

Angewandte Corrigendum

Visible-Light-Driven Hydrogen Evolution Using Planarized Conjugated Polymer Photocatalysts

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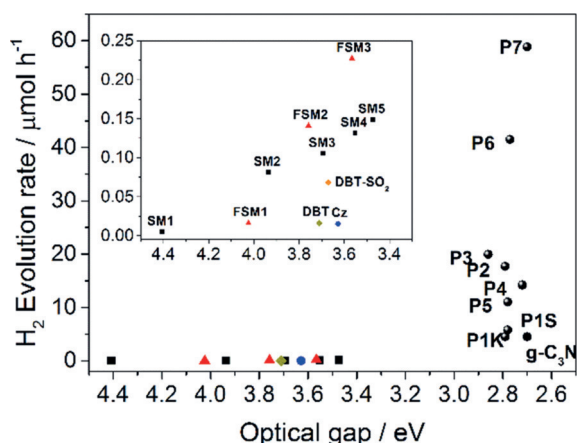


Figure 2. Photocatalytic hydrogen evolution rates. Each measurement was performed with 25 mg catalyst in water/MeOH/triethylamine mixture under broad-spectrum irradiation ($\lambda > 295$ nm; see Table 1 for visible light HERs).

Table 1: Photophysical properties and hydrogen evolution rates (HERs) for the polymer photocatalysts.

Polymer	Optical gap	λ_{em}	HER > 420 nm ^[c] [$\mu\text{mol h}^{-1}$]	HER > 295 nm ^[c] [$\mu\text{mol h}^{-1}$]
P1K	0.8 (\pm 0.04)	4.2 (\pm 0.3)
P1S	1.6 (\pm 0.1)	5.8 (\pm 0.2)
P2	3.4 (\pm 0.1)	17.7 (\pm 0.1)
P3	> 0.04 (\pm 0.02)	20.0 (\pm 0.2)
P4	3.2 (\pm 0.1)	14.2 (\pm 0.5)
P5	0.9 (\pm 0.2)	11.1 (\pm 0.2)
P6	10.8 (\pm 0.1)	41.5 (\pm 0.3)
P7	37.3 (\pm 0.8)	58.8 (\pm 1.9)

... [c] Reaction conditions: 25 mg polymer was suspended in water/MeOH/triethylamine solution, irradiated by 300 W Xe lamp for 5 hours using a suitable filter.

The authors regret that incorrect data was presented in Figure 2, Figure 3, and Table 1 of this Communication. The corrected Figures and Table entries are shown below. The hydrogen evolution rates were incorrectly calculated, but by a common scaling factor. Hence, the trends observed between materials and the overall conclusions made in the Communication remain valid. The correct H_2 evolution rate for the most active polymer, P7, under visible light (> 420 nm) should be $37.3 \mu\text{mol h}^{-1}$ ($1492 \mu\text{mol g}^{-1} \text{h}^{-1}$), not $92.0 \mu\text{mol h}^{-1}$ as initially reported. The apparent quantum yields at 420 nm for P1K, P6, and P7 should be corrected to 0.4% ($\pm 0.1\%$), 2.2% ($\pm 0.2\%$), and 7.2% ($\pm 0.3\%$), respectively.

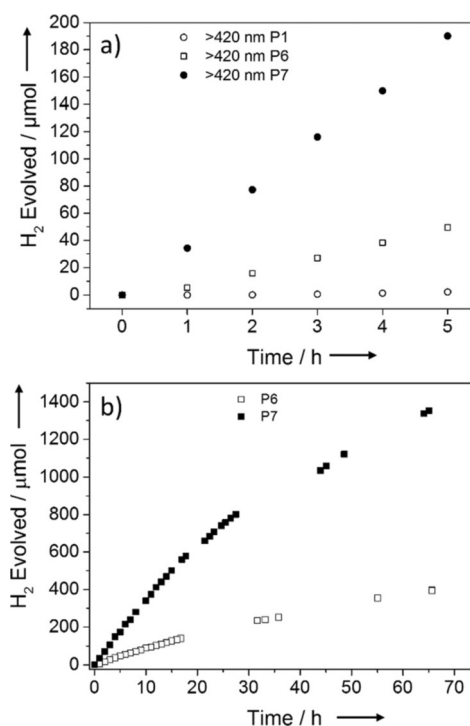


Figure 3. a) Time-course for photocatalytic H_2 production using visible light for P1K, P6, and P7 (25 mg catalyst in water/MeOH/triethylamine mixture $\lambda > 420$ nm). b) P6 and P7 (25 mg catalyst in water/MeOH/triethylamine mixture; $\lambda > 420$ nm), photolysis run for a total of 65 h.

The most active polymer, P7, was studied independently by another research group,^[1] who reported an apparent quantum yield of 6.61%, close to the corrected value of 7.2%. The precise value of the apparent quantum yield and hence the H_2 evolution rate will depend on the details of the experimental set up and the irradiation intensity.

[1] C. Yang, B. C. Ma, L. Zhang, S. Lin, S. Ghasimi, K. Landfester, K. A. I. Zhang, X. Wang, *Angew. Chem. Int. Ed.* **2016**, 55, 9202–9206; *Angew. Chem.* **2016**, 128, 9348–9352.