

Supporting Information

Multifunctional Magnesium-Organic Framework Doped Biodegradable Bone Cement for Antibacterial Growth, Inflammatory Regulation and Osteogenic Differentiation

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Table S1. The binding energy (eV) of M0 and M5 in O 1s, Ca 2p, C 1s.

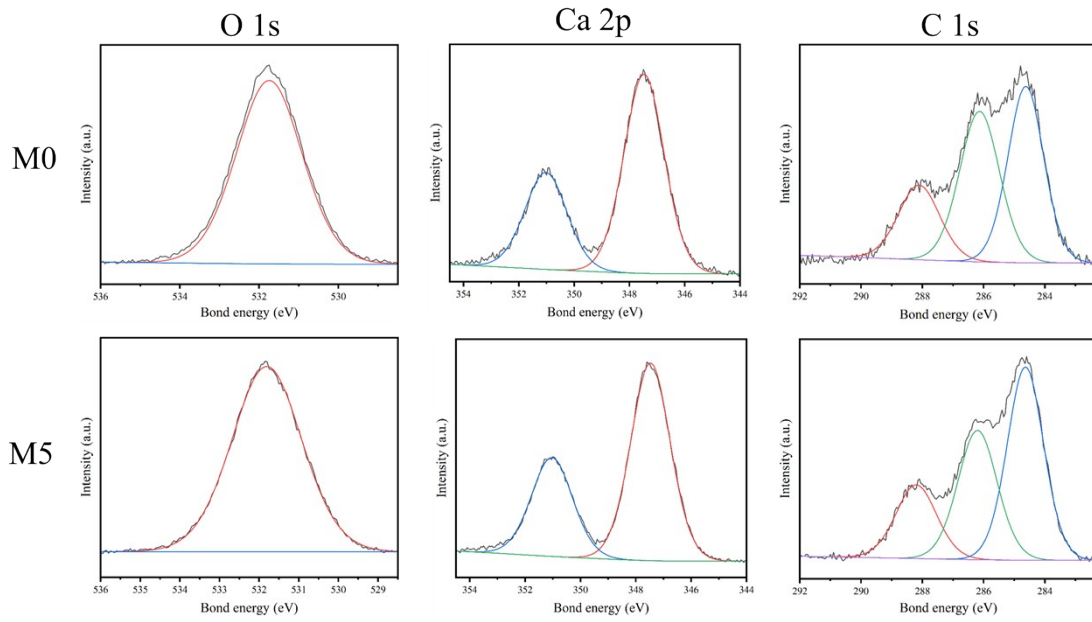
binding energy (eV)	O 1s	Ca 2p		C 1s		
	Peak C-O	Peak1 2p 1/2	Peak2 2p 3/2	Peak1 C=O	Peak2 C-O	Peak3 C-C/C-H
M0	531.71	351.02	347.49	288.11	286.14	284.6
M5	531.76	351.04	347.47	288.18	286.2	284.6

Table S2. The relative content (%) of different element components in C 1s.

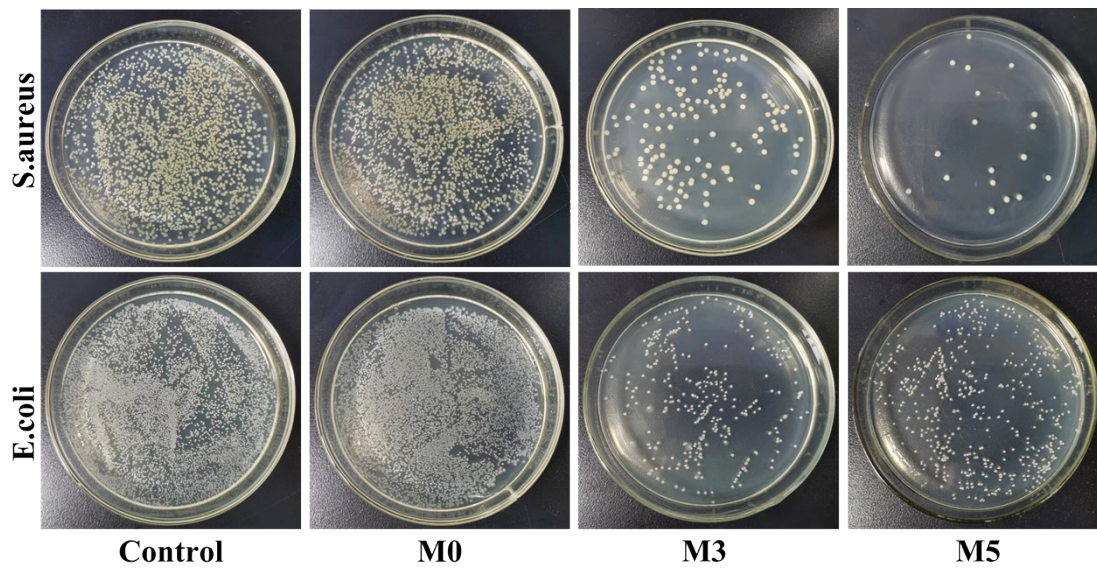
Relative content (%)	C 1s		
	Peak1 C=O	Peak2 C-O	Peak3 C-C/C-H
M0	20.0	41.0	39.0
M5	19.8	33.7	46.4

Table S3. Primer sequences for Q-PCR

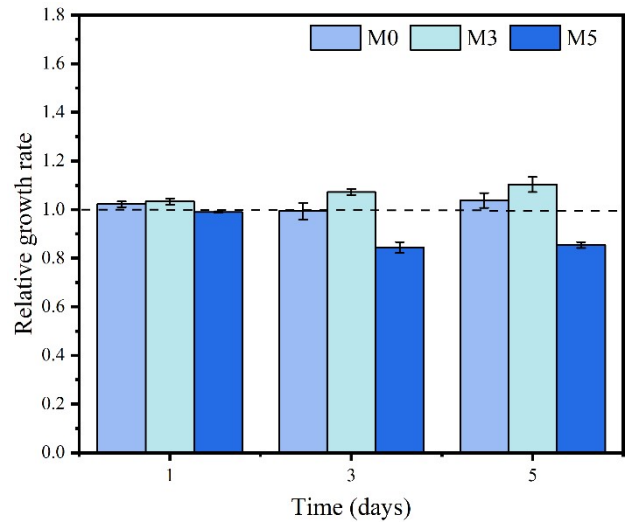
Genes	ID	Direction	Sequences
β-Actin	11461	FORWARD	GTGCTATGTTGCTCTAGACTTTCG
		REVERSE	ATGCCACAGGATTCCATACC
Runx2	12393	FORWARD	ATGGCGTCAAACAGCCTCTTC
		REVERSE	TGGTGCTCGGATCCCAAAAG
BMP2	12156	FORWARD	TCTCCGGGAACAGATACAGG
		REVERSE	TGGTGCCAATAGTCTGGTCA
OCN	12096	FORWARD	AAGACCGCCTACAAACGCATCTAT
		REVERSE	GCACTTCCTCATCTGAACTTTATTT G
OPN	20750	FORWARD	TTGGTGACTTGGTGGTGATCTAGT
		REVERSE	TCTCCTCTGAGCTGCCAGAATC
COL1	12842	FORWARD	TAAGGGTCCCCAATGGTGAGA
		REVERSE	GGGTCCCTCGACTCCTACAT



S1) High resolution of O 1s, Ca 2p and C 1s in the XPS spectra acquired from M0 and M5.



S2) The number of bacterial colonies after 24 hours of co-culture with different cements.



S3) Relative cell growth rate.