Supporting Information for "Reading the orbital angular momentum of light using plasmonic nanoantennas"

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Movies of the induced electric field

The movies show the temporal evolution of the induced electric field calculated with the BEM (Dynamics_BEM.avi) and with the analytical antenna model (Dynamics_Antennamodel.avi). We consider an excitation of the nanoantenna array consisting of three rods with twisted light having an OAM of $\ell = 0$ (left), $\ell = +1$ (middle) and $\ell = -1$ (right). The excitation frequency is chosen to match the corresponding resonance frequency $\omega_r = 2\pi c / \lambda_r$. The movies display the intensity of the electric field on a logarithmic scale for four periods $T_r = 2\pi / \omega_r$ at $z = 0$. We find a good qualitative agreement for the BEM and the analytical model, displaying a rotating mode for $\ell = 0$, a rotating mode with inverted direction for $\ell = +1$ and a breathing mode for $\ell = -1$.