Electronic Supplementary Material (ESI) for Nanoscale.

Hybrid Tamm and quasi-BIC microcavity modes

D. S. Buzin,[†,‡] P. S. Pankin,[*,†,‡] D. N. Maksimov,[†,‡] G. A. Romanenko,[¶,†,§]

V. S. Sutormin,[†,‡] S. V. Nabol,[†,‡] F. V. Zelenov,[‖,§] A. N. Masyugin,[‖,§,‡]

M. N. Volochaev,[‡,†] S. Ya. Vetrov,[‡,†] and I. V. Timofeev[†,‡]

†*Kirensky Institute of Physics, Federal Research Center KSC SB RAS, Krasnoyarsk, 660036 Russia*

‡*Siberian Federal University, Krasnoyarsk, 660041 Russia*

¶*Krasnoyarsk Scientific Center, Siberian Branch, Russian Academy of Sciences, Krasnoyarsk, 660036 Russia*

§*Siberian State University of Science and Technology, Krasnoyarsk, 660037 Russia*

‖*AO NPP Radiosvyaz, Krasnoyarsk, 660021 Russia*

E-mail: pavel-s-pankin@iph.krasn.ru

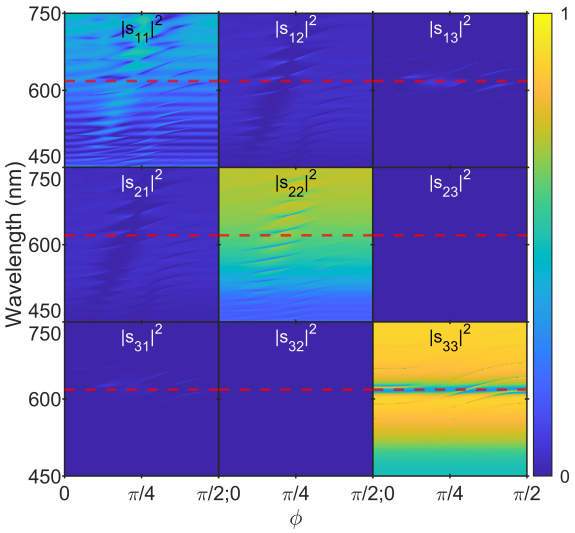

Figure S1. Numerical scattering coefficients of the microcavity corresponding to Fig.5 in the main text.

		Governing parameter			Operating side	Incident light polarization
		$\phi; (0-\pi/2)rad$	$U; (0-7)V$	$\Delta T; (0-7)°C$		
Ref.[1]	$\lvert\Delta\lambda_0\rvert^*$ $\Delta\lambda_{max}^{**}$ $\Delta\lambda_{min}^{***}$	-	57 5 5	7.5 4 4	PhC	TM TE
Ref.[2]	$\lvert\Delta\lambda_0\rvert$ $\Delta\lambda_{max}$ $\Delta\lambda_{min}$	60 24 14	-	-	PhC	TM
Ref.[3]	$\lvert\Delta\lambda_0\rvert$ $\Delta\lambda_{max}$ $\Delta\lambda_{min}$	43 16 12	-	5 10 7	PhC	TM
This work	$\lvert\Delta\lambda_0\rvert$ $\Delta\lambda_{max}$ $\Delta\lambda_{min}$	70 24 12	20 14 7	5 16 10	PhC Au	TM TE
* Resonant line position shift (nm); ** Minimal FWHM (nm); *** Maximal FWHM (nm)						

Table S1. Comparison of PhC/LC/Metal device performances.

References

(1) Pankin, P.; Sutormin, V.; Gunyakov, V.; Zelenov, F.; Tambasov, I.; Masyugin, A.; Volochaev, M.; Baron, F.; Chen, K.; Zyryanov, V. Y., et al. Experimental implementation of tunable hybrid Tamm-microcavity modes. *Applied Physics Letters* **2021**, *119*, 161107.

(2) Pankin, P.; Wu, B.-R.; Yang, J.-H.; Chen, K.-P.; Timofeev, I.; Sadreev, A. One-dimensional photonic bound states in the continuum. *Communications Physics* **2020**, *3*, 1–8.

(3) Wu, B.-R.; Yang, J.-H.; Pankin, P. S.; Huang, C.-H.; Lee, W.; Maksimov, D. N.; Timofeev, I. V.; Chen, K.-P. Quasi-Bound States in the Continuum with Temperature-Tunable Q Factors and Critical Coupling Point at Brewster's Angle. *Laser & Photonics Reviews* **2021**, *15*, 2000290.