

Martin Patel

List of Publications by Year in descending order

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Version: 2024-02-01

203
papers

13,268
citations

26610

56
h-index

27389

106
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212
all docs

212
docs citations

212
times ranked

13843
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Identification of criteria for the selection of buildings with elevated energy saving potentials from hydraulic balancing-methodology and case study. <i>Advances in Building Energy Research</i> , 2022, 16, 427-444. | 1.1 | 2 |
| 2 | Decarbonization strategies for Switzerland considering embedded greenhouse gas emissions in electricity imports. <i>Energy Policy</i> , 2022, 162, 112794. | 4.2 | 23 |
| 3 | Shallow geothermal energy potential for heating and cooling of buildings with regeneration under climate change scenarios. <i>Energy</i> , 2022, 244, 123086. | 4.5 | 30 |
| 4 | Analysing utility-based direct load control programmes for heat pumps and electric vehicles considering customer segmentation. <i>Energy Policy</i> , 2022, 164, 112900. | 4.2 | 8 |
| 5 | Integration of prosumer peer-to-peer trading decisions into energy community modelling. <i>Nature Energy</i> , 2022, 7, 74-82. | 19.8 | 50 |
| 6 | Impact of energy efficiency and decarbonisation policies for buildings: A comparative assessment of Austria and Switzerland. <i>Energy and Buildings</i> , 2022, , 112175. | 3.1 | 0 |
| 7 | Large Air-to-Water Heat Pumps for Fuel-Boiler Substitution in Non-Retrofitted Multi-Family Buildingsâ€”Energy Performance, CO2 Savings, and Lessons Learned in Actual Conditions of Use. <i>Energies</i> , 2022, 15, 5033. | 1.6 | 6 |
| 8 | Optimal spatial resource allocation in networks: Application to district heating and cooling. <i>Computers and Industrial Engineering</i> , 2022, 171, 108448. | 3.4 | 4 |
| 9 | What adds more flexibility? An energy system analysis of storage, demand-side response, heating electrification, and distribution reinforcement. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 167, 112696. | 8.2 | 23 |
| 10 | Decarbonising heat with optimal PV and storage investments: A detailed sector coupling modelling framework with flexible heat pump operation. <i>Applied Energy</i> , 2021, 282, 116110. | 5.1 | 36 |
| 11 | Using rewards and penalties to promote sustainability: Who chooses incentiveâ€”based electricity products and why?. <i>Journal of Consumer Behaviour</i> , 2021, 20, 381-398. | 2.6 | 9 |
| 12 | A Monte Carlo building stock model of space cooling demand in the Swiss service sector under climate change. <i>Energy and Buildings</i> , 2021, 233, 110662. | 3.1 | 17 |
| 13 | Why We Continue to Need Energy Efficiency Programmesâ€”A Critical Review Based on Experiences in Switzerland and Elsewhere. <i>Energies</i> , 2021, 14, 1742. | 1.6 | 7 |
| 14 | Physical design, techno-economic analysis and optimization of distributed compressed air energy storage for renewable energy integration. <i>Journal of Energy Storage</i> , 2021, 35, 102268. | 3.9 | 25 |
| 15 | Spatial analysis of distribution grid capacity and costs to enable massive deployment of PV, electric mobility and electric heating. <i>Applied Energy</i> , 2021, 287, 116504. | 5.1 | 71 |
| 16 | Potential and costs of decentralized heat pumps and thermal networks in Swiss residential areas. <i>International Journal of Energy Research</i> , 2021, 45, 15245-15264. | 2.2 | 3 |
| 17 | Optimal building retrofit pathways considering stock dynamics and climate change impacts. <i>Energy Policy</i> , 2021, 152, 112220. | 4.2 | 29 |
| 18 | Decarbonizing heat with PV-coupled heat pumps supported by electricity and heat storage: Impacts and trade-offs for prosumers and the grid. <i>Energy Conversion and Management</i> , 2021, 240, 114220. | 4.4 | 22 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | How to Improve Effectiveness of Renewable Space Heating Programs by Better Understanding Homeowner-Installer Interactions. <i>Energies</i> , 2021, 14, 4625. | 1.6 | 2 |
| 20 | Pay now, save later: Using insights from behavioural economics to commit consumers to environmental sustainability. <i>Journal of Environmental Psychology</i> , 2021, 76, 101625. | 2.3 | 3 |
| 21 | Linking energy efficiency indicators with policy evaluation – A combined top-down and bottom-up analysis of space heating consumption in residential buildings. <i>Energy and Buildings</i> , 2021, 244, 110987. | 3.1 | 12 |
| 22 | In search of optimal consumption: A review of causes and solutions to the Energy Performance Gap in residential buildings. <i>Energy and Buildings</i> , 2021, 249, 111253. | 3.1 | 46 |
| 23 | Geospatial global sensitivity analysis of a heat energy service decarbonisation model of the building stock. <i>Applied Energy</i> , 2021, 302, 117592. | 5.1 | 5 |
| 24 | Using energy saving deficit distributions to assess calculated, deemed and metered electricity savings estimations. <i>Applied Energy</i> , 2021, 304, 117721. | 5.1 | 3 |
| 25 | Novel integrated agricultural land management approach provides sustainable biomass feedstocks for bioplastics and supports the UK's net-zero target. <i>Environmental Research Letters</i> , 2021, 16, 014023. | 2.2 | 9 |
| 26 | The Energy Performance Gap in Swiss residential buildings: a roadmap for improvement. <i>Journal of Physics: Conference Series</i> , 2021, 2042, 012143. | 0.3 | 0 |
| 27 | Presentation of new geospatial datasets for renewable thermal energy systems modelling in Switzerland. <i>Journal of Physics: Conference Series</i> , 2021, 2042, 012003. | 0.3 | 1 |
| 28 | An optimisation approach for spatial allocation of energy sources to district heating networks. <i>Journal of Physics: Conference Series</i> , 2021, 2042, 012038. | 0.3 | 0 |
| 29 | Does bulk electricity storage assist wind and solar in replacing dispatchable power production?. <i>Energy Economics</i> , 2020, 85, 104495. | 5.6 | 11 |
| 30 | Estimation of energy savings potential through hydraulic balancing of heating systems in buildings. <i>Journal of Building Engineering</i> , 2020, 28, 101030. | 1.6 | 6 |
| 31 | Spatiotemporal analysis of industrial excess heat supply for district heat networks in Switzerland. <i>Energy</i> , 2020, 192, 116705. | 4.5 | 15 |
| 32 | Levelized cost of solar photovoltaics and wind supported by storage technologies to supply firm electricity. <i>Journal of Energy Storage</i> , 2020, 27, 101027. | 3.9 | 41 |
| 33 | Measuring the thermal energy performance gap of labelled residential buildings in Switzerland. <i>Energy Policy</i> , 2020, 137, 111085. | 4.2 | 57 |
| 34 | A detailed review on current status of energy efficiency improvement in the Swiss industry sector. <i>Energy Policy</i> , 2020, 137, 111162. | 4.2 | 15 |
| 35 | Heat integration of a multi-product batch process by means of direct and indirect heat recovery using thermal energy storage. <i>Applied Thermal Engineering</i> , 2020, 167, 114796. | 3.0 | 9 |
| 36 | Simulation and comparative assessment of heating systems with tank thermal energy storage – A Swiss case study. <i>Journal of Energy Storage</i> , 2020, 32, 101810. | 3.9 | 12 |

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|----|---|-----|-----------|
| 37 | Assessment of techno-economic feasibility of centralised seasonal thermal energy storage for decarbonising the Swiss residential heating sector. <i>Renewable Energy</i> , 2020, 161, 1209-1225. | 4.3 | 14 |
| 38 | How Does the Electricity Demand Profile Impact the Attractiveness of PV-Coupled Battery Systems Combining Applications?. <i>Energies</i> , 2020, 13, 4038. | 1.6 | 11 |
| 39 | Economic and Environmental Assessment of Catalytic and Thermal Pyrolysis Routes for Fuel Production from Lignocellulosic Biomass. <i>Processes</i> , 2020, 8, 1612. | 1.3 | 2 |
| 40 | Estimation of load curves for large-scale district heating networks. <i>IOP Conference Series: Earth and Environmental Science</i> , 2020, 588, 052032. | 0.2 | 0 |
| 41 | Analysis of energy efficiency improvement and carbon dioxide abatement potentials for Swiss Food and Beverage sector. <i>Resources, Conservation and Recycling</i> , 2020, 161, 104967. | 5.3 | 10 |
| 42 | Do energy performance certificates allow reliable predictions of actual energy consumption and savings? Learning from the Swiss national database. <i>Energy and Buildings</i> , 2020, 224, 110235. | 3.1 | 50 |
| 43 | Impact of prosumer battery operation on the cost of power supply. <i>Journal of Energy Storage</i> , 2020, 29, 101323. | 3.9 | 7 |
| 44 | Carbon tax and energy programs for buildings: Rivals or allies?. <i>Energy Policy</i> , 2020, 139, 111218. | 4.2 | 21 |
| 45 | Cost-effectiveness of large-scale deep energy retrofit packages for residential buildings under different economic assessment approaches. <i>Energy and Buildings</i> , 2020, 215, 109870. | 3.1 | 51 |
| 46 | A comprehensive indicator set for measuring multiple benefits of energy efficiency. <i>Energy Policy</i> , 2020, 139, 111284. | 4.2 | 44 |
| 47 | Stock modelling and cost-effectiveness analysis of energy-efficient household electronic appliances in Switzerland. <i>Energy Efficiency</i> , 2020, 13, 571-596. | 1.3 | 8 |
| 48 | Energy Performance Certificate for buildings as a strategy for the energy transition: Stakeholder insights on shortcomings. <i>IOP Conference Series: Earth and Environmental Science</i> , 2020, 588, 022003. | 0.2 | 5 |
| 49 | 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. <i>Energy Policy</i> , 2019, 133, 110909. | 4.2 | 37 |
| 50 | 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. <i>Energy</i> , 2019, 185, 136-147. | 4.5 | 34 |
| 51 | Comparing electricity consumption trends: A multilevel index decomposition analysis of the Geneva and Swiss economy. <i>Energy Economics</i> , 2019, 83, 1-25. | 5.6 | 9 |
| 52 | Comparative analysis of customer-funded energy efficiency programs in the United States and Switzerlandâ€“Cost-effectiveness and discussion of operational practices. <i>Energy Policy</i> , 2019, 135, 111010. | 4.2 | 14 |
| 53 | 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. <i>Applied Energy</i> , 2019, 239, 117-132. | 5.1 | 16 |
| 54 | Applying ex post index decomposition analysis to final energy consumption for evaluating European energy efficiency policies and targets. <i>Energy Efficiency</i> , 2019, 12, 1329-1357. | 1.3 | 44 |

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|----|--|-----|-----------|
| 55 | Comparison of clustering approaches for domestic electricity load profile characterisation - Implications for demand side management. <i>Energy</i> , 2019, 180, 665-677. | 4.5 | 113 |
| 56 | Optimized PV-coupled battery systems for combining applications: Impact of battery technology and geography. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 112, 978-990. | 8.2 | 58 |
| 57 | A bottom-up analysis of energy efficiency improvement and CO2 emission reduction potentials for the swiss metals sector. <i>Energy</i> , 2019, 181, 173-186. | 4.5 | 22 |
| 58 | Disaggregation of energy storage operation by timescales. <i>Journal of Energy Storage</i> , 2019, 23, 480-494. | 3.9 | 7 |
| 59 | Mapping district heating potential under evolving thermal demand scenarios and technologies: A case study for Switzerland. <i>Energy</i> , 2019, 176, 682-692. | 4.5 | 43 |
| 60 | The nature of combining energy storage applications for residential battery technology. <i>Applied Energy</i> , 2019, 239, 1343-1355. | 5.1 | 38 |
| 61 | Combined geospatial and techno-economic analysis of deep building envelope retrofit. <i>Journal of Physics: Conference Series</i> , 2019, 1343, 012028. | 0.3 | 3 |
| 62 | Applications of graph theory in district heat network analysis at national scale. <i>Journal of Physics: Conference Series</i> , 2019, 1343, 012045. | 0.3 | 3 |
| 63 | Strategies for decarbonising the Swiss heating system. <i>Energy</i> , 2019, 169, 1119-1131. | 4.5 | 26 |
| 64 | Cost-effectiveness analysis of energy efficiency measures in the Swiss chemical and pharmaceutical industry. <i>International Journal of Energy Research</i> , 2019, 43, 313-336. | 2.2 | 10 |
| 65 | An assessment of the impacts of renewable and conventional electricity supply on the cost and value of power-to-gas. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 9577-9593. | 3.8 | 23 |
| 66 | Assessing availability and greenhouse gas emissions of lignocellulosic biomass feedstock supply – case study for a catchment in England. <i>Biofuels, Bioproducts and Biorefining</i> , 2019, 13, 568-581. | 1.9 | 10 |
| 67 | Analysis of space heating demand in the Swiss residential building stock: Element-based bottom-up model of archetype buildings. <i>Energy and Buildings</i> , 2019, 184, 300-322. | 3.1 | 77 |
| 68 | A review on the role, cost and value of hydrogen energy systems for deep decarbonisation. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 101, 279-294. | 8.2 | 378 |
| 69 | Naphtha storage fraction and green house gas emissions in the Korean petrochemical industry. <i>Energy and Environment</i> , 2018, 29, 919-937. | 2.7 | 2 |
| 70 | Recent experiences with tariffs for saving electricity in households. <i>Energy Policy</i> , 2018, 115, 514-522. | 4.2 | 23 |
| 71 | Second-generation bio-based plastics are becoming a reality – Non-renewable energy and greenhouse gas (GHG) balance of succinic acid-based plastic end products made from lignocellulosic biomass. <i>Biofuels, Bioproducts and Biorefining</i> , 2018, 12, 426-441. | 1.9 | 47 |
| 72 | Feel good, stay green: Positive affect promotes pro-environmental behaviors and mitigates compensatory –mental bookkeeping– effects. <i>Journal of Environmental Psychology</i> , 2018, 56, 3-11. | 2.3 | 57 |

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|----|---|-----|-----------|
| 73 | Function-driven Investigation of Non-renewable Energy Use and Greenhouse Gas Emissions for Material Selection in Food Packaging Applications: Case Study of Yoghurt Packaging. <i>Procedia CIRP</i> , 2018, 69, 728-733. | 1.0 | 8 |
| 74 | Techno-economic analysis of battery storage and curtailment in a distribution grid with high PV penetration. <i>Journal of Energy Storage</i> , 2018, 17, 73-83. | 3.9 | 57 |
| 75 | GIS-based assessment of photovoltaic (PV) and concentrated solar power (CSP) generation potential in West Africa. <i>Renewable and Sustainable Energy Reviews</i> , 2018, 81, 2088-2103. | 8.2 | 148 |
| 76 | Analysis of the energy efficiency potential of household lighting in Switzerland using a stock model. <i>Energy and Buildings</i> , 2018, 158, 536-548. | 3.1 | 31 |
| 77 | Assessment of the current thermal performance level of the Swiss residential building stock: Statistical analysis of energy performance certificates. <i>Energy and Buildings</i> , 2018, 178, 360-378. | 3.1 | 68 |
| 78 | Excess heat recovery: An invisible energy resource for the Swiss industry sector. <i>Applied Energy</i> , 2018, 228, 390-408. | 5.1 | 36 |
| 79 | Combining "carrot and stick" to incentivize sustainability in households. <i>Energy Policy</i> , 2018, 123, 31-40. | 4.2 | 19 |
| 80 | Emerging bioeconomy sectors in energy systems modeling " Integrated systems analysis of electricity, heat, road transport, aviation, and chemicals: a case study for the Netherlands. <i>Biofuels, Bioproducts and Biorefining</i> , 2018, 12, 665-693. | 1.9 | 20 |
| 81 | Life cycle assessment of sisal fibre " Exploring how local practices can influence environmental performance. <i>Journal of Cleaner Production</i> , 2017, 149, 818-827. | 4.6 | 51 |
| 82 | The role of bioenergy and biochemicals in <sc>CO</sc> ₂ mitigation through the energy system " a scenario analysis for the Netherlands. <i>GCB Bioenergy</i> , 2017, 9, 1489-1509. | 2.5 | 21 |
| 83 | Cost-effectiveness of energy efficiency programs: How to better understand and improve from multiple stakeholder perspectives?. <i>Energy Policy</i> , 2017, 108, 538-550. | 4.2 | 26 |
| 84 | An interdisciplinary review of energy storage for communities: Challenges and perspectives. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 79, 730-749. | 8.2 | 209 |
| 85 | An integrated techno-economic and life cycle environmental assessment of power-to-gas systems. <i>Applied Energy</i> , 2017, 193, 440-454. | 5.1 | 204 |
| 86 | Bottom-up analysis of energy efficiency improvement and CO2 emission reduction potentials in the Swiss cement industry. <i>Journal of Cleaner Production</i> , 2017, 142, 4294-4309. | 4.6 | 68 |
| 87 | Techno-economic potential of large-scale energy retrofit in the Swiss residential building stock. <i>Energy Procedia</i> , 2017, 122, 121-126. | 1.8 | 32 |
| 88 | Electro What: A platform for territorial analysis of electricity consumption. <i>Energy Procedia</i> , 2017, 122, 92-97. | 1.8 | 2 |
| 89 | Actual energy performance of student housing: case study, benchmarking and performance gap analysis. <i>Energy Procedia</i> , 2017, 122, 163-168. | 1.8 | 14 |
| 90 | Techno-economic and environmental assessment of stationary electricity storage technologies for different time scales. <i>Energy</i> , 2017, 139, 1173-1187. | 4.5 | 95 |

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| 91 | Techno-economic analysis of energy efficiency improvement in electric motor driven systems in Swiss industry. <i>Applied Energy</i> , 2017, 205, 85-104. | 5.1 | 34 |
| 92 | Optimizing PV and grid charging in combined applications to improve the profitability of residential batteries. <i>Journal of Energy Storage</i> , 2017, 13, 58-72. | 3.9 | 74 |
| 93 | Applying ex-post index decomposition analysis to primary energy consumption for evaluating progress towards European energy efficiency targets. <i>Energy Efficiency</i> , 2017, 10, 1381-1400. | 1.3 | 31 |
| 94 | Spatial–Temporal Analysis of the Heat and Electricity Demand of the Swiss Building Stock. <i>Frontiers in Built Environment</i> , 2017, 3, . | 1.2 | 20 |
| 95 | Editorial: Behavioral Insights for a Sustainable Energy Transition. <i>Frontiers in Energy Research</i> , 2016, 4, . | 1.2 | 3 |
| 96 | Final Energy Requirements of Steam for Use in Environmental Life Cycle Assessment. <i>Journal of Industrial Ecology</i> , 2016, 20, 828-836. | 2.8 | 9 |
| 97 | Conceptual design of sustainable integrated microalgae biorefineries: Parametric analysis of energy use, greenhouse gas emissions and techno-economics. <i>Algal Research</i> , 2016, 17, 113-131. | 2.4 | 54 |
| 98 | Comparing biobased products from oil crops versus sugar crops with regard to non-renewable energy use, GHG emissions and land use. <i>Industrial Crops and Products</i> , 2016, 84, 366-374. | 2.5 | 19 |
| 99 | Value creation with life cycle assessment: an approach to contextualize the application of life cycle assessment in chemical companies to create sustainable value. <i>Journal of Cleaner Production</i> , 2016, 126, 337-351. | 4.6 | 24 |
| 100 | Early-stage sustainability assessment to assist with material selection: a case study for biobased printer panels. <i>Journal of Cleaner Production</i> , 2016, 135, 30-41. | 4.6 | 35 |
| 101 | Long-term model-based projections of energy use and CO2 emissions from the global steel and cement industries. <i>Resources, Conservation and Recycling</i> , 2016, 112, 15-36. | 5.3 | 196 |
| 102 | Techno-economic implications of the electrolyser technology and size for power-to-gas systems. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 3748-3761. | 3.8 | 144 |
| 103 | Contributing to a green energy economy? A macroeconomic analysis of an energy efficiency program operated by a Swiss utility. <i>Applied Energy</i> , 2016, 179, 1304-1320. | 5.1 | 35 |
| 104 | Effect of tariffs on the performance and economic benefits of PV-coupled battery systems. <i>Applied Energy</i> , 2016, 164, 175-187. | 5.1 | 107 |
| 105 | Increasing Precision in Greenhouse Gas Accounting Using Real–Time Emission Factors. <i>Journal of Industrial Ecology</i> , 2015, 19, 380-390. | 2.8 | 20 |
| 106 | Life cycle impact assessment of bio-based plastics from sugarcane ethanol. <i>Journal of Cleaner Production</i> , 2015, 90, 114-127. | 4.6 | 142 |
| 107 | Fuels and plastics from lignocellulosic biomass via the furan pathway: an economic analysis. <i>Biofuels, Bioproducts and Biorefining</i> , 2015, 9, 307-325. | 1.9 | 25 |
| 108 | Life cycle inventory data quality issues for bioplastics feedstocks. <i>International Journal of Life Cycle Assessment</i> , 2015, 20, 584-596. | 2.2 | 20 |

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|-----|--|------|-----------|
| 109 | 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 |
| 110 | On the electrification of road transportation – 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 |
| 111 | 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 |
| 112 | Analysis of sustainability metrics and application to the catalytic production of higher alcohols from ethanol. Catalysis Today, 2015, 239, 56-79. | 2.2 | 45 |
| 113 | Is ethanol worth tanking only when it costs 70% of the price of the equivalent in volume of gasoline?. Biofuels, 2014, 5, 195-198. | 1.4 | 2 |
| 114 | Affective Influences on Energy-Related Decisions and Behaviors. Frontiers in Energy Research, 2014, 2, . | 1.2 | 46 |
| 115 | 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 |
| 116 | Forecasting global developments in the basic chemical industry for environmental policy analysis. Energy Policy, 2014, 64, 273-287. | 4.2 | 39 |
| 117 | Innovative membrane filtration system for micropollutant removal from drinking water – prospective environmental LCA and its integration in business decisions. Journal of Cleaner Production, 2014, 72, 153-166. | 4.6 | 48 |
| 118 | Fuels and plastics from lignocellulosic biomass via the furan pathway; a technical analysis. RSC Advances, 2014, 4, 3536-3549. | 1.7 | 61 |
| 119 | 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 |
| 120 | Energy demand and emissions of the non-energy sector. Energy and Environmental Science, 2014, 7, 482-498. | 15.6 | 62 |
| 121 | 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 |
| 122 | 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 |
| 123 | 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 |
| 124 | Succinic acid production derived from carbohydrates: An energy and greenhouse gas assessment of a platform chemical toward a bio-based economy. Biofuels, Bioproducts and Biorefining, 2014, 8, 16-29. | 1.9 | 246 |
| 125 | District heating in the Netherlands today: A techno-economic assessment for NGCC-CHP (Natural Gas) Tj ETQq1 1 0.784314 r gBT /Over | 4.5 | 48 |
| 126 | Linking historic developments and future scenarios of industrial energy use in the Netherlands between 1993 and 2040. Energy Efficiency, 2013, 6, 341-368. | 1.3 | 5 |

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|-----|--|------|-----------|
| 127 | Potential of bioethanol as a chemical building block for biorefineries: Preliminary sustainability assessment of 12 bioethanol-based products. <i>Bioresource Technology</i> , 2013, 135, 490-499. | 4.8 | 195 |
| 128 | Critical aspects in the life cycle assessment (LCA) of bio-based materials – Reviewing methodologies and deriving recommendations. <i>Resources, Conservation and Recycling</i> , 2013, 73, 211-228. | 5.3 | 213 |
| 129 | Modelling the future CO2 abatement potentials of energy efficiency and CCS: The case of the Dutch industry. <i>International Journal of Greenhouse Gas Control</i> , 2013, 18, 23-37. | 2.3 | 21 |
| 130 | Energy and greenhouse gas assessment of European glucose production from corn – a multiple allocation approach for a key ingredient of the bio-based economy. <i>Journal of Cleaner Production</i> , 2013, 43, 182-190. | 4.6 | 32 |
| 131 | The impact of copper scarcity on the efficiency of 2050 global renewable energy scenarios. <i>Energy</i> , 2013, 50, 62-73. | 4.5 | 107 |
| 132 | Early-Stage Comparative Sustainability Assessment of New Bio-based Processes. <i>ChemSusChem</i> , 2013, 6, 1724-1736. | 3.6 | 42 |
| 133 | Replacing fossil based PET with biobased PEF; process analysis, energy and GHG balance. <i>Energy and Environmental Science</i> , 2012, 5, 6407. | 15.6 | 478 |
| 134 | Comparing life cycle energy and GHG emissions of bio-based PET, recycled PET, PLA, and man-made cellulose. <i>Biofuels, Bioproducts and Biorefining</i> , 2012, 6, 625-639. | 1.9 | 95 |
| 135 | Sustainability assessment of novel chemical processes at early stage: application to biobased processes. <i>Energy and Environmental Science</i> , 2012, 5, 8430. | 15.6 | 138 |
| 136 | On the electrification of road transport - Learning rates and price forecasts for hybrid-electric and battery-electric vehicles. <i>Energy Policy</i> , 2012, 48, 374-393. | 4.2 | 144 |
| 137 | Long-term energy efficiency analysis requires solid energy statistics: The case of the German basic chemical industry. <i>Energy</i> , 2012, 44, 1094-1106. | 4.5 | 17 |
| 138 | Innovations in papermaking: An LCA of printing and writing paper from conventional and high yield pulp. <i>Science of the Total Environment</i> , 2012, 439, 307-320. | 3.9 | 56 |
| 139 | Accounting for the constrained availability of land: a comparison of bio-based ethanol, polyethylene, and PLA with regard to non-renewable energy use and land use. <i>Biofuels, Bioproducts and Biorefining</i> , 2012, 6, 146-158. | 1.9 | 37 |
| 140 | Plastics Derived from Biological Sources: Present and Future: A Technical and Environmental Review. <i>Chemical Reviews</i> , 2012, 112, 2082-2099. | 23.0 | 792 |
| 141 | A Review of the Environmental Impacts of Biobased Materials. <i>Journal of Industrial Ecology</i> , 2012, 16, S169. | 2.8 | 233 |
| 142 | Preliminary evaluation of risks related to waste incineration of polymer nanocomposites. <i>Science of the Total Environment</i> , 2012, 417-418, 76-86. | 3.9 | 78 |
| 143 | <i>Bioenergy</i> , 2011, , 209-332. | | 162 |
| 144 | Potential of best practice technology to improve energy efficiency in the global chemical and petrochemical sector. <i>Energy</i> , 2011, 36, 5779-5790. | 4.5 | 74 |

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|-----|--|-----|-----------|
| 145 | Benchmarking the energy use of energy-intensive industries in industrialized and in developing countries. <i>Energy</i> , 2011, 36, 6661-6673. | 4.5 | 103 |
| 146 | Life cycle energy and GHG emissions of PET recycling: change-oriented effects. <i>International Journal of Life Cycle Assessment</i> , 2011, 16, 522-536. | 2.2 | 81 |
| 147 | Current policies affecting the market penetration of biomaterials [*] . <i>Biofuels, Bioproducts and Biorefining</i> , 2011, 5, 708-719. | 1.9 | 21 |
| 148 | Ex-ante environmental assessments of novel technologies – Improved caprolactam catalysis and hydrogen storage. <i>Journal of Cleaner Production</i> , 2011, 19, 1659-1667. | 4.6 | 50 |
| 149 | To compost or not to compost: Carbon and energy footprints of biodegradable materials TM waste treatment. <i>Polymer Degradation and Stability</i> , 2011, 96, 1159-1171. | 2.7 | 197 |
| 150 | Environmental Assessment of a Sugar Cane Bagasse Food Tray Produced by Roots Biopack – Results of a Shortcut-Life Cycle Assessment. <i>Journal of Biobased Materials and Bioenergy</i> , 2011, 5, 140-152. | 0.1 | 5 |
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