



Particulate Aluminum Matrix Composites: From Fundamentals to Applications

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Message from the Guest Editors

Among composite materials, particulate aluminum matrix composites (PAMC) stand out not only for their high strength-to-low density ratio but also for their versatility and multifunctionality that widened the range of their applications. The possibility of incorporating ceramic particles such as oxides, carbides, or nitrides enhances the various properties of these composites. By the turn of this century, new technologies became more affordable and versatile, allowing aluminum matrix composite parts with micro- to nanosized particles to be fabricated in large volumes for various applications. This Special Issue seeks to collect an assortment of investigations related to the processing of PAMC, the effect of the reinforcement/matrix interfaces on the mechanical properties, and novel applications of these materials. Manuscripts on characterization of these materials are welcome in the Special Issue. Numerical modeling and computational simulation and experimental evaluation of these materials are also welcomed in submitted manuscripts. Researchers working on novel approaches that stimulate groundbreaking applications of these versatile materials are particularly encouraged to submit.

