

$$I_1 = \text{tr}(\boldsymbol{C})$$

$$I_2 = \frac{1}{2} \left[I_1^2 - \text{tr} \left(\boldsymbol{C}^2 \right) \right]$$

$$I_{4f} = \boldsymbol{f}_0 \cdot (\boldsymbol{C} \boldsymbol{f}_0)$$

$$I_{4s} = \boldsymbol{s}_0 \cdot (\boldsymbol{C} \boldsymbol{s}_0)$$

$$I_{8fs} = \boldsymbol{f}_0 \cdot (\boldsymbol{C} \boldsymbol{s}_0)$$