

CORRECTION

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Correction: Necessary and sufficient conditions for the successful three-phase photocatalytic reduction of CO₂ by H₂O over heterogeneous photocatalysts

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Correction for 'Necessary and sufficient conditions for the successful three-phase photocatalytic reduction of CO₂ by H₂O over heterogeneous photocatalysts' by Kentaro Teramura *et al.*, *Phys. Chem. Chem. Phys.*, 2018, **20**, 8423–8431.

The authors would like to make the following corrections to their published article:

(1) On page 8424, eqn (5), H₂O should be changed to 2H₂O as shown in the amended equation below:



(2) On page 8426, line 2 in the right column, the sentence should be amended as follows:

Very recently, we also discovered that the modification of Ga₂O₃ with Zn species suppresses the evolution of H₂ and does not change the formation rate of CO.

(3) The references in Table 1 on page 8426 should be corrected as shown in the revised Table 1 below:

Table 1 Summary of photocatalysts tested for the photocatalytic reduction of CO₂ by H₂O in our research group. Ag co-catalyst loading: 0.25–1.0 wt%; light source: 400 W high-pressure Hg lamp; water volume: 1.0 L; CO₂ flow rate: 30 mL min⁻¹; additive: 0.1 M NaHCO₃

Photocatalyst	Cat. weight/g	Rate of gas evolved/μmol h ⁻¹					e ⁻ /h ⁺	Ref.
		H ₂	O ₂	CO	Conv. of CO ₂ (%)	Selec. to CO (%)		
Ag/ZnGa ₂ O ₄ /Ga ₂ O ₃	1.0	16.9	70.1	117.0	0.16	87.4	0.96	33 and 73
Ag/La ₂ Ti ₂ O ₇	1.0	4.9	5.3	5.2	0.01	51.5	0.95	74
Ag/SrO/Ta ₂ O ₅	1.0	3.8	5.1	6.8	0.01	64.2	1.04	75
Ag/ZnGa ₂ O ₄	1.0	7.8	78.3	147	0.20	95.0	0.99	37
Ag/ZnTa ₂ O ₆	0.5	22.3	20.0	21.9	0.03	49.5	1.11	76
Ag/Sr ₂ KTa ₅ O ₁₅	1.0	8.3	34.3	65.5	0.09	88.8	1.08	77
Ag/SrNb ₂ O ₆	0.5	1.1	24.8	51.2	0.07	97.9	1.05	46
Ag/Mg-Al LDH/Ga ₂ O ₃	1.0	131	167	212	0.29	61.7	1.03	78
Ag/Pr/Ga ₂ O ₃	0.5	64.7	150	249	0.34	79.4	1.04	79
Ag/K ₂ YTa ₅ O ₁₅	1.0	16.2	43.2	91.9	0.13	85.0	1.25	80
Ag/Sr _{1.6} K _{0.37} Na _{1.43} Ta ₅ O ₁₅	1.0	16.0	53.7	94.6	0.13	85.5	1.03	81
Ag/Yb-Zn/Ga ₂ O ₃	0.5	37.6	103	150	0.21	80.0	0.91	82
Ag-Cr/Ga ₂ O ₃	0.5	92.9	281	480	0.66	83.8	1.02	83

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

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