

Supporting Information

Each active species can be detected as ESR signal like Fig. a, d and f. The concentration of reagents, which are TPC, NaN_3 , DMPO and MGD-Fe solution, was decided as largely reacted concentration based on Fig. b, c, e and g.

1. Singlet oxygen measurement

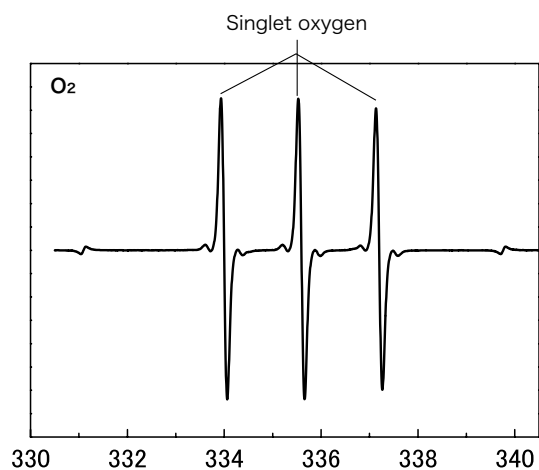


Figure a. ESR signal of singlet oxygen adducts (TPC is 75 mM, plasma gas species is oxygen, treatment time is 30 s and flow rate is 1 L/min.)

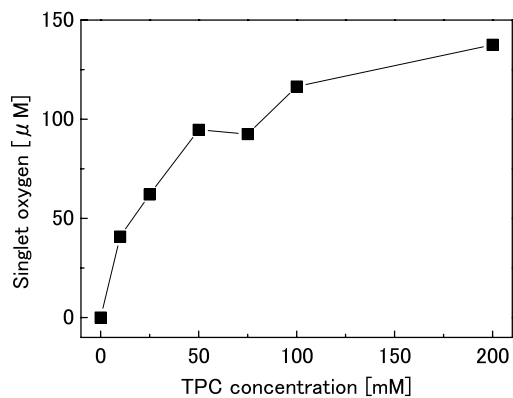


Figure b. Relation between TPC concentration and detected singlet oxygen (Plasma gas species is oxygen, treatment time is 30 s and flow rate is 1 L/min.)

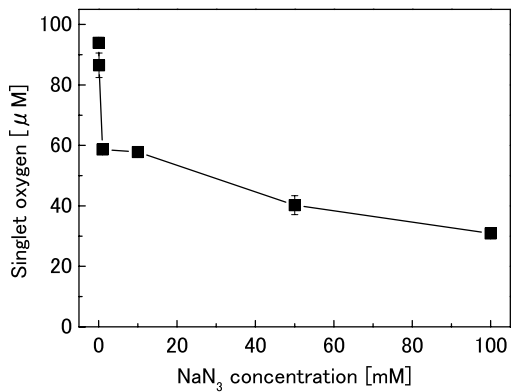


Figure c. Singlet oxygen scavenging ability of NaN_3 (Plasma gas species is oxygen, treatment time is 30 s and flow rate is 1 L/min.)

2. OH radical measurement

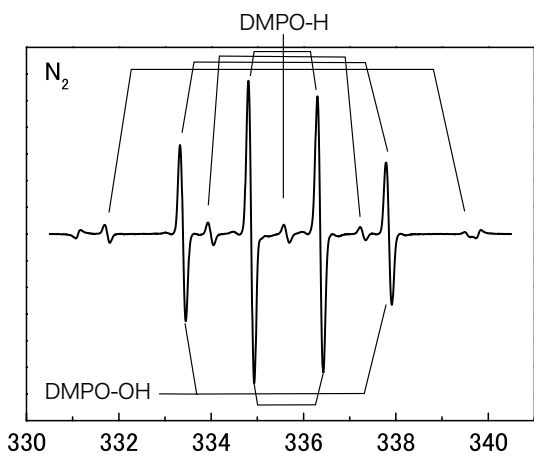


Figure d. ESR signal of OH radical and H radical adducts (DMPO is 200 mM, plasma gas species is nitrogen, treatment time is 30 s and flow rate is 1 L/min.)

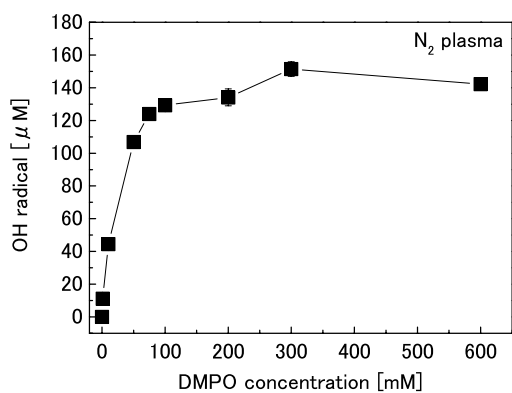


Figure e. Relation between DMPO concentration and detected OH radical (Plasma gas species is nitrogen, treatment time is 30 s and flow rate is 1 L/min.)

2. NO radical measurement

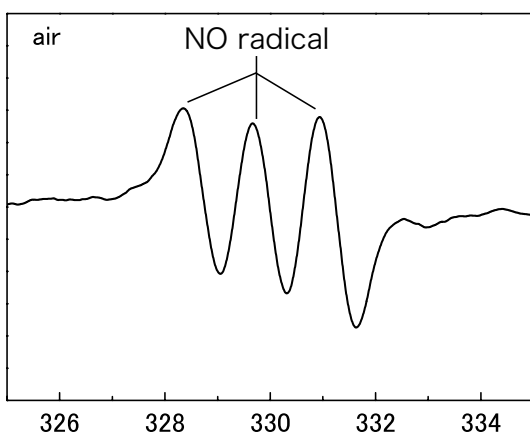


Figure f. ESR signal of NO radical adducts (MGD-Fe is 8 mM, plasma gas species is mock air, treatment time is 30 s and flow rate is 1 L/min.)

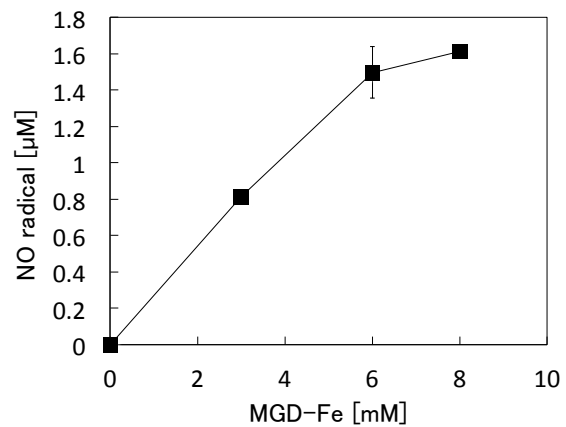


Figure g. Relation between MGD-Fe concentration and detected NO radical (Plasma gas species is mock air, treatment time is 30 s and flow rate is 1 L/min.)