

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.

The authors reported a classical model using linearized coupled differential equations for the description of the polaritonic peaks conditioned both by free and forced Rabi oscillations of the spin-cavity polaritons (SCP) system. The subject is interesting for several applications such as storage in quantum memories and optical interfaces.

However, some corrections and improvements should be made to the manuscript:

1. Define "EPR" in the abstract as it appears first.
2. What do you mean by " μ_0 is the instrumental factor of the cavity with the sample" as given in equation 1? More explanation is needed.
3. Several abbreviations are not defined, such as: MW (p1); STS (p1); cQED (p2)
4. The frequencies in figure 1 should appear first in 1. If... (p3).
5. Give the experimental values of the parameters used in the work (Ref. from Breeze et al., 2017).
6. What is the "l" given in equation 6? If it is the number 1, it should be omitted or clarified.
7. Figure 4 is scaled in the units of the instrumental factor. Therefore, a comparison with the experiment should be given.
8. The conclusion is very short. No information about the main results is given. So, it should be detailed.

The manuscript contains some errors. In my opinion, the manuscript should be revised taking into account the points mentioned above.

END REPORT