

REFERENCES

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- [2] E. Gil-Santos, C. Baker, A. Lemaître, C. Gomez, G. Leo, I. Favero, *Nat. Comm.* 8 (2017) 14267.
- [3] E. Gil-Santos, M. Labousse, C. Baker, A. Goetschy, W. Hease, C. Gomez, A. Lemaître, G. Leo, C. Ciuti, I. Favero, *Phys. Rev. Lett.* 118 (2017) 063605.

FIGURES

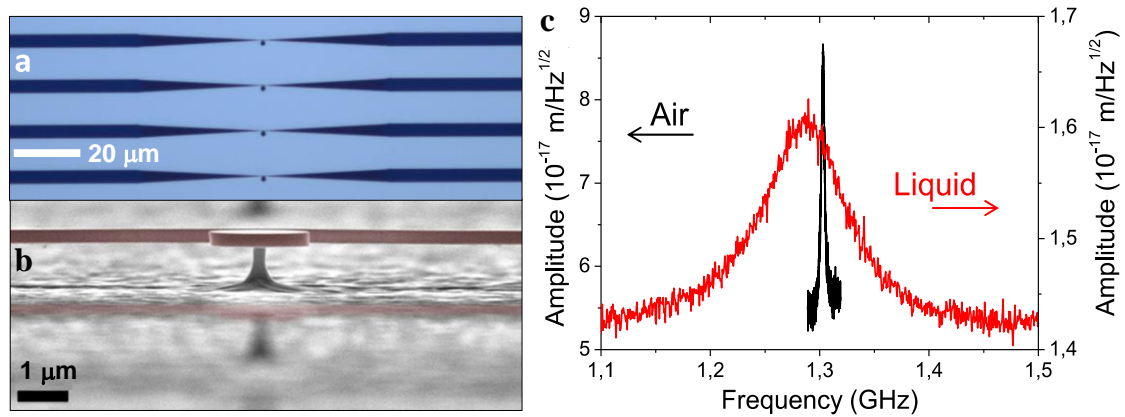


Figure 1. a) Optical microscope top view of four tapered waveguides and disk resonators. b) Scanning electron microscope side view of a semiconductor disk resonator. c) Thermomechanical spectra of the disk vibrating in air (dark blue) and in liquid (red).

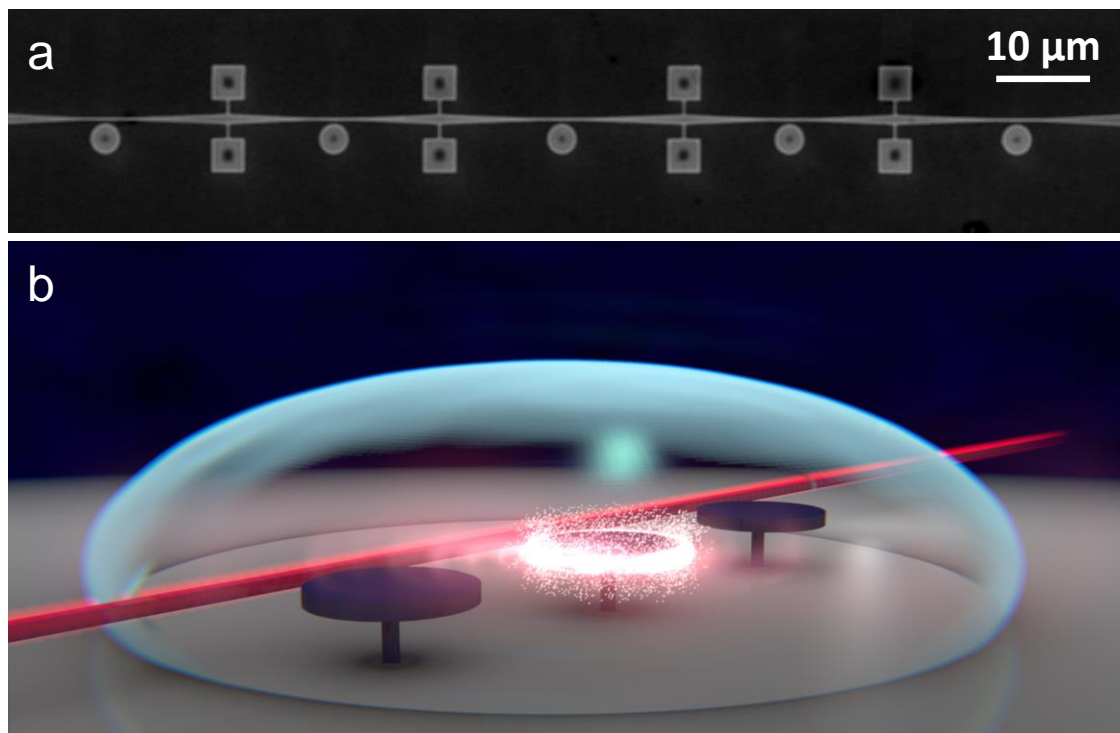


Figure 2. a) Top-view electron micrograph of a set of five disk resonators in series along a suspended waveguide held by square anchors. b) Illustration of the resonant PEC etching of a disk resonator belonging to a set of three resonators immersed in a liquid droplet.

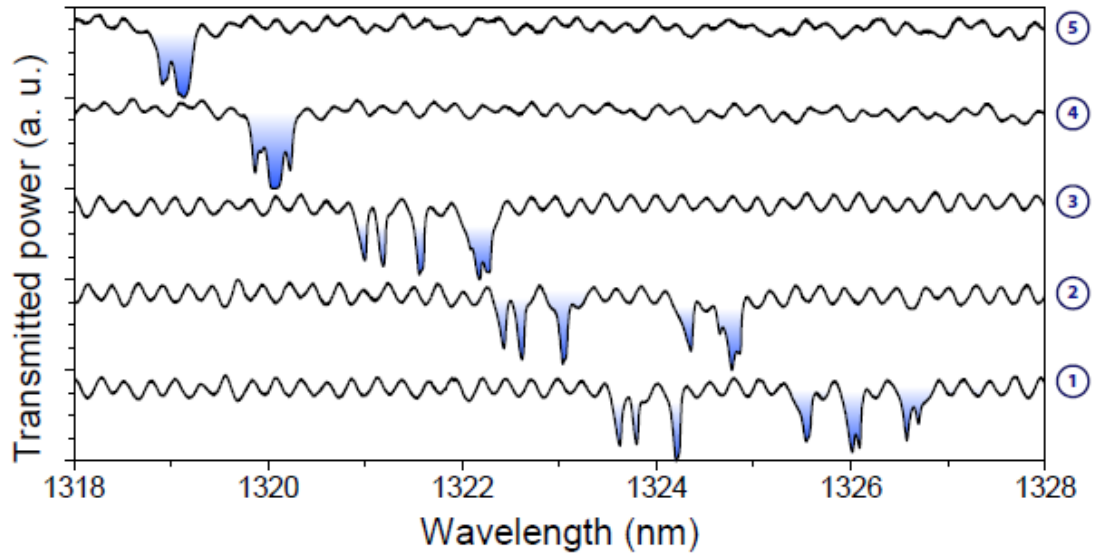


Figure 3. Five optical spectra corresponding to step-by-step spectral alignment of five optical resonators immersed in water.

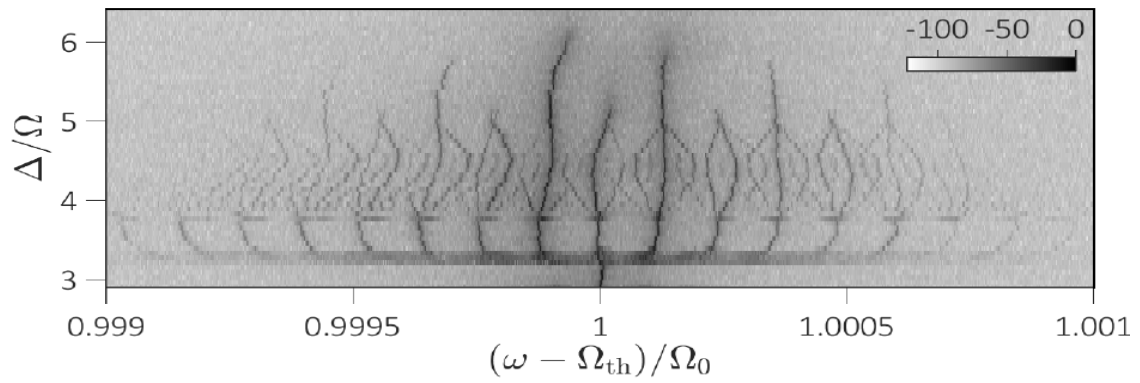


Figure 4. Gray-scale map of the power spectral density for the system of three optomechanical oscillators as a function of the normalized laser-cavity detuning Δ/Ω .