

Supplementary Information

3D Printed Strontium and Zinc Doped Hydroxyapatite Loaded PEEK for Craniomaxillofacial Implants

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Figure S1. Non-uniform diameter of PEEK nanocomposite filaments obtained during optimisation via 3devo desktop extruder.

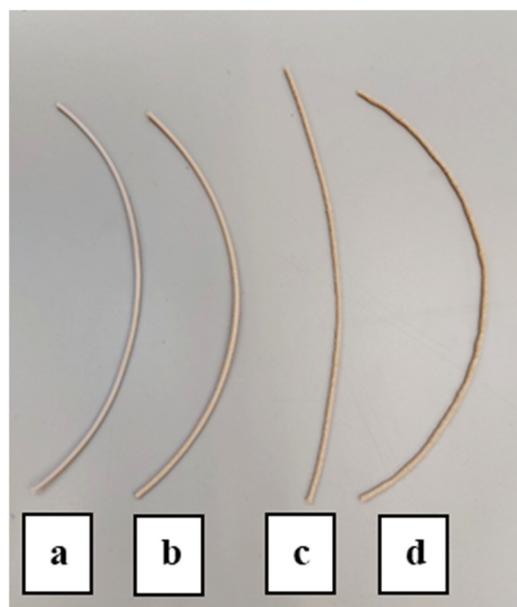


Figure S2. PEEK nanocomposite filaments prepared after optimisation via 3devo desktop extruder; (a) PEEK, (b) PEEK/10SrHA, (c) PEEK/20SrHA, (d) PEEK/30SrHA.



Figure S3. FDM 3D printing optimisation of PEEK nanocomposites at (a) low nozzle temperature, (b) low printing speed (c) high printing speed, low bed and chamber temperatures, (e,f) successful prints of impact testing samples.



Figure S4. Tensile testing samples of PEEK nanocomposites prepared at optimised conditions via SpiderBot FDM 3D printer.

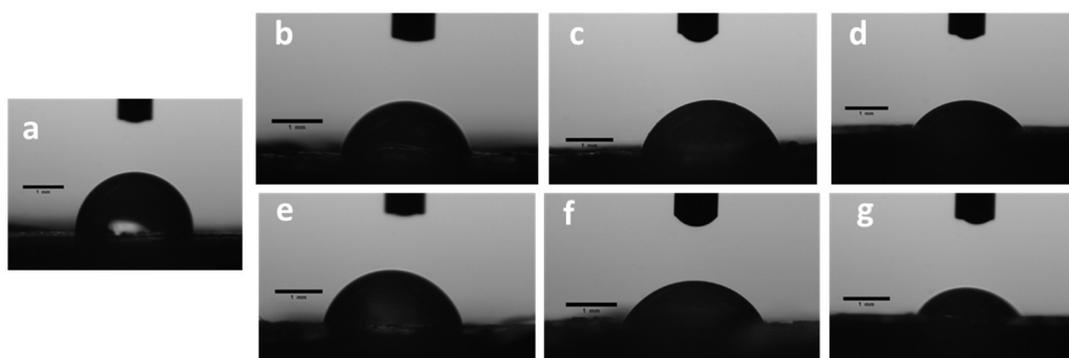


Figure S5. Water contact angle on the surface of 3D printed samples; (a) PEEK, (b) PEEK/10SrHA, (c) PEEK/20SrHA, (d) PEEK/30SrHA, (e) PEEK/10ZnHA, (f) PEEK/20ZnHA, (g) PEEK/30ZnHA.