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Grain Size Control in the Processing of Poly-Crystalline Materials

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Message from the Guest Editors

poly-crystalline materials, grain size, grain size distribution and grain boundaries are critical to materials' physical and chemical properties. Tremendous progress has been made to control the microstructure evolution. when processing bulk poly-crystalline materials, including many novel processing techniques. The microstructural features of the processed materials are correlated with the properties of the final products. Advances to retrieve the desired grain size distribution for specific applications depend on the comprehensive understanding of the mechanisms and kinetics of recrystallization and grain growth, as well as grain refinement techniques. There have also been considerable research efforts dedicated to developing both analytical and numerical grain growth/microstructure evolution models as an essential step toward strengthening the theoretical aspects of grain growth.

This Special Issue is particularly concerned with, but not limited to, the topics outlined in the keywords. We sincerely invite researchers in the field of material processing to contribute to this Special Issue and to make advances to this important aspect in poly-crystalline materials.











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Message from the Editor-in-Chief

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