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Scientific Landscape of Dental Literature in 2018

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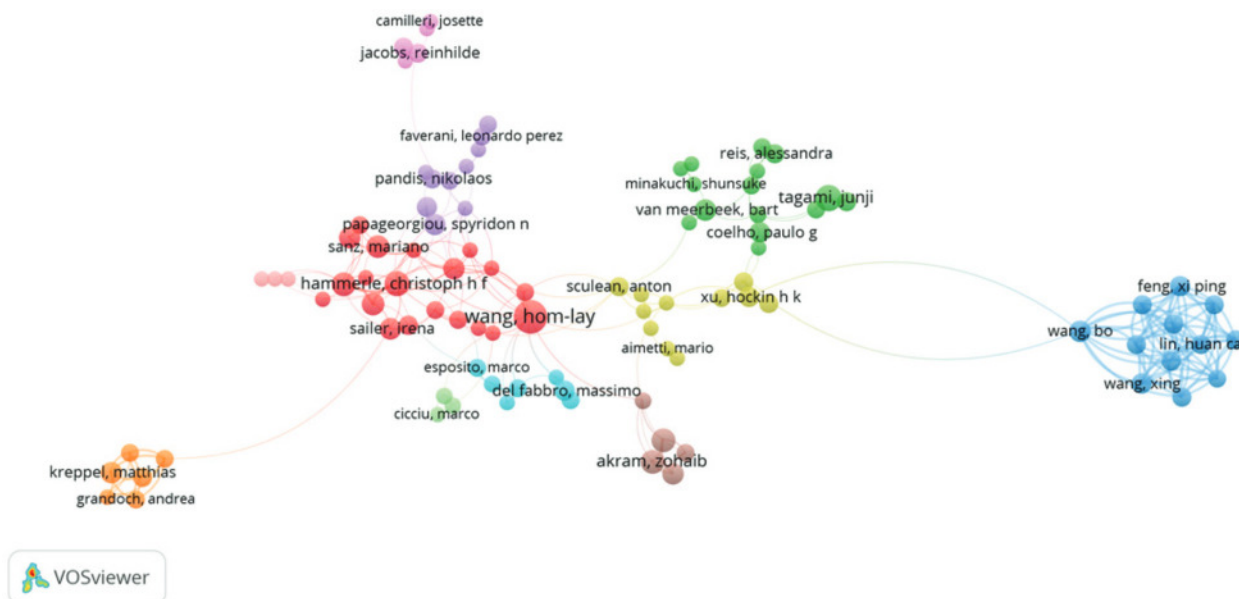


Figure 2: Co-authorship network visualization among 2018 dental articles

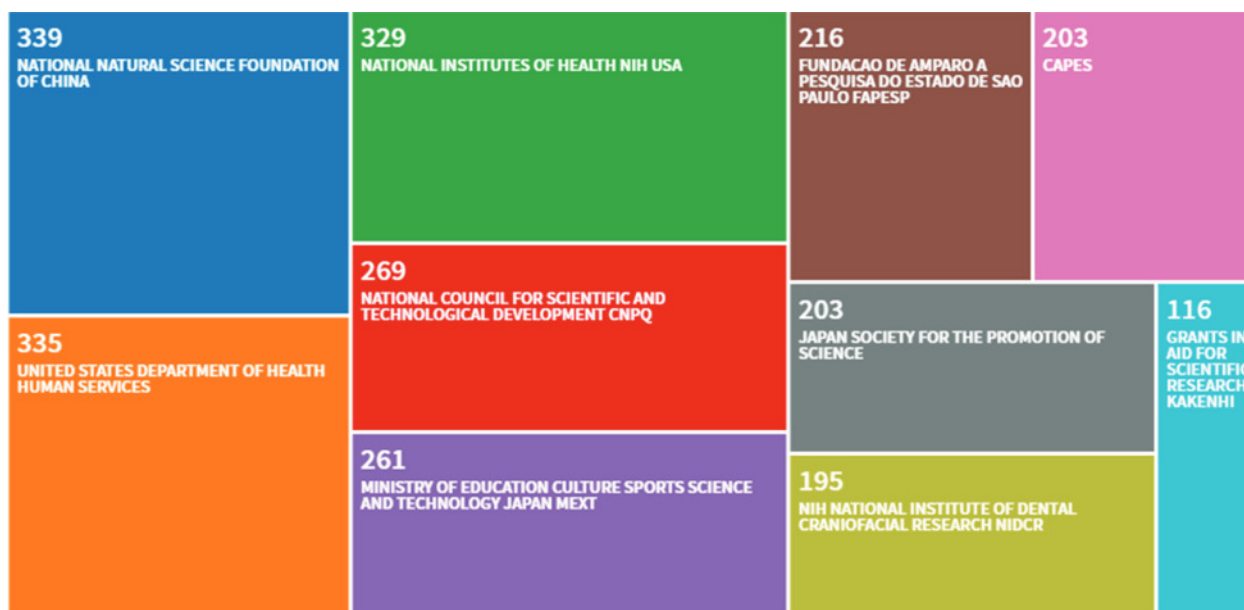


Figure 3: Top ten funding agencies related to 2018 dental articles

open access.^[7] Author keywords co-occurrence network analysis showed that dental implant, periodontitis, dental education, and systematic review were the most popular keywords [Figure 1]. Interestingly, periodontitis was among the hot topics received the most online attention in 2018.^[8]

Co-authorship network analysis showed Romina Brignardello-Petersen (Department of Health Research Methods, Evidence, and Impact, McMaster University) and Hom-Lay Wang (Department of Periodontics and Oral Medicine, University of Michigan) had the most influence on the network considering number of articles [Figure 2]. Web of Science data analysis showed these to be the most

active funding agencies for dental articles published in 2018 [Figure 3]: National Natural Science Foundation of China (339), United States Department of Health and Human Services (335), and National Institutes of Health USA (329).

Systematic review was a popular topic among 2018 dental articles [Figure 2], an important and encouraging finding given the growing emphasis on evidence-based dentistry. Yet, consistent with 2017 results,^[4] ground-breaking issues such as artificial intelligence/machine learning, nano-technology, and genomic medicine were not observed among 2018 hot topics. Instead, 3D printing and micro-CT were cutting-edge technologies seen among hot topics.

Another noteworthy finding is that the National Natural Science Foundation of China funded the greatest number of dental articles in 2018 [Figure 3]. This outcome is not particularly surprising given that China's total spending on research and development rose that year to a robust record \$254 billion. Clearly, support for research efforts remains a high budgetary priority for the Chinese government, resulting in China's continued growth as a scientific power.^[9]

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Conflicts of interest

There are no conflicts of interest.

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