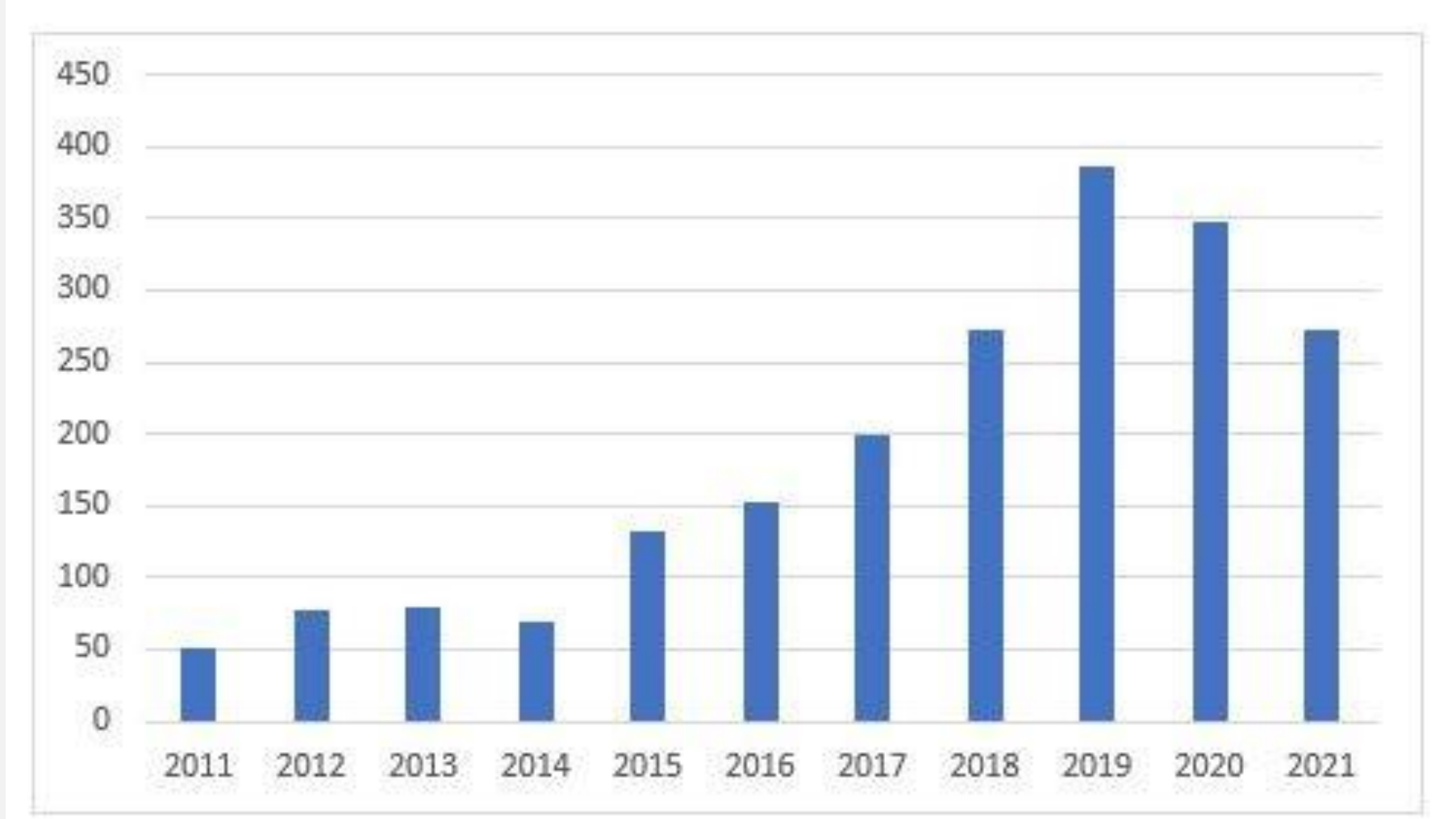
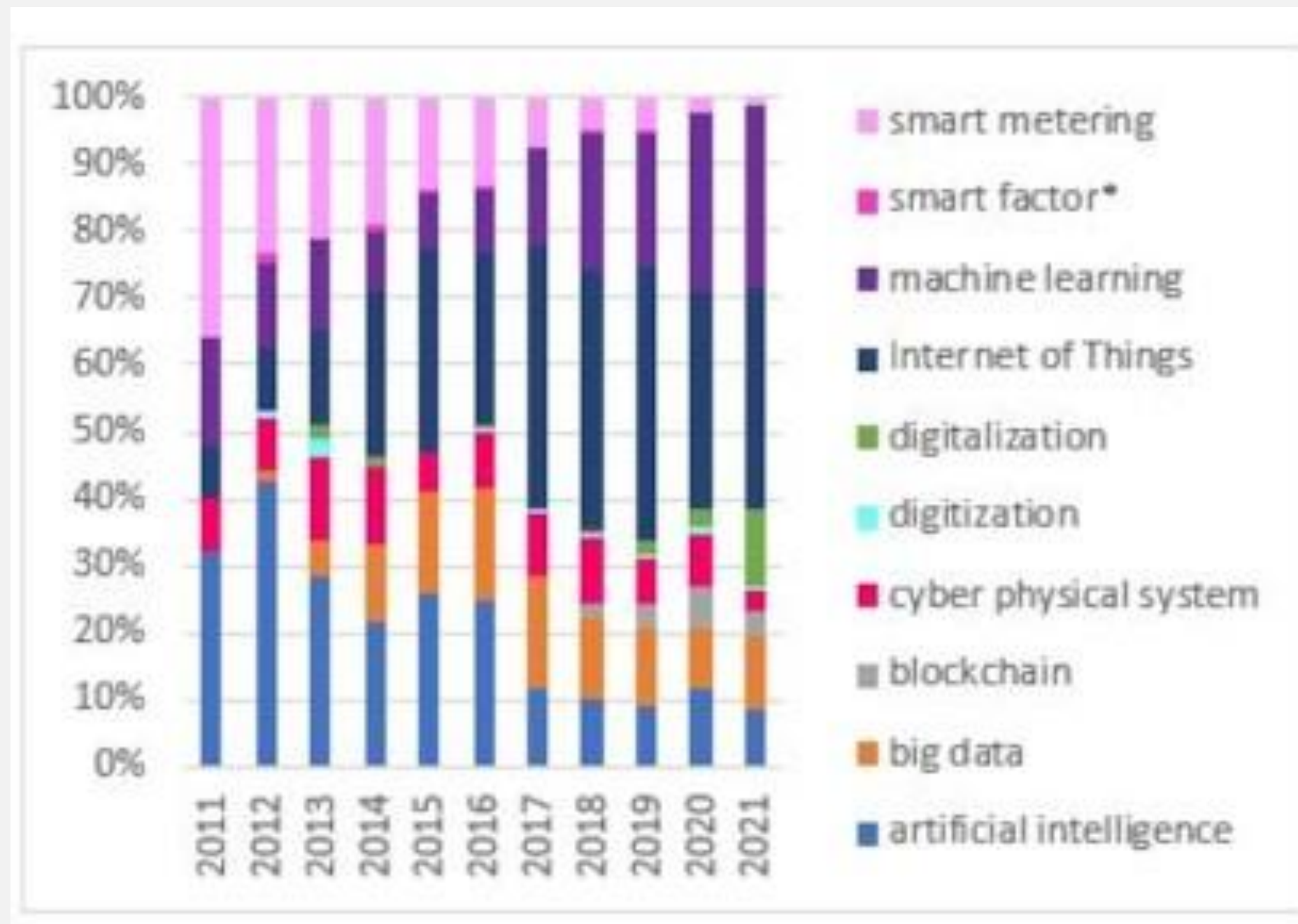


Descriptive analysis

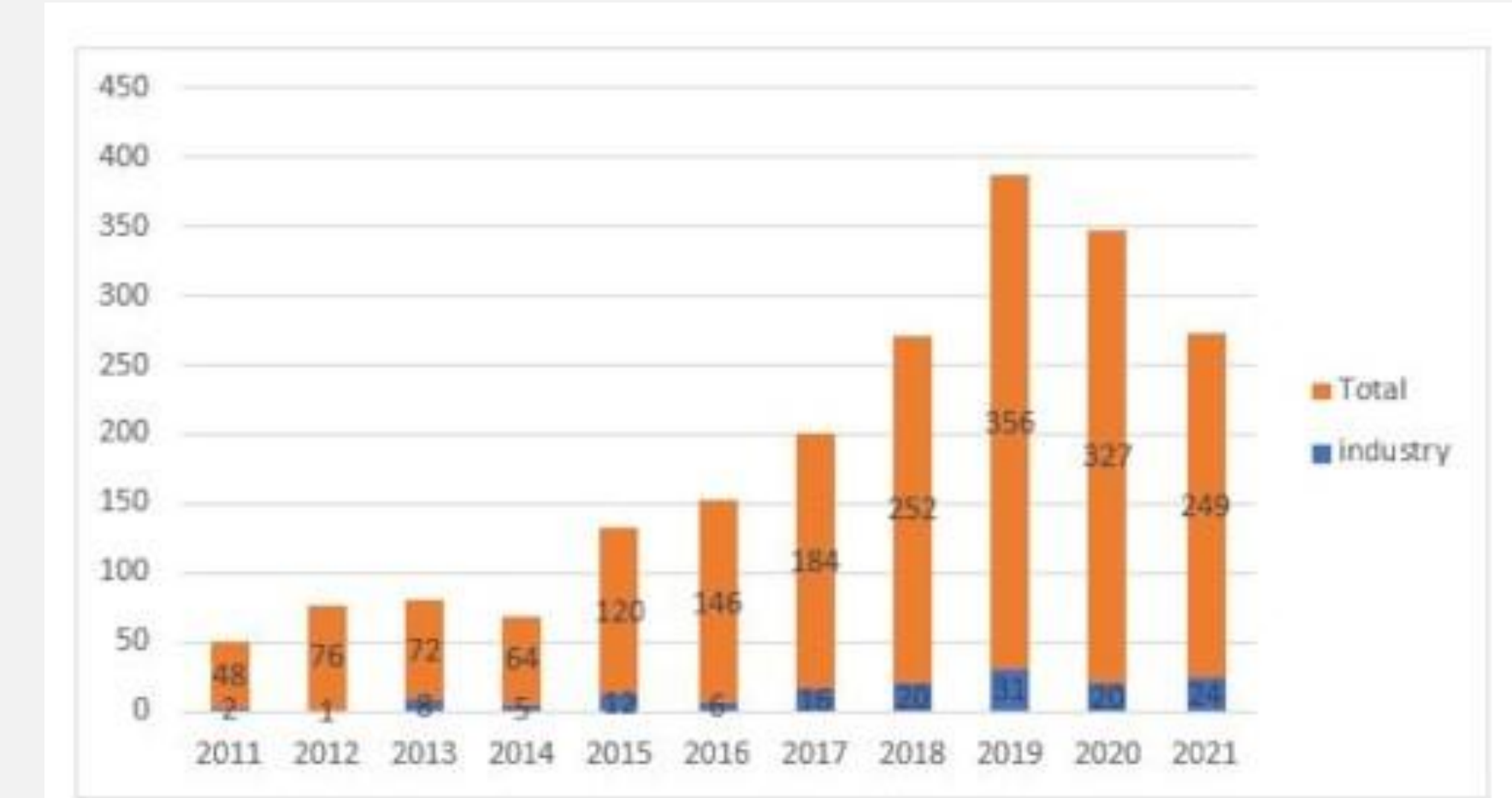
❖ In this paper, we want to present an overall structure of the research area and hotspots for energy management and digitalization topic.



Annual publications between 2011 and 2021

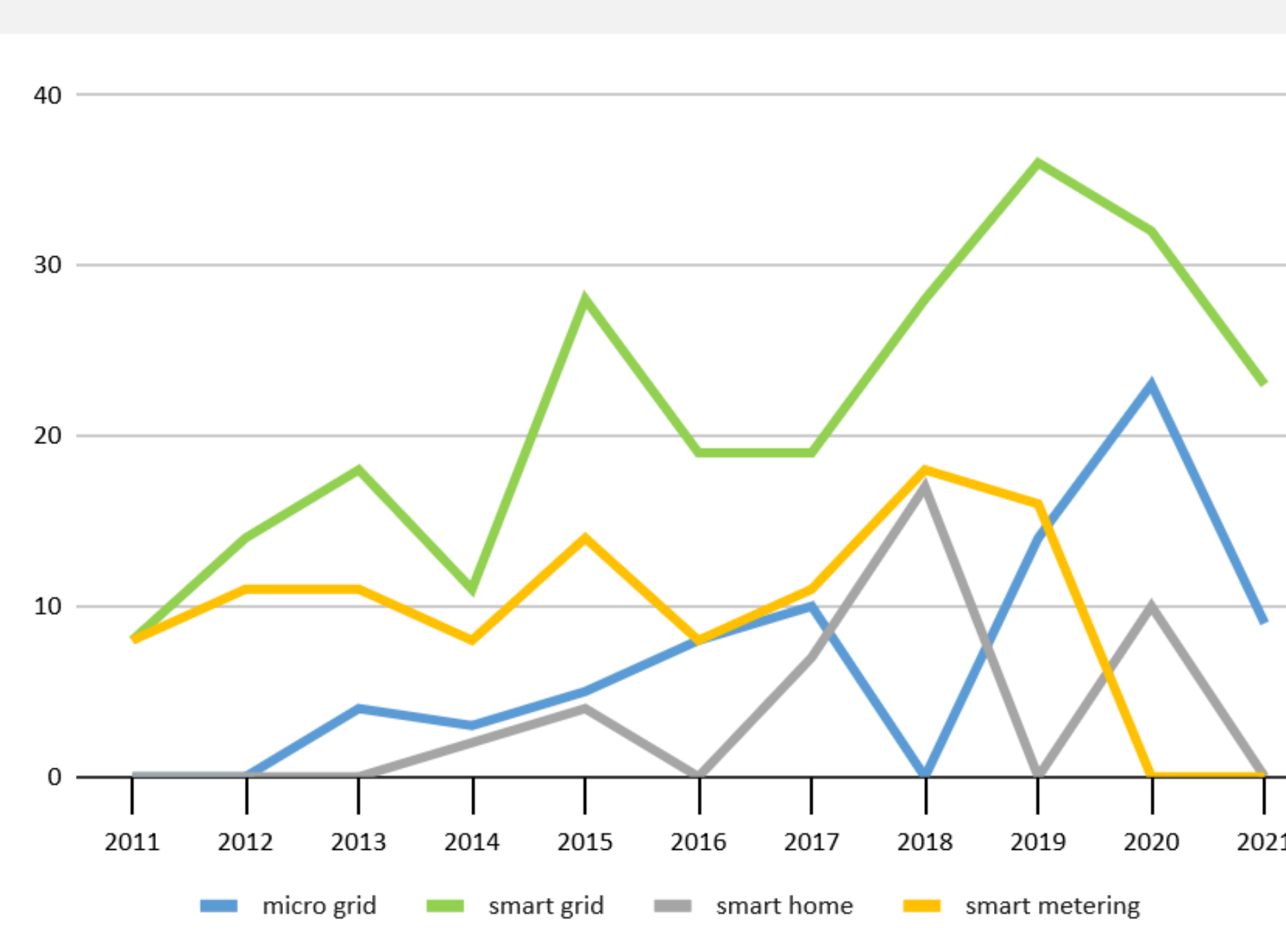
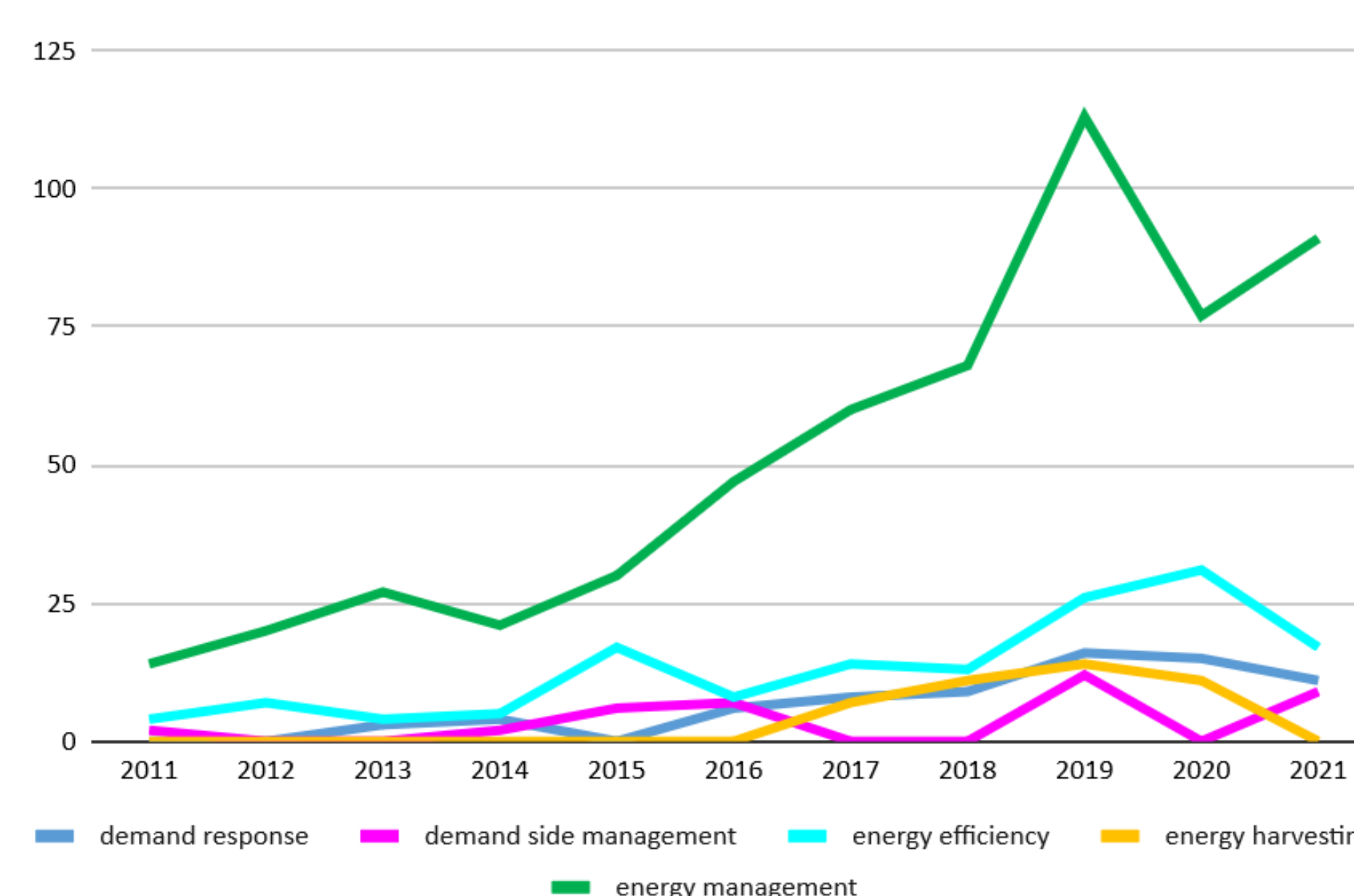
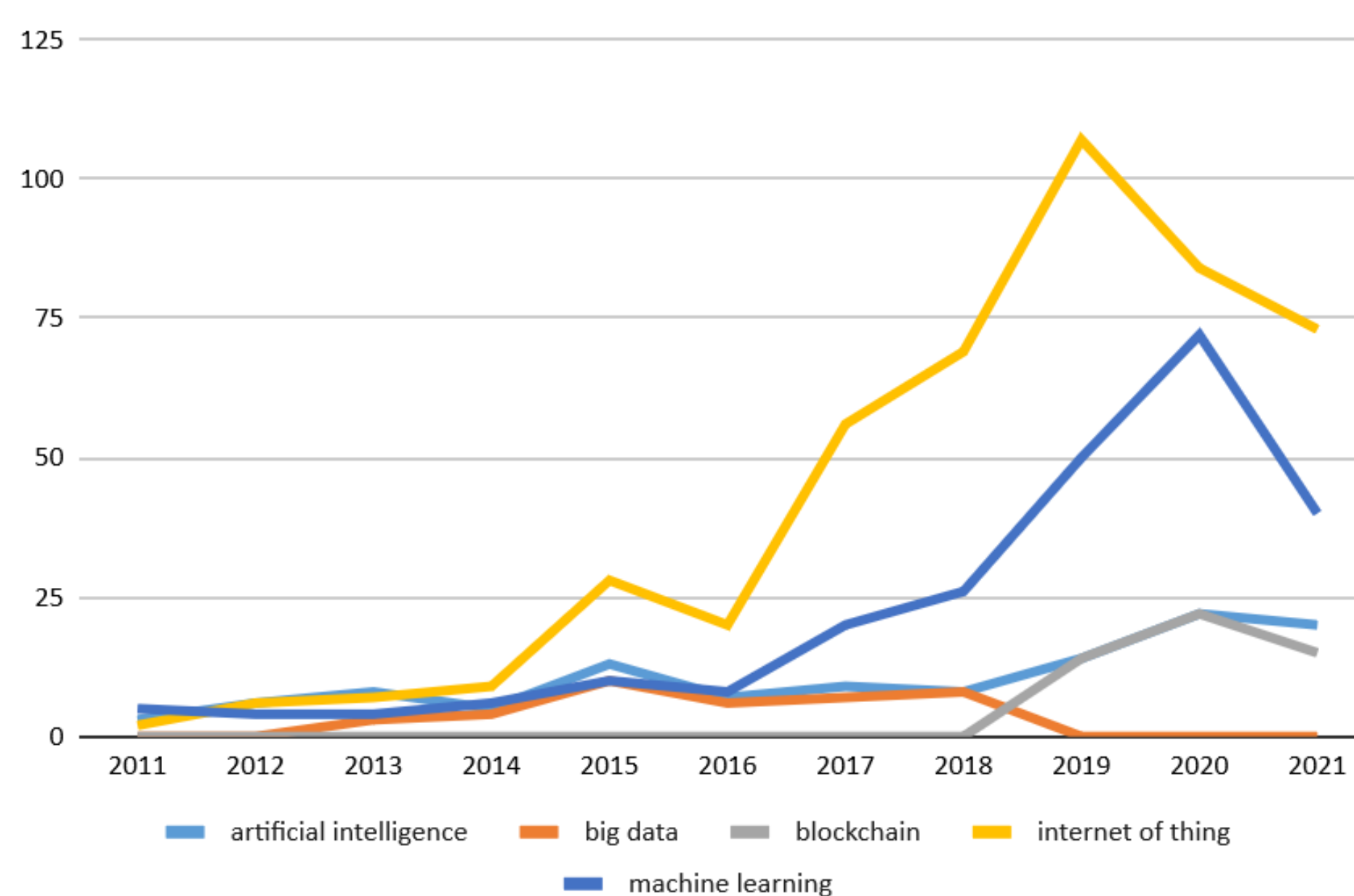


Publication distribution

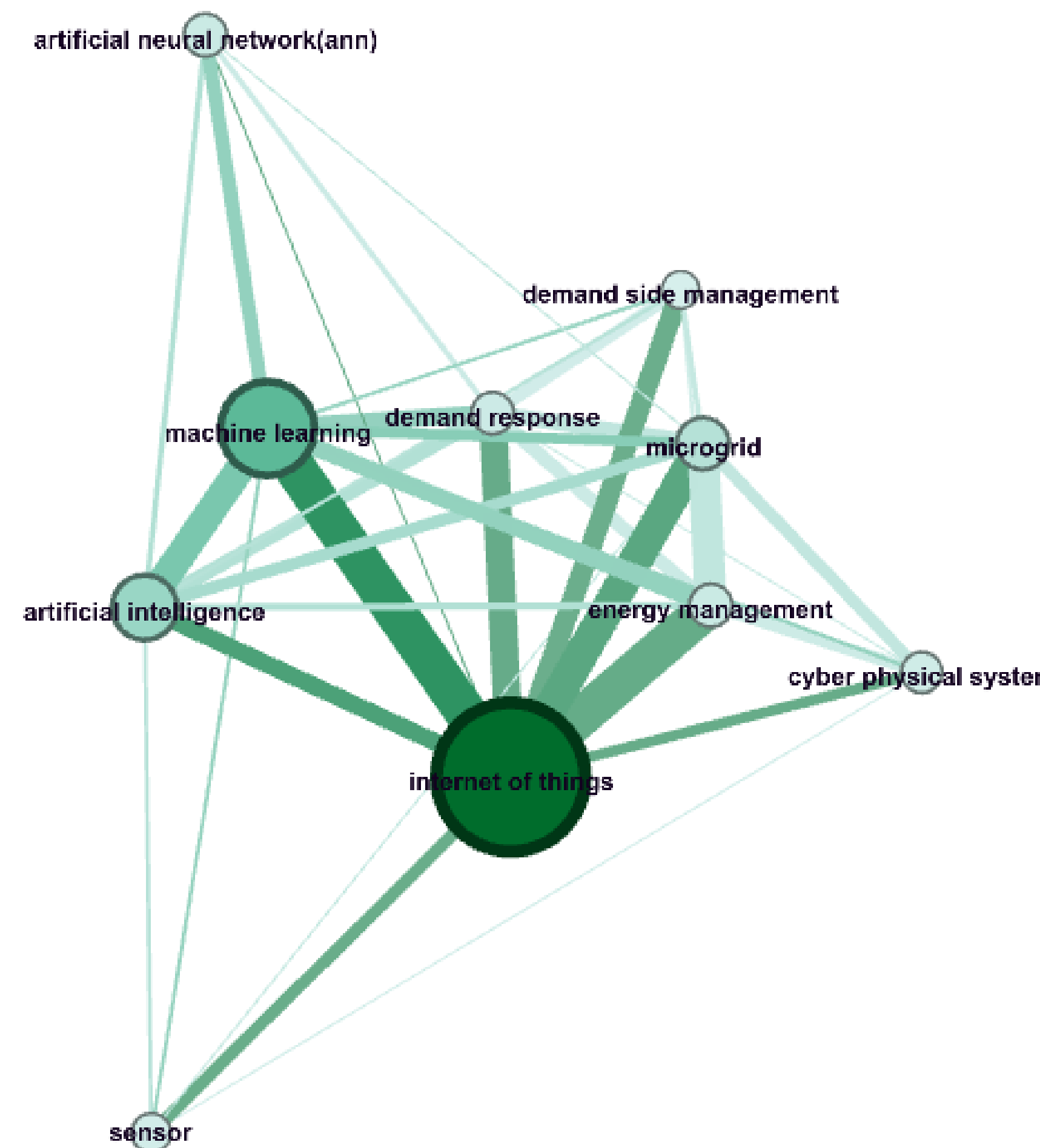


"Industry" term related publications

Results



Keyword evolution analysis



Co-(key)word analysis

Keywords	Year	Strength	Begin	End	2011 - 2021
smart metering	2011	11.07	2011	2015	█
multi agent system	2011	4.48	2011	2017	█
energy saving	2011	3.67	2011	2014	█
data mining	2011	3.41	2011	2016	█
wireless sensor network	2011	3.35	2011	2013	█
home automation	2011	3.74	2012	2016	█
electric vehicle	2011	3.45	2012	2016	█
ant colony optimization	2011	3.32	2012	2016	█
decision support system	2011	2.8	2012	2014	█
cyber physical system	2011	2.36	2012	2013	█
big data	2011	8.65	2014	2018	█
cloud computing	2011	3.26	2015	2016	█
demand side management	2011	2.19	2015	2016	█
energy harvesting	2011	4.78	2017	2021	█
smart home	2011	3.4	2017	2021	█
fog computing	2011	7	2018	2019	█
smart city	2011	5.2	2018	2021	█
energy consumption	2011	5.82	2019	2021	█

Burst analysis

Discussion

- Publications in „Energy management & Digitalization “have an increasing trend. The articles published in 2021 are retrieved in the third quarter of the year, consequently the total number of publications for this year is not complete. Moreover, the COVID-19 Crisis might have impacted '20.
- The majority of studies fall into the Internet of Things, machine learning, artificial intelligence topics.
- Inspecting keyword evolution which represents research theme can be noticed that the most frequent keywords are: energy management, Internet of Thing, machine learning, microgrid, smart grid, smart home, smart metering, artificial intelligence, big data, blockchain, demand response, demand side management, energy efficiency, energy harvesting. Many of these keywords have had burst periods for i.e. smart metering, big data, demand side management, energy harvesting.
- In the burst analysis, can be noticed also other terms with a high value of burst might be considered for further research or investigation.
- To identify keyword research topics, co-(key)word analysis has been implemented. The keywords that mostly occur together are Internet of Thing, machine learning, energy management, artificial intelligence, microgrid, demand response, cyber physical system, demand side management, artificial neural network (ann). They imply the main research areas in the literature for our topic of interest.



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