

$M_{N+1}AX_N$ Phases

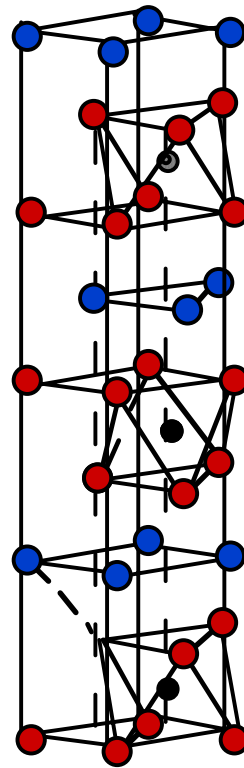
Transitional metal Carbides /Nitrides (red and black atoms) are interleaved with layers of pure A – group element (blue atoms)

M: Early transition metal

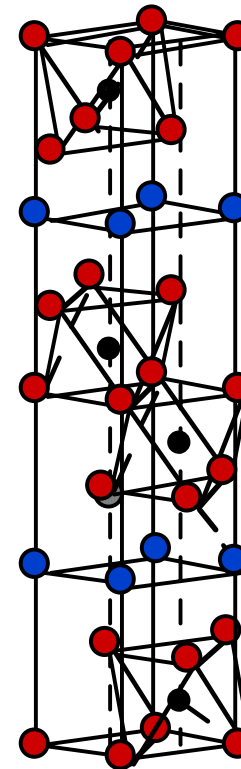
A: Group A (IIIA and IVA)

X: C and/or N

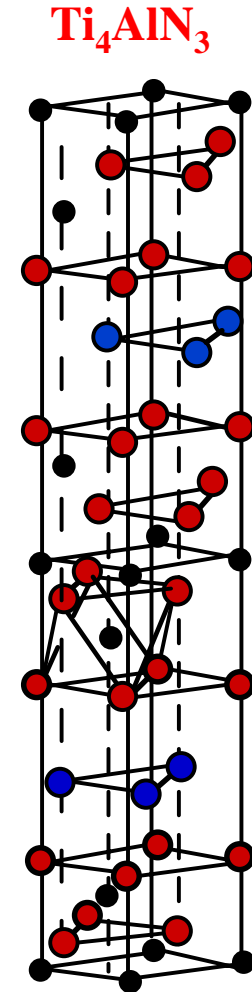
M.W.Barsoum and T.El.Raghy, American Scientist (2001)



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