

CORRECTION

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Correction: Au@PdO_x with a PdO_x-rich shell and Au-rich core embedded in Co₃O₄ nanorods for catalytic combustion of methane

Nating Yang,^{a,b} Jingwei Liu,^a Yuhua Sun^{a,c} and Yan Zhu^{*a,c}Correction for 'Au@PdO_x with a PdO_x-rich shell and Au-rich core embedded in Co₃O₄ nanorods for catalytic combustion of methane' by Yan Zhu *et al.*, *Nanoscale*, 2017, **9**, 2123–2128.

The authors regret that the units provided for the reaction rate and TOF of the catalysts were misdescribed due to the '%' of methane conversion being omitted in the calculations. The units provided for the reaction rate and TOF of the catalysts in Fig. 2B, Table 1, Tables S1 and S2, and Fig. S8B therefore all need to be multiplied by 10⁻². As an example, a revised version of Fig. 2B is provided below, with the corrected units highlighted in red.

We would like to state that the changes do not affect the overall conclusions of the original manuscript, as all of the units for the reaction rates and TOFs in the manuscript were corrected at the same time. Moreover, we compared the catalytic

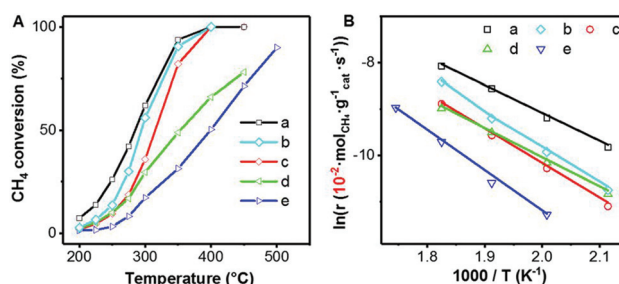


Fig. 2 (A) Methane conversion versus temperatures and (B) ln(rate) – 1/T plots for CH₄ combustion over (a) Au@PdO_x (1 : 5)/Co₃O₄, (b) AuPd (1 : 5)/Co₃O₄, (c) Pd/Co₃O₄, (d) Au/Co₃O₄ and (e) Co₃O₄ respectively.

Table C1 Catalytic performances of catalysts developed for lean methane oxidation reported in our work and in the literature. The data given in the table correspond to the Au and Pd weight loading of the samples, reaction conditions, reaction rate (*r*) (calculated using the weight of the catalysts) at 250 °C, and *T*₉₀.

Catalysts	Pd content (wt%)	Au content (wt%)	Feed composition	Space velocity (mL g ⁻¹ h ⁻¹)	<i>r</i> (10 ⁻² μmol g ⁻¹ s ⁻¹)	<i>T</i> ₉₀ (°C)	Note
Au@PdO _x (1 : 5)/Co ₃ O ₄	2.44	0.49	1% CH ₄ and 10% O ₂ in N ₂	60 000	194	344	This work
AuPd (1 : 5)/Co ₃ O ₄	2.44	0.49			101	350	
Pd/Co ₃ O ₄	2.45	0			70	372	
Au/Co ₃ O ₄	—	2.79			75	>450	
Pd/Co ₃ O ₄	2.00	—	2% CH ₄ in air	24 000	112.7	272	1
Pd/Co ₃ O ₄	5.00	—	2% CH ₄ in air	24 000	519.4	248	1
Au/Co ₃ O ₄	—	10.0	0.3% CH ₄ and 2.4% O ₂ in He	60 000	33.7	~475	2
Pd/SnO ₂ on ceramic monolith	8.70	—	1% CH ₄ in air	41 000 h ⁻¹	~544.3	~320	3
Pd/Sn _{0.4} Zr _{0.6} O ₂	2.00	—	1% CH ₄ in air	33 000	~16.4	378	4

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performances of the catalysts reported in our work with those reported in the literature (Table C1), and we found that the activities of our catalysts are better than or comparable with those of the reported catalysts.

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

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