Electronic Supplementary Information

CeO_2 nanorods/g-C_3N_4/N-rGO composite: Enhanced visible-light-driven photocatalytic performance and the role of N-rGO as electronic transfer media

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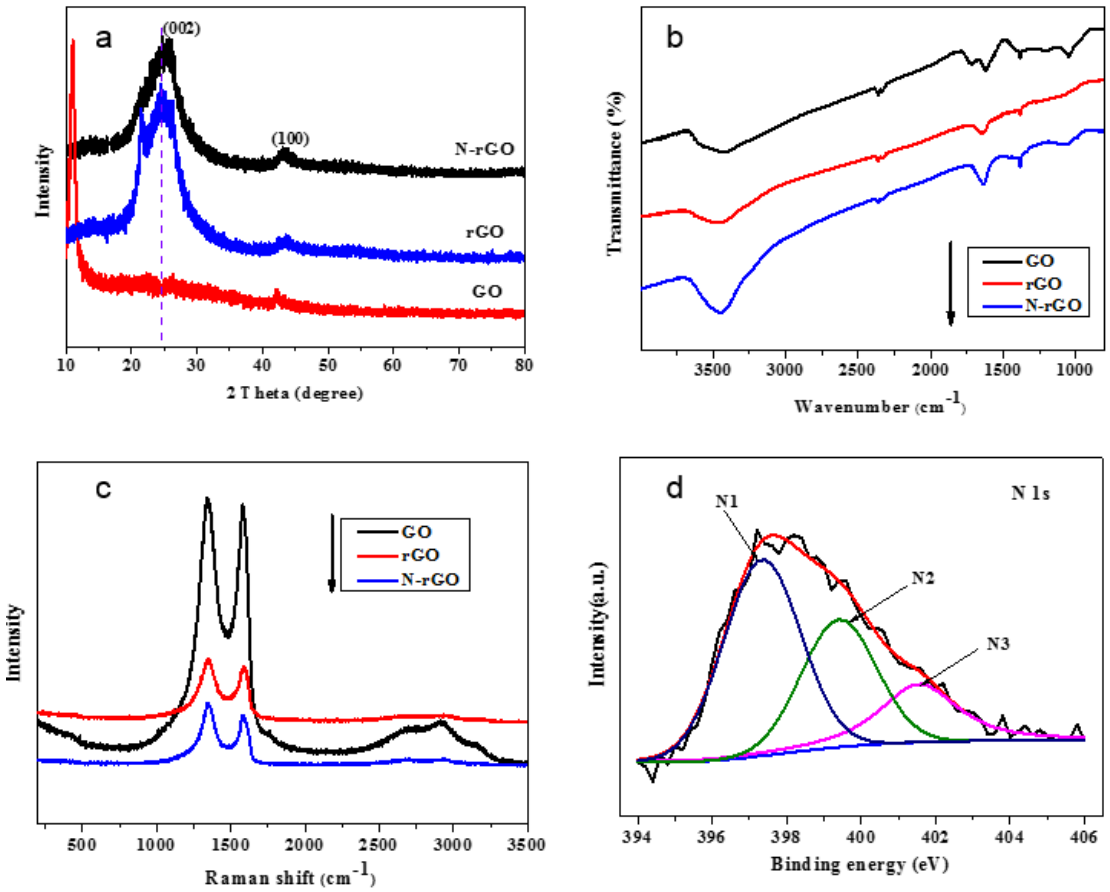

Fig. S1 XRD (a), FT-IR (b), Raman spectra (c) and XPS spectra (d) of N-rGO sample.

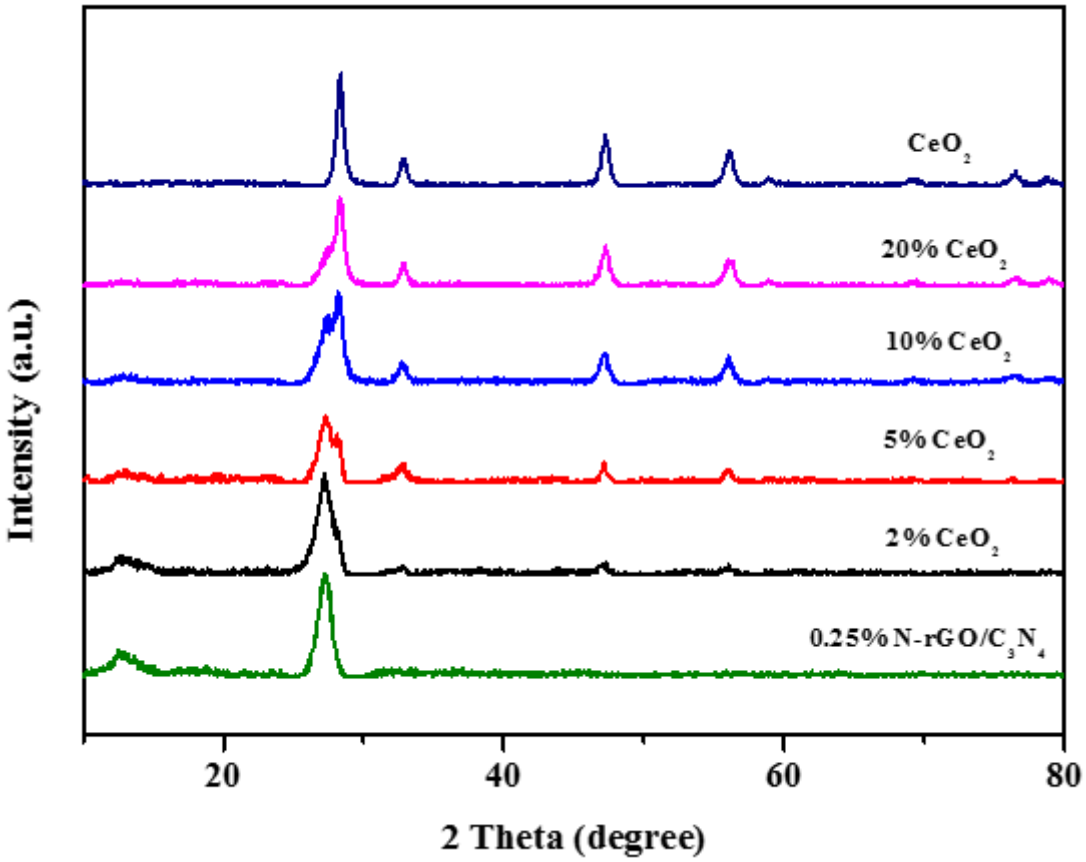

Fig. S2 XRD patterns of the ternary CeO_2 nanorods/(g-C_3N_4/0.25%N-rGO) composites with different content of CeO_2 nanorods.

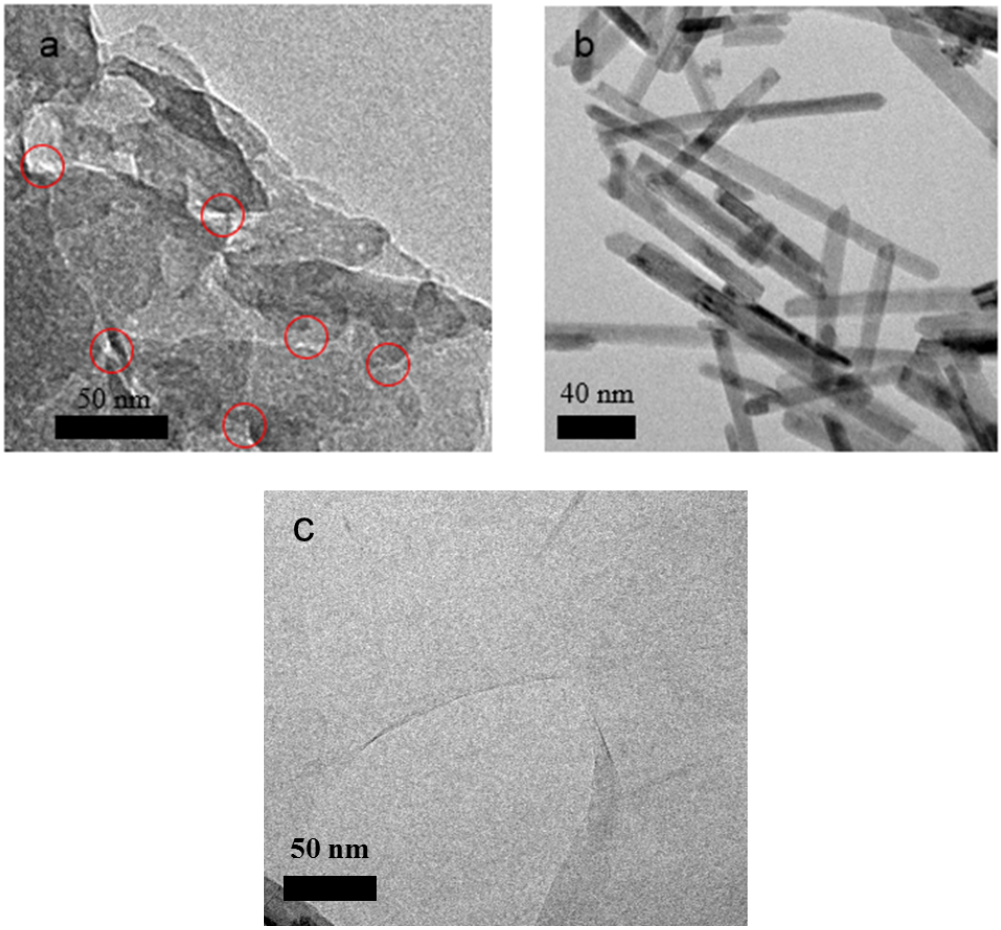

Fig. S3 TEM images of pure g-C_3N_4 (a), pure CeO_2 nanorods (b) and grapheme (c)

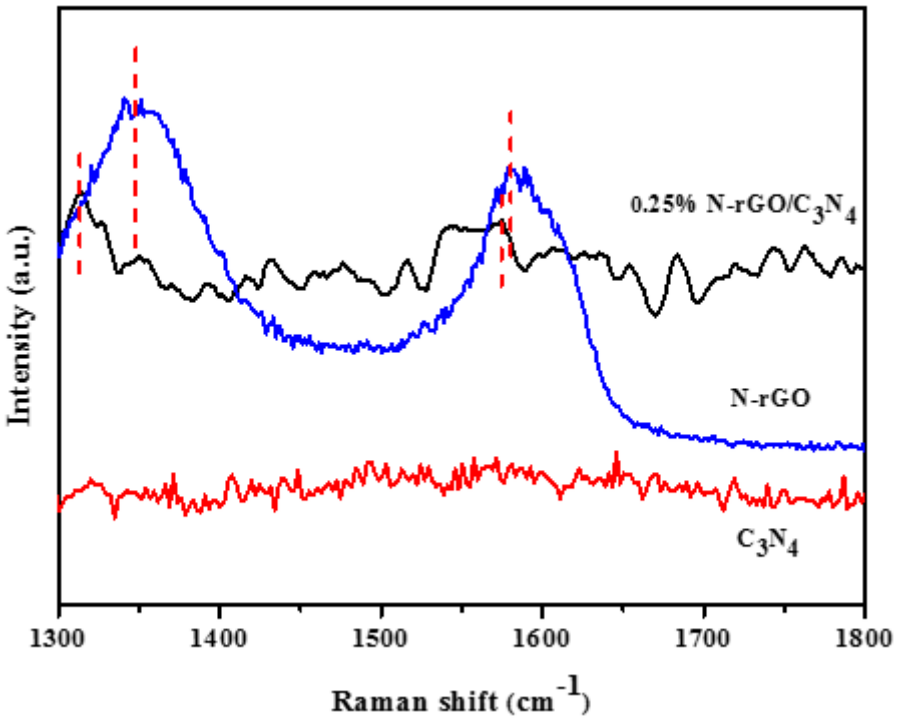

Fig. S4 Raman spectra of N-rGO, g-C_3N_4 and g-C_3N_4/0.25%N-rGO.

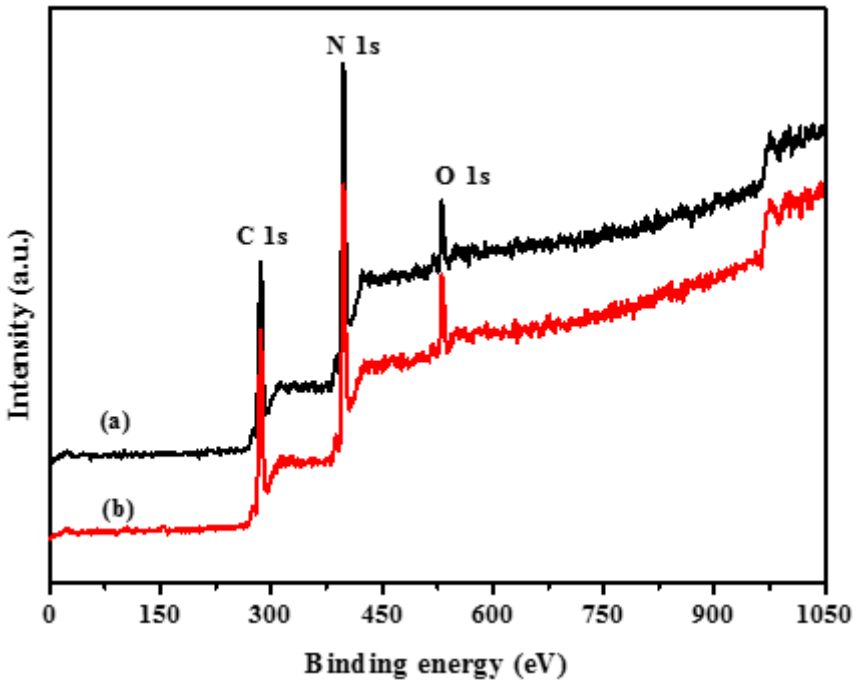

Fig. S5 XPS survey spectra of g-C_3N_4 (a) and g-C_3N_4/0.25%N-rGO (b).

Table S1 BET surface areas of different samples

Sample	S_{BET} (m^2/g)
C_3N_4	16.2
g-C_3N_4/0.25%rGO	23.9
g-C_3N_4/0.25%N-rGO	25.9
2wt% CeO_2/(g-C_3N_4/0.25%N-rGO)	27.0

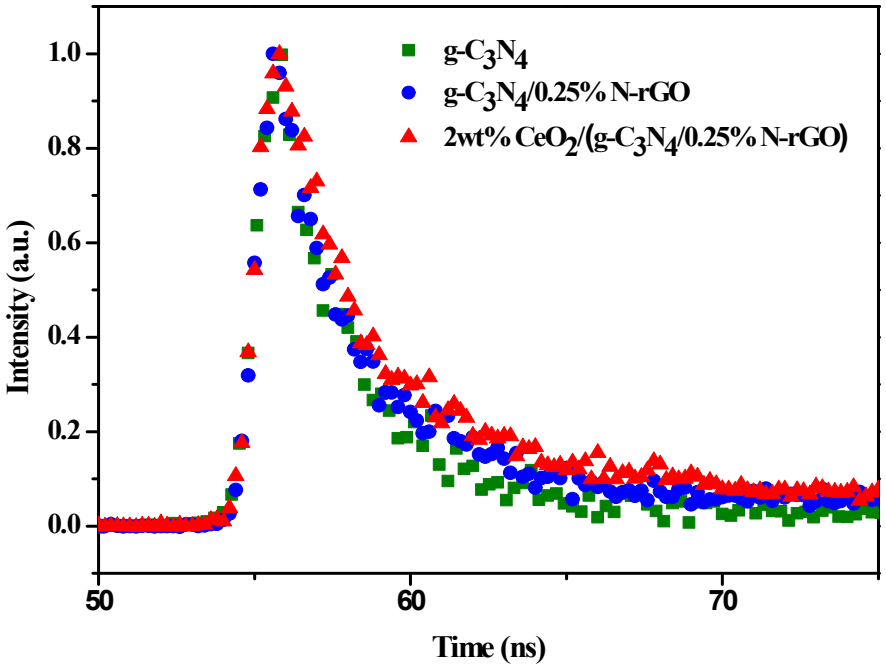

Fig. S6 Time-resolved fluorescence decay spectra of the g-C_3N_4, g-C_3N_4/0.25%N-rGO and 2wt% CeO_2 nanorods/(g-C_3N_4/0.25%N-rGO) samples

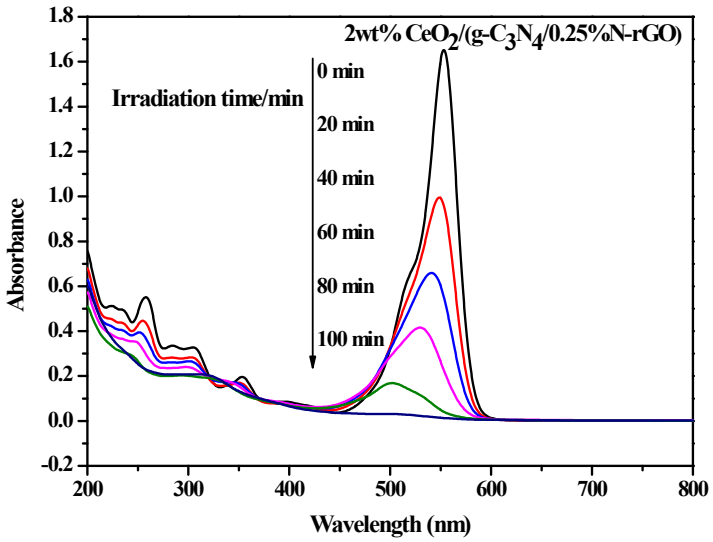

Fig. S7 The temporal absorption spectrum changes of RhB aqueous solution in the presence of 2wt% CeO_2/(g-C_3N_4/0.25%N-rGO) under visible light irradiation.