

Supplementary materials

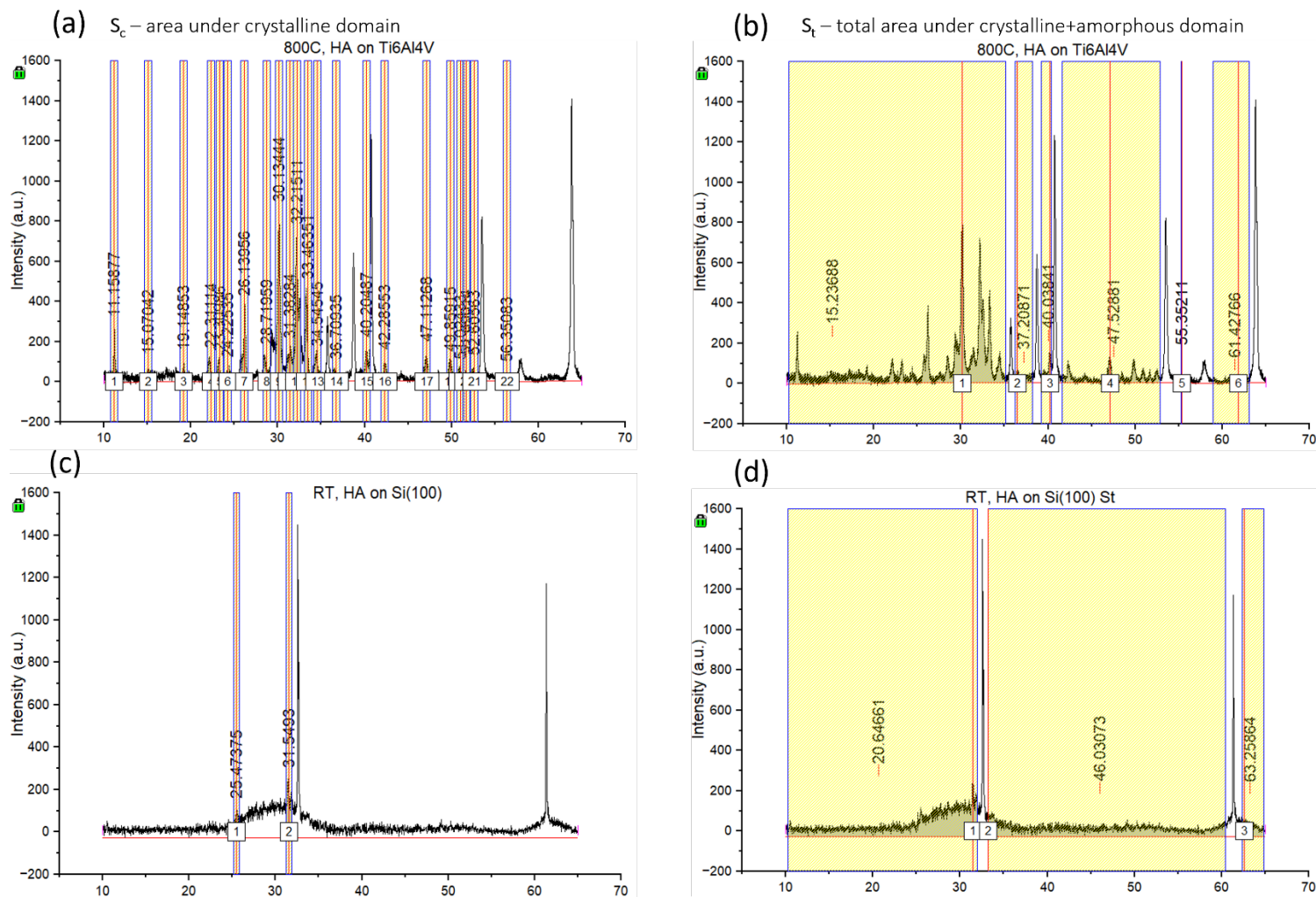


Figure S1. Representative calculations of crystallinity indices for (a-b) HA on Ti6Al4V at 800C and (c-d) HA on Si(100) at deposited RT. Crystallinity index: $CI(\%) = (S_c/S_t) \cdot 100\%$.

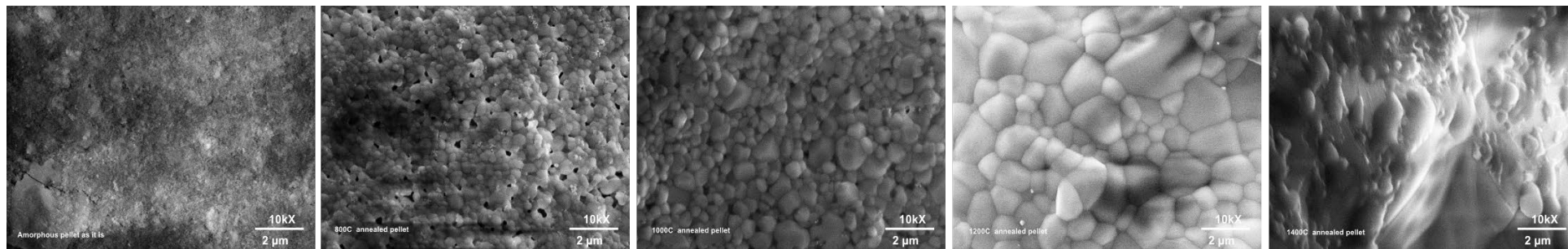


Figure S2. SEM images of the HA pellets cold-pressed at 5000 psi, then annealed at different temperatures: (a) amorphous, (b) 800°C, (c) 1000°C, (d) 1200°C, and (e) 1400°C.

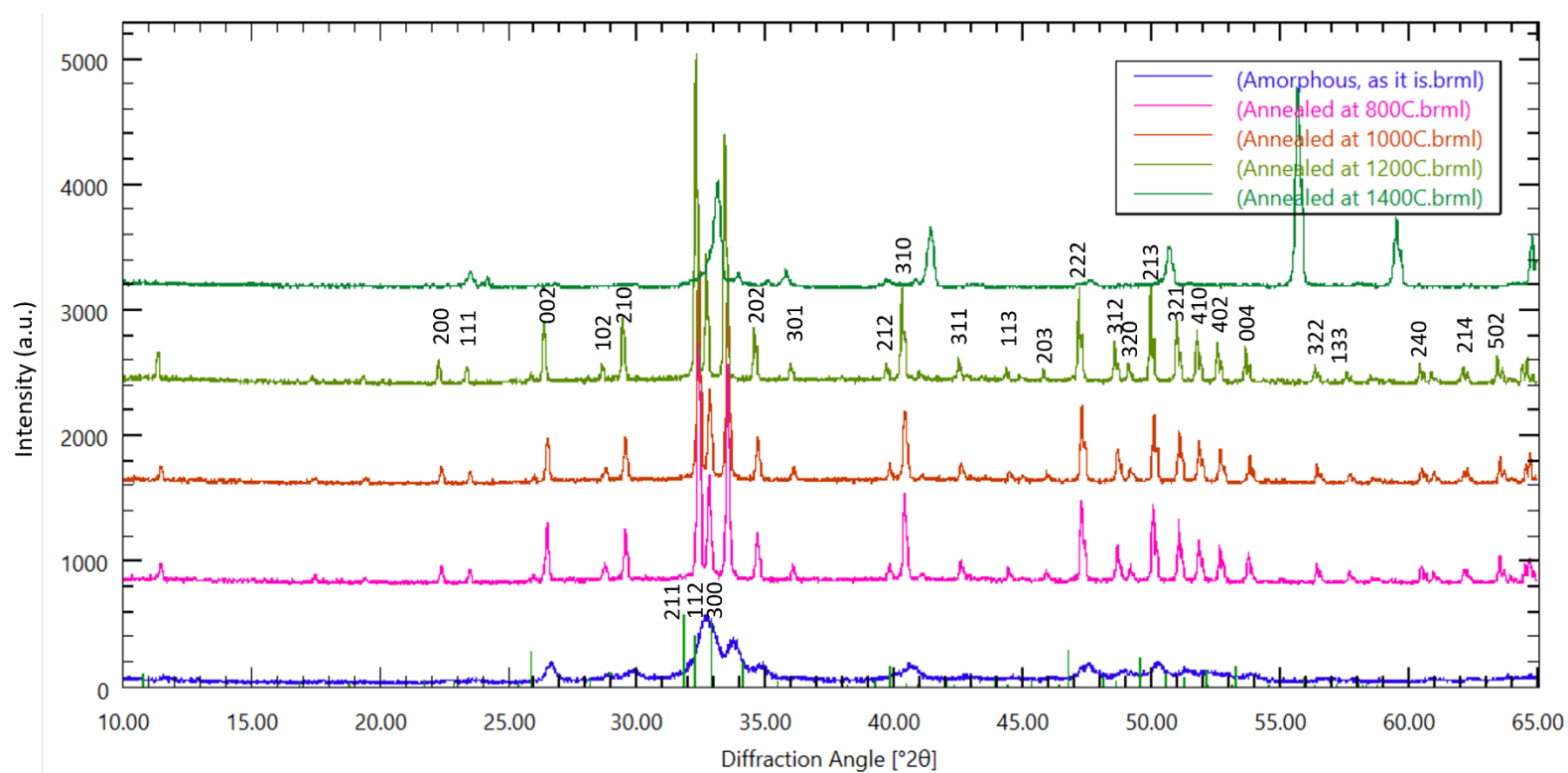


Figure S3. XRD patterns of pellets shown in Fig. 1.

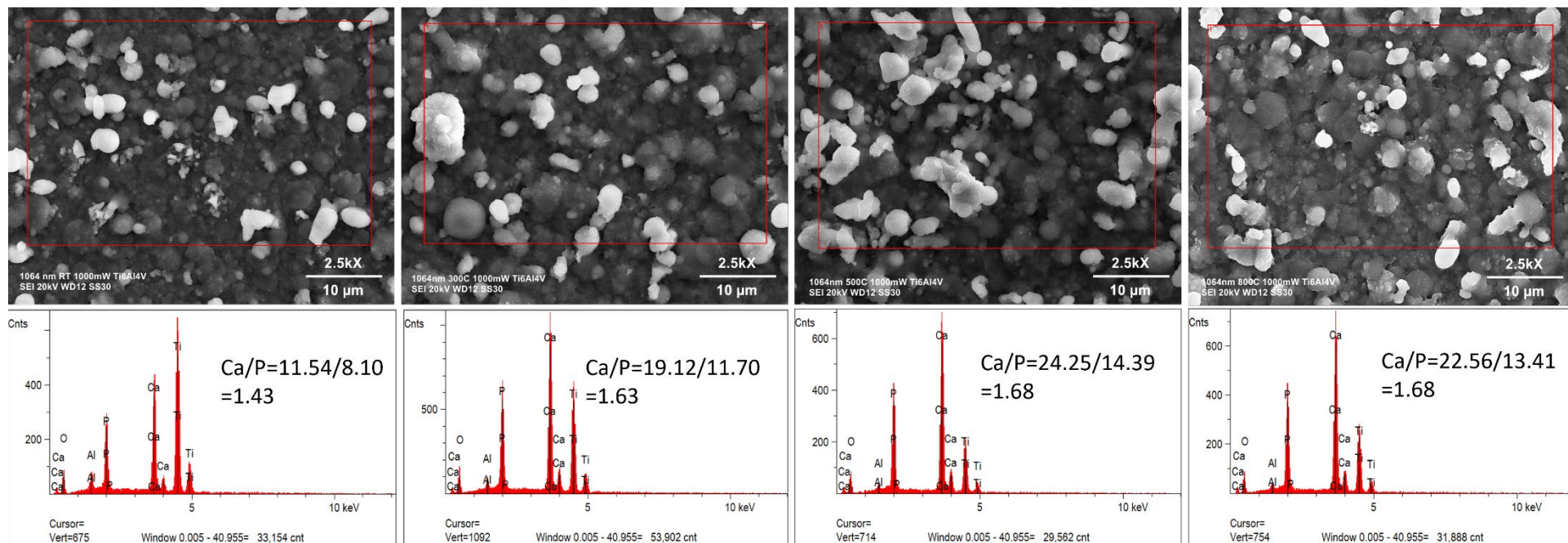


Figure S3. 1064 nm deposition, Ca/P ratio study through EDS analysis.

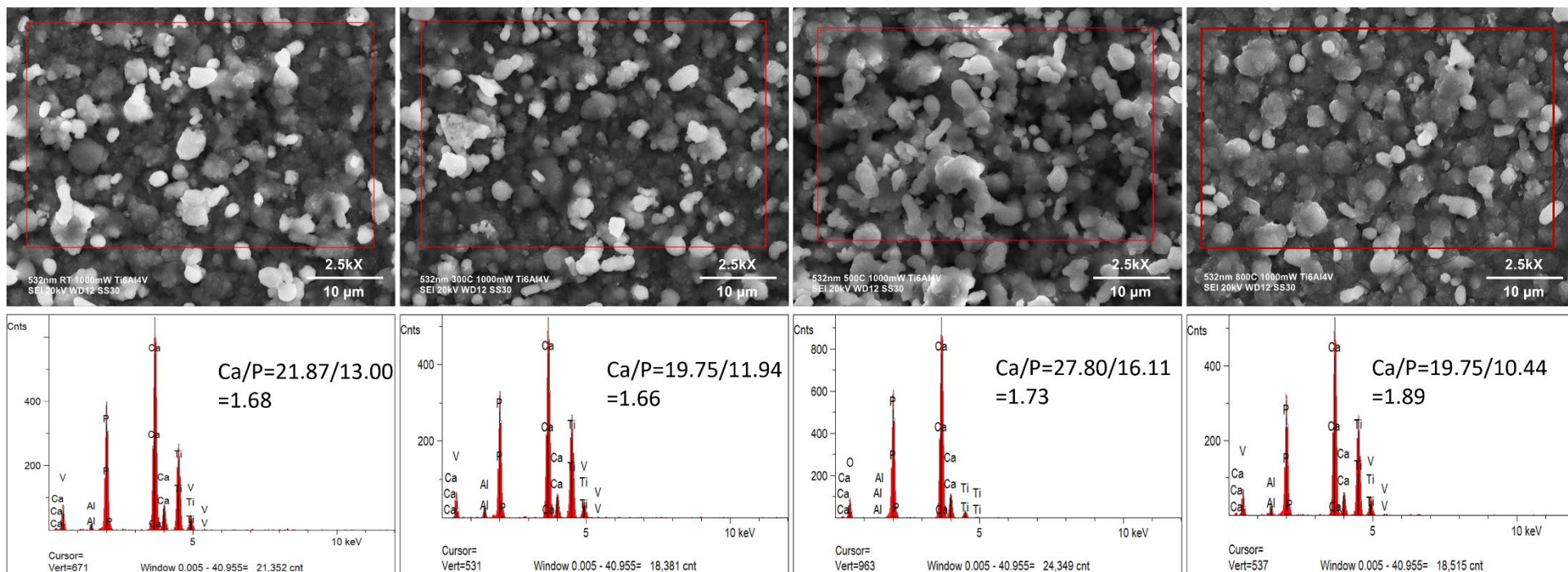


Figure S4. 532 nm deposition, Ca/P ratio study through EDS analysis.

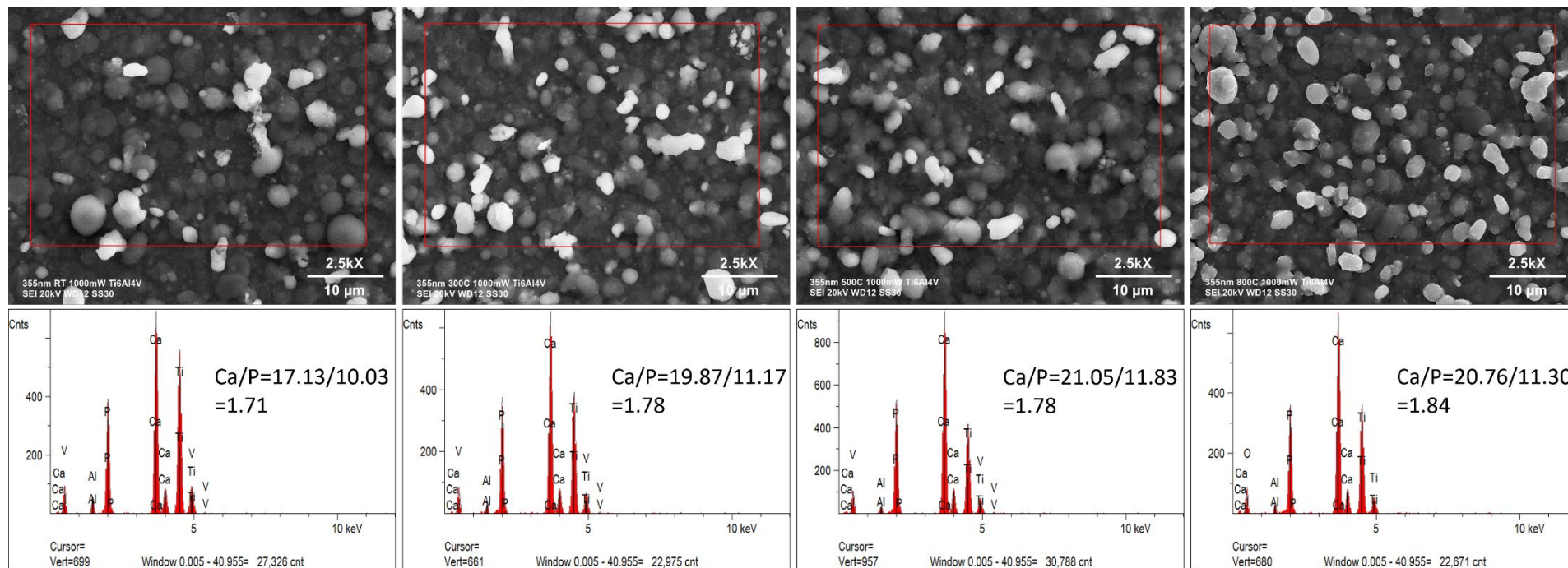


Figure S5. 355 nm deposition, Ca/P ratio study through EDS analysis.

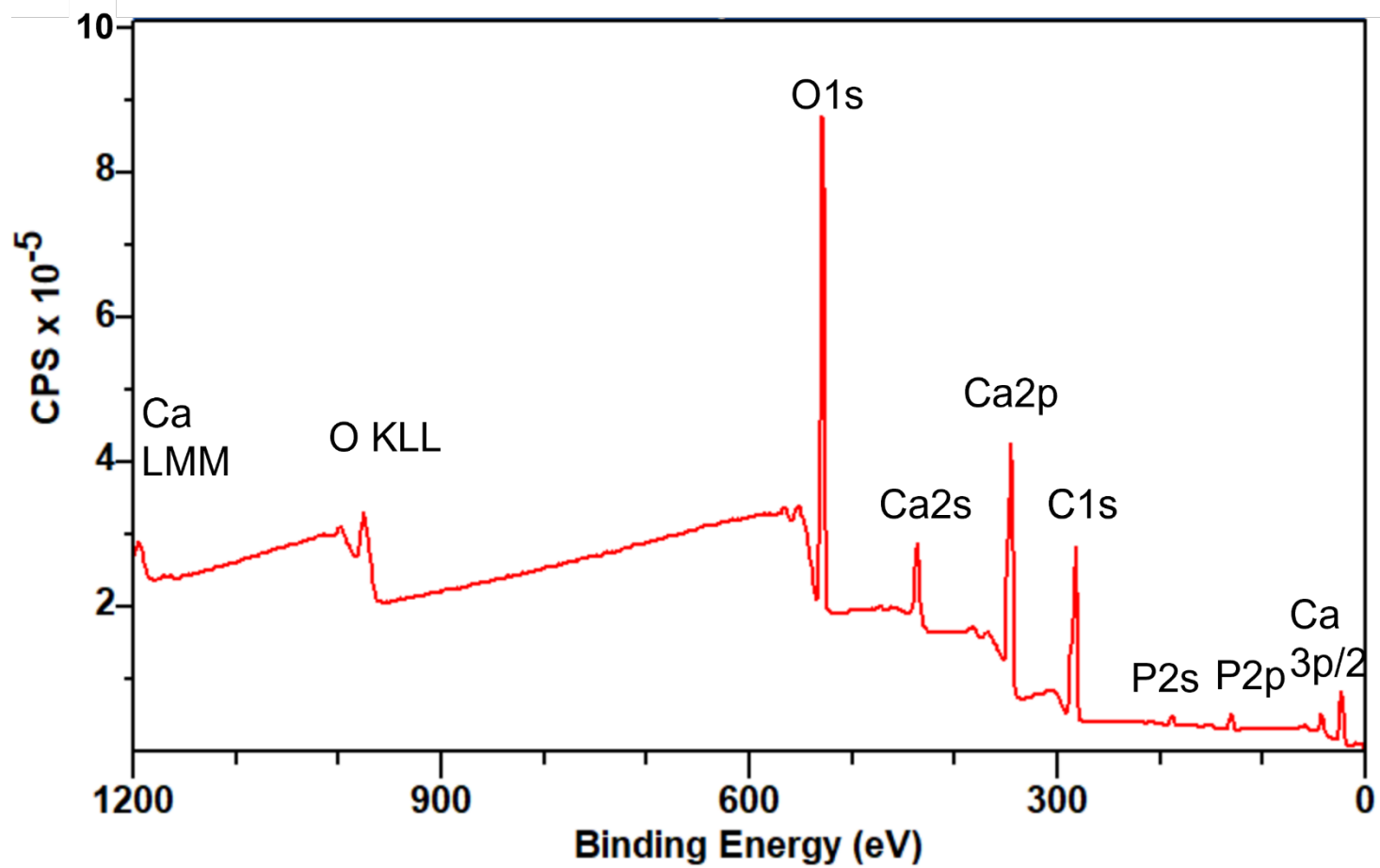


Figure S6. XPS of HA coating on Ti6Al4V deposited at 500 °C with 532 nm beam.