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Formation of Nb₃Sn after Different Mechanical Alloying Methods

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The Nb₃Sn was prepared successfully by two methods of mechanical alloying followed by their respective heat treatment process. The microscope morphology, crystal structure, and superconducting properties were investigated. From the results, mechanical alloying was an effective method to produce the precursor, which changed the reaction formation energy of Nb₃Sn and can produce Nb₃Sn more easily and quickly. The phase transition processes were measured by XRD in different temperatures.

Keywords Nb₃Sn·Mechanically Alloying·Heat Treatment

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