

ABSTRACT

HIGH-STRENGTH GRAPHENE HEAT-CONDUCTING PAD AND PREPARATION METHOD THEREFOR

The present application relates to the field of thermal interface materials. Disclosed are a high-strength graphene heat-conducting pad and a preparation method therefor. The high-strength graphene heat-conducting pad comprises at least two graphene heat-conducting layers stacked in sequence, wherein adjacent graphene heat-conducting layers are fixedly adhered by means of an adhesive; the graphene heat-conducting layers comprise a plurality of layers of graphene films stacked in sequence; adjacent graphene films are adhered by means of an adhesive; and the stacking directions of the graphene films of two adjacent graphene heat-conducting layers are perpendicular to each other and parallel to the same plane, and the stacking directions of the graphene heat-conducting layers are perpendicular to the stacking directions of the graphene films in any graphene heat-conducting layer. In the present application, the graphene heat-conducting layers prepared by stacking the plurality of layers of graphene films are stacked, such that the stacking directions of the graphene films of adjacent layers are perpendicular to each other, thereby providing good mechanical strength in two directions in the graphene heat-conducting pad, namely, a graphene-film stacking direction and a direction perpendicular to the graphene-film stacking direction.

FIG. 1