# Basal Fibers in Geopolymer Composites: Advanced Thermal, Mechanical and Flexural Review

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## ABSTRACT

In the recent few years, Basalt fibers and bars were of a great interest to the researchers as it is considered an inorganic, environmentally-friendly and cost-effective strengthening material especially in the case of geopolymer concrete. The thermal, mechanical and flexural properties of geopolymer composites with basalt fibers and bars have been discussed in terms of the most recent studies that have been done. The thermal properties of basalt fibers have been proved to be a major advantage. The mechanical and flexural properties have shown contradictive results, which requires further and more advanced research to be conducted in order to examine its mechanical and flexural performance.

***Keywords:*** *Basalt Fibers, Geopolymer Composites, Basalt bars, Mechanical Properties, BFRP*