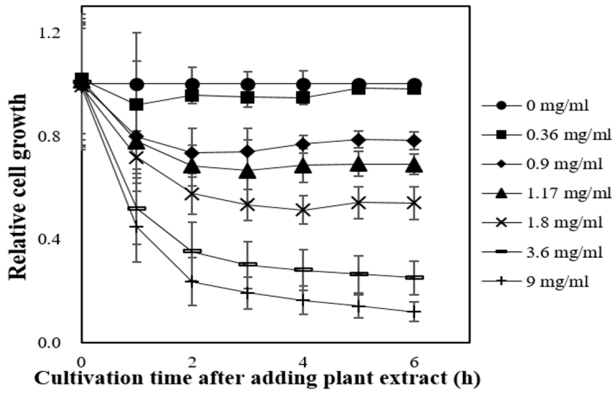
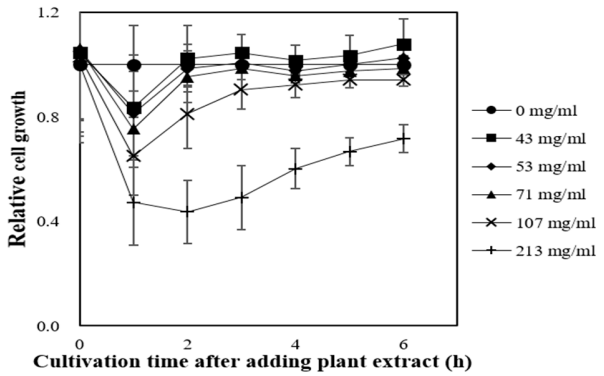
(a)



(b)



(c)

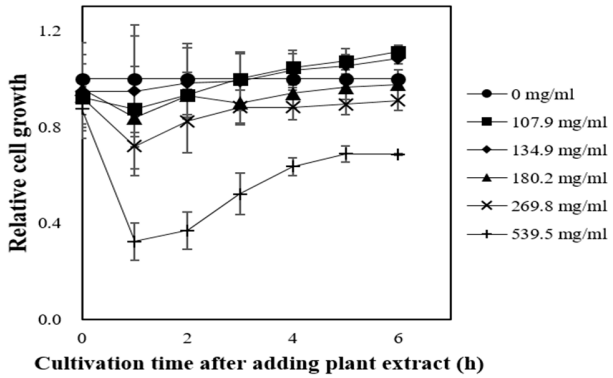
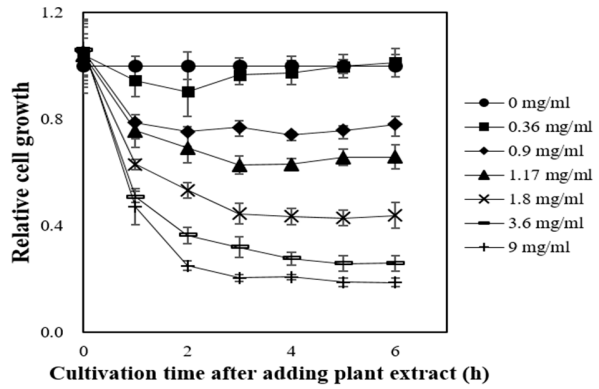
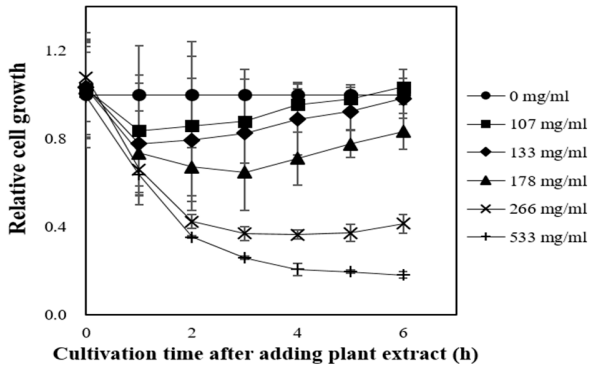


Figure S1. Inactivation rate of *M. luteus* vs. time for (a) tea-tree oil, (b) rosemary, and (c) garlic extracts for various extract solution concentrations.

(a)



(b)



(c)

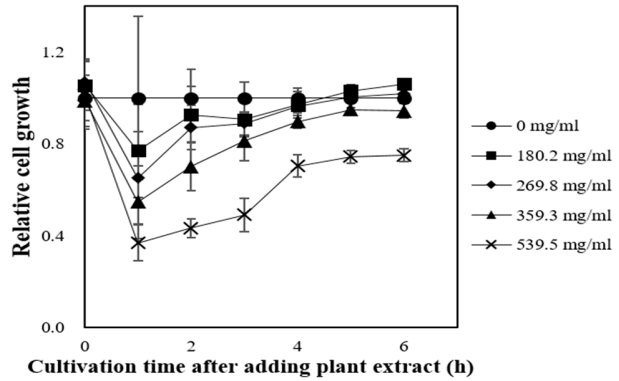
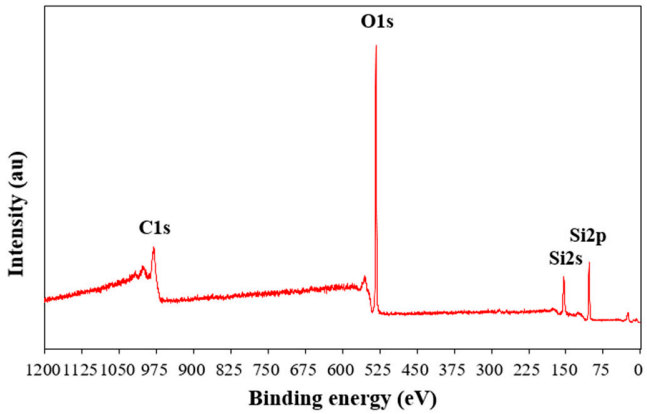
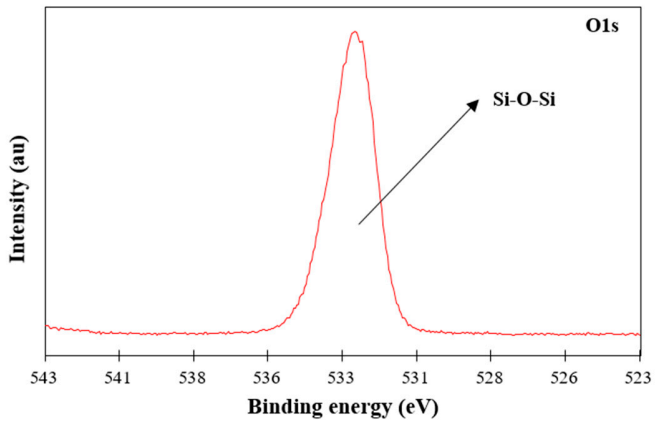


Figure S2. Inactivation rate of *E. coli* vs. time for (a) tea-tree oil, (b) rosemary, and (c) garlic extracts for various extract solution concentrations.

(a)



(b)



(c)

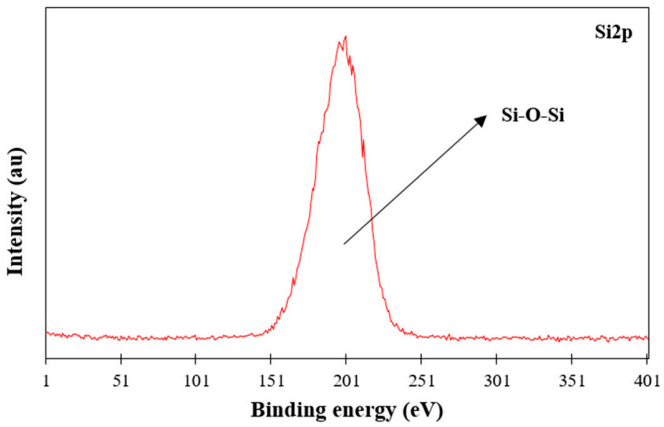
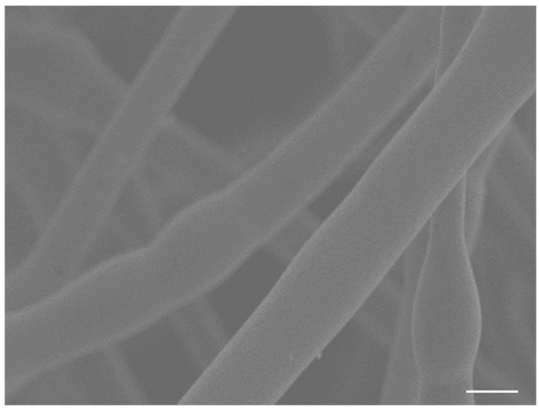
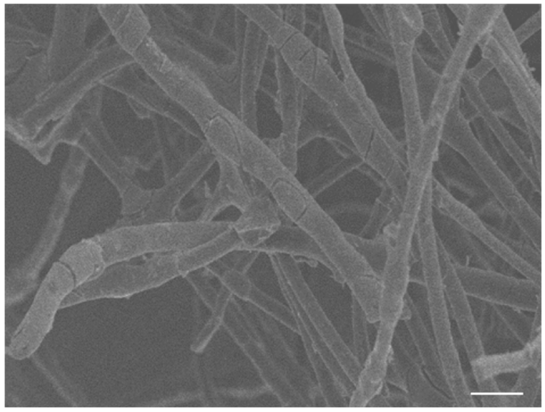


Figure S3. XPS spectra of the silicate polymer coating layer: (a) survey spectra, (b) O1s, and (c) Si2p.

(a)



(b)



(c)

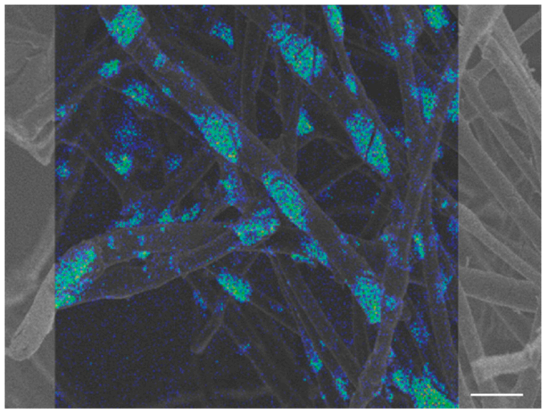
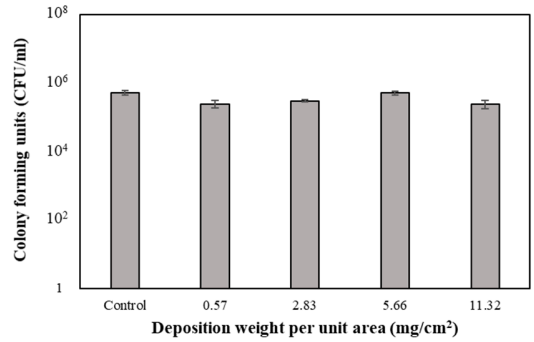
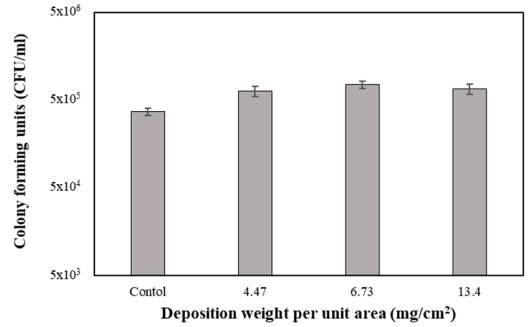


Figure S4. Scanning electron micrographs of the (a) pristine (control) and (b) tea tree oil-coated filters at a concentration of 9 mg/ml, and (c) results of Si mapping. Bars indicate (a) 33.3μm and (b)(c) 100μm.

(a)



(b)



(c)

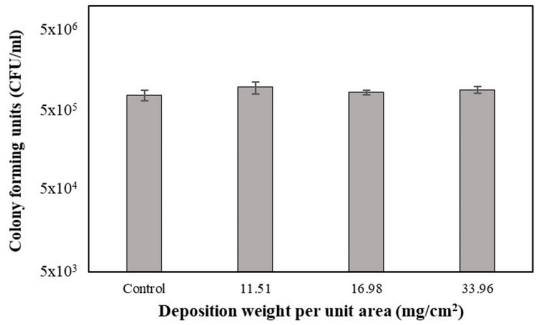


Figure S5. Colony-forming units of *M. luteus,* immediately after bioaerosol exposure, vs. weight of plant extract per unit area: (a) tea-tree oil, (b) rosemary, and (c) garlic.