Martin Patel

List of Publications by Year
in descending order

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203	13,268	26610	27389
papers	citations	56 h-index	106 g-index

212	212	212	13843
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Olefins from conventional and heavy feedstocks: Energy use in steam cracking and alternative processes. Energy, 2006, 31, 425-451.	4.5	842
2	Plastics Derived from Biological Sources: Present and Future: A Technical and Environmental Review. Chemical Reviews, 2012, 112, 2082-2099.	23.0	792
3	Replacing fossil based PET with biobased PEF; process analysis, energy and GHG balance. Energy and Environmental Science, 2012, 5, 6407.	15.6	478
4	A review on the role, cost and value of hydrogen energy systems for deep decarbonisation. Renewable and Sustainable Energy Reviews, 2019, 101, 279-294.	8.2	378
5	Open-loop recycling: A LCA case study of PET bottle-to-fibre recycling. Resources, Conservation and Recycling, 2010, 55, 34-52.	5.3	340
6	Present and future development in plastics from biomass. Biofuels, Bioproducts and Biorefining, 2010, 4, 25-40.	1.9	306
7	Succinic acid production derived from carbohydrates: An energy and greenhouse gas assessment of a platform chemical toward a bioâ€based economy. Biofuels, Bioproducts and Biorefining, 2014, 8, 16-29.	1.9	246
8	A Review of the Environmental Impacts of Biobased Materials. Journal of Industrial Ecology, 2012, 16, S169.	2.8	233
9	Critical aspects in the life cycle assessment (LCA) of bio-based materials â€“ Reviewing methodologies and deriving recommendations. Resources, Conservation and Recycling, 2013, 73, 211-228.	5.3	213
10	An interdisciplinary review of energy storage for communities: Challenges and perspectives. Renewable and Sustainable Energy Reviews, 2017, 79, 730-749.	8.2	209
11	Producing Bio-Based Bulk Chemicals Using Industrial Biotechnology Saves Energy and Combats Climate Change. Environmental Science & Technology, 2007, 41, 7915-7921.	4.6	207
12	An integrated techno-economic and life cycle environmental assessment of power-to-gas systems. Applied Energy, 2017, 193, 440-454.	5.1	204
13	To compost or not to compost: Carbon and energy footprints of biodegradable materialsâ€™ waste treatment. Polymer Degradation and Stability, 2011, 96, 1159-1171.	2.7	197
14	Long-term model-based projections of energy use and CO2 emissions from the global steel and cement industries. Resources, Conservation and Recycling, 2016, 112, 15-36.	5.3	196
15	Potential of bioethanol as a chemical building block for biorefineries: Preliminary sustainability assessment of 12 bioethanol-based products. Bioresource Technology, 2013, 135, 490-499.	4.8	195
16	From fluid milk to milk powder: Energy use and energy efficiency in the European dairy industry. Energy, 2006, 31, 1984-2004.	4.5	176
17	A review of experience curve analyses for energy demand technologies. Technological Forecasting and Social Change, 2010, 77, 411-428.	6.2	163
18	Bioenergy. , 2011, , 209-332.		162

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19	LCA benchmarking study on textiles made of cotton, polyester, nylon, acryl, or elastane. International Journal of Life Cycle Assessment, 2014, 19, 331-356.	2.2	159
20	GIS-based assessment of photovoltaic (PV) and concentrated solar power (CSP) generation potential in West Africa. Renewable and Sustainable Energy Reviews, 2018, 81, 2088-2103.	8.2	148
21	On the electrification of road transportation â€“ A review of the environmental, economic, and social performance of electric two-wheelers. Transportation Research, Part D: Transport and Environment, 2015, 41, 348-366.	3.2	145
22	On the electrification of road transport - Learning rates and price forecasts for hybrid-electric and battery-electric vehicles. Energy Policy, 2012, 48, 374-393.	4.2	144
23	Techno-economic implications of the electrolyser technology and size for power-to-gas systems. International Journal of Hydrogen Energy, 2016, 41, 3748-3761.	3.8	144
24	Life cycle impact assessment of bio-based plastics from sugarcane ethanol. Journal of Cleaner Production, 2015, 90, 114-127.	4.6	142
25	Todayâ€™s and tomorrowâ€™s bio-based bulk chemicals from white biotechnology. Applied Biochemistry and Biotechnology, 2007, 136, 361-388.	1.4	141
26	Exâ€ante environmental and economic evaluation of polymer photovoltaics. Progress in Photovoltaics: Research and Applications, 2009, 17, 372-393.	4.4	141
27	Sustainability assessment of novel chemical processes at early stage: application to biobased processes. Energy and Environmental Science, 2012, 5, 8430.	15.6	138
28	Environmental impact assessment of man-made cellulose fibres. Resources, Conservation and Recycling, 2010, 55, 260-274.	5.3	134
29	Competing uses of biomass: Assessment and comparison of the performance of bio-based heat, power, fuels and materials. Renewable and Sustainable Energy Reviews, 2014, 40, 964-998.	8.2	132
30	Plastics materials flow analysis for India. Resources, Conservation and Recycling, 2006, 47, 222-244.	5.3	128
31	Life Cycle Assessment of Polysaccharide Materials: A Review. Journal of Polymers and the Environment, 2008, 16, 154-167.	2.4	125
32	Comparison of clustering approaches for domestic electricity load profile characterisation - Implications for demand side management. Energy, 2019, 180, 665-677.	4.5	113
33	Environmental and Cost Assessment of a Polypropylene Nanocomposite. Journal of Polymers and the Environment, 2007, 15, 212-226.	2.4	109
34	The impact of copper scarcity on the efficiency of 2050 global renewable energy scenarios. Energy, 2013, 50, 62-73.	4.5	107
35	Effect of tariffs on the performance and economic benefits of PV-coupled battery systems. Applied Energy, 2016, 164, 175-187.	5.1	107
36	Comparative Life Cycle Studies on Poly(3-hydroxybutyrate)-Based Composites as Potential Replacement for Conventional Petrochemical Plastics. Biomacromolecules, 2007, 8, 2210-2218.	2.6	106

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37	Benchmarking the energy use of energy-intensive industries in industrialized and in developing countries. Energy, 2011, 36, 6661-6673.	4.5	103
38	Recycling of plastics in Germany. Resources, Conservation and Recycling, 2000, 29, 65-90.	5.3	96
39	Comparing the Land Requirements, Energy Savings, and Greenhouse Gas Emissions Reduction of Biobased Polymers and Bioenergy.. Journal of Industrial Ecology, 2003, 7, 93-116.	2.8	95
40	Comparing life cycle energy and <scp>GHG</scp> emissions of bioâ€based <scp>PET</scp>, recycled <scp>PET</scp>, <scp>PLA</scp>, and manâ€made cellulosics. Biofuels, Bioproducts and Biorefining, 2012, 6, 625-639.	1.9	95
41	Techno-economic and environmental assessment of stationary electricity storage technologies for different time scales. Energy, 2017, 139, 1173-1187.	4.5	95
42	How much energy to process one pound of meat? A comparison of energy use and specific energy consumption in the meat industry of four European countries. Energy, 2006, 31, 2047-2063.	4.5	90
43	Life cycle energy and GHG emissions of PET recycling: change-oriented effects. International Journal of Life Cycle Assessment, 2011, 16, 522-536.	2.2	81
44	Preliminary evaluation of risks related to waste incineration of polymer nanocomposites. Science of the Total Environment, 2012, 417-418, 76-86.	3.9	78
45	Analysis of space heating demand in the Swiss residential building stock: Element-based bottom-up model of archetype buildings. Energy and Buildings, 2019, 184, 300-322.	3.1	77
46	Potential of best practice technology to improve energy efficiency in the global chemical and petrochemical sector. Energy, 2011, 36, 5779-5790.	4.5	74
47	Optimizing PV and grid charging in combined applications to improve the profitability of residential batteries. Journal of Energy Storage, 2017, 13, 58-72.	3.9	74
48	Basic petrochemicals from natural gas, coal and biomass: Energy use and CO2 emissions. Resources, Conservation and Recycling, 2009, 53, 513-528.	5.3	72
49	Plastics streams in Germanyâ€”an analysis of production, consumption and waste generation. Resources, Conservation and Recycling, 1998, 24, 191-215.	5.3	71
50	Approximation of theoretical energy-saving potentials for the petrochemical industry using energy balances for 68 key processesâ˜†. Energy, 2007, 32, 1104-1123.	4.5	71
51	Spatial analysis of distribution grid capacity and costs to enable massive deployment of PV, electric mobility and electric heating. Applied Energy, 2021, 287, 116504.	5.1	71
52	Bottom-up analysis of energy efficiency improvement and CO2 emission reduction potentials in the Swiss cement industry. Journal of Cleaner Production, 2017, 142, 4294-4309.	4.6	68
53	Assessment of the current thermal performance level of the Swiss residential building stock: Statistical analysis of energy performance certificates. Energy and Buildings, 2018, 178, 360-378.	3.1	68
54	Energy demand and emissions of the non-energy sector. Energy and Environmental Science, 2014, 7, 482-498.	15.6	62

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55	Fuels and plastics from lignocellulosic biomass via the furan pathway; a technical analysis. RSC Advances, 2014, 4, 3536-3549.	1.7	61
56	Adding apples and oranges: The monitoring of energy efficiency in the Dutch food industry. Energy Policy, 2006, 34, 1720-1735.	4.2	60
57	â€œWhite and Greenâ€• Comparison of market-based instruments to promote energy efficiency. Journal of Cleaner Production, 2005, 13, 1015-1026.	4.6	59
58	Assessment of the technical and economic potentials of biomass use for the production of steam, chemicals and polymers. Renewable and Sustainable Energy Reviews, 2014, 40, 1153-1167.	8.2	59
59	Optimized PV-coupled battery systems for combining applications: Impact of battery technology and geography. Renewable and Sustainable Energy Reviews, 2019, 112, 978-990.	8.2	58
60	Scenario Projections for Future Market Potentials of Biobased Bulk Chemicals. Environmental Science & Technology, 2008, 42, 2261-2267.	4.6	57
61	Analyzing price and efficiency dynamics of large appliances with the experience curve approach. Energy Policy, 2010, 38, 770-783.	4.2	57
62	Feel good, stay green: Positive affect promotes pro-environmental behaviors and mitigates compensatory â€œmental bookkeepingâ€•effects. Journal of Environmental Psychology, 2018, 56, 3-11.	2.3	57
63	Techno-economic analysis of battery storage and curtailment in a distribution grid with high PV penetration. Journal of Energy Storage, 2018, 17, 73-83.	3.9	57
64	Measuring the thermal energy performance gap of labelled residential buildings in Switzerland. Energy Policy, 2020, 137, 111085.	4.2	57
65	Cumulative energy demand (CED) and cumulative CO2 emissions for products of the organic chemical industry. Energy, 2003, 28, 721-740.	4.5	56
66	Petrochemicals from oil, natural gas, coal and biomass: Production costs in 2030â€“2050. Resources, Conservation and Recycling, 2009, 53, 653-663.	5.3	56
67	Innovations in papermaking: An LCA of printing and writing paper from conventional and high yield pulp. Science of the Total Environment, 2012, 439, 307-320.	3.9	56
68	Choosing sustainable technologies. Implications of the underlying sustainability paradigm in the decision-making process. Journal of Cleaner Production, 2015, 105, 438-446.	4.6	56
69	Applying distance-to-target weighing methodology to evaluate the environmental performance of bio-based energy, fuels, and materials. Resources, Conservation and Recycling, 2007, 50, 260-281.	5.3	55
70	Conceptual design of sustainable integrated microalgae biorefineries: Parametric analysis of energy use, greenhouse gas emissions and techno-economics. Algal Research, 2016, 17, 113-131.	2.4	54
71	Environmental assessment of coloured fabrics and opportunities for value creation: spin-dyeing versus conventional dyeing of modal fabrics. Journal of Cleaner Production, 2014, 72, 127-138.	4.6	52
72	Life cycle assessment of sisal fibre â€“ Exploring how local practices can influence environmental performance. Journal of Cleaner Production, 2017, 149, 818-827.	4.6	51

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73	Cost-effectiveness of large-scale deep energy retrofit packages for residential buildings under different economic assessment approaches. Energy and Buildings, 2020, 215, 109870.	3.1	51
74	Ex-ante environmental assessments of novel technologies â€“ Improved caprolactam catalysis and hydrogen storage. Journal of Cleaner Production, 2011, 19, 1659-1667.	4.6	50
75	Do energy performance certificates allow reliable predictions of actual energy consumption and savings? Learning from the Swiss national database. Energy and Buildings, 2020, 224, 110235.	3.1	50
76	Integration of prosumer peer-to-peer trading decisions into energy community modelling. Nature Energy, 2022, 7, 74-82.	19.8	50
77	Ex-ante life cycle assessment of polymer nanocomposites using organo-modified layered double hydroxides for potential application in agricultural films. Green Chemistry, 2014, 16, 4969-4984.	4.6	49
78	Innovative membrane filtration system for micropollutant removal from drinking water â€“ prospective environmental LCA and its integration in business decisions. Journal of Cleaner Production, 2014, 72, 153-166.	4.6	48
79	The non-energy intensive manufacturing sector.: An energy analysis relating to the Netherlands. Energy, 2005, 30, 749-767.	4.5	47
80	Biorefinery systems â€“ potential contributors to sustainable innovation. Biofuels, Bioproducts and Biorefining, 2010, 4, 275-286.	1.9	47
81	Secondâ€generation bioâ€based plastics are becoming a reality â€“ Nonâ€renewable energy and greenhouse gas (GHG) balance of succinic acidâ€based plastic end products made from lignocellulosic biomass. Biofuels, Bioproducts and Biorefining, 2018, 12, 426-441.	1.9	47
82	District heating in the Netherlands today: A techno-economic assessment for NGCC-CHP (Natural Gas) Tj ETQq0 0 0 rgBT /Overlock 10 T	4.5	46
83	Affective Influences on Energy-Related Decisions and Behaviors. Frontiers in Energy Research, 2014, 2, .	1.2	46
84	In search of optimal consumption: A review of causes and solutions to the Energy Performance Gap in residential buildings. Energy and Buildings, 2021, 249, 111253.	3.1	46
85	Analysis of sustainability metrics and application to the catalytic production of higher alcohols from ethanol. Catalysis Today, 2015, 239, 56-79.	2.2	45
86	Modelling CO2 emissions from non-energy use with the non-energy use emission accounting tables (NEAT) model. Resources, Conservation and Recycling, 2005, 45, 226-250.	5.3	44
87	Applying ex post index decomposition analysis to final energy consumption for evaluating European energy efficiency policies and targets. Energy Efficiency, 2019, 12, 1329-1357.	1.3	44
88	A comprehensive indicator set for measuring multiple benefits of energy efficiency. Energy Policy, 2020, 139, 111284.	4.2	44
89	Mapping district heating potential under evolving thermal demand scenarios and technologies: A case study for Switzerland. Energy, 2019, 176, 682-692.	4.5	43
90	Earlyâ€Stage Comparative Sustainability Assessment of New Bioâ€based Processes. ChemSusChem, 2013, 6, 1724-1736.	3.6	42

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91	Twisting biomaterials around your little finger: environmental impacts of bio-based wrappings. International Journal of Life Cycle Assessment, 2010, 15, 346-358.	2.2	41
92	Influence of using nanoobjects as filler on functionality-based energy use of nanocomposites. Journal of Nanoparticle Research, 2010, 12, 2011-2028.	0.8	41
93	Levelized cost of solar photovoltaics and wind supported by storage technologies to supply firm electricity. Journal of Energy Storage, 2020, 27, 101027.	3.9	41
94	Economics and GHG emission reduction of a PLA bio-refinery systemâ€"Combining bottom-up analysis with price elasticity effects. Resources, Conservation and Recycling, 2006, 46, 377-409.	5.3	39
95	An ex-ante evaluation of a White Certificates scheme in The Netherlands: A case study for the household sector. Energy Policy, 2007, 35, 1147-1163.	4.2	39
96	Energy efficiency developments in the Dutch energy-intensive manufacturing industry, 1980â€"2003. Energy Policy, 2007, 35, 6112-6131.	4.2	39
97	Forecasting global developments in the basic chemical industry for environmental policy analysis. Energy Policy, 2014, 64, 273-287.	4.2	39
98	Prospective life cycle assessment of an antibacterial T-shirt and supporting business decisions to create value. Resources, Conservation and Recycling, 2015, 103, 47-57.	5.3	39
99	The nature of combining energy storage applications for residential battery technology. Applied Energy, 2019, 239, 1343-1355.	5.1	38
100	Accounting for the constrained availability of land: a comparison of bioâ€based ethanol, polyethylene, and PLA with regard to nonâ€renewable energy use and land use. Biofuels, Bioproducts and Biorefining, 2012, 6, 146-158.	1.9	37
101	Who is sensitive to DSM? Understanding the determinants of the shape of electricity load curves and demand shifting: Socio-demographic characteristics, appliance use and attitudes. Energy Policy, 2019, 133, 110909.	4.2	37
102	Excess heat recovery: An invisible energy resource for the Swiss industry sector. Applied Energy, 2018, 228, 390-408.	5.1	36
103	Decarbonising heat with optimal PV and storage investments: A detailed sector coupling modelling framework with flexible heat pump operation. Applied Energy, 2021, 282, 116110.	5.1	36
104	Reducing Industrial Energy Use and CO₂ Emissions: The Role of Materials Science. MRS Bulletin, 2008, 33, 471-477.	1.7	35
105	Early-stage sustainability assessment to assist with material selection: a case study for biobased printer panels. Journal of Cleaner Production, 2016, 135, 30-41.	4.6	35
106	Contributing to a green energy economy? A macroeconomic analysis of an energy efficiency program operated by a Swiss utility. Applied Energy, 2016, 179, 1304-1320.	5.1	35
107	Surfactants Based on Renewable Raw Materials.. Journal of Industrial Ecology, 2003, 7, 47-62.	2.8	34
108	Market diffusion, technological learning, and cost-benefit dynamics of condensing gas boilers in the Netherlands. Energy Policy, 2009, 37, 2962-2976.	4.2	34

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109	Techno-economic analysis of energy efficiency improvement in electric motor driven systems in Swiss industry. Applied Energy, 2017, 205, 85-104.	5.1	34
110	Evaluating the electricity saving potential of electrochromic glazing for cooling and lighting at the scale of the Swiss non-residential national building stock using a Monte Carlo model. Energy, 2019, 185, 136-147.	4.5	34
111	Surfactant production and use in Germany: resource requirements and CO2 emissions. Resources, Conservation and Recycling, 1999, 25, 61-78.	5.3	33
112	Energy and greenhouse gas assessment of European glucose production from corn â€“ a multiple allocation approach for a key ingredient of the bio-based economy. Journal of Cleaner Production, 2013, 43, 182-190.	4.6	32
113	Techno-economic potential of large-scale energy retrofit in the Swiss residential building stock. Energy Procedia, 2017, 122, 121-126.	1.8	32
114	Applying ex-post index decomposition analysis to primary energy consumption for evaluating progress towards European energy efficiency targets. Energy Efficiency, 2017, 10, 1381-1400.	1.3	31
115	Analysis of the energy efficiency potential of household lighting in Switzerland using a stock model. Energy and Buildings, 2018, 158, 536-548.	3.1	31
116	Shallow geothermal energy potential for heating and cooling of buildings with regeneration under climate change scenarios. Energy, 2022, 244, 123086.	4.5	30
117	Optimal building retrofit pathways considering stock dynamics and climate change impacts. Energy Policy, 2021, 152, 112220.	4.2	29
118	Carbon dioxide emissions from non-energy use of fossil fuels: Summary of key issues and conclusions from the country analyses. Resources, Conservation and Recycling, 2005, 45, 195-209.	5.3	27
119	Cost-effectiveness of energy efficiency programs: How to better understand and improve from multiple stakeholder perspectives?. Energy Policy, 2017, 108, 538-550.	4.2	26
120	Strategies for decarbonising the Swiss heating system. Energy, 2019, 169, 1119-1131.	4.5	26
121	Fuels and plastics from lignocellulosic biomass via the furan pathway: an economic analysis. Biofuels, Bioproducts and Biorefining, 2015, 9, 307-325.	1.9	25
122	Physical design, techno-economic analysis and optimization of distributed compressed air energy storage for renewable energy integration. Journal of Energy Storage, 2021, 35, 102268.	3.9	25
123	Value creation with life cycle assessment: an approach to contextualize the application of life cycle assessment in chemical companies to create sustainable value. Journal of Cleaner Production, 2016, 126, 337-351.	4.6	24
124	Recent experiences with tariffs for saving electricity in households. Energy Policy, 2018, 115, 514-522.	4.2	23
125	An assessment of the impacts of renewable and conventional electricity supply on the cost and value of power-to-gas. International Journal of Hydrogen Energy, 2019, 44, 9577-9593.	3.8	23
126	Decarbonization strategies for Switzerland considering embedded greenhouse gas emissions in electricity imports. Energy Policy, 2022, 162, 112794.	4.2	23

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127	What adds more flexibility? An energy system analysis of storage, demand-side response, heating electrification, and distribution reinforcement. Renewable and Sustainable Energy Reviews, 2022, 167, 112696.	8.2	23
128	Non-energy use of fossil fuels and resulting carbon dioxide emissions: bottomâ€“up estimates for the world as a whole and for major developing countries. Climatic Change, 2009, 95, 369-394.	1.7	22
129	A bottom-up analysis of energy efficiency improvement and CO2 emission reduction potentials for the swiss metals sector. Energy, 2019, 181, 173-186.	4.5	22
130	Decarbonizing heat with PV-coupled heat pumps supported by electricity and heat storage: Impacts and trade-offs for prosumers and the grid. Energy Conversion and Management, 2021, 240, 114220.	4.4	22
131	Analysis of energy use and carbon losses in the chemical industry. Applied Energy, 2007, 84, 853-862.	5.1	21
132	Current policies affecting the market penetration of biomaterials[*]. Biofuels, Bioproducts and Biorefining, 2011, 5, 708-719.	1.9	21
133	Modelling the future CO2 abatement potentials of energy efficiency and CCS: The case of the Dutch industry. International Journal of Greenhouse Gas Control, 2013, 18, 23-37.	2.3	21
134	The role of bioenergy and biochemicals in <scp>CO</scp>₂ mitigation through the energy system â€“ a scenario analysis for the Netherlands. GCB Bioenergy, 2017, 9, 1489-1509.	2.5	21
135	Carbon tax and energy programs for buildings: Rivals or allies?. Energy Policy, 2020, 139, 111218.	4.2	21
136	Voluntary agreements with white certificates for energy efficiency improvement as a hybrid policy instrument. Energy Policy, 2009, 37, 1970-1982.	4.2	20
137	Increasing Precision in Greenhouse Gas Accounting Using Realâ€Time Emission Factors. Journal of Industrial Ecology, 2015, 19, 380-390.	2.8	20
138	Life cycle inventory data quality issues for bioplastics feedstocks. International Journal of Life Cycle Assessment, 2015, 20, 584-596.	2.2	20
139	Spatialâ€“Temporal Analysis of the Heat and Electricity Demand of the Swiss Building Stock. Frontiers in Built Environment, 2017, 3, .	1.2	20
140	Emerging bioeconomy sectors in energy systems modeling â€“ Integrated systems analysis of electricity, heat, road transport, aviation, and chemicals: a case study for the Netherlands. Biofuels, Bioproducts and Biorefining, 2018, 12, 665-693.	1.9	20
141	Comparing biobased products from oil crops versus sugar crops with regard to non-renewable energy use, GHG emissions and land use. Industrial Crops and Products, 2016, 84, 366-374.	2.5	19
142	Combining â€œcarrot and stickâ€• to incentivize sustainability in households. Energy Policy, 2018, 123, 31-40.	4.2	19
143	Life Cycle Risks for Human Health: A Comparison of Petroleum Versus Bioâ€Based Production of Five Bulk Organic Chemicals. Risk Analysis, 2007, 27, 1311-1321.	1.5	18
144	CO2 emissions and carbon storage resulting from the non-energy use of fossil fuels in the Netherlands, NEAT results for 1993â€“1999. Resources, Conservation and Recycling, 2005, 45, 251-274.	5.3	17

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145	Long-term energy efficiency analysis requires solid energy statistics: The case of the German basic chemical industry. Energy, 2012, 44, 1094-1106.	4.5	17
146	A Monte Carlo building stock model of space cooling demand in the Swiss service sector under climate change. Energy and Buildings, 2021, 233, 110662.	3.1	17
147	Climate policy: Bucket or drainer?. Energy Policy, 2006, 34, 3656-3668.	4.2	16
148	Analysis of the impact of energy efficiency labelling and potential changes on electricity demand reduction of white goods using a stock model: The case of Switzerland. Applied Energy, 2019, 239, 117-132.	5.1	16
149	Spatiotemporal analysis of industrial excess heat supply for district heat networks in Switzerland. Energy, 2020, 192, 116705.	4.5	15
150	A detailed review on current status of energy efficiency improvement in the Swiss industry sector. Energy Policy, 2020, 137, 111162.	4.2	15
151	Applying bottom-up analysis to identify the system boundaries of non-energy use data in international energy statistics. Energy, 2008, 33, 1609-1622.	4.5	14
152	Actual energy performance of student housing: case study, benchmarking and performance gap analysis. Energy Procedia, 2017, 122, 163-168.	1.8	14
153	Comparative analysis of customer-funded energy efficiency programs in the United States and Switzerlandâ€“Cost-effectiveness and discussion of operational practices. Energy Policy, 2019, 135, 111010.	4.2	14
154	Assessment of techno-economic feasibility of centralised seasonal thermal energy storage for decarbonising the Swiss residential heating sector. Renewable Energy, 2020, 161, 1209-1225.	4.3	14
155	Simulation and comparative assessment of heating systems with tank thermal energy storage â€“ A Swiss case study. Journal of Energy Storage, 2020, 32, 101810.	3.9	12
156	Linking energy efficiency indicators with policy evaluation â€“ A combined top-down and bottom-up analysis of space heating consumption in residential buildings. Energy and Buildings, 2021, 244, 110987.	3.1	12
157	Does bulk electricity storage assist wind and solar in replacing dispatchable power production?. Energy Economics, 2020, 85, 104495.	5.6	11
158	How Does the Electricity Demand Profile Impact the Attractiveness of PV-Coupled Battery Systems Combining Applications?. Energies, 2020, 13, 4038.	1.6	11
159	Non-energy use and related carbon dioxide emissions in Germany: A carbon flow analysis with the NEAT model for the period of 1990â€“2003. Resources, Conservation and Recycling, 2008, 52, 1252-1265.	5.3	10
160	Costâ€effectiveness analysis of energy efficiency measures in the Swiss chemical and pharmaceutical industry. International Journal of Energy Research, 2019, 43, 313-336.	2.2	10
161	Assessing availability and greenhouse gas emissions of lignocellulosic biomass feedstock supply â€“ case study for a catchment in England. Biofuels, Bioproducts and Biorefining, 2019, 13, 568-581.	1.9	10
162	Analysis of energy efficiency improvement and carbon dioxide abatement potentials for Swiss Food and Beverage sector. Resources, Conservation and Recycling, 2020, 161, 104967.	5.3	10

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163	Final Energy Requirements of Steam for Use in Environmental Life Cycle Assessment. Journal of Industrial Ecology, 2016, 20, 828-836.	2.8	9
164	Comparing electricity consumption trends: A multilevel index decomposition analysis of the Genevan and Swiss economy. Energy Economics, 2019, 83, 1-25.	5.6	9
165	Heat integration of a multi-product batch process by means of direct and indirect heat recovery using thermal energy storage. Applied Thermal Engineering, 2020, 167, 114796.	3.0	9
166	Using rewards and penalties to promote sustainability: Who chooses incentiveâ€based electricity products and why?. Journal of Consumer Behaviour, 2021, 20, 381-398.	2.6	9
167	Novel integrated agricultural land management approach provides sustainable biomass feedstocks for bioplastics and supports the UKâ€™s â€˜net-zeroâ€™ target. Environmental Research Letters, 2021, 16, 014023.	2.2	9
168	Function-driven Investigation of Non-renewable Energy Use and Greenhouse Gas Emissions for Material Selection in Food Packaging Applications: Case Study of Yoghurt Packaging. Procedia CIRP, 2018, 69, 728-733.	1.0	8
169	Stock modelling and cost-effectiveness analysis of energy-efficient household electronic appliances in Switzerland. Energy Efficiency, 2020, 13, 571-596.	1.3	8
170	Analysing utility-based direct load control programmes for heat pumps and electric vehicles considering customer segmentation. Energy Policy, 2022, 164, 112900.	4.2	8
171	Disaggregation of energy storage operation by timescales. Journal of Energy Storage, 2019, 23, 480-494.	3.9	7
172	Impact of prosumer battery operation on the cost of power supply. Journal of Energy Storage, 2020, 29, 101323.	3.9	7
173	Why We Continue to Need Energy Efficiency Programmesâ€”A Critical Review Based on Experiences in Switzerland and Elsewhere. Energies, 2021, 14, 1742.	1.6	7
174	Projections for the Production of Bulk Volume Bio-Based Polymers in Europe and Environmental Implications. Journal of Biobased Materials and Bioenergy, 2007, 1, 437-453.	0.1	7
175	Estimation of energy savings potential through hydraulic balancing of heating systems in buildings. Journal of Building Engineering, 2020, 28, 101030.	1.6	6
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