



an Open Access Journal by MDPI

Microwave Plasma Processing of Materials

Guest Editors:

Prof. Dr. Paolo Veronesi

Enzo Ferrari Department of
Engineering, University of
Modena and Reggio Emilia, Via P.
Vivarelli 10, 41125 Modena, Italy

Dr. Marilena Radoiu

Microwave Technologies
Consulting, Lyon, France

Deadline for manuscript
submissions:

closed (1 May 2019)

Message from the Guest Editors

Dear Colleagues,

This Special Issue will gather contributions from the 16th AMPERE conference in Delft (2017), centered on microwave plasmas, involving both the processing of materials and new plasma sources. The advantage of using microwaves for plasma generation lies in the higher degrees of ionization and dissociation that can be obtained, compared to other types of electrical excitation. This can be used proficiently to reduce activation energy and to enhance reaction kinetics. Moreover, compared to conventional thermal plasmas or standard thermal reactions, lower temperatures can be achieved, with important consequences on the energy efficiency and yield of processes, as well as on the microstructure of resulting products. The topic of microwave plasmas is an interdisciplinary one, which includes fields of science, engineering, and technology, with important contributions from chemistry, physics, materials science and microwave technology. The latter becomes more and more relevant when considering the advent of new high-power microwave solid-state generators, implementing new control strategies to further optimize plasma generation, both in continuous or pulsed mode.



mdpi.com/si/11839

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Manoj Gupta

Materials Group, Department of Mechanical Engineering, National University of Singapore, 9 Engineering Drive 1, Singapore 117576, Singapore

Message from the Editor-in-Chief

Technologies, provides a single focus for reporting on developments of all technologies, regardless of their application. It is our intention that *Technologies* becomes the journal of choice for both researchers wanting to publish their work and technologists wishing to exploit the high quality research across a wide range of potential applications. Through its open access policy, its quick publication cycle, *Technologies* will facilitate the rapid uptake and development of the research presented, ultimately providing benefit to the wider society.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within ESCI (Web of Science), Scopus, Inspec, INSPIRE, and other databases.

Journal Rank: CiteScore - Q1 (*Computer Science (miscellaneous)*)

Contact Us

Technologies Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/technologies
technologies@mdpi.com
[@Technologies_OA](https://twitter.com/Technologies_OA)