

Effects of SiO₂ filler in the shell and wood fiber in the core on the thermal expansion of core-shell wood/polyethylene composites

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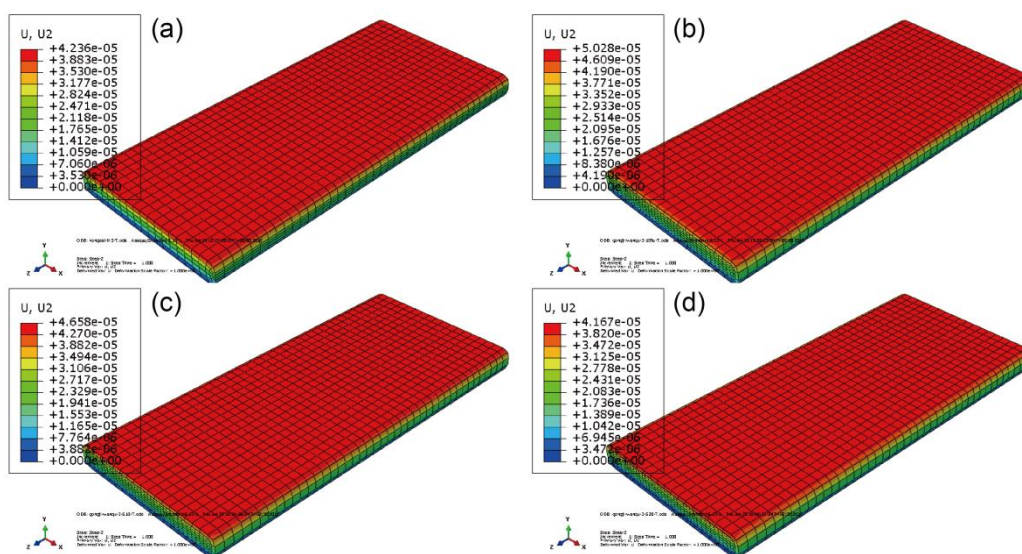
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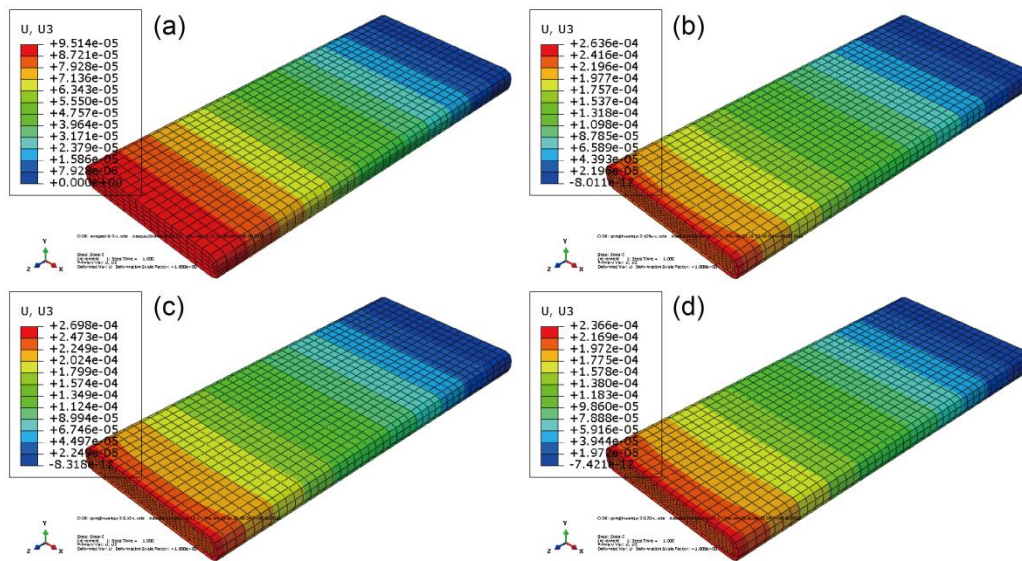
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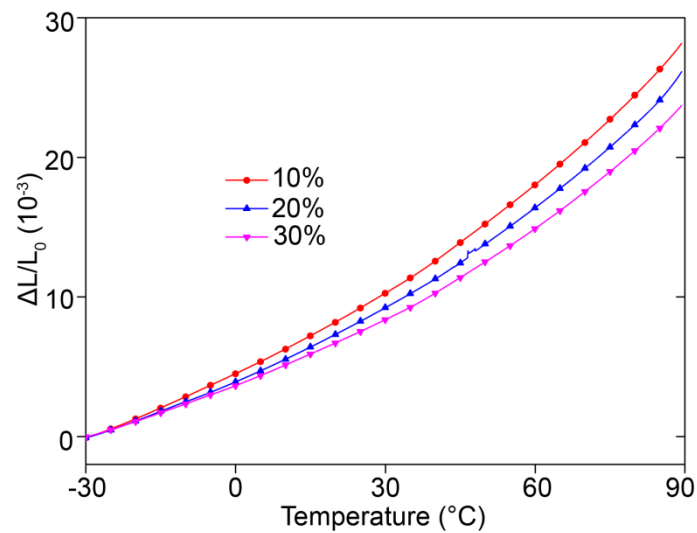
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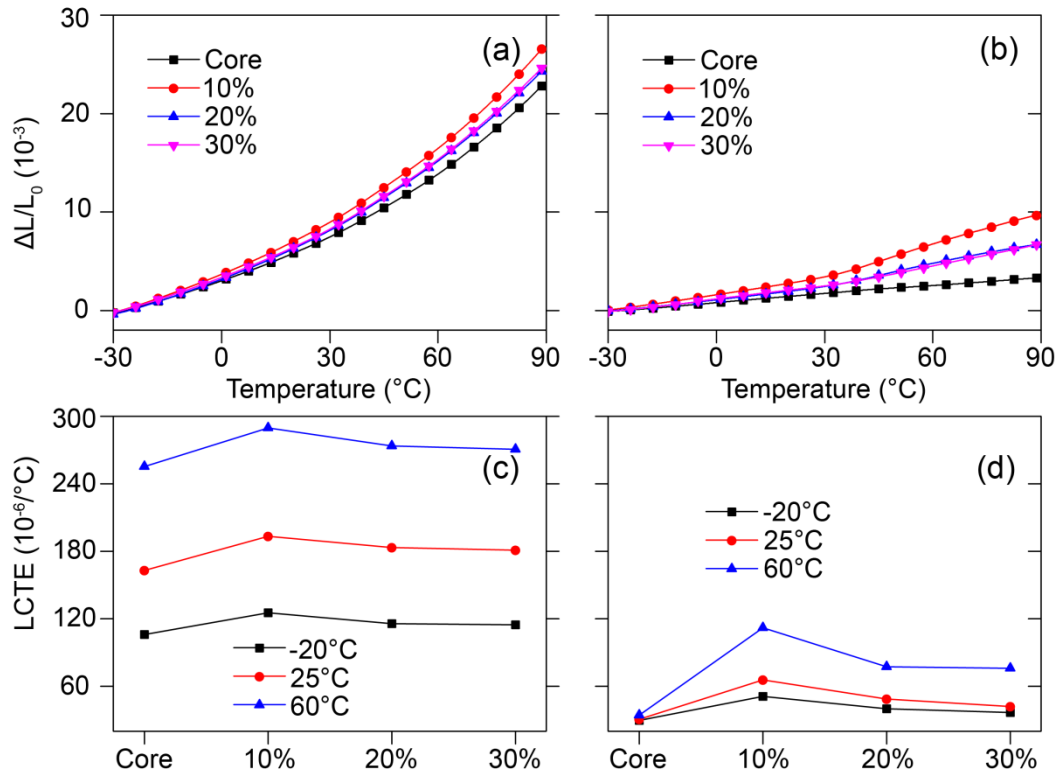
FS. 1 Simulated thermal expansion strain values the entire Co-WPCs in the thickness direction: (a) single core layer (W50), (b) S0, (c) S10 and (d) S20.



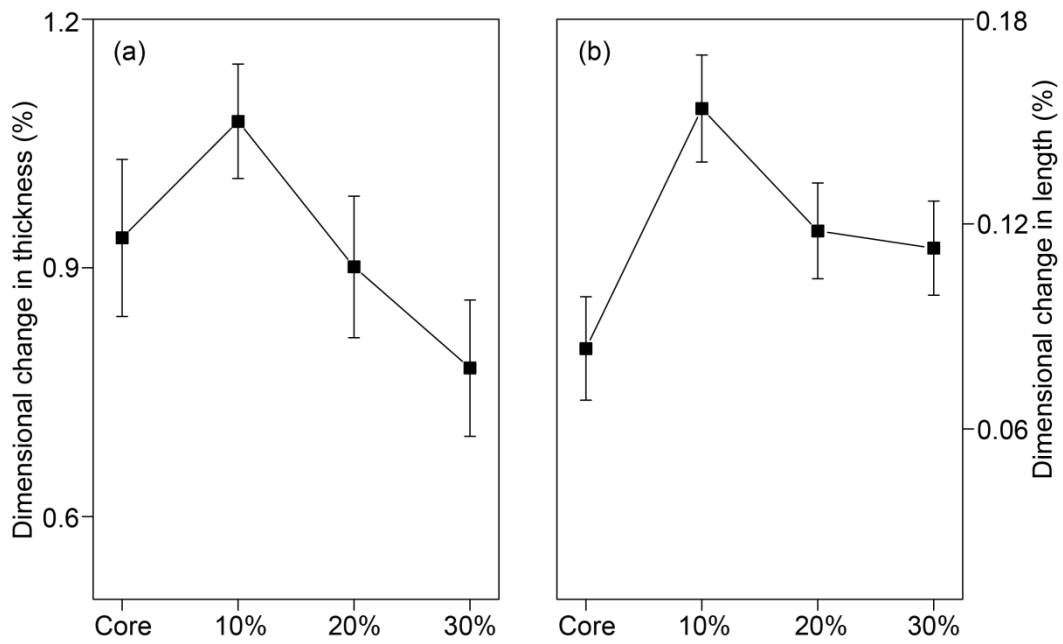
FS. 2 Simulated thermal expansion strain values of the entire Co-WPCs in the extrusion direction: (a) single core layer (W50), (b) S0, (c) S10 and (d) S20.



FS. 3 Thermal expansion strain of the shell filling with different wood fiber contents.



FS. 4 Thermal expansion strain of the cut Co-WPCs (W50) filling with different wood fiber in shell layer in the thickness (a) and extrusion directions (b); and LCTE in thickness direction (c) and extrusion directions (d).



FS. 5 Thermal expansion strain of the entire Co-WPCs (W50) filling with different wood fiber in shell layer in the thickness (a) and extrusion directions (b).