



**Figure S1.** Content of microparticles of CuO on nanofiber's surface before and after treatment under the simulated conditions of water filtration according to the results of EDX analysis (experiments with the rotating needle electrode).

**Table S1.** Differences of antibacterial activity of samples with microparticles of CuO before and after treatment under the simulated conditions of water filtration (experiments with electrode with needle surface).

Tested sample	Efficiency (%) - Escherichia coli		Efficiency (%) - Staphylococcus gallinarum	
	before filtration	after filtration	before filtration	after filtration
PUR + 5% CuO $\mu\text{m}$	97	97.3	98.8	97.9
PUR + 7% CuO $\mu\text{m}$	99.7	99.1	100	99.8
PUR + 9.5% CuO $\mu\text{m}$	100	100	100	100
PUR + 12% CuO $\mu\text{m}$	100	100	100	100