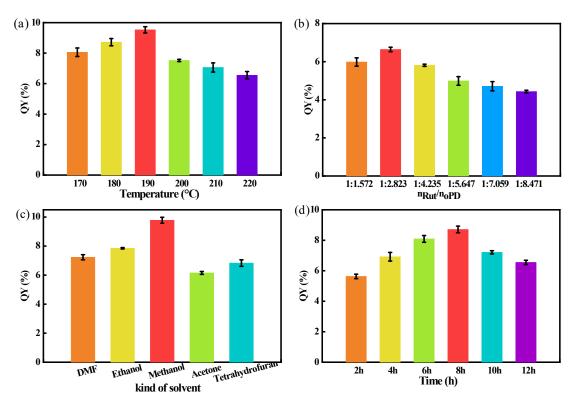
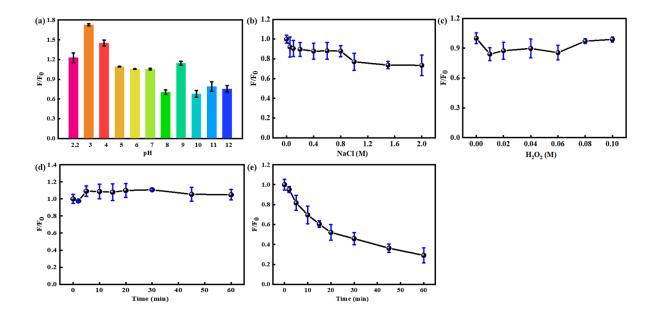
Electronic Supplementary Material (ESI) for Analytical Methods. This journal is © The Royal Society of Chemistry 2023



## **Electronic Supplementary Material**

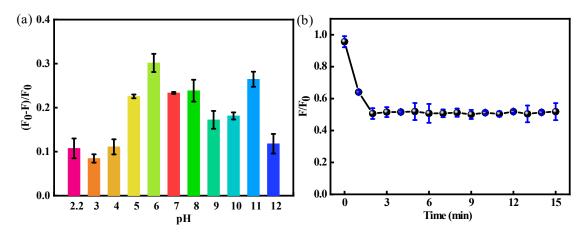
**Fig. S1** Optimization of preparation conditions. The QY of Rut-CDs varies in different reaction temperatures(a), proportions of rutimun and oPD (b), reaction solvents (c) and reaction times(d).



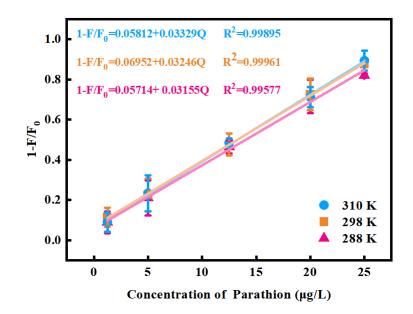
**Fig. S2** Fluorescence intensity of Rut-CDs at different pH values from 2.2 to 12 (a), 0-2 M NaCl concentration (b), antioxidant performance (c), and reaction time under natural (d) and UV light (e).



Fig. S3 Fluorescence intensity change of Rut-CDs without or with different concentrations of parathion



**Fig. S4** Fluorescence intensity of Rut-CDs detecting parathion at different pH values from 2.2 to 12 (a), and reaction time (b).



**Fig. S5** *Stern-Volmer* equation of Rut-CDs at different temperatures. F<sub>0</sub> is the PL intensity of the purified Rut-CDs, and F is the PL intensity of Rut-CDs after addition of parathion.