Stimulated secondary emission from semiconductor microcavities

We find strong influence of final-state stimulation on the time-resolved light emission dynamics from semiconductor microcavities after pulsed excitation allowing angle-resonant polariton-polariton scattering on the lower-polariton branch. The polariton dynamics can be controlled by injection of final-state polaritons at densities below a polariton saturation density of \(5 \times 10^8 \text{ cm}^{-2}\). A bosonic enhancement factor in the dynamics of up to 700 is evaluated.

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