

# Yasunori Kikuchi

## List of Publications by Year in descending order

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96  
papers

1,165  
citations

393982

19  
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500791

28  
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99  
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99  
docs citations

99  
times ranked

957  
citing authors

#	ARTICLE	IF	CITATIONS
1	Environmental and resource use analysis of plant factories with energy technology options: A case study in Japan. <i>Journal of Cleaner Production</i> , 2018, 186, 703-717.	4.6	65
2	Industrial Symbiosis Centered on a Regional Cogeneration Power Plant Utilizing Available Local Resources: A Case Study of Tanegashima. <i>Journal of Industrial Ecology</i> , 2016, 20, 276-288.	2.8	54
3	Battery-assisted low-cost hydrogen production from solar energy: Rational target setting for future technology systems. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 1451-1465.	3.8	50
4	Analysis of risk trade-off relationships between organic solvents and aqueous agents: case study of metal cleaning processes. <i>Journal of Cleaner Production</i> , 2011, 19, 414-423.	4.6	43
5	Design of recycling system for poly(methyl methacrylate) (PMMA). Part 1: recycling scenario analysis. <i>International Journal of Life Cycle Assessment</i> , 2014, 19, 120-129.	2.2	37
6	Practical Method of Assessing Local and Global Impacts for Risk-Based Decision Making: A Case Study of Metal Degreasing Processes. <i>Environmental Science &amp; Technology</i> , 2008, 42, 4527-4533.	4.6	34
7	A graph theory-based methodology for vulnerability assessment of supply chains using the life cycle inventory database. <i>Omega</i> , 2018, 75, 165-181.	3.6	33
8	Hierarchical Activity Model for Risk-Based Decision Making. <i>Journal of Industrial Ecology</i> , 2009, 13, 945-964.	2.8	32
9	Environmental Performance of Biomass-Derived Chemical Production: A Case Study on Sugarcane-Derived Polyethylene. <i>Journal of Chemical Engineering of Japan</i> , 2013, 46, 319-325.	0.3	32
10	Present Status and Points of Discussion for Future Energy Systems in Japan from the Aspects of Technology Options. <i>Journal of Chemical Engineering of Japan</i> , 2014, 47, 499-513.	0.3	30
11	A scenario analysis of future energy systems based on an energy flow model represented as functionals of technology options. <i>Applied Energy</i> , 2014, 132, 586-601.	5.1	29
12	Separation of cathode particles and aluminum current foil in Lithium-Ion battery by high-voltage pulsed discharge Part I: Experimental investigation. <i>Waste Management</i> , 2021, 125, 58-66.	3.7	29
13	Greenhouse gas emissions and socioeconomic effects of biomass-derived products based on structural path and life cycle analyses: A case study of polyethylene and polypropylene in Japan. <i>Journal of Cleaner Production</i> , 2017, 167, 289-305.	4.6	28
14	Techno-economic and environmental assessment of bioethanol-based chemical process: A case study on ethyl acetate. <i>Environmental Progress and Sustainable Energy</i> , 2011, 30, 675-684.	1.3	26
15	Designing the scale of a woody biomass CHP considering local forestry reformation: A case study of Tanegashima, Japan. <i>Applied Energy</i> , 2017, 198, 160-172.	5.1	25
16	Analysis of supercritical water oxidation for detoxification of waste organic solvent in university based on life cycle assessment. <i>Journal of Hazardous Materials</i> , 2011, 194, 283-289.	6.5	23
17	Design of recycling system for poly(methyl methacrylate) (PMMA). Part 2: process hazards and material flow analysis. <i>International Journal of Life Cycle Assessment</i> , 2014, 19, 307-319.	2.2	22
18	Distributed Cogeneration of Power and Heat within an Energy Management Strategy for Mitigating Fossil Fuel Consumption. <i>Journal of Industrial Ecology</i> , 2016, 20, 289-303.	2.8	20

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19	Integrated design of agricultural and industrial processes: A case study of combined sugar and ethanol production. <i>AIChE Journal</i> , 2017, 63, 560-581.	1.8	20
20	Application of technology assessments to co-learning for regional transformation: a case study of biomass energy systems in Tanegashima. <i>Sustainability Science</i> , 2020, 15, 1473-1494.	2.5	20
21	Copper/Silver Recovery from Photovoltaic Panel Sheet by Electrical Dismantling Method. <i>International Journal of Automation Technology</i> , 2020, 14, 966-974.	0.5	20
22	Design of zeolite boiler in thermochemical energy storage and transport system utilizing unused heat from sugar mill. <i>Applied Energy</i> , 2019, 238, 561-571.	5.1	19
23	Rethinking sustainable bioenergy development in Japan: decentralised system supported by local forestry biomass. <i>Sustainability Science</i> , 2020, 15, 1461-1471.	2.5	19
24	Integration of CAPE and LCA Tools in Environmentally-Conscious Process Design: A Case Study on Biomass-Derived Resin. <i>Computer Aided Chemical Engineering</i> , 2010, , 1051-1056.	0.3	18
25	Design method for a local energy cooperative network using distributed energy technologies. <i>Applied Energy</i> , 2015, 154, 781-793.	5.1	18
26	Conceptual design of light integrated gasification fuel cell based on thermodynamic process simulation. <i>Applied Energy</i> , 2015, 147, 486-499.	5.1	16
27	Local risks and global impacts considering plant-specific functions and constraints: a case study of metal parts cleaning. <i>International Journal of Life Cycle Assessment</i> , 2010, 15, 17-31.	2.2	15
28	A graphical representation for consequential life cycle assessment of future technologies. Part 1: methodological framework. <i>International Journal of Life Cycle Assessment</i> , 2012, 17, 119-125.	2.2	14
29	Lifecycle greenhouse gas emissions of thermal energy storage implemented in a paper mill for wind energy utilization. <i>Energy</i> , 2020, 205, 118056.	4.5	14
30	Techno-economic and life cycle analyses of battery-assisted hydrogen production systems from photovoltaic power. <i>Journal of Cleaner Production</i> , 2021, 298, 126809.	4.6	14
31	Life Cycle Greenhouse Gas Emissions of Acetylated Cellulose Nanofiber-Reinforced Polylactic Acid Based on Scale-Up from Lab-Scale Experiments. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 10444-10452.	3.2	14
32	Separation of cathode particles and aluminum current foil in lithium-ion battery by high-voltage pulsed discharge Part II: Prospective life cycle assessment based on experimental data. <i>Waste Management</i> , 2021, 132, 86-95.	3.7	13
33	Simulation-Based Approaches for Design of Smart Energy System: A Review Applying Bibliometric Analysis. <i>Journal of Chemical Engineering of Japan</i> , 2017, 50, 385-396.	0.3	12
34	Defining Requirements on Technology Systems Assessment from Life Cycle Perspectives: Cases on Recycling of Photovoltaic and Secondary Batteries. <i>International Journal of Automation Technology</i> , 2020, 14, 890-908.	0.5	12
35	A New Approach for the Design and Assessment of Bio-based Chemical Processes toward Sustainability. <i>Industrial &amp; Engineering Chemistry Research</i> , 2015, 54, 5494-5504.	1.8	11
36	Material and heat flow analysis in thermal energy storage and transport system utilizing unused heat from bagasse boiler. <i>Mechanical Engineering Journal</i> , 2016, 3, 16-00334-16-00334.	0.2	11

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37	A region-specific analysis of technology implementation of hydrogen energy in Japan. International Journal of Hydrogen Energy, 2019, 44, 19434-19451.	3.8	11
38	A region-specific environmental analysis of technology implementation of hydrogen energy in Japan based on life cycle assessment. Journal of Industrial Ecology, 2020, 24, 217-233.	2.8	11
39	A graphical representation for consequential life cycle assessment of future technologies”Part 2: two case studies on choice of technologies and evaluation of technology improvements. International Journal of Life Cycle Assessment, 2012, 17, 270-276.	2.2	10
40	Activity and Data Models for Process Assessment Considering Sustainability. Kagaku Kogaku Ronbunshu, 2014, 40, 211-223.	0.1	10
41	Life Cycle Assessment of International Biomass Utilization: A Case Study of Malaysian Palm Kernel Shells for Biomass Power Generation in Japan. Waste and Biomass Valorization, 2022, 13, 2717-2733.	1.8	10
42	Tackling Power Outages in Japan: The Earthquake Compels a Swift Transformation of the Power Supply. Journal of Chemical Engineering of Japan, 2011, , .	0.3	9
43	Integrated modeling of agricultural and industrial processes within life cycle design for environment. Computer Aided Chemical Engineering, 2016, 38, 1947-1952.	0.3	9
44	Techno economic analysis of thermochemical energy storage and transport system utilizing “Zeolite Boiler” case study in Sweden. Energy Procedia, 2018, 149, 102-111.	1.8	9
45	Pilot Scale Demonstration of Technologies for Enhancing Production of Sugar and Ethanol from Sugarcane. Kagaku Kogaku Ronbunshu, 2018, 44, 260-270.	0.1	9
46	Process assessments for low-temperature methane reforming using oxygen carrier metal oxide nanoparticles. Chemical Engineering and Processing: Process Intensification, 2019, 142, 107531.	1.8	9
47	Integrated sugarcane farming and sugar milling with selective fermentation: A simulation-based approach. Journal of Cleaner Production, 2019, 236, 117521.	4.6	8
48	Extension of Event Correlation Analysis for Rationalization of Plant Alarm Systems. Kagaku Kogaku Ronbunshu, 2011, 37, 338-343.	0.1	8
49	Implementation Analysis of Bagasse Power Plants Considering Technology Options on Sugarcane Cultivars and Power Plants. Kagaku Kogaku Ronbunshu, 2018, 44, 113-122.	0.1	7
50	Risk Classification and Identification for Chemicals Management in Process Design. Journal of Chemical Engineering of Japan, 2013, 46, 488-500.	0.3	7
51	Prospective life cycle assessment for designing mobile thermal energy storage system utilizing zeolite. Journal of Cleaner Production, 2022, 365, 132592.	4.6	7
52	Integrated design of process and operation considering local risks and global impacts: A case study on metal-degreasing process design. Computer Aided Chemical Engineering, 2007, 24, 1223-1228.	0.3	6
53	Safety, health, and environmental assessment of bioethanol production from sugarcane, corn, and corn stover. Green Processing and Synthesis, 2012, 1, .	1.3	6
54	A socio-technical analysis of consumer preferences about energy systems applying a simulation-based approach: A case study of the Tokyo area. Energy Research and Social Science, 2018, 46, 52-63.	3.0	6

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55	Retrofit Energy Integration for Selective Fermentation in Cane Sugar Mills under Hot/Cold Energy Availability. <i>Journal of Chemical Engineering of Japan</i> , 2017, 50, 297-308.	0.3	6
56	Activity and Data Models of Planning Processes for Industrial Symbiosis in Rural Areas. <i>Kagaku Kogaku Ronbunshu</i> , 2017, 43, 347-357.	0.1	6
57	Analysis and Modeling of Information Required for Process Assessment on Environment, Health, and Safety by IDEF0 and UML. <i>Computer Aided Chemical Engineering</i> , 2012, , 1392-1396.	0.3	5
58	Life Cycle Assessment of Resource Recovery from Waste Electrical and Electronic Equipment: A Case Study of Tantalum Recovery by Chain-Using Drum-Typed Impact Mill. <i>Kagaku Kogaku Ronbunshu</i> , 2019, 45, 244-252.	0.1	5
59	Long-Term Forecasting Potential of Photo-Voltaic Electricity Generation and Demand Using R. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 4462.	1.3	5
60	Design Method of Alarm System for Identifying Possible Malfunctions in a Plant Based on Cause-Effect Model. <i>Computer Aided Chemical Engineering</i> , 2012, 31, 285-289.	0.3	5
61	Monitoring and Analysis of Solvent Emissions from Metal Cleaning Processes for Practical Process Improvement. <i>Annals of Occupational Hygiene</i> , 2012, 56, 829-42.	1.9	4
62	Developing technology introduction strategies based on visualized scenario analysis: Application in energy systems design. <i>Environmental Progress and Sustainable Energy</i> , 2015, 34, 832-840.	1.3	4
63	Simulation-based analysis for operational decision support on scheduling in sugar crystallization considering quality of molasses and syrup. <i>Computer Aided Chemical Engineering</i> , 2017, 40, 1807-1812.	0.3	4
64	Life cycle assessment. , 2020, , 383-395.		4
65	Decision Support for Plastics Recycling System Design Based on Individual Fossil Resource Consumption. <i>Kagaku Kogaku Ronbunshu</i> , 2010, 36, 243-254.	0.1	4
66	Reduction of Greenhouse Gas Emissions in the Introduction of &i>Inversion System&i> to Produce Sugar and Ethanol from Sugarcane. <i>Journal of Life Cycle Assessment Japan</i> , 2019, 15, 86-100.	0.0	4
67	Multi-Viewpoint Activity Model of Environmental and Health Risk Management for Middle-Stream Industrial Processes in the Supply Chain. <i>Kagaku Kogaku Ronbunshu</i> , 2014, 40, 174-186.	0.1	4
68	Utilizing Risk Analysis and Scenario Planning for Technology Roadmapping. , 2013, , 231-244.		3
69	Challenges for Model-Based Life Cycle Inventories and Impact Assessment in Early to Basic Process Design Stages. , 2016, , 295-326.		3
70	A computer-aided scenario analysis of national and regional energy systems based on feasible technology options. <i>Computer Aided Chemical Engineering</i> , 2016, 38, 1959-1964.	0.3	3
71	Environmental impact of tomato production under different hydroponic systems. <i>Acta Horticulturae</i> , 2016, , 267-271.	0.1	3
72	Impact of local conditions on bio&#x2013;based chemical process design: selection of input feedstock and production scale and scenario. <i>Environmental Progress and Sustainable Energy</i> , 2016, 35, 174-182.	1.3	3

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73	A design of rural energy system by industrial symbiosis considering availability of regional resources. Computer Aided Chemical Engineering, 2017, 40, 1987-1992.	0.3	3
74	A computer-aided analysis on regional power and heat energy systems considering socio-economic aspects: A case study on an isolated island in Japan. Computer Aided Chemical Engineering, 2018, 43, 1347-1352.	0.3	3
75	Regional suitability for energy carriers in Japan considering socioeconomic conditions and environmental performance. Journal of Cleaner Production, 2021, 318, 128461.	4.6	3
76	A computer-aided socio-technical analysis on national and regional energy systems considering local availability of renewable resources. Computer Aided Chemical Engineering, 2017, , 2485-2490.	0.3	3
77	Present Status of Japan's Energy. , 2016, , 23-32.		2
78	Life Cycle Assessment. , 2016, , 321-329.		2
79	Life cycle design of indoor hydroponic horticulture considering energy-water-food nexus. Computer Aided Chemical Engineering, 2019, , 1585-1590.	0.3	2
80	Integrated Modeling of Sugarcane Cultivation and Ethanol Fermentation from Agriculture and Engineering Perspectives. Computer Aided Chemical Engineering, 2012, , 182-186.	0.3	2
81	ICOPE-15-1132 Transport system of unused heat from bagasse-boiler by using chemical heat storage in sugar milling and refinery process. The Proceedings of the International Conference on Power Engineering (ICOPE), 2015, 2015.12, _ICOPE-15--_ICOPE-15-.	0.0	2
82	Design Support for VOC Control in SMEs by Simulation-Based Life-Cycle Engineering Part 1: Framework. Journal of Chemical Engineering of Japan, 2016, 49, 776-784.	0.3	2
83	Bench-Scale Demonstration Test and Design of a Moving Bed Counter-Flow Heat Exchanger for Unused Energy from a Sugar Mill. Kagaku Kogaku Ronbunshu, 2021, 47, 191-199.	0.1	2
84	Activity and Information Modeling of Comprehensive Assessment for Sustainable Process Design. Computer Aided Chemical Engineering, 2009, 26, 1123-1128.	0.3	1
85	Activity and Information Infrastructure for Risk-Based Process Design. Computer Aided Chemical Engineering, 2009, 27, 1023-1028.	0.3	1
86	Process Modeling of Bio-Based Production on Interdisciplinary Analysis across Agriculture and Engineering. Computer Aided Chemical Engineering, 2012, 31, 1105-1109.	0.3	1
87	Design Support for VOC Control in SMEs by Simulation-Based Life-Cycle Engineering Part 2: Case Study of Metal Cleaning Process. Journal of Chemical Engineering of Japan, 2017, 50, 68-78.	0.3	1
88	EcoBalance 2018 "Nexus of ideas: innovation by linking through life cycle thinking (9th-12 October 2018,)" Tj ETQg0 0 0 rgBT /Overlo	2.2	1
89	Life Cycle Assessment of Metal Parts Cleaning Considering Plant-specific Functions and Constraints. Journal of Life Cycle Assessment Japan, 2008, 4, 147-160.	0.0	1
90	Energy intensity in applying low-temperature chemical looping in steam reforming. Chemical Engineering Research and Design, 2022, 159, 850-861.	2.7	1

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91	Effect of bagasse drying on thermal energy storage utilizing zeolite water vapor ad/desorption at a sugar mill. Journal of Energy Storage, 2022, 51, 104495.	3.9	1
92	Design Methodology of Biomass Utilization System Considering Impacts on Petroleum Refining Industry. Computer Aided Chemical Engineering, 2014, 33, 1003-1008.	0.3	0
93	Effect of Multi Injection Process on "Zeolite Boiler" in Thermochemical Energy Storage and Transport System of Unused Heat From Bagasse Boiler. , 2017, , .		0
94	Design Support of Smart Energy Systems based on Locally Available Resources: A Case Study in Isolated Islands in Japan. Computer Aided Chemical Engineering, 2018, 44, 2515-2520.	0.3	0
95	Plant Alarm Signal Selection under Assumption of the Best Alarm Generation. Kagaku Kogaku Ronbunshu, 2012, 38, 408-414.	0.1	0
96	Modeling of open-system process for sustainable production. Computer Aided Chemical Engineering, 2012, 30, 612-616.	0.3	0