André Faaij

List of Publications by Year in descending order

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300 papers 27,447 citations

4960 84 h-index 154 g-index

307 all docs

307 does citations

times ranked

307

21330 citing authors

#	Article	IF	CITATIONS
1	Ethanol from lignocellulosic biomass: techno-economic performance in short-, middle- and long-term. Biomass and Bioenergy, 2005, 28, 384-410.	5.7	1,374
2	Exploration of the possibilities for production of Fischer Tropsch liquids and power via biomass gasification. Biomass and Bioenergy, 2002, 23, 129-152.	5.7	763
3	Exploration of the ranges of the global potential of biomass for energy. Biomass and Bioenergy, 2003, 25, 119-133.	5.7	547
4	A bottom-up assessment and review of global bio-energy potentials to 2050. Progress in Energy and Combustion Science, 2007, 33, 56-106.	31.2	503
5	Future prospects for production of methanol and hydrogen from biomass. Journal of Power Sources, 2002, 111, 1-22.	7.8	501
6	Bioenergy and climate change mitigation: an assessment. GCB Bioenergy, 2015, 7, 916-944.	5. 6	494
7	Pre-treatment technologies, and their effect on international bioenergy supply chain logistics. Techno-economic evaluation of torrefaction, fast pyrolysis and pelletisation. Energy, 2008, 33, 1206-1223.	8.8	488
8	Replacing fossil based PET with biobased PEF; process analysis, energy and GHG balance. Energy and Environmental Science, 2012, 5, 6407.	30.8	478
9	A review at the role of storage in energy systems with a focus on Power to Gas and long-term storage. Renewable and Sustainable Energy Reviews, 2018, 81, 1049-1086.	16.4	447
10	Production of FT transportation fuels from biomass; technical options, process analysis and optimisation, and development potential. Energy, 2004, 29, 1743-1771.	8.8	438
11	Bio-energy in Europe: changing technology choices. Energy Policy, 2006, 34, 322-342.	8.8	411
12	Exploring land use changes and the role of palm oil production in Indonesia and Malaysia. Land Use Policy, 2011, 28, 193-206.	5 . 6	371
13	Comparative assessment of CO2 capture technologies for carbon-intensive industrial processes. Progress in Energy and Combustion Science, 2012, 38, 87-112.	31.2	364
14	A comparison of electricity and hydrogen production systems with CO2 capture and storage. Part A: Review and selection of promising conversion and capture technologies. Progress in Energy and Combustion Science, 2006, 32, 215-246.	31.2	362
15	Potential of biomass energy out to 2100, for four IPCC SRES land-use scenarios. Biomass and Bioenergy, 2005, 29, 225-257.	5.7	360
16	Mitigation of global greenhouse gas emissions from waste: conclusions and strategies from the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report. Working Group III (Mitigation). Waste Management and Research, 2008, 26, 11-32.	3.9	314
17	International bioenergy transport costs and energy balance. Biomass and Bioenergy, 2005, 29, 114-134.	5.7	308
18	Fischer–Tropsch diesel production in a well-to-wheel perspective: A carbon, energy flow and cost analysis. Energy Conversion and Management, 2009, 50, 855-876.	9.2	301

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19	Life cycle assessment of a pulverized coal power plant with post-combustion capture, transport and storage of CO2. International Journal of Greenhouse Gas Control, 2008, 2, 448-467.	4.6	300
20	Energy use, cost and CO2 emissions of electric cars. Journal of Power Sources, 2011, 196, 2298-2310.	7.8	293
21	The global technical and economic potential of bioenergy from salt-affected soils. Energy and Environmental Science, 2011, 4, 2669-2681.	30.8	292
22	Outlook for advanced biofuels. Energy Policy, 2006, 34, 3268-3283.	8.8	289
23	Performance of batteries for electric vehicles on short and longer term. Journal of Power Sources, 2012, 212, 111-129.	7.8	280
24	Development of fluidized bed combustion—An overview of trends, performance and cost. Progress in Energy and Combustion Science, 2007, 33, 19-55.	31.2	273
25	Global experience curves for wind farms. Energy Policy, 2005, 33, 133-150.	8.8	262
26	Biomass torrefaction technology: Techno-economic status and future prospects. Energy, 2013, 62, 196-214.	8.8	256
27	Efficiency and economy of wood-fired biomass energy systems in relation to scale regarding heat and power generation using combustion and gasification technologies. Biomass and Bioenergy, 2001, 21, 91-108.	5.7	255
28	Impacts of large-scale Intermittent Renewable Energy Sources on electricity systems, and how these can be modeled. Renewable and Sustainable Energy Reviews, 2014, 33, 443-466.	16.4	255
29	Different palm oil production systems for energy purposes and their greenhouse gas implications. Biomass and Bioenergy, 2008, 32, 1322-1337.	5.7	240
30	Modern Biomass Conversion Technologies. Mitigation and Adaptation Strategies for Global Change, 2006, 11, 343-375.	2.1	235
31	European biomass resource potential and costs. Biomass and Bioenergy, 2010, 34, 188-202.	5 . 7	235
32	Bioenergy revisited: Key factors in global potentials of bioenergy. Energy and Environmental Science, 2010, 3, 258.	30.8	234
33	Biofuel production potentials in Europe: Sustainable use of cultivated land and pastures, Part II: Land use scenarios. Biomass and Bioenergy, 2010, 34, 173-187.	5 . 7	232
34	Operational flexibility and economics of power plants in future low-carbon power systems. Applied Energy, 2015, 156, 107-128.	10.1	232
35	Bioenergy potentials from forestry in 2050. Climatic Change, 2007, 81, 353-390.	3 . 6	227
36	A cost roadmap for silicon heterojunction solar cells. Solar Energy Materials and Solar Cells, 2016, 147, 295-314.	6.2	226

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37	Least-cost options for integrating intermittent renewables in low-carbon power systems. Applied Energy, 2016, 161, 48-74.	10.1	217
38	The economical and environmental performance of miscanthus and switchgrass production and supply chains in a European setting. Renewable and Sustainable Energy Reviews, 2009, 13, 1230-1245.	16.4	199
39	Life-cycle analysis of greenhouse gas emissions from renewable jet fuel production. Biotechnology for Biofuels, 2017, 10, 64.	6.2	197
40	The feasibility of shortâ€ŧerm production strategies for renewable jet fuels – a comprehensive technoâ€economic comparison. Biofuels, Bioproducts and Biorefining, 2015, 9, 778-800.	3.7	196
41	The European wood pellet markets: current status and prospects for 2020. Biofuels, Bioproducts and Biorefining, 2011, 5, 250-278.	3.7	187
42	Greenhouse gas footprints of different biofuel production systems. Renewable and Sustainable Energy Reviews, 2010, 14, 1661-1694.	16.4	179
43	International bioenergy trade—A review of past developments in the liquid biofuel market. Renewable and Sustainable Energy Reviews, 2011, 15, 2655-2676.	16.4	175
44	Overview of recent developments in sustainable biomass certification. Biomass and Bioenergy, 2008, 32, 749-780.	5.7	174
45	Natural gas as an alternative to crude oil in automotive fuel chains well-to-wheel analysis and transition strategy development. Energy Policy, 2005, 33, 579-594.	8.8	170
46	Techno-economic analysis of natural gas combined cycles with post-combustion CO2 absorption, including a detailed evaluation of the development potential. International Journal of Greenhouse Gas Control, 2007, 1, 396-417.	4.6	167
47	The sustainability of Brazilian ethanolâ€"An assessment of the possibilities of certified production. Biomass and Bioenergy, 2008, 32, 781-813.	5.7	167
48	Biomass combustion for power generation. Biomass and Bioenergy, 1996, 11, 271-281.	5.7	166
49	Explaining the experience curve: Cost reductions of Brazilian ethanol from sugarcane. Biomass and Bioenergy, 2009, 33, 644-658.	5.7	162
50	Bioenergy. , 2011, , 209-332.		162
51	Health, Safety and Environmental Risks of Underground Co2 Storage – Overview of Mechanisms and Current Knowledge. Climatic Change, 2006, 74, 289-318.	3.6	161
52	From the global efforts on certification of bioenergy towards an integrated approach based on sustainable land use planning. Renewable and Sustainable Energy Reviews, 2010, 14, 2445-2472.	16.4	161
53	Indirect land use change: review of existing models and strategies for mitigation. Biofuels, 2012, 3, 87-100.	2.4	155
54	Potential for hydrogen and Power-to-Liquid in a low-carbon EU energy system using cost optimization. Applied Energy, 2018, 232, 617-639.	10.1	154

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55	Informed and uninformed public opinions on CO2 capture and storage technologies in the Netherlands. International Journal of Greenhouse Gas Control, 2009, 3, 322-332.	4.6	151
56	Integrated assessment of biomass supply and demand in climate change mitigation scenarios. Global Environmental Change, 2019, 54, 88-101.	7.8	151
57	Developments in international solid biofuel trade—An analysis of volumes, policies, and market factors. Renewable and Sustainable Energy Reviews, 2012, 16, 3176-3199.	16.4	150
58	Potential of Power-to-Methane in the EU energy transition to a low carbon system using cost optimization. Applied Energy, 2018, 232, 323-340.	10.1	148
59	Life cycle impact assessment of bio-based plastics from sugarcane ethanol. Journal of Cleaner Production, 2015, 90, 114-127.	9.3	142
60	The environmental impact and risk assessment of CO2 capture, transport and storage – An evaluation of the knowledge base. Progress in Energy and Combustion Science, 2012, 38, 62-86.	31.2	141
61	Technological learning in bioenergy systems. Energy Policy, 2006, 34, 4024-4041.	8.8	137
62	Exploration of regional and global cost–supply curves of biomass energy from short-rotation crops at abandoned cropland and rest land under four IPCC SRES land-use scenarios. Biomass and Bioenergy, 2009, 33, 26-43.	5.7	137
63	Techno-economic comparison of series hybrid, plug-in hybrid, fuel cell and regular cars. Journal of Power Sources, 2010, 195, 6570-6585.	7.8	137
64	Gasification of biomass wastes and residues for electricity production. Biomass and Bioenergy, 1997, 12, 387-407.	5.7	136
65	Steps towards the development of a certification system for sustainable bio-energy trade. Biomass and Bioenergy, 2006, 30, 83-104.	5.7	136
66	Cost optimization of biofuel production – The impact of scale, integration, transport and supply chain configurations. Applied Energy, 2017, 195, 1055-1070.	10.1	134
67	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.	16.4	132
68	Cost Reduction Prospects for Offshore Wind Farms. Wind Engineering, 2004, 28, 97-118.	1.9	129
69	A state-of-the-art review of techno-economic models predicting the costs of CO2 pipeline transport. International Journal of Greenhouse Gas Control, 2013, 16, 241-270.	4.6	129
70	Projections of the availability and cost of residues from agriculture and forestry. GCB Bioenergy, 2016, 8, 456-470.	5.6	127
71	Effects of technological learning on future cost and performance of power plants with CO2 capture. Progress in Energy and Combustion Science, 2009, 35, 457-480.	31.2	126
72	Harmonising bioenergy resource potentials—Methodological lessons from review of state of the art bioenergy potential assessments. Renewable and Sustainable Energy Reviews, 2012, 16, 6598-6630.	16.4	125

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73	Environmental impact assessment of CCS chains $\hat{a}\in$ Lessons learned and limitations from LCA literature. International Journal of Greenhouse Gas Control, 2013, 13, 59-71.	4.6	113
74	Global experience with jatropha cultivation for bioenergy: An assessment of socio-economic and environmental aspects. Renewable and Sustainable Energy Reviews, 2014, 32, 869-889.	16.4	113
75	Competition between biofuels: Modeling technological learning and cost reductions over time. Biomass and Bioenergy, 2010, 34, 203-217.	5.7	111
76	The economic value of the phytoremediation function $\hat{a}\in$ Assessed by the example of cadmium remediation by willow (Salix ssp). Agricultural Systems, 2006, 89, 68-89.	6.1	108
77	Techno-economic assessment of micro-algae as feedstock for renewable bio-energy production. Applied Energy, 2013, 102, 461-475.	10.1	107
78	Paper and biomass for energy?. Resources, Conservation and Recycling, 2010, 54, 1208-1218.	10.8	106
79	Developments in international bioenergy trade. Biomass and Bioenergy, 2008, 32, 717-729.	5.7	102
80	Quantitative risk assessment of CO2 transport by pipelinesâ€"A review of uncertainties and their impacts. Journal of Hazardous Materials, 2010, 177, 12-27.	12.4	102
81	Opportunities and barriers for international bioenergy trade. Energy Policy, 2011, 39, 2028-2042.	8.8	102
82	Comparative life cycle assessment of biomass co-firing plants with carbon capture and storage. Applied Energy, 2014, 131, 441-467.	10.1	100
83	Biomass production potentials in Central and Eastern Europe under different scenarios. Biomass and Bioenergy, 2007, 31, 345-366.	5.7	95
84	Uncertainty in Carbon Capture and Storage (CCS) deployment projections: a cross-model comparison exercise. Climatic Change, 2014, 123, 461-476.	3.6	93
85	Designing a cost-effective CO2 storage infrastructure using a GIS based linear optimization energy model. Environmental Modelling and Software, 2010, 25, 1754-1768.	4.5	89
86	Outlook for ethanol production costs in Brazil up to 2030, for different biomass crops and industrial technologies. Applied Energy, 2015, 147, 593-610.	10.1	89
87	Identification of early opportunities for CO2 sequestrationâ€"worldwide screening for CO2-EOR and CO2-ECBM projects. Energy, 2005, 30, 1931-1952.	8.8	87
88	Improved cost models for optimizing CO2 pipeline configuration for point-to-point pipelines and simple networks. International Journal of Greenhouse Gas Control, 2014, 22, 25-46.	4.6	86
89	Techno-economic assessment of CO2 capture at steam methane reforming facilities using commercially available technology. International Journal of Greenhouse Gas Control, 2012, 9, 160-171.	4.6	85
90	Techno-economic analysis of co-fired biomass integrated gasification/combined cycle systems with inclusion of economies of scale. Energy, 2003, 28, 1229-1258.	8.8	84

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91	Performance of simulated flexible integrated gasification polygeneration facilities. Part A: A technical-energetic assessment. Renewable and Sustainable Energy Reviews, 2011, 15, 2563-2587.	16.4	81
92	Large-scale bioenergy production from soybeans and switchgrass in Argentina. Renewable and Sustainable Energy Reviews, 2009, 13, 1679-1709.	16.4	79
93	Performance of simulated flexible integrated gasification polygeneration facilities, Part B: Economic evaluation Renewable and Sustainable Energy Reviews, 2012, 16, 6083-6102.	16.4	79
94	Technological learning and cost reductions in wood fuel supply chains in Sweden. Biomass and Bioenergy, 2005, 29, 399-418.	5.7	78
95	Fuel supply strategies for large-scale bio-energy projects in developing countries. Electricity generation from agricultural and forest residues in Northeastern Thailand. Biomass and Bioenergy, 2001, 21, 259-275.	5.7	77
96	Techno-economic prospects of small-scale membrane reactors in a future hydrogen-fuelled transportation sector. Energy, 2006, 31, 2523-2555.	8.8	77
97	Carbon payback period and carbon offset parity point of wood pellet production in the Southâ€eastern <scp>United States</scp> . GCB Bioenergy, 2014, 6, 371-389.	5.6	76
98	The international logistics of wood pellets for heating and power production in Europe: Costs, energyâ€input and greenhouse gas balances of pellet consumption in Italy, Sweden and the Netherlands. Biofuels, Bioproducts and Biorefining, 2010, 4, 132-153.	3.7	75
99	Co-firing of natural gas and Biomass gas in biomass integrated gasification/combined cycle systems. Energy, 2003, 28, 1115-1131.	8.8	73
100	A comparison of electricity and hydrogen production systems with CO2 capture and storageâ€"Part B: Chain analysis of promising CCS options. Progress in Energy and Combustion Science, 2007, 33, 580-609.	31.2	73
101	Planning for an electricity sector with carbon capture and storage. International Journal of Greenhouse Gas Control, 2008, 2, 105-129.	4.6	71
102	The current bioenergy production potential of semi-arid and arid regions in sub-Saharan Africa. Biomass and Bioenergy, 2011, 35, 2773-2786.	5.7	71
103	Global solid biomass trade for energy by 2020: an assessment of potential import streams and supply costs to Northâ€West Europe under different sustainability constraints. GCB Bioenergy, 2015, 7, 618-634.	5.6	71
104	Sustainability constraints in determining European bioenergy potential: A review of existing studies and steps forward. Renewable and Sustainable Energy Reviews, 2017, 69, 719-734.	16.4	70
105	Analysis of socio-economic impacts of sustainable sugarcane–ethanol production by means of inter-regional Input–Output analysis: Demonstrated for Northeast Brazil. Renewable and Sustainable Energy Reviews, 2013, 28, 290-316.	16.4	68
106	Comparative analysis of key socio-economic and environmental impacts of smallholder and plantation based jatropha biofuel production systems in Tanzania. Biomass and Bioenergy, 2014, 61, 25-45.	5.7	68
107	Damaged forests provide an opportunity to mitigate climate change. GCB Bioenergy, 2014, 6, 44-60.	5.6	67
108	Characteristics and availability of biomass waste and residues in The Netherlands for gasification. Biomass and Bioenergy, 1997, 12, 225-240.	5.7	64

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109	Energy demand and emissions of the non-energy sector. Energy and Environmental Science, 2014, 7, 482-498.	30.8	62
110	New gross energy-requirement figures for materials production. Energy, 1994, 19, 627-640.	8.8	61
111	The impact of CO2 capture in the power and heat sector on the emission of SO2, NOx, particulate matter, volatile organic compounds and NH3 in the European Union. Atmospheric Environment, 2010, 44, 1369-1385.	4.1	61
112	Cost/benefit analysis of biomass energy supply options for rural smallholders in the semi-arid eastern part of Shinyanga Region in Tanzania. Renewable and Sustainable Energy Reviews, 2010, 14, 148-165.	16.4	61
113	Fuels and plastics from lignocellulosic biomass via the furan pathway; a technical analysis. RSC Advances, 2014, 4, 3536-3549.	3.6	61
114	Current and future economic performance of first and second generation biofuels in developing countries. Applied Energy, 2014, 135, 115-141.	10.1	61
115	Benefits of coal-fired power generation with flexible CCS in a future northwest European power system with large scale wind power. International Journal of Greenhouse Gas Control, 2014, 28, 216-233.	4.6	59
116	Implications of technological learning on the prospects for renewable energy technologies in Europe. Energy Policy, 2007, 35, 4072-4087.	8.8	58
117	Fulfilling the electricity demand of electric vehicles in the long term future: An evaluation of centralized and decentralized power supply systems. Applied Energy, 2013, 107, 33-51.	10.1	58
118	Externalities of biomass based electricity production compared with power generation from coal in the Netherlands. Biomass and Bioenergy, 1998, 14, 125-147.	5.7	57
119	The impact of sustainability criteria on the costs and potentials of bioenergy production – Applied for case studies in Brazil and Ukraine. Biomass and Bioenergy, 2010, 34, 319-333.	5.7	57
120	Comprehensive characterisation and analysis of PV module performance under real operating conditions. Progress in Photovoltaics: Research and Applications, 2017, 25, 218-232.	8.1	57
121	Greenhouse gas emission curves for advanced biofuel supply chains. Nature Climate Change, 2017, 7, 920-924.	18.8	57
122	CO2 enhanced coalbed methane production in the Netherlands. Energy, 2002, 27, 647-674.	8.8	56
123	Unravelling uncertainty and variability in early stage techno-economic assessments of carbon capture technologies. International Journal of Greenhouse Gas Control, 2017, 56, 221-236.	4.6	56
124	The potential biomass for energy production in the Czech Republic. Biomass and Bioenergy, 2006, 30, 405-421.	5.7	55
125	Governance of the emerging bio-energy markets. Energy Policy, 2007, 35, 3909-3924.	8.8	55
126	Benchmarking energy use in the paper industry: a benchmarking study on process unit level. Energy Efficiency, 2013, 6, 49-63.	2.8	55

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127	Model collaboration for the improved assessment of biomass supply, demand, and impacts. GCB Bioenergy, 2015, 7, 422-437.	5.6	54
128	Uncertainty in the deployment of Carbon Capture and Storage (CCS): A sensitivity analysis to techno-economic parameter uncertainty. International Journal of Greenhouse Gas Control, 2014, 27, 81-102.	4.6	53
129	Performance evaluation of atmospheric biomass integrated gasifier combined cycle systems under different strategies for the use of low calorific gases. Energy Conversion and Management, 2007, 48, 1289-1301.	9.2	51
130	The GHG contribution of the cascaded use of harvested wood products in comparison with the use of wood for energyâ€"A case study on available forest resources in Canada. Environmental Science and Policy, 2013, 31, 96-108.	4.9	51
131	Lifeâ€cycle greenhouse gas emissions and energy payback time of current and prospective silicon heterojunction solar cell designs. Progress in Photovoltaics: Research and Applications, 2015, 23, 1406-1428.	8.1	51
132	Challenges and uncertainties of ex ante techno-economic analysis of low TRL CO2 capture technology: Lessons from a case study of an NGCC with exhaust gas recycle and electric swing adsorption. Applied Energy, 2017, 208, 920-934.	10.1	51
133	Assessing deployment pathways for greenhouse gas emissions reductions in an industrial plant – A case study for a complex oil refinery. Applied Energy, 2019, 236, 354-378.	10.1	51
134	Feasibility of storing CO2 in the Utsira formation as part of a long term Dutch CCS strategy. International Journal of Greenhouse Gas Control, 2010, 4, 351-366.	4.6	50
135	Optimizing the energy efficiency of conventional multi-cylinder dryers in the paper industry. Energy, 2010, 35, 3738-3750.	8.8	50
136	Competing uses of biomass for energy and chemicals: implications for longâ€term global <scp>CO</scp> ₂ mitigation potential. GCB Bioenergy, 2015, 7, 1321-1334.	5.6	50
137	Life cycle assessment integration into energy system models: An application for Power-to-Methane in the EU. Applied Energy, 2020, 259, 114160.	10.1	50
138	Large-scale bioenergy production from soybeans and switchgrass in Argentina. Renewable and Sustainable Energy Reviews, 2009, 13, 1710-1733.	16.4	49
139	Productivity developments in European agriculture: Relations to and opportunities for biomass production. Renewable and Sustainable Energy Reviews, 2011, 15, 2397-2412.	16.4	49
140	Impact of international climate policies on CO2 capture and storage deployment. Energy Policy, 2011, 39, 2000-2019.	8.8	49
141	Techno-economic prospects for CO2 capture from distributed energy systems. Renewable and Sustainable Energy Reviews, 2013, 19, 328-347.	16.4	48
142	Pathways towards large-scale implementation of CO2 capture and storage: A case study for the Netherlands. International Journal of Greenhouse Gas Control, 2009, 3, 217-236.	4.6	47
143	Cost and Co2-Emission Reduction of Biomass Cascading: Methodological Aspects and Case Study of SRF Poplar. Climatic Change, 2005, 71, 373-408.	3.6	46
144	The REFUEL EU road map for biofuels in transport: Application of the project's tools to some short-term policy issues. Biomass and Bioenergy, 2010, 34, 244-250.	5.7	46

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145	Spatio-temporal uncertainty in Spatial Decision Support Systems: A case study of changing land availability for bioenergy crops in Mozambique. Computers, Environment and Urban Systems, 2012, 36, 30-42.	7.1	45
146	International and domestic uses of solid biofuels under different renewable energy support scenarios in the European Union. Applied Energy, 2014, 131, 139-157.	10.1	45
147	What can and can't we say about indirect landâ€use change in Brazil using an integrated economic – landâ€use change model?. GCB Bioenergy, 2016, 8, 561-578.	5.6	45
148	Spatial variation of environmental impacts of regional biomass chains. Renewable and Sustainable Energy Reviews, 2012, 16, 2053-2069.	16.4	44
149	Techno-economic performance and challenges of applying CO2 capture in the industry: A case study of five industrial plants. International Journal of Greenhouse Gas Control, 2013, 17, 259-279.	4.6	44
150	Technical and economic prospects of coal- and biomass-fired integrated gasification facilities equipped with CCS over time. International Journal of Greenhouse Gas Control, 2013, 16, 311-323.	4.6	44
151	The influence of uncertainty in the development of a CO2 infrastructure network. Applied Energy, 2015, 158, 332-347.	10.1	44
152	A Greenhouse Gas Balance of two Existing International Biomass Import Chains. Mitigation and Adaptation Strategies for Global Change, 2006, 11, 1023-1050.	2.1	43
153	Prospects for cost-effective post-combustion CO2 capture from industrial CHPs. International Journal of Greenhouse Gas Control, 2010, 4, 511-524.	4.6	42
154	Potential, spatial distribution and economic performance of regional biomass chains: The North of the Netherlands as example. Agricultural Systems, 2010, 103, 403-417.	6.1	42
155	Optimization potential of biomass supply chains with torrefaction technology. Biofuels, Bioproducts and Biorefining, 2014, 8, 253-282.	3.7	42
156	Interregional assessment of socio-economic effects of sugarcane ethanol production in Brazil. Renewable and Sustainable Energy Reviews, 2018, 88, 347-362.	16.4	42
157	Optimising waste treatment systems. Resources, Conservation and Recycling, 2006, 49, 68-88.	10.8	40
158	Combining hybrid cars and synthetic fuels with electricity generation and carbon capture and storage. Energy Policy, 2011, 39, 248-268.	8.8	40
159	A review of the role of spatial resolution in energy systems modelling: Lessons learned and applicability to the North Sea region. Renewable and Sustainable Energy Reviews, 2021, 141, 110857.	16.4	40
160	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.	10.8	39
161	Impact of hydrogen onboard storage technologies on the performance of hydrogen fuelled vehicles: A techno-economic well-to-wheel assessment. International Journal of Hydrogen Energy, 2007, 32, 4859-4870.	7.1	39
162	Multi-agent simulation of adoption of alternative fuels. Transportation Research, Part D: Transport and Environment, 2010, 15, 326-342.	6.8	39

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163	Detecting systemic change in a land use system by Bayesian data assimilation. Environmental Modelling and Software, 2016, 75, 424-438.	4.5	39
164	Modeling the impacts of wood pellet demand on forest dynamics in southeastern United States. Biofuels, Bioproducts and Biorefining, 2017, 11, 1007-1029.	3.7	39
165	Techno-economic assessment and comparison of CO2 capture technologies for industrial processes: Preliminary results for the iron and steel sector. Energy Procedia, 2011, 4, 1981-1988.	1.8	38
166	Energy conversion strategies in the European paper industry – A case study in three countries. Applied Energy, 2012, 98, 102-113.	10.1	38
167	The economic potential of wood pellet production from alternative, low-value wood sources in the southeast of the U.S Biomass and Bioenergy, 2014, 71, 443-454.	5.7	38
168	Identifying a land use change cellular automaton by Bayesian data assimilation. Environmental Modelling and Software, 2014, 53, 121-136.	4.5	38
169	Investing in CO2 transport infrastructure under uncertainty: A comparison between ships and pipelines. International Journal of Greenhouse Gas Control, 2015, 41, 174-193.	4.6	38
170	Learning in dedicated wood production systems: Past trends, future outlook and implications for bioenergy. Renewable and Sustainable Energy Reviews, 2013, 19, 417-432.	16.4	37
171	On the macro-economic impact of bioenergy and biochemicals – Introducing advanced bioeconomy sectors into an economic modelling framework with a case study for the Netherlands. Biomass and Bioenergy, 2018, 108, 381-397.	5.7	37
172	The screening and scoping of Environmental Impact Assessment and Strategic Environmental Assessment of Carbon Capture and Storage in the Netherlands. Environmental Impact Assessment Review, 2008, 28, 392-414.	9.2	36
173	Legal Harvesting, Sustainable Sourcing and Cascaded Use of Wood for Bioenergy: Their Coverage through Existing Certification Frameworks for Sustainable Forest Management. Forests, 2014, 5, 2163-2211.	2.1	36
174	Informed public opinions on CCS in comparison to other mitigation options. Energy Procedia, 2009, 1, 4795-4802.	1.8	35
175	Unravelling the potential of energy efficiency in the Colombian oil industry. Journal of Cleaner Production, 2018, 176, 604-628.	9.3	35
176	The economic performance of jatropha, cassava and Eucalyptus production systems for energy in an East African smallholder setting. GCB Bioenergy, 2012, 4, 828-845.	5.6	34
177	Macro-economic impact of large-scale deployment of biomass resources for energy and materials on a national level—A combined approach for the Netherlands. Energy Policy, 2013, 59, 727-744.	8.8	33
178	Mapping land use changes resulting from biofuel production and the effect of mitigation measures. GCB Bioenergy, 2018, 10, 804-824.	5.6	33
179	A Spatial Analysis of the Potentials for Offshore Wind Farm Locations in the North Sea Region: Challenges and Opportunities. ISPRS International Journal of Geo-Information, 2020, 9, 96.	2.9	33
180	An approach for analysing the potential for material efficiency improvement. Resources, Conservation and Recycling, 1995, 13, 215-232.	10.8	32

#	Article	IF	Citations
181	Future technological and economic performance of IGCC and FT production facilities with and without CO2 capture: Combining component based learning curve and bottom-up analysis. International Journal of Greenhouse Gas Control, 2013, 16, 287-310.	4.6	32
182	The distribution of food security impacts of biofuels, a Ghana case study. Biomass and Bioenergy, 2020, 141, 105695.	5.7	31
183	Spatiotemporal land use modelling to assess land availability for energy crops – illustrated for <scp>M</scp> ozambique. GCB Bioenergy, 2012, 4, 859-874.	5.6	30
184	Potentials for electricity production from wood in Ireland. Energy, 2001, 26, 991-1013.	8.8	29
185	Uncertainties in risk assessment of CO2 pipelines. Energy Procedia, 2009, 1, 1587-1594.	1.8	29
186	A conceptual framework for the analysis of the effect of institutions on biofuel supply chains. Applied Energy, 2017, 185, 895-915.	10.1	29
187	A review of key international biomass and bioenergy sustainability frameworks and certification systems and their application and implications in Colombia. Renewable and Sustainable Energy Reviews, 2018, 96, 460-478.	16.4	29
188	Competitiveness of CO2 capture from an industrial solid oxide fuel cell combined heat and power system in the early stage of market introduction. Fuel, 2011, 90, 958-973.	6.4	28
189	Assessment of driving factors for yield and productivity developments in crop and cattle production as key to increasing sustainable biomass potentials. Food and Energy Security, 2015, 4, 36-75.	4.3	28
190	Recent and projected impacts of land use and land cover changes on carbon stocks and biodiversity in East Kalimantan, Indonesia. Ecological Indicators, 2019, 103, 563-575.	6.3	28
191	Optimising waste treatment systems. Resources, Conservation and Recycling, 2006, 48, 227-248.	10.8	27
192	Model development and process simulation of postcombustion carbon capture technology with aqueous AMP/PZ solvent. International Journal of Greenhouse Gas Control, 2016, 47, 176-199.	4.6	27
193	Exploring the potential of carbon capture and storage-enhanced oil recovery as a mitigation strategy in the Colombian oil industry. International Journal of Greenhouse Gas Control, 2020, 94, 102938.	4.6	27
194	International bioenergy trade in the Netherlands. Biomass and Bioenergy, 2008, 32, 672-687.	5.7	26
195	Soft-linking of a behavioral model for transport with energy system cost optimization applied to hydrogen in EU. Renewable and Sustainable Energy Reviews, 2019, 115, 109349.	16.4	26
196	Estimating GHG emission mitigation supply curves of large-scale biomass use on a country level. Biomass and Bioenergy, 2007, 31, 46-65.	5.7	25
197	Macroeconomic impacts of bioenergy production on surplus agricultural landâ€"A case study of Argentina. Renewable and Sustainable Energy Reviews, 2009, 13, 2463-2473.	16.4	25
198	Informed public opinion in the Netherlands: Evaluation of CO2 capture and storage technologies in comparison with other CO2 mitigation options. International Journal of Greenhouse Gas Control, 2012, 10, 169-180.	4.6	25

#	Article	IF	Citations
199	Fuels and plastics from lignocellulosic biomass via the furan pathway: an economic analysis. Biofuels, Bioproducts and Biorefining, 2015, 9, 307-325.	3.7	25
200	Forestry Projects under the Clean Development Mechanism?. Climatic Change, 2003, 61, 123-156.	3.6	24
201	Renewable electricity in the Netherlands. Energy Policy, 2004, 32, 1053-1073.	8.8	24
202	A global conversation about energy from biomass: the continental conventions of the global sustainable bioenergy project. Interface Focus, 2011, 1, 271-279.	3.0	24
203	Combining empirical and theory-based land-use modelling approaches to assess economic potential of biofuel production avoiding iLUC: Argentina as a case study. Renewable and Sustainable Energy Reviews, 2014, 34, 208-224.	16.4	24
204	Renewable jet fuel supply scenarios in the European Union in 2021–2030 in the context of proposed biofuel policy and competing biomass demand. GCB Bioenergy, 2018, 10, 661-682.	5.6	24
205	Assessing bioâ€oil coâ€processing routes as <scp>CO₂</scp> mitigation strategies inÂoil refineries. Biofuels, Bioproducts and Biorefining, 2021, 15, 305-333.	3.7	24
206	Using a participatory approach to develop a sustainability framework for carbon capture and storage systems in The Netherlands. International Journal of Greenhouse Gas Control, 2008, 2, 136-154.	4.6	23
207	Mobilization of biomass for energy from boreal forests in Finland & Discount Russia under present sustainable forest management certification and new sustainability requirements for solid biofuels. Biomass and Bioenergy, 2014, 71, 23-36.	5.7	22
208	Improving uncertainty evaluation of process models by using pedigree analysis. A case study on CO2 capture with monoethanolamine. Computers and Chemical Engineering, 2016, 85, 1-15.	3.8	22
209	Modelling of decarbonisation transition in national integrated energy system with hourly operational resolution. Advances in Applied Energy, 2021, 3, 100043.	13.2	22
210	Optimization of the final waste treatment system in the Netherlands. Resources, Conservation and Recycling, 1998, 22, 47-82.	10.8	21
211	Lignocellulosic feedstock supply systems with intermodal and overseas transportation. Biofuels, Bioproducts and Biorefining, 2014, 8, 794-818.	3.7	21
212	Socio-economic impacts of low-carbon power generation portfolios: Strategies with and without CCS for the Netherlands. Applied Energy, 2016, 183, 257-277.	10.1	21
213	<scp>GHG</scp> emissions and other environmental impacts of indirect land use change mitigation. GCB Bioenergy, 2017, 9, 725-742.	5.6	21
214	Carbon balance and economic performance of pine plantations for bioenergy production in the Southeastern United States. Biomass and Bioenergy, 2018, 117, 44-55.	5.7	21
215	Pathways for a Brazilian biobased economy: towards optimal utilization of biomass. Biofuels, Bioproducts and Biorefining, 2019, 13, 673-689.	3.7	21
216	Measuring accuracy and computational capacity trade-offs in an hourly integrated energy system model. Advances in Applied Energy, 2021, 1, 100009.	13.2	21

#	Article	IF	CITATIONS
217	Spatial and temporal analysis of cumulative environmental effects of offshore wind farms in the North Sea basin. Scientific Reports, 2021, 11, 10125.	3.3	21
218	Spatiotemporal costâ€supply curves for bioenergy production in Mozambique. Biofuels, Bioproducts and Biorefining, 2012, 6, 405-430.	3.7	20
219	Exploring policy options to spur the expansion of ethanol production and consumption in Brazil: An agent-based modeling approach. Energy Policy, 2018, 123, 619-641.	8.8	20
220	Emerging bioeconomy sectors in energy systems modeling – 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.	3.7	20
221	An integrated GIS-MARKAL toolbox for designing a CO2 infrastructure network in the Netherlands. Energy Procedia, 2009, 1, 4071-4078.	1.8	19
222	The environmental impact and risk assessment of CO2 capture, transport and storage-an evaluation of the knowledge base using the DPSIR framework. Energy Procedia, 2011, 4, 2293-2300.	1.8	19
223	The influence of risk mitigation measures on the risks, costs and routing of CO 2 pipelines. International Journal of Greenhouse Gas Control, 2014, 29, 104-124.	4.6	19
224	Exploring path dependence, policy interactions, and actor behavior in the German biodiesel supply chain. Applied Energy, 2017, 195, 370-381.	10.1	19
225	How a Pareto frontier complements scenario projections in land use change impact assessment. Environmental Modelling and Software, 2017, 97, 287-302.	4.5	19
226	Modelling a highly decarbonised North Sea energy system in 2050: A multinational approach. Advances in Applied Energy, 2022, 5, 100080.	13.2	19
227	Economic and greenhouse gas emission analysis of bioenergy production using multi-product cropsâ€"case studies for the Netherlands and Poland. Biomass and Bioenergy, 2005, 28, 454-474.	5.7	18
228	Options of biofuel trade from Central and Eastern to Western European countries. Biomass and Bioenergy, 2009, 33, 728-744.	5.7	18
229	Effect of CO2 capture on the emissions of air pollutants from industrial processes. International Journal of Greenhouse Gas Control, 2012, 10, 310-328.	4.6	18
230	Business case uncertainty of power plants in future energy systems with wind power. Energy Policy, 2016, 89, 237-256.	8.8	18
231	Low-ILUC-risk ethanol from Hungarian maize. Biomass and Bioenergy, 2017, 99, 57-68.	5 . 7	18
232	Willow firing in retrofitted Irish peat power plants. Biomass and Bioenergy, 1997, 12, 75-90.	5.7	17
233	Techno-economic performance and spatial footprint of infrastructure configurations for large scale CO2 capture in industrial zones. International Journal of Greenhouse Gas Control, 2015, 39, 256-284.	4.6	17
234	Techno-economic Comparison of Combined Cycle Gas Turbines with Advanced Membrane Configuration and Monoethanolamine Solvent at Part Load Conditions. Energy & Energy & 2018, 32, 625-645.	5.1	17

#	Article	IF	CITATIONS
235	Economic performance and GHG emission intensity of sugarcane―and eucalyptusâ€derived biofuels and biobased chemicals in Brazil. Biofuels, Bioproducts and Biorefining, 2019, 13, 950-977.	3.7	17
236	The potential of a bioeconomy to reduce Brazilian GHG emissions towards 2030: a CGEâ€based life cycle analysis. Biofuels, Bioproducts and Biorefining, 2020, 14, 265-285.	3.7	17
237	Improving the analytical framework for quantifying technological progress in energy technologies. Renewable and Sustainable Energy Reviews, 2021, 145, 111084.	16.4	17
238	Techno-economic prospects for CO2 capture from a Solid Oxide Fuel Cell–Combined Heat and Power plant. Preliminary results. Energy Procedia, 2009, 1, 3843-3850.	1.8	15
239	Geospatial analysis of the energy yield and environmental footprint of different photovoltaic module technologies. Solar Energy, 2017, 155, 1339-1353.	6.1	15
240	Potential role of natural gas infrastructure in China to supply low-carbon gases during 2020–2050. Applied Energy, 2022, 306, 117989.	10.1	15
241	Potential energy savings in the production route for plastics. Energy Conversion and Management, 1994, 35, 1073-1085.	9.2	14
242	Exploration of the land potential for the production of biomass for energy in the Netherlands. Biomass and Bioenergy, 1998, 14, 439-456.	5.7	14
243	Developments in international bio-energy markets and trade. Biomass and Bioenergy, 2008, 32, 657-659.	5.7	14
244	Integrated spatiotemporal modelling of bioenergy production potentials, agricultural land use, and related GHG balances; demonstrated for Ukraine. Biofuels, Bioproducts and Biorefining, 2014, 8, 391-411.	3.7	14
245	Bioethanol potential from miscanthus with low <scp>ILUC</scp> risk in the province of Lublin, Poland. GCB Bioenergy, 2016, 8, 909-924.	5.6	14
246	Technoâ€economic performance of sustainable international bioâ€SNG production and supply chains on short and longer term. Biofuels, Bioproducts and Biorefining, 2019, 13, 325-357.	3.7	14
247	Local energy planning in the built environment: An analysis of model characteristics. Renewable and Sustainable Energy Reviews, 2021, 144, 111030.	16.4	14
248	The impacts of CO2 capture on transboundary air pollution in the Netherlands. Energy Procedia, 2009, 1, 3787-3794.	1.8	13
249	Evaluation of sustainability schemes for international bioenergy flows. International Journal of Energy Sector Management, 2009, 3, 359-382.	2.3	13
250	Socio-economic impacts of future electricity generation scenarios in Europe: Potential costs and benefits of using CO 2 Capture and Storage (CCS). International Journal of Greenhouse Gas Control, 2015, 42, 471-484.	4.6	13
251	Linking carbon stock change from land-use change to consumption of agricultural products: Alternative perspectives. Journal of Environmental Management, 2016, 182, 542-556.	7.8	13
252	Analyses of Land Cover Change Trajectories Leading to Tropical Forest Loss: Illustrated for the West Kutai and Mahakam Ulu Districts, East Kalimantan, Indonesia. Land, 2018, 7, 108.	2.9	13

#	Article	IF	Citations
253	How does the interplay between resource availability, intersectoral competition and reliability affect a low-carbon power generation mix in Brazil for 2050?. Energy, 2020, 195, 116948.	8.8	13
254	System analysis of the bioâ€based economy in Colombia: A bottomâ€up energy system model and scenario analysis. Biofuels, Bioproducts and Biorefining, 2021, 15, 481-501.	3.7	13
255	Techno-economic and life cycle greenhouse gas emissions assessment of liquefied natural gas supply chain in China. Energy, 2021, 224, 120049.	8.8	13
256	Harmonized comparison of virgin steel production using biomass with carbon capture and storage for negative emissions. International Journal of Greenhouse Gas Control, 2021, 112, 103519.	4.6	13
257	The Flexibility Requirements for Power Plants with CCS in a Future Energy System with a Large Share of Intermittent Renewable Energy Sources. Energy Procedia, 2013, 37, 2657-2664.	1.8	12
258	Greenhouse gas mitigation effects of integrating biomass production into European agriculture. Biofuels, Bioproducts and Biorefining, 2014, 8, 374-390.	3.7	12
259	Monitoring sustainable biomass flows: General methodology development. Biofuels, Bioproducts and Biorefining, 2014, 8, 83-102.	3.7	12
260	Deployment of infrastructure configurations for large-scale CO 2 capture in industrial zones: A case study for the Rotterdam Botlek area (part B). International Journal of Greenhouse Gas Control, 2017, 60, 24-50.	4.6	12
261	Regionalization of a national integrated energy system model: A case study of the northern Netherlands. Applied Energy, 2022, 306, 118035.	10.1	12
262	The Techno-Economic Potential of Integrated Gasification Co-Generation Facilities with CCS Going from Coal to Biomass. Energy Procedia, 2013, 37, 6053-6061.	1.8	11
263	Economic Optimization of CO2 Pipeline Configurations. Energy Procedia, 2013, 37, 3105-3112.	1.8	11
264	Exploring under-utilised low carbon land resources from multiple perspectives: Case studies on regencies in Kalimantan. Land Use Policy, 2017, 60, 150-168.	5.6	11
265	Identifying key factors for mobilising under-utilised low carbon land resources: A case study on Kalimantan. Land Use Policy, 2018, 70, 198-211.	5.6	11
266	Impact of increased wood pellet demand on biodiversity in the southâ€eastern United States. GCB Bioenergy, 2018, 10, 841-860.	5.6	11
267	Trading biomass or GHG emission credits?. Climatic Change, 2009, 94, 287-317.	3.6	10
268	Exploring the emergence of a biojet fuel supply chain in Brazil: An agentâ€based modeling approach. GCB Bioenergy, 2019, 11, 773-790.	5.6	10
269	Evaluating the suitability of marginal land for a perennial energy crop on the Loess Plateau of China. GCB Bioenergy, 2021, 13, 1388-1406.	5.6	10
270	Fully integrated CO2 mitigation strategy for an existing refinery: A case study in Colombia. Applied Energy, 2022, 313, 118771.	10.1	10

#	Article	IF	CITATIONS
271	The impact of landâ€use change emissions on the potential of bioenergy as climate change mitigation option for a Brazilian lowâ€carbon energy system. GCB Bioenergy, 2022, 14, 110-131.	5.6	9
272	Regionalized cost supply potential of bioenergy crops and residues in Colombia: A hybrid statistical balance and land suitability allocation scenario analysis. Biomass and Bioenergy, 2021, 150, 106096.	5.7	8
273	Linking carbon stock change from land-use change to consumption of agricultural products: A review with Indonesian palm oil as a case study. Journal of Environmental Management, 2016, 184, 340-352.	7.8	7
274	Using dynamic relative climate impact curves to quantify the climate impact of bioenergy production systems over time. GCB Bioenergy, 2019, 11, 427-443.	5.6	7
275	Post-combustion CO2 capture from part-load industrial NGCCCHPs: Selected results. Energy Procedia, 2009, 1, 1395-1402.	1.8	6
276	Renewable energy targets, forest resources, and second-generation biofuels in Finland. Biofuels, Bioproducts and Biorefining, 2011, 5, 238-249.	3.7	6
277	A Sensitivity Analysis of the Global Deployment of CCS to the Cost of Storage and Storage Capacity Estimates. Energy Procedia, 2013, 37, 7537-7544.	1.8	5
278	Rapid screening and probabilistic estimation of the potential for CO ₂ -EOR and associated geological CO ₂ storage in Colombian petroleum basins. Petroleum Geoscience, 2022, 28, .	1.5	5
279	Flexible integrated gasification co-generation facilities A technical and energy analysis. Energy Procedia, 2009, 1, 4241-4248.	1.8	4
280	Linear programing formulation of a high temporal and technological resolution integrated energy system model for the energy transition. MethodsX, 2022, 9, 101732.	1.6	4
281	Benefits of an integrated power and hydrogen offshore grid in a netâ€zero North Sea energy system. Advances in Applied Energy, 2022, 7, 100097.	13.2	4
282	Method for identifying drivers, barriers and synergies related to the deployment of a CO2 pipeline network. International Journal of Greenhouse Gas Control, 2015, 41, 82-106.	4.6	3
283	Assessment of the Energy Production Industry: Modern Options for Producing Secondary Energy Carriers from Biomass., 2006,, 209-230.		2
284	Transition to sustainable use of fossil fuelsImpacts of CFF options and societal preferences., 2005,, 1569-1575.		2
285	Energy Efficiencies of Industrial Processes and Electricity Production in European and Non-European Countries., 1995,, 285-297.		2
286	La bioénergie et le développement durable. Biofutur, 1999, 1999, 16-19.	0.0	1
287	Assessing the economic feasibility of flexible integrated gasification Co-generation facilities. Energy Procedia, 2011, 4, 1973-1980.	1.8	1
288	Cofiring Biomass and Natural Gas - Boosting Power Production from Sugarcane Residues. , 2005, , 125-140.		1

#	Article	IF	CITATIONS
289	A General Introduction to International Bioenergy Trade. Lecture Notes in Energy, 2014, , 1-15.	0.3	1
290	Biomass Resources, Worldwide. , 2018, , 1-53.		1
291	Detailed spatial analysis of renewables' potential and heat: A study of Groningen Province in the northern Netherlands. Applied Energy, 2022, 318, 119149.	10.1	1
292	The influence of international climate policies on the deployment of CO2 capture and storage at the national level. Energy Procedia, 2011, 4, 5838-5844.	1.8	0
293	Jatropha: A Promising Crop for Africa's Biofuel Production?. , 2012, , 27-40.		0
294	Preliminary Results of a Techno-Economic Assessment of CO2 Capture-network Configurations in the Industry. Energy Procedia, 2013, 37, 7100-7107.	1.8	0
295	Agent-based model of the German Biodiesel Supply Chain. Computer Aided Chemical Engineering, 2015, 37, 2045-2050.	0.5	0
296	Synthesis and Recommendations. Lecture Notes in Energy, 2014, , 213-224.	0.3	0
297	Carbon Dioxide Capture and Storage (CCS) Technologies. , 2010, , .		0
298	Overview and Comparison of Experience Curves for Energy Technologies. , 2010, , .		0
299	Methodological Lessons and Recommendations for Scientists and Modellers. , 2010, , .		0
300	Lessons on Technological Learning for Policy Makers and Industry. , 2010, , .		0