Supporting Information

Photoresponsive CuS@Polyaniline nanocomposites: An excellent synthetic bactericide against several multidrug-resistant pathogenic strains

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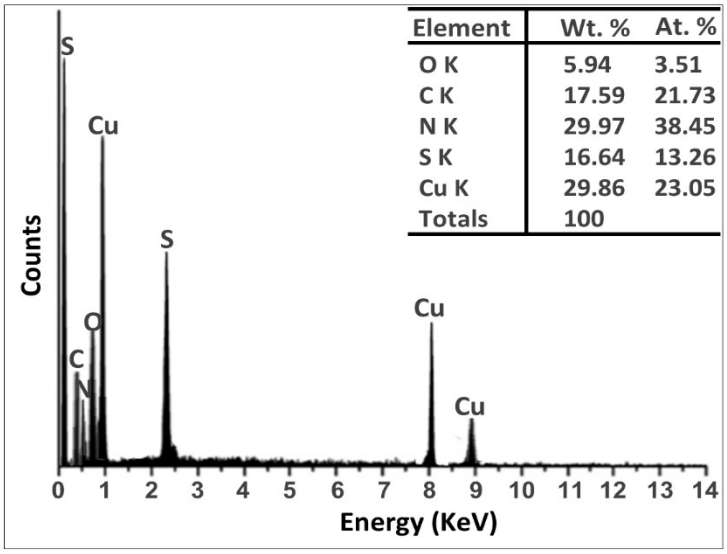

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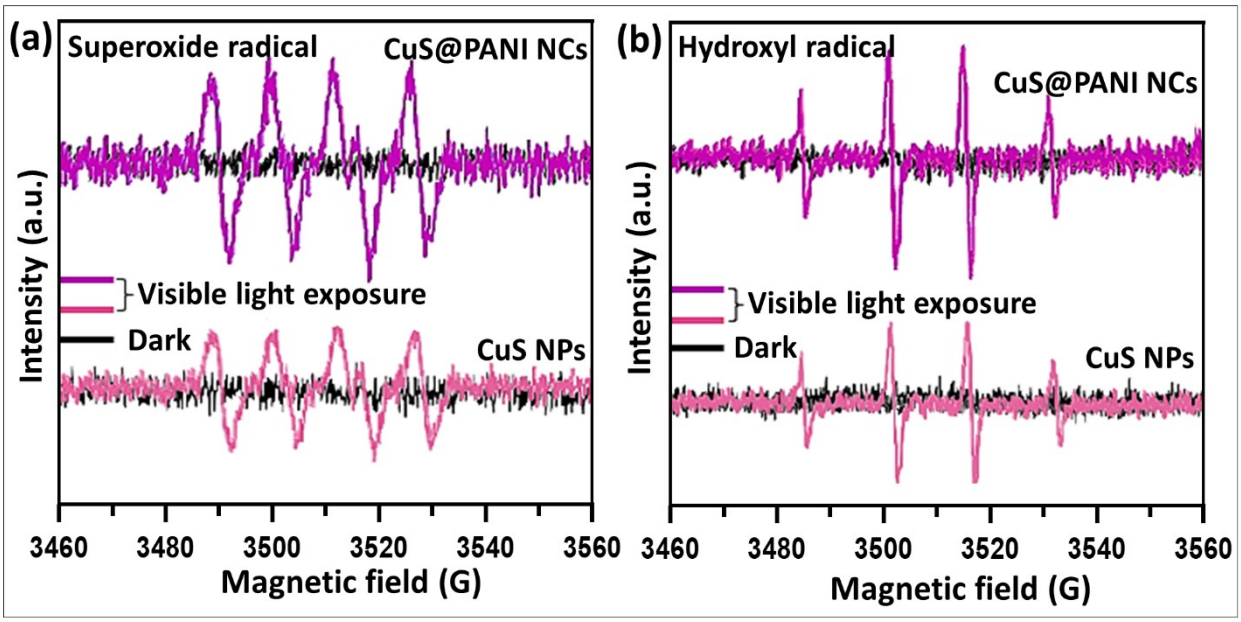
2 Figure S1 EDS spectrum with inset table of atomic/weight elemental percentages of the CuS@PANI NCs



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4 Figure S2 ESR spectra of (a) DMPO−$^{\bullet}O_2^-$ and (b) DMPO−$OH^{\bullet}$ for CuS and CuS@PANI samples under Dark

5 conditions and 20 min of visible light irradiations

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7 Table S1 The relative bactericidal effectiveness of the as-prepared CuS@PANI NCs with reported literatures

Materials	**MIC (μg·ml^{-1})**	**Effectiveness**	**Pathogens**
MoS_2@Polydopamine-Ag[86]	125	> 95 %	*S. aureus, E. coli*
PEG@CuS/g-C_3N_4[1]	200	> 95 %	*S. aureus, E. coli*
Polydopamine@SnS/g-C_3N_4[38]	45	> 90 %	*A. fumigatus,* and *A. flavus, E. faecalis, P. aeruginosa.*
CuS/protonated g-C_3N_4[37]	40 %	> 98 %e	*S. aureus, E. coli*
GO-COOH-CuS-5[74]	---	> 90 %	*E. coli, B. subtitle*
CuS@$Ti_3C_2T_x$[2]	500	> 95 %	*S. aureus, E. coli*
CuS@Corn stalk/chitin[73]	---	Active	*S. aureus, E. coli*
CuS-BSA[3]	50 ppm	80 %	*S. aureus, E. coli*
CuS-BSA/Lysozyme[4]	200	Active	*B. subtitle, E. coli*
CuS@PANI (This work)	30	Active	*S. aureus, S. pneumonaie, E. coli, and P. aeruginosa*

References

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