

# Designing gallium-containing hydroxyapatite coatings on low modulus beta

## Ti-45Nb alloy

Jithin Vishnu<sup>1,2,3</sup>, Andrea Voss<sup>1</sup>, Volker Hoffmann<sup>1</sup>, Ludovico Andrea Alberta<sup>1</sup>,

Adnan Akman<sup>1</sup>, Balakrishnan Shankar<sup>2,3</sup>, Annett Gebert<sup>1</sup> and Mariana Calin<sup>1,\*</sup>

<sup>1</sup>Leibniz Institute for Solid State and Materials Research Dresden (IFW Dresden), Helmholtzstr. 20, D-01069 Dresden, Germany; jithinv@am.amrita.edu (J.V.);

a.voss@ifw-dresden.de (A.V.); v.hoffmann@ifw-dresden.de (V.H.);

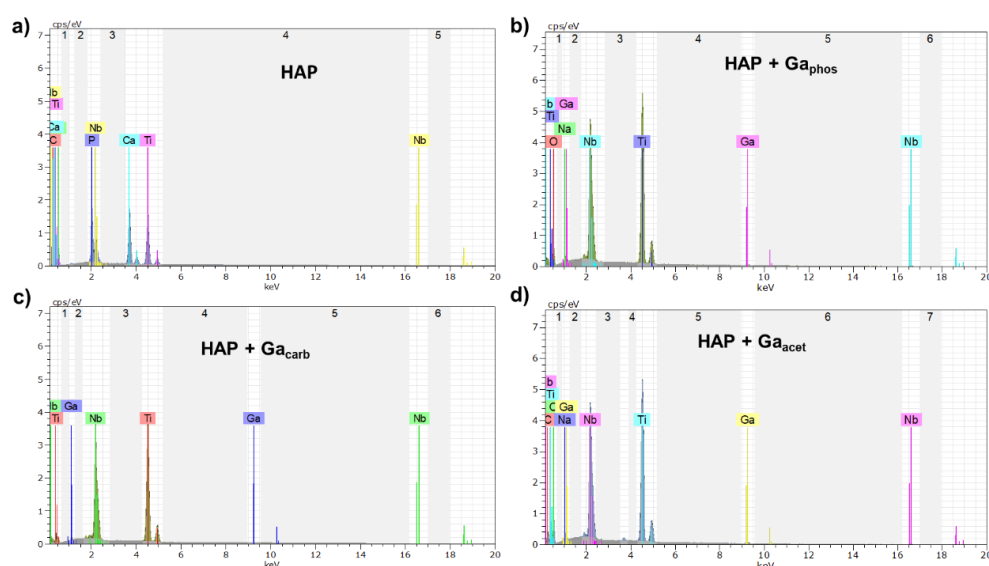
l.a.alberta@ifw-dresden.de (L.A.A.); a.akman@ifw-dresden.de (A.A.);

a.gebert@ifw-dresden.de (A.G.)

<sup>2</sup>Centre for Flexible Electronics and Advanced Materials, Amrita Vishwa Vidyapeetham, Amritapuri 690525, Kerala, India; bala@am.amrita.edu

<sup>3</sup>Department of Mechanical Engineering, Amrita Vishwa Vidyapeetham, Amritapuri 690525, Kerala, India

\*Correspondence: m.calin@ifw-dresden.de; Tel.: +49-351-4659-613



**Figure S1.** EDX analysis of (a) hydroxyapatite surface showing the presence of Ca, P on Ti-45Nb surface, and Ga-incorporated HAP morphologies in the presence of (b) phosphate, (c) sodium bicarbonate and (d) ammonium acetate buffers evidencing Ga addition on to the HAP-modified surface.