Efficient Catalytic Conversion of Corn Stalk and Xylose into Furfural over Sulfonated Graphene in γ-Valerolactone

Jianru Ma\textsuperscript{a,b}, Wenzhi Li\textsuperscript{a,*}, Shengnan Guan\textsuperscript{a}, Qiying Liu\textsuperscript{b}, Qingqing Li\textsuperscript{b}, Chaofeng Zhu\textsuperscript{a}, Tao Yang\textsuperscript{a}, Ajibola Temitope Ogunbiyi\textsuperscript{a}, Longlong Ma\textsuperscript{b,*}

\textsuperscript{a} Laboratory of Basic Research in Biomass Conversion and Utilization, Department of Thermal Science and Energy Engineering, University of Science and Technology of China, Hefei 230026, PR China

\textsuperscript{b} CAS Key Laboratory of Renewable Energy, Guangzhou Institute of Energy Conversion, Chinese Academy of Sciences, Guangzhou 510640, PR China

*Corresponding author. E-mail address: mall@ms.giec.ac.cn (Longlong Ma)

*Corresponding author. E-mail address: liwenzhi@ustc.edu.cn (Wenzhi Li)

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Fig. S1. SEM images of RGO (a), SG (b) and used SG (c), TEM images of RGO (d), SG (e) and the 5\textsuperscript{th} recycling SG (f).
Fig. S2. Thermogravimetric (TG) analysis pattern of sulfonated graphene.

Fig. S3. FT-IR spectra of GO (a), RGO (b), SG (c) and the 5th recycling SG (d).
Fig. S4. Elemental mapping images (C, O, N, S) of SG.
Fig. S5. The effects of temperature (A), time (B), catalyst loading (C), substrate loading (D) and diverse solvents (E) on 5-HMF yield produced from corn stalk.