

F,O,S-codoped graphitic carbon nitride as an efficient photocatalyst for the synthesis of benzoxazoles and benzimidazoles

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SUPPLEMENTARY MATERIAL

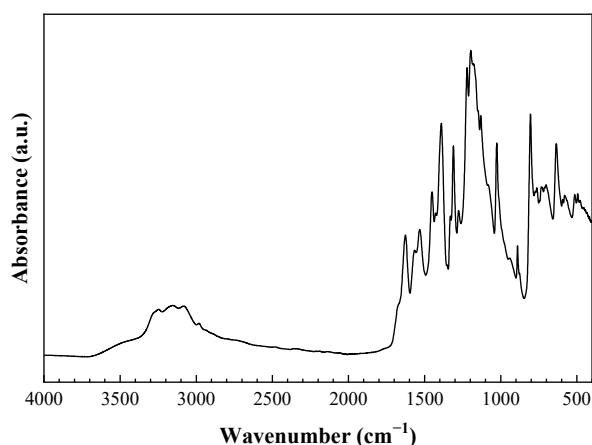


Figure S1. ATR-FTIR spectrum of F,O,S-codoped g-C₃N₄.

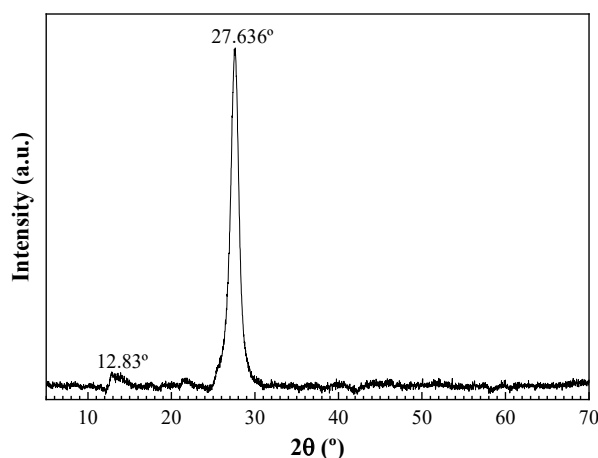


Figure S2. X-ray powder diffraction pattern of F,O,S-codoped g-C₃N₄.

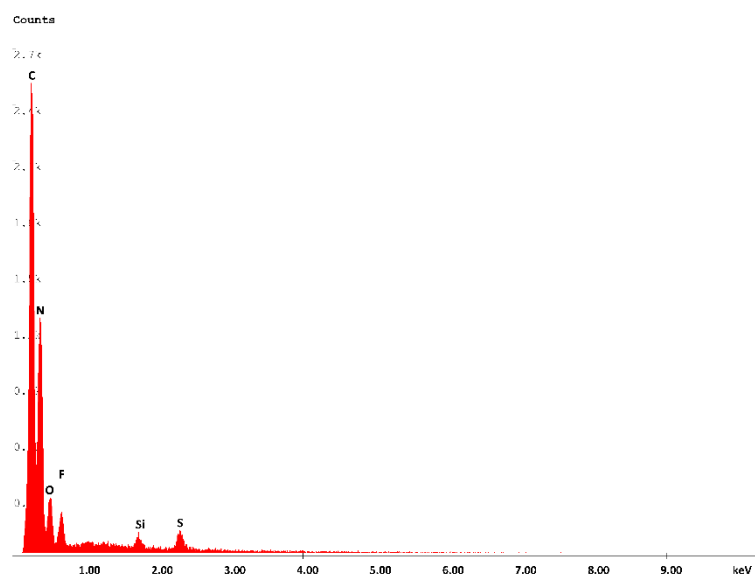


Figure S3. EDS analysis of F,O,S-codoped g-C₃N₄

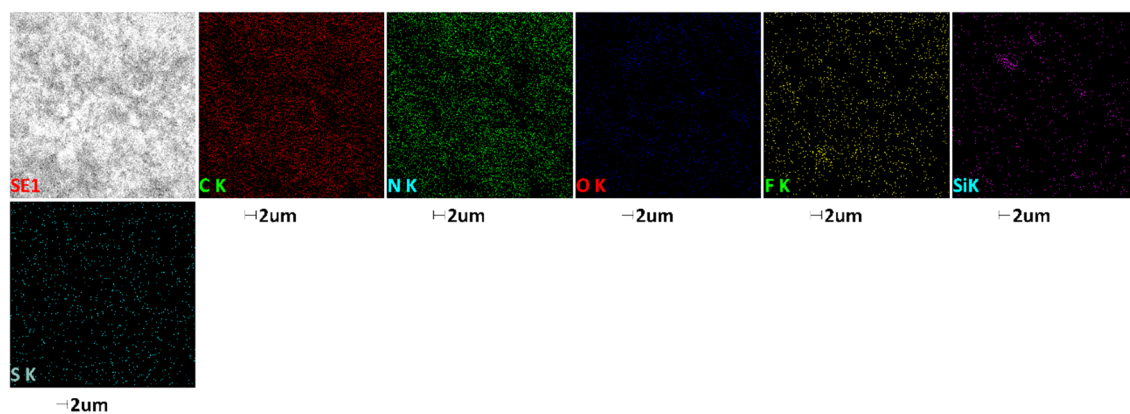


Figure S4. EDS analysis of F,O,S-codoped g-C₃N₄: elemental mapping.

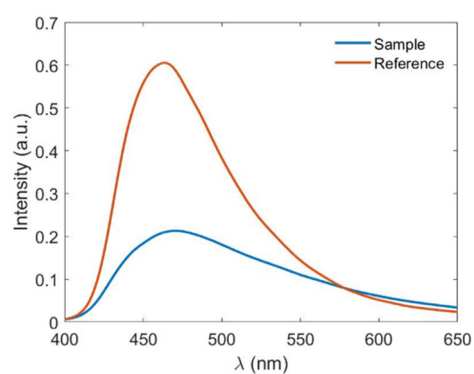


Figure S5. Comparison of the luminescence spectrum of F,O,S-codoped g-C₃N₄ and pristine g-C₃N₄.

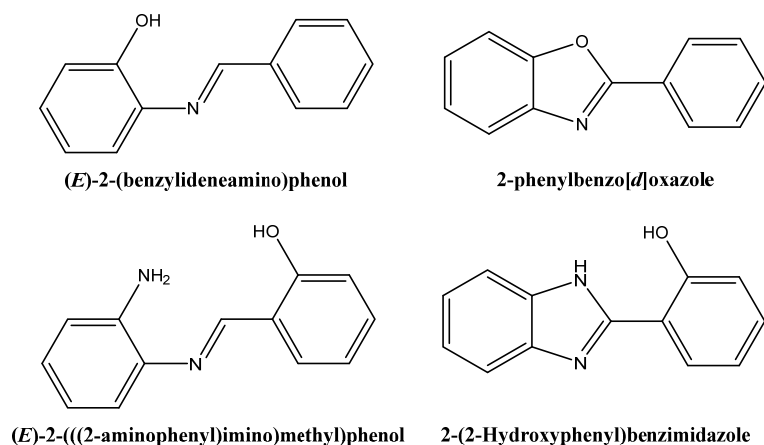


Figure S6. Intermediate and desired products considered in the selectivity evaluation.

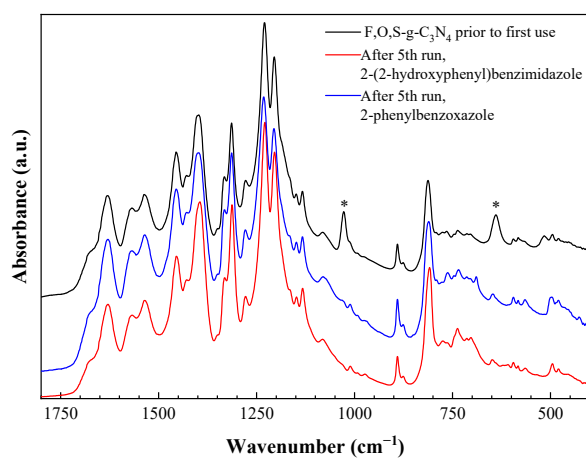


Figure S7. ATR-FTIR spectra of the F,O,S-codoped g-C₃N₄ photocatalyst before 1st use and after 5 runs.

Table S1. CHNS elemental analysis results of F,O,S-codoped g-C₃N₄.

Sample	C %	N %	H %	S %	(O % + F%)
Doped g-C ₃ N ₄ (1)	27.51	41.36	2.43	1.12	(27.58)
Doped g-C ₃ N ₄ (2)	27.37	41.14	2.07	1.06	(28.36)
Doped g-C ₃ N ₄ (3)	27.28	41.16	2.11	1.01	(28.44)
mean±SD	27.39±0.12	41.22±0.12	2.20±0.20	1.06±0.06	(28.12±0.48)
Sulfamethazine standard	51.86	20.13	5.05	11.41	(11.55)
Sulfamethazine sample	51.90	20.17	5.07	11.32	(11.58)