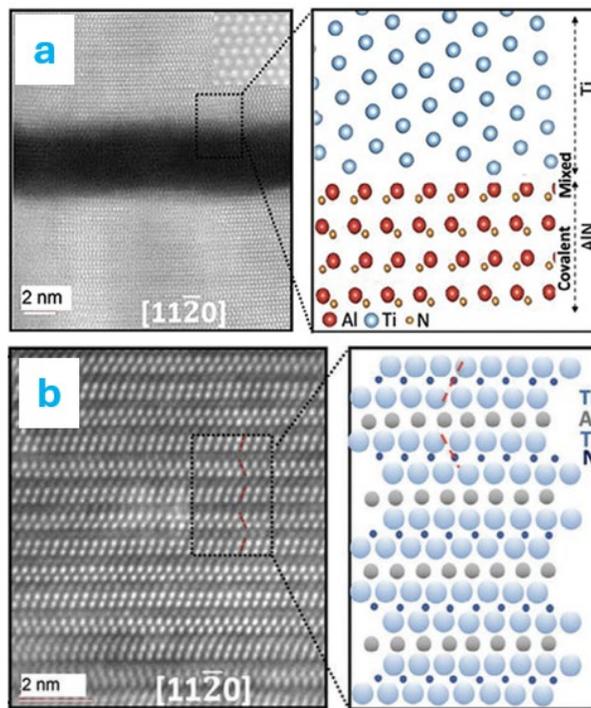


Journal of Physics: Condensed Matter, 28(43), 433003.

Fig. 1: Illustration of $M_{n+1}AX_n$ phase structure.



Adv Funct. Materials, 34(29), 2316290.

Fig. 2: (a) Ti/AlN multi-layer deposited at ambient temperature. (b) Transformation of Ti/AlN multi-layer into MAX-phase Ti_2AlN after annealing at 750 °C for 2 hours.

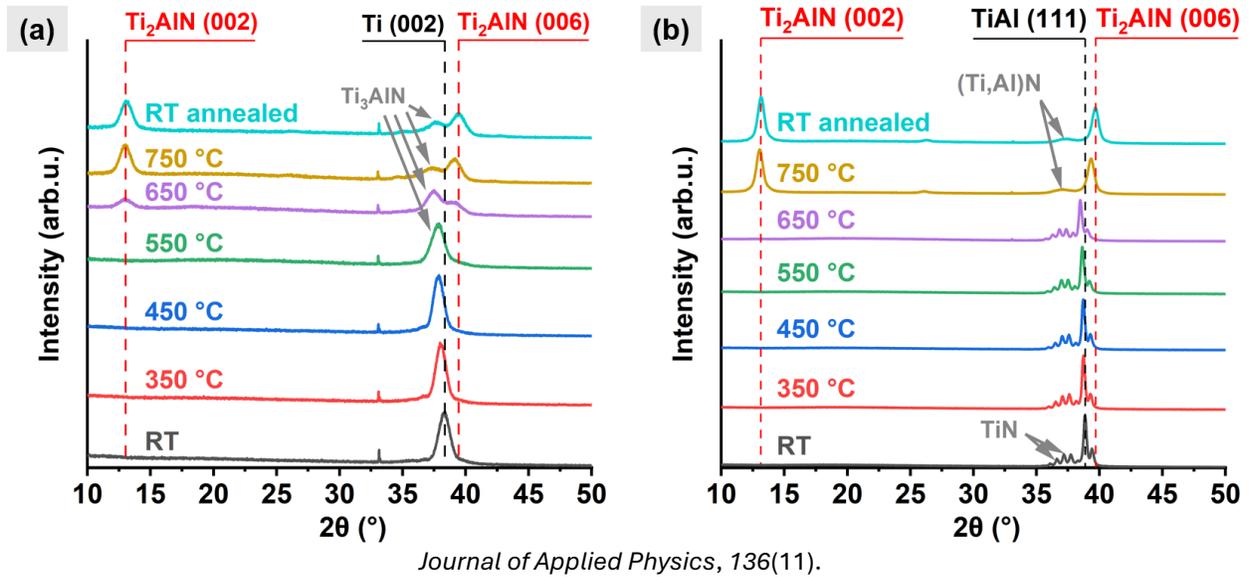


Fig.3: (a) *In-situ* XRD of Ti/AlN multi-layer, with dwell times of 30 minutes, indicating Ti_2AlN emergence at ~ 650 °C. (b) *In-situ* XRD of TiN/TiAl multi-layer, indicating Ti_2AlN emergence at ~ 750 °C.

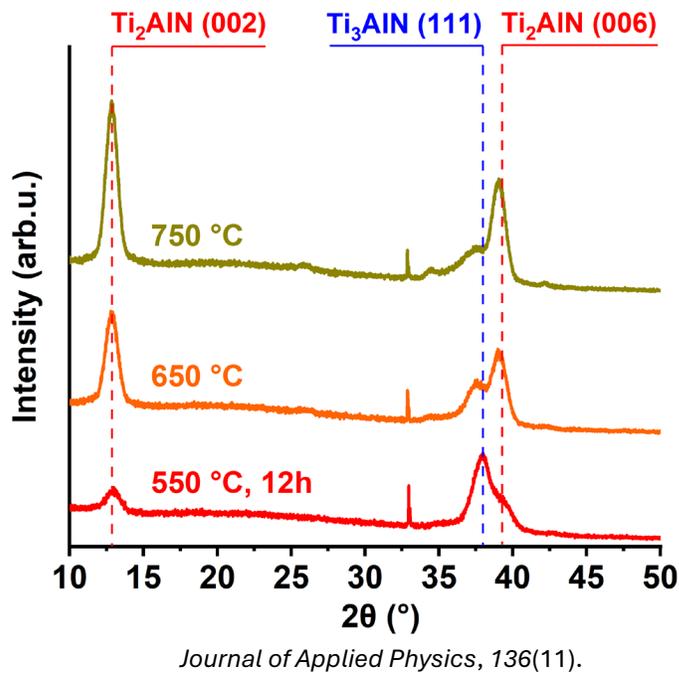


Fig.4: *In-situ* XRD of Ti/AlN multi-layer initially annealed at 550 °C for 12 hours.