124 all docs	124 docs citations	124 times ranked	2437 citing authors

#	Article	IF	Citations
1	Support vector machines for default prediction of SMEs based on technology credit. European Journal of Operational Research, 2010, 201, 838-846.	5.7	163
2	Predicting the pattern of technology convergence using big-data technology on large-scale triadic patents. Technological Forecasting and Social Change, 2015, 100, 317-329.	11.6	141
3	A novel decomposition analysis of green patent applications for the evaluation of R&D efforts to reduce CO2 emissions from fossil fuel energy consumption. Journal of Cleaner Production, 2018, 193, 290-299.	9.3	112
4	Global stock market investment strategies based on financial network indicators using machine learning techniques. Expert Systems With Applications, 2019, 117, 228-242.	7.6	111
5	Technology credit scoring model with fuzzy logistic regression. Applied Soft Computing Journal, 2016, 43, 150-158.	7.2	98
6	Structural equation model for predicting technology commercialization success index (TCSI). Technological Forecasting and Social Change, 2003, 70, 885-899.	11.6	95
7	Beyond absorptive capacity in open innovation process: the relationships between openness, capacities and firm performance. Technology Analysis and Strategic Management, 2016, 28, 1009-1028.	3.5	94
8	Meta analysis of classification algorithms for pattern recognition. IEEE Transactions on Pattern Analysis and Machine Intelligence, 1999, 21, 1137-1144.	13.9	92
9	Pattern recognition for road traffic accident severity in Korea. Ergonomics, 2001, 44, 107-117.	2.1	92
10	Comparison of technology efficiency for CO 2 emissions reduction among European countries based on DEA with decomposed factors. Journal of Cleaner Production, 2017, 151, 109-120.	9.3	78
11	Technological convergence in standards for information and communication technologies. Technological Forecasting and Social Change, 2016, 106, 1-10.	11.6	63
12	Decision Tree based on data envelopment analysis for effective technology commercialization. Expert Systems With Applications, 2004, 26, 279-284.	7.6	60
13	Analyzing research trends in personal information privacy using topic modeling. Computers and Security, 2017, 67, 244-253.	6.0	60
14	Patent valuation based on text mining and survival analysis. Journal of Technology Transfer, 2015, 40, 821-839.	4.3	50
15	An optimization approach for the placement of bicycle-sharing stations to reduce short car trips: An application to the city of Seoul. Transportation Research, Part A: Policy and Practice, 2017, 105, 154-166.	4.2	50
16	Cost of ownership model for the RFID logistics system applicable to u-city. European Journal of Operational Research, 2009, 194, 406-417.	5.7	49
17	Patent-based QFD framework development for identification of emerging technologies and related business models: A case of robot technology in Korea. Technological Forecasting and Social Change, 2015, 94, 44-64.	11.6	49
18	Multitask learning for health condition identification and remaining useful life prediction: deep convolutional neural network approach. Journal of Intelligent Manufacturing, 2021, 32, 2169-2179.	7.3	49

#	Article	IF	Citations
19	Managing loan customers using misclassification patterns of credit scoring model. Expert Systems With Applications, 2004, 26, 567-573.	7.6	46
20	Improved technology scoring model for credit guarantee fund. Expert Systems With Applications, 2005, 28, 327-331.	7.6	46
21	Searching customer patterns of mobile service using clustering and quantitative association rule. Expert Systems With Applications, 2008, 34, 1070-1077.	7.6	43
22	Random effects logistic regression model for default prediction of technology credit guarantee fund. European Journal of Operational Research, 2007, 183, 472-478.	5.7	41
23	Decision tree-based technology credit scoring for start-up firms: Korean case. Expert Systems With Applications, 2012, 39, 4007-4012.	7.6	41
24	Machine-learning-based deep semantic analysis approach for forecasting new technology convergence. Technological Forecasting and Social Change, 2020, 157, 120095.	11.6	41
25	Quantifying technology–industry spillover effects based on patent citation network analysis of unmanned aerial vehicle (UAV). Technological Forecasting and Social Change, 2016, 105, 140-157.	11.6	40
26	Stock fraud detection using peer group analysis. Expert Systems With Applications, 2012, 39, 8986-8992.	7.6	39
27	Utilizing mobile phone-based floating population data to measure the spatial accessibility to public transit. Applied Geography, 2018, 92, 123-130.	3.7	39
28	Patent Network Analysis and Quadratic Assignment Procedures to Identify the Convergence of Robot Technologies. PLoS ONE, 2016, 11, e0165091.	2.5	37
29	Early detection of valuable patents using a deep learning model: Case of semiconductor industry. Technological Forecasting and Social Change, 2020, 158, 120146.	11.6	37
30	Multigeneration diffusion model for economic assessment of new technology. Technological Forecasting and Social Change, 2003, 70, 251-264.	11.6	35
31	Product failure pattern analysis from warranty data using association rule and Weibull regression analysis: A case study. Reliability Engineering and System Safety, 2015, 133, 176-183.	8.9	35
32	Patent analysis to identify shale gas development in China and the United States. Energy Policy, 2014, 74, 111-115.	8.8	33
33	Hybrid neural network with cost-sensitive support vector machine for class-imbalanced multimodal data. Neural Networks, 2020, 130, 176-184.	5.9	33
34	Forecasting changes in Korea Composite Stock Price Index (KOSPI) using association rules. Expert Systems With Applications, 2011, 38, 9046-9049.	7.6	32
35	Graph convolutional network-based credit default prediction utilizing three types of virtual distances among borrowers. Expert Systems With Applications, 2021, 168, 114411.	7.6	32
36	Meta-analysis on total braking time. Ergonomics, 1998, 41, 1129-1140.	2.1	30

#	Article	IF	Citations
37	Optimal location selection for the installation of urban green roofs considering honeybee habitats along with socio-economic and environmental effects. Journal of Environmental Management, 2017, 189, 125-133.	7.8	30
38	Behavioral credit scoring model for technology-based firms that considers uncertain financial ratios obtained from relationship banking. Small Business Economics, 2013, 41, 931-943.	6.7	27
39	Patent network based conjoint analysis for wearable device. Technological Forecasting and Social Change, 2015, 101, 338-346.	11.6	27
40	Updating a credit-scoring model based on new attributes without realization of actual data. European Journal of Operational Research, 2014, 234, 119-126.	5.7	25
41	Identifying patterns in rare earth element patents based on text and data mining. Scientometrics, 2015, 102, 389-410.	3.0	25
42	Reject inference in credit operations based on survival analysis. Expert Systems With Applications, 2006, 31, 26-29.	7.6	24
43	Analyzing technological convergence trends in a business ecosystem. Industrial Management and Data Systems, 2015, 115, 718-739.	3.7	24
44	Recommendation of startups as technology cooperation candidates from the perspectives of similarity and potential: A deep learning approach. Decision Support Systems, 2020, 130, 113229.	5.9	24
45	Valuing academic patents and intellectual properties: Different perspectives of willingness to pay and sell. Technovation, 2013, 33, 13-24.	7.8	22
46	What makes the first forward citation of a patent occur earlier?. Scientometrics, 2017, 113, 279-298.	3.0	22
47	Graph convolutional network approach applied to predict hourly bike-sharing demands considering spatial, temporal, and global effects. PLoS ONE, 2019, 14, e0220782.	2.5	22
48	Multivariate meta analysis with potentially correlated marketing study results. Naval Research Logistics, 2000, 47, 500-510.	2.2	21
49	Random effects Weibull regression model for occupational lifetime. European Journal of Operational Research, 2007, 179, 124-131.	5.7	21
50	Behavior scoring model for coalition loyalty programs by using summary variables of transaction data. Expert Systems With Applications, 2013, 40, 1564-1570.	7.6	21
51	Identifying the trends in wound-healing patents for successful investment strategies. PLoS ONE, 2017, 12, e0174203.	2.5	21
52	Discovering emerging business ideas based on crowdfunded software projects. Decision Support Systems, 2019, 116, 102-113.	5.9	21
53	Recommendation system for technology convergence opportunities based on self-supervised representation learning. Scientometrics, 2021, 126, 1-25.	3.0	21
54	Impact analysis for national R&D funding in science and technology using quantification method II. Research Policy, 2009, 38, 1534-1544.	6.4	19

#	ARTICLE	IF	CITATIONS
55	Patent portfolio-based indicators to evaluate the commercial benefits of national plant genetic resources. Ecological Indicators, 2016, 70, 43-52.	6.3	19
56	Empirical Bayesian analysis for traffic intensity:M/M/1 queues with covariates. Queueing Systems, 1996, 22, 383-401.	0.9	18
57	Optimal pricing for mobile manufacturers in competitive market using genetic algorithm. Expert Systems With Applications, 2009, 36, 3448-3453.	7.6	18
58	Conjoint analysis of R&D contract agreements for industry-funded university research. Journal of Technology Transfer, 2012, 37, 532-549.	4.3	18
59	Hierarchical forecasting based on AR-GARCH model in a coherent structure. European Journal of Operational Research, 2007, 176, 1033-1040.	5.7	17
60	Sequential association rules for forecasting failure patterns of aircrafts in Korean airforce. Expert Systems With Applications, 2009, 36, 1129-1133.	7.6	17
61	Patent clustering and network analyses to explore nuclear waste management technologies. Energy Policy, 2020, 146, 111794.	8.8	17
62	Cost of ownership model for inspection of multiple quality attributes. IEEE Transactions on Semiconductor Manufacturing, 2003, 16, 565-571.	1.7	16
63	Random effects model for the reliability management of modules of a fighter aircraft. Reliability Engineering and System Safety, 2006, 91, 433-437.	8.9	16
64	Competing Risk Model for Technology Credit Fund for Small and Medium-Sized Enterprises. Journal of Small Business Management, 2010, 48, 378-394.	4.8	16
65	Exploring the effect of dual use on the value of military technology patents based on the renewal decision. Scientometrics, 2017, 112, 1203-1227.	3.0	16
66	Novel method for detection of mixed-type defect patterns in wafer maps based on a single shot detector algorithm. Journal of Intelligent Manufacturing, 2022, 33, 1715-1724.	7.3	16
67	Technology scoring model for reflecting evaluatorâ€™s perception within confidence limits. European Journal of Operational Research, 2008, 184, 981-989.	5.7	15
68	A new cost of ownership model for the acquisition of technology complying with environmental regulations. Journal of Cleaner Production, 2015, 100, 269-277.	9.3	15
69	Patent-based framework for assisting entrepreneurial firmsâ€™ R&D partner selection: Leveraging their limited resources and managing the tension between learning and protection. Journal of Engineering and Technology Management - JET-M, 2020, 57, 101575.	2.7	15
70	Identifying Emerging Trends of Financial Business Method Patents. Sustainability, 2017, 9, 1670.	3.2	14
71	A novel approach to explore patent development paths for subfield technologies. Journal of the Association for Information Science and Technology, 2018, 69, 410-419.	2.9	14
72	Cost of ownership model for a CRM system. Science of Computer Programming, 2006, 60, 68-81.	1.9	13

#	Article	IF	Citations
73	Fuzzy analytic hierarchy process applied to technology credit scorecard considering entrepreneurs' psychological and behavioral attributes. Journal of Intelligent and Fuzzy Systems, 2016, 30, 2349-2364.	1.4	13
74	Recommendation of feeder bus routes using neural network embedding-based optimization. Transportation Research, Part A: Policy and Practice, 2019, 126, 329-341.	4.2	13
75	Economic Evaluation Model for International Standardization of Correlated Technologies. IEEE Transactions on Engineering Management, 2011, 58, 189-198.	3.5	12
76	Design guidelines for the Dashilar, Beijing Open Green Space Redevelopment Project. Urban Forestry and Urban Greening, 2014, 13, 385-396.	5.3	11
77	Stress test for a technology credit guarantee fund based on survival analysis. Journal of the Operational Research Society, 2015, 66, 463-475.	3.4	10
78	Demand Forecasting for Heavy-Duty Diesel Engines Considering Emission Regulations. Sustainability, 2017, 9, 166.	3.2	10
79	Optimal location-allocation model for the installation of rooftop sports facilities in metropolitan areas. European Sport Management Quarterly, 2020, 20, 189-204.	3.8	10
80	Statistical Analysis of Environmental Effects on Reliability Decay of Missiles: A Case Study. IIE Transactions, 1996, 28, 995-1002.	2.1	9
81	Quantification method analysis of the relationship between occupant injury and environmental factors in traffic accidents. Accident Analysis and Prevention, 2011, 43, 342-351.	5.7	9
82	Behavioral technology credit scoring model with time-dependent covariates for stress test. European Journal of Operational Research, 2015, 242, 910-919.	5.7	9
83	Technology Credit Scoring Based on a Quantification Method. Sustainability, 2017, 9, 1057.	3.2	9
84	Topic Model Analysis of Research Trend on Spatial Big Data. Journal of Korean Institute of Industrial Engineers, 2015, 41, 64-73.	0.1	9
85	CASE-BASED REASONING FOR PREDICTING MULTIPERIOD FINANCIAL PERFORMANCES OF TECHNOLOGY-BASED SMEs. Applied Artificial Intelligence, 2008, 22, 602-615.	3.2	8
86	Taxi vacancy duration: a regression analysis. Transportation Planning and Technology, 2017, 40, 771-795.	2.0	8
87	A Credit Scoring Model for SMEs Based on Accounting Ethics. Sustainability, 2017, 9, 1588.	3.2	8
88	Disparities in exploitative and exploratory patenting performance across regions: Focusing on the roles of agglomeration externalities. Papers in Regional Science, 2019, 98, 241-264.	1.9	8
89	Predicting future technological convergence patterns based on machine learning using link prediction. Scientometrics, 2021, 126, 5413-5429.	3.0	8
90	Genetic algorithms applied to optimal tolerance levels of multiattribute inspection errors. IEEE Transactions on Electronics Packaging Manufacturing, 2003, 26, 338-344.	1.4	7

#	Article	IF	Citations
91	Competing risk model for mobile phone service. Technological Forecasting and Social Change, 2008, 75, 1416-1422.	11.6	7
92	Optimization strategy of credit line management for credit card business. Computers and Operations Research, 2014, 48, 81-88.	4.0	7
93	Evaluating the patenting activities of pharmaceutical research organizations based on new technology indices. Journal of Informetrics, 2016, 10, 74-81.	2.9	7
94	Forecasting new product diffusion using both patent citation and web search traffic. PLoS ONE, 2018, 13, e0194723.	2.5	7
95	Engineering graduate students' views on the effective ownership of academic patents. Journal of Technology Transfer, 2019, 44, 132-154.	4.3	7
96	Patenting trends in biometric technology of the Big Five patent offices. World Patent Information, 2021, 65, 102040.	1.7	7
97	Trend analysis of academic research and technical development pertaining to gas hydrates. Scientometrics, 2015, 105, 905-920.	3.0	6
98	Competing risk model for predicting stabilization period of university spin-off ventures. International Entrepreneurship and Management Journal, 2017, 13, 777-796.	5.0	6
99	Economic Evaluation Model for International Standardization of Technology. IEEE Transactions on Instrumentation and Measurement, 2009, 58, 657-665.	4.7	5
100	Peer group analysis for introducing weather derivatives for a city. Expert Systems With Applications, 2013, 40, 5680-5687.	7.6	5
101	Adaptive conjoint analysis for the vitalisation of angel investments by entrepreneurs. Technology Analysis and Strategic Management, 2016, 28, 677-690.	3.5	5
102	Quantitative analysis of a half-century of K-Pop songs: Association rule analysis of lyrics and social network analysis of singers and composers. Journal of Popular Music Studies, 2017, 29, e12225.	0.4	5
103	Identifying innovation in socialist countries through patent analysis focused on Cuba and Vietnam. World Patent Information, 2019, 59, 101898.	1.7	5
104	Cost–benefit model for multi-generational high-technology products to compare sequential innovation strategy with quality strategy. PLoS ONE, 2021, 16, e0249124.	2.5	5
105	Balanced Scorecard Based Performance Analysis of Accreditation for Engineering Education. Industrial Engineering and Management Systems, 2014, 13, 67-86.	0.4	5
106	Evaluating borrowers' default risk with a spatial probit model reflecting the distance in their relational network. PLoS ONE, 2021, 16, e0261737.	2.5	5
107	Modelling and estimating heavy-tailed non-homogeneous correlated queues: Pareto-inverse gamma HGLM with covariates. Journal of Applied Statistics, 2006, 33, 417-425.	1.3	4
108	Effects of the matching fund program on IPO and bankruptcy of SMEs in Korea. Small Business Economics, 2014, 42, 117-129.	6.7	4

#	Article	IF	Citations
109	Term discrimination for text search tasks derived from negative binomial distribution. Information Processing and Management, 2018, 54, 370-379.	8.6	4
110	Patent data based search framework for IT R&D employees for convergence technology. Scientometrics, 2021, 126, 5687-5705.	3.0	4
111	Firmsâ€™ Negative Perceptions on Patents, Technology Management Strategies, and Subsequent Performance. Sustainability, 2017, 9, 440.	3.2	3
112	Perceived importance of intellectual property protection methods by Korean SMEs involved in product innovation and their value appropriation. Journal of Small Business Management, 2023, 61, 2561-2587.	4.8	3
113	A Costâ€“Benefit Analysis to Assess the Effectiveness of Frontal Center Curtain Airbag. Sustainability, 2017, 9, 1745.	3.2	2
114	Mapping and identifying technological coopetition: a multi-level approach. Scientometrics, 2021, 126, 5797.	3.0	2
115	Recommendation of investment portfolio for peer-to-peer lending with additional consideration of bidding period. Annals of Operations Research, 0, , .	4.1	2
116	A credit scoring model based on the Myersâ€“Briggs type indicator in online peer-to-peer lending. Financial Innovation, 2022, 8, 42.	6.4	2
117	Meta analysis with potentially correlated marketing study results. Journal of Statistical Computation and Simulation, 2000, 65, 95-107.	1.2	1
118	Multi-generation diffusion model for economic assessment of new technology. , 0, , .		1
119	Investigating the relationship between ammunition stockpile information and subsequent performance. Reliability Engineering and System Safety, 2010, 95, 426-430.	8.9	1
120	Comparing spatial patterns of sole proprietorship and corporate payday lenders in Seoul, Korea. Annals of Regional Science, 2020, 64, 215-236.	2.1	1
121	Recommending blue ocean technologies for subcontractors: A framework based on business reports of prime contractors and patents. PLoS ONE, 2021, 16, e0256157.	2.5	1
122	Dynamics of Topics in Antimalarial Patents: Comparison Between the USPTO and SIPO. , 2019, , 309-321.		0