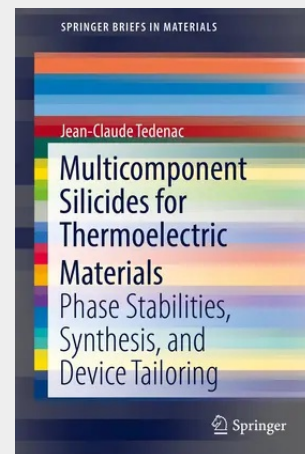


Multicomponent Silicides for Thermoelectric Materials

Phase Stabilities, Synthesis, and Device Tailoring

This book provides a comprehensive review of the current state of the art in silicon compounds for thermoelectric applications. Silicides are materials with good initial thermoelectric properties, which can be enhanced through tuning of their micro- and macrostructure. These compounds present various conduction mechanisms and complex band structures. Moreover, some are isotropic, and others anisotropic, which is highly beneficial for device tailoring. Silicides are a particularly attractive material for sensors, thermoelectric generators, and other applications because they are environmentally friendly, abundant, and low cost. This concise volume covers fundamentals and applications for an audience of materials scientists, chemists, solid-state physicists, and engineers.

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