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Author Correction: 3D hydrogen-like screening effect on excitons in hBN-encapsulated monolayer transition metal dichalcogenides

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Correction to: *Scientific Reports* <https://doi.org/10.1038/s41598-024-77625-x>, published online 8 November 2024

The original version of this Article contained an error in References 27, 28, 30, 45 and 57, which were incorrectly given as:

“27. Voigt, J., Spiegelberg, F. & Senoner, M. Band parameters of CdS and CdSe single crystals determined from optical exciton spectra. *Phys. Status Solidi* 91, 189–199 (1979).

28. Senger, R. T. & Bajaj, K. K. Binding energies of excitons in II-VI compound-semiconductor based quantum well structures. *Phys. Status Solidi Basic. Res.* 241, 1896–1900 (2004).

30. Yang, Z. et al. Unraveling the exciton binding energy and the dielectric constant in single-crystal methylammonium lead tri-iodide perovskite. *J. Phys. Chem. Lett.* 8, 1851–1855 (2017).

45. Bieniek, M., Sadecka, K., Szulakowska, L. & Hawrylak, P. Theory of excitons in atomically thin semiconductors: Tight-binding approach. *Nanomaterials* 12, 1584 (2022).

57. Wilson, N. P., Finley, J. J. & Dery, H. Breakdown of the static dielectric screening approximation of Coulomb interactions in atomically thin semiconductors. Preprint at [arXiv:2402.18639](https://arxiv.org/abs/2402.18639) (2024).”

The correct References are listed below:

“27. Voigt, J., Spiegelberg, F. & Senoner, M. Band parameters of CdS and CdSe single crystals determined from optical exciton spectra. *Phys. Status Solidi (b)* 91, 189–199 (1979).

28. Senger, R. T. & Bajaj, K. K. Binding energies of excitons in II-VI compound-semiconductor based quantum well structures. *Phys. Status Solidi (b)* 241, 1896–1900 (2004).

30. Yang, Z. et al. Unraveling the exciton binding energy and the dielectric constant in single-crystal methylammonium lead triiodide perovskite. *J. Phys. Chem. Lett.* 8, 1851–1855 (2017).

45. Bieniek, M., Sadecka, K., Szulakowska, L. & Hawrylak, P. Theory of excitons in atomically thin semiconductors: Tight-binding approach. *Nanomaterials* 12, 1582 (2022).

57. Mhenni, A. B. et al. Breakdown of the static dielectric screening approximation of Coulomb interactions in atomically thin semiconductors. Preprint at [arXiv:2402.18639](https://arxiv.org/abs/2402.18639) (2024).”

In addition, the legend of Table 1 contained an error in the spectral resolution.

As a result, the legend of Table 1

“The errors of the experimental values are determined by the spectral resolution (~6 meV) and the fitting error. The experimental data for 1L-WSe₂ are from our previous report²⁰.”

now reads,

“The errors of the experimental values are determined by the spectral resolution (~ 0.6 meV) and the fitting error. The experimental data for 1L-WSe₂ are from our previous report²⁰.”

The original Article has been corrected.

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