



## Author Correction: Design and characterization of electrons in a fractal geometry

S. N. Kempkes, M. R. Slot, S. E. Freeney, S. J. M. Zevenhuizen, D. Vanmaekelbergh, I. Swart  and C. Morais Smith 

Correction to: *Nature Physics* <https://doi.org/10.1038/s41567-018-0328-0>, published online 12 November 2018.

In the version of this Letter originally published, in Fig. 3, for the data point of the experimental wave function map at bias voltage  $-0.3$  V for the square lattice, a different bias voltage was erroneously used. This data point has now been removed. In addition, an error in the code used to determine the box-counting dimension of the wave function maps of the artificial electronic structures with a fractal geometry has been corrected. As a result, Fig. 3b has been split into Fig. 3b and c, to highlight how the choice of box size in the box-counting algorithm may affect the estimated effective dimension. The original and corrected versions of Fig. 3 are shown below. Accordingly, the caption has been amended, and the appropriate discussion in the main text, in the paragraph beginning “To determine whether...”, and the Methods has been updated to reflect the changes. Also, ref. 36 has been renumbered as ref. 31 and subsequent references updated.

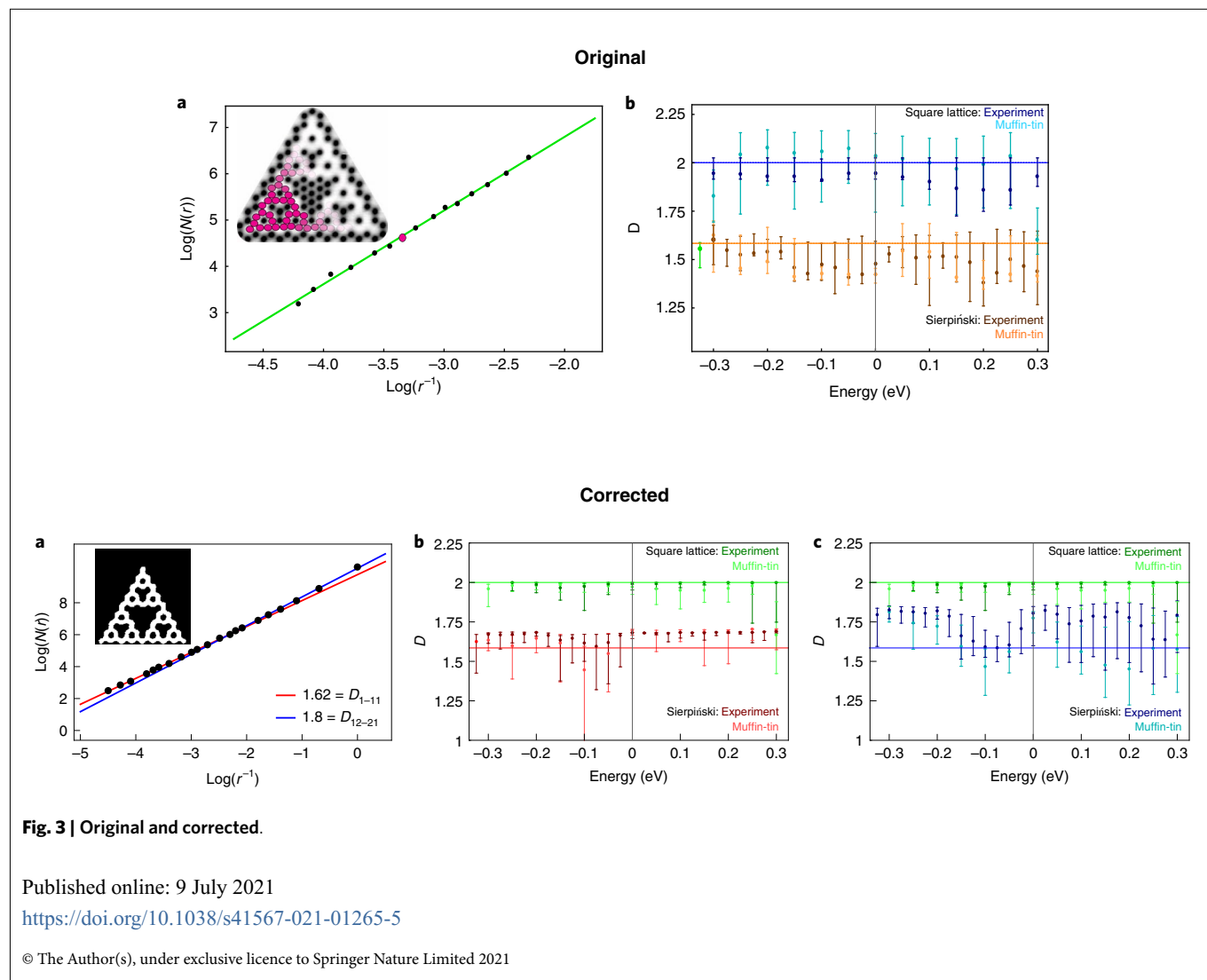
Further, the Data availability statement was “All data is available from the corresponding authors upon reasonable request. The experimental data can be accessed using open-source tools”. As the data that underpins the box-counting analysis is now publicly available, this has been changed to “The experimental and simulated images used in the box-counting analysis, as well as the code, have been published (<https://doi.org/10.24416/UU01-N90LX5>). The data can be accessed using open-source tools.”

Finally, in the Supplementary Information, in Section G, ‘Fractal dimension of the LDOS’, which describes extracting estimates of the dimension of the local density of states/differential conductance images, the following data have been added: a benchmark of the box-counting analysis on known systems (rectangle, triangle, mathematical Sierpiński triangle); the results of a detailed study on the influence of the box size and the use of masks on the extracted dimension; a minimum box-counting and skeleton analysis; and a scaling analysis, which is an independent method to estimate the dimension of an object in an image. In Section H, ‘Fourier analysis of the LDOS’, the box-counting analysis of the FFT is no longer included.

We thank G. C. P. van Miert for raising issues with reproducing our results and the box-counting analysis. The conclusions of the Letter are unaffected.

Furthermore, in the ‘Online content’ section in the PDF, the link ‘<https://doi.org/10.1038/s41567-018-0327-1>’ should have been ‘<https://doi.org/10.1038/s41567-018-0328-0>’.

The online versions of the Letter have been amended and the Supplementary Information file replaced.



## Author Correction: Maximum information states for coherent scattering measurements

Dorian Bouchet , Stefan Rotter  and Allard P. Mosk 

Correction to: *Nature Physics* <https://doi.org/10.1038/s41567-020-01137-4>; published online 21 January 2021.

In the Supplementary Information file originally published with this Letter, owing to a mistake in the derivative used to calculate equation (S11), the original version of this equation in Supplementary Information section S1.2 was incorrect. However, this did not affect the final result of the Fisher information given by equation (S18), which was stated correctly. Equation (S11) and all subsequent expressions affected by the mistake have now been corrected. The amended Supplementary Information file has now been uploaded to the Letter.

Published online: 22 June 2021

<https://doi.org/10.1038/s41567-021-01304-1>

© The Author(s), under exclusive licence to Springer Nature Limited 2021