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Figure S1. The animal operation procedure. (A) The prepared femur defect ($\emptyset 6 \times 6$ mm). (B) The ceramic scaffold was prepared for implantation. (C) The ceramic scaffold after implanted in the femur of rabbits. (D) The implanted ceramic scaffold by micro-CT reconstruction.



Figure S2. The representative stress-strain curves of the compression test compared ceramic for TCP (A), CSi (B), and CSi-Mg10 (C) during immersion in SBF in vitro (solid line) and implantation in femoral bone defect in vivo (dot line). w: week(s); h: histological.