

Electronic Supplementary Information

**High-quality-factor anodic alumina optical microcavities
prepared by cyclic anodizing with voltage versus optical
path length modulation**

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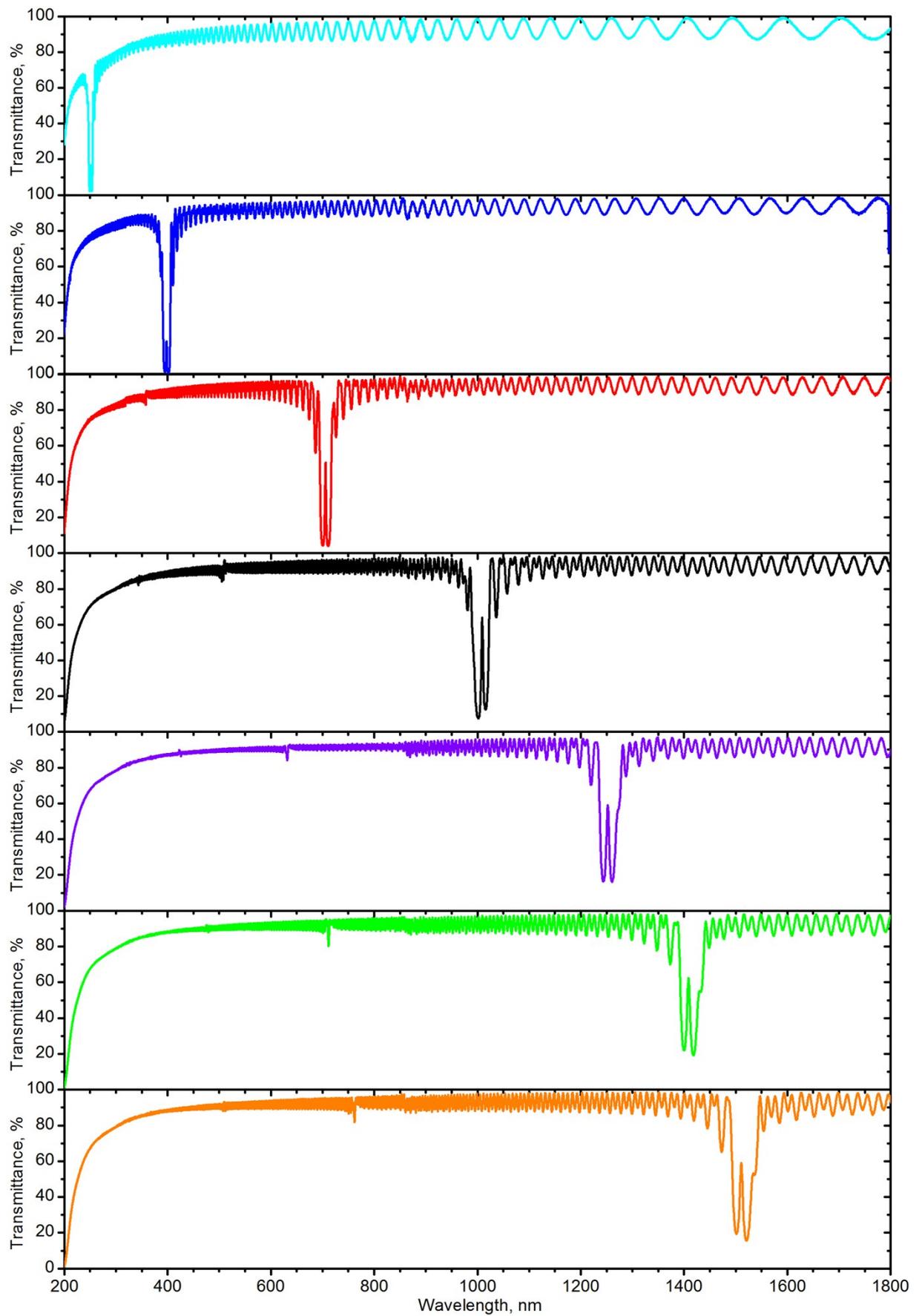


Figure S1. Transmittance spectra of prepared AAO optical microcavities: MC250 (cyan), MC400 (blue), MC700 (red), MC1000 (black), MC1250 (violet), MC1400 (green), and MC1500 (orange). Spectra were recorded at normal incidence.

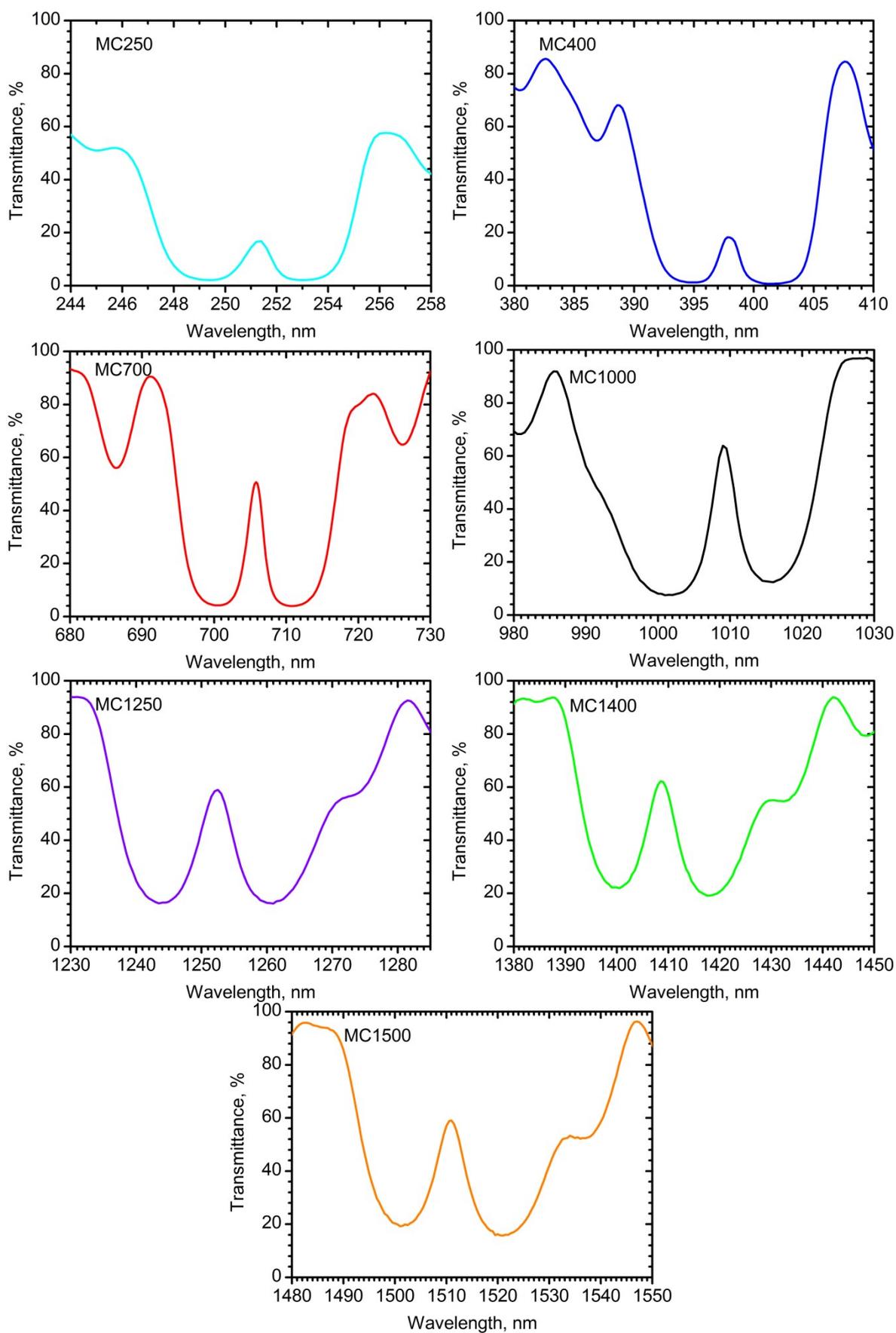


Figure S2. Transmittance spectra of prepared anodic alumina optical microcavities in the vicinity of resonance band: MC250 (cyan), MC400 (blue), MC700 (red), MC1000 (black), MC1250 (violet), MC1400 (green), and MC1500 (orange). The spectra were recorded at normal incidence.

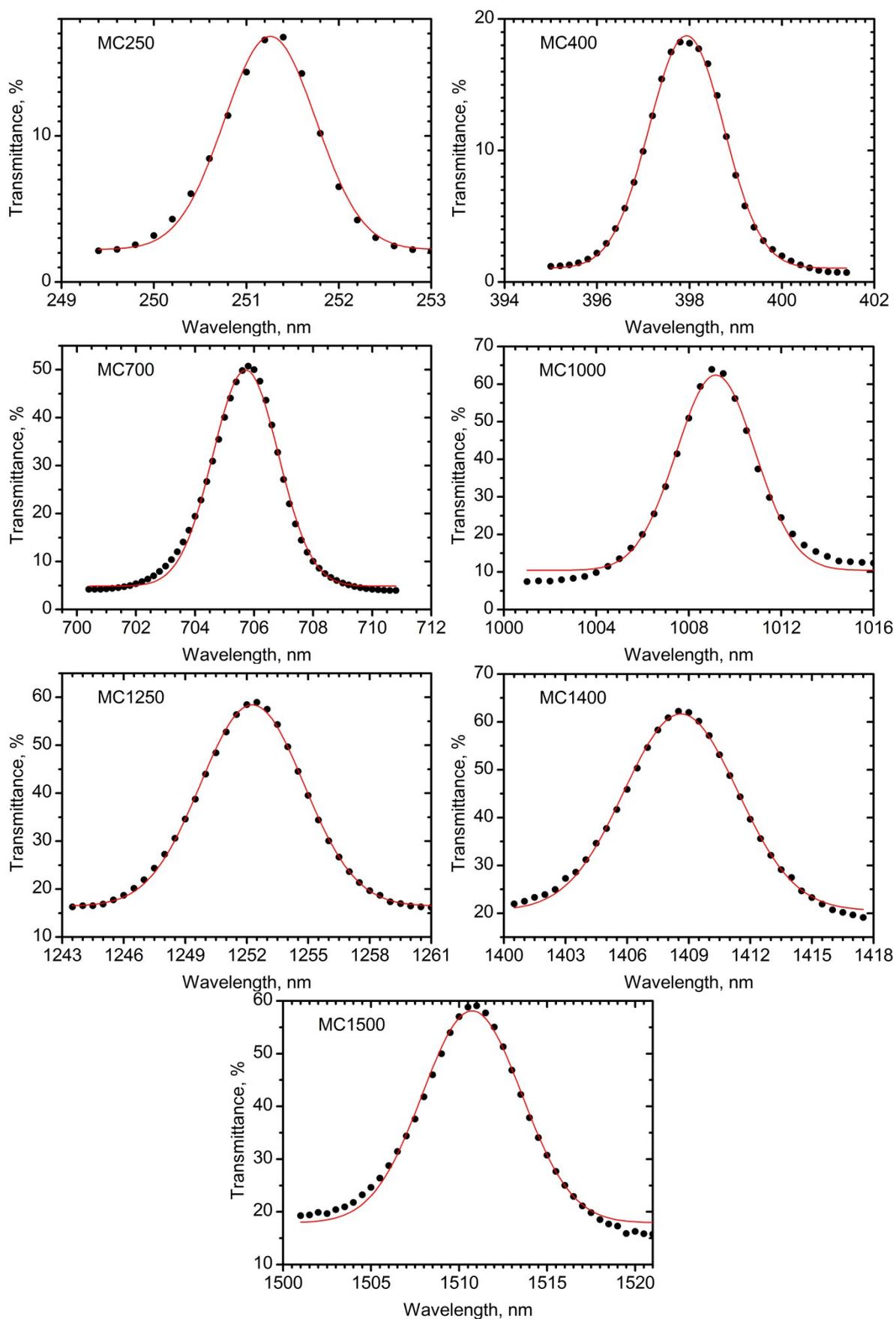


Figure S3. Gaussian fittings (red line) of resonance bands on transmittance spectra of prepared anodic alumina optical microcavities (black circles).

Table S1. Parameters of resonance bands obtained by Gaussian fitting of transmittance spectra of optical microcavities: the position of resonance band – λ_R , full-width at half maximum – FWHM, quality factor – Q-factor, peak intensity, the ratio of the resonance peak intensity to the FWHM – Q_o , baseline of Gaussian fitting – y_0 , and fitting correlation coefficient – R^2 .

Sample	λ_R , nm	FWHM, nm	Q-factor	Intensity, %T	Q_o	y_0 , %T	R^2
MC250	251.3	1.168	215	14.6	12.5	2.2	0.994
MC400	397.9	1.902	209	17.7	9.3	1.0	0.998
MC700	705.7	2.624	269	45.1	17.2	4.9	0.996
MC1000	1009.2	4.020	251	52.0	12.9	10.4	0.989
MC1250	1252.3	5.938	211	42.0	7.1	16.4	0.999
MC1400	1408.6	6.511	216	41.1	6.3	20.6	0.997
MC1500	1510.7	6.651	227	40.2	6.0	17.9	0.993