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Correction: Bridging colloidal and electrochemical syntheses of metal nanocrystals with seeded electrodeposition for tracking single nanocrystal growth

 Ekta Verma,^a Myung-Hoon Choi,^b Nabojit Kar,^a Lane A. Baker^b and Sara E. Skrabalak^{*a}

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 Correction for 'Bridging colloidal and electrochemical syntheses of metal nanocrystals with seeded electrodeposition for tracking single nanocrystal growth' by Ekta Verma *et al.*, *Nanoscale*, 2024, **16**, 8002–8012, <https://doi.org/10.1039/D4NR00202D>.

The authors regret the inclusion of a typographical error in the Experimental section of the article where the amount of $\text{HAuCl}_4 \cdot 3\text{H}_2\text{O}$ was mistakenly stated as 1 mg instead of 99.1 mg. Additionally, there were some errors in the captions for Fig. S23, S24 and S25 within the ESI, which has now been updated. The correct values are as below, and the authors confirm these changes do not affect the main conclusions of the paper.

Main article change:

2.2.2. Methods *Synthesis of sodium gold(i) sulfite*

The method developed by Dietz Jr. *et al.* was followed to synthesize sodium gold(i) sulfite.¹ 99.1 mg of $\text{HAuCl}_4 \cdot 3\text{H}_2\text{O}$ was added to 5 ml of nanopure water, and 88.6 mg of finely divided magnesium oxide was added. The pH of the solution was adjusted to 8.3 by adding 1 M HCl dropwise and stirred at 65 °C for 5 min. Further, the temperature was increased to 100 °C for 15 min. The color of the solution became orange, and it was allowed to cool for 2 min. The supernatant was removed after centrifugation of the solution at $\sim 7000g$ for 5 min. After centrifugation, the pellet was rinsed with water once, and transferred by spatula to a round-bottom flask containing 187.5 mg of sodium sulfite solution. The sodium sulfite solution with pellet was mixed with stirring and heated on a heating mantle at 74 °C for 10 min. The color of the above solution changed from orange to clear. After that, the solid was removed by centrifugation at $\sim 7000g$ for 5 min and the supernatant sodium gold(i) sulfite solution was collected and stored in a vial.

^aDepartment of Chemistry, Indiana University – Bloomington, Bloomington, Indiana, USA. E-mail: sskrabal@indiana.edu

^bDepartment of Chemistry, Texas A&M University, College Station, Texas, USA


A fraction of the sodium gold(i) sulfite solution was concentrated by quantitative methods and digested in aqua regia to measure the Au content. The solution was analyzed from the liquid-phase on an Agilent 770 ICP-MS at the Indiana University Department of Earth and Atmospheric Sciences. ICP-MS measured an Au concentration of 82.92 μM for the sodium gold(i) sulfite solution.

ESI changes:

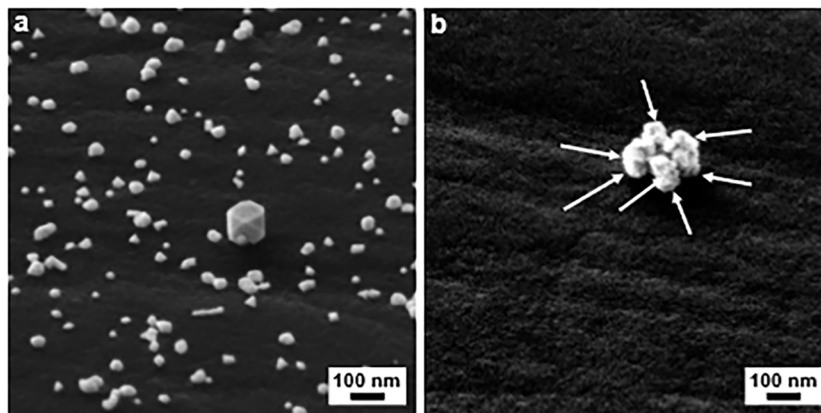


Fig. S23. SEM images of electrodeposited product obtained at (a) $-1.175\text{ V vs. Ag/AgCl}$ for 10 min in $3.5\ \mu\text{M Na}_3\text{Au(SO}_3)_2$ and $0.32\ \text{M Na}_2\text{SO}_3$ electrolyte and (b) $-0.775\text{ V vs. Ag/AgCl}$ for 10 min in $0.35\ \mu\text{M Na}_3\text{Au(SO}_3)_2$ and $0.32\ \text{M Na}_2\text{SO}_3$ electrolyte. The GCE was tilted by 54 degrees from right to left. The arrows in (b) are added to guide the reader's attention to seven regions of deposition.

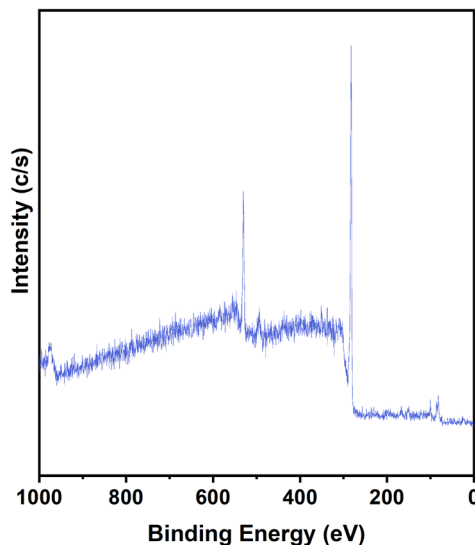


Fig. S24. XPS survey spectrum of corner-deposited Au nanocubes obtained for electrodeposited product at $-0.775\text{ V vs. Ag/AgCl}$ for 10 min in $0.35\ \mu\text{M Na}_3\text{Au(SO}_3)_2$ and $0.32\ \text{M Na}_2\text{SO}_3$ electrolyte indicating the observed element.



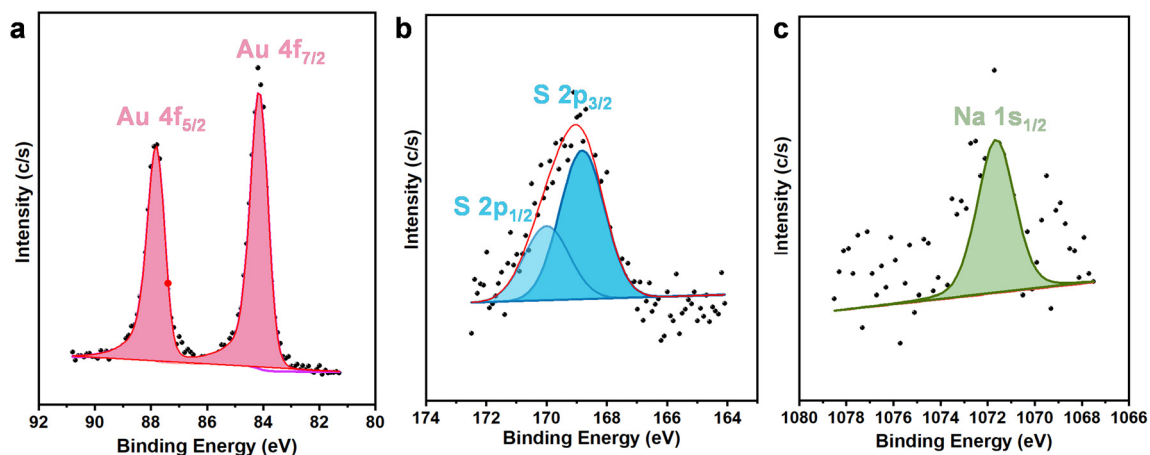


Fig. S25. High resolution XPS spectra of the (a) Au 4f, (b) S 2p (c) Na 1s spectral regions for Au corner-deposited product obtained at -0.775 V vs. Ag/AgCl for 10 min in $0.35 \mu\text{M Na}_3\text{Au}(\text{SO}_3)_2$ and 0.32 M Na_2SO_3 electrolyte. XPS analysis confirms the oxidation states of 0, 4+, and 1+ for Au, S and Na, respectively.

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

References

- 1 G. Dietz Jr., R. M. Skomoroski and R. G. Zoppi, United States, US3966880A, 1976.

