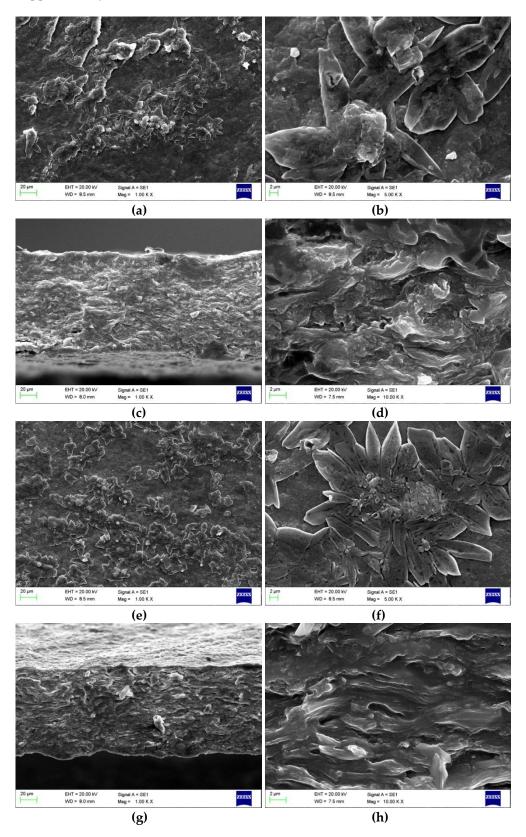
Supplementary material 1



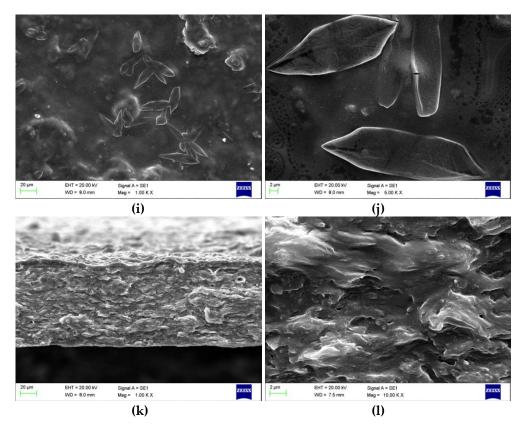


Figure S1. FE-SEM micrographs of film surfaces with a magnification of 1.00 K × (**a**) and 5.00 K × (**b**) and cross-sectional images with a magnification of 1.00 K × (**c**) and 10.00 K × (**d**) containing the highest concentrations of glycerol and sugar and the lowest concentration of MA (0.39%); film surfaces with a magnification of 1.00 K × (**e**) and 5.00 K × (**f**) and cross-sectional images with a magnification of 1.00 K × (**g**) and 10.00 K × (**h**) containing the highest concentrations of glycerol and sugar and the middle level of MA concentration (0.78%); film surfaces with a magnification of 1.00 K × (**i**) and 5.00 K × (**i**) and cross-sectional images with a magnification of 1.00 K × (**i**) and the middle level of MA concentration (0.78%); film surfaces with a magnification of 1.00 K × (**i**) and 5.00 K × (**i**) and cross-sectional images with a magnification of 1.00 K × (**k**) and 10.00 K × (**l**) containing the highest concentrations of glycerol and sugar and the highest concentration of MA (1.56%).