

---

## On the acoustooptic efficiency of $\text{Pb}_2\text{P}_2\text{Se}_6$ crystals. Acoustic and thermal studies: Errata

<sup>1</sup>Mys O., <sup>1</sup>Martynyuk-Lototska I., <sup>1,2</sup>Kostruba A. M., <sup>3</sup>Grabar A. and <sup>1</sup>Vlokh R.

<sup>1</sup>Institute of Physical Optics, 23 Dragomanov Steet, 79005 Lviv, Ukraine, e-mail: vlokh@ifp.lviv.ua

<sup>2</sup>Lviv Academy of Commerce, 9 Samchuk Street, 79011 Lviv, Ukraine, e-mail: amkostr@lac.lviv.ua

<sup>3</sup>Institute for Solid State Physics and Chemistry, Uzhgorod National University, 54 Voloshyn Street, 88000 Uzhgorod, Ukraine, e-mail: inpcss@univ.uzhgorod.ua

**Received:** 25.09.2013

**Abstract.** We address the errors found in our article [Mys O, Martynyuk-Lototska I, Kostruba A M, Grabar A and Vlokh R, 2012. On the acoustooptic efficiency of  $\text{Pb}_2\text{P}_2\text{Se}_6$  crystals. Acoustic and thermal studies. Ukr. J. Phys. Opt. 13: 177–182].

**Keywords:** acoustooptic figure of merit, acoustic wave velocities, thermal expansion

**PACS:** 78.20.hb, 62.65.+k, 65.40.De

**UDC:** 535.42

We have found a number of technical errors appearing in the text of our recent article [1].

The captions of Fig. 1 and Fig. 2 should be written as follows: Fig. 1. Temperature dependences of relative elongations for the  $\text{Pb}_2\text{P}_2\text{Se}_6$  crystals measured along the principal crystallographic axes  $b$  (open triangles),  $a$  (open circles), and  $c$  (open squares); Fig. 2. Temperature dependences of thermal expansion coefficients for the  $\text{Pb}_2\text{P}_2\text{Se}_6$  crystals calculated for the principal crystallographic axes  $b$  (panel a,  $\alpha_{22}$ ),  $a$  (panel b,  $\alpha_{11}$ ), and  $c$  (panel c,  $\alpha_{33}$ ); solid lines are linear fits.

Page 179. The sentence “The lowest velocity ( $v_{5\bar{5}} = 1426 \pm 70$  m/s) is peculiar for the quasi-transverse wave that propagates along the  $[101]$  direction and has polarisation parallel to  $[\bar{1}01]$ ” should be read as “The lowest velocity ( $v_{4\bar{4}} = 1426 \pm 70$  m/s) is peculiar for the quasi-transverse wave that propagates along the  $[011]$  direction and has polarisation parallel to  $[0\bar{1}1]$ ”.

Line 11 in Table 1 should be read as follows:

$[011]$	$[0\bar{1}1]$	$1426 \pm 30$	–	2184
---------	---------------	---------------	---	------

Page 179. In the sentence “Their mean values are  $C_{22} = 43.59 \times 10^9$  N/m<sup>2</sup>,  $C_{66} = 23.37 \times 10^9$  N/m<sup>2</sup>,  $C_{44} = 14.88 \times 10^9$  N/m<sup>2</sup>, and  $C_{46} = 2.0 \times 10^9$  N/m<sup>2</sup>” the value of the coefficient  $C_{46}$  should be read as  $|C_{46}| = 2.0 \times 10^9$  N/m<sup>2</sup>.”

Page 180. The sentence “As already mentioned for the case of  $\text{Pb}_2\text{P}_2\text{Se}_6$ , here the slowest transverse acoustic wave propagates in the  $ac$  plane along the crystallographic direction  $[101]$  and has the polarisation parallel to  $[\bar{1}0\bar{1}]$ . The relevant acoustic wave velocity is equal to  $1426 \pm 30$  m/s” should be read as follows: “As already mentioned for the case of  $\text{Pb}_2\text{P}_2\text{Se}_6$ , here

the slowest transverse acoustic wave propagates in the  $bc$  plane along the crystallographic direction  $[011]$  and has the polarisation parallel to  $[0\bar{1}1]$ . The relevant acoustic wave velocity is equal to  $1426 \pm 30$  m/s”.

### References

1. Mys O, Martynyuk-Lototska I, Kostruba A M, Grabar A and Vlokh R, 2012. On the acoustooptic efficiency of  $Pb_2P_2Se_6$  crystals. Acoustic and thermal studies. Ukr. J. Phys. Opt. **13**: 177–182.

---

Mys O., Martynyuk-Lototska I., Kostruba A.M., Grabar A. and Vlokh R. 2013. On the acoustooptic efficiency of  $Pb_2P_2Se_6$  crystals. Acoustic and thermal studies: Errata. Ukr.J.Phys.Opt. **14**: 210 – 211.

*Анотація.* У нашій нещодавній статті [Mys O, Martynyuk-Lototska I, Kostruba A M, Grabar A and Vlokh R, 2012. On the acoustooptic efficiency of  $Pb_2P_2Se_6$  crystals. Acoustic and thermal studies. Ukr. J. Phys. Opt. **13**: 177–182] виявлені помилки, які виправлені у цій публікації.