

Supporting information for

**Carboxymethyl Chitosan and Peptide-Decorated Polyetheretherketone
Ternary Biocomposite with Enhanced Antibacterial Activity and
Osseointegration as Orthopedic/Dental Implant**

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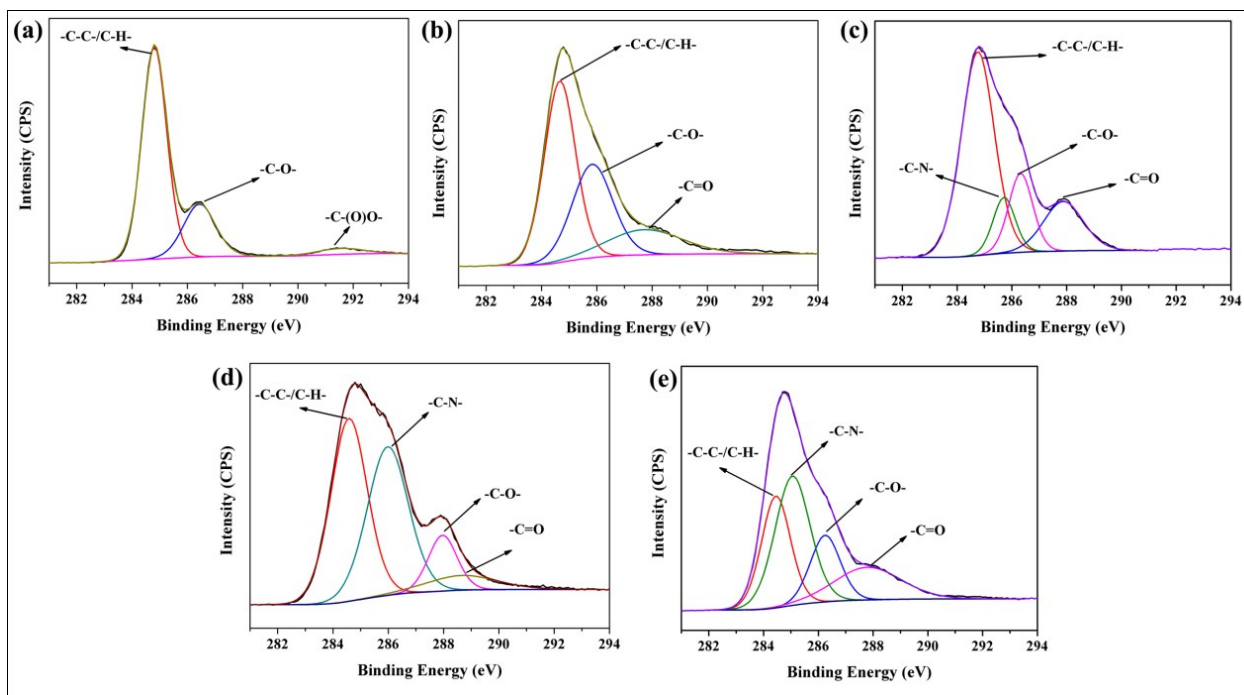


Fig. S1. High-resolution spectra of carbon peaks for the pristine CFRPEEK/n-HA (a), pDA-CFRPEEK/n-HA (b), CMC-CFRPEEK/n-HA (c), pep-pDA-CFRPEEK/n-HA (d), and pep-CMC-CFRPEEK/n-HA (e) substrates.

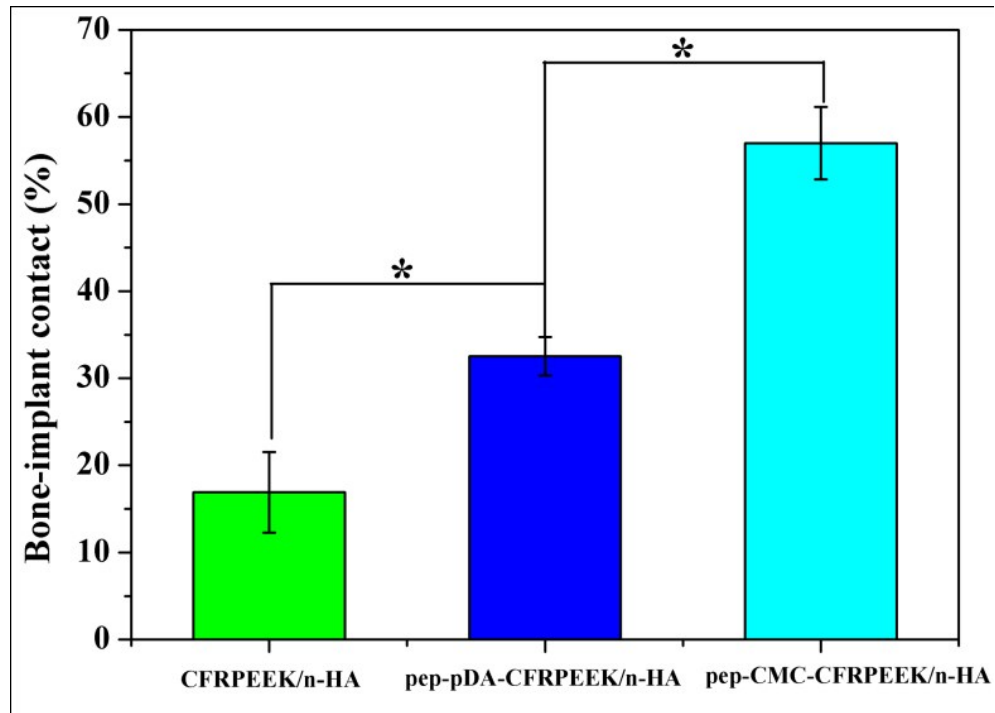


Fig. S2. Percentage of bone-implant contact (BIC) on three implants at 4 weeks. * represents $p < 0.05$ between groups.

Table S1. Primer sequence (5'-3') for the quantitative real-time PCR.

Name	Forward primer	Reverse primer
GAPDH	CGACAGTCAGCCGCATCTT	CCAATACGACCAAATCCGTTG
Runx2	AGGAATGCGCCCTAAATCACT	ACCCAGAAGGCACAGACAGAAG
ALP	GAACGTGGTCACCTCCATCCT	TCTCGTGGTCACAATGC
Colla1	AGACACTGGTGCTAAGGGAGAG	GACCAGCAACACCATCTGCG
OCN	CCTGAAAGCCGATGTGGT	AGGGCAGCGAGGTAGTGA

Table S2. Elemental composition of the pristine CFRPEEK/n-HA and different decorated CFRPEEK/n-HA determined by XPS analysis.

Samples	C 1s (%)	O 1s	N 1s	Ca 2p	P 2p	Na
pristine CFRPEEK/n-HA	70.27	17.92	0	7.95	3.86	0
pDA-CFRPEEK/n-HA	65.47	26.61	7.92	0	0	0
CMC-CFRPEEK/n-HA	59.13	30.99	9.88	0	0	0
pep-pDA-CFRPEEK/n-HA	49.32	35.23	12.97	0	0	2.48
pep-CMC-CFRPEEK/n-HA	50.90	32.86	13.48	0	0	2.76