

Stephan Pfister

List of Publications by Year in descending order

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Version: 2024-02-01

112
papers

8,957
citations

46918

47
h-index

42291

92
g-index

118
all docs

118
docs citations

118
times ranked

6432
citing authors

#	ARTICLE	IF	CITATIONS
1	Growing environmental footprint of plastics driven by coal combustion. <i>Nature Sustainability</i> , 2022, 5, 139-148.	11.5	148
2	Letter to the editor re: "The scarcity-weighted water footprint provides unreliable water sustainability scoring" by. <i>Science of the Total Environment</i> , 2022, 825, 154108.	3.9	3
3	Regionalized Life Cycle Inventories of Global Sulfidic Copper Tailings. <i>Environmental Science & Technology</i> , 2022, 56, 4553-4564.	4.6	21
4	Mine waste as a sustainable resource for facing bricks. <i>Journal of Cleaner Production</i> , 2022, 368, 133118.	4.6	12
5	A highly resolved MRIO database for analyzing environmental footprints and Green Economy Progress. <i>Science of the Total Environment</i> , 2021, 755, 142587.	3.9	46
6	Towards sustainable resource management: identification and quantification of human actions that compromise the accessibility of metal resources. <i>Resources, Conservation and Recycling</i> , 2021, 167, 105403.	5.3	30
7	Building consensus on water use assessment of livestock production systems and supply chains: Outcome and recommendations from the FAO LEAP Partnership. <i>Ecological Indicators</i> , 2021, 124, 107391.	2.6	22
8	Methodology and optimization tool for a personalized low environmental impact and healthful diet specific to country and season. <i>Journal of Industrial Ecology</i> , 2021, 25, 1147.	2.8	6
9	Quantifying uncertainty for AWARE characterization factors. <i>Journal of Industrial Ecology</i> , 2021, 25, 1588-1601.	2.8	4
10	Global Assessment of Agricultural Productivity Losses from Soil Compaction and Water Erosion. <i>Environmental Science & Technology</i> , 2021, 55, 12162-12171.	4.6	17
11	Linking land use inventories to biodiversity impact assessment methods. <i>International Journal of Life Cycle Assessment</i> , 2021, 26, 2315.	2.2	2
12	Preface to the Thematic Section: Mine Tailings: Problem or Opportunity? Towards a Combined Remediation and Resource Recovery Approach. <i>Journal of Sustainable Metallurgy</i> , 2021, 7, 1440.	1.1	1
13	Improving water ecosystem sustainability of urban water system by management strategies optimization. <i>Journal of Environmental Management</i> , 2020, 254, 109766.	3.8	18
14	Globally Regionalized Monthly Life Cycle Impact Assessment of Particulate Matter. <i>Environmental Science & Technology</i> , 2020, 54, 16028-16038.	4.6	16
15	Regionalized LCA in practice: the need for a universal shapefile to match LCI and LCIA. <i>International Journal of Life Cycle Assessment</i> , 2020, 25, 1867-1871.	2.2	10
16	Assessing Impacts on the Natural Resource Soil in Life Cycle Assessment: Methods for Compaction and Water Erosion. <i>Environmental Science & Technology</i> , 2020, 54, 6496-6507.	4.6	15
17	LC-IMPACT: A regionalized life cycle damage assessment method. <i>Journal of Industrial Ecology</i> , 2020, 24, 1201-1219.	2.8	80
18	Quantifying the Valuation of Animal Welfare Among Americans. <i>Journal of Agricultural and Environmental Ethics</i> , 2020, 33, 261-282.	0.9	6

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19	Regional Carrying Capacities of Freshwater Consumption—Current Pressure and Its Sources. <i>Environmental Science & Technology</i> , 2020, 54, 9083-9094.	4.6	23
20	Giving Legs to Handprint Thinking: Foundations for Evaluating the Good We Do. <i>Earth's Future</i> , 2020, 8, e2019EF001422.	2.4	11
21	Water—Energy—Food Nexus Framework for Promoting Regional Integration in Central Asia. <i>Water (Switzerland)</i> , 2020, 12, 1896.	1.2	27
22	Water scarcity footprint of hydropower based on a seasonal approach - Global assessment with sensitivities of model assumptions tested on specific cases. <i>Science of the Total Environment</i> , 2020, 724, 138188.	3.9	18
23	The greenhouse gas emissions, water consumption, and heat emissions of global steam-electric power production: a generating unit level analysis and database. <i>Environmental Research Letters</i> , 2020, 15, 104029.	2.2	7
24	Environmental impacts of an advanced oxidation process as tertiary treatment in a wastewater treatment plant. <i>Science of the Total Environment</i> , 2019, 694, 133572.	3.9	91
25	Defining freshwater as a natural resource: a framework linking water use to the area of protection natural resources. <i>International Journal of Life Cycle Assessment</i> , 2019, 24, 960-974.	2.2	33
26	A new method for analyzing sustainability performance of global supply chains and its application to material resources. <i>Science of the Total Environment</i> , 2019, 684, 164-177.	3.9	65
27	An LCA impact assessment model linking land occupation and malnutrition-related DALYs. <i>International Journal of Life Cycle Assessment</i> , 2019, 24, 1620-1630.	2.2	8
28	Global emission hotspots of coal power generation. <i>Nature Sustainability</i> , 2019, 2, 113-121.	11.5	149
29	International trade of global scarce water use in agriculture: Modeling on watershed level with monthly resolution. <i>Ecological Economics</i> , 2019, 159, 301-311.	2.9	40
30	Regionalization in LCA: current status in concepts, software and databases—69th LCA forum, Swiss Federal Institute of Technology, Zurich, 13 September, 2018. <i>International Journal of Life Cycle Assessment</i> , 2019, 24, 364-369.	2.2	21
31	The land-water nexus of biofuel production in Brazil: Analysis of synergies and trade-offs using a multiregional input-output model. <i>Journal of Cleaner Production</i> , 2019, 214, 52-61.	4.6	55
32	Overview and recommendations for regionalized life cycle impact assessment. <i>International Journal of Life Cycle Assessment</i> , 2019, 24, 856-865.	2.2	57
33	Consistent characterisation factors at midpoint and endpoint relevant to agricultural water scarcity arising from freshwater consumption. <i>International Journal of Life Cycle Assessment</i> , 2018, 23, 2276-2287.	2.2	58
34	Method Development for Including Environmental Water Requirement in the Water Stress Index. <i>Water Resources Management</i> , 2018, 32, 1585-1598.	1.9	5
35	A Multimedia Hydrological Fate Modeling Framework To Assess Water Consumption Impacts in Life Cycle Assessment. <i>Environmental Science & Technology</i> , 2018, 52, 4658-4667.	4.6	17
36	Global guidance on environmental life cycle impact assessment indicators: impacts of climate change, fine particulate matter formation, water consumption and land use. <i>International Journal of Life Cycle Assessment</i> , 2018, 23, 2189-2207.	2.2	94

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37	The WULCA consensus characterization model for water scarcity footprints: assessing impacts of water consumption based on available water remaining (AWARE). <i>International Journal of Life Cycle Assessment</i> , 2018, 23, 368-378.	2.2	471
38	Enhancing comprehensive measurement of social impacts in S-LCA by including environmental and economic aspects. <i>International Journal of Life Cycle Assessment</i> , 2018, 23, 133-146.	2.2	19
39	Ecosystem quality in LCIA: status quo, harmonization, and suggestions for the way forward. <i>International Journal of Life Cycle Assessment</i> , 2018, 23, 1995-2006.	2.2	30
40	Framework for integrating animal welfare into life cycle sustainability assessment. <i>International Journal of Life Cycle Assessment</i> , 2018, 23, 1476-1490.	2.2	64
41	LCA of key technologies for future electricity supply – 68th LCA forum, Swiss Federal Institute of Technology, Zurich, 16 April, 2018. <i>International Journal of Life Cycle Assessment</i> , 2018, 23, 1716-1721.	2.2	2
42	Biodiversity impacts from water consumption on a global scale for use in life cycle assessment. <i>International Journal of Life Cycle Assessment</i> , 2017, 22, 1247-1256.	2.2	33
43	LCIA framework and cross-cutting issues guidance within the UNEP-SETAC Life Cycle Initiative. <i>Journal of Cleaner Production</i> , 2017, 161, 957-967.	4.6	141
44	Water scarcity assessments in the past, present, and future. <i>Earth's Future</i> , 2017, 5, 545-559.	2.4	545
45	Towards harmonizing natural resources as an area of protection in life cycle impact assessment. <i>International Journal of Life Cycle Assessment</i> , 2017, 22, 1912-1927.	2.2	70
46	Assessing the environmental impacts of freshwater thermal pollution from global power generation in LCA. <i>Science of the Total Environment</i> , 2017, 580, 1014-1026.	3.9	26
47	Understanding the LCA and ISO water footprint: A response to Hoekstra (2016) – A critique on the water-scarcity weighted water footprint in LCA – <i>Ecological Indicators</i> , 2017, 72, 352-359.	2.6	158
48	Bringing it all together: linking measures to secure nations' food supply. <i>Current Opinion in Environmental Sustainability</i> , 2017, 29, 98-117.	3.1	47
49	BOARD-INVITED REVIEW: Quantifying water use in ruminant production. <i>Journal of Animal Science</i> , 2017, 95, 2001.	0.2	14
50	Hydropower's Biogenic Carbon Footprint. <i>PLoS ONE</i> , 2016, 11, e0161947.	1.1	69
51	Dealing with uncertainty in water scarcity footprints. <i>Environmental Research Letters</i> , 2016, 11, 054008.	2.2	42
52	Global thermal pollution of rivers from thermoelectric power plants. <i>Environmental Research Letters</i> , 2016, 11, 104011.	2.2	89
53	Spatially explicit assessment of water embodied in European trade: A product-level multi-regional input-output analysis. <i>Global Environmental Change</i> , 2016, 38, 171-182.	3.6	98
54	Global water footprint assessment of hydropower. <i>Renewable Energy</i> , 2016, 99, 711-720.	4.3	104

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55	A matter of meters: state of the art in the life cycle assessment of enhanced geothermal systems. Energy and Environmental Science, 2016, 9, 2720-2743.	15.6	43
56	Water Footprinting in Life Cycle Assessment: How to Count the Drops and Assess the Impacts?. LCA Compendium, 2016, , 73-114.	0.8	5
57	Global Biodiversity Loss by Freshwater Consumption and Eutrophication from Swiss Food Consumption. Environmental Science & Technology, 2016, 50, 7019-7028.	4.6	55
58	Global freshwater thermal emissions from steam-electric power plants with once-through cooling systems. Energy, 2016, 97, 46-57.	4.5	41
59	Area of concern: a new paradigm in life cycle assessment for the development of footprint metrics. International Journal of Life Cycle Assessment, 2016, 21, 276-280.	2.2	38
60	Global guidance on environmental life cycle impact assessment indicators: progress and case study. International Journal of Life Cycle Assessment, 2016, 21, 429-442.	2.2	88
61	Spatially Explicit Analysis of Biodiversity Loss Due to Global Agriculture, Pasture and Forest Land Use from a Producer and Consumer Perspective. Environmental Science & Technology, 2016, 50, 3928-3936.	4.6	101
62	Ecoinvent 3: assessing water use in LCA and facilitating water footprinting. International Journal of Life Cycle Assessment, 2016, 21, 1349-1360.	2.2	43
63	Saving the Planet's Climate or Water Resources? The Trade-Off between Carbon and Water Footprints of European Biofuels. Sustainability, 2015, 7, 6665-6683.	1.6	37
64	Analysis of water use impact assessment methods (part A): evaluation of modeling choices based on a quantitative comparison of scarcity and human health indicators. International Journal of Life Cycle Assessment, 2015, 20, 139-160.	2.2	72
65	Spatial and temporal specific characterisation factors for water use impact assessment in Spain. International Journal of Life Cycle Assessment, 2015, 20, 128-138.	2.2	34
66	Making Sense of the Minefield of Footprint Indicators. Environmental Science & Technology, 2015, 49, 2601-2603.	4.6	38
67	Exploring the potential impact of implementing carbon capture technologies in fossil fuel power plants on regional European water stress index levels. International Journal of Greenhouse Gas Control, 2015, 39, 318-328.	2.3	10
68	Consensus building on the development of a stress-based indicator for LCA-based impact assessment of water consumption: outcome of the expert workshops. International Journal of Life Cycle Assessment, 2015, 20, 577-583.	2.2	84
69	Modelling spatially explicit impacts from phosphorus emissions in agriculture. International Journal of Life Cycle Assessment, 2015, 20, 785-795.	2.2	48
70	Analysis of water use impact assessment methods (part B): applicability for water footprinting and decision making with a laundry case study. International Journal of Life Cycle Assessment, 2015, 20, 865-879.	2.2	31
71	Large-Scale Hydrological Modeling for Calculating Water Stress Indices: Implications of Improved Spatiotemporal Resolution, Surface-Groundwater Differentiation, and Uncertainty Characterization. Environmental Science & Technology, 2015, 49, 4971-4979.	4.6	30
72	Criticality of Water: Aligning Water and Mineral Resources Assessment. Environmental Science & Technology, 2015, 49, 12315-12323.	4.6	33

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73	Uncertainty analysis of the environmental sustainability of biofuels. Energy, Sustainability and Society, 2015, 5, .	1.7	20
74	Water Use. LCA Compendium, 2015, , 223-245.	0.8	4
75	Activities of Water Use in LCA (WULCA). Journal of Life Cycle Assessment Japan, 2015, 11, 257-261.	0.0	0
76	Teleconnecting Consumption to Environmental Impacts at Multiple Spatial Scales. Journal of Industrial Ecology, 2014, 18, 7-9.	2.8	79
77	Response to Fang and Heijungs. Journal of Industrial Ecology, 2014, 18, 72-72.	2.8	2
78	Water Footprint: Pitfalls on Common Ground. Environmental Science & Technology, 2014, 48, 4-4.	4.6	43
79	Impacts of River Water Consumption on Aquatic Biodiversity in Life Cycle Assessment—A Proposed Method, and a Case Study for Europe. Environmental Science & Technology, 2014, 48, 3236-3244.	4.6	43
80	Footprints and Safe Operation Space: Walk the Line?. Environmental Science & Technology, 2014, 48, 8935-8935.	4.6	5
81	Water Footprint Symposium: where next for water footprint and water assessment methodology?. International Journal of Life Cycle Assessment, 2014, 19, 1561-1565.	2.2	13
82	Virtual Scarce Water in China. Environmental Science & Technology, 2014, 48, 7704-7713.	4.6	251
83	Monthly water stress: spatially and temporally explicit consumptive water footprint of global crop production. Journal of Cleaner Production, 2014, 73, 52-62.	4.6	199
84	Assessment of Implementing Carbon Capture Technologies in Fossil Fuel Power Plants on Regional European Water Stress Index Levels. Energy Procedia, 2014, 63, 7198-7204.	1.8	1
85	Assessing the Environmental Impact of Water Consumption by Energy Crops Grown in Spain. Journal of Industrial Ecology, 2013, 17, 90-102.	2.8	58
86	Quantifying Area Changes of Internationally Important Wetlands Due to Water Consumption in LCA. Environmental Science & Technology, 2013, 47, 9799-9807.	4.6	54
87	Review of methods addressing freshwater use in life cycle inventory and impact assessment. International Journal of Life Cycle Assessment, 2013, 18, 707-721.	2.2	268
88	Accounting for a scarce resource: virtual water and water footprint in the global water system. Current Opinion in Environmental Sustainability, 2013, 5, 599-606.	3.1	74
89	Estimating Water Consumption of Potential Natural Vegetation on Global Dry Lands: Building an LCA Framework for Green Water Flows. Environmental Science & Technology, 2013, 47, 12258-12265.	4.6	41
90	Effects of Consumptive Water Use on Biodiversity in Wetlands of International Importance. Environmental Science & Technology, 2013, 47, 12248-12257.	4.6	95

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91	Towards an Integrated Family of Footprint Indicators. <i>Journal of Industrial Ecology</i> , 2013, 17, 337-339.	2.8	51
92	A new water footprint calculation method integrating consumptive and degradative water use into a single stand-alone weighted indicator. <i>International Journal of Life Cycle Assessment</i> , 2013, 18, 204-207.	2.2	132
93	Biodiversity Impacts from Salinity Increase in a Coastal Wetland. <i>Environmental Science & Technology</i> , 2013, 47, 6384-6392.	4.6	42
94	Environmental Impacts of <i>Jatropha curcas</i> Biodiesel in India. <i>Journal of Biomedicine and Biotechnology</i> , 2012, 2012, 1-10.	3.0	34
95	Does South-North Water Transfer Reduce the Environmental Impact of Water Consumption in China?. <i>Journal of Industrial Ecology</i> , 2012, 16, 647-654.	2.8	33
96	Life Cycle Inventory and Carbon and Water Footprint of Fruits and Vegetables: Application to a Swiss Retailer. <i>Environmental Science & Technology</i> , 2012, 46, 3253-3262.	4.6	196
97	GIS-Based Regionalized Life Cycle Assessment: How Big Is Small Enough? Methodology and Case Study of Electricity Generation. <i>Environmental Science & Technology</i> , 2012, 46, 1096-1103.	4.6	115
98	Modeling the Local Biodiversity Impacts of Agricultural Water Use: Case Study of a Wetland in the Coastal Arid Area of Peru. <i>Environmental Science & Technology</i> , 2012, 46, 4966-4974.	4.6	45
99	Measuring ecological impact of water consumption by bioethanol using life cycle impact assessment. <i>International Journal of Life Cycle Assessment</i> , 2012, 17, 16-24.	2.2	22
100	Characterization Factors for Water Consumption and Greenhouse Gas Emissions Based on Freshwater Fish Species Extinction. <i>Environmental Science & Technology</i> , 2011, 45, 5272-5278.	4.6	114
101	Environmental Impacts of Water Use in Global Crop Production: Hotspots and Trade-Offs with Land Use. <i>Environmental Science & Technology</i> , 2011, 45, 5761-5768.	4.6	234
102	Value Choices in Life Cycle Impact Assessment of Stressors Causing Human Health Damage. <i>Journal of Industrial Ecology</i> , 2011, 15, 796-815.	2.8	46
103	Projected water consumption in future global agriculture: Scenarios and related impacts. <i>Science of the Total Environment</i> , 2011, 409, 4206-4216.	3.9	118
104	The environmental relevance of freshwater consumption in global power production. <i>International Journal of Life Cycle Assessment</i> , 2011, 16, 580-591.	2.2	110
105	Taking into account water use impacts in the LCA of biofuels: an Argentinean case study. <i>International Journal of Life Cycle Assessment</i> , 2011, 16, 869-877.	2.2	32
106	COMPARISON OF BOTTOM-UP AND TOP-DOWN APPROACHES TO CALCULATING THE WATER FOOTPRINTS OF NATIONS. <i>Economic Systems Research</i> , 2011, 23, 371-385.	1.2	288
107	A framework for assessing off-stream freshwater use in LCA. <i>International Journal of Life Cycle Assessment</i> , 2010, 15, 439-453.	2.2	203
108	Reducing humanity's water footprint. <i>Environmental Science & Technology</i> , 2010, 44, 6019-6021.	4.6	86

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109	Characterization Factors for Thermal Pollution in Freshwater Aquatic Environments. Environmental Science & Technology, 2010, 44, 9364-9369.	4.6	93
110	A revised approach to water footprinting to make transparent the impacts of consumption and production on global freshwater scarcity. Global Environmental Change, 2010, 20, 113-120.	3.6	480
111	The water footprint vs. footprint of bioenergy. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, E93-4.	3.3	84
112	Assessing the Environmental Impacts of Freshwater Consumption in LCA. Environmental Science & Technology, 2009, 43, 4098-4104.	4.6	1,032