Sabrina Spatari

List of Publications by Year
in descending order

70 papers	2,490 citations	218592 26 h-index	206029 48 g-index
72 all docs	72 docs citations	72 times ranked	2687 citing authors

#	Article	IF	Citations
1	Life Cycle Assessment of Switchgrass- and Corn Stover-Derived Ethanol-Fueled Automobiles. Environmental Science & Technology, 2005, 39, 9750-9758.	4.6	256
2	Life cycle evaluation of emerging lignocellulosic ethanol conversion technologies. Bioresource Technology, 2010, 101, 654-667.	4.8	217
3	Life cycle implications of urban green infrastructure. Environmental Pollution, 2011, 159, 2174-2179.	3.7	145
4	The contribution of enzymes and process chemicals to the life cycle of ethanol. Environmental Research Letters, 2009, 4, 014001.	2.2	113
5	The Multilevel Cycle of Anthropogenic Zinc. Journal of Industrial Ecology, 2005, 9, 67-90.	2.8	107
6	Using Life Cycle Assessment to Evaluate Green and Grey Combined Sewer Overflow Control Strategies. Journal of Industrial Ecology, 2012, 16, 901-913.	2.8	96
7	A review of thermochemical upgrading of pyrolysis bioâ€oil: Technoâ€economic analysis, life cycle assessment, and technology readiness. GCB Bioenergy, 2020, 12, 4-18.	2.5	86
8	Comparative evaluation of lead emissions and toxicity potential in the life cycle of lead halide perovskite photovoltaics. Energy, 2019, 166, 1089-1096.	4.5	83
9	Land Use Greenhouse Gas Emissions from Conventional Oil Production and Oil Sands. Environmental Science & Technology, 2010, 44, 8766-8772.	4.6	76
10	Potential use of lightweight aggregate (LWA) produced from bottom coal ash for internal curing of concrete systems. Cement and Concrete Composites, 2020, 105, 103428.	4.6	75
11	Effects of composition and transportation logistics on environmental, energy and cost metrics for the production of alternative cementitious binders. Journal of Cleaner Production, 2018, 185, 628-645.	4.6	59
12	Characterizing Model Uncertainties in the Life Cycle of Lignocellulose-Based Ethanol Fuels. Environmental Science & Technology, 2010, 44, 8773-8780.	4.6	58
13	Life-Cycle Assessment of Biodiesel Produced from Grease Trap Waste. Environmental Science & Technology, 2016, 50, 2718-2726.	4.6	55
14	Economic and life cycle assessments of biomass utilization for bioenergy products. Biofuels, Bioproducts and Biorefining, 2017, 11, 633-647.	1.9	55
15	Mechanochemistry Can Reduce Life Cycle Environmental Impacts of Manufacturing Active Pharmaceutical Ingredients. ACS Sustainable Chemistry and Engineering, 2022, 10, 1430-1439.	3.2	54
16	Technological application potential of polyethylene and polystyrene biodegradation by macro-organisms such as mealworms and wax moth larvae. Science of the Total Environment, 2020, 735, 139521.	3.9	51
17	Using GaBi 3 to perform life cycle assessment and life cycle engineering. International Journal of Life Cycle Assessment, 2001, 6, 81.	2.2	49
18	Life Cycle Environmental and Economic Tradeoffs of Using Fast Pyrolysis Products for Power Generation. Energy & Fuels, 2013, 27, 2578-2587.	2.5	48

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19	Estimating Materials Stocked by Landâ€Use Type in Historic Urban Buildings Using Spatioâ€Temporal Analytical Tools. Journal of Industrial Ecology, 2016, 20, 1025-1037.	2.8	41
20	Cost and greenhouse gas emission tradeoffs of alternative uses of lignin for second generation ethanol. Environmental Research Letters, 2013, 8, 025021.	2.2	40
21	Uncertainties in Life Cycle Greenhouse Gas Emissions from Advanced Biomass Feedstock Logistics Supply Chains in Kansas. Energies, 2014, 7, 7125-7146.	1.6	37
22	Application of life cycle inventory analysis to fuel tank system design. International Journal of Life Cycle Assessment, 1998, 3, 18-28.	2.2	35
23	A greenhouse gas abatement framework for investment in district heating. Applied Energy, 2018, 211, 1095-1105.	5.1	35
24	The contemporary copper cycle of Asia. Journal of Material Cycles and Waste Management, 2003, 5, 143-156.	1.6	34
25	Densified Biomass Can Cost-Effectively Mitigate Greenhouse Gas Emissions and Address Energy Security in Thermal Applications. Environmental Science & Technology, 2012, 46, 1270-1277.	4.6	31
26	Environmental, exergetic and economic tradeoffs of catalytic- and fast pyrolysis-to-renewable diesel. Renewable Energy, 2020, 162, 371-380.	4.3	29
27	Fuels and Chemicals from Equine-Waste-Derived Tail Gas Reactive Pyrolysis Oil: Technoeconomic Analysis, Environmental and Exergetic Life Cycle Assessment. ACS Sustainable Chemistry and Engineering, 2017, 5, 8804-8814.	3.2	25
28	Life Cycle Economic and Environmental Implications of Pristine High Density Polyethylene and Alternative Materials in Drainage Pipe Applications. Journal of Polymers and the Environment, 2017, 25, 925-947.	2.4	24
29	Uncertainty in the life cycle greenhouse gas emissions and costs of HDPE pipe alternatives. Resources, Conservation and Recycling, 2020, 154, 104602.	5.3	24
30	Exergy Based Assessment of the Production and Conversion of Switchgrass, Equine Waste, and Forest Residue to Bio-Oil Using Fast Pyrolysis. Industrial & Engineering Chemistry Research, 2015, 54, 529-539.	1.8	23
31	Life cycle environmental and cost evaluation of renewable diesel production. Fuel, 2020, 279, 118429.	3.4	22
32	Monetizing environmental impact of integrated aquaponic farming compared to separate systems. Science of the Total Environment, 2021, 792, 148459.	3.9	22
33	Life Cycle Environmental and Cost Implications of Isostearic Acid Production for Pharmaceutical and Personal Care Products. ACS Sustainable Chemistry and Engineering, 2019, 7, 15247-15258.	3.2	20
34	Mitigation Opportunities for Life-Cycle Greenhouse Gas Emissions during Feedstock Production across Heterogeneous Landscapes. , 2012, , 203-219.		19
35	Renewable Rubber and Jet Fuel from Biomass: Evaluation of Greenhouse Gas Emissions and Land Use Trade-offs in Energy and Material Markets. ACS Sustainable Chemistry and Engineering, 2018, 6, 14414-14422.	3.2	19
36	Time effects of climate change mitigation strategies for second generation biofuels and co-products with temporary carbon storage. Journal of Cleaner Production, 2016, 112, 2642-2653.	4.6	18

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37	Environmental Sustainability of Mixed Cation Perovskite Materials in Photovoltaics Manufacturing. ACS Sustainable Chemistry and Engineering, 2020, 8, 16537-16548.	3.2	18
38	Life-Cycle Assessment of Alternative Pyrolysis-Based Transport Fuels: Implications of Upgrading Technology, Scale, and Hydrogen Requirement. ACS Sustainable Chemistry and Engineering, 2018, 6, 10001-10010.	3.2	17
39	Thermochemical principles of the production of lightweight aggregates from waste coal bottom ash. Journal of the American Ceramic Society, 2021, 104, 613-634.	1.9	17
40	Melt ceramics from coal ash: Constitutive product design using thermal and flow properties. Resources, Conservation and Recycling, 2018, 132, 168-177.	5.3	16
41	Quantitative assessment of the impacts of BIM and lean on process and operations flow in construction projects. Engineering, Construction and Architectural Management, 2021, 28, 2176-2198.	1.8	16
42	Integrating biorefinery and farm biogeochemical cycles offsets fossil energy and mitigates soil carbon losses. , 2015, 25, 1142-1156.		15
43	Decision support for sustainable development using a Canadian economic inputâ€“output life cycle assessment model. Canadian Journal of Civil Engineering, 2005, 32, 16-29.	0.7	14
44	A life cycle perspective on land use and project economics of electricity from wind and anaerobic digestion. Energy Policy, 2016, 89, 52-63.	4.2	14
45	Legacy effects of individual crops affect N₂O emissions accounting within crop rotations. GCB Bioenergy, 2018, 10, 123-136.	2.5	14
46	Renewable diesel from oils and animal fat waste: implications of feedstock, technology, co-products and ILUC on life cycle GWP. Resources, Conservation and Recycling, 2020, 161, 104944.	5.3	14
47	Tradeâ€offs across productivity, GHG intensity, and pollutant loads from secondâ€generation sorghum bioenergy. GCB Bioenergy, 2017, 9, 1764-1779.	2.5	13
48	Environmental life cycle evaluation of prefabricated residential construction in China. Journal of Building Engineering, 2022, 57, 104776.	1.6	13
49	Energy and Greenhouse Gas Emissions Trade-Offs of Recycled Concrete Aggregate Use in Nonstructural Concrete: A North American Case Study. Journal of Infrastructure Systems, 2009, 15, 361-370.	1.0	12
50	Life cycle assessment of novel heat exchanger for dry cooling of power plants based on encapsulated phase change materials. Applied Energy, 2020, 271, 115227.	5.1	11
51	Fracture characterization of pristine/post-consumer HDPE blends using the essential work of fracture (EWF) concept and extended finite element method (XFEM). Engineering Fracture Mechanics, 2015, 139, 1-17.	2.0	10
52	Fracture characterization of recycled high density polyethylene/nanoclay composites using the essential work of fracture concept. Polymer Engineering and Science, 2016, 56, 222-232.	1.5	8
53	Framework for improved confidence in modeled nitrous oxide estimates for biofuel regulatory standards. Mitigation and Adaptation Strategies for Global Change, 2018, 23, 1281-1301.	1.0	8
54	Is aquaponics good for the environment?â€"evaluation of environmental impact through life cycle assessment studies on aquaponics systems. Aquaculture International, 2022, 30, 305-322.	1.1	8

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55	Longitudinal Study of Wastewater Greases and Their Potential for the Production of Biofuels. Energy & Fuels, 2018, 32, 1831-1842.	2.5	7
56	The Role of Biorefinery Co-Products, Market Proximity and Feedstock Environmental Footprint in Meeting Biofuel Policy Goals for Winter Barley-to-Ethanol. Energies, 2020, 13, 2236.	1.6	7
57	Continuous Calcination of Biocoke/Petcoke Blends in a Rotary Tube Furnace. ACS Sustainable Chemistry and Engineering, 2021, 9, 695-703.	3.2	7
58	The Place of Planning in Sustainability Metrics for Public Works: Lessons From the Philadelphia Region. Public Works Management Policy, 2011, 16, 20-39.	0.7	6
59	Asset management in civil engineering. Structure and Infrastructure Engineering, 2013, 9, 295-296.	2.0	6
60	Bio-Based Polyisoprene Can Mitigate Climate Change and Deforestation in Expanding Rubber Production. Fermentation, 2021, 7, 204.	1.4	6
61	Effects of recycled HDPE and nanoclay on stress cracking of HDPE by correlating J_c with slow crack growth. Polymer Engineering and Science, 2018, 58, 1471-1478.	1.5	5
62	Strategies to achieve deep reductions in metropolitan transportation GHG emissions: the case of Philadelphia. Transportation Planning and Technology, 2018, 41, 797-815.	0.9	5
63	Evaluation of environmental and cost tradeoffs of producing energy from soybeans for on-farm use. Journal of Cleaner Production, 2019, 210, 1635-1649.	4.6	5
64	Environmental and economic implications of stormwater management alternatives in rural development. Journal of Industrial Ecology, 2021, 25, 1076-1088.	2.8	4
65	Construction waste management decision making process: identification, framework and detailed urban C&D waste profile analysis. , 2012, , .		3
66	Effects of greenhouse gas emissions timing on alternative biomass and fossil energy sources for district heating. GCB Bioenergy, 2021, 13, 1785-1799.	2.5	3
67	An optimization framework to identify key management strategies for improving biorefinery performance: a case study of winter barley production. Biofuels, Bioproducts and Biorefining, 2020, 14, 1296-1312.	1.9	2
68	Repurposing anaerobic digestate for economical biomanufacturing and water recovery. Applied Microbiology and Biotechnology, 2022, , .	1.7	2
69	Life Cycle Environmental Impact of Underground Plastic Recharge Chambers in Stormwater Management. Buildings, 2022, 12, 867.	1.4	2
70	Life Cycle Environmental Impacts of Precursors Used in the Supply Chain of Emerging Perovskite Solar Cells. , 2021, , .		0