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CORRECTION

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Correction: Necessary and sufficient conditions for the successful three-phase photocatalytic reduction of CO_2 by H_2O over heterogeneous photocatalysts

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Correction for 'Necessary and sufficient conditions for the successful three-phase photocatalytic reduction of CO_2 by H_2O 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), H_2O should be changed to $2H_2O$ as shown in the amended equation below:

$$CO_2 + 8H^+ + 8e^- \rightleftharpoons CH_4 + 2H_2O \quad (5)$$

(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 Ga_2O_3 with Zn species suppresses the evolution of H_2 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 CO_2 by H_2O 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; CO_2 flow rate: 30 mL min^{-1}; additive: 0.1 M $NaHCO_3$

		Rate of gas evolved/μmol h^{-1}						
Photocatalyst	Cat. weight/g	H_2	O_2	CO	Conv. of CO_2 (%)	Selec. to CO (%)	e^-/h^+	Ref.
$Ag/ZnGa_2O_4/Ga_2O_3$	1.0	16.9	70.1	117.0	0.16	87.4	0.96	**33 and 73**
$Ag/La_2Ti_2O_7$	1.0	4.9	5.3	5.2	0.01	51.5	0.95	**74**
$Ag/SrO/Ta_2O_5$	1.0	3.8	5.1	6.8	0.01	64.2	1.04	**75**
$Ag/ZnGa_2O_4$	1.0	7.8	78.3	147	0.20	95.0	0.99	**37**
$Ag/ZnTa_2O_6$	0.5	22.3	20.0	21.9	0.03	49.5	1.11	**76**
$Ag/Sr_2KTa_5O_{15}$	1.0	8.3	34.3	65.5	0.09	88.8	1.08	**77**
$Ag/SrNb_2O_6$	0.5	1.1	24.8	51.2	0.07	97.9	1.05	**46**
Ag/Mg–Al LDH/Ga_2O_3	1.0	131	167	212	0.29	61.7	1.03	**78**
$Ag/Pr/Ga_2O_3$	0.5	64.7	150	249	0.34	79.4	1.04	**79**
$Ag/K_2YTa_5O_{15}$	1.0	16.2	43.2	91.9	0.13	85.0	1.25	**80**
$Ag/Sr_{1.6}K_{0.37}Na_{1.43}Ta_5O_{15}$	1.0	16.0	53.7	94.6	0.13	85.5	1.03	**81**
$Ag/Yb–Zn/Ga_2O_3$	0.5	37.6	103	150	0.21	80.0	0.91	**82**
$Ag–Cr/Ga_2O_3$	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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