

Supporting information

Study of TiO_2 Surface Modification Effect on Size and Intensity Ratio of Au_9 Nanoclusters by XPS Analysis

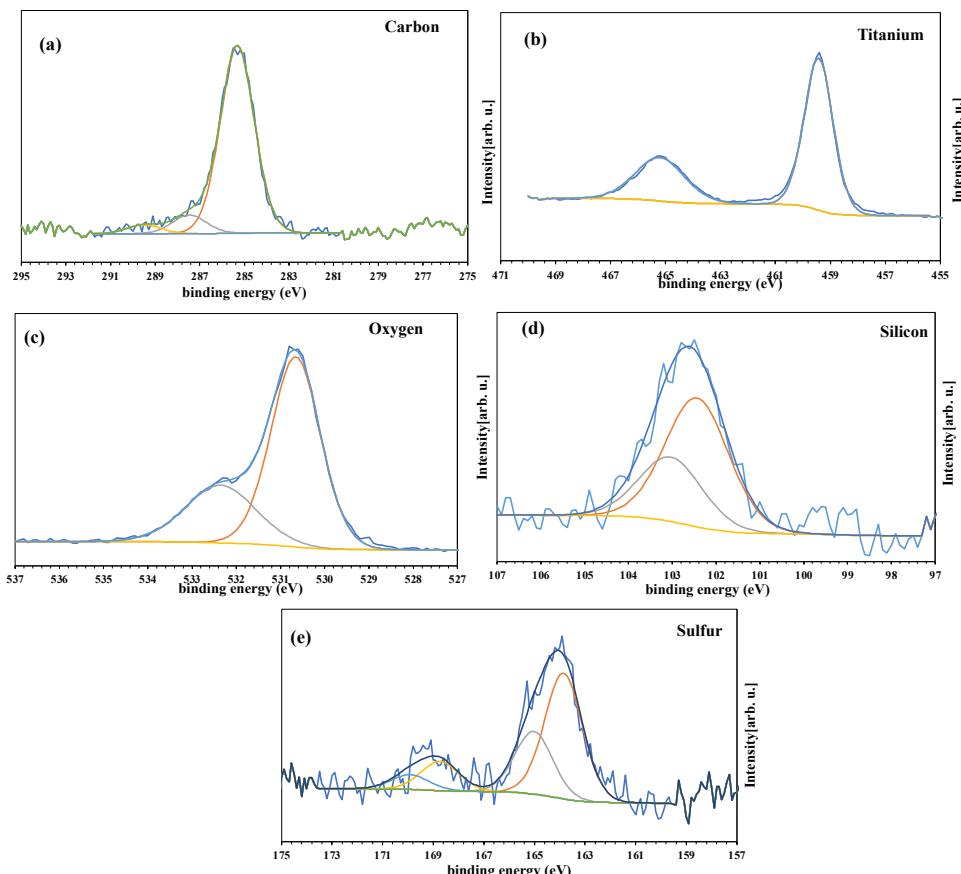
Anahita Motamedisade,^a Martin R. Johnston,^a Amjad E.H. Alotaibi,^a Gunther Andersson*^a

a. Institute for Nanoscale Science and Technology, Flinders University, Adelaide 5042, Australia
E-mail: gunther.andersson@flinders.edu.au, mota0010@flinders.edu.au

Table S1. Assessment of intensity ratio of Si, and S grafted on the surface of MTiO₂. The intensity of

Si and S are 3.70 and 2.80 %, respectively.

Elements	Ralative intensity (%)
C	21.8
O	59.0
Sn	0.7
Ti	18.5
S	2.8
Si	3.7



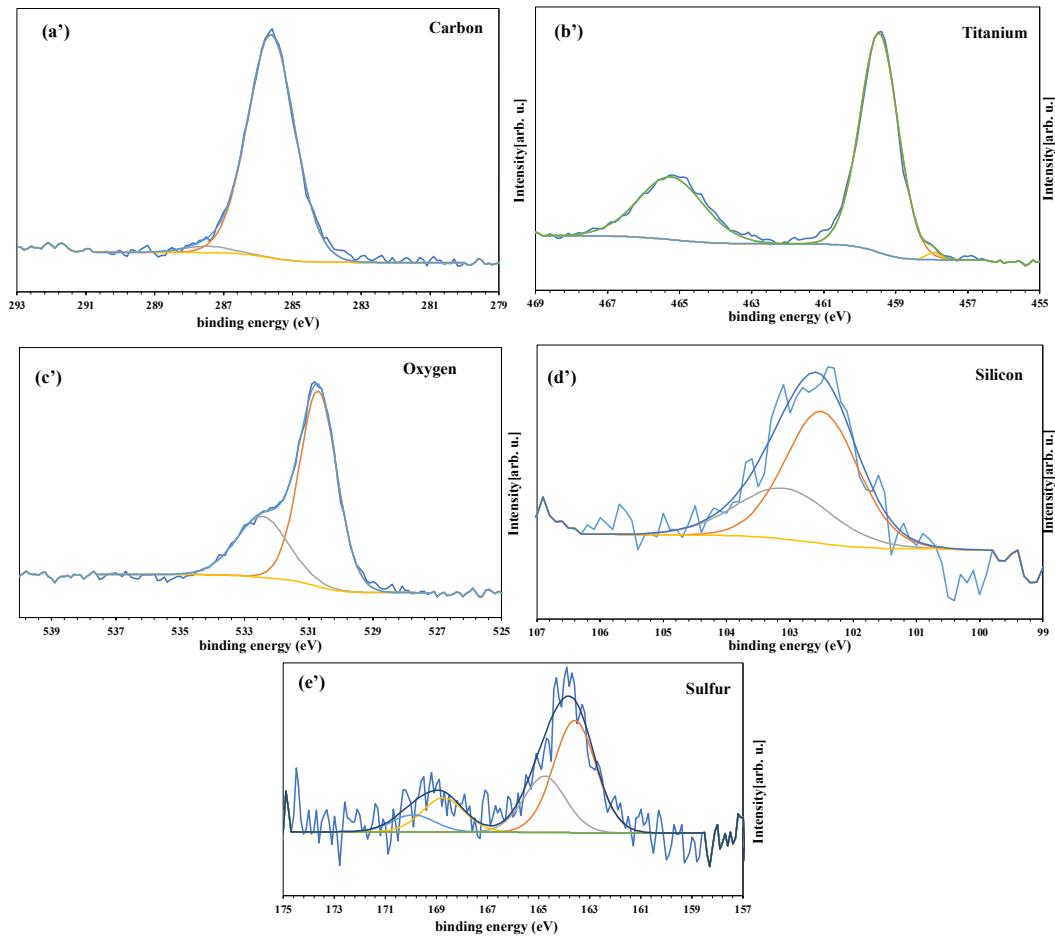


Figure S1. XPS High resolution of (a) C1s, (b) Ti2p, (c) O1s, (d) Si2p, and (e) S2p for $\text{Au}_9\text{NCs}/\text{SMTiO}_2$ after deposition and (a') C1s, (b') Ti2p, (c') O1s, (d') Si2p, and (e') S2p for annealed $\text{Au}_9\text{NCs}/\text{SMTiO}_2$ nanocomposites.

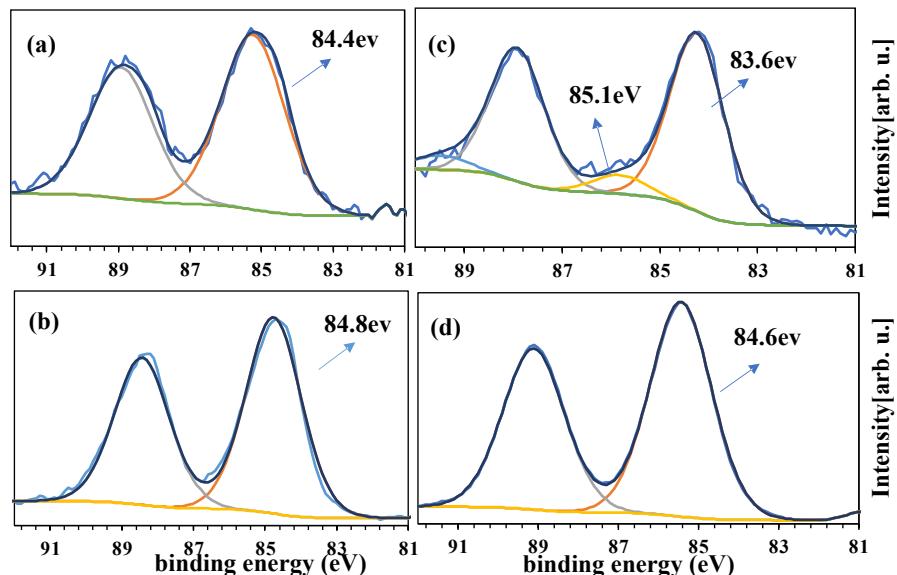


Figure S2. XPS High resolution of Au4f after deposition process of Au₉ NCs on (a) MTiO₂ film (b) SMTiO₂ film and after annealing process of (c) Au₉/MTiO₂ (d) Au₉/SMTiO₂ films.