

Lorenz M Hilty

List of Publications by Year in descending order

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83
papers

3,158
citations

126708

33
h-index

161609

54
g-index

86
all docs

86
docs citations

86
times ranked

2619
citing authors

#	ARTICLE	IF	CITATIONS
1	Digital sufficiency: conceptual considerations for ICTs on a finite planet. <i>Annales Des Telecommunications/Annals of Telecommunications</i> , 2023, 78, 277-295.	1.6	14
2	Toward a method for assessing the energy impacts of telecommuting based on time-use data. <i>Travel Behaviour & Society</i> , 2022, 27, 107-116.	2.4	6
3	The digital sharing economy: A confluence of technical and social sharing. <i>Environmental Innovation and Societal Transitions</i> , 2021, 38, 127-139.	2.5	65
4	Impacts of telecommuting on time use and travel: A case study of a neighborhood telecommuting center in Stockholm. <i>Travel Behaviour & Society</i> , 2021, 23, 157-165.	2.4	19
5	Representation, Propagation, and Interpretation of Uncertain Knowledge in Dynamic Probabilistic Material Flow Models. <i>Environmental Modeling and Assessment</i> , 2021, 26, 709-721.	1.2	0
6	Digital transformationâ€™ life cycle assessment of digital services, multifunctional devices and cloud computing. <i>International Journal of Life Cycle Assessment</i> , 2020, 25, 2093-2098.	2.2	32
7	Sources of variation in life cycle assessments of smartphones and tablet computers. <i>Environmental Impact Assessment Review</i> , 2020, 84, 106416.	4.4	35
8	Conceptualizing the impact of information and communication technology on individual time and energy use. <i>Telematics and Informatics</i> , 2020, 49, 101375.	3.5	18
9	Digitally Enabled Sharing and the Circular Economy: Towards a Framework for Sustainability Assessment. <i>Progress in IS</i> , 2020, , 105-116.	0.5	7
10	The Relevance of Digital Sharing Business Models for Sustainability. , 2020, , .		7
11	A Typology of Digital Sharing Business Models: A Design Science Research Approach. <i>Lecture Notes in Computer Science</i> , 2020, , 297-308.	1.0	1
12	Contribution-based prioritization of LCI database improvements: the most important unit processes inecoinvent. <i>International Journal of Life Cycle Assessment</i> , 2019, 24, 1778-1792.	2.2	6
13	How LCA contributes to the environmental assessment of higher order effects of ICT application: A review of different approaches. <i>Journal of Cleaner Production</i> , 2019, 219, 698-712.	4.6	92
14	Transparenz normativer Orientierungen in partizipativen TA-Projekten. <i>TATuP - Zeitschrift FÃ¼r TechnikfolgenabschÃ¤tzung in Theorie Und Praxis</i> , 2019, 28, 58-64.	0.2	1
15	Motivating students on ICT-related study programs to engage with the subject of sustainable development. <i>International Journal of Sustainability in Higher Education</i> , 2018, 19, 642-656.	1.6	14
16	Sustainable software productsâ€™ Towards assessment criteria for resource and energy efficiency. <i>Future Generation Computer Systems</i> , 2018, 86, 199-210.	4.9	62
17	Service Lifetime, Storage Time, and Disposal Pathways of Electronic Equipment: A Swiss Case Study. <i>Journal of Industrial Ecology</i> , 2018, 22, 196-208.	2.8	44
18	Assessing Indirect Environmental Effects of Information and Communication Technology (ICT): A Systematic Literature Review. <i>Sustainability</i> , 2018, 10, 2662.	1.6	71

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19	Where Do Our Resources Go? Indium, Neodymium, and Gold Flows Connected to the Use of Electronic Equipment in Switzerland. <i>Sustainability</i> , 2018, 10, 2658.	1.6	41
20	ICT-Enabled Sharing Economy and Environmental Sustainability—A Resource-Oriented Approach. <i>Progress in IS</i> , 2018, , 53-65.	0.5	11
21	Conceptualizing the Digital Sharing Economy in the Context of Sustainability. <i>Sustainability</i> , 2018, 10, 4453.	1.6	70
22	Unintended Side Effects of the Digital Transition: European Scientists’s™ Messages from a Proposition-Based Expert Round Table. <i>Sustainability</i> , 2018, 10, 2001.	1.6	82
23	An agent-based model of wood markets: Scenario analysis. <i>Forest Policy and Economics</i> , 2018, 95, 26-36.	1.5	9
24	An Approach to Assess Indirect Environmental Effects of Digitalization Based on a Time-Use Perspective. <i>Progress in IS</i> , 2018, , 67-78.	0.5	14
25	Empirical validation of an agent-based model of wood markets in Switzerland. <i>PLoS ONE</i> , 2018, 13, e0190605.	1.1	10
26	Use, Storage, and Disposal of Electronic Equipment in Switzerland. <i>Environmental Science & Technology</i> , 2017, 51, 4494-4502.	4.6	27
27	Contribution-based prioritization of LCI database improvements: Method design, demonstration, and evaluation. <i>Environmental Modelling and Software</i> , 2016, 86, 204-218.	1.9	12
28	Service lifetime and disposal pathways of business devices. , 2016, , .		1
29	Using Systems Thinking and System Dynamics Modeling to Understand Rebound Effects. <i>Progress in IS</i> , 2016, , 237-255.	0.5	2
30	A dynamic probabilistic material flow modeling method. <i>Environmental Modelling and Software</i> , 2016, 76, 69-80.	1.9	54
31	LICARA nanoSCAN - A tool for the self-assessment of benefits and risks of nanoproducts. <i>Environment International</i> , 2016, 91, 150-160.	4.8	53
32	Enhancing Agent-Based Models with Discrete Choice Experiments. <i>Jasss</i> , 2016, 19, .	1.0	18
33	The Energy Demand of ICT: A Historical Perspective and Current Methodological Challenges. <i>Advances in Intelligent Systems and Computing</i> , 2015, , 71-103.	0.5	22
34	The Things of the Internet of Things in BPMN. <i>Lecture Notes in Business Information Processing</i> , 2015, , 285-297.	0.8	48
35	Information technology and renewable energy — Modelling, simulation, decision support and environmental assessment. <i>Environmental Impact Assessment Review</i> , 2015, 52, 1.	4.4	5
36	Ethical Issues in Ubiquitous Computing—Three Technology Assessment Studies Revisited. <i>Advances in Intelligent Systems and Computing</i> , 2015, , 45-60.	0.5	9

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37	ICT for Sustainability: An Emerging Research Field. <i>Advances in Intelligent Systems and Computing</i> , 2015, , 3-36.	0.5	150
38	An Information System Supporting Cap and Trade in Organizations. <i>Advances in Intelligent Systems and Computing</i> , 2015, , 285-299.	0.5	1
39	Gamification and Sustainable Consumption: Overcoming the Limitations of Persuasive Technologies. <i>Advances in Intelligent Systems and Computing</i> , 2015, , 367-385.	0.5	39
40	Dematerialization Through Electronic Media?. <i>Advances in Intelligent Systems and Computing</i> , 2015, , 405-421.	0.5	14
41	Modeling the Effects of ICT on Environmental Sustainability: Revisiting a System Dynamics Model Developed for the European Commission. <i>Advances in Intelligent Systems and Computing</i> , 2015, , 449-474.	0.5	15
42	The Energy Intensity of the Internet: Home and Access Networks. <i>Advances in Intelligent Systems and Computing</i> , 2015, , 137-155.	0.5	23
43	The Energy Intensity of the Internet: Edge and Core Networks. <i>Advances in Intelligent Systems and Computing</i> , 2015, , 157-170.	0.5	14
44	Evaluating the sustainability of electronic media: Strategies for life cycle inventory data collection and their implications for LCA results. <i>Environmental Modelling and Software</i> , 2014, 56, 27-36.	1.9	24
45	Modeling Metal Stocks and Flows: A Review of Dynamic Material Flow Analysis Methods. <i>Environmental Science & Technology</i> , 2014, 48, 2102-2113.	4.6	350
46	Assessing Internet energy intensity: A review of methods and results. <i>Environmental Impact Assessment Review</i> , 2014, 45, 63-68.	4.4	74
47	The Direct Energy Demand of Internet Data Flows. <i>Journal of Industrial Ecology</i> , 2013, 17, 680-688.	2.8	54
48	Simulation der Smart Grid Integration eines modernen BÃ¼rogebÃ¼udes am Beispiel von IBM-Schweiz. , 2013, , 59-68.		0
49	Effects of Internet-based multiple-site conferences on greenhouse gas emissions. <i>Telematics and Informatics</i> , 2012, 29, 362-374.	3.5	125
50	Prospective Impacts of Electronic Textiles on Recycling and Disposal. <i>Journal of Industrial Ecology</i> , 2011, 15, 496-511.	2.8	66
51	Environmental impacts of lighting technologies â€” Life cycle assessment and sensitivity analysis. <i>Environmental Impact Assessment Review</i> , 2011, 31, 334-343.	4.4	81
52	Information and Communication Technologies for a more Sustainable World. , 2011, , 410-418.		3
53	Information and Communication Technologies for a more Sustainable World. , 2011, , 36-45.		1
54	Scenario Analysis. <i>Journal of Industrial Ecology</i> , 2010, 14, 826-843.	2.8	128

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55	SUSTAINABLE DEVELOPMENT AND ICT INTERPRETED IN A NATURAL SCIENCE CONTEXT. Information, Communication and Society, 2010, 13, 7-22.	2.6	29
56	ICT and Sustainable Development. International Federation for Information Processing, 2010, , 227-235.	0.4	32
57	The Precautionary Principle as a Framework for a Sustainable Information Society. Journal of Business Ethics, 2009, 85, 493-505.	3.7	31
58	One laptop per child, local refurbishment or overseas donations? Sustainability assessment of computer supply scenarios for schools in Colombia. Journal of Environmental Management, 2009, 90, 3498-3511.	3.8	39
59	Impact assessment and policy learning in the European Commission. Environmental Impact Assessment Review, 2008, 28, 90-105.	4.4	42
60	The Material Side of Virtualization. , 2007, , 5-6.		1
61	Risiken und Nebenwirkungen der Informatisierung des Alltags. , 2007, , 187-205.		1
62	Life cycle assessment of second generation (2G) and third generation (3G) mobile phone networks. Environment International, 2006, 32, 656-675.	4.8	65
63	Environmental informatics. Environmental Modelling and Software, 2006, 21, 1517-1518.	1.9	11
64	The relevance of information and communication technologies for environmental sustainability â€“ A prospective simulation study. Environmental Modelling and Software, 2006, 21, 1618-1629.	1.9	268
65	Environmental Assessment of End-of-Life Treatment Options for a GSM 900 Antenna Rack (12 pp paper) Tj ETQq1 1,0.784314 rgBT /Ovw 2.2 11	1.9	11
66	Rebound effects of progress in information technology. Poiesis & Praxis, 2006, 4, 19-38.	0.3	56
67	Electronic wasteâ€”an emerging risk?. Environmental Impact Assessment Review, 2005, 25, 431-435.	4.4	73
68	The end of life treatment of second generation mobile phone networks: Strategies to reduce the environmental impact. Environmental Impact Assessment Review, 2005, 25, 540-566.	4.4	57
69	Smart labels in municipal solid waste â€” a case for the Precautionary Principle?. Environmental Impact Assessment Review, 2005, 25, 567-586.	4.4	52
70	Pervasive Computing â€“ A Case for the Precautionary Principle?. Lecture Notes in Computer Science, 2005, , 1-2.	1.0	0
71	Towards sustainable pervasive computing - Guest editorial. IEEE Technology and Society Magazine, 2005, 24, 7-8.	0.6	3
72	The Precautionary Principle in the Information Society. Human and Ecological Risk Assessment (HERA), 2004, 10, 787-799.	1.7	25

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73	Introduction: Technology Assessment for Pervasive Computing. Human and Ecological Risk Assessment (HERA), 2004, 10, 759-761.	1.7	0
74	Assessing the Human, Social, and Environmental Risks of Pervasive Computing. Human and Ecological Risk Assessment (HERA), 2004, 10, 853-874.	1.7	55
75	Analysis of energy footprints associated with recycling of glass and plastic case studies for industrial ecology. Ecological Modelling, 2004, 174, 175-189.	1.2	39
76	Environmental impacts of an international conference. Environmental Impact Assessment Review, 2002, 22, 543-557.	4.4	61
77	Sustainable development and information technology. Environmental Impact Assessment Review, 2002, 22, 445-447.	4.4	3
78	A General Modelling and Simulation System for Sustainability Impact Assessment in the Field of Traffic and Logistics. , 2001, , 167-185.		1
79	Betriebliche Umweltinformationssysteme (BUIS) - eine Literaturanalyse. Informatik-Spektrum, 1997, 20, 159-167.	1.0	4
80	Environmental Management Information Systems for Production and Recycling. IFIP Advances in Information and Communication Technology, 1997, , 21-29.	0.5	6
81	15. Betriebliche Umweltinformatik. , 1995, , 295-312.		2
82	Betriebliche und überbetriebliche Umweltinformationssysteme als informationstechnische Infrastruktur für das Stoffstrommanagement. , 1995, , 193-205.		2
83	Anforderungen an ein ökologisch orientiertes Logistik-Informationssystem. Informatik Aktuell, 1992, , 254-263.	0.4	2