

ZIF-8-derived carbon modified g-C₃N₄ heterostructure with enhanced photocatalytic activity for dye degradation and hydrogen production

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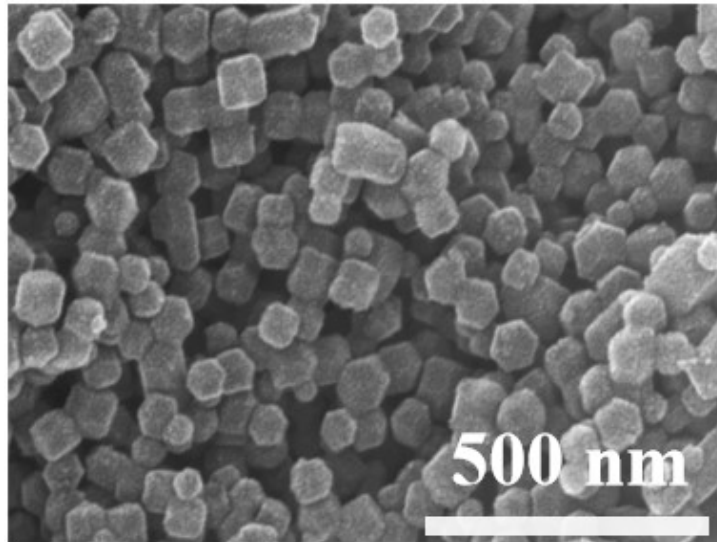


Fig. S1. SEM image of the sample obtained by heating the ZIF-8 at 900 °C under Ar gas flow.

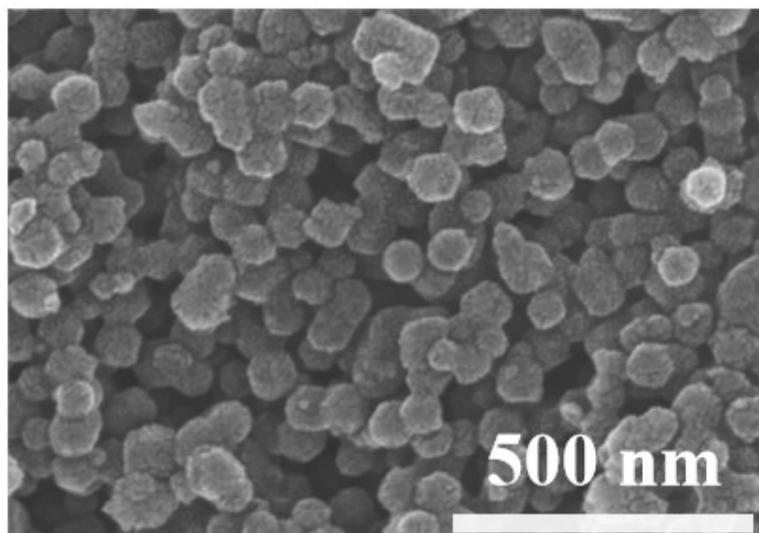


Fig. S2. SEM image of C-ZIF.

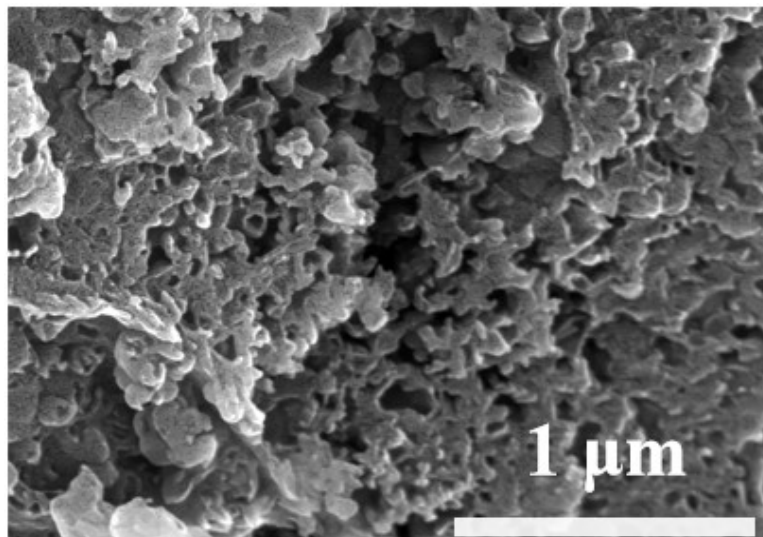


Fig. S3. SEM image of 10-C-ZIF+g-C₃N₄.

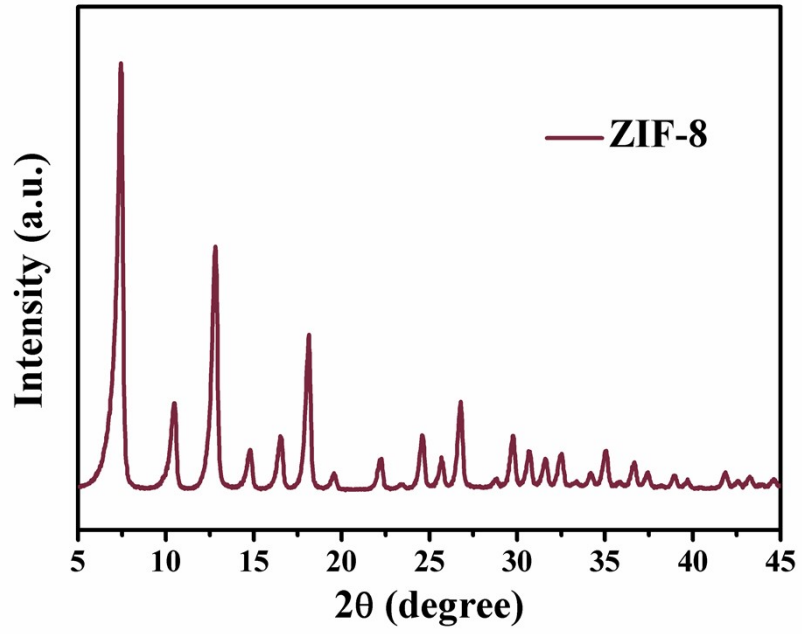


Fig. S4. XRD pattern of as-synthesized ZIF-8

Table S1. TG, EDX data and BET surface areas of g-C₃N₄, 10-C-ZIF+g-C₃N₄ and C-ZIF@g-C₃N₄ composites with different C-ZIF contents.

Samples	C-ZIF Contents (Wt.%) ^a	Element Contents		BET S.A. (m ² .g ⁻¹) ^c
		C (At.%) ^b	N	
g-C ₃ N ₄	--	42.25	57.75	15.916
5-C-ZIF@g-C ₃ N ₄	5.9	47.91	52.09	13.982
10-C-ZIF@g-C ₃ N ₄	9.7	49.72	50.28	15.735
10-C-ZIF+g-C ₃ N ₄	9.7	50.66	49.34	10.181
20-C-ZIF@g-C ₃ N ₄	15.7	53.62	46.28	13.441
30-C-ZIF@g-C ₃ N ₄	22.7	60.53	39.47	15.803
C-ZIF	--	84.70	15.30	983.723

[a] The value was determined by EDX.

[b] The contents of C-ZIF in the final prepared samples were obtained by TG.

[c] The specific surface area of samples was confirmed by BET.