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Micromechanics-based characterization of mechanical properties of fuzzy fiber-reinforced composites containing carbon nanotubes

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Highlights

- The SUC micromechanical model is employed to obtain the off-axis mechanical properties of the FFRCs.
- Elastic modulus and Poisson's ratio of the FFRC are remarkably dependent on the off-axis angle.
- Adding the CNTs significantly affects the transverse mechanical properties of the FFRC.
- A good agreement is observed between the predictions and experimental data.

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