Supporting Information

Facile hydrothermal synthesis of carbon dots modified g-C_3N_4 for enhanced photocatalytic H_2-evolution performance

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Table S1 The element components of various samples based on the EDS results.

Samples	C	N	O	Molar ratio of C/N	$g_{CDs}/g_{catalyst}$ (wt%)
g-C_3N_4	39.46	56.66	3.88	0.70	
CDs/g-C_3N_4(1 wt%)	39.79	56.34	3.87	0.71	0.53
CDs/g-C_3N_4(10 wt%)	40.66	56.18	3.16	0.72	1.06
CDs/g-C_3N_4(50 wt%)	41.96	51.82	6.22	0.81	5.56
CDs/g-C_3N_4(100 wt%)	44.88	48.87	6.25	0.92	10.54

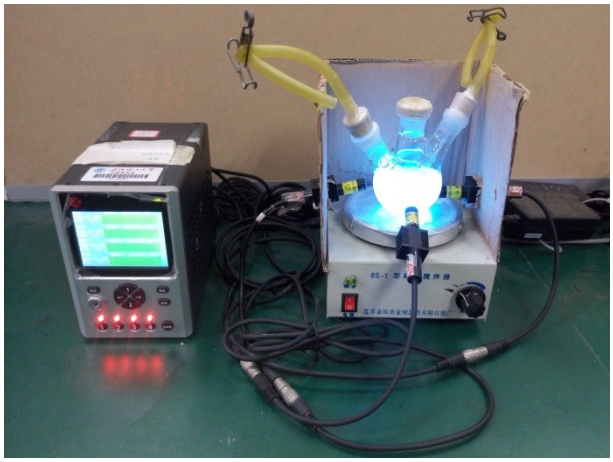

Fig. S1. The set-up diagram for the photocatalytic H_2 production.

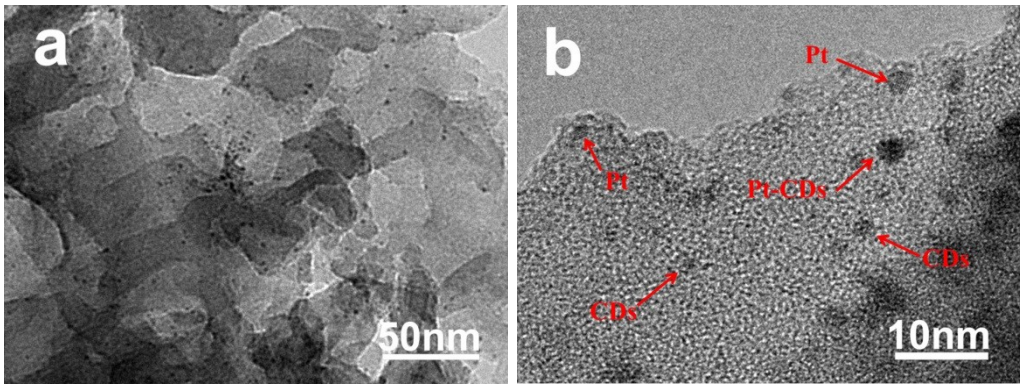

Fig. S2. (a)TEM and (b) HRTEM images of Pt-CDs/g-C_3N_4(100 wt%).

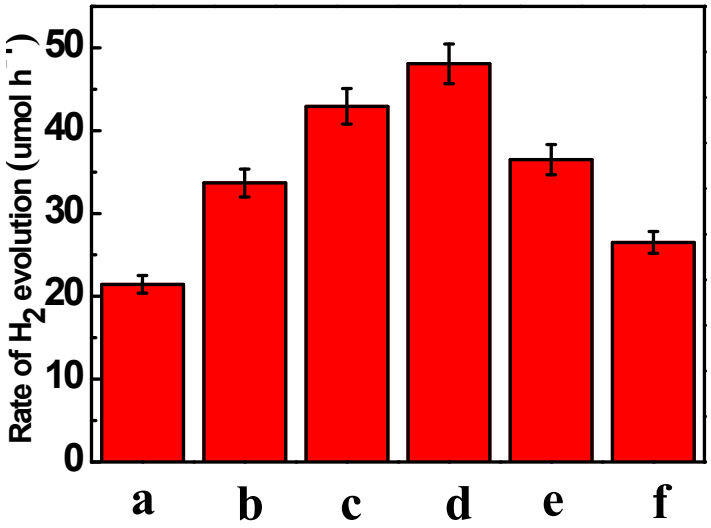

Fig. S3 Photocatalytic H_2-evolution rate of (a) g-C_3N_4, (b) CDs/g-C_3N_4(1 wt%), (c) CDs/g- C_3N_4(5 wt%), (d) CDs/g-C_3N_4(10 wt%), (e) CDs/g-C_3N_4(50 wt%) and (f) CDs/g-C_3N_4(100 wt%) under visible-light irradiation (λ = 420 nm) with lactic acid as the sacrificial agent and additional Pt cocatalyst.