

Tables:
Table 1: Energies of GaX(X=P,As,Sb) calculated by the GGA and mBJ-GGA approach without SOI. The last column gives the deviation in percentage of our calculated values from the experimental values [13].

Sl. No.	Compounds	Energy Band Gap E_g (in eV)			Deviation (in %)	
		Our calculations		Experimental results[13]	Deviation (in %)	
		GGA	mBJ-GGA		GGA	mBJ-GGA
1	GaP	1.65	2.25	2.350	29.79	4.26
2	GaAs	0.5	1.65	1.519	67.08	8.62
3	GaSb	0.06	0.93	0.812	92.61	14.53

Table 2: Comparison of spin splitting energy in AlX(X=P,As,Sb) calculated by the GGA and mBJ-GGA approach with SOI. The last column gives the deviation in percentage of our calculated values from the experimental values [13].

Sl. No.	Compounds	Spin Splitting Energy (in eV)			Deviation (in %)	
		Our calculations		Experimental results[13]	Deviation (in %)	
		GGA	mBJ-GGA		GGA	mBJ-GGA
1	GaP	0.06	0.06	0.08	25.00	25.00
2	GaAs	0.32	0.32	0.34	5.88	5.88
3	GaSb	0.71	0.71	0.76	6.58	6.58