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Tribological Properties of Spark Plasma Sintered Materials

Guest Editor:

Dr. Takashi Murakami
Tribology Group, Advanced Manufacturing Research Institute (AMRI), National Institute of Advanced Industrial Science and Technology (AIST), AIST Tsukuba East, 1-2-1 Namiki, Tsukuba 305-8564, Ibaraki, Japan

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Message from the Guest Editor

Dear Colleagues,

It has been approximately 60 years since the spark plasma sintering (SPS) process was developed by Inoue et al. and approximately 30 years since its widespread use began. The SPS process allows sintering from around 100 °C to 2000 °C. Moreover, the heating and cooling rates of the SPS process are considerably higher than those of the conventional hot pressing and hot isostatic pressing processes. Therefore, the SPS process can be applied to many types of material, such as ceramics, alloys, intermetallics, resins, and their composite materials, with an extremely short sintering time compared with conventional sintering processes. Therefore, many types of tribomaterial, structural materials and functional materials have been developed using the SPS process. However, the information on the latest SPS-treated tribomaterials and their tribological properties has rarely been summarized and published in Special Issues of journals dealing with tribology. The intention of this Special Issue is to highlight the latest SPS-treated tribomaterials and their tribological properties,