Electronic Supplementary Information

Investigation on chirality mechanism of chiral carbon quantum dots derived from tryptophan

Yingying Wei,^{a,b} Lin Chen,^{b,c} Junli Wang,^{b,c} Xuguang Liu,*a,b Yongzhen Yang,*b,c Shiping Yu,^{b,d}

- ^a College of Materials Science and Engineering, Taiyuan University of Technology, Taiyuan 030024, China.
- ^b Key Laboratory of Interface Science and Engineering in Advanced Materials, (Taiyuan University of Technology), Ministry of Education, Taiyuan 030024, China.
- ^c Research Center of Advanced Materials Science and Technology, Taiyuan University of Technology, Taiyuan 030024, China.
- ^d Interventional Treatment Department, Second Hospital of Shanxi Medical University, Taiyuan 030001, China.
- ^e Key Laboratory of Interface Science and Engineering in Advanced Materials of Ministry of Education, Taiyuan University of Technology, Taiyuan 030024, China.

^{*}Corresponding authors: liuxuguang@tyut.edu.cn (Xuguang Liu), yyztyut@126.com (Yongzhen Yang)

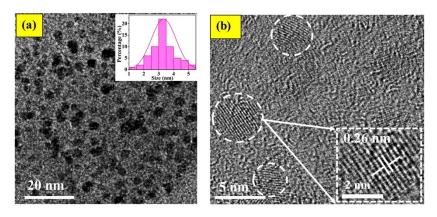


Fig. S1 (a) TEM image and particle size statistics, (b) HRTEM image of D-CQDs

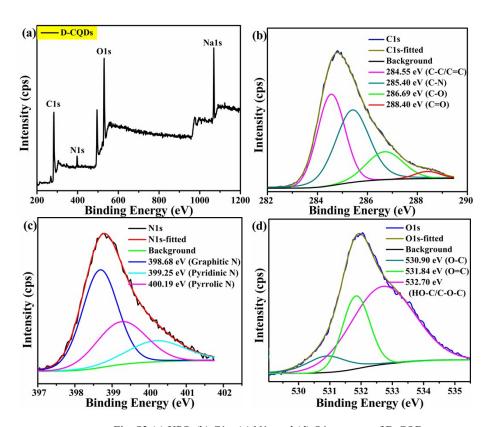


Fig. S2 (a) XPS, (b) C1s, (c) N1s and (d) O1s spectra of D-CQDs

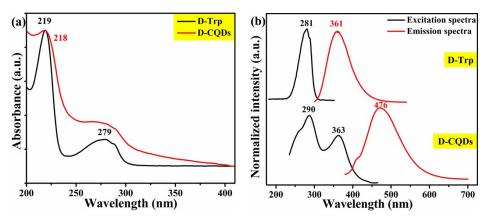


Fig. S3 UV-vis absorption (a), excitation and emission spectra (b) of D-Trp and D-CQDs

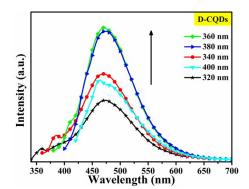


Fig. S4 Emission spectra of D-CQDs aqueous solutions at different excitation wavelengths

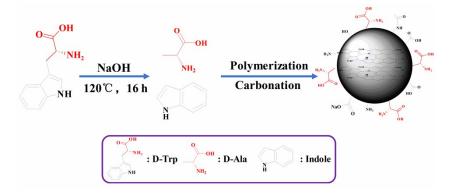


Fig. S5 Synthetic mechanism diagram of D-CQDs