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(54) **MULTI-LAYER SEMICONDUCTOR
MATERIAL STRUCTURE AND
PREPARATION METHOD THEREOF**

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The present disclosure relates to the technical field of semi-conductors. Disclosed is a multi-layer semiconductor material structure and a preparation method thereof, solving the problems of the existing semiconductor materials that have poor heat dissipation, high cost, and cannot be mass-produced. The multi-layer semiconductor material structure includes a highly thermally conductive support substrate and a crystallized device function layer, where the device function layer is provided on the highly thermally conductive support substrate, and has a single-crystal surface layer.

