

Erratum: Anharmonicity and Universal Response of Linear Carbon Chain Mechanical Properties under Hydrostatic Pressure [Phys. Rev. Lett. **125**, 105501 (2020)]

Keshav Sharma, Nathalia L. Costa, Yoong Ahm Kim, Hiroyuki Muramatsu, Newton M. Barbosa Neto,
Luiz G. P. Martins, Jing Kong, Alexandre Rocha Paschoal, and Paulo T. Araujo

(Received 3 January 2022; published 27 January 2022)

DOI: [10.1103/PhysRevLett.128.049901](https://doi.org/10.1103/PhysRevLett.128.049901)

The symbol % in the vertical axis' label [$\epsilon(\%)$] of Fig. 2(b) of this Letter is a typographical error and leads to a wrong evaluation of the strains obtained from the experiments. The correct label must read ϵ and the range of values from 0.00 to -0.03 must mean, in percentage, the range of values from 0 to -3% .

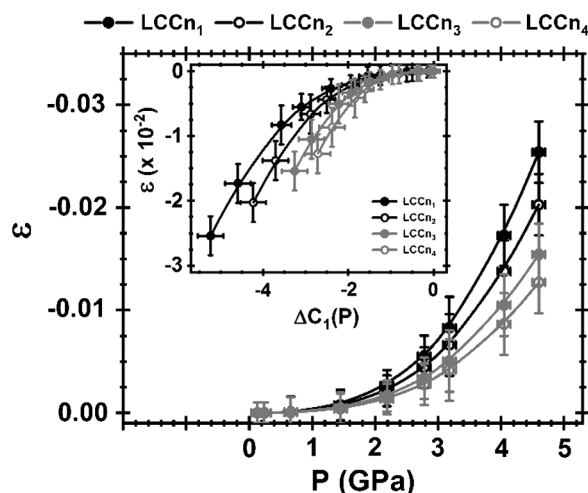


FIG. 2 (a) Young's modulus E , (b) strain ϵ , and (c) Grüneisen parameter γ as a function of P for each LCC. Both E and γ follow a P^{-1} universal law, while ϵ follows P^2 universal law. data (d) $(\Delta\omega/\omega)(E/\gamma) = -P$, an important parameter nanometrology, is universal and unified. (a)–(d) the solid lines are experimental data fittings. Insets: (a) shows the $E(P)$ vs P graphic enlarged to highlight the $P \rightarrow \infty$ limit. The horizontal dashed lines correspond to the values E (4.60 GPa) for each LLC. (b) shows the evolution of ϵ with relation to the relative changes of C_1 with increasing P . (c) shows the $\gamma(P)$ vs P graphic zoomed to highlight the $P \rightarrow \infty$ limit. The horizontal dashed lines correspond to the values of γ calculated with $E = 0.3$ TPa for each LCC [1]. The vertical dashed lines in (a) and (c) stand for $P_c = 0.1$ GPa.

[1] S. Kotrechko, I. Mikhailovskij, T. Mazilova, E. Sadanov, A. Timoshevskii, N. Stetsenko, and Y. Matviychuk, Mechanical properties of carbyne: Experiment and simulations, *Nanoscale Res. Lett.* **10**, 24 (2015).