Sami Kara

List of Publications by Year
in descending order

82 papers	4,489 citations	117625 34 h-index	106344 65 g-index
83 all docs	83 docs citations	83 times ranked	3616 citing authors

#	Article	IF	Citations
1	Artificial Learning for Part Identification in Robotic Disassembly Through Automatic Rule Generation in an Ontology. IEEE Transactions on Automation Science and Engineering, 2023, 20, 296-309.	5.2	2
2	Closed-loop systems to circular economy: A pathway to environmental sustainability?. CIRP Annals - Manufacturing Technology, 2022, 71, 505-528.	3.6	37
3	Efficiency stagnation in global steel production urges joint supply- and demand-side mitigation efforts. Nature Communications, 2021, 12, 2066.	12.8	85
4	A modelling framework to support design of complex engineering systems in early design stages. Research in Engineering Design - Theory, Applications, and Concurrent Engineering, 2020, 31, 25-52.	2.1	9
5	Manufacturing big data ecosystem: A systematic literature review. Robotics and Computer-Integrated Manufacturing, 2020, 62, 101861.	9.9	182
6	Absolute sustainability: Challenges to life cycle engineering. CIRP Annals - Manufacturing Technology, 2020, 69, 533-553.	3.6	86
7	Product portfolio analysis towards operationalising science-based targets. Procedia CIRP, 2020, 90, 377-382.	1.9	9
8	An investigation into the role of PV industry in meeting the growing energy demand towards absolute sustainability. Procedia CIRP, 2020, 90, 383-387.	1.9	8
9	Green paradox and the role of life cycle engineering. Procedia CIRP, 2020, 90, 159-164.	1.9	2
10	Energy efficient machine tools. CIRP Annals - Manufacturing Technology, 2020, 69, 646-667.	3.6	64
11	Monitoring and Control of Unstructured Manufacturing Big Data. , 2020, , .		3
12	A Framework for Estimating Regional Footprint of Companies towards Absolute Sustainability. Procedia CIRP, 2019, 80, 446-451.	1.9	6
13	Material Criticality and Circular Economy: Necessity of Manufacturing Oriented Strategies. Procedia CIRP, 2019, 80, 667-672.	1.9	16
14	Global production networks: Design and operation. CIRP Annals - Manufacturing Technology, 2019, 68, 823-841.	3.6	156
15	The role of life cycle engineering (LCE) in meeting the sustainable development goals â€“ report from a consultation of LCE experts. Journal of Cleaner Production, 2019, 230, 378-382.	9.3	33
16	System interaction, System of Systems, and environmental impact of products. CIRP Annals - Manufacturing Technology, 2019, 68, 17-20.	3.6	19
17	Data mining in battery production chains towards multi-criterial quality prediction. CIRP Annals - Manufacturing Technology, 2019, 68, 463-466.	3.6	67
18	Comparative energy and greenhouse gas assessment of industrial rooftop-integrated PV and solar thermal collectors. Applied Energy, 2019, 241, 113-123.	10.1	42

#	Article	IF	Citations
19	Large scale MTConnect data collection. , 2019, , .		2
20	Design, analysis and manufacturing of lattice structures: an overview. International Journal of Computer Integrated Manufacturing, 2018, 31, 243-261.	4.6	198
21	Target-driven Life Cycle Engineering: Staying within the Planetary Boundaries. Procedia CIRP, 2018, 69, 3-10.	1.9	32
22	Dynamic life cycle quantification of metallic elements and their circularity, efficiency, and leakages. Journal of Cleaner Production, 2018, 174, 1492-1502.	9.3	36
23	Energy Flow Analysis of an Alternative Fuel Production Facility in South Australia. Procedia CIRP, 2018, 69, 288-293.	1.9	1
24	Life cycle engineering of lightweight structures. CIRP Annals - Manufacturing Technology, 2018, 67, 651-672.	3.6	82
25	Role of manufacturing towards achieving circular economy: The steel case. CIRP Annals - Manufacturing Technology, 2018, 67, 21-24.	3.6	33
26	Cradle-to-cradle modeling of the future steel flow in China. Resources, Conservation and Recycling, 2017, 117, 45-57.	10.8	43
27	Rapid generation of uniform cellular structure by using prefabricated unit cells. International Journal of Computer Integrated Manufacturing, 2017, 30, 792-804.	4.6	13
28	Methodology for Monitoring Manufacturing Environment by Using Wireless Sensor Networks (WSN) and the Internet of Things (IoT). Procedia CIRP, 2017, 61, 323-328.	1.9	71
29	A Generic Sankey Tool for Evaluating Energy Value Stream in Manufacturing Systems. Procedia CIRP, 2017, 61, 475-480.	1.9	19
30	Functional unit and product functionalityâ€"addressing increase in consumption and demand for functionality in sustainability assessment with LCA. International Journal of Life Cycle Assessment, 2017, 22, 1257-1265.	4.7	19
31	Resource Efficiency and an Integral Framework for Performance Measurement. Sustainable Development, 2017, 25, 150-165.	12.5	7
32	Life Cycle Cost Analysis of Electrical Vehicles in Australia. Procedia CIRP, 2017, 61, 767-772.	1.9	48
33	Design, management and control of demanufacturing and remanufacturing systems. CIRP Annals - Manufacturing Technology, 2017, 66, 585-609.	3.6	156
34	An Integrated Framework for Life Cycle Engineering. Procedia CIRP, 2017, 61, 2-9.	1.9	88
35	Concurrent scheduling of a job shop and microgrid to minimize energy costs under due date constraints. , 2017, , .		1
36	An Integrated Simulation Optimisation Decision Support Tool for Multi-Product Production Systems. Modern Applied Science, 2017, 11, 56.	0.6	5

#	Article	IF	Citations
37	A Modelling Framework to Design Executable Logical Architecture of Engineering Systems. Modern Applied Science, 2017, 11, 75.	0.6	8
38	Sustainability Cockpit: An integrated tool for continuous assessment and improvement of sustainability in manufacturing. CIRP Annals - Manufacturing Technology, 2016, 65, 5-8.	3.6	27
39	Implementing Key Performance Indicators for Energy Efficiency in Manufacturing. Procedia CIRP, 2016, 57, 758-763.	1.9	40
40	A hierarchical framework for concurrent assessment of energy and water efficiency in manufacturing systems. Journal of Cleaner Production, 2016, 133, 88-98.	9.3	28
41	Finite Element Analysis and Validation of Cellular Structures. Procedia CIRP, 2016, 50, 94-99.	1.9	35
42	Determining the Main Factors Influencing the Energy Consumption of Electric Vehicles in the Usage Phase. Procedia CIRP, 2016, 48, 352-357.	1.9	55
43	An integrated approach for improving energy efficiency of manufacturing process chains. International Journal of Sustainable Engineering, 2016, 9, 11-24.	3.5	27
44	Economic and environmental value stream map (E²VSM) simulation for multi-product manufacturing systems. International Journal of Sustainable Engineering, 2016, 9, 354-362.	3.5	43
45	Defining Circulation Factories â€“ A Pathway towards Factories of the Future. Procedia CIRP, 2015, 29, 627-632.	1.9	25
46	Characterising Energy Efficiency of Electrical Discharge Machining (EDM) Processes. Procedia CIRP, 2015, 29, 263-268.	1.9	39
47	Life cycle assessment of cubic boron nitride grinding wheels. Journal of Cleaner Production, 2015, 107, 707-721.	9.3	21
48	Robot Assisted Disassembly for the Recycling of Electric Vehicle Batteries. Procedia CIRP, 2015, 29, 716-721.	1.9	141
49	Assessing the Impact of Embodied Water in Manufacturing Systems. Procedia CIRP, 2015, 29, 80-85.	1.9	11
50	Characterising energy and eco-efficiency of injection moulding processes. International Journal of Sustainable Engineering, 2015, 8, 55-65.	3.5	20
51	General plans for removing main components in cognitive robotic disassembly automation. , 2015, , .		7
52	Renewable energy integration into factories: Real-time control of on-site energy systems. CIRP Annals - Manufacturing Technology, 2015, 64, 443-446.	3.6	19
53	Hierarchical Modelling of Complex Material and Energy Flow in Manufacturing Systems. Procedia CIRP, 2015, 29, 92-97.	1.9	24
54	Life Cycle Assessment of Electric Vehicles â€“ A Framework to Consider Influencing Factors. Procedia CIRP, 2015, 29, 233-238.	1.9	65

#	Article	IF	Citations
55	A methodology for customized prediction of energy consumption in manufacturing industries. International Journal of Precision Engineering and Manufacturing - Green Technology, 2015, 2, 163-172.	4.9	51
56	Learning and revision in cognitive robotics disassembly automation. Robotics and Computer-Integrated Manufacturing, 2015, 34, 79-94.	9.9	60
57	Analysis of the impact of technology changes on the economic and environmental influence of product life-cycle design. International Journal of Computer Integrated Manufacturing, 2014, 27, 422-433.	4.6	15
58	LCA case study. Part 2: environmental footprint and carbon tax of cradle-to-gate for composite and stainless steel I-beams. International Journal of Life Cycle Assessment, 2014, 19, 272-284.	4.7	8
59	Stepwise approach to reduce the costs and environmental impacts of grinding processes. International Journal of Advanced Manufacturing Technology, 2014, 71, 919-931.	3.0	13
60	Determining optimal process parameters to increase the eco-efficiency of grinding processes. Journal of Cleaner Production, 2014, 66, 644-654.	9.3	95
61	Energy Efficiency of Compressed Air Systems. Procedia CIRP, 2014, 15, 313-318.	1.9	99
62	Integrated Material and Energy Flow Analysis towards Energy Efficient Manufacturing. Procedia CIRP, 2014, 15, 117-122.	1.9	34
63	Reactive modelling of on-site energy system components for real-time application. , 2014, , .		4
64	Long term impacts of international outsourcing of manufacturing on sustainability. CIRP Annals - Manufacturing Technology, 2014, 63, 41-44.	3.6	18
65	Economic and environmental assessment of product life cycle design:Âvolume and technology perspective. Journal of Cleaner Production, 2014, 75, 75-85.	9.3	26
66	Eco-efficiency of disposable and reusable surgical instrumentsâ€"a scissors case. International Journal of Life Cycle Assessment, 2013, 18, 1137-1148.	4.7	83
67	A Framework for Developing Portfolios of Improvements Projects in Manufacturing. Procedia CIRP, 2013, 7, 377-382.	1.9	5
68	LCA case study. Part 1: cradle-to-grave environmental footprint analysis of composites and stainless steel I-beams. International Journal of Life Cycle Assessment, 2013, 18, 208-217.	4.7	26
69	Application of cognitive robotics in disassembly of products. CIRP Annals - Manufacturing Technology, 2013, 62, 31-34.	3.6	76
70	Outsourcing decisions and environmental sustainability. , 2013, , .		1
71	Selection of Lean and Six Sigma projects in industry. International Journal of Lean Six Sigma, 2013, 4, 4-16.	3.3	54
72	Developing Unit Process Models for Predicting Energy Consumption in Industry: A Case of Extrusion Line. , 2013, , 147-152.		7

#	Article	IF	Citations
73	Towards energy and resource efficient manufacturing: A processes and systems approach. CIRP Annals - Manufacturing Technology, 2012, 61, 587-609.	3.6	865
74	Toward integrated product and process life cycle planningâ€"An environmental perspective. CIRP Annals - Manufacturing Technology, 2012, 61, 681-702.	3.6	155
75	Eco-efficiency of manufacturing processes: A grinding case. CIRP Annals - Manufacturing Technology, 2012, 61, 59-62.	3.6	133
76	Project portfolio selection in continuous improvement. International Journal of Operations and Production Management, 2011, 31, 1071-1088.	5.9	39
77	An Investigation into Fixed Energy Consumption of Machine Tools. , 2011, , 268-273.		106
78	Development of SCRIS: A Knowledge Based System Tool for Assisting Organizations in Managing Supply Chain Risks. , 2010, , .		3
79	An integrated methodology for assessing physical and technological life of products for reuse. International Journal of Sustainable Manufacturing, 2009, 1, 463.	0.3	12
80	Simulation modelling of reverse logistics networks. International Journal of Production Economics, 2007, 106, 61-69.	8.9	120
81	A technical and economic model for end-of-life (EOL) options of industrial products. International Journal of Environment and Sustainable Development, 2002, 1, 171.	0.3	27
82	The role of human factors in flexibility management: A survey. Human Factors and Ergonomics in Manufacturing, 2002, 12, 75-119.	2.7	38