Electronic Supplementary Information

Degradation of tetracycline by visible light using Ca₂Nb₂O₇ composite oxides with perovskite and pyrochlore subcrystalline phases

Junwei Xu^{1, 2#}, Chengxin Lu^{2#}, Xianfeng Zhang³, Rumeng Ouyang², Xiuzhong Fang², Xianglan Xu², Xiang Wang²*

- 1. Department of Applied Chemistry, Jiang Xi Academy of Sciences, Nanchang, 330096, China.
- Key Laboratory of Jiangxi Province for Environment and Energy Catalysis, School of Chemistry and Chemical Engineering, Nanchang University, Nanchang, 330031, China.
- 3. Anhui Silicon Based New Materials Engineering Research Center, School of Material and Chemical Engineering, Bengbu University, Bengbu, 233030, China.

* Corresponding author. Xujunwei0102@163.com; xwang23@ncu.edu.cn

These authors contributed equally to this work.



Fig. S1 The absorption spectra of tetracycline before and after degradation by the two catalysts (a) Ca₂Nb₂O₇-perovskite and (b) Ca₂Nb₂O₇-pyrochlore.

	DMPO-•OH		DMPO-•O2-		TEMPO-h ⁺	
Samples	5 min	10 min	5 min	10 min	5 min	10 min
Pyrochlore	4.538e+13	6.734e+13	4.023e+14	5.368e+14	5.721e+15	3.763e+15
Perovskite	5.402e+13	7.221e+13	5.634e+14	6.607e+14	5.159e+15	3.538e+15

 Table S1 The relevant ESR quantitative results.