Fig. S2 Relationships between Shannon and biophysiochemical factors in lakes and reservoirs based on generalized additive models (GAM). a Water samples. **b** Sediment samples. The shadings are at the 95% confidence intervals. In figure (a), the abscissa unit is: T (temperature, °C), TP (total phosphorus, mg/L), NH_4^+-N (ammonia nitrogen, mg/L), TN (total nitrogen, mg/L), NO_3^--N (nitrate nitrogen, mg/L), DO (dissolved oxygen, mg/L), conductivity (μS/cm), chlorophylla (μg/L), and NO_2^--N (nitrate nitrogen, mg/L). In figure (b), the abscissa unit is T (temperature, °C), TP (total phosphorus, mg/g), NH_4^+-N (ammonia nitrogen, mg/g), TN (total nitrogen, mg/g), NO_3^--N (nitrate nitrogen, mg/g), and NO_2^--N (nitrate nitrogen, mg/g). *$0.01 < p < 0.05$, **$0.001 < p \leq 0.01$, and ***$p \leq 0.001$.