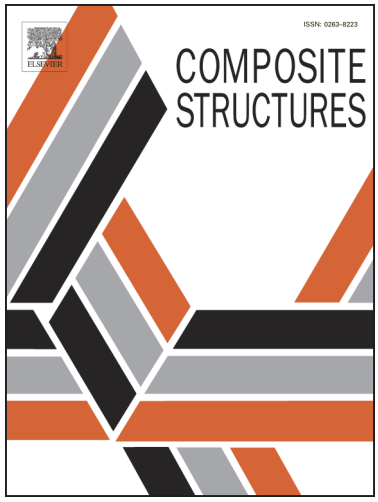

GF/epoxy laminates embedded with wire nets: A way to improve the low-velocity impact resistance and energy absorption ability

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GF/epoxy laminates embedded with wire nets: A way to improve the low-velocity impact resistance and energy absorption ability

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Abstracts:

The present paper aims to provide further understanding of the low-velocity impact behaviour of glass fabric cloth reinforced epoxy composite panels embedded with wire nets (WN-GF/epoxy). WN-GF/epoxy hybrid panels with six layer modes were manufactured by vacuum-assisted injection process. Low-velocity impact tests with various incident velocities were performed, and the perforation thresholds of the designed specimens were found out. Scanning electron microscope was carried out to study the microstructure of the composites after impact. Experimental results show that perforation threshold velocity of the specimens appears a bi-linear increasing