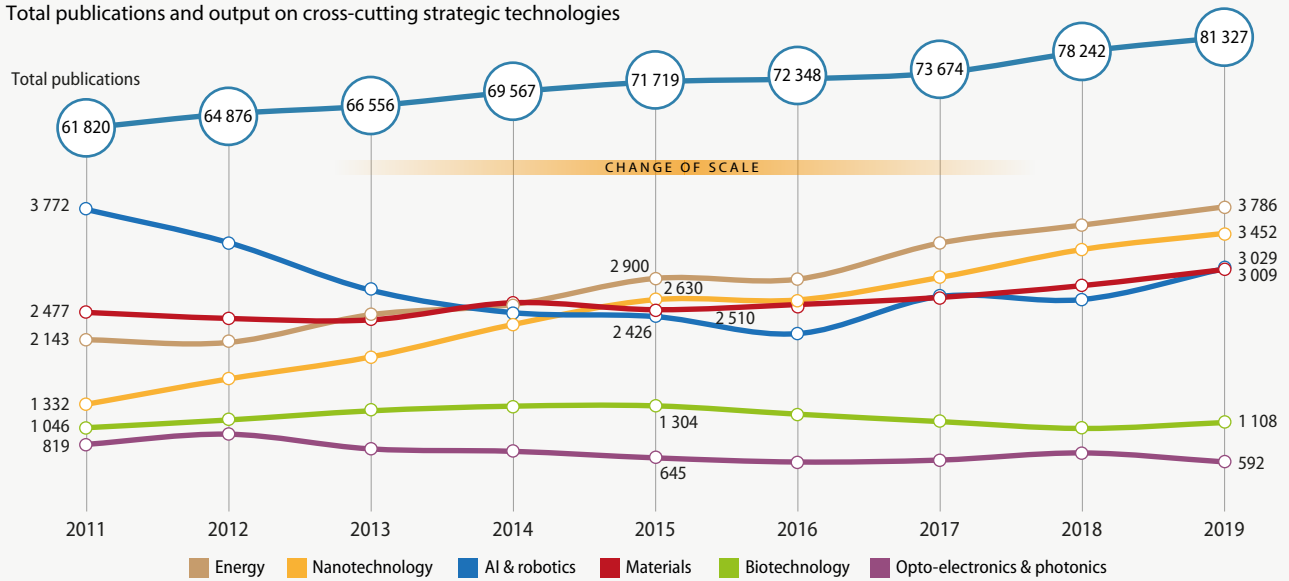




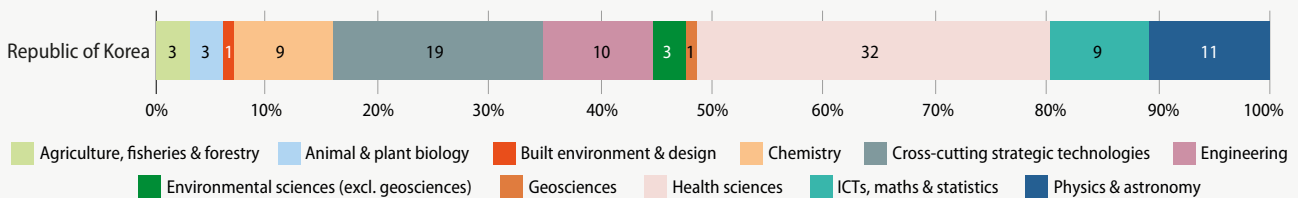
Figure 25.4: Trends in scientific publishing in the Republic of Korea

Volume of scientific publications in the Republic of Korea, 2011–2019

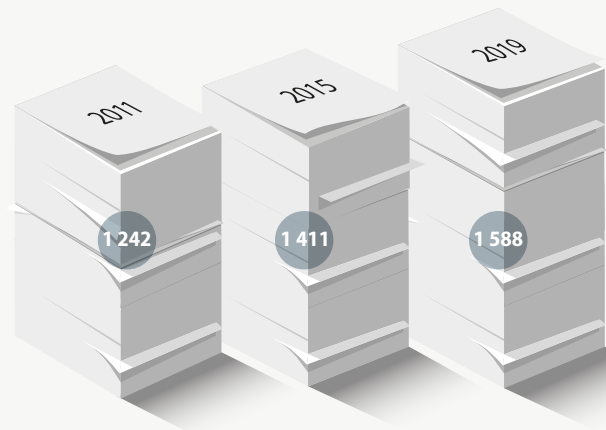
Total publications and output on cross-cutting strategic technologies



Scientific publications in the Republic of Korea by broad field of science, 2017–2019 (%)



Scientific publications per million inhabitants in the Republic of Korea, 2011, 2015 and 2019



0.99

Average of relative citations for Korean publications, 2014–2016; the OECD average is 1.11

28%

Share of Korean publications with foreign co-authors, 2016–2018; the OECD average is 34%

How has output on SDG-related topics evolved since 2012?



Scientists in the Republic of Korea are publishing more on the following topics than would be expected, relative to global averages: photovoltaics (2.5 times), greater battery efficiency (2.3 times), hydrogen energy (1.9 times), sustainable transportation (1.6 times), radioactive waste management and desalination (1.6 times each), regenerative medicine and carbon capture and storage (1.5 times each).

The number of publications on greater battery efficiency has grown by 50%, from 2 866 (2012–2015) to 4 164 (2016–2019). Conversely, output on photovoltaics has dropped from 4 311 (2012–2015) to 3 861 (2016–2019).

This eight-year period also witnessed strong growth in publications on sustainable transportation, from 1 406 (2012–2015) to 2 138 (2016–2019).

The issue of radioactive waste management, meanwhile, was the subject of 315 (2012–2015) and 402 (2016–2019) publications.

Among topics with at least 100 publications over the period under study, the impact on human health of soil, freshwater and air pollution recorded the fastest growth, from 401 (2012–2015) to 812 (2016–2019) publications.

For details, see chapter 2

Republic of Korea's top five partners for scientific co-authorship, 2017–2019 (number of papers)

	1st collaborator	2nd collaborator	3rd collaborator	4th collaborator	5th collaborator
Republic of Korea	USA (28 427)	China (12 467)	Japan (7 559)	India (6 676)	UK (5 605)

Source: Scopus (excluding Arts, Humanities and Social Sciences), data treatment by Science-Metrix