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Corrigendum to the Manuscript Entitled "Elastic, Optoelectronic and Thermal Properties of Boron Phosphide" [*J. Nano- Electron. Phys.* 5 No 4, 04061 (2013)]

S. Daoud[1,*], N. Bioud[2,3], L. Belagraa[1,4], N. Lebga[2,3]

[1] *Laboratoire Matériaux et Systèmes Electroniques, Université Mohamed Elbachir El Ibrahimi de Bordj Bou Arreridj, 34000 Bordj Bou Arreridj, Algérie*
[2] *Laboratoire d'Optoélectronique et Composants, Faculté des sciences, Université de Sétif1, 19000 Sétif, Algérie*
[3] *Faculté des sciences et de la technologie, Université Mohamed Elbachir El Ibrahimi de Bordj Bou Arreridj, 34000 Bordj Bou Arreridj, Algérie*
[4] *Department of Civil Engineering, Mohamed Boudiaf University of M'sila, 28000 M'sila, Algeria*

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We would like to correct some inaccuracies in our previous manuscript entitled "Elastic, Optoelectronic and Thermal Properties of Boron Phosphide" [*J. Nano- Electron. Phys.* **5** No 4, 04061 (2013)].

Keywords: Melting temperature.

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In our previous work "Elastic, Optoelectronic and Thermal Properties of Boron Phosphide" [*J. Nano-Electron. Phys.* **5** No 4, 04061 (2013)] [1], we made an error during the calculation of the melting temperature T_m for cubic zinc-blende (B3) boron phosphide (BP) semiconducting compounds using the expression:

$$T_m = 533 + (591/\text{Mbar})\, C_{11} \pm 300\text{K} . \qquad (1)$$

The numerical value of the melting temperature T_m for BP compound was found as T_m = 2641.69 ± 300 K.

Unfortunately, the expression of Eq. (1) contains an error. The correct formula of the expression of Eq. (1) is given as follows [2-4]:

$$T_m = 553 + (591/\text{Mbar})\, C_{11} \pm 300\text{K} . \qquad (2)$$

So, using Eq. (2), the correct value of T_m for (B3) BP compound becomes T_m = 2661.69 ± 300K.

The authors would like to apologies for any inconvenience caused.

REFERENCES

1. S. Daoud, N. Bioud, L. Belagraa, N. Lebga, *J. Nano- Electron. Phys.* **5** No 4, 04061 (2013).
2. N. Bioud, X-W. Sun, S. Daoud, T. Song, A. Zaoui, R. Khenata, S. Bin-Omran, *Optik* **155**, 17 (2018).
3. S. Daoud, N. Bouarissa, A. Benmakhlouf, O. Allaoui, *phys. status solidi b* **257**, 1900537 (2020).
4. A. Benamrani, S. Daoud, P.K. Saini, *J. Nano- Electron. Phys.* **13** No 1, 01008 (2021).

* salah_daoud07@yahoo.fr

