

Supplementary data

Table S1 .Quantities of C, O, and N Calculated from the XPS Survey Spectra of unmodified and GRGDS immobilized PHB/PHBV nanofibers

| | C | N | O |
|--|-------|------|-------|
| PHB/PHBV nanofibers | 71.18 | 0.13 | 28.69 |
| GRGDS immobilized PHB/PHBV nanofibers | 69.87 | 1.31 | 28.82 |

Table S2. Designed primers of genes for real-time PCR

| Gene | Primer Sequence | Length |
|---------------------------------|--|--------|
| β-Actin | F:5'-CACCCGCGAGTACAACCTTC-3' R:5'-CCCTATCCCACCATCACACC-3' | 207 |
| CNTF | F:5'-TTTGCGAGAGCAAACACCTCT-3' R:5'-TGCTAGCCAGATAGAACGGGCTAC-3' | 67 |
| GDNF | F:5'-GGCGACGGGACTCTAGAATGA-3' R:5'-GTCAGGATAATCTTCGGGCATATTG-3' | 194 |
| BDNF | F:5'-GCCATTCATTCAGGCTTCCA-3' R:5'-GCCATTCATTCAGGCTTCCA-3' | 93 |
| NGF-F | F:5'-TGATCGGCGTACAGGCAGA-3' R:5'-GAGGGCTGTGTCAAGGGAAT-3' | 107 |
| PMP22 | F:5'-TGTACCACATCCGCCTTGG-3' R:5'-GAGCTGGCAGAAGAACAGGAAC-3' | 138 |

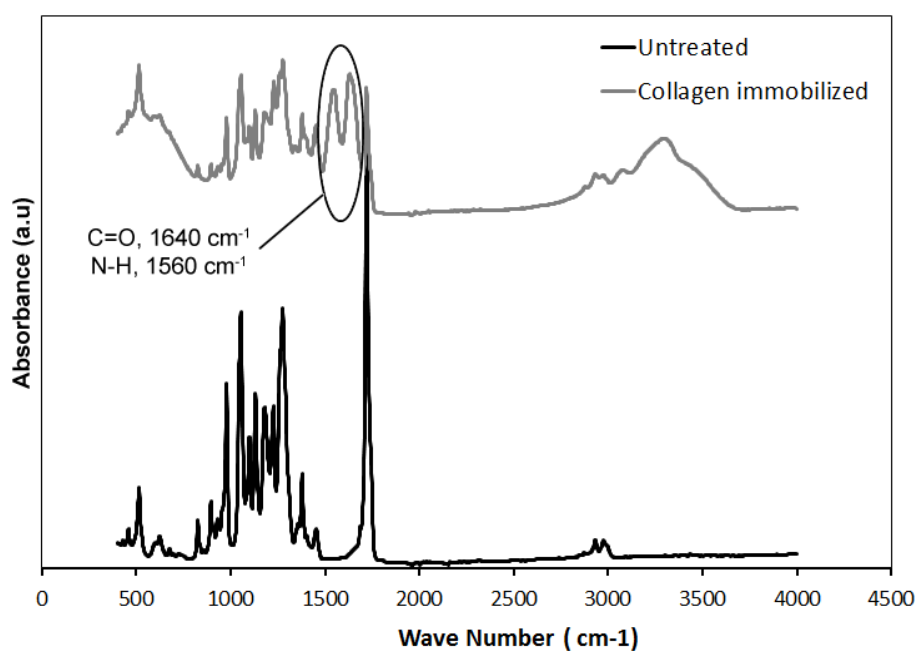


Figure S1. ATR-FTIR of untreated PHB/PHBV and collagen immobilized nanofibers.

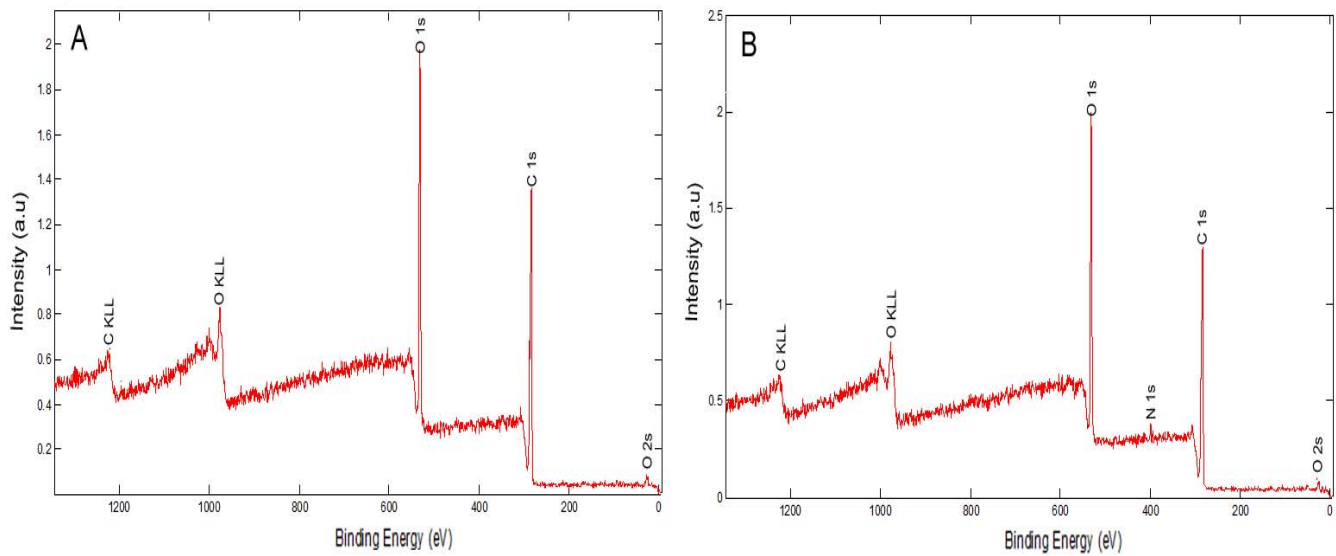


Figure S2. XPS spectra of (A) unmodified and (B) GRGDS immobilized PHB/PHBV nanofibers.

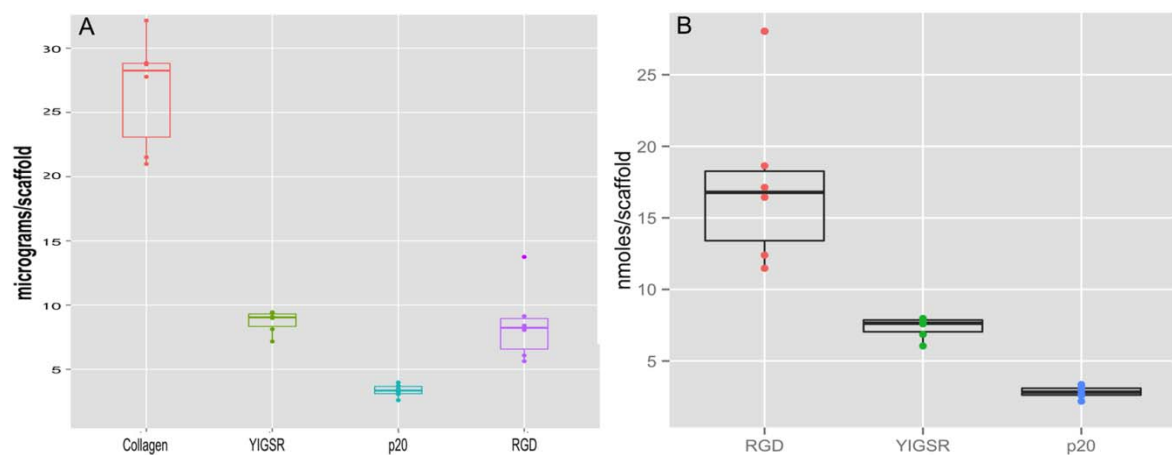


Figure S3. Microgram quantities (A) and relative molar concentrations (B) of immobilized biomolecules per scaffold. Measured immobilised amounts were $26.6 \pm 4.5 \mu\text{g}$, $8.5 \pm 2.9 \mu\text{g}$ (408 mM), $8.7 \pm 0.9 \mu\text{g}$ (336 μM) and $3.3 \pm 0.5 \mu\text{g}$ (169 μM), for collagen, GRGDS, YIGSR and p20 biomolecules, respectively.