# Editorial: Machinability: a bibliometric analysis

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Machinability refers to "the relative ease with which a given material (or group of materials) can be machined" using appropriate cutting parameters and tooling. Machinability studies involve, among other aspects, tool life, cutting forces, surface integrity (Davim, 2008, 2014, 2015; Sarikaya et al., 2021).

The bibliometric study used the database Scopus/Elsevier to search for the documents. Using the term {machinability}, TITLE-ABS-KEY ({machinability}), 13,216 documents were identified (search carried out on 24th January 2025).

The results obtained in documents can be seen in Table 1, for the first ten positions concerning year, source, author, affiliation, country, document type, scientific area, and funding support. The better results obtained show in function of the number of documents produced: year 2024 (1,077), followed by the years 2023 (944) and 2022 (931); source *International Journal of Advanced Manufacturing Technology* – Springer (604) followed by *Materials Today Proceedings* – Elsevier (343) and *Journal of Materials Processing Technology* – Elsevier (252); Chen, M. – Shanghai Jiao Tong University (97), followed by Gupta, M.K. – Opole University of Technology (75) and Davim, J.P. – University of Aveiro (63); affiliation Ministry of Education of China (278) followed by Shanghai Jiao Tong University (176) and Nanjing University of Aeronautics and Astronautics (160); India (2,641) followed by China (2,509) and USA (1,175); document type article (8,923) followed by conference paper (3,355) and review (424); scientific area engineering (9,790) followed by materials science (6,481) and physics and astronomy (2,495) and funding support National Natural Science Foundation of China (1,055) followed by Ministry of Science and Technology of China (304) and National Key Research and Development Program of China (176).

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**Table 1** Documents (13,216) by Scopus/Elsevier (24th January 2025)

| *Year* | *Source* | *Author* | *Affiliation* |
|---|---|---|---|
| 2024 (1,077) | *Int. J. Adv. Manuf. Tech.* (604) | Chen, M. (97) | Ministry of Education of China (277) |
| 2023 (944) | *Materials Today Proceedings* (343) | Gupta, M.K. (75) | Shanghai Jiao Tong University (176) |
| 2022 (931) | *J. Mater. Process. Technol.* (252) | Davim, J.P. (63) | Nanjing Univ. of Aeronautics and Astronautics (160) |
| 2021 (839) | *Journal of Manufacturing Processes* (212) | Sahoo, A.K. (58) | Harbin Institute of Technology (156) |
| 2019 (731) | *Procedia CIRP* (202) | Kumar, R. (53) | Shandong University (139) |
| 2020 (728) | *Materials and Manufacturing Processes* (195) | Xu, J. (53) | Chinese Academy of Sciences (127) |
| 2018 (623) | *SAE Technical Papers* (187) | Khanna, N. (50) | Vellore Institute of Technology (121) |
| 2017 (488) | *Advanced Materials Research* (2,241) | An, Q. (48) | National Institute of Technology Rourkela (119) |
| 2016 (448) | *Key Engineering Materials* (181) | He, N. (42) | Key Lab. of High Efficiency and Clean Mec. Manuf. (96) |
| 2013 (409) | *Materials Science Forum* (172) | Bruschi, S. (40) | Huazhong Univ. of Science and Technology (91) |
| *Country* | *Type* | *Area* | *Funding support* |
| India (2,641) | Article (8,923) | Engineering (9,790) | National Natural Sci. Found. of China (1,055) |
| China (2,508) | Conference paper (3,355) | Materials sci. (6,481) | Ministry of Science and Technology of China (304) |
| USA (1,175) | Review (424) | Physics and astr. (2,495) | National Key Res. and Dev. Program of China (176) |
| Japan (858) | Book chapter (282) | Computer sci. (1,563) | Fundamental Res. Funds for the Central Univ. (126) |
| Turkey (651) | Conference review (122) | Chemical eng. (674) | European Commission (96) |
| UK (513) | Note (26) | Chemistry (632) | China Postdoctoral Science Foundation (91) |
| Germany (470) | Book (25) | Business manag. (465) | Department of Science and Technology, India (85) |
| Malaysia (299) | Report (18) | Mathematics (456) | Engineering and Physical Sci. Research Council (80) |
| Canada (297) | Short survey (12) | Environmental sci. (449) | D. Forschungsgemeinschaft (78) |
| South Korea (291) | Editorial (6) | Energy (320) | Natural Sci, and Eng. Res. Council of Canada (74) |

## References

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