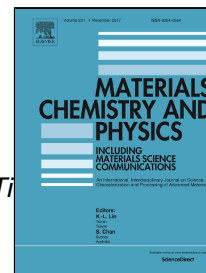


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Investigation of structural, electronic, anisotropic elastic, and lattice dynamical properties of MAX Phases Borides: An Ab-initio study on hypothetical  $M_2AB$  ( $M= Ti, Zr, Hf, A=Al, Ga, In$ ) compounds



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- The structural, electronic, and lattice dynamical properties of MAX phases borides are studied.
- The calculated all  $M_2AB$  phases are mechanically and thermodynamically stable.
- The band structures for  $M_2AB$  phases are metallic in nature.

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