

integration of time-dependent BSE by 2nd order Runge-Kutta:

$$G^{<}(t)$$



$$\mathbf{P}(t) \propto \sum_{n,m,\mathbf{k}} \mathbf{r}_{n.m\mathbf{k}} G_{n,m,\mathbf{k}}^{<}(t)$$

Post-processing

optical properties

e.g.
$$\hat{\chi},\hat{\chi}^{(2)},\hat{\chi}^{(3)}$$