

Special Issue

Carbon Based Films: Characterization, Radiofrequency and Terahertz Applications

Message from the Guest Editor

In the search for novel materials, carbon-based materials (carbon nanotubes, graphene, and biochar) are some of the most sought-after materials due to their interesting electrical, mechanical, and thermal properties. The properties of carbon-based materials and films have been widely analyzed in the terahertz frequency range where plasmonic effects occur.

Recently, the practical utility of carbon-based films in the microwave frequency spectrum has been researched, and potential applications including sensing, shielding and RF and wireless communications are emerging. Further research needs to be done in order to expand the horizon in terms of practical applications and functional device prototypes. This Special Issue focuses on recent advances in the characterization and applications of carbon-based films. Suggested topics for this Special Issue include:

- Characterization and modeling of carbon-based films for microwave applications;
- Passive tunable components based on carbon films;
- Carbon-based films and sensing;
- Innovative shielding films;
- Films for satellite and space applications.

Guest Editor

Prof. Patrizia Savi

Department of Electronics and Telecommunications (DET), Politecnico di Torino, 10129 Turin, Italy

Deadline for manuscript submissions

closed (31 December 2020)



C

an Open Access Journal
by MDPI

Impact Factor 2.9
CiteScore 3.4



mdpi.com/si/37486

C
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
c@mdpi.com

[mdpi.com/journal/
carbon](https://mdpi.com/journal/carbon)





C

an Open Access Journal
by MDPI

Impact Factor 2.9
CiteScore 3.4



[mdpi.com/journal/
carbon](https://mdpi.com/journal/carbon)



About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Prof. Dr. Craig E. Banks
Faculty of Science and Engineering, Manchester Metropolitan
University, Chester Street, Manchester M1 5GD, UK

Author Benefits

High Visibility:

indexed within ESCI (Web of Science), Scopus, CAPlus /
SciFinder, and other databases.

Journal Rank:

CiteScore - Q2 (Environmental Science (miscellaneous))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is
provided to authors approximately 22.5 days after
submission; acceptance to publication is undertaken in 2.8
days (median values for papers published in this journal in
the second half of 2025).