

Supplementary material

Magnetically actuated microscaffold with controllable magnetization and morphology for regeneration of osteochondral tissue

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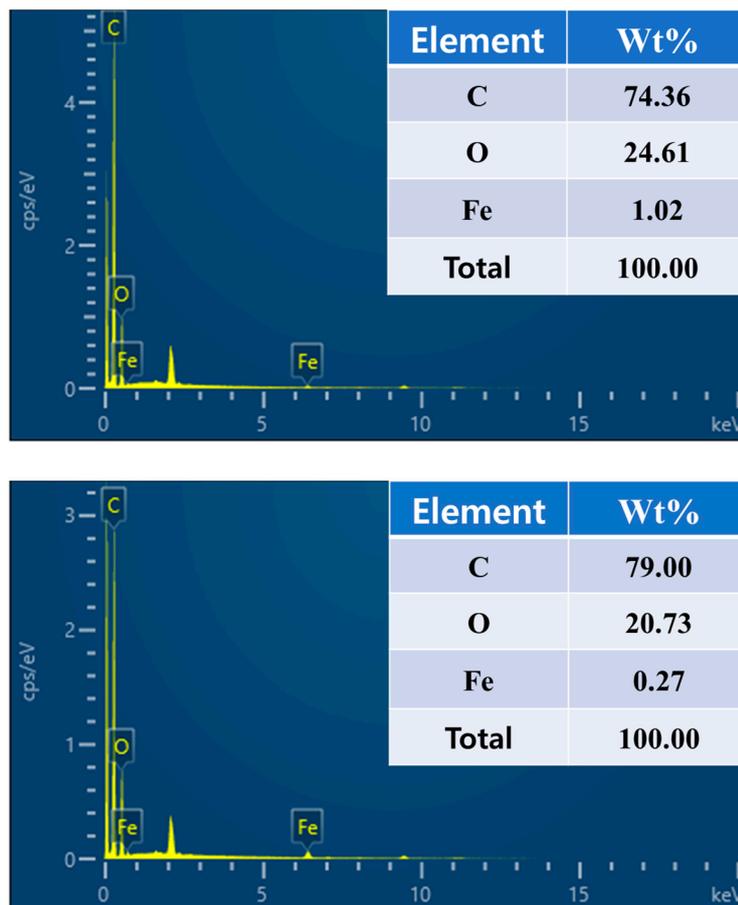


Figure S1. Graphs and table of element signals for MAM-CR (top) and MAM-SBR (bottom)

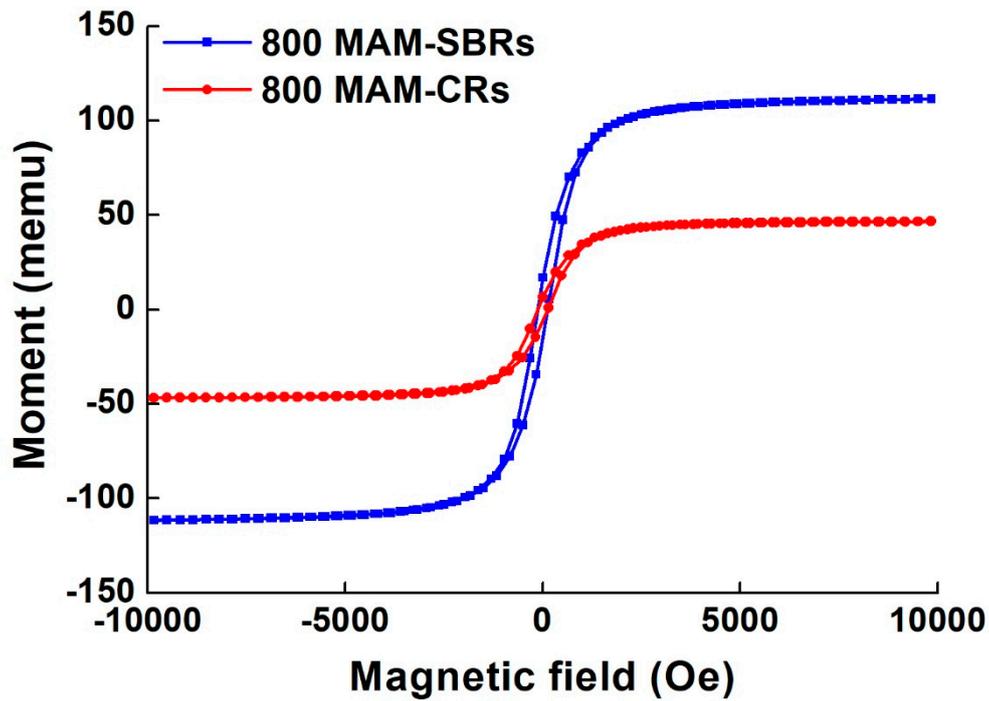


Figure S2. Magnetization curves of 800 MAM-CRs and 800 MAM-SBRs

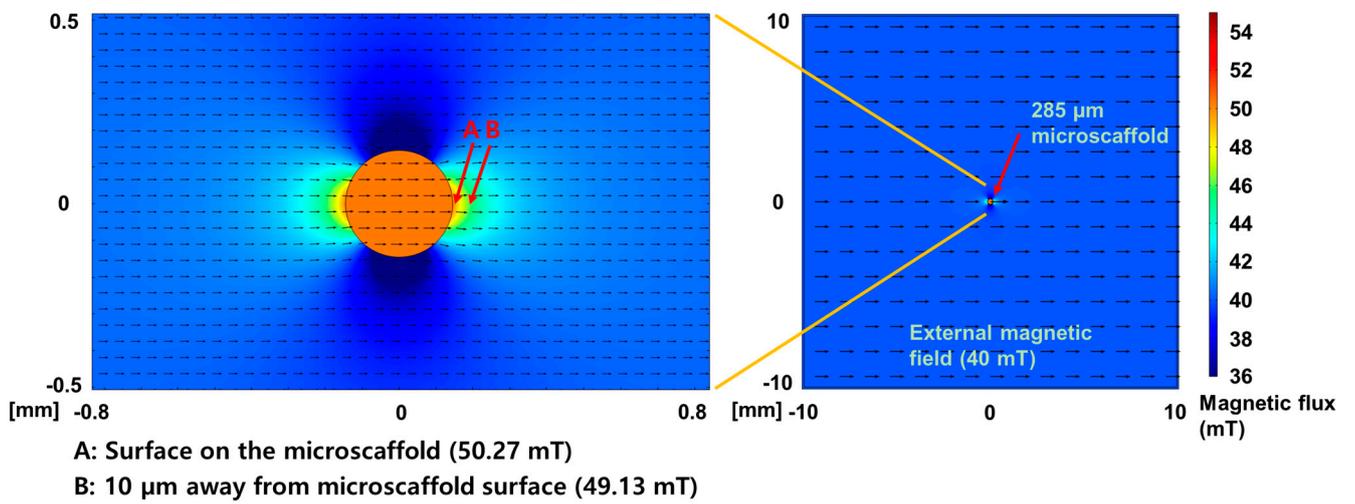


Figure S3. Numerical simulation showing magnetic fields map of the magnetized microcylinder under external magnetic fields. Black arrows indicate direction of magnetic fields

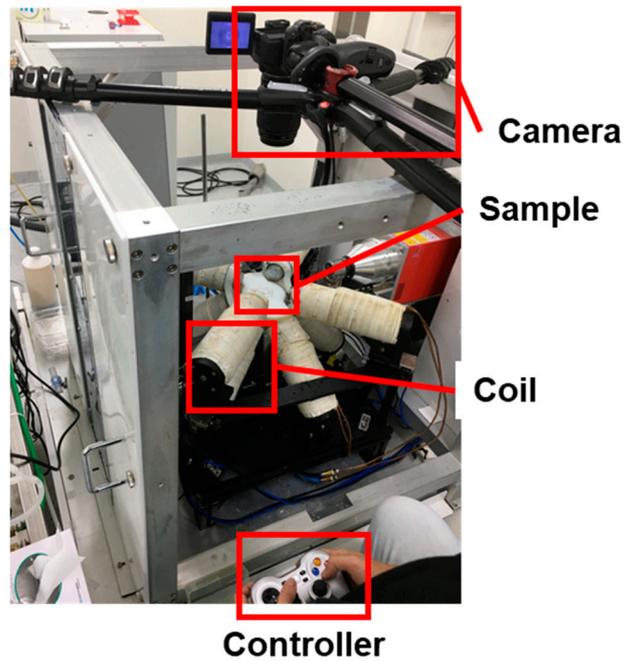


Figure S4. Experimental setup for magnetic actuation of the microscaffolds

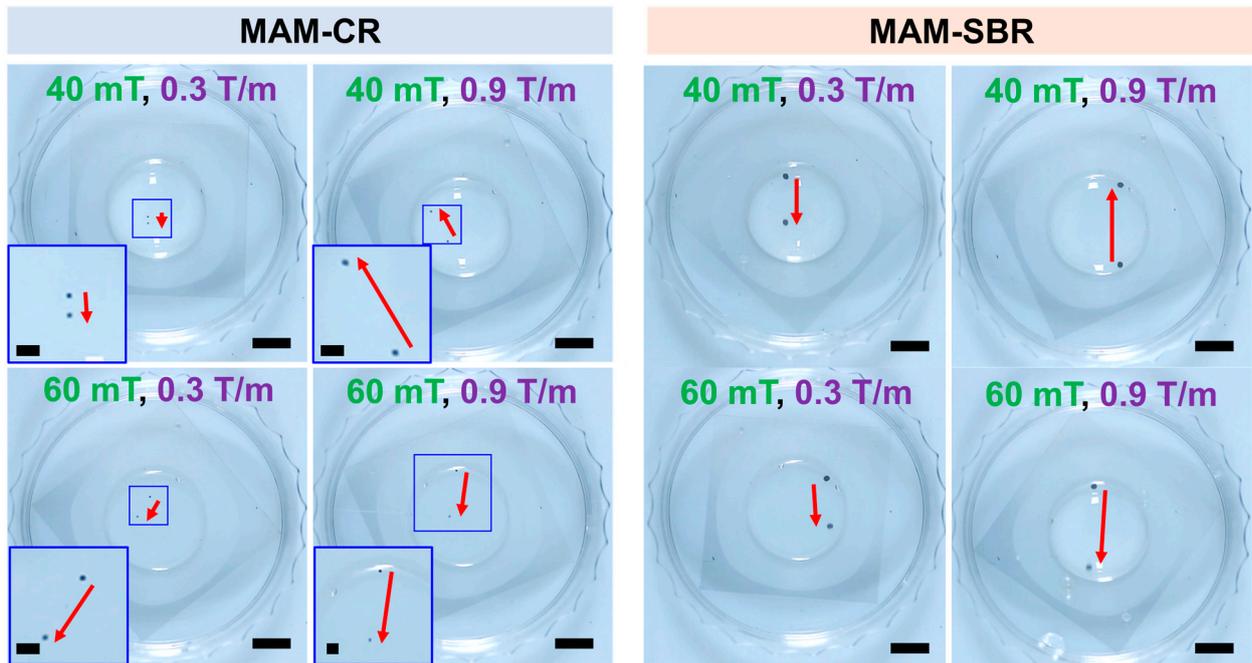


Figure S5. Timelapse images for mobility of MAM-CR and MAM-SBR at different magnetic fields (40 and 60 mT) and gradients (0.3 and 0.9 T/m). Red arrows indicate moving distances of the microscaffolds for one second. Scale bars are 5 mm. The blue boxes in MAM-CR are shown as insets. Scale bar of the inset images is 1 mm.