











<https://doi.org/10.1038/s41467-021-25869-w>

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Author Correction: Spin-controlled generation of indistinguishable and distinguishable photons from silicon vacancy centres in silicon carbide

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Correction to: *Nature Communications* <https://doi.org/10.1038/s41467-020-16330-5>, published online 20 May 2020.

The original version of this Article contained an error in Supplementary Eq. (8), and incorrectly read:

$$V = \frac{1}{(1 - \varepsilon)^2} \left[\left\{ \left(\frac{\text{SN} + 1}{\text{SN}} \right)^2 \alpha_2 + \frac{2\alpha_1}{\text{SN}} \right\} - (1 - V_0) \left\{ \left(\frac{\text{SN} + 1}{\text{SN}} \right)^2 \alpha_1 + \frac{2\alpha_2}{\text{SN}} \right\} \right]$$

The correct form of Supplementary Eq. (8) is:

$$V = \frac{1}{(1 - \varepsilon)^2} \left[\left\{ \left(\frac{\text{SN} + 1}{\text{SN}} \right)^2 \alpha_2 + \frac{4\alpha_1}{\text{SN}} \right\} - (1 - V_0) \left\{ \left(\frac{\text{SN} + 1}{\text{SN}} \right)^2 \alpha_1 + \frac{2\alpha_2}{\text{SN}} \right\} \right]$$

The original version of this Article contained an error in Supplementary Eq. (11), and incorrectly read:

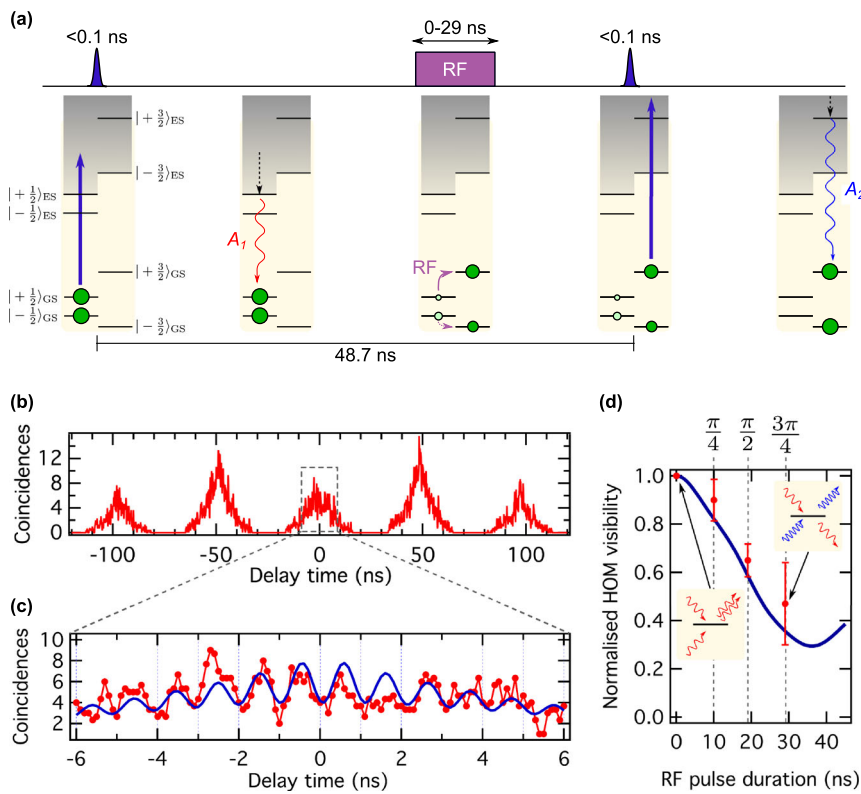
$$V = \frac{1}{(1 - \varepsilon)^2 \beta_{\text{jitter}}} \left[\left\{ \left(\frac{\text{SN} + 1}{\text{SN}} \right)^2 \alpha_2 + \frac{2\alpha_1}{\text{SN}} \right\} - (1 - V_0) \left\{ \left(\frac{\text{SN} + 1}{\text{SN}} \right)^2 \alpha_1 + \frac{2\alpha_2}{\text{SN}} \right\} \right]$$

The correct form of Supplementary Eq. (11) is:

$$V = \frac{1}{(1 - \varepsilon)^2 \beta_{\text{jitter}}} \left[\left\{ \left(\frac{\text{SN} + 1}{\text{SN}} \right)^2 \alpha_2 + \frac{4\alpha_1}{\text{SN}} \right\} - (1 - V_0) \left\{ \left(\frac{\text{SN} + 1}{\text{SN}} \right)^2 \alpha_1 + \frac{2\alpha_2}{\text{SN}} \right\} \right]$$

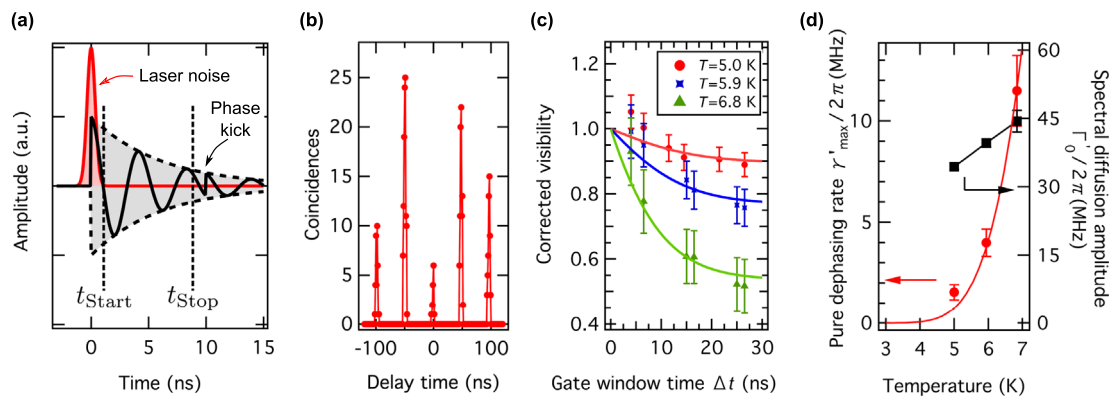
As a result of the errors identified in Supplementary Eqs. (8) and (11), the original version of this Article contained an error in Figs. 3 and 4, and Supplementary Fig. 4.

The correct version of Fig. 3 is:



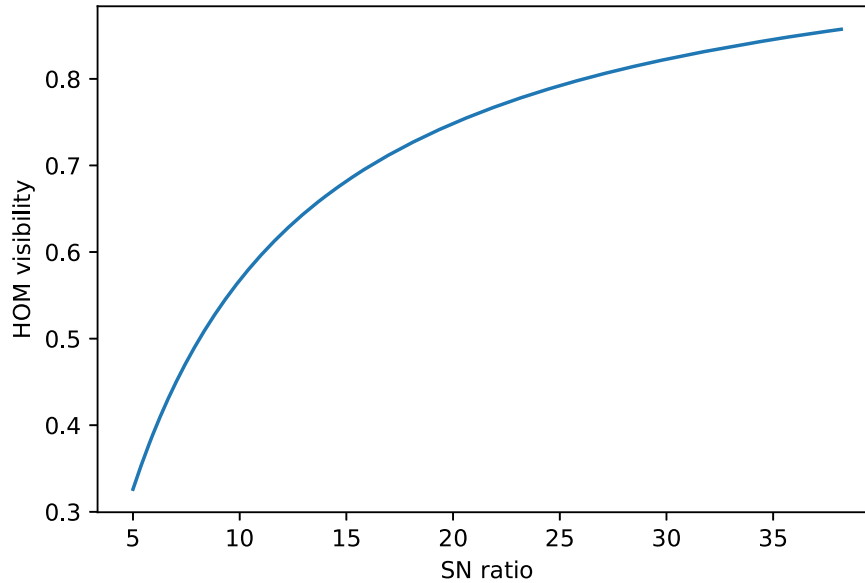
Which replaces the previous incorrect version.

The correct version of Fig. 4 is:



Which replaces the previous incorrect version.

The correct version of Supplementary Fig. 4 is:



which replaces the previous incorrect version.

As a result of the errors identified in Supplementary Eqs. (8) and (11), the original version of the Supplementary Information contained an error in Supplementary Table 1. The correct version of Supplementary Table 1 is:

Temperature [K]	PLE linewidth [MHz]	Pure dephasing limited		Spectral diffusion limited	
		$\gamma'_{\max}/2\pi$ [MHz]	$\Gamma'_0/2\pi$ [MHz]	$\Gamma'_{0,\max}/2\pi$ [MHz]	$\tau_{c,\min}$ [ns]
5.0	62.4 ± 0.4	1.5 ± 0.4	34.4 ± 0.5	35.9 ± 0.4	109 ± 8
5.9	70.1 ± 0.3	4.0 ± 0.7	39.6 ± 0.7	43.6 ± 0.3	81 ± 6
6.8	82.4 ± 0.3	11.5 ± 1.7	44.4 ± 1.8	55.9 ± 0.3	51 ± 6

,which replaces the previous incorrect version.

As a result of the errors identified in Supplementary Eqs. (8) and (11), the original version of the Article contained the errors listed in the second column of the table below.

The corrected values (listed in the third column) have been corrected both in the PDF and HTML versions of the Article.

Position in the Article	Wrong items	Corrected items
Introduction	... a naturally stable spin-photon interface at temperatures up to 6.6 K	... a naturally stable spin-photon interface at temperatures up to 6.9 K
Results, Spin-controlled distinguishable photon generation	$V_{\max} = 0.65 \pm 0.05$ $V_{\text{norm},\pi/2} = \frac{V_{\text{measured}}}{V_{\max}} = 0.61 \pm 0.10$ $V_{\text{norm},\pi/4} = 0.89 \pm 0.10$ $V_{\text{norm},3\pi/4} = 0.37 \pm 0.26$ $A = 2\pi \cdot (365 \pm 36) \text{ MHz}(\text{meV})^{-3}$ $T_{\text{crit}} > 6.6 \text{ K}$	$V_{\max} = 0.73 \pm 0.05$ $V_{\text{norm},\pi/2} = \frac{V_{\text{measured}}}{V_{\max}} = 0.65 \pm 0.07$ $V_{\text{norm},\pi/4} = 0.90 \pm 0.09$ $V_{\text{norm},3\pi/4} = 0.47 \pm 0.17$ $A = 2\pi \cdot (237 \pm 12) \text{ MHz}(\text{meV})^{-3}$ $T_{\text{crit}} > 6.9 \text{ K}$
Results, Temperature stability of spin-photon properties	... the fringe pattern with the expected modulation at 0.966 ± 0.007 GHz	... the fringe pattern with the expected modulation at 0.965 ± 0.006 GHz
Figure 3c, caption	... the theoretical expectation (0.86 ± 0.01)	... the theoretical expectation (0.80 ± 0.01)

As a result of the errors identified in Supplementary Eqs. (8) and (11), the original version of the Supplementary Information contained the errors listed in the second column of the table below.

The HTML has been updated to include a corrected version of the Supplementary Information.

Position in Supplementary Information	Wrong items	Corrected items
Supplementary Note 3, page 7	... the maximum achievable HOM visibility is upper bound at 87%	... the maximum achievable HOM visibility is upper bound at 81%
Supplementary Note 3, page 8	... the maximum achievable HOM visibility is upper bound at $(86 \pm 1)\%$... the maximum achievable HOM visibility is upper bound at $(80 \pm 1)\%$
Supplementary Note 4, page 11, Supplementary Fig. 6, caption	$V(\text{RF before sequence}) = 0.65 \pm 0.05$	$V(\text{RF before sequence}) = 0.73 \pm 0.05$
Supplementary Note 7, page 17	$y = (119 \pm 5) \text{ MHz}$ $(1 - V_{\text{norm}}) = 0.39 \pm 0.1$ $\frac{S_2}{c_1} = \frac{1}{1 - V_{\text{norm}}} = 1.55 \pm 0.47$ $c_3/c_1 = 0.60 \pm 0.12$ $c_1 = 739 \pm 11$ $\delta\nu = (0.966 \pm 0.007) \text{ GHz}$ $\sigma_{\text{det}} = (0.16 \pm 0.02) \text{ ns}$	$y = (84 \pm 4) \text{ MHz}$ $(1 - V_{\text{norm}}) = 0.37 \pm 0.06$ $\frac{S_2}{c_1} = \frac{1}{1 - V_{\text{norm}}} = 1.68 \pm 0.45$ $c_3/c_1 = 0.63 \pm 0.11$ $c_1 = 753 \pm 12$ $\delta\nu = (0.965 \pm 0.006) \text{ GHz}$ $\sigma_{\text{det}} = (0.17 \pm 0.02) \text{ ns}$

The Supplementary Information contained a typographical error in the second sentence of the caption of Supplementary Fig. 6, and incorrectly read:

“Time gating settings are $t_{\text{start}} = 2 \text{ ns}$ and $\Delta t = 16.5 \text{ ns}$ ”.

The correct sentence is:

“Time gating settings are $t_{\text{start}} = 2 \text{ ns}$ and $\Delta t = 16 \text{ ns}$ ”.

The HTML has been updated to include a corrected version of the Supplementary Information. The correct version of the Supplementary Information can be found associated with this Correction.

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Additional information

Supplementary information The online version contains supplementary material available at <https://doi.org/10.1038/s41467-021-25869-w>.



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