

Strong Light-Matter interaction in nanohybrid architectures

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Abstract

The fabrication of hybrid systems composed by optical nanocavities and quantum dots represents a key approach to induce new and distinctive physico-chemical properties, with significant implications in fields ranging from cavity quantum electrodynamics to polariton chemistry [1,2]. Here, strong coupling between surface plasmon polaritons and nanocrystal quasiparticles such as excitons [3,4] and phonons [5] has been investigated through steady-state and time resolved spectroscopies, thus confirming the possibility of altering the intrinsic nanomaterial response by means of properly tailored optical nanoresonators.

References

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