

$$\begin{pmatrix} \boldsymbol{D} \\ \boldsymbol{H} \end{pmatrix} = \begin{pmatrix} \epsilon_0(\tilde{\epsilon}_r + \kappa_{DE}) & \sqrt{\frac{\epsilon_0}{\mu_0}}\kappa_{DB} \\ \sqrt{\frac{\epsilon_0}{\mu_0}}\kappa_{HE} & \mu_0^{-1}(\tilde{\mu}_r^{-1} + \kappa_{HB}) \end{pmatrix} \begin{pmatrix} \boldsymbol{E} \\ \boldsymbol{B} \end{pmatrix}$$