Editorial Note: this manuscript has been previously reviewed at another journal that is not operating a transparent peer review scheme. This document only contains reviewer comments and rebuttal letters for versions considered at Nature Communications.

Reviewers' Comments:

Reviewer #1:

Remarks to the Author:

The authors have satisfactorily addressed all the points I have raised in my previous report. The new explanations and the new part involving a 5-mode all-optomechanical circulator have significantly improved the paper. I find the paper an important contribution for the development of on-chip nonreciprocal devices and a clever application of optomechanical systems and therefore I suggest publication of the paper in Nature Communications.

Reviewer #2:

Remarks to the Author:

The revisions performed by the authors has indeed improved the manuscript. I find the current revision of the manuscript suitable for publication in Nature Communications