Special Issue

Trends in Spark Plasma Sintering of Advanced Materials

Message from the Guest Editors

As is well known worldwide, the spark plasma sintering (SPS) technique is one of the most advanced processing routes to obtain dense sintered bodies with improved general properties. SPS is the most cost -effective technique among all sintering routes. It has been used to process all kinds of metals, ceramics, and composite materials, even hard-to-sinter materials, such as strongly covalent ceramics. We are pleased to invite you to contribute to this Special Issue, and we very much appreciate receiving contributions from your group and colleagues who use SPS to process advanced materials. The aim of this Special Issue is to publish original and cutting-edge papers—research articles and reviews—on the trends of use of the SPS technique and its impact on industry and science, focusing on the application of the SPS technique to consolidate advanced materials. We will additionally focus on SPS-processed advanced materials, such as designed metal alloys, coated materials, functional gradient materials (FGMs), and ceramics and composites for several applications. We look forward to receiving your contributions.

Guest Editors

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Deadline for manuscript submissions

closed (10 August 2025)

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Message from the Editorial Board

Now more than ever, research is asked to deliver knowledge and technologies to solve the major challenges faced by our society. The development of new materials and devices for (without the ambition to be exhaustive) energy, health and food technology, together with the need for establishing processes that reduce the impact on critical resources and the environment, is indeed in the spotlight of most contemporary research. Surface science and engineering play a key role in this regard, with an incredible potential in delivering new and deep scientific understanding and technical solutions essential to solve most of the major societal challenges.
Coatings is a well-established, peerreviewed, online journal dedicated to the vibrant field of surface science and engineering. Coatings publishes original research articles that report cutting-edge results and review papers that make the point on the hottest research topics.

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