

Dear Reviewer #1:

Thank you very much for reviewing our revision. According to your suggestions, we have carefully look through our manuscript and made some revisions accordingly.

Detailed responses:

1. Quality of English Language: Reseable Ok for publication.

Line 14: "the electronic interaction within the system" was modified to "electronic interactions between inorganic and organic systems".

Line 18: "the degradation of nitrobenzene" was modified to "nitrogen degradation performance".

Line 24: "and" was modified to ", as well as".

Line 29: "E. coli" was modified to "*E. coli*".

Line 34: "photocatalytic materials" was modified to "photocatalysts".

Line 39: "attention" was modified to "attentions".

Line 40: ", " was replaced by "and".

Line 41: "most suitable and ecological" was modified to "the most suitable and eco-friendly".

Line 42: "applied" was modified to "efficiently-applied".

Line 54: " (GO)" was modified to " (rGO)".

Line 58: "attempted to Dual-catalysts of TiO₂/g-C₃N₄ to incorporate with photosynthetic bacteria" was modified to "attempted to incorporate dual-catalysts of TiO₂/g-C₃N₄ with photosynthetic bacteria".

Line 80: "improvement" was modified to "improvements".

Line 80: "the possible" was modified into "possible".

Line 81: "seem" was changed into "seemed".

Line 83: "materials" was replaced by "substances".

Line 83: "researches" was replaced by "studies".

Line 86: "were found" was modified into "were also uncovered".

Line 88: "the surface energy" was modified into "surface energies".

Line 89: “strengthened their photocatalytic activities” was modified into “strengthened photocatalytic performance”.

Line 90: “modified” was replaced by “tuned”.

Line 92: “role of surface properties” was modified into “roles of surface properties in photocatalysts and bio-substances hybrids”.

Line 96: “could serve” was modified into “serve”.

Line 101: “electron transfer” was changed into “EET”, and “path” was modified into “paths”.

Line 110: “evidence is” was modified into “evidences were”.

Line 113: “industry” was changed into “industries”.

Line 117: “Previously literature” was modified into “Previous literatures”.

Line 118: “into” was changed into “in”.

Line 122: “the” was added.

Line 123: “the changes of the properties of materials” was changed into “properties alternation of g-C₃N₄ based materials”.

Line 124: “extracellular electron transfer (EET)” was changed into “EET”.

Line 126: “the mechanisms of inner circuit of the photocatalytic process was” was changed into “mechanisms of inner circuits during photocatalytic processes were”.

Line 127: “mathematical simulation for charge transfer resistance (R_{ct})” was modified into “mathematical simulations for charge transfer resistances (R_{ct})”.

Line 129: “and” was changed into “, as well as”.

Line 131: “pavement” was changed into “advancement” and “the interactions” was shortened into “interactions”.

Line 133: “. Findings of this work might” was changed into “, and”.

Line 145: “g-C₃N₄” was changed into “G-C₃N₄”.

Line 211: “it was obvious that more bio-substances” was modified into “more bio-substances”.

Line 269: “The chemical structures” was modified into “Chemical structures”.

Line 296: “A slight red-shift was” was modified into “Slight red-shifts were”.

Line 297: “The red-shift was” was modified into “Red-shifts were”.

Line 299: "E. coli" was changed into "*E. coli*".

Line 300: "blue shift" was changed into "the blue shift".

Line 306: "E. coli" was changed into "*E. coli*".

Line 326: "While" was changed into "Whereas".

Line 340: "is" was modified into "was".

Line 438: "Besides, enhanced microbial reduction of nitrobenzene into aniline was previously published, and electrons were proved to conveyed from nitrobenzene to bacteria through reduced graphene oxides" was modified into "Besides, enhanced microbial reduction of nitrobenzene into aniline in previous publications indicated that electrons were conveyed from nitrobenzene to bacteria through reduced graphene oxides".

Line 464: "the" was removed.

Line 479: "hybrids system with chemical stress and bio-activity" was modified into "hybridized systems with chemical stress and bio-activities"