

Chihiro Watanabe

List of Publications by Year in descending order

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141
papers

2,478
citations

186265

28
h-index

254184

43
g-index

151
all docs

151
docs citations

151
times ranked

1228
citing authors

#	ARTICLE	IF	CITATIONS
1	A new perspective of innovation toward a non-contact society - Amazon's initiative in pioneering growing seamless switching. Technology in Society, 2022, 69, 101953.	9.4	7
2	Increasing dependence on uncaptured GDP and ways to measure it. , 2021, , 37-62.		0
3	Neo open innovation in the digital economy. , 2021, , 135-164.		0
4	The transformation of R&D into neo open innovation. , 2021, , 165-200.		0
5	The productivity paradox and the limitations of GDP in measuring the digital economy. , 2021, , 19-35.		1
6	The emergence of soft innovation resources. , 2021, , 63-133.		0
7	Amazon's initiative transforming a non-contact society - Digital disruption leads the way to stakeholder capitalization. Technology in Society, 2021, 65, 101596.	9.4	6
8	Amazon's New Supra-Omnichannel: Realizing Growing Seamless Switching for Apparel During COVID-19. Technology in Society, 2021, 66, 101645.	9.4	11
9	Operationalizing uncaptured GDP with neo open innovation. , 2021, , 201-218.		0
10	Fusion of technology management and financing management - Amazon's transformative endeavor by orchestrating techno-financing systems. Technology in Society, 2020, 60, 101219.	9.4	13
11	Co-evolutionary coupling leads a way to a novel concept of R&D - Lessons from digitalized bioeconomy. Technology in Society, 2020, 60, 101220.	9.4	11
12	Institutional systems inducing R&D in Amazon- the role of an investor surplus toward stakeholder capitalization. Technology in Society, 2020, 63, 101290.	9.4	10
13	CO-EVOLUTIONARY COUPLING BETWEEN CAPTURED AND UNCAPPED GDP CYCLES:CROSS LEARNING FROM AMAZON AND FINLAND MODELS FOR SUSTAINABILITY. International Journal of Managing Information Technology, 2019, 11, 33-54.	0.8	1
14	The transformation of R&D into neo open innovation- a new concept in R&D endeavor triggered by amazon. Technology in Society, 2019, 58, 101141.	9.4	24
15	Harnessing soft innovation resources leads to neo open innovation. Technology in Society, 2019, 58, 101114.	9.4	19
16	A NEW CONCEPT OF R&D IN NEO OPEN INNOVATION - TRANSFORMATION OF R&D TRIGGERED BY AMAZON. International Journal of Managing Information Technology, 2019, 11, 17-35.	0.8	8
17	A SOLUTION TO THE DILEMMA BETWEEN R&D EXPANSION AND THE PRODUCTIVITY DECLINE: LESSONS FROM THE R&D MODELS IN AMAZON AND FINLAND. International Journal of Managing Information Technology, 2019, 11, 9-31.	0.8	1
18	Digitalized bioeconomy: Planned obsolescence-driven circular economy enabled by Co-Evolutionary coupling. Technology in Society, 2019, 56, 8-30.	9.4	44

#	ARTICLE	IF	CITATIONS
19	The transformative direction of innovation toward an IoT-based society - Increasing dependency on uncaptured GDP in global ICT firms. <i>Technology in Society</i> , 2018, 53, 23-46.	9.4	31
20	Hybrid Role of Soft Innovation Resources : Finland's Notable Resurgence in the Digital Economy. <i>International Journal of Managing Information Technology</i> , 2018, 10, 01-22.	0.8	6
21	Neo Open Innovation in the Digital Economy : Harnessing Soft Innovation Resources. <i>International Journal of Managing Information Technology</i> , 2018, 10, 53-75.	0.8	11
22	Digital solutions transform the forest-based bioeconomy into a digital platform industry - A suggestion for a disruptive business model in the digital economy. <i>Technology in Society</i> , 2018, 54, 168-188.	9.4	44
23	Measuring GDP in the digital economy: Increasing dependence on uncaptured GDP. <i>Technological Forecasting and Social Change</i> , 2018, 137, 226-240.	11.6	104
24	A new paradox of the digital economy - Structural sources of the limitation of GDP statistics. <i>Technology in Society</i> , 2018, 55, 9-23.	9.4	51
25	Co-evolution between streaming and live music leads a way to the sustainable growth of music industry “ Lessons from the US experiences. <i>Technology in Society</i> , 2017, 50, 1-19.	9.4	56
26	Co-evolution between trust in teachers and higher education toward digitally-rich learning environments. <i>Technology in Society</i> , 2017, 48, 70-96.	9.4	25
27	ICT-driven disruptive innovation nurtures un-captured GDP “ Harnessing women's potential as untapped resources. <i>Technology in Society</i> , 2017, 51, 81-101.	9.4	11
28	Consolidated challenge to social demand for resilient platforms - Lessons from Uber's global expansion. <i>Technology in Society</i> , 2017, 48, 33-53.	9.4	56
29	Operationalization of un-captured GDP - Innovation stream under new global mega-trends. <i>Technology in Society</i> , 2016, 45, 58-77.	9.4	32
30	Co-evolution of three mega-trends nurtures un-captured GDP “ Uber’s ride-sharing revolution. <i>Technology in Society</i> , 2016, 46, 164-185.	9.4	75
31	Co-evolution between Trust in Teachers and Higher Education Enabled by ICT Advancement “ A Suggestion to ICT Growing Economies. <i>Journal of Technology Management for Growing Economies</i> , 2016, 7, 7-38.	1.4	1
32	Dependency on un-captured GDP as a source of resilience beyond economic value in countries with advanced ICT infrastructure: Similarities and disparities between Finland and Singapore. <i>Technology in Society</i> , 2015, 42, 104-122.	9.4	29
33	New paradigm of ICT productivity “ Increasing role of un-captured GDP and growing anger of consumers. <i>Technology in Society</i> , 2015, 41, 21-44.	9.4	41
34	Technology strategy and technology policy. <i>Technovation</i> , 2014, 34, 731-733.	7.8	3
35	Institutional Sources of Resilience in Global ICT Leaders - Harness the Vigor of Emerging Power. <i>Journal of Technology Management for Growing Economies</i> , 2014, 5, 7-34.	1.4	9
36	Structural Source of the Trap of ICT Advancement - Lessons from World ICT Top Leaders. <i>Journal of Technology Management for Growing Economies</i> , 2014, 5, 49-71.	1.4	4

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37	Innovation-consumption Co-emergence Leads a Resilience Business &/b>. Innovation and Supply Chain Management, 2013, 7, 92-104.	0.1	13
38	Co-emergence of Institutional Innovation Navigates the New Normal in Growing Economies. Journal of Technology Management for Growing Economies, 2013, 4, 69-81.	1.4	6
39	Utmost Fear Hypothesis Explores Green Technology Driven Energy for Sustainable Growth. Dynamic Modeling and Econometrics in Economics and Finance, 2013, , 191-216.	0.5	0
40	Innovation Dynamics of Materials Manufacturing Industry: Changes in Management of Technology due to Socio-Economic Changes. Advanced Materials Research, 2012, 452-453, 1020-1024.	0.3	0
41	Inside the learning dynamism inducing the resonance between innovation and high-demand consumption: A case of Japan's high-functional mobile phones. Technological Forecasting and Social Change, 2012, 79, 1292-1311.	11.6	6
42	New functionality development through follower substitution for a leader in open innovation. Technological Forecasting and Social Change, 2011, 78, 116-131.	11.6	17
43	The challenges in Singapore NEWater development: Co-evolutionary development for innovation and industry evolution. Technology in Society, 2011, 33, 200-200.	9.4	12
44	Global coevolution as a source of a high-profits resilient structure: a lesson from Shin-Etsu Chemical. International Journal of Society Systems Science, 2010, 2, 63.	0.1	0
45	Network externality perspective of feed-in-tariffs (FIT) instrumentsâ€™Some observations and suggestions. Energy Policy, 2010, 38, 3266-3269.	8.8	14
46	Optimization of functionality development. Applied Mathematics and Computation, 2010, 217, 1125-1134.	2.2	3
47	Technology Leapfrogging: Findings from Singapore's Water Industry. Journal of Technology Management for Growing Economies, 2010, 1, 29-47.	1.4	8
48	Innovation Dynamics of Materials Technology. Advances in Knowledge Acquisition, Transfer and Management Book Series, 2010, , 131-151.	0.2	0
49	Diffusion of Environmental Products and Services â€™ Towards an Institutions-Theoretic Framework: Comparing Solar Photovoltaic (PV) Diffusion Patterns in Japan and the US. Series on Technology Management, 2010, , 313-345.	0.1	0
50	Functionality development dynamism in a diffusion trajectory: A case of Japan's mobile phones development. Technological Forecasting and Social Change, 2009, 76, 737-753.	11.6	18
51	Institutional structure of sustainable development in BRICs: Focusing on ICT utilization. Technology in Society, 2009, 31, 9-28.	9.4	14
52	Competitive advantage in an industry cluster: The case of Dalian Software Park in China. Technology in Society, 2009, 31, 139-149.	9.4	34
53	Learning and assimilation vs. M&A and innovation: Japan at the crossroads. Technology in Society, 2009, 31, 218-231.	9.4	7
54	An innovation management approach for renewable energy deploymentâ€™the case of solar photovoltaic (PV) technology. Energy Policy, 2009, 37, 3535-3544.	8.8	42

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55	Changes in the technology spillover structure due to economic paradigm shifts: A driver of the economic revival in Japan's material industry beyond the year 2000. <i>Technovation</i> , 2009, 29, 5-22.	7.8	13
56	Fusing indigenous technology development and market learning for greater functionality development—An empirical analysis of the growth trajectory of Canon printers. <i>Technovation</i> , 2009, 29, 265-283.	7.8	28
57	Formation of IT Features through Interaction with Institutional Systems: Empirical Evidence of Unique Epidemic Behavior. , 2009, , 3-30.		1
58	Managing Innovation in Japan. , 2009, , .		3
59	The impact of diversifying technologies in related areas on firm's profitability: the case of Canon's copying machines and printers. <i>International Journal of Entrepreneurship and Innovation Management</i> , 2009, 10, 178.	0.1	0
60	Effective assimilation of intra—technology spillover as a key to sustainable functionality. <i>Journal of Advances in Management Research</i> , 2009, 6, 27-40.	3.0	0
61	An Empirical Analysis of the Institutional System's Effects on the Development of China's Personal Computer Industry—From Inertia to Innovation. , 2009, , 13-39.		0
62	The Co-evolution Process of Technological Innovation: An Empirical Study of Mobile Phone Vendors and Telecommunication Service Operators in Japan. , 2009, , 135-158.		8
63	Impacts of Functionality Development on Dynamism between Learning and Diffusion of Technology. , 2009, , 81-102.		0
64	An Empirical Analysis of the Coevolution of China's Institutional System and Rapidly Growing PC Sector. , 2009, , 41-64.		0
65	A Substitution Orbit Model of Competitive Innovations. , 2009, , 57-80.		6
66	Institutional Elasticity as a Significant Driver of IT Functionality Development. , 2009, , 31-56.		3
67	Technological Diversification Strategic Trajectory Leading to an Effective Utilization of Potential Resources in Innovation: A Case of Canon. , 2009, , 179-209.		0
68	Diffusion, Substitution and Competition Dynamism Inside the ICT Market: A Case of Japan. , 2009, , 103-134.		9
69	Japan's Coevolutionary Dynamism between Innovation and Institutional Systems: Hybrid Management Fusing East and West. , 2009, , 211-231.		0
70	Towards a local learning (innovation) model of solar photovoltaic deployment. <i>Energy Policy</i> , 2008, 36, 508-521.	8.8	65
71	Japanese and US perspectives on the National Innovation Ecosystem. <i>Technology in Society</i> , 2008, 30, 49-63.	9.4	54
72	A comparison of institutional systems affecting software advancement in China and India: The role of outsourcing from Japan and the United States. <i>Technology in Society</i> , 2008, 30, 429-436.	9.4	17

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73	Co-evolution between economic growth, educational development, and urbanization in china: The triggering role of Informatization. <i>Asian Journal of Technology Innovation</i> , 2008, 16, 23-44.	2.8	3
74	Structural source enabling firm revitalization innovation of sector—An empirical analysis of Japanese 31 industrial Sectors. <i>Technovation</i> , 2008, 28, 37-51.	7.8	2
75	Timing of the initial functionality development as a key to sustainable functionality: comparative analysis of copying machine development in Canon and Ricoh. <i>Journal of Advances in Management Research</i> , 2008, 5, 42-55.	3.0	1
76	An Analysis of High Profitability Mechanism by Means of Dynamism between Technological Diversification, Learning and Functionality Development. <i>Management of Technology</i> , 2008, , 55-72.	0.1	0
77	The role of techno-countervailing power in inducing the development and dissemination of new functionality – an analysis of Canon printers and Japan's personal computers. <i>International Journal of Technology Management</i> , 2008, 44, 205.	0.5	8
78	TOWARDS AN INSTITUTIONS-THEORETIC FRAMEWORK COMPARING SOLAR PHOTOVOLTAIC DIFFUSION PATTERNS IN JAPAN AND THE UNITED STATES. <i>International Journal of Innovation Management</i> , 2007, 11, 565-592.	1.2	10
79	Analysis of institutional factors influencing the service innovation - a case of chinese software industry. , 2007, , .		0
80	A resonant development trajectory for IT deployment: lessons from Japan's l�mode. <i>Journal of Advances in Management Research</i> , 2007, 4, 7-27.	3.0	4
81	A resilient structure as a survival strategy for Japan's chemical industry amidst megacompetition. <i>Journal of Advances in Management Research</i> , 2007, 4, 29-48.	3.0	1
82	Photovoltaic deployment strategy in Japan and the USA—an institutional appraisal. <i>Energy Policy</i> , 2007, 35, 1186-1195.	8.8	47
83	The co-evolution process of technological innovation—An empirical study of mobile phone vendors and telecommunication service operators in Japan. <i>Technology in Society</i> , 2007, 29, 1-22.	9.4	53
84	INSTITUTIONAL MOT: CO-EVOLUTIONARY DYNAMISM OF INNOVATION AND INSTITUTION. <i>Management of Technology</i> , 2007, , 355-366.	0.1	1
85	FIRMS WITH ADAPTABILITY LEAD A WAY TO INNOVATIVE DEVELOPMENT. <i>Management of Technology</i> , 2007, , 367-379.	0.1	0
86	A new dimension of potential resources in innovation: A wider scope of patent claims can lead to new functionality development. <i>Technovation</i> , 2006, 26, 796-806.	7.8	24
87	Double spiral trajectory between retail, manufacturing and customers leads a way to service oriented manufacturing. <i>Technovation</i> , 2006, 26, 873-890.	7.8	19
88	Diffusion trajectory of self-propagating innovations interacting with institutions—incorporation of multi-factors learning function to model PV diffusion in Japan. <i>Energy Policy</i> , 2006, 34, 411-421.	8.8	30
89	Promoting industrial development through technology policy: Lessons from Japan and China. <i>Technology in Society</i> , 2006, 28, 303-320.	9.4	66
90	Diffusion, substitution and competition dynamism inside the ICT market: The case of Japan. <i>Technological Forecasting and Social Change</i> , 2006, 73, 731-759.	11.6	36

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91	Converging trend of innovation efforts in high technology firms under paradigm shift—a case of Japan's electrical machinery. Omega, 2006, 34, 178-188.	5.9	14
92	Structural change in techno-production of Japan's automotive industry. Journal of Advances in Management Research, 2005, 2, 21-31.	3.0	1
93	Inside the black box of cross-functional spillover—a lesson from the functionality development of fine ceramics. Journal of Advances in Management Research, 2005, 2, 7-23.	3.0	1
94	IT substitution for energy leads to a resilient structure for a survival strategy of Japan's electric power industry. Energy Policy, 2005, 33, 1069-1084.	8.8	6
95	Technological diversification and firm's techno-economic structure: An assessment of Canon's sustainable growth trajectory. Technological Forecasting and Social Change, 2005, 72, 11-27.	11.6	27
96	Institutional elasticity as a significant driver of IT functionality development. Technological Forecasting and Social Change, 2004, 71, 723-750.	11.6	53
97	A substitution orbit model of competitive innovations. Technological Forecasting and Social Change, 2004, 71, 365-390.	11.6	30
98	Technological diversification and assimilation of spillover technology: Canon's scenario for sustainable growth. Technological Forecasting and Social Change, 2004, 71, 941-959.	11.6	25
99	Co-evolution between internal motivation and external expectation as a source of firm self-propagating function creation. Technovation, 2004, 24, 109-120.	7.8	9
100	Resilience as a source of survival strategy for high-technology firms experiencing megacompetition. Technovation, 2004, 24, 139-152.	7.8	22
101	Constructing a virtuous cycle of manufacturing agility: concurrent roles of modularity in improving agility and reducing lead time. Technovation, 2004, 24, 573-583.	7.8	36
102	Impacts of functionality development on dynamism between learning and diffusion of technology. Technovation, 2004, 24, 651-664.	7.8	21
103	Resonant R&D structure for effective technology development amidst megacompetition—an empirical analysis of smart cooperative R&D structure in Japan's transport machinery industry. Technovation, 2004, 24, 955-969.	7.8	6
104	Technological distance between manufacturing sectors and prefectures in Japan: innovative clusters and patents. Journal of Advances in Management Research, 2004, 1, 9-31.	3.0	2
105	The virtuous cycle between institutional elasticity, IT advancement and sustainable growth: can Japan survive in an information society?. Technology in Society, 2003, 25, 319-335.	9.4	29
106	National innovation policies in an IT society: the myth of technology policies focusing on supply sides. Science and Public Policy, 2003, 30, 70-84.	2.4	3
107	Institutional elasticity towards IT waves for Japan's survival—the significant role of an IT testbed. Technovation, 2003, 23, 307-320.	7.8	18
108	Management and the effect of MITI's R&D project: case study from a supercomputer project. Technovation, 2003, 23, 221-238.	7.8	2

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109	Dynamic interactions between assimilation capacity, technology spillovers, sales and R&D intensity “the case of electrical machinery industry in Japan. Technovation, 2003, 23, 15-34.	7.8	10
110	Formation of IT features through interaction with institutional systems“empirical evidence of unique epidemic behavior. Technovation, 2003, 23, 205-219.	7.8	28
111	Functionality development as a survival strategy for fine ceramics. Technovation, 2003, 23, 833-842.	7.8	5
112	Optimal timing of R&D for effective utilization of potential resources in innovation. Journal of Advances in Management Research, 2003, 1, 11-27.	3.0	4
113	Technology spillovers and economic vitality: an analysis of institutional flexibility in Japan with comparisons to the USA. International Journal of Technology Management, 2002, 23, 746.	0.5	3
114	Myth of market needs and technology seeds as a source of product innovation “ an analysis of pharmaceutical new product development in an anti-hypertensive product innovation. Technovation, 2002, 22, 353-362.	7.8	23
115	Optimal timing of the development of innovative goods with generation “ an empirical analysis focusing on Canon's printer series 1The opinions in this paper are those of the authors and do not represent the official opinion of Canon Inc. 1. Technovation, 2002, 22, 175-185.	7.8	6
116	Technology spillover as a complement for high-level R&D intensity in the pharmaceutical industry. Technovation, 2002, 22, 245-258.	7.8	42
117	Dynamic process of technology spillover; a transfer function approach. Technovation, 2002, 22, 437-444.	7.8	9
118	Alliance strategy as a competitive strategy for successively creative new product development: the proof of the co-evolution of creativity and efficiency in the Japanese pharmaceutical industry. Technovation, 2002, 22, 607-614.	7.8	23
119	Industrial ecology and technology policy: Japanese experience. , 2002, , .		1
120	Unintentional technology spillover between two sectors: kinetic approach. Technovation, 2001, 21, 227-235.	7.8	10
121	Global technology spillover and its impact on industry's R&D strategies. Technovation, 2001, 21, 281-291.	7.8	47
122	Development and diffusion trajectory of innovative products in the light of institutional maturity“a comparative empirical analysis of the laser beam printer and optical cards. Technovation, 2001, 21, 637-647.	7.8	2
123	Patent statistics: deciphering a “real“™ versus a “pseudo“™ proxy of innovation. Technovation, 2001, 21, 783-790.	7.8	107
124	Hierarchical impacts of the length of technology waves: An analysis of technolabor homeostasis. Technological Forecasting and Social Change, 2001, 68, 81-104.	11.6	10
125	The interaction between product concept and institutional inducement: a new driver of product innovation. Technovation, 2000, 20, 11-23.	7.8	21
126	Industrial dynamism and the creation of a “œvirtuous cycle“ between R&D, market growth and price reduction. Technovation, 2000, 20, 299-312.	7.8	142

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127	Evolutional dynamics of product innovation: the case of consumer electronics. <i>Technovation</i> , 2000, 20, 437-449.	7.8	19
128	Systems option for sustainable developmentâ€™effect and limit of the Ministry of International Trade and Industry's efforts to substitute technology for energy. <i>Research Policy</i> , 1999, 28, 719-749.	6.4	58
129	Technology spillovers and informatisation in Japan: an analysis of information technology diffusion in large versus small and medium-sized enterprises. <i>International Journal of Technology Management</i> , 1999, 17, 362.	0.5	5
130	Stimulating R&D: an analysis of the Ministry of International Trade and Industry's 'visions' and the current challenges facing Japan's technology policy-making mechanisms. <i>Science and Public Policy</i> , 1999, 26, 2-16.	2.4	2
131	Mitigating global warming by substituting technology for energy. <i>Energy Policy</i> , 1995, 23, 447-461.	8.8	8
132	Identification of the role of renewable energy. <i>Renewable Energy</i> , 1995, 6, 237-274.	8.9	38
133	The feedback loop between technology and economic development: An examination of Japanese industry. <i>Technological Forecasting and Social Change</i> , 1995, 49, 127-145.	11.6	27
134	Inducing power of Japanese technological innovation - mechanism of Japan's industrial science and technology policy. <i>Japan and the World Economy</i> , 1992, 3, 361-390.	1.1	9
135	Japanese industrial science & technology policy in the 1990s. <i>Japan and the World Economy</i> , 1992, 4, 47-67.	1.1	8
136	Trends in the substitution of production factors to technologyâ€™empirical analysis of the inducing impact of the energy crisis on Japanese industrial. <i>Research Policy</i> , 1992, 21, 481-505.	6.4	30
137	Myth of energy competitiveness in energy producing countries. <i>Energy Economics</i> , 1992, 14, 291-301.	12.1	2
138	JAPANESE INDUSTRIAL DEVELOPMENT. <i>Australian Journal of Public Administration</i> , 1990, 49, 288-294.	1.7	4
139	Innovation Ecosystem for Sustainable Development. , 0, , .		8
140	Innovation Dynamics of Materials Manufacturing Industry: Changes in Management of Technology due to Socio-Economic Changes. <i>Advanced Materials Research</i> , 0, 452-453, 1020-1024.	0.3	0
141	A systems option for sustainable techno-metabolism: An ecological assessment of Japan's industrial technology system. , 0, , 233-263.		0