

$$\mathcal{I}_{g,n} = \int d^4x \mathcal{F}_{g,n}(X, X^\dagger) \left[\left(R_{(-)\mu\nu\rho\tau} R_{(-)}^{\mu\nu\rho\tau} \right) \left(F_{(-)\lambda\sigma}^G F_{(-)}^{G\lambda\sigma} \right) + \left(B_{(-)\mu\nu}^{i\alpha} B_{(-)i\alpha}^{\mu\nu} \right)^2 \right] \\ \times \left[F_{(-)\lambda\sigma}^G F_{(-)}^{G\lambda\sigma} \right]^{g-2} \left[F_{(+)\rho\sigma} F_{(+)}^{\rho\sigma} \right]^n$$