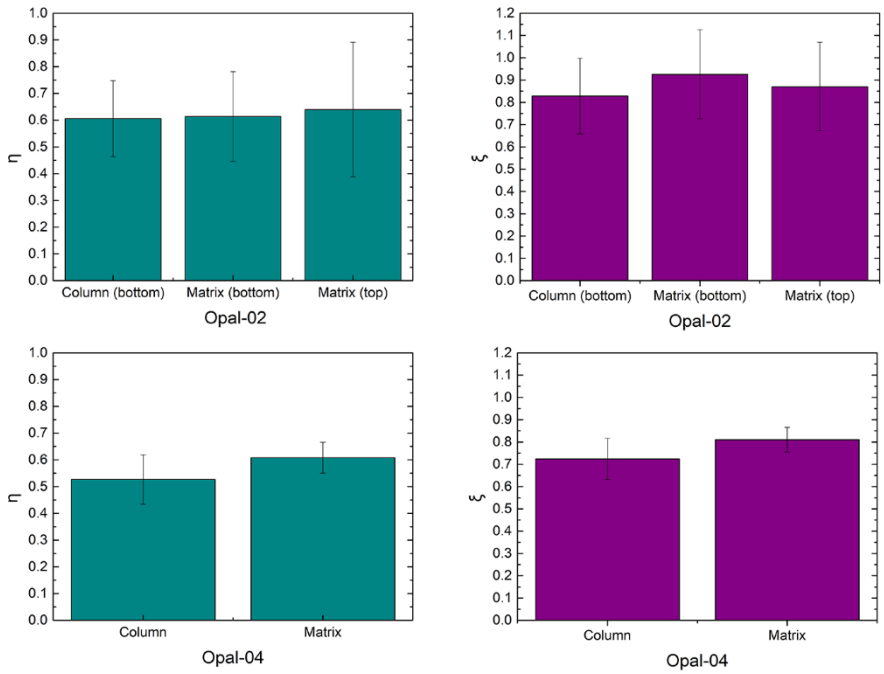

Figure S1. Error Bars of the η and ξ values of different areas in Opal-02 and 04.

According to the formula for error propagation [45], the formula for estimating the standard error of η (Equation S1) is as follows:

$$SE_{\eta} = \frac{[(I(R2)+I(R3))^2 \cdot \left(SE^2_{I(R1)}+SE^2_{I(R4)}\right)+\left(I(R1)+I(R4)\right)^2 \cdot \left(SE^2_{I(R2)}+SE^2_{I(R3)}\right)]^{\frac{1}{2}}}{(I(R1)+I(R2)+I(R3)+I(R4))^2}, \quad \text{(S1)}$$

where $SE_{I(R1)}$, $SE_{I(R2)}$, $SE_{I(R3)}$ and $SE_{I(R4)}$ are the standard errors of I(R1), I(R2), I(R3) and I(R4) respectively, which were obtained by the fitting program of origin 9 software.

The formula for estimating the standard error of ξ (Equation S2) is as follows:

$$SE_{\xi} = \xi \cdot \left(\frac{SE^2_{\Gamma(R3)}}{\Gamma(R3)^2} + \frac{SE^2_{\Gamma(R4)}}{\Gamma(R4)^2}\right)^{\frac{1}{2}}, \quad \text{(S2)}$$

where $SE_{\Gamma(R3)}$ and $SE_{\Gamma(R4)}$ are the standard errors Γ(R3) and Γ(R4) respectively, which were obtained by the fitting program of origin 9 software.