

Supplementary Information

3D/4D additive–subtractive manufacturing of heterogeneous ceramics

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This Supplementary Information contains the captions of Videos S1 to S7.

Supplementary Video S1. Shape and material transformations of 3D printed heterogeneous precursor structure into heterogeneous ceramic bending configuration in induction heating furnace (played at 40× speed).

Supplementary Video S2. FEA simulations showing thermal-shrinkage-dominated shape transformation of heterogeneous precursor structure into heterogeneous ceramic bending configuration.

Supplementary Video S3. Shape and material transformations of 3D printed heterogeneous precursor structure into heterogeneous ceramic saddle surface in resistance heating furnace (played at 400× speed).

Supplementary Video S4. FEA simulations showing thermal-shrinkage-dominated shape transformation of heterogeneous precursor structure into heterogeneous ceramic saddle surface.

Supplementary Video S5. Material transformation of 3D printed homogeneous ceramic lattice structure into heterogeneous ceramic cross patterns under local heating in air (real-time).

Supplementary Video S6. Material transformation of 3D printed homogeneous ceramic lattice structure into heterogeneous black-white ceramic Tai Chi patterns under local heating in air (real-time).

Supplementary Video S7. Material transformation of 3D printed homogeneous ceramic lattice structure into heterogeneous black-white ceramic panda patterns under local heating in air (real-time).