

ERRATUM | JULY 27 2015

Erratum: “Experimental demonstration of the equivalence of inductive and strongly coupled magnetic resonance wireless power transfer” [Appl. Phys. Lett. 102, 053904 (2013)] **FREE**

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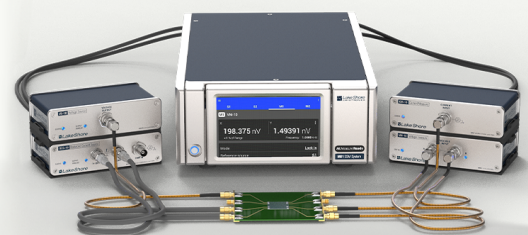
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Erratum: “Experimental demonstration of the equivalence of inductive and strongly coupled magnetic resonance wireless power transfer” [Appl. Phys. Lett. 102, 053904 (2013)]

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We wish to make a correction to Eq. (3) in the original Letter.² U should be replaced with G_{max}

$$\begin{aligned}
 U &\rightarrow G_{max}, \\
 G_{max} &= \left| \frac{S_{21}}{S_{12}} \right| (k - \sqrt{k^2 - 1}), \\
 k &= \frac{1 - |S_{11}^2| - |S_{22}|^2 + |S_{11}S_{22} - S_{12}S_{21}|^2}{2|S_{12}||S_{21}|}. \quad (1)
 \end{aligned}$$

G_{max} represents the maximum power transfer of the system when it is bi-conjugate matched and is an invariant quantity, as stated in the original Letter. Mason’s unilateral gain, referenced in the paper as U , is related to the maximum power gain for a system that has been unilaterized, which is

generally applicable to active two-port systems. The system considered in the paper is passive. G_{max} was used instead of Mason’s unilateral power gain for all calculations. The relationship between Mason’s unilateral power gain, U , and G_{max} is detailed in Ref. 1 as cited in the Letter.

The use of an invariant quantity to characterize the system and the explanation of operation of the system is unchanged with the corrected equation. Equation (1) was used to calculate all data in Fig. 3 of the Letter.

The results and conclusions of the Letter remain unchanged.

¹M. Gupta, *IEEE Trans. Microwave Theory Tech.* **40**, 864–879 (1992).

²D. S. Ricketts, M. J. Chabalko, and A. Hillenius, *Appl. Phys. Lett.* **102**, 053904 (2013).

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