



Corrigendum to “Point-of-care testing for lysine concentration in swine serum via blue-emissive carbon dots entrapped microfluidic chip” [Animal Nutrition 12 (2023) 236–244]



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Section 2.1:

Animal ethics approval number: **HZAUSW-2002–0009**

Change to: **HZAUSW-2022–0011**

Section 2.6:

... 200 μL solution of N-CDs (**0.1 mg/mL**) ...

Change to: ... 200 μL solution of N-CDs (**1.5 mg/mL**) ...

Section 3.1:

... with the size ranging **from 4 to 8 nm** ...

Change to: ... with the size ranging **from 2 to 7 nm** ...

Section 3.1:

... 2 distinct absorption peaks at **240 and 281 nm**, ... the $n\text{-}\pi^*$ transitions of **C–N bonds** ...

Change to: ... 2 distinct absorption peaks at **256 and 339 nm**, ... the $n\text{-}\pi^*$ transitions of **C=O groups** ...

Section 3.1:

... **1,790 to 1,365 cm^{-1}** (C=O and COOH stretching vibration) and **1080 cm^{-1}** (**C–O–C stretching vibration**) ...

Change to: ... **1,790 to 1540 cm^{-1}** (C=O and COOH stretching vibration) and **1400 to 1000 cm^{-1}** (**C–N, C–O, and C–O–C stretching vibration**) ...

Section 3.1:

... a broad peak at **22.6°**, corresponding to a d -spacing of **3.93 Å** ...

Change to: ... a broad peak at **31.7°**, corresponding to a d -spacing of **2.82 Å** ...

Section 3.1:

... mainly contained **4 elements: C, O, N and Zn. A small amount of Cl element was also observed.** The element contents of **C, O, N and Zn** determined by XPS were **68.05% (wt/wt), 20.82% (wt/wt), 7.63% (wt/wt) and 3.51% (wt/wt)**, respectively ...

Change to: ... mainly contained **3 elements: C, O, and N.** The element contents of **C, O, and N** determined by XPS were **73.64% (wt/wt), 22.99% (wt/wt), and 3.37% (wt/wt)**, respectively ...

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Section 3.2:

... ($I/I_0 = 0.00458C_{Lys} + 1.01319$, $R^2 = 0.99693$) ... $\lambda_{em} = 436 \text{ nm}$... $1.7 \mu\text{mol/L}$ based on $3\delta_{blank}$...

Change to: ... ($I/I_0 = 0.00131C_{Lys} + 1.01175$, $R^2 = 0.9923$) ... $\lambda_{em} = 459 \text{ nm}$... $2.25 \mu\text{mol/L}$ based on $3\delta_{blank}$...

Section 3.2:

... **24.8% and 34.8%** before and after addition of $100 \mu\text{mol/L}$ lysine with excitation at **380 nm** ...

Change to: ... **8.2% and 9.1%** before and after addition of $100 \mu\text{mol/L}$ lysine with excitation at **370 nm** ...

Section 3.3:

... ($I/I_0 = 0.00471C_{Lys} + 1.01184$, $R^2 = 0.99546$) ...

Change to: ... ($I/I_0 = 0.00471C_{Lys} + 1.01184$, $R^2 = 0.9955$) ...

Section 3.4:

... ($I/I_0 = 0.00455C_{Lys} + 1.01985$, $R^2 = 0.99537$) ...

Change to: ... ($I/I_0 = 0.00455C_{Lys} + 1.01985$, $R^2 = 0.9954$) ...

Section 4:

... LOD of **1.7 $\mu\text{mol/L}$** ...

Change to: ... LOD of **2.25 $\mu\text{mol/L}$** ...

Fig. 2 and caption:

Change to:

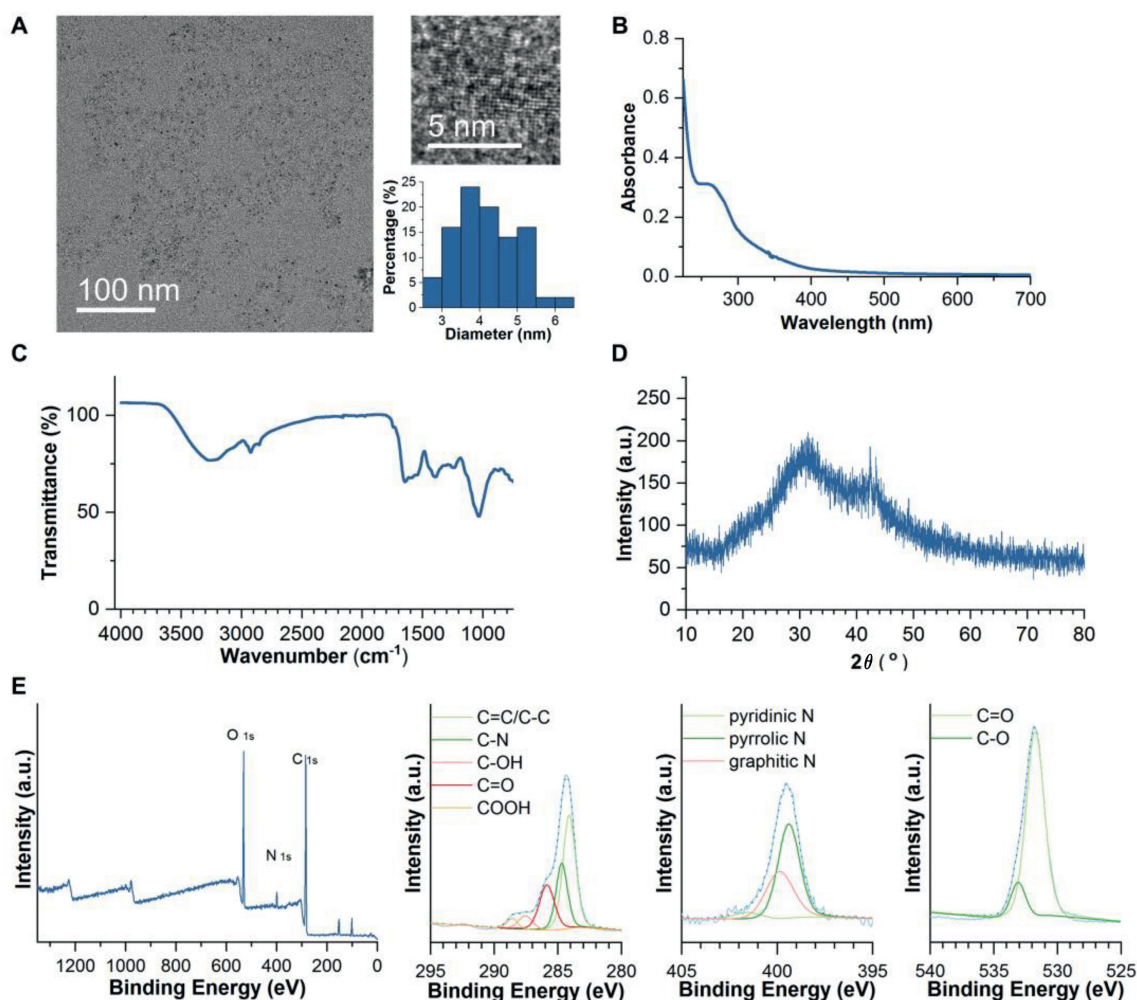


Fig. 2. Structural characterization of nitrogen-doped carbon dots (N-CDs). (A) Transmission electron microscopy (TEM), high-resolution TEM (HRTEM) images, and particle-size distribution for N-CDs. (B) Ultraviolet-visible (UV-vis) absorption spectrum. (C) Fourier transform infrared (FTIR) spectrum. (D) X-ray power diffraction (XRD) pattern ($2\theta = 31.7^\circ$, d-spacing = 2.82 Å). (E) X-ray photoelectron spectroscopy (XPS) survey and deconvoluted high-resolution XPS spectra of C 1s, N 1s, and O 1s for N-CDs.

Fig. 3 and caption:
Change to:

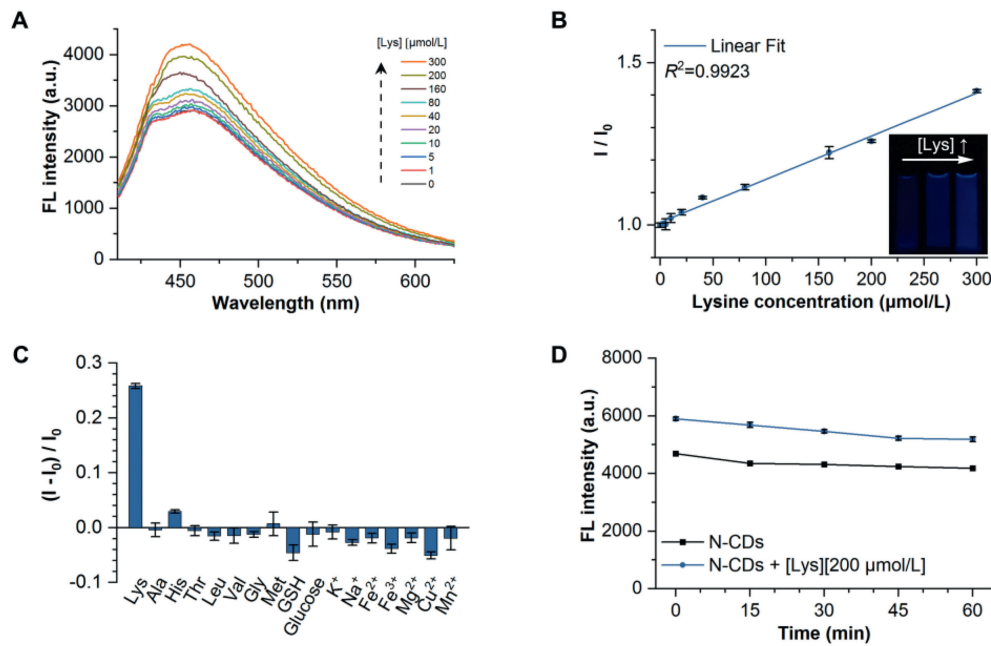


Fig. 3. Optical response of nitrogen-doped carbon dots (N-CDs) for lysine detection. (A) Fluorescence emission spectra of N-CDs in the presence of different concentration of lysine ($\lambda_{\text{ex}} = 370 \text{ nm}$). (B) Linear fitting curve of the relative light intensity (I/I_0) versus the concentration of lysine ($\lambda_{\text{em}} = 459 \text{ nm}$) and image of N-CDs solution under 365 nm UV irradiation. (C) Fluorescence response I/I_0 in the presence of different analytes ($\lambda_{\text{ex}} = 370 \text{ nm}$, $\lambda_{\text{em}} = 459 \text{ nm}$). (D) Fluorescence stability under UV illumination. FL = fluorescence; a.u. = arbitrary units; GSH = glutathione.

Fig. 5
Change to:

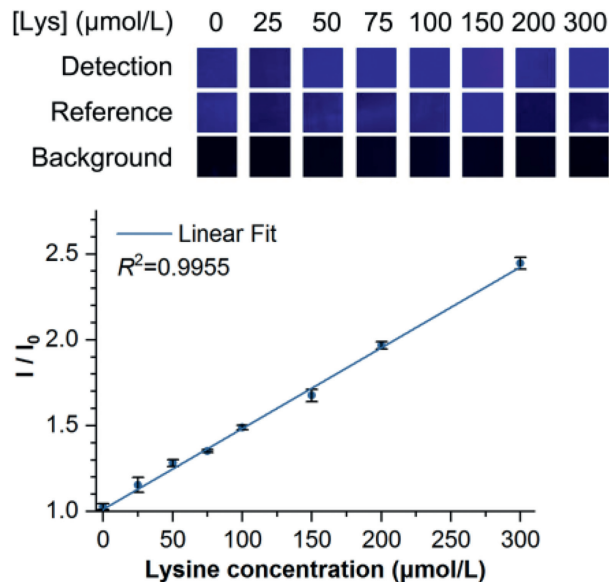
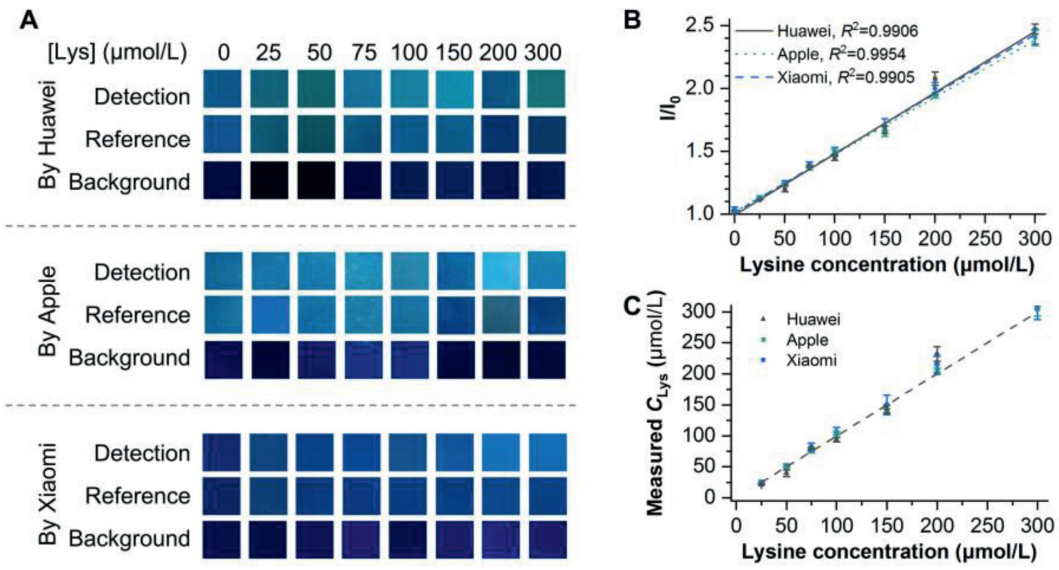


Fig. 7
Change to:



The authors would like to apologise for any inconvenience caused.