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## Thermally-triggered free-standing shape-memory actuators

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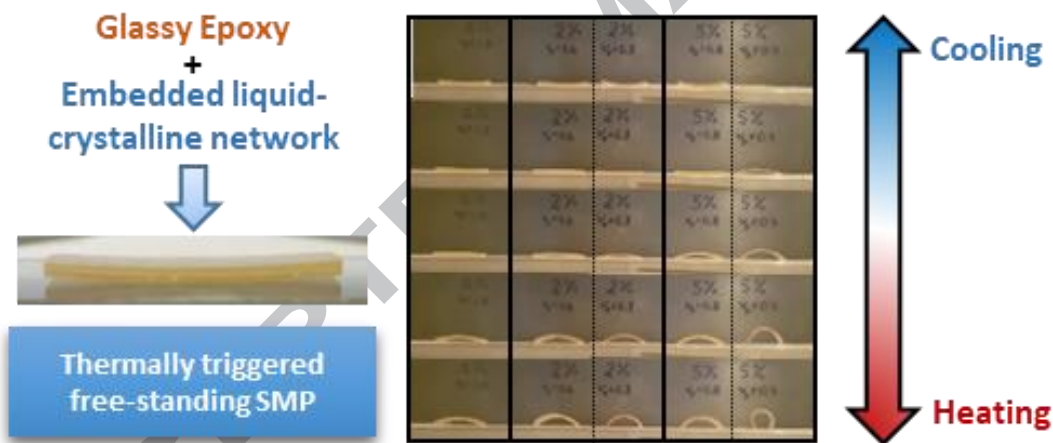
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### Highlights

1. Free-standing stimuli-triggered two-way shape memory polymer is designed by joining together a programmed liquid-crystalline network film and a glassy thermoset.
2. Reversible bending actuation motion is achieved by assembling beam-like multilayered devices using layers of both materials with the same surface.
3. Modulating the actuation level is possible by adjusting the thickness of the different layers and the stretching level of the liquid-crystalline network (device configuration).
4. An analytical model based on multilayered devices makes possible to predict the actuation level depending on the materials properties and configuration.

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