Supporting Information for "Development of Calculation and Analysis Methods for Dynamic First Hyperpolarizability Based on the Ab Initio Molecular Orbital – Quantum Master Equation Method"

Ryohei Kishi*, Hiroaki Fujii, Shingo Kishimoto, Yusuke Murata, Soichi Ito, Katsuki Okuno, Yasuteru Shigeta, Masayoshi Nakano*

Department of Materials Engineering Science, Graduate School of Engineering Science, Osaka University, Toyonaka, Osaka 560-8531, Japan

Contents

jp301213z_si_002.pdf: Movie sequence of $\rho_{pol}(\boldsymbol{r},t)$ of system **1** shown in Figure 3.

jp301213z_si_003.pdf: Movie sequence of $\rho_{pol}(\boldsymbol{r},t)$ of system **2** shown in Figure 3.

jp301213z_si_004.pdf: Movie sequence of $\rho_{pol}(\boldsymbol{r},t)$ of system **3** shown in Figure 3.

jp301213z_si_005.pdf: Movie sequence of SHG response density $\rho^{(2)}(\boldsymbol{r},-2\omega;\omega,\omega)\cos 2\omega t$ of system **1**.

jp301213z_si_006.pdf: Movie sequence of SHG response density $\rho^{(2)}(\boldsymbol{r},-2\omega;\omega,\omega)\cos 2\omega t$ of system **2**.

jp301213z_si_007.pdf: Movie sequence of SHG response density $\rho^{(2)}(\boldsymbol{r},-2\omega;\omega,\omega)\cos 2\omega t$ of system **3**.