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Last five years publication list:

1. Raja, D.B., Sundaram, K.S. and Vidya, R. First principle study on hybrid organic-inorganic perovskite ASnBr_3 (A= Formamidinium, Dimethylammonium and Azetidinium). *Solar Energy*, 207, pp.1348-1355.(2020).
2. Jebasty, R.M. and Vidya, R. Elucidating reaction equations of TiF_x ($x= 4, 3, 2$) catalysts for hydrogen storage applications. *International Journal of Hydrogen Energy*, 45(4), pp.2818-2828.(2020).
3. Sreedevi, P.D., Vidya, R. and Ravindran, P.,. Earth-abundant nontoxic direct band gap semiconductors for photovoltaic applications by ab-initio simulations. *Solar Energy*, 190, pp.350-360.(2019).
4. Patra, L., Vidya, R., Fjellvåg, H. and Ravindran, P.Giant Magnetoelectric Coupling in Multiferroic $\text{PbTi}_{1-x}\text{V}_x\text{O}_3$ from Density Functional Calculations. *ACS omega*, 4(16), pp.16743-16755.(2019).
5. Jebasty, R.M. and Vidya, R.,. Mechanical Properties of Multifunctional TiF_4 from First-Principles Calculations. *ACS Biomaterials Science & Engineering*, 5(4), pp.2001-2012.(2019).
6. Jebasty, R.M. and Vidya, R., December. Calculation of Elastic Properties of Titanium Fluoride Compounds—A DFT Study. In *International Workshop on the Physics of Semiconductor and Devices* (pp. 1177-1183). Springer, Cham.(2017).
7. Premkumar, T., Mani, J., Anbalagan, G. and Vidya, R., 2017, December. Electronic Structure Properties of ATe and A_2Te (A: Cu, Ag and Cd). In *International Workshop on the Physics of Semiconductor and Devices* (pp. 1151-1157). Springer, Cham.(2017).
8. Vidya, R. and Baskaran, G. Valence Bond Order and Antiferromagnetism in Silicene-ab initio Results. *arXiv preprint arXiv:1709.04664*.(2017).
9. Patra, L., Kishore, M.A., Vidya, R., Sjøstad, A.O., Fjellvåg, H. and Ravindran, P.,. Electronic and Magnetic Structures of Hole Doped Trilayer $\text{La}_{4-x}\text{Sr}_x\text{Ni}_3\text{O}_8$ from First-Principles Calculations. *Inorganic Chemistry*, 55(22), pp.11898-11907.(2016).
10. Kishore, M.A., Okamoto, H., Patra, L., Vidya, R., Sjøstad, A.O., Fjellvåg, H. and Ravindran, P.,. Theoretical and experimental investigation on structural, electronic and magnetic properties of layered Mn_5O_8 . *Physical Chemistry Chemical Physics*, 18(40), pp.27885-27896.(2016).
11. Manimuthu, P., Vidya, R., Ravindran, P., Fjellvåg, H. and Venkateswaran, C.,. Observation of direct magneto-dielectric behaviour in $\text{Lu}_3\text{Fe}_5\text{O}_{12-\delta}$ above room-temperature. *Physical Chemistry Chemical Physics*, 17(27), pp.17688-17698.(2015)
12. Iozzi, M.F., Vajeeston, P., Vidya, R., Ravindran, P. and Fjellvåg, H.,. Structural and electronic properties of transparent conducting delafossite: a comparison between the

AgBO₂ and CuBO₂ families (B= Al, Ga, In and Sc, Y). *RSC Advances*, 5(2), pp.1366-1377.(2015).