Electronic Supplementary Information (ESI)

Water-soluble Graphene Sheets with Large Optical Limiting Response via Non-covalent Functionalization with Polyacetylenes

Xiujuan Xu,^a Daxin Ou,^a Xiaoliang Luo,^b Jun Chen,^a Jingjing Lu,^c Hongbing Zhan,^c Yongqiang Dong,^b Jingui Qin,^a Zhen Li *^a

^a Department of Chemistry, Hubei Key Laboratory on Organic and Polymeric Optoelectronic Materials, Wuhan University, Wuhan, 430072, China. Fax: +86-27-6875-6757; Phone: +86-27-6225-4108; E-mail: lizhen@whu.edu.cn or lichemlab@163.com.

^c College of Materials Science and Engineering, Fuzhou University, Fuzhou 350002, China.



Figure S1. Photographs of water solutions of GO reduced with (right) and without (left) the aid of Pac.

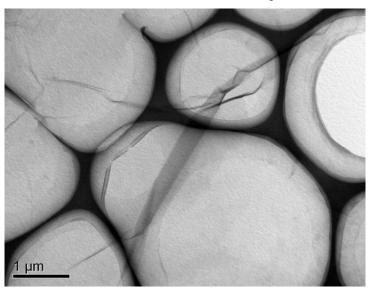


Figure S2. TEM image of GO.

^b Department of Chemistry, Beijing Normal University, Beijing 100875, China.

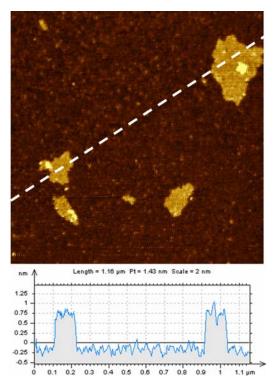


Figure S3. AFM image of GO. Scan size: $1 \mu m \times 1 \mu m$.

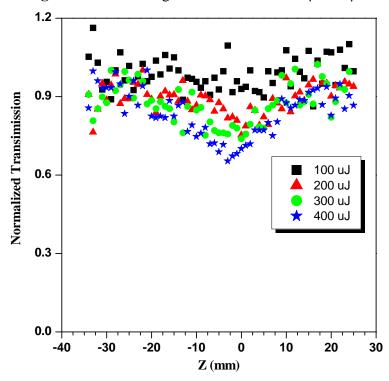


Figure S4. Open-aperture Z-scan results with normalized transmission for GO.

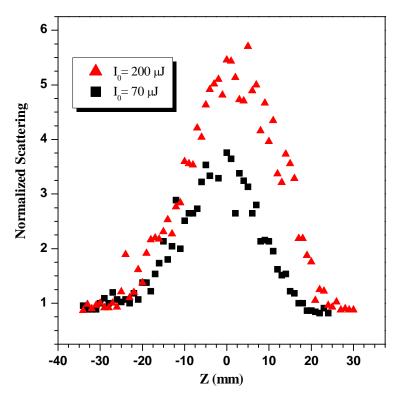


Figure S5. Open-aperture Z-scan results with normalized scattered signals for G-Pac.