Editorial

Composite materials: A bibliometric analysis

J. Paulo Davim*

Department of Mechanical Engineering, University of Aveiro, Campus Santiago, 3810-193 Aveiro, Portugal

* **Correspondence:** pdavim@ua.pt; Tel: +351-234-401-566.

Abstract: Composite materials are a vital subject in the field of materials science. Currently, composite materials are used in multiple sectors, including aerospace, automotive, medical, building, defense, furniture, electronics, energy, and sports. The Scopus database was used for bibliometric analysis, based on the term {composite materials}. The following returned the most search results in their respective categories: year, 2019; source, *Journal of Applied Polymer Science*; author, Hamada, H.; affiliation, Ministry of Education of China; country, China; document type, article; scientific area, materials science; and funding support, National Natural Science Foundation of China.

Keywords: composites; composite materials; nanocomposites; biocomposites; wood composites; green composites; hybrid composites; cellulose composites

Composites combine two or more constituent materials with different physical or chemical properties to produce a new material. Composite materials include the following: polymer matrix composites, metal matrix composites, ceramic matrix composites, nanocomposites, biocomposites, wood composites, green composites, hybrid composites, cellulose composites, etc. [1–4].

Bibliometric analysis was used in the Scopus database to search for the documents. Using the term {composite materials}, TITLE-ABS-KEY ({composite materials}), 215682 documents were identified on November 23, 2024. The number of documents returned by category can be seen in Table 1. The table includes the top ten positions for the following categories: year, source, author, affiliation, country, document type, scientific area, and funding support.

Table 1. Documents (215682) by (source Scopus, November 23, 2024).

	Year	Source	Author	Affiliation
1	2019 (10036)	*Journal of Applied Polymer Science* (3747)	Hamada, H. (204)	Ministry of Education of China (4758)
2	2018 (9731)	*Proceedings of SPIE* (3060)	Chamis, C.C. (173)	Chinese Academy of Sciences (3632)
3	2017 (9335)	*Composites Structures* (2590)	Gu, B. (172)	Russian Academy of Sciences (2581)
4	2016 (9320)	*Key Engineering Materials* (2569)	Sapuan, S.M. (166)	CNRS Centre National de la Rech. Scientifique (2063)
5	2020 (9025)	*Journal of Composite Materials* (2319)	Sun, B. (166)	Harbin Institute of Technology (1952)
6	2023 (8653)	*Materials Letters* (2164)	Gillespie, J.W. (160)	National Academy of Sciences of Ukraine (1525)
7	2021 (8418)	*IOP Conference Series Materials Science and Engineering* (2129)	Chou, T.W. (156)	Northwestern Polytechnical University (1381)
8	2022 (8347)	*Advanced Materials Research* (1832)	Friedrich, K. (140)	Tsinghua University (1364)
9	2015 (8110)	*Composite Science and Technology* (1828)	Boccaccini, A.R. (139)	Beihang University (1299)
10	2014 (7971)	*Fuhe Cailiao Xuebao Acta Materiae Comp. Sinica* (1804)	Reifsnider, K.L. (131)	Shanghai Jiao Tong University (1140)
	Country	Type	Area	Funding support
1	China (48519)	Article (146731)	Materials Science (133428)	National Natural Science Foundation of China (16256)
2	USA (37152)	Conference Paper (54142)	Engineering (128315)	Ministry of Education of China (3611)
3	India (13800)	Review (6861)	Physics and Astronomy (55683)	Nacional Science Foundation (2722)
4	Japan (11184)	Book Chapter (4329)	Chemistry (38063)	Fundamental Research Funds for the Central Universities (2273)
5	Russian Fed. (10413)	Conference Review (1559)	Chemical Engineering (22352)	European Commission (1902)
6	UK (9659)	Book (671)	Mathematics (12035)	National Key Research and Dev. Program of China (1866)
7	Germany (8554)	Note (272)	Computer Science (11207)	National Research Foundation of Korea (1485)

	Country	Type	Area	Funding support
8	France (7995)	Short Survey (221)	Energy (8827)	Engineering and Physical Sciences Research Council (1264)
9	South Korea (6737)	Report (211)	Environmental Science (7238)	China Postdoctoral Science Foundation (1142)
10	Italy (5961)	Editorial (200)	Biochemistry, G. and M. Biology (4825)	Japan Science for Promotion of Science (1083)

The following returned the most search results in their respective categories: year, 2019 (10036), followed by 2018 (9731) and 2017 (9335); source, *Journal of Applied Polymer Science* (3747) followed by *Proceedings of SPIE* (3060) and *Composite Structures* (2590); author, Hamada, H. (204), followed by Chamis, C.C. (173) and Gu, B. (172); affiliation, Ministry of Education of China (4758), followed by Chinese Academy of Sciences (3632) and Russia Academy of Sciences (2581); country, China (48519), followed by USA (37152) and India (13800); document type, article (146731), followed by conference paper (54142) and review (6861); scientific area, materials science (133428), followed by engineering (128315) and physics and astronomy (55683); and funding support, National Natural Science Foundation of China (16256), followed by Ministry of Education of China (3611) and Nacional Science Foundation (2722).

Use of AI tools declaration

The author declares that no Artificial Intelligence (AI) tools were used in the creation of this article.

Conflict of interest

J. Paulo Davim is an editorial board member for *AIMS Materials Science* and was not involved in the editorial review or the decision to publish this article. The author declares no conflict of interest.

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