

$$\begin{aligned}
& \text{c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1} \quad 2 \text{ c 2 c 2 c 2 c 2 c 2 c 2 c 2 c 2 c 2 c} \\
& \text{c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1} \quad 2 \text{ c 2 c 2 c 2 c 2 c 2 c 2} \\
& \text{c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1} \\
& \text{c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1} \quad \hat{H}_{\text{SE}} = \chi(t) \boldsymbol{\alpha} \cdot \hat{\boldsymbol{\sigma}} \otimes \hat{O}. \quad (2) \\
& \text{c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1} \\
& \text{c 1 c 1 c 1 c 1} \quad \text{c 2 c 2 } \mathbf{h} \cdot \hat{\boldsymbol{\sigma}} \text{ c 2 c 2 } \boldsymbol{\alpha} \cdot \hat{\boldsymbol{\sigma}} \text{ c 2 c 2 c 2} \\
& \text{c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1} \quad \text{c 2 c 2 c 2 c 2 c 2 c 2 } \mathbf{h} \text{ c 2 c 2 } \boldsymbol{\alpha} \text{ c 2 c 2} \\
& \text{c 1 c 1 c 1 c 1 c 1 c 1 c 1} \quad \hat{O} \text{ c 2 c 2 c 2 c 2 c 2 c 2 c 2 c 2 c 2 c} \\
& \quad \quad \quad 2 \text{ c 2 c 2 c 2 c 2 c 2 c 2 c 2 c 2 c 2 c} \\
& \hat{H} \text{ c 1 c 1 } \hat{H} \text{ c 1 c 1 s c 1 c 1 } \hat{H} \text{ c 1 c 1 E c 1 c 1 } \hat{H} \text{ c 1 c 1 s E c 1 c 1} \quad 2 \text{ c 2 c 2 c 2 c 2 c 2 c 2} \\
& \quad \quad \quad (1) \quad \text{c 2 c 2 } \chi(t) \text{ c 2 c 2 c 2 c 2 c 2 c 2} \\
& \quad \quad \quad \text{c 2 c 2 c 2 c 2 c 2 c 2 c 2 c 2 c 2 c 2} \\
& \text{c 1 c 1 } \hat{H}_{\text{E}} \text{ c 1 c 1 c 1 c 1 c 1 c 1 c} \quad \text{c 2 c 2 c 2 c 2 c 2 c 2 c 2 c 2 c 2 c 2} \\
& \text{1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1} \quad \text{c 2 c 2 c 2 c 2 c 2 c 2 c 2 c 2 c 2 c 2} \\
& \hat{H}_{\text{S}} = \Omega \mathbf{h} \cdot \hat{\boldsymbol{\sigma}} \text{ c 1 c 1 c 1 c 1 c 1 c 1 c} \quad \chi \text{ c 2 c 2 c 2 c 2 c 2 c 2 c 2 c 2}
\end{aligned}$$