

Table S1 Primers used for qRT-PCR.

| Gene | Forward primer sequence(5'-3') | Reverse primer sequence(5'-3') |
|-------|--------------------------------|--------------------------------|
| ALP | AACGTGGCCAAGAACATCATCA | TGTCCATCTCCAGCCGTGTC |
| BMP-2 | CAACACCGTGCTCAGCTTCC | TTCCCACTCATTTCTGAAAGTTCC |
| OCN | GGTGCAGACCTAGCAGACACCA | AGGTAGCGCCGGAGTCTATTCA |
| RUNX2 | CCATAACGGTCTTCACAAATCCT | TCTGTCTGTGCCTTCTTGGTTC |
| GAPDH | GGCACAGTCAAGGCTGAGAATG | ATGGTGGTGAAGACGCCAGTA |

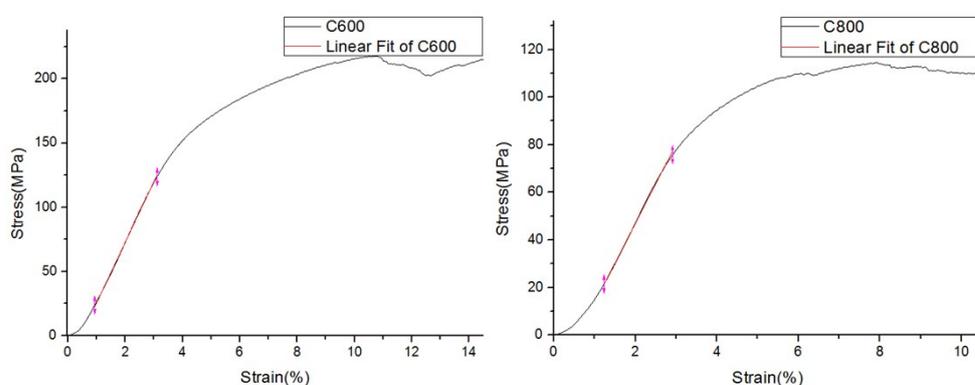


Fig. S1 Stress-strain curve of C600 and C800.

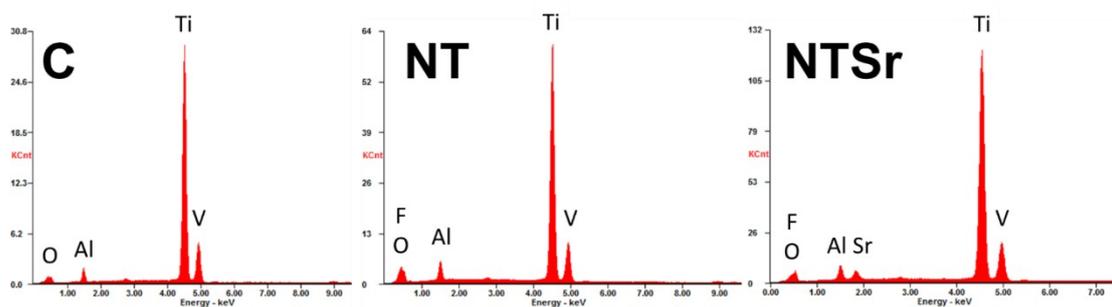


Fig. S2 Surface element contents of C, NT and NTSr evaluated by EDS gathered under FE-SEM at a magnification of 1000x.