

Abstract Submitted
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Prediction of the first stable compound with flat hexagonal tin layers¹ JUNPING SHAO, CLEMENT BEAUFILS, ALEKSEY KOLMOGOROV, Binghamton University, SUNY — An analysis of stability trends in a large family of metal stannides has directed our attention towards a previously unknown compound featuring a backbone of flat hexagonal tin layers. Ab initio calculations show that this compound is at least metastable under ambient conditions and is furthermore stabilized under pressure. Compounds with such layered frameworks may possess exotic electronic properties and also serve as precursors for the synthesis of 2D derivatives.

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Junping Shao
Binghamton University, SUNY

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