

Supplementary materials

Ultrasound-assisted synthesis of nanocrystallized silicocarnotite biomaterial with improved sinterability and osteogenic activity

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Table S1

Primer sequences for real-time polymerase chain reaction (PCR).

Full name	Abbreviation	GenBank No.	Sequences
Mus musculus glyceraldehyde-3-phosphate dehydrogenase	mouse GAPDH	NM_001289726.1	Forward: TGGCAAAGTGGAGATTGTTGCC Reverse: AAGATGGTGATGGGCTTCCCG
Mus musculus runt related transcription factor 2	Runx-2	NM_001271627.1	Forward: CCCTGCCCCGTGGCCTTCAAG Reverse: AGGCATTTTCGGAGCTCGGCG
Mus musculus osteocalcin	Ocn	NM_007541.3	Forward: CAGACCTAGCAGACACCATGAGG Reverse: AGGTCAGAGAGACAGAGCGCA
Mus musculus integrin binding sialoprotein	Bsp	NM_008318.3	Forward: ACTCGAGCCAGGACTGCCGA Reverse: TCGAGAAAGCACAGGCCATTCCC
Mus musculus collagen I	Col-I	XM_213440	Forward: TTCTCCTGGCAAAGACGGAC Reverse: CTCAAGGTCACGGTCACGAA

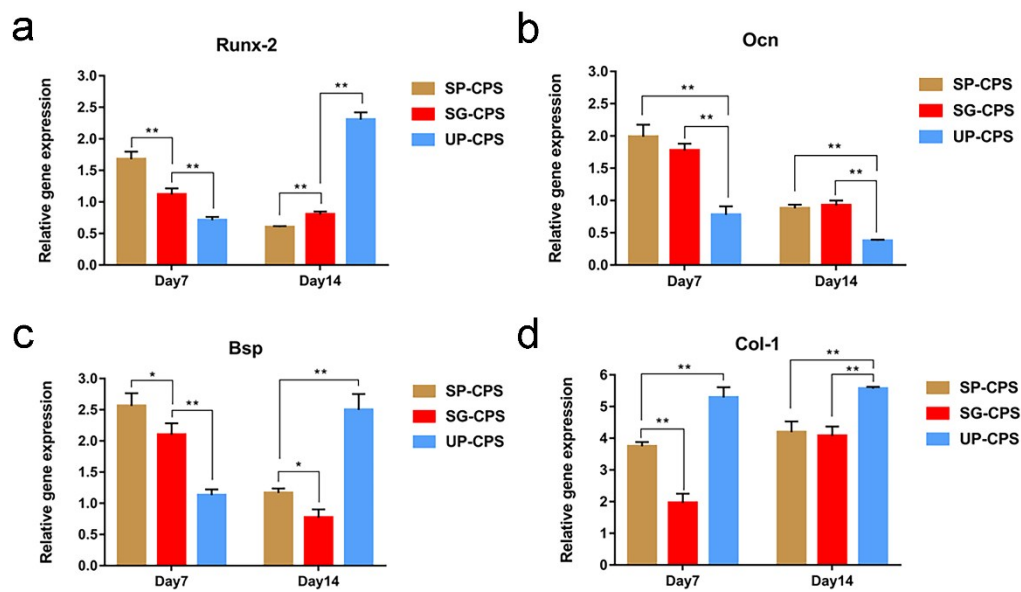


Fig. S1 Relative expression levels of osteogenic-related genes: Runx-2 (a), Ocn (b), Bsp (c), and Col-I (d) by real time PCR after culturing MC3T3-E1 cells with three CPSs and HA extract for 7 and 14 days.

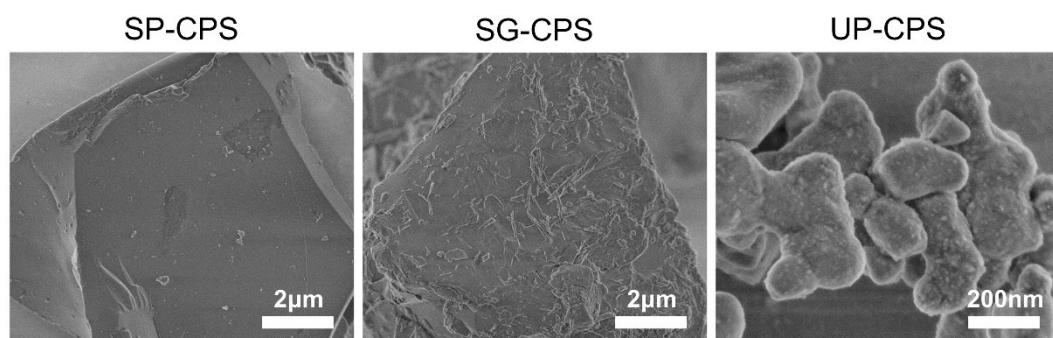


Fig. S2 SEM morphology of different CPS powders after soaking in α -Minimum Essential Medium (α -MEM) at 37°C for 24h.