

Electronic supplementary data

Zeolite encapsulated active metal composites and their photocatalytic studies for the rhodamine-b, reactive red-198 and chloro- phenols

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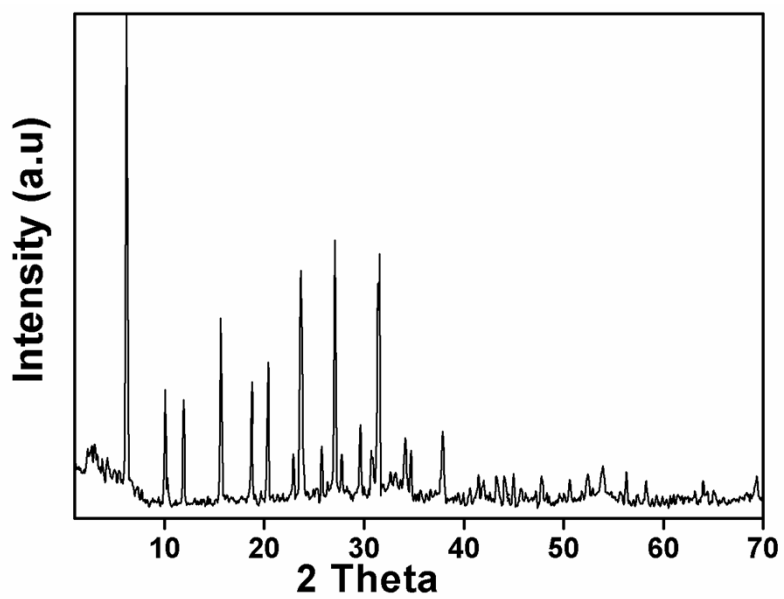


Fig. S1: Powder XRD patterns of PdY

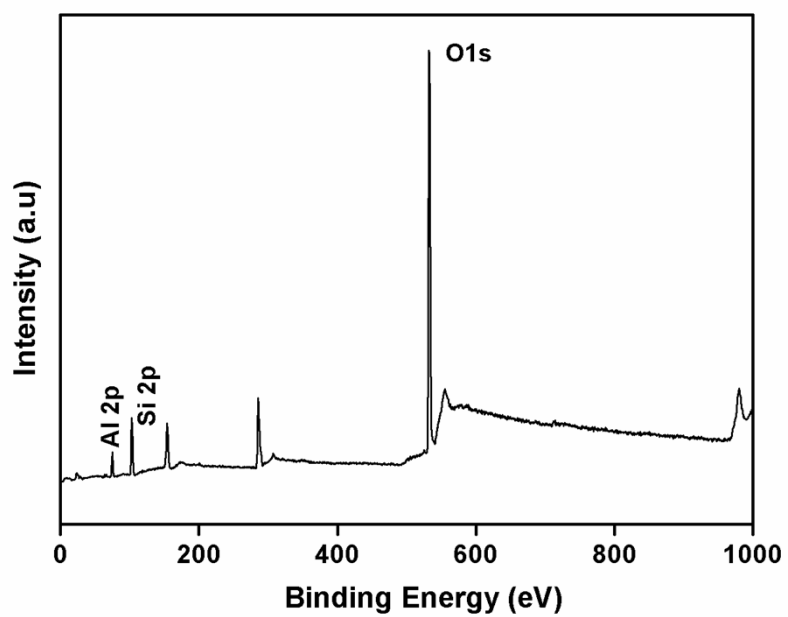


Fig. S2: XPS survey spectrum of NaY

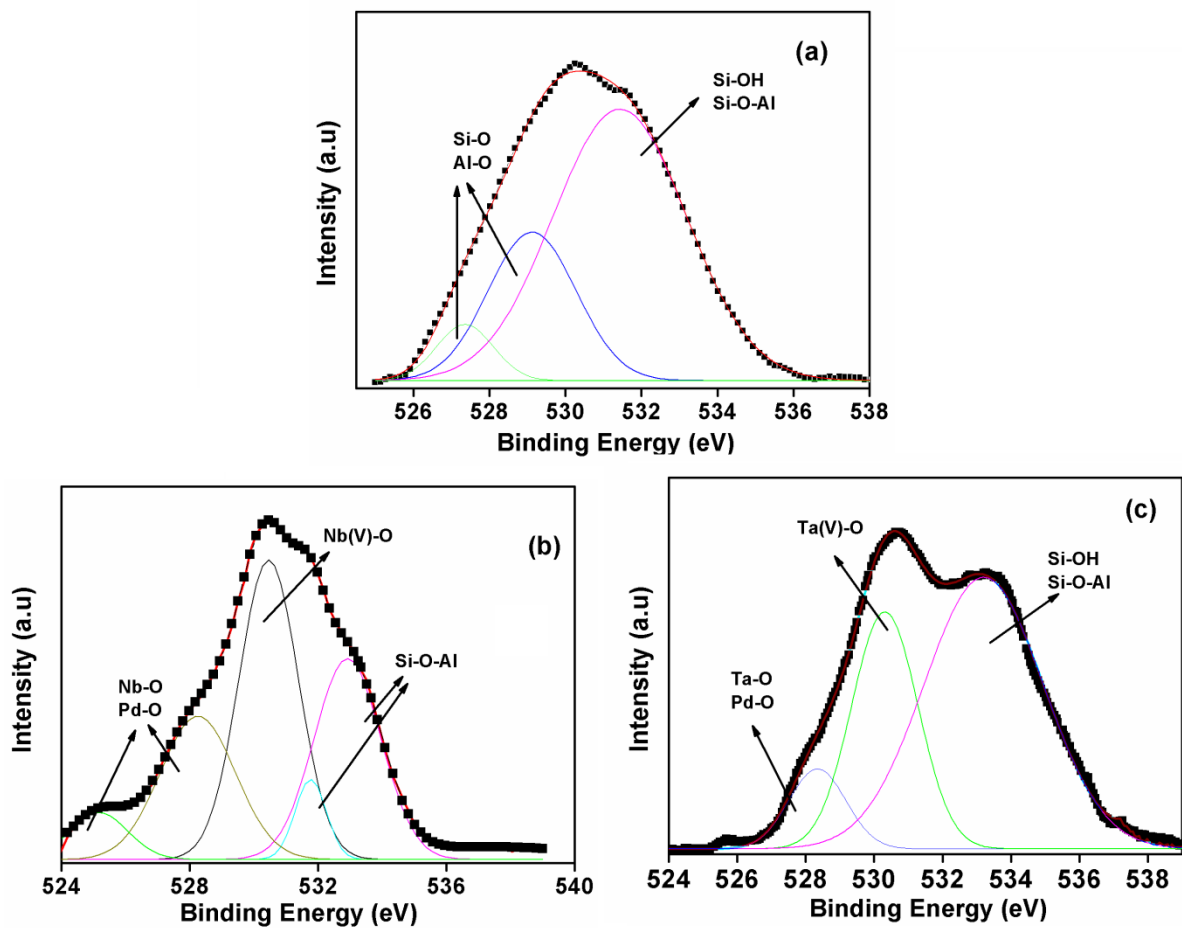


Fig. S3: The O1s deconvoluted spectra of (a) NaY (b) NbPdY and (c) TaPdY

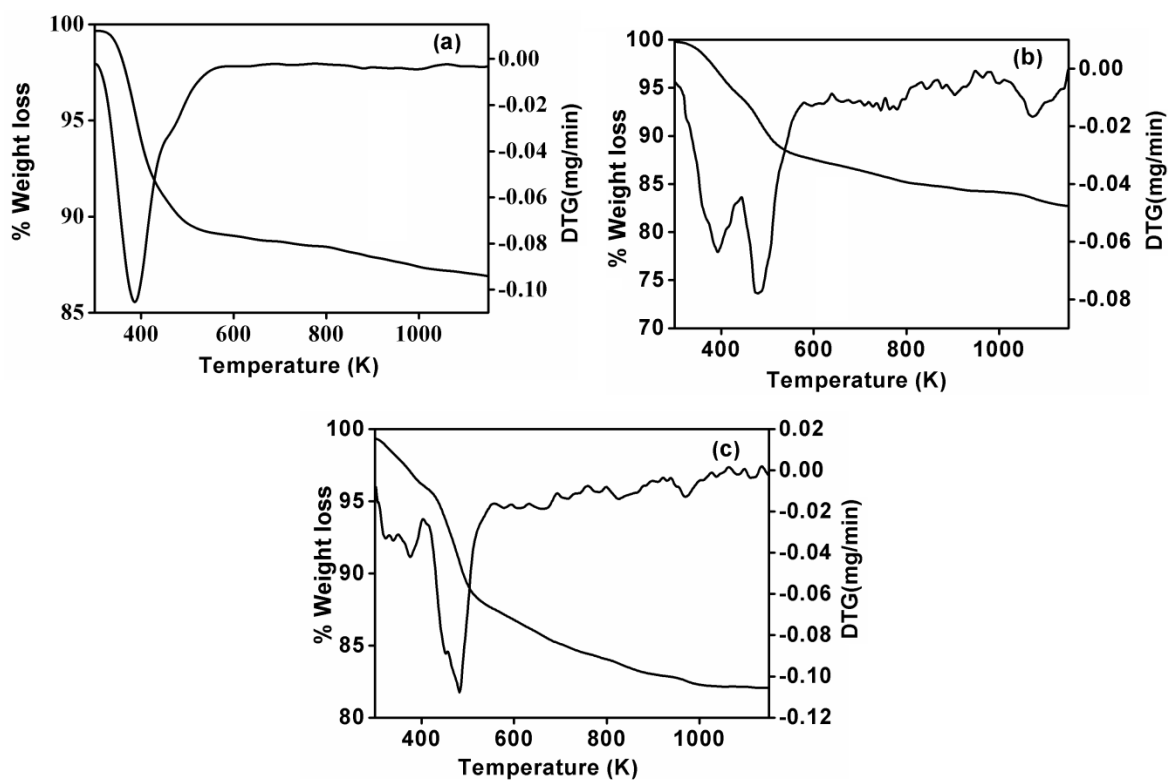


Fig.S4: TG-DTG curves of the (a) NaY, (b) NaPdY and (c) TaPdY

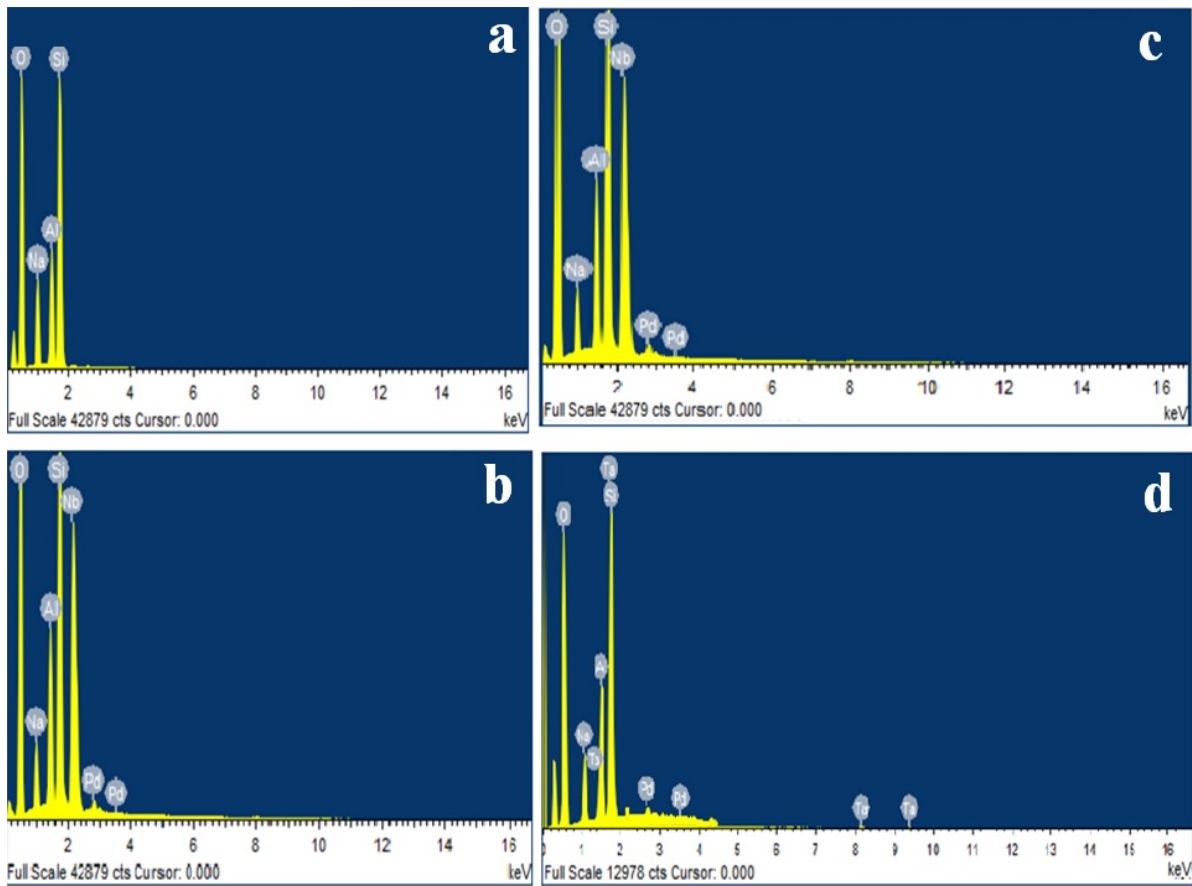


Fig. S5: The SEM/EDAX micrographs of the (a) NaY, (b) PdY (c) NbPdY and (d) TaPdY.

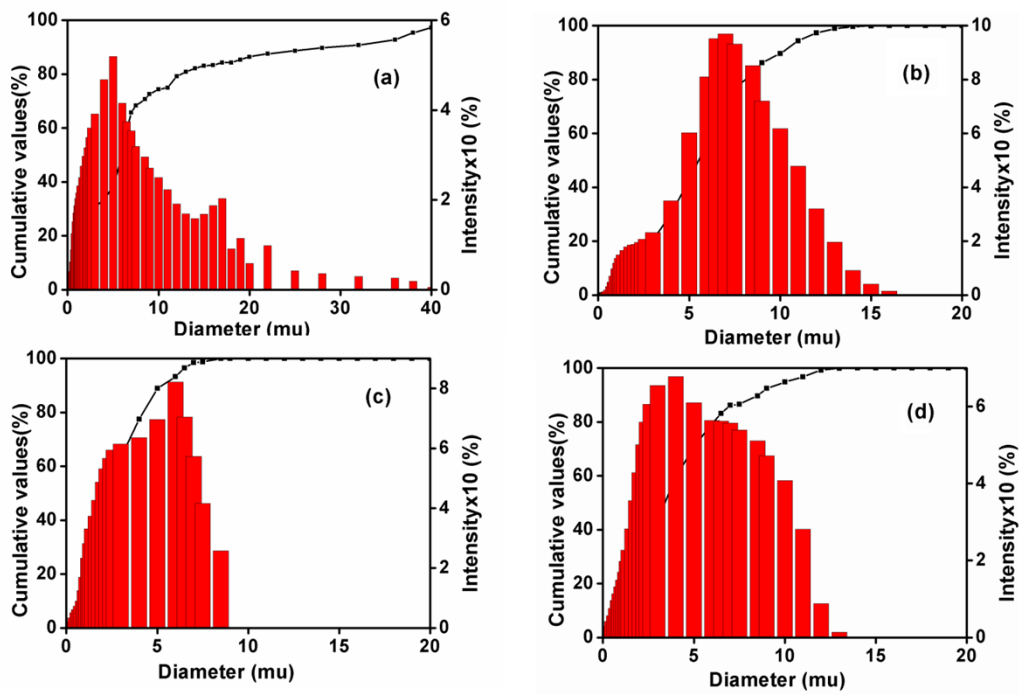


Fig. S6: Particle size distribution curves for the (a) NaY, (b) PdY, (c) NbPdY and (d) TaPdY

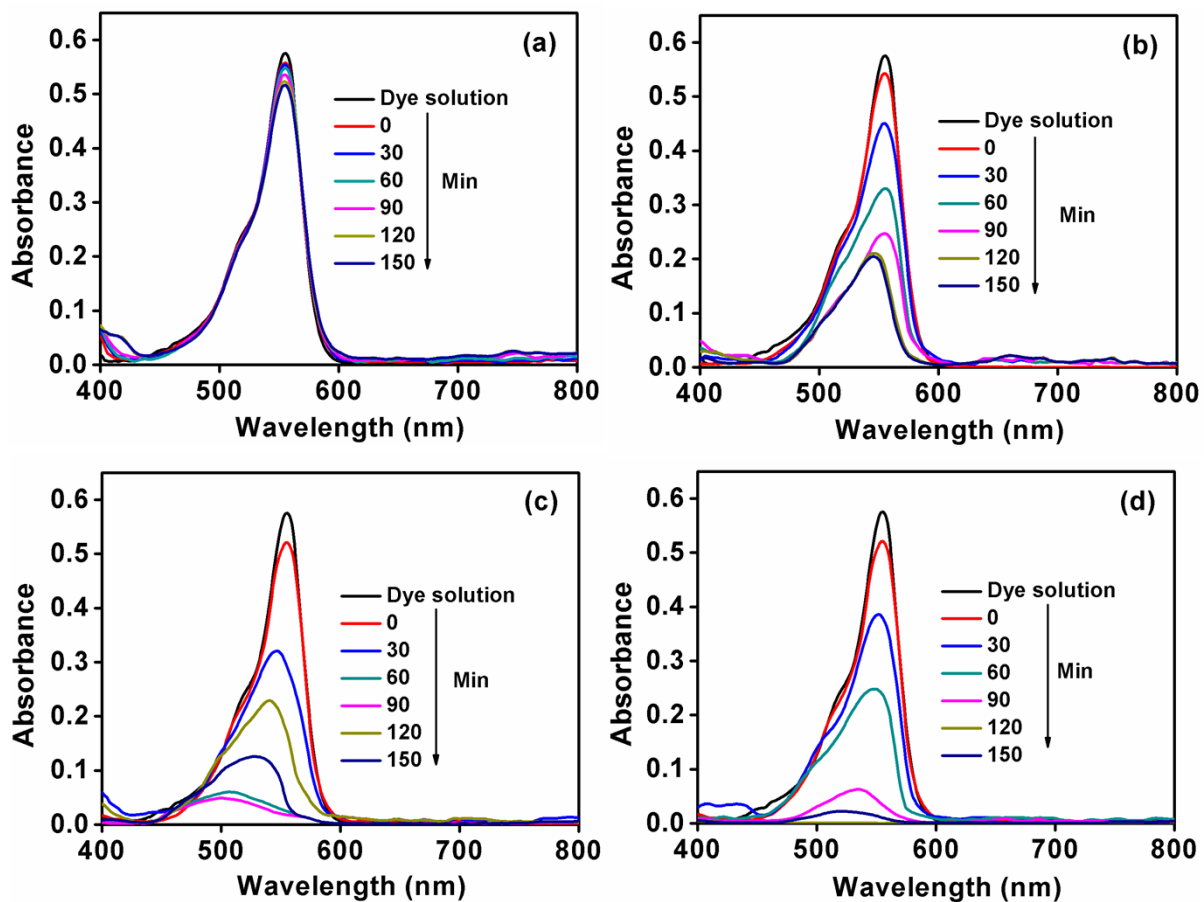


Fig. S7: The absorption plots for the photo degradation of RhB in the presence of (a) NaY, (b) PdY, (c) NbPdY and (d) TaPdY under visible light irradiation

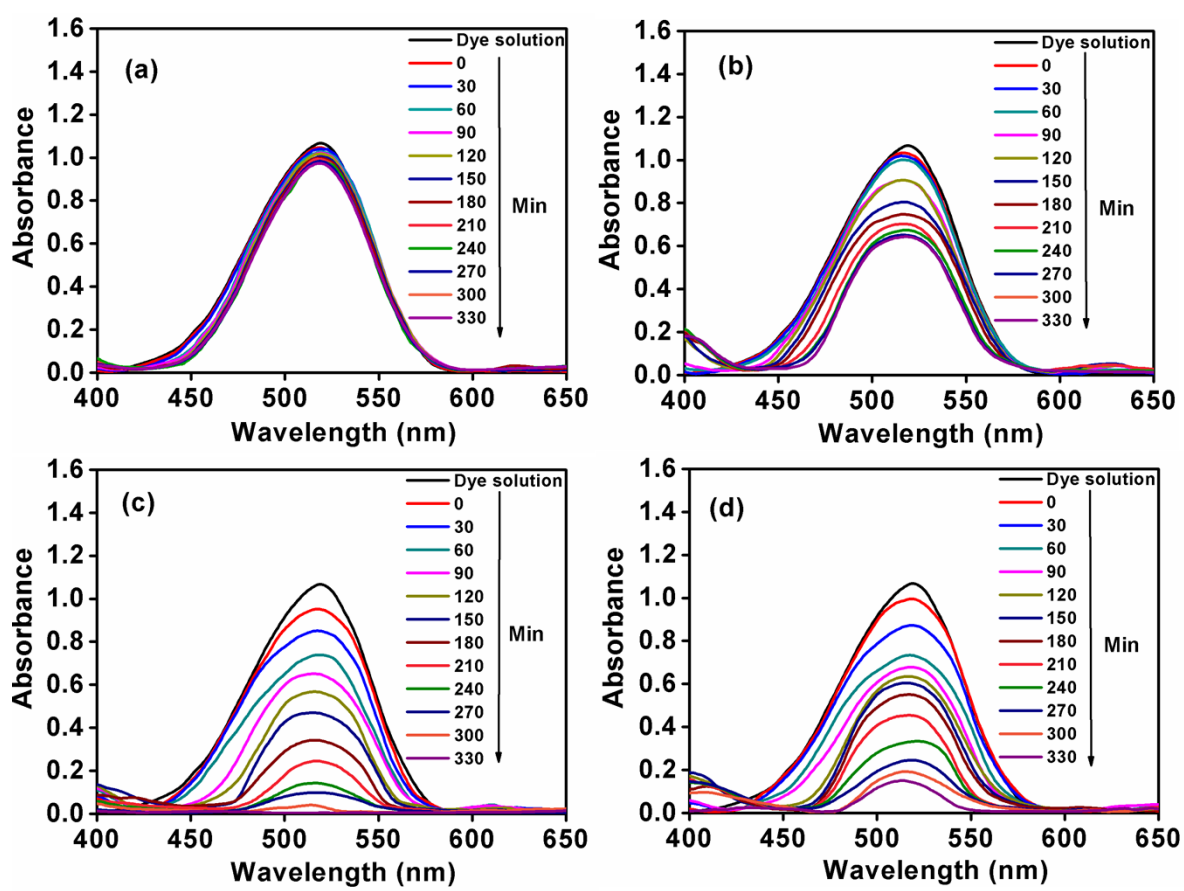


Fig. S8: The absorption plots for the photo degradation of RR in the presence of (a) NaY, (b) PdY, (c) NbPdY and (d) TaPdY under visible light irradiation

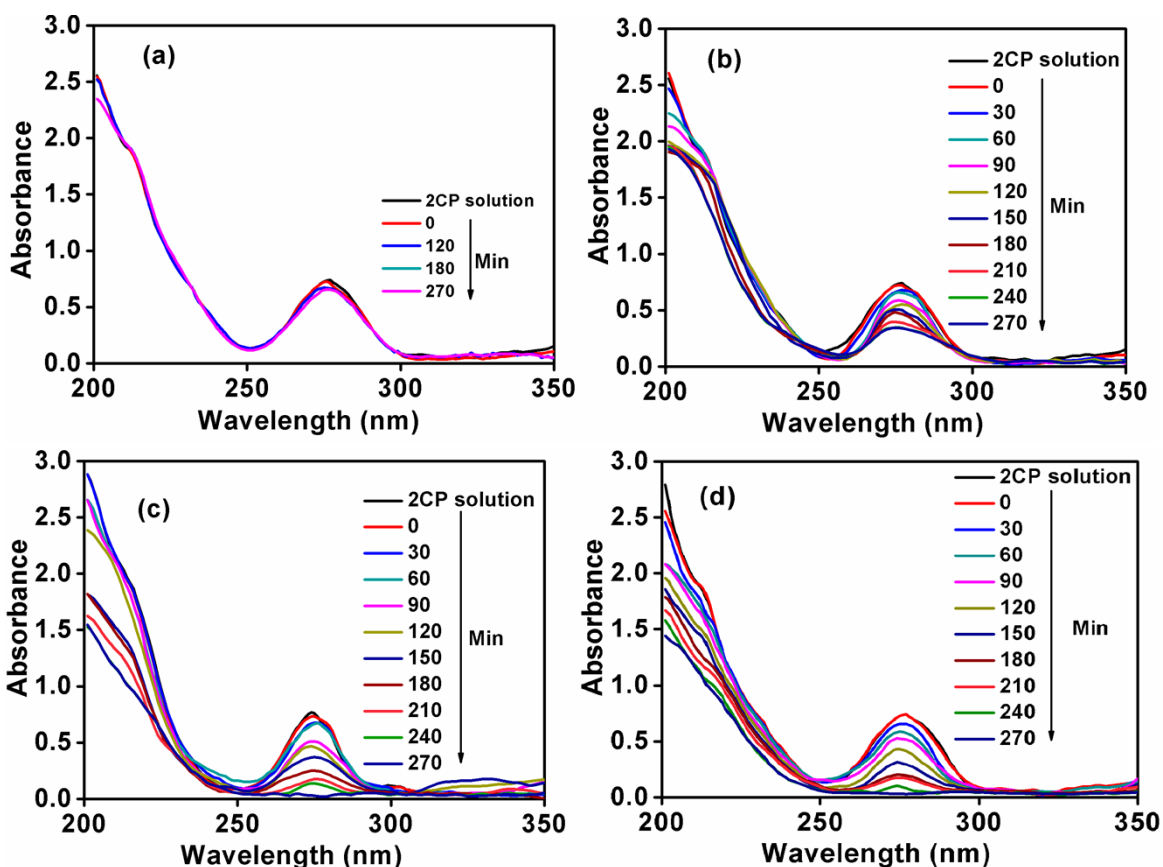


Fig. S9: The absorption plots for the photo degradation of 2CP in the presence of (a) NaY, (b) PdY, (c) NbPdY and (d) TaPdY under visible light irradiation.

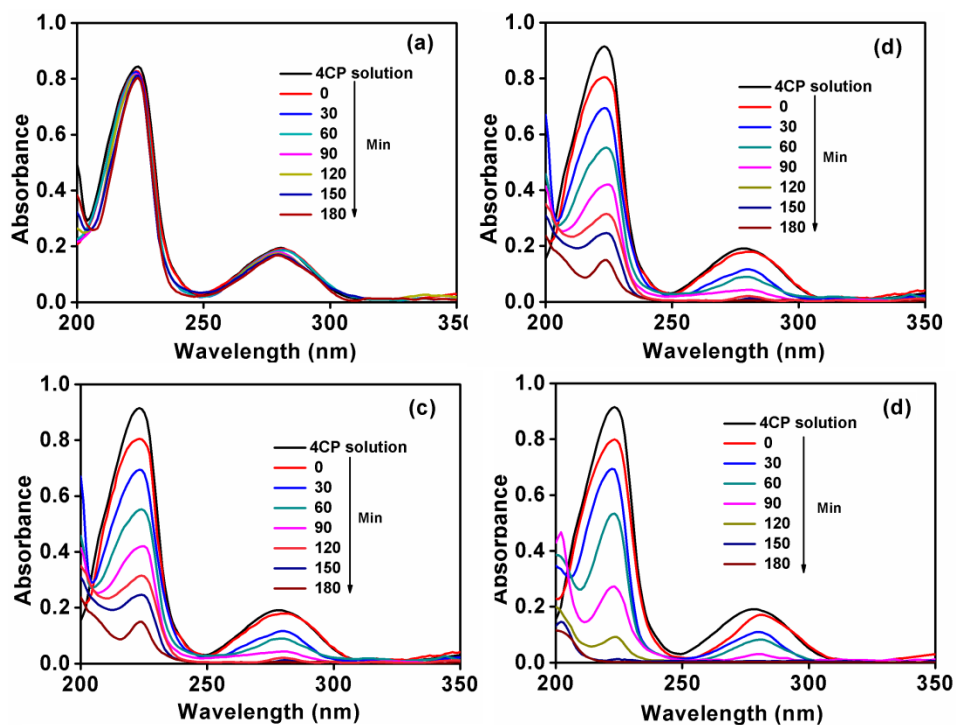


Fig. S10: The absorption plots for the photo degradation of 4CP in the presence of (a) NaY, (b) PdY, (c) NbPdY and (d) TaPdY under visible light irradiation

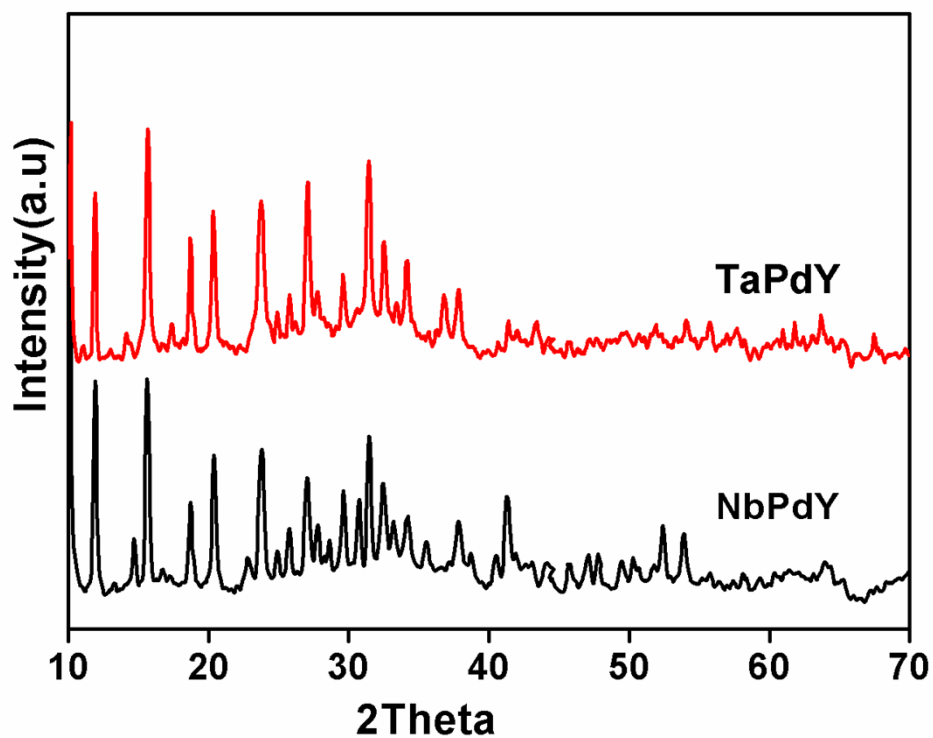


Fig. S11: The powder XRD patterns of recovered (a) NbPdY and (b) TaPdY.

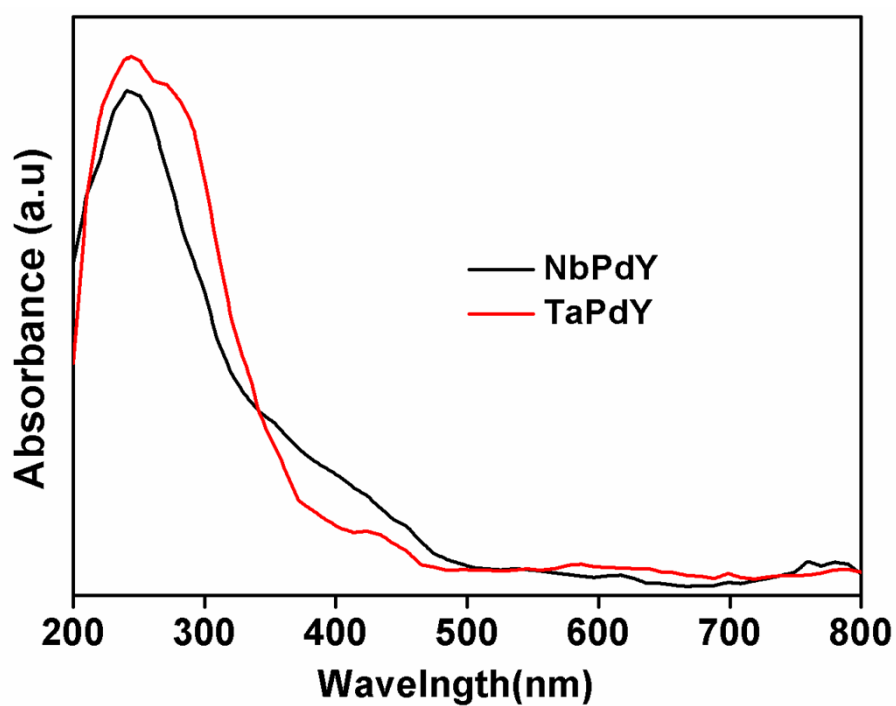


Fig. S12: DRS/UV-visible spectra of the recovered (a) NbPdY and (b) TaPdY catalysts.

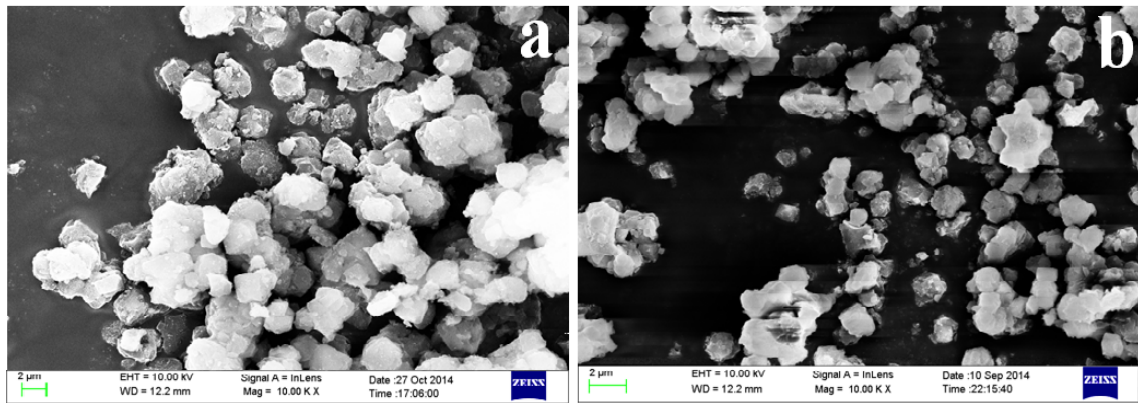


Fig. S13: SEM images of the reused NbPdY and TaPdY

Table A: The Si/Al ratio of the composites

Sl.No	Materials	Si%	Al%	Na%	Si/Al
1	NaY	22.7	8.1	7.8	2.6
2	PdY	21.1	7.9	6.5	2.7
3	NbPdY	21.5	8.0	4.5	2.6
4	TaPdY	20.8	7.8	3.2	2.6