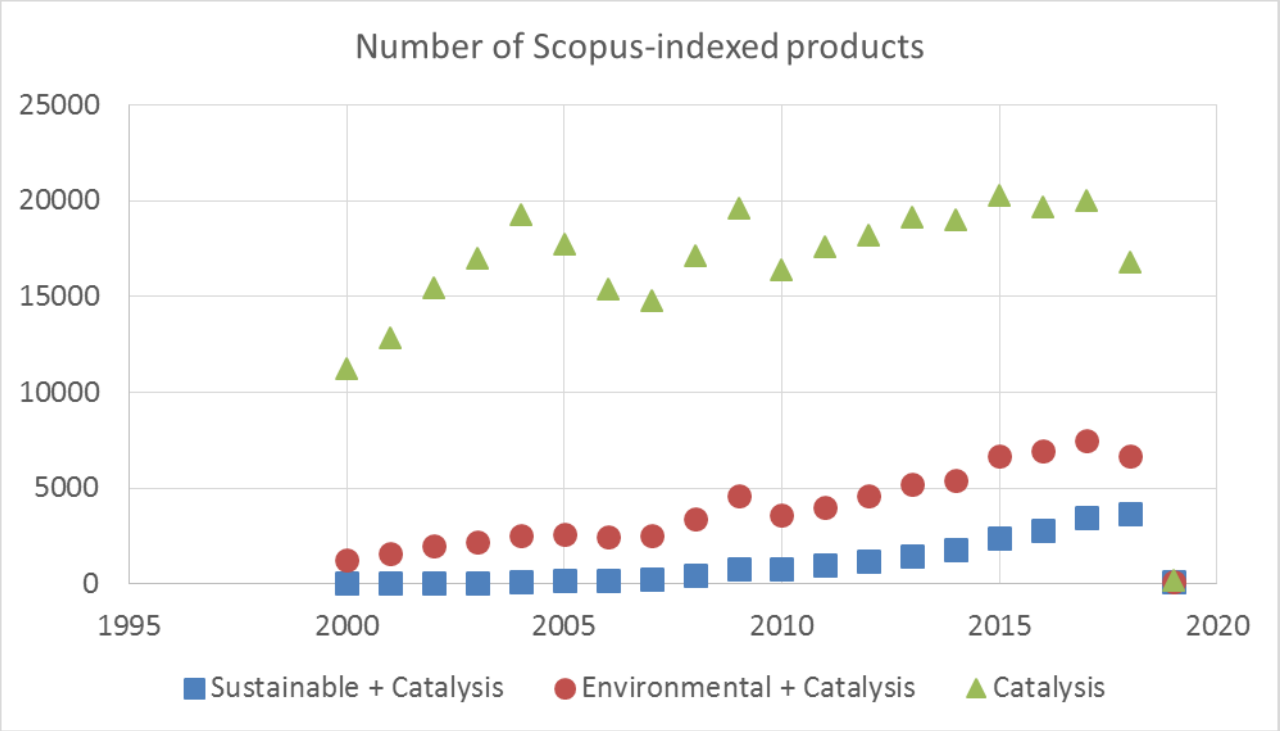
The impact of catalysis in the worldwide research panorama has grown almost continuously in the last two decades reaching ca. 20,000 Scopus indexed products per year. In this frame, the interest on environmental catalysis is steadily growing, constituting ca. one third of these products, while the additional keyword "sustainable" became more and more important in the last decade, passing from 0.2% of occurrence in all "catalysis" products" in year 2000 to 40% in 2019.



This special issue of Topics in Catalysis is based on selected contributions presented during the 13th European Congress on Catalysis, EuropaCat 2017, which was held in Florence, Italy, August 27th-31st, 2017. This conference, organised every two years, represents an excellent platform for researchers from all over the world, both from academia and industry, to share and discuss the latest advances in catalysis. The broad scientific programme included 6 topics: 1) Catalysis to address the evolving energy and chemical scenario; 2) Catalysis for a cleaner and sustainable future, 3) Addressing catalysis complexity; 4) Understanding and design catalyst from molecular to material scale; 5) Expanding catalysis concepts and 6) Industrial Catalysis. This collection refers to Topic 2, only, including environmental catalysis and catalysis for sustainable processes. A subject by far raising the highest number of abstracts: 760 contributions submitted, out of a total of 1815.

This issue groups some examples of application of catalysis to the improvement of the sustainability of chemical processes. Case histories are taken from different fields, such as the utilisation of CO_2 (papers 1 and 2), the valorization of biomass derived compounds, starting from simpler molecules (papers 3-5), to more complex ones (papers 6-9), up to cellulose and lignin (papers 10-11). The role of the catalyst and of its specific functions has been deepened in papers 12-15. Last, but not least, environmental catalysis issues are addressed in papers 16-22, mainly focusing on deNO_x, SCR and dehydrochlorination processes.