

Review of: "Polariton Peaks from the Coupled System of the Spin Triplet Transition and the Cavity, Classically Considered in the Linear Approximation"

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Potential competing interests: No potential competing interests to declare.

In this present work, the authors studied "Polariton Peaks from the Coupled System of the Spin Triplet Transition and the Cavity, Classically Considered in the Linear Approximation." I recommend publication after considering the following comments,

1. Please verify its room-temperature operation stability because the effects of thermal fluctuation are important when a cavity possesses atoms.
2. What proposal does the author have for possible device efficiency?
3. The work will be improved by demonstrating/simulating the devices experimentally.
4. To improve the quality of the work, the authors should include the non-linearity effect.
5. Please explain the origin of the "fork" effect, which is predicted for normal decays with the decreasing value of the spin-photon coupling.
6. Please elaborate on the conclusion in one paragraph for a better understanding.
7. The Rabi frequency is the rate at which the probability amplitudes of two atomic energy levels oscillate in an electromagnetic field. Please calculate the strength of the transition dipole moment of the two-level system.
8. What happens when there are N atoms in the cavity? Please explain the origin of fluctuations induced in the cavity.