Charles V Trappey

List of Publications by Year
in descending order

125 papers	2,665 citations	186265 28 h-index	206112 48 g-index
130 all docs	130 docs citations	130 times ranked	2133 citing authors

#	Article	IF	Citations
1	A review of essential standards and patent landscapes for the Internet of Things: A key enabler for Industry 4.0. Advanced Engineering Informatics, 2017, 33, 208-229.	8.0	261
2	Using patent data for technology forecasting: China RFID patent analysis. Advanced Engineering Informatics, 2011, 25, 53-64.	8.0	150
3	A patent quality analysis for innovative technology and product development. Advanced Engineering Informatics, 2012, 26, 26-34.	8.0	148
4	A Review of Technology Standards and Patent Portfolios for Enabling Cyber-Physical Systems in Advanced Manufacturing. IEEE Access, 2016, 4, 7356-7382.	4.2	136
5	Development of a patent document classification and search platform using a back-propagation network. Expert Systems With Applications, 2006, 31, 755-765.	7.6	96
6	IoT patent roadmap for smart logistic service provision in the context of Industry 4.0. Journal of the Chinese Institute of Engineers, Transactions of the Chinese Institute of Engineers,Series A/Chung-kuo Kung Ch'eng Hsuch K'an, 2017, 40, 593-602.	1.1	85
7	An evaluation of the time-varying extended logistic, simple logistic, and Gompertz models for forecasting short product lifecycles. Advanced Engineering Informatics, 2008, 22, 421-430.	8.0	74
8	An evaluation model for low carbon island policy: The case of Taiwan's green transportation policy. Energy Policy, 2012, 45, 510-515.	8.8	71
9	Genetic algorithm dynamic performance evaluation for RFID reverse logistic management. Expert Systems With Applications, 2010, 37, 7329-7335.	7.6	66
10	A computerized quality function deployment approach for retail services. Computers and Industrial Engineering, 1996, 30, 611-622.	6.3	65
11	Intelligent engineering asset management system for power transformer maintenance decision supports under various operating conditions. Computers and Industrial Engineering, 2015, 84, 3-11.	6.3	62
12	A meta-analysis of consumer choice and subliminal advertising. Psychology and Marketing, 1996, 13, 517-530.	8.2	60
13	System dynamics modelling of product carbon footprint life cycles for collaborative green supply chains. International Journal of Computer Integrated Manufacturing, 2012, 25, 934-945.	4.6	59
14	Automatic patent document summarization for collaborative knowledge systems and services. Journal of Systems Science and Systems Engineering, 2009, 18, 71-94.	1.6	49
15	Intelligent patent recommendation system for innovative design collaboration. Journal of Network and Computer Applications, 2013, 36, 1441-1450.	9.1	49
16	A Fuzzy Ontological Knowledge Document Clustering Methodology. IEEE Transactions on Systems, Man, and Cybernetics, 2009, 39, 806-814.	5.0	48
17	Mobile agent technology and application for online global logistic services. Industrial Management and Data Systems, 2004, 104, 169-183.	3.7	46
18	The determinants of photovoltaic system costs: an evaluation using a hierarchical learning curve model. Journal of Cleaner Production, 2016, 112, 1709-1716.	9.3	44

#	ARTICLE	IF	CITATIONS
19	Clustering patents using non-exhaustive overlaps. Journal of Systems Science and Systems Engineering, 2010, 19, 162-181.	1.6	43
20	The analysis of renewable energy policies for the Taiwan Penghu island administrative region. Renewable and Sustainable Energy Reviews, 2012, 16, 958-965.	16.4	42
21	An R&D knowledge management method for patent document summarization. Industrial Management and Data Systems, 2008, 108, 245-257.	3.7	40
22	Intelligent compilation of patent summaries using machine learning and natural language processing techniques. Advanced Engineering Informatics, 2020, 43, 101027.	8.0	40
23	Immersive Technology for Human-Centric Cyberphysical Systems in Complex Manufacturing Processes: A Comprehensive Overview of the Global Patent Profile Using Collective Intelligence. Complexity, 2018, 2018, 1-17.	1.6	37
24	Ontology-based neural network for patent knowledge management in design collaboration. International Journal of Production Research, 2013, 51, 1992-2005.	7.5	34
25	Patent Value Analysis Using Deep Learning Models—The Case of IoT Technology Mining for the Manufacturing Industry. IEEE Transactions on Engineering Management, 2021, 68, 1334-1346.	3.5	34
26	Consumer driven product technology function deployment using social media and patent mining. Advanced Engineering Informatics, 2018, 36, 120-129.	8.0	33
27	Technology and knowledge document cluster analysis for enterprise R&D strategic planning. International Journal of Technology Management, 2006, 36, 336.	0.5	32
28	The design of a JADE-based autonomous workflow management system for collaborative SoC design. Expert Systems With Applications, 2009, 36, 2659-2669.	7.6	32
29	A hierarchical cost learning model for developing wind energy infrastructures. International Journal of Production Economics, 2013, 146, 386-391.	8.9	27
30	A Machine Learning Approach for Solar Power Technology Review and Patent Evolution Analysis. Applied Sciences (Switzerland), 2019, 9, 1478.	2.5	26
31	Deriving industrial logistics hub reference models for manufacturing based economies. Expert Systems With Applications, 2011, 38, 1223-1232.	7.6	24
32	A knowledge centric methodology for dental implant technology assessment using ontology based patent analysis and clinical meta-analysis. Advanced Engineering Informatics, 2014, 28, 153-165.	8.0	24
33	Constructing a dental implant ontology for domain specific clustering and life span analysis. Advanced Engineering Informatics, 2013, 27, 346-357.	8.0	22
34	Retailing in Taiwan: modernization and the emergence of new formats. International Journal of Retail and Distribution Management, 1996, 24, 31-37.	4.7	21
35	An XML based supply chain integration hub for green product lifecycle management. Expert Systems With Applications, 2010, 37, 7319-7328.	7.6	21
36	Clustering analysis prioritization of automobile logistics services. Industrial Management and Data Systems, 2010, 110, 731-743.	3.7	21

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37	Internet and e‐commerce adoption by the Taiwan semiconductor industry. Industrial Management and Data Systems, 2005, 105, 476-490.	3.7	20
38	A multi-agent collaborative maintenance platform applying game theory negotiation strategies. Journal of Intelligent Manufacturing, 2013, 24, 613-623.	7.3	20
39	Data interchange services: use of XML hub approach for the aerospace supply chain. International Journal of Technology Management, 2004, 28, 227.	0.5	18
40	Intelligent collaborative patent mining using excessive topic generation. Advanced Engineering Informatics, 2019, 42, 100955.	8.0	17
41	Global content management services for product providers and purchasers. Computers in Industry, 2004, 53, 39-58.	9.9	16
42	Are patent trade wars impeding innovation and development?. World Patent Information, 2016, 46, 64-72.	1.7	16
43	Differences in Factors Attracting Consumers to Taiwan's Supermarkets and Traditional Wet Markets. Journal of Family and Economic Issues, 1997, 18, 211-224.	2.4	15
44	Improving the global competitiveness of retailers using a cultural analysis of in-store digital innovations. International Journal of Technology Management, 2016, 70, 25.	0.5	14
45	Virtual Reality Exposure Therapy for Driving Phobia Disorder: System Design and Development. Applied Sciences (Switzerland), 2020, 10, 4860.	2.5	14
46	A Test Platform for Managing School Stress Using a Virtual Reality Group Chatbot Counseling System. Applied Sciences (Switzerland), 2021, 11, 9071.	2.5	14
47	Life Cycle Analysis of the Optical Disc Industry Market Innovation and Development. Innovation: Management, Policy and Practice, 2015, 17, 196-216.	3.9	13
48	Building an Internet-Based Knowledge Ontology for Trademark Protection. Journal of Global Information Management, 2021, 29, 123-144.	2.8	13
49	Automated silicon intellectual property trade using mobile agent technology. Robotics and Computer-Integrated Manufacturing, 2006, 22, 189-202.	9.9	12
50	The Design and Evaluation of a Supply Chain Logistic Hub for Automobile and Parts Distribution. Materials Science Forum, 2008, 594, 119-131.	0.3	12
51	An exploratory RFID patent analysis. Management Research Review, 2009, 32, 1163-1176.	0.7	12
52	Develop patient monitoring and support system using mobile communication and intelligent reasoning. , 2009, , .		12
53	Virtual Reality Exposure Therapy for Driving Phobia Disorder (2): System Refinement and Verification. Applied Sciences (Switzerland), 2021, 11, 347.	2.5	12
54	A one-stop logistic services framework supporting global supply chain collaboration. Journal of Systems Science and Systems Engineering, 2016, 25, 229-253.	1.6	11

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55	Tracing the Evolution of Biomedical 3D Printing Technology Using Ontology-Based Patent Concept Analysis. Technology Analysis and Strategic Management, 2017, 29, 339-352.	3.5	11
56	Modeling international investment decisions for financial holding companies. European Journal of Operational Research, 2007, 180, 800-814.	5.7	10
57	THE ANALYSIS OF CUSTOMER SERVICE CHOICES AND PROMOTION PREFERENCES USING HIERARCHICAL CLUSTERING. Journal of the Chinese Institute of Industrial Engineers, 2009, 26, 367-376.	0.5	10
58	A framework of customer complaint handling system. , 2010, , .		10
59	Deriving Competitive Foresight Using an Ontology-Based Patent Roadmap and Valuation Analysis. International Journal on Semantic Web and Information Systems, 2019, 15, 68-91.	5.1	10
60	Construction and validation of an ontology-based technology function matrix: Technology mining of cyber physical system patent portfolios. World Patent Information, 2018, 55, 19-24.	1.7	9
61	Development of an Empathy-Centric Counseling Chatbot System Capable of Sentimental Dialogue Analysis. Processes, 2022, 10, 930.	2.8	9
62	A strategic product portfolio management methodology considering R&D resource constraints for engineering-to-order industries. International Journal of Technology Management, 2009, 48, 258.	0.5	8
63	IP portfolios and evolution of biomedical additive manufacturing applications. Scientometrics, 2017, 111, 139-157.	3.0	8
64	Intelligent Extraction of a Knowledge Ontology From Global Patents. International Journal on Semantic Web and Information Systems, 2020, 16, 61-80.	5.1	8
65	Intelligent recommendation methodology and system for patent search. , 2012, , .		7
66	Data driven modeling for power transformer lifespan evaluation. Journal of Systems Science and Systems Engineering, 2014, 23, 80-93.	1.6	7
67	Ontology-based technology function matrix for patent analysis of additive manufacturing in the dental industry. International Journal of Manufacturing Research, 2017, 12, 64.	0.2	7
68	Location Quotient EIO-LCA Method for Carbon Emission Analysis. , 2013, , 367-377.		7
69	Automobile Manufacturing Logistic Service Management and Decision Support Using Classification and Clustering Methodologies. Advanced Concurrent Engineering, 2009, , 581-592.	0.2	7
70	Intelligent Supply Chain Management Modules Enabling Advanced Manufacturing for the Electric-Mechanical Equipment Industry. Complexity, 2022, 2022, 1-20.	1.6	7
71	CONNECTING SMALL AND MEDIUM ENTERPRISES TO THE GLOBAL MARKET VIA THE GLOBAL LOGISTICS SERVICE CHAINâ€"SECTOR ANALYSES AND CASE STUDIES. Journal of the Chinese Institute of Industrial Engineers, 2002, 19, 75-87.	0.5	6
72	A JADE-based Autonomous Workflow Management System for Collaborative IC Design. , 2007, , .		6

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73	The Diffusion of Innovation and perceived risk for the adoption of alternative energy vehicles. International Journal of Innovation and Learning, 2010, 8, 296.	0.4	6
74	Ontology-based knowledge representation and semantic topic modeling for intelligent trademark legal precedent research. World Patent Information, 2022, 68, 102098.	1.7	6
75	Intelligent trademark recognition and similarity analysis using a two-stage transfer learning approach. Advanced Engineering Informatics, 2022, 52, 101567.	8.0	6
76	The National Si-Soft Project. Applied Surface Science, 2003, 216, 2-7.	6.1	5
77	Re-engineering transformer maintenance processes to improve customized service delivery. Journal of Systems Science and Systems Engineering, 2011, 20, 323-345.	1.6	5
78	Using System Dynamics Analysis for Performance Evaluation of IoT Enabled One-Stop Logistic Services. , 2015, , .		5
79	Collective intelligence applied to legal e-discovery: A ten-year case study of Australia franchise and trademark litigation. Advanced Engineering Informatics, 2015, 29, 787-798.	8.0	5
80	Exploring 4G patent and litigation informatics in the mobile telecommunications industry. World Patent Information, 2017, 50, 38-51.	1.7	5
81	Web Mining Customer Perceptions to Define Product Positions and Design Preferences. International Journal on Semantic Web and Information Systems, 2020, 16, 42-58.	5.1	5
82	China RFID Patent Analysis. , 2009, , .		5
83	Automated Patent Document Summarization for R&D Intellectual Property Management. , 2006, , .		4
84	Evaluating renewable energy policies using hybrid clustering and analytic hierarchy process modeling. , 2014, , .		4
85	Patent Analysis of Key Technologies for Smart Retailing and their Projected Economic Impact. , 2018, , .		4
86	An Evaluation of the Extended Logistic, Simple Logistic, and Gompertz Models for Forecasting Short Lifecycle Products and Services. , 2007, , 793-800.		4
87	Using information overload or decreasing marginal responsiveness to determine â€œhow many catalogs are too many?â€ It really makes a differenceâ€"reply to Ganzach and Or. Journal of Direct Marketing, 1996, 10, 10-12.	0.2	3
88	Using fuzzy cognitive map for evaluation of RFID-based reverse logistics services. , 2009, , .		3
89	Ontology-based dental implant connection patent analysis. , 2013, , .		3
90	Knowledge Discovery of Service Satisfaction Based on Text Analysis of Critical Incident Dialogues and Clustering Methods. , 2013, , .		3

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91	SETZ logistics models and system framework for manufacturing and exporting large engineering assets. Journal of Systems and Software, 2013, 86, 1797-1805.	4.5	3
92	Using a small-island pilot plant approach to analyze low-carbon emission policies. Carbon Management, 2013, 4, 257-260.	2.4	3
93	Computer supported technology function matrix construction for patent data analytics. , 2017, , .		3
94	System Dynamics Evaluation of Renewable Energy Policies. Advanced Concurrent Engineering, 2011, , 133-140.	0.2	3
95	Ontology-based Patent Licensing and Litigation Strategic Knowledge System for the Light Emitting Diode Industry. International Journal of Automation and Smart Technology, 2013, 3, 155-167.	0.4	3
96	Analysis and design of a supply chain logistics hub for after market automotive parts distribution. , 2008, , .		2
97	The analysis and development of Taiwan's industrial logistics hubs. , 2009, , .		2
98	Applying BPANN and hierarchical ontology to develop a methodology for binary knowledge document classification and content analysis. , 2010, , .		2
99	Knowledge discovery of customer satisfaction and dissatisfaction using ontology-based text analysis of critical incident dialogues. , 2012, , .		2
100	The implementation of global logistic services using one-stop logistics management. , 2014, , .		2
101	Understanding customers using Facebook Pages: Data mining users feedback using text analysis. , 2014, , .		2
102	Computer supported formal concept analysis to explore the evolution of patent litigation. , 2015, , .		2
103	Advanced design, analysis, and implementation of pervasive and smart collaborative systems enabled with knowledge modelling and big data analytics. Advanced Engineering Informatics, 2017, 33, 206-207.	8.0	2
104	Computer-supported portfolio analysis and comparison using ontology-based patent classification mapping scheme: the case of mobile communication patent pools. Cluster Computing, 2017, 20, 1661-1677.	5.0	2
105	IP Analytics and Machine Learning Applied to Create Process Visualization Graphs for Chemical Utility Patents. Processes, 2021, 9, 1342.	2.8	2
106	The Integrated Circuit Industry: A Technological Powerhouse. , 2001, , 105-132.		2
107	Using Patent Ontology Engineering for Intellectual Property Defense Support System. , 2013, , 207-217.		2
108	Carbon Emission Analysis for Renewable Energy Policies. , 2015, , 761-778.		2

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109	Incorporating Data Warehouse Technology into Asset Information Management Systems for Large Assets. Lecture Notes in Mechanical Engineering, 2016, , 601-612.	0.4	2
110	Marketing intellectual property using electronic libraries: a survey of system-on-chip engineers and managers in Sweden and Taiwan. International Journal of Technology Management, 2006, 36, 368.	0.5	1
111	Special issue editorial on mass customization and sustainable value systems. Journal of Systems Science and Systems Engineering, 2011, 20, 257-259.	1.6	1
112	Using the collective intelligence of sports fans to improve professional football league customer service. , 2014, , .		1
113	Computer Supported ontology-based patent analysis considering business processes and strategic patent portfolio management. , 2015, , .		1
114	Patent portfolio analysis of e-payment services using technical ontology roadmaps. , 2016, , .		1
115	Computer supported comparative analysis of technology portfolios for LTE-A patent pools. , 2016, , .		1
116	Using Machine Learning Approach to Identify Synonyms for Document Mining. Advances in Transdisciplinary Engineering, 2019, , .	0.1	1
117	VR-Enabled Chatbot System Supporting Transformer Mass-Customization Services. Advances in Transdisciplinary Engineering, 2020, , .	0.1	1
118	A VR-Enabled Chatbot Supporting Design and Manufacturing of Large and Complex Power Transformers. Electronics (Switzerland), 2022, 11, 87.	3.1	1
119	A KNOWLEDGE BASE SYSTEM FOR PREDICTING MERCHANDISE INVESTMENT RETURNS. Applied Artificial Intelligence, 1993, 7, 207-221.	3.2	0
120	Planning Merchandise Investments Using Fuzzy Optimization. Journal of Intelligent and Fuzzy Systems, 1993, 1, 189-197.	1.4	0
121	Reengineer restaurant set-meal design process. , 2010, , .		0
122	Analysis of IP-related court decisions using e-discovery - a case study of Apotex Pty. Ltd. v Sanofi-Aventis Australia Pty. Ltd. & Ors. International Journal of Intellectual Property Management, 2016, 9, 16.	0.3	0
123	Patent Analytics of Robotics Technology for Intelligent Manufacturing in the Semiconductor Industry. , 2018, , .		0
124	Detecting Trademark Image Infringement Using Convolutional Neural Networks. Advances in Transdisciplinary Engineering, 2019, , .	0.1	0
125	Virtual Reality Exposure Therapy and Physiological Data Analysis for Treatment of Stress Disorders. Advances in Medical Technologies and Clinical Practice Book Series, 2022, , 143-170.	0.3	0