polymers

MDPI

Research Article

Magnesium Hydroxide as a Versatile Nanofiller for 3D Printed PLA Bone Scaffolds

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Supplementary Materials

Table S1. FDM 3D printing parameters.

Initial Layer Height	0.2mm
Wall Thickness	0.8 mm
Wall line count	2
Top/Bottom Thickness	0.0 mm
Top/Bottom Pattern	Lines
Top/Bottom Directions	[90°, 180°]
Infill Line Distance	0.8 mm
Infill Pattern	Grid
Build Plate Adhesion Type	Skirt
Skirt Line Count	1
Enable Retraction	√
Retraction Distance	6.5 mm
Retraction Speed	25.0 mm/s
Filling Density	100%

Table S2. Actual porosity data of the PLA/$Mg(OH)_2$ scaffolds (determined according to the liquid displacement method).

Samples	PLA	2.5$Mg(OH)_2$	5$Mg(OH)_2$	7.5$Mg(OH)_2$	10$Mg(OH)_2$	20$Mg(OH)_2$
Porosity (%)	48.57± 3.40	45.77± 2.64	47.31± 2.85	46.70± 2.37	44.53± 1.95	43.63± 0.78

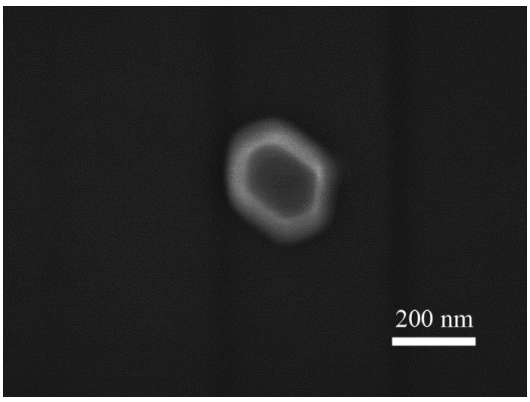

Figure S1. Representative SEM morphology of $Mg(OH)_2$.

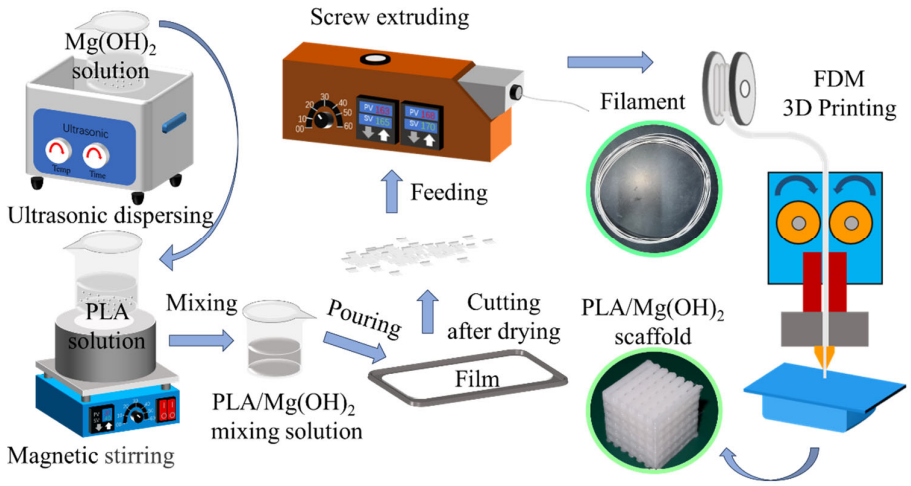

Figure S2. The schematic diagram of the preparation process for PLA/$Mg(OH)_2$ composite, filament and scaffold.

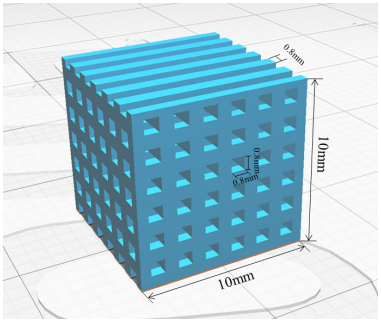

Figure S3. Schematic diagram of sample for the compression test.

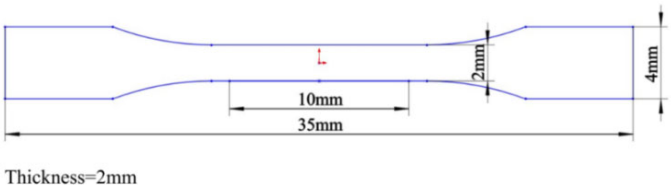

Figure S4. Schematic diagram of 1BB-type sample for the tensile test.