

Supporting Information

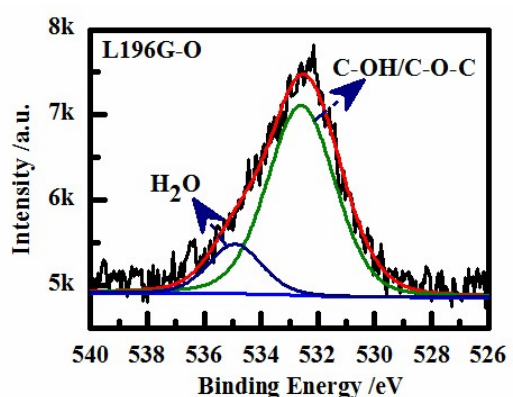
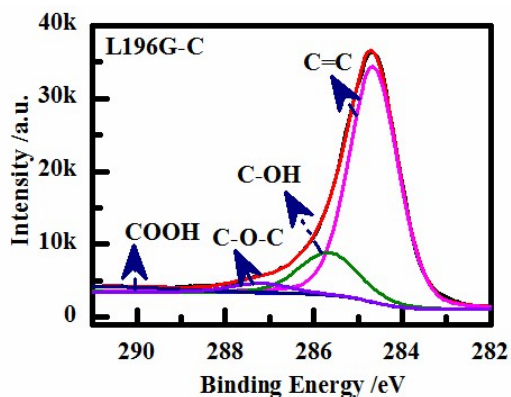
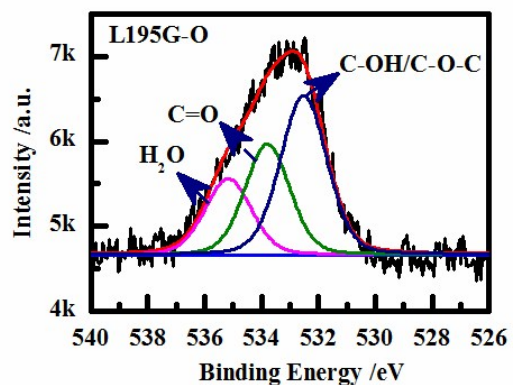
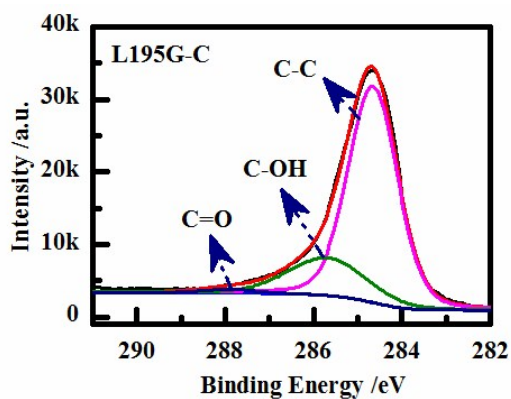
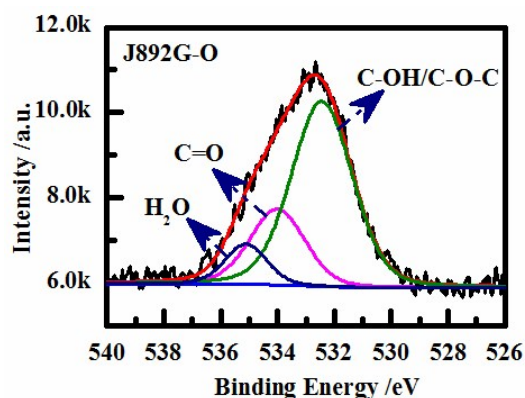
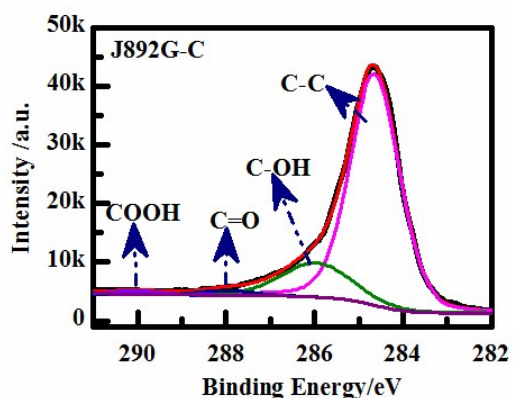
Study of Oxidation Process Occurring in Natural Graphite Deposits

Sun Hongjuan^{1,2*}, Peng Tongjiang^{1,2}, Liu Bo^{1,2}, Ma Caifeng^{1,2}, Luo Liming^{1,2}, Wang Quanjun^{1,2},
Duan Jiaqi^{1,2}, Liang Xiaoyi^{1,2}

1. Key Laboratory of Ministry of Education for Solid Waste Treatment and Resource Recycle, Southwest University of Science and Technology, Mianyang Sichuan, 621010, P. R. China;

2. Institute of Mineral Materials and Applications, Southwest University of Science and Technology, Mianyang, Sichuan 621010, P. R. China

*Corresponding author: Hongjuan Sun, sunhongjuan@swust.edu.cn



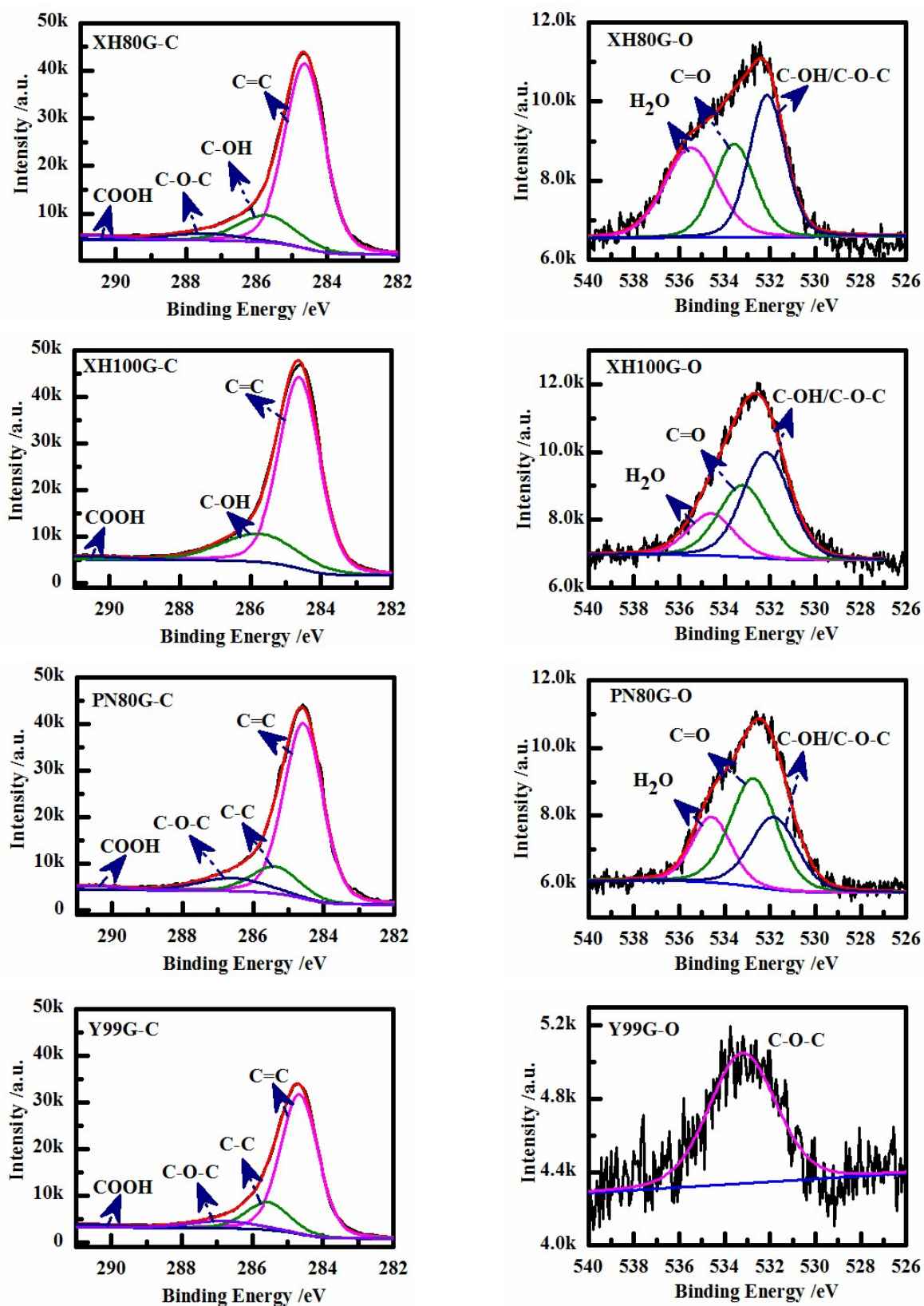
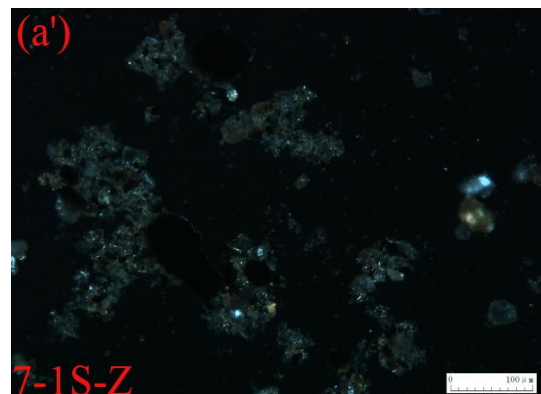
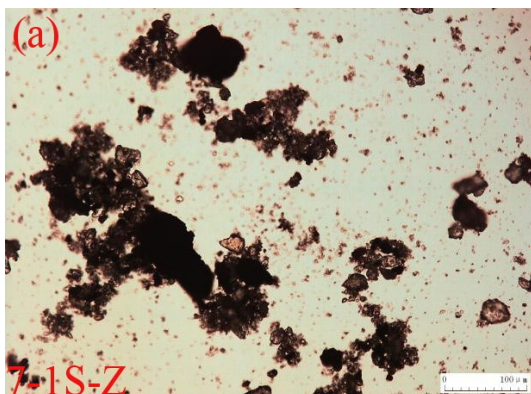
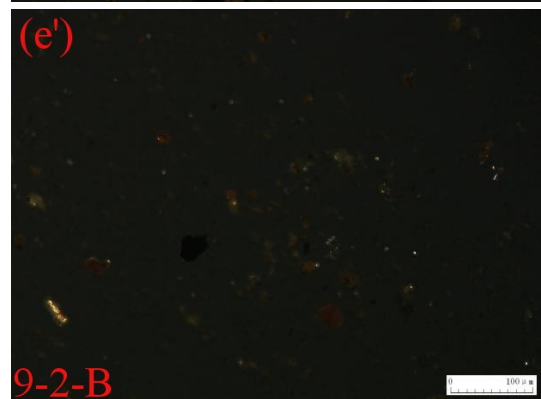
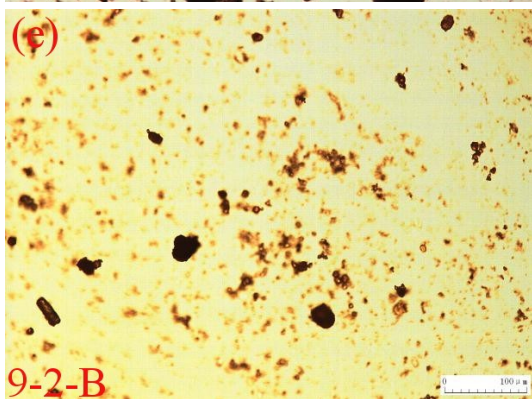
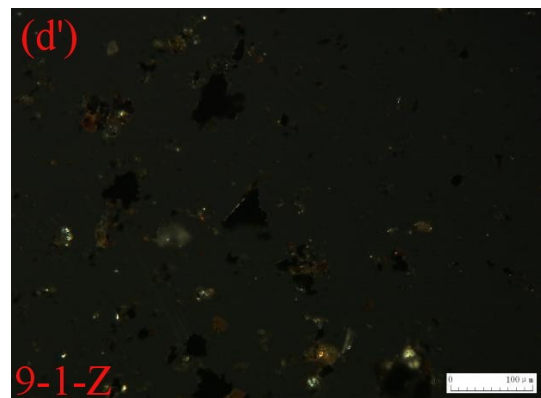
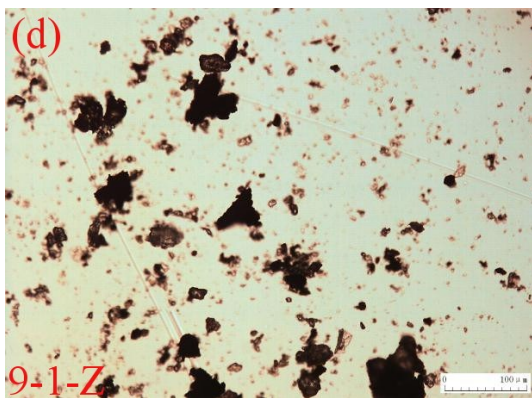
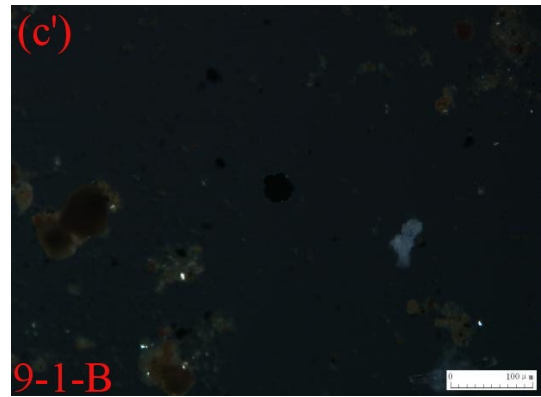
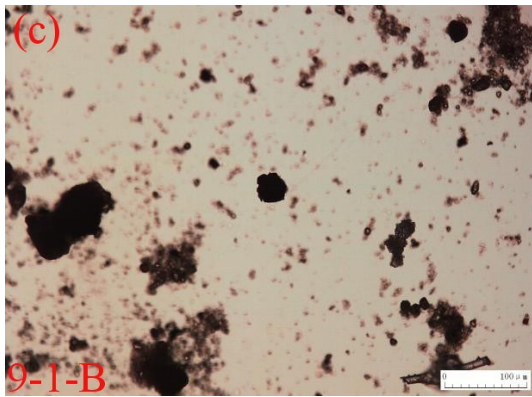
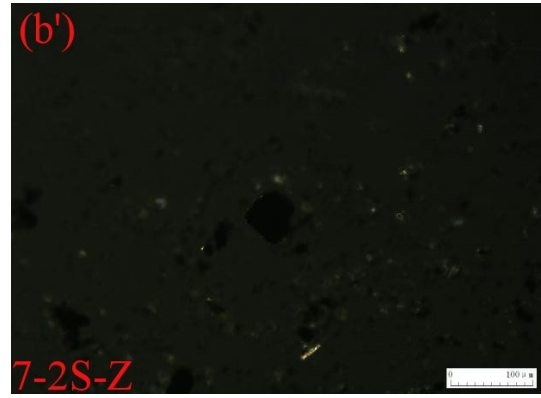
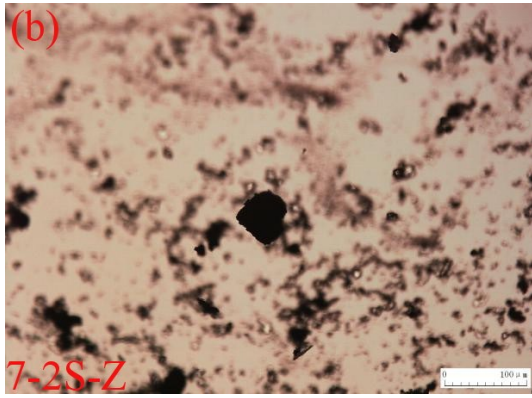


Fig. S1 The C1s and O1s spectra of graphite ore samples extracted from different mines. The left spectra represent C1s and the right spectra represent O1s



Fig. S2 Digital photos of graphite samples collected from Ping River district





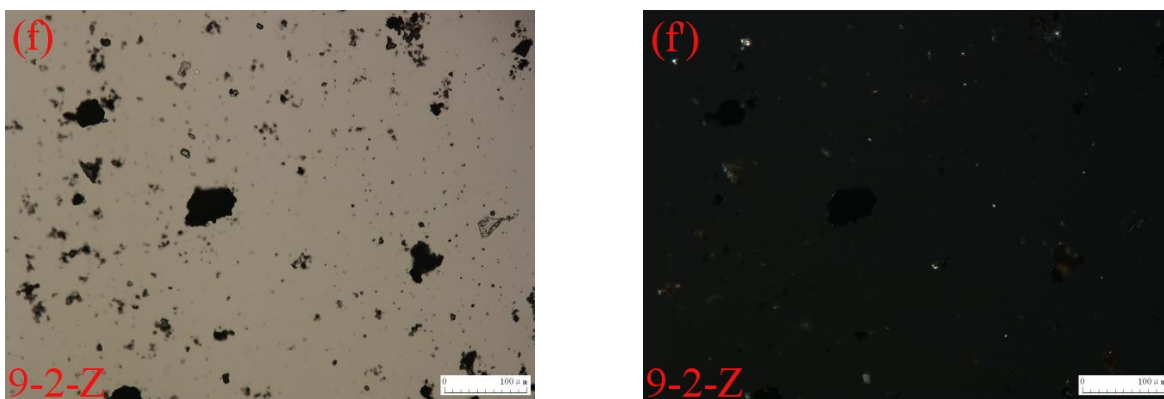


Fig. S3 Single polarization diagrams (a, b, c, d, e, f) and orthogonal polarization diagrams (a', b', c', d', e', f) of different samples

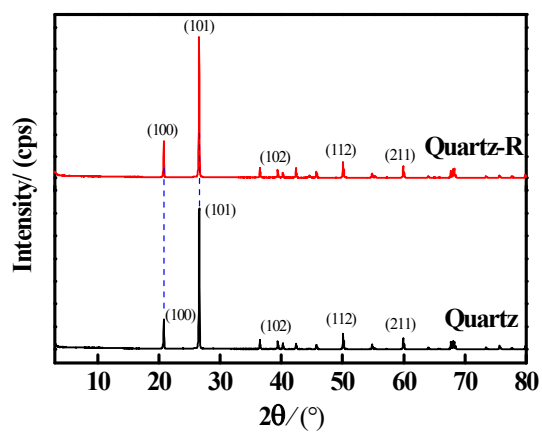
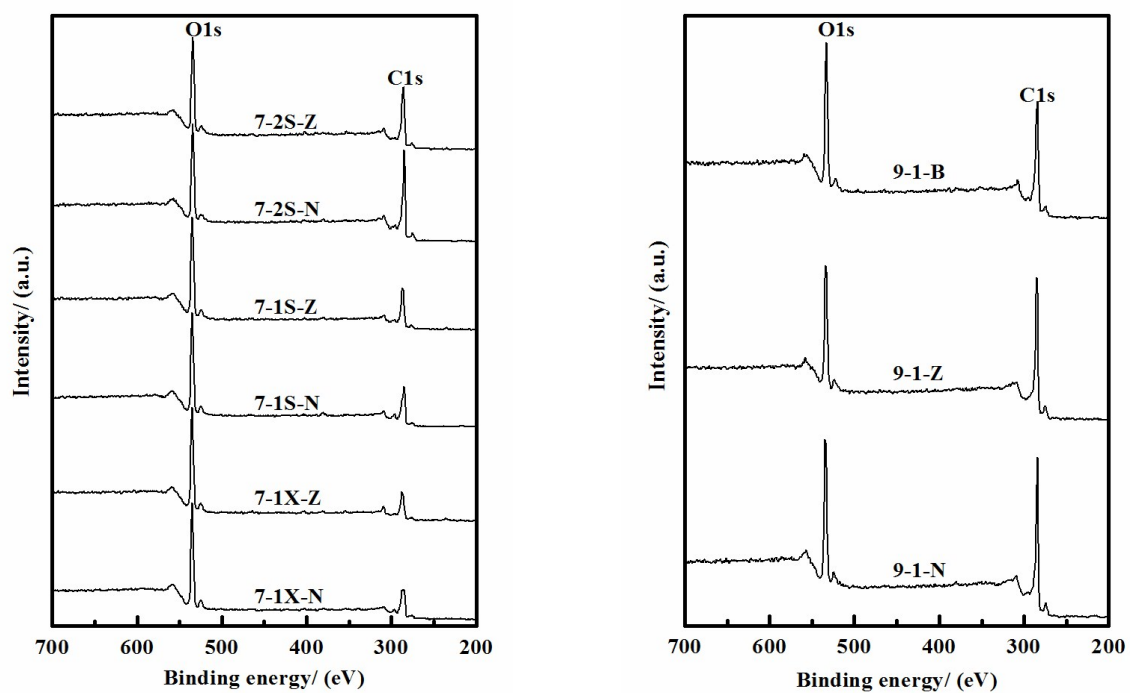


Fig. S4 XRD of pure quartz samples before and after calcination at 450 °C



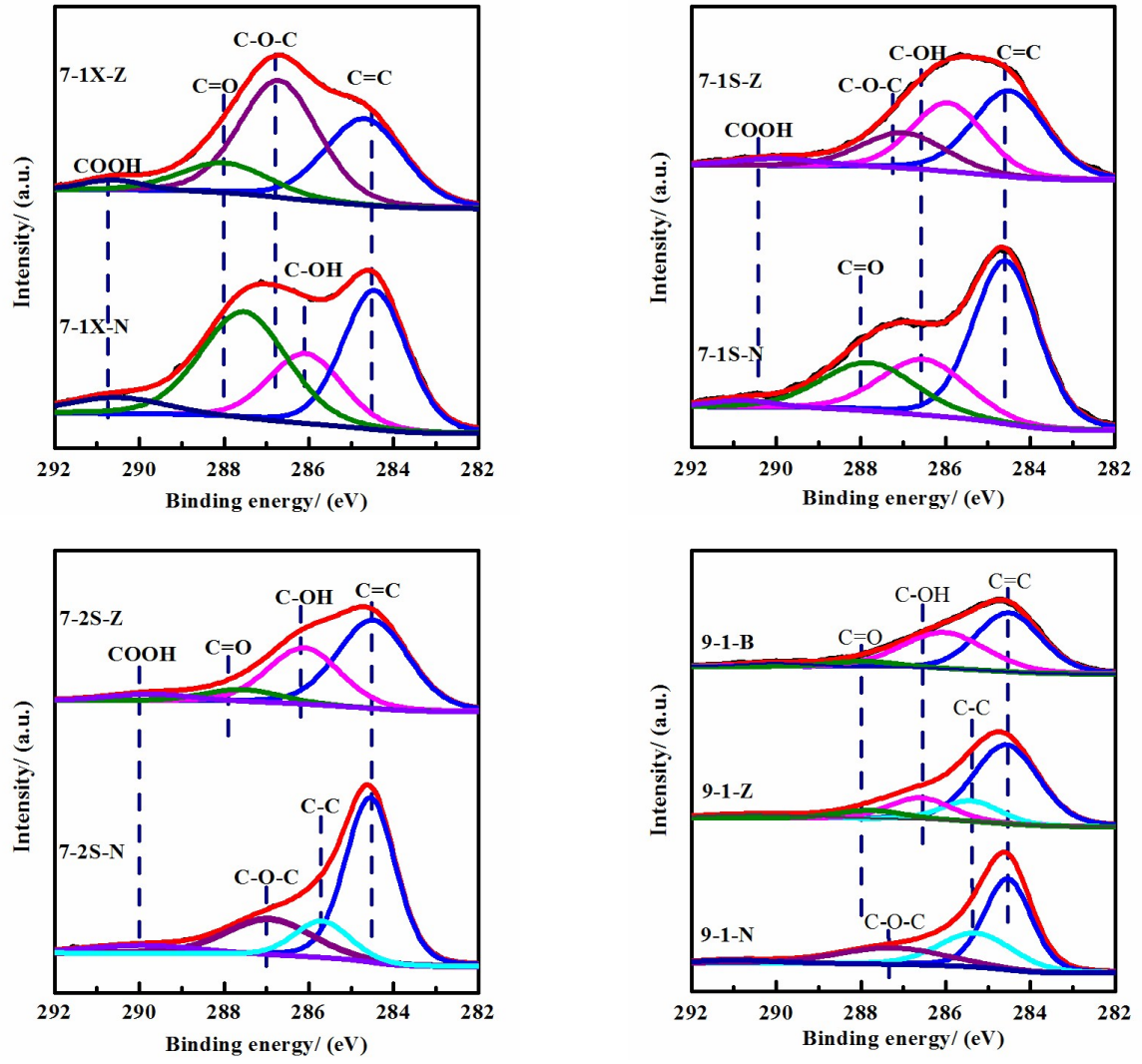


Fig. S5 The XPS and C1s spectra of graphite ore samples