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Composition, Microstructure, Phase Constitution and Fundamental Physicochemical Properties of Low-Melting-Point Multi-Component Eutectic Alloys

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Low-melting-point alloys have an extensive applications in the fields of materials processing, phase change energy storage, electronic and electrical automatic control, continuous casting simulation, welding, etc. Specifically, the eutectic compositions make up a large number of low-melting-point alloys that are exploited because of their desirable features like single melting peaks, excellent operational reliability, and casting fluidity. However, the fundamental physicochemical properties from the current