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Mechanical properties of hybrid composites reinforced by carbon and basalt fibers

Guangyong Sun , Shaowei Tong , Dongdong Chen , Zhihui Gong ,
Qing Li

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Highlights:

- Hybrid effect was investigated through experimental, analytical and numerical methods.
- Effect of hybrid ratios and stacking sequences were investigated.
- A modified analytical model was applied to predict the flexural strength.
- SEM and digital photography technology was employed to apprehend the fracture mechanism.
- The distribution of bending stress across the thickness shows stronger correlation with stacking configurations.

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