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Supporting Information

Broadening the absorption bandwidth by novel series-parallel cross convex-concave structures

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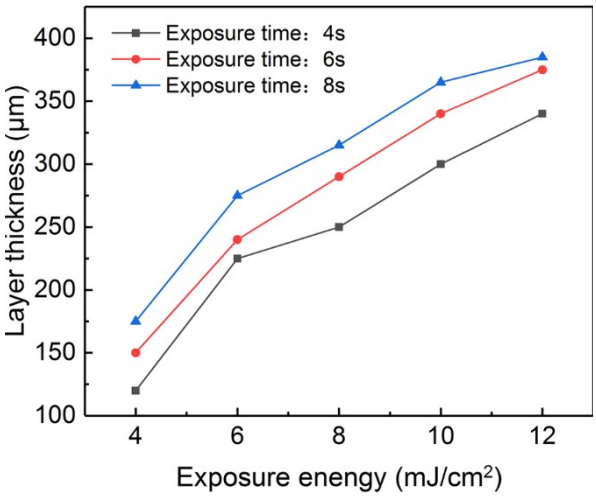

Fig. S1. The relationship between exposure energy, exposure time and thickness of a monolayer of UV-cured film.

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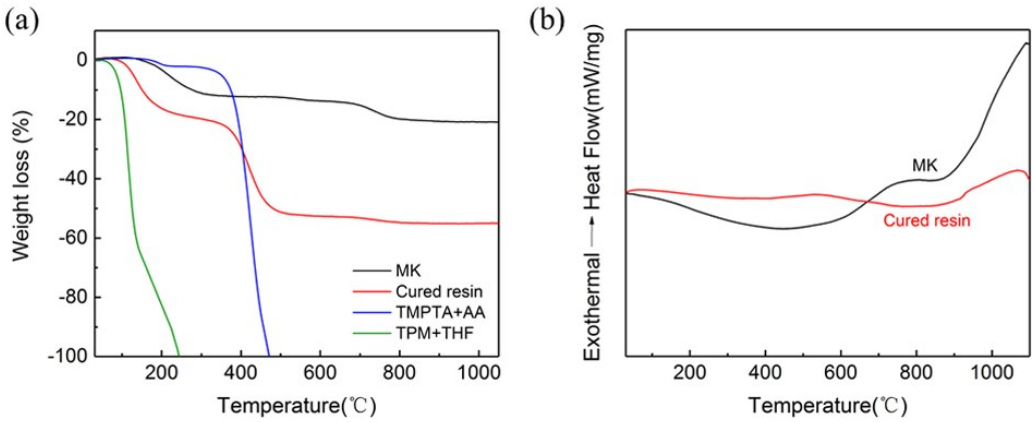

Fig. S2. TG and DTA analysis of precursors resin: (a) TGA curves for the silicone resin (MK), UV-cured resin, TMPTA+AA and TPM+THF solvent mixture. (b) DTA curves for the silicone resin (MK), UV-cured resin.

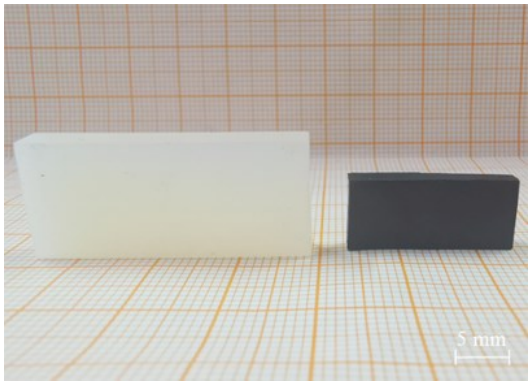

Fig. S3. Picture of 3D-printed flat structural SiOC precursors resin and SiOC ceramic after pyrolysis.

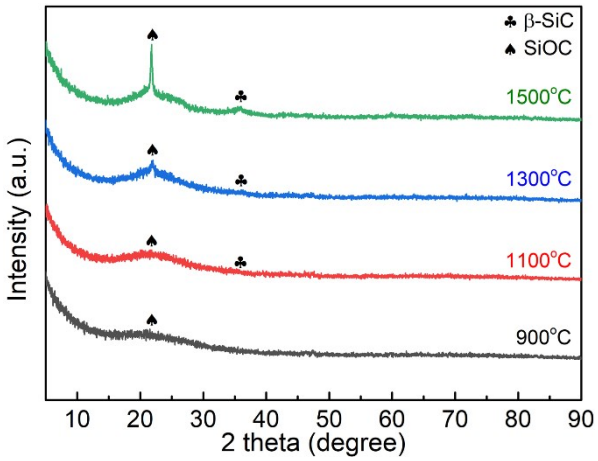

Fig. S4. XRD patterns of SiOC derived from thermal treatment of the precursor at 900 °C, 1100°C, 1300°C and 1500°C.

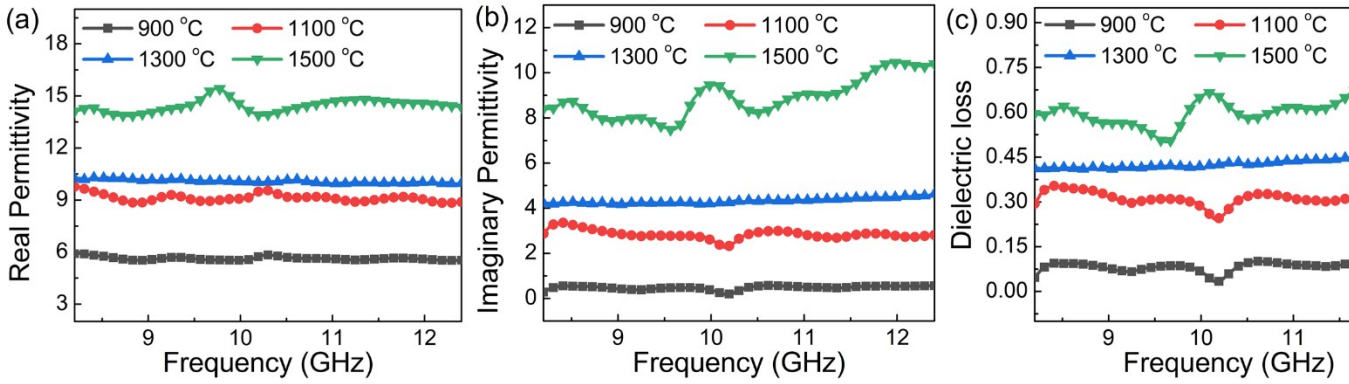

Fig. S5. Dielectric properties of flat structures of SiOC ceramics annealed at different temperature: the frequency dependence of the (a) real and (b) imaginary permittivity. (c) dielectric loss.

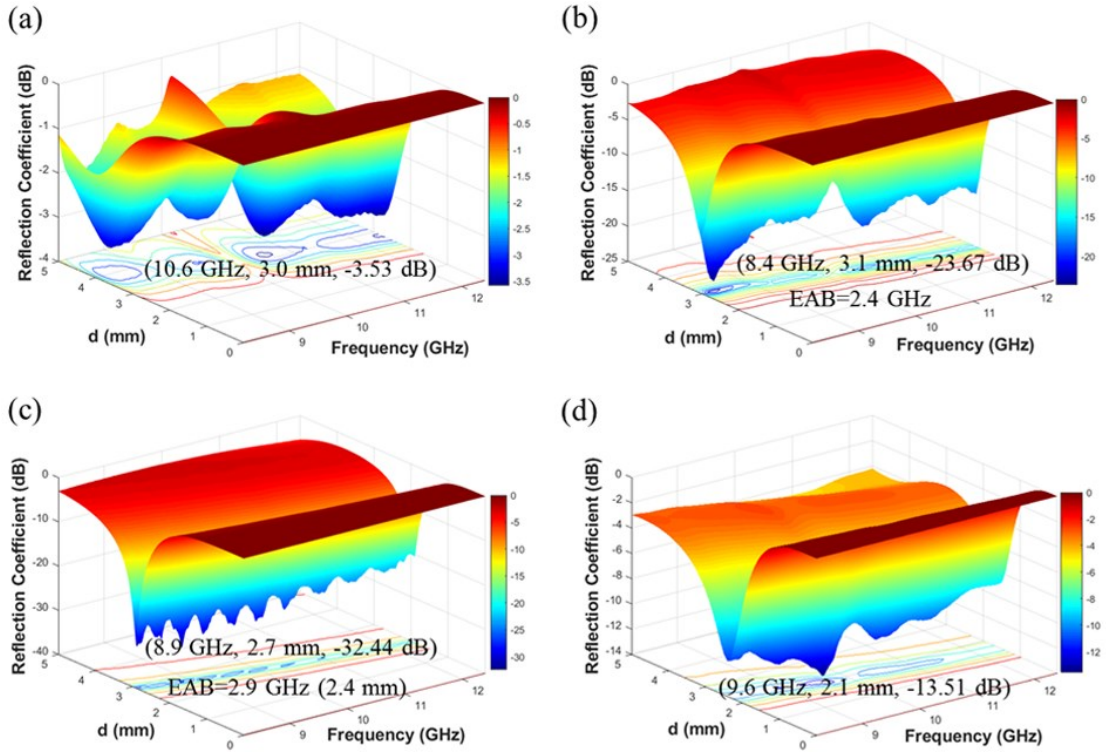

Fig. S6. The reflection coefficient of flat structural SiOC ceramics annealed at different temperatures: (a) 900 °C. (b) 1100 °C. (c) 1300 °C. (d) 1500 °C.