Light Pulse Excitation of Radiative Polaritons in a 2D Excitonic Layer

NORMAN J.M. HORING, Stevens Institute of Technology, T. YU BAGAEVA, V.V. POPOV, Institute of Radio Engineering and Electronics, Saratov Division, Russia, JAY MANCINI, Kingsborough Community College of CUNY — The excitation of a polariton mode in a two-dimensional excitonic layer by a light-wave extinction front is analyzed here using the dyadic Green’s function formalism. The electromagnetic response of the 2D excitonic layer includes inhomogeneous radiative exciton-polariton modes corresponding to the complex poles of the Green’s function.