

**A comparative study between Poly (lactide-co-glycolide) derived
composite sintered microsphere scaffolds for bone tissue
engineering**

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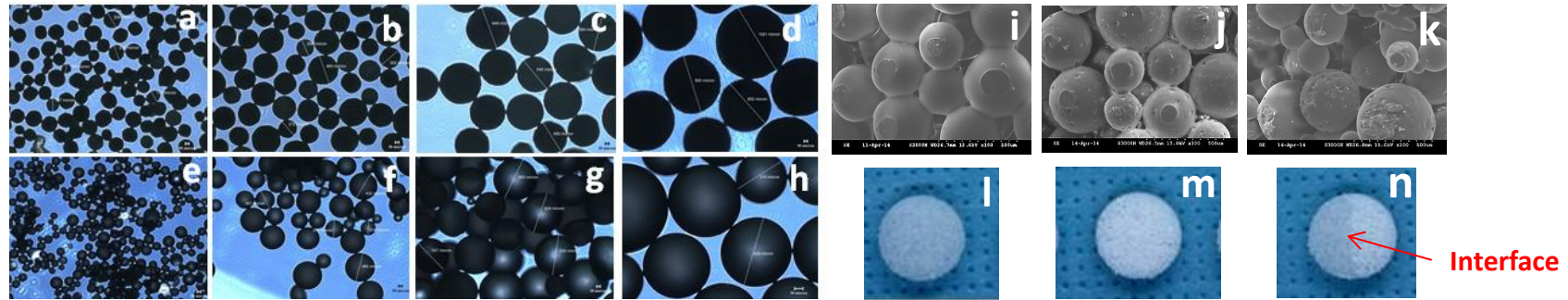


Fig.1 (a-h) represents various size ranges of microspheres of virgin (a-d) and composite (e-h) spheres. (i&l), (j&m) and (k&n) respectively represents the microscopic and photographic images of virgin, composite and interface virgin/composite (osteocondral) scaffolds.

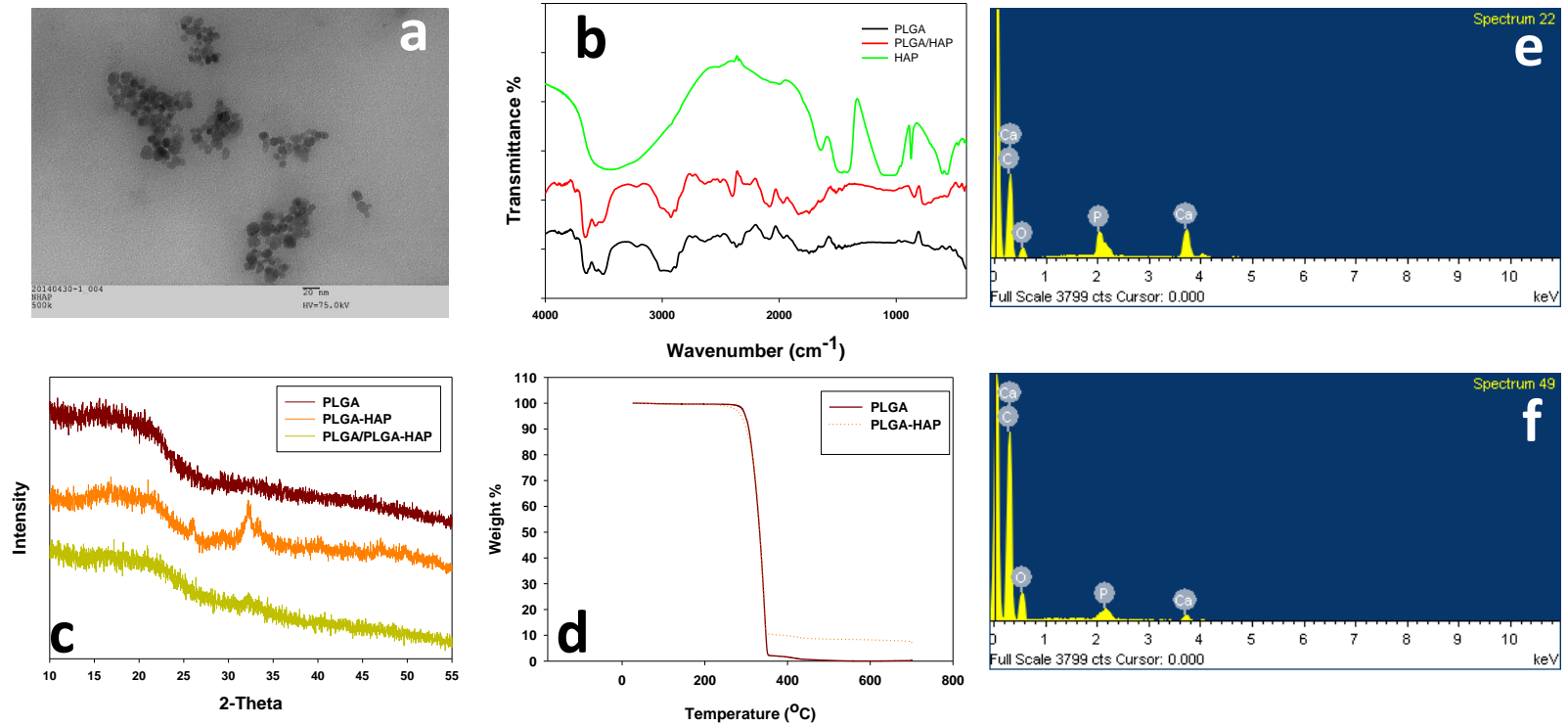


Fig.2 (a) is TEM image of nHAP and (b&c) represents FTIR and XRD patterns of virgin, composite and virgin/composite scaffolds. (d) is the thermal decomposition curve of virgin and composite scaffolds, to estimate the actual concentration of nHAP in composite scaffold. (e&f) are the EDS spectrum of virgin and composite scaffold to confirm the stoichiometric Ca/P ratio of prepared nHAP.

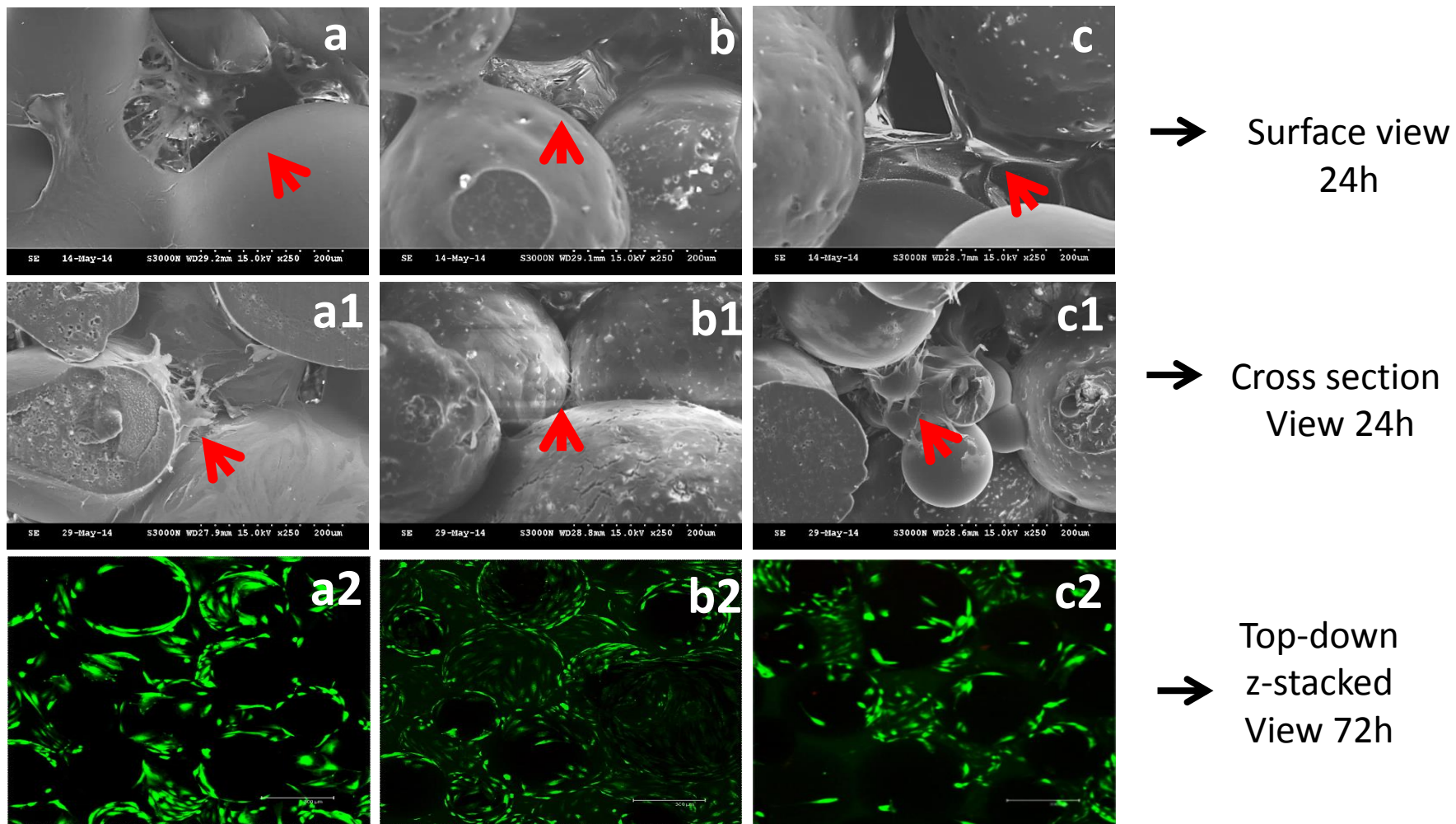


Fig.3 a, b, c and a1, b1, c1 respectively represents surface and cross sectional view of BMSCs on the interiors of (a) virgin (b) composite and (c) osteochondral scaffolds. a2, b2 and c2 is the z-stacked cell infiltration images by confocal microscope. Arrows indicates the filopodial extensions on the sphere surface.