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SiC/Pt/CdS纳米棒Z型异质结的制备及其高效光催化产氢性能

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Fabrication of Z-Scheme Heterojunction of Sic/Pt/Cds Nanorod for Efficient Photocatalytic H_2 Evolution

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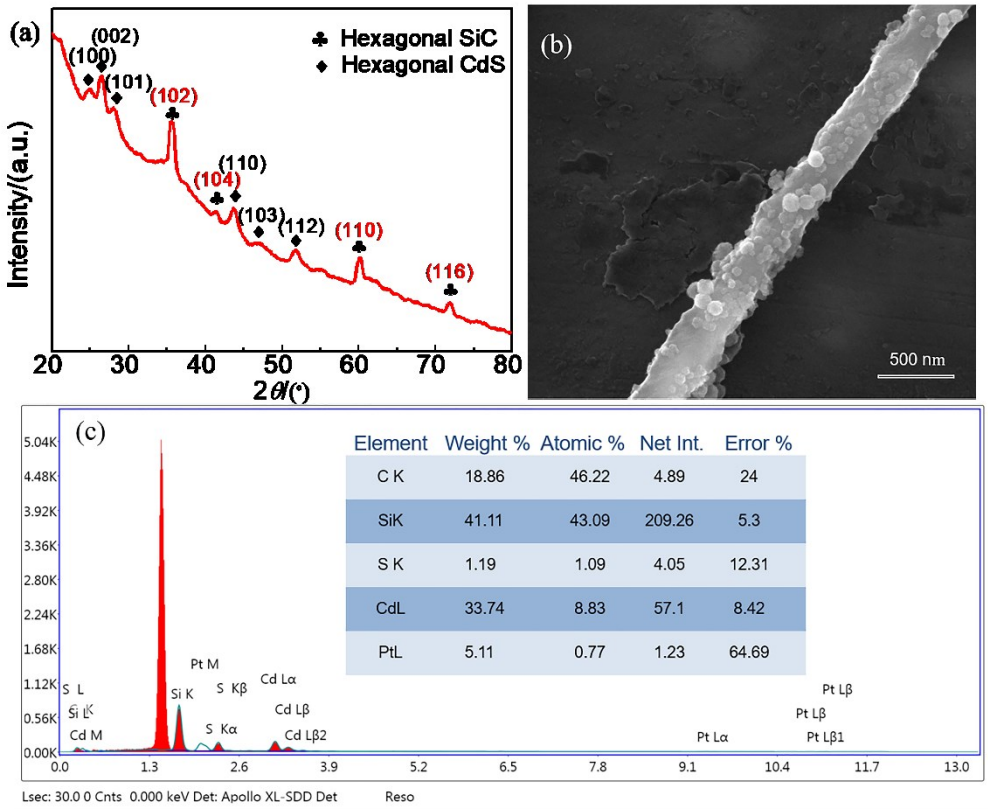

Element	Weight %	Atomic %	Net Int.	Error %
C K	18.86	46.22	4.89	24
SiK	41.11	43.09	209.26	5.3
S K	1.19	1.09	4.05	12.31
CdL	33.74	8.83	57.1	8.42
PtL	5.11	0.77	1.23	64.69

Fig. S1 (a) XRD pattern of the SPC-5 nanocomposite; (b) SEM images of SPC-5 nanocomposite; (c) The corresponding EDX spectrum of SPC-5 nanocomposite after three recycling test.

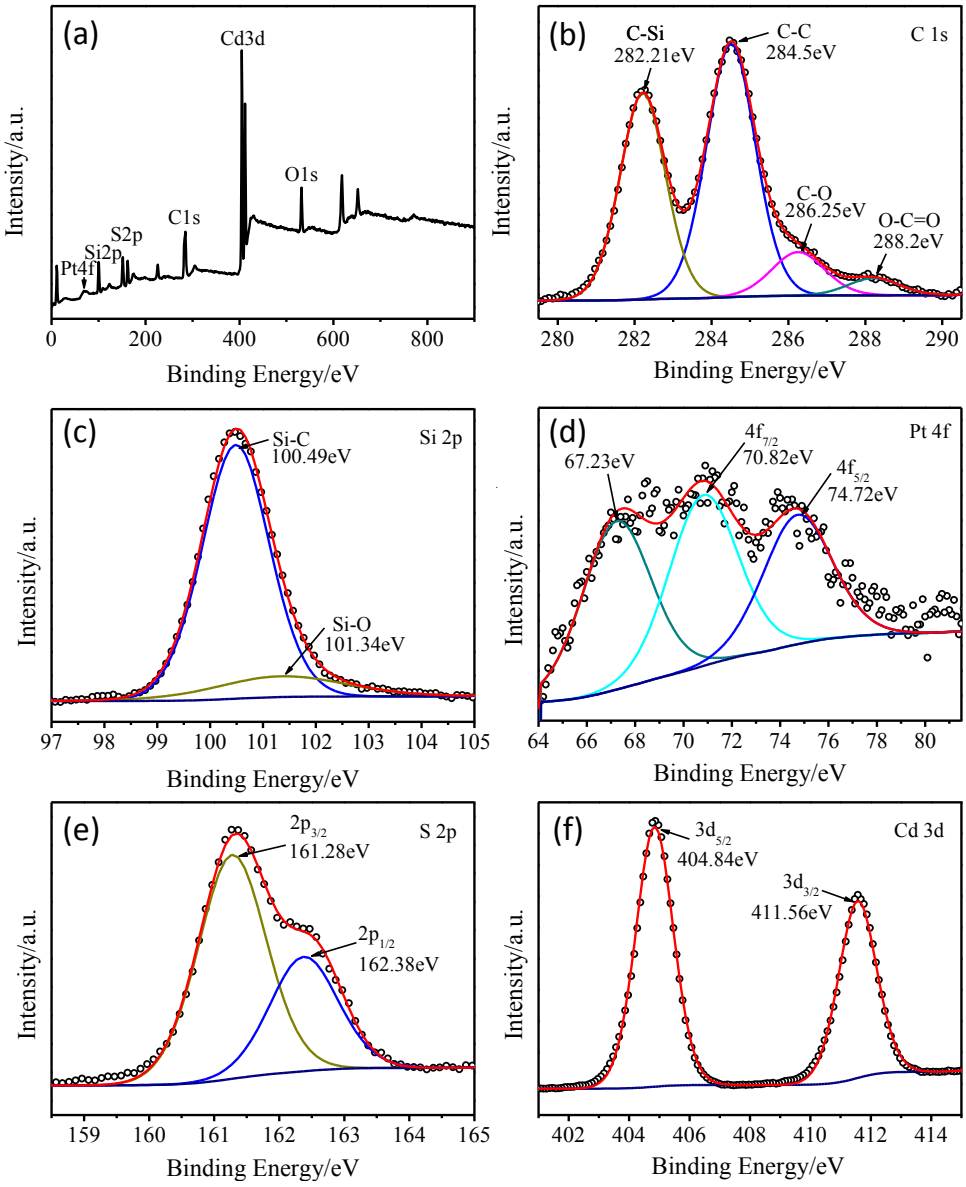

Fig. S2 (a) The XPS survey spectrum and (b–f) high-resolution XPS spectra of C (b), Si (c), Pt (d), S (e) and Cd (f) for SPC5 nanocomposite after three recycling test.

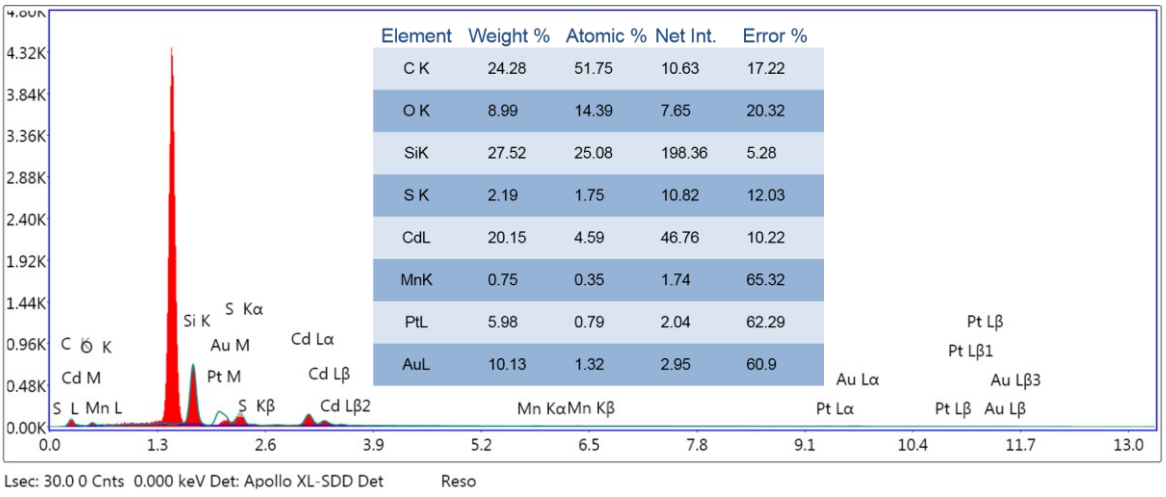

Fig. S3 The corresponding EDX spectrum with simultaneously photo-deposited Mn_3O_4 and Au nanoparticles.

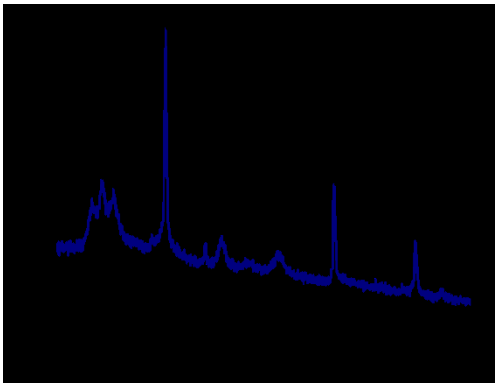

Fig. S4 XRD pattern of SPC-5 nanocomposite with simultaneously photo-deposited Mn_3O_4 and Au nanoparticles.