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CORRECTION

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Correction: Nanoparticle binding attenuates the pathobiology of gastric cancer-associated *Helicobacter pylori*

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Correction for 'Nanoparticle binding attenuates the pathobiology of gastric cancer-associated *Helicobacter pylori*' by Dana Westmeier *et al.*, *Nanoscale*, 2018, **10**, 1453–1463.

The authors have discovered that in the previously published Fig. 2, the electron microscopy image in panel 2a was generated in collaboration with Prof. Gunzer's group, for which we did not receive written confirmation to be used in the paper. In the revised version of Fig. 2, the electron microscopy image in panel 2a has been replaced with an alternative image, also showing the assembly of Si NPs with different sizes onto *E. coli* by scanning electron microscopy.

Although this error does not affect the conclusions and findings of this research paper, the authors sincerely apologize for the error and any confusion caused.

Please find below the corrected version of Fig. 2 below.

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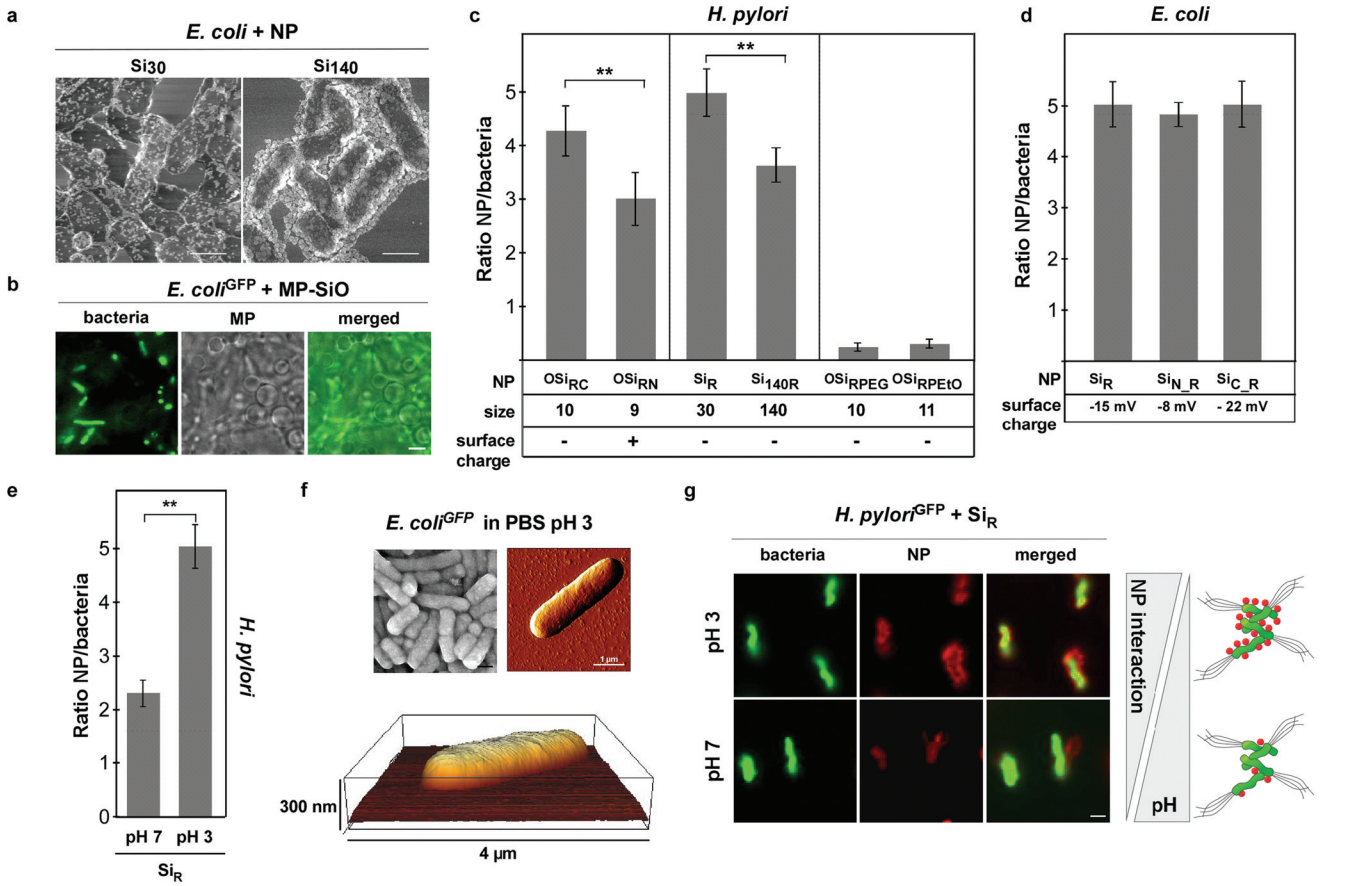

Fig. 2 NPs' physico-chemical characteristics and environmental conditions affect complex formation. a–d. NP size, charge, and stealth modification affects NP–bacteria assembly. a. SEM visualizing assembly of Si NPs with different sizes onto *E. coli*. Exposure: 10 min in PBS. Scale bars 1 µm. b. Fluorescence microscopy demonstrates that MP-SiO does not interact with bacteria. Scale bar, 2 µm. c. Quantification of NP (red)–*H. pylori* (green) interaction by automated microscopy. Reduced binding was observed for positively (OSi_{RN}; ζ = +24 mV) *versus* negatively (OSi_{RC}; ζ = −32 mV) charged polymer NPs. Compared to small Si_R (∅ ~ 30 nm), larger silica Si_{140R} (∅ ~ 140 nm) displayed reduced binding. The stealth modification of polymer NPs (OSi_{RPEG}/OSi_{RPEtO}) reduced binding. The assays were performed in triplicate. Columns show the mean ± s.d. from three independent experiments. d. Fluorescence-based automated quantification of complex formation revealed no significantly improved binding for less negatively charged Si NPs (Table 1). The data are representatives of two independent experiments. e–g. Low pH enhances NP–bacteria complex formation. e. Quantification of Si_R (red)–*H. pylori* (green) complex formation by automated microscopy at the indicated pH. A minimum of 1000 NP–bacteria complexes per well was analyzed for green and red fluorescence using the TargetActivation assay. Columns show the mean ± s.d. from three independent experiments. The assays were performed in triplicate. f. SEM and AFM revealed no structural damage of the bacterial surface topology after acidic exposure. Scale bar 1 µm. g. Bacteria were incubated with Si_R at pH 7 in PBS or pH 3 in artificial gastric juice, and analyzed by live cell microscopy. The NP–bacteria complex formation increased with low pH. Scale bar 2 µm. All images are representative of three independent experiments.

Furthermore, we wish to acknowledge the intellectual support received from Prof. Gunzer's group during the study. Hence, the acknowledgements section should therefore have read as follows:

Acknowledgements

We wish to acknowledge the intellectual support received from Prof. Gunzer's group and the Mainz imaging facility during the study.

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.