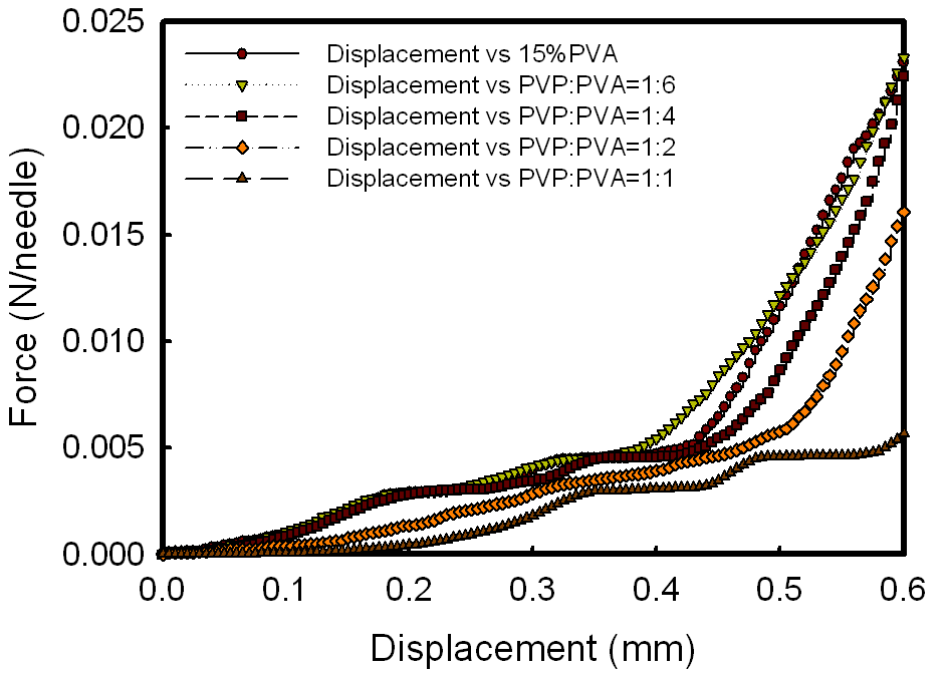
Electronic Supplementary Material (ESI) for Journal of Materials Chemistry B.

MN compression test

Mechanical compression was determined by using a universal testing machine (H1K5, Hounsfield). Series of polymeric MNs was attached on a flat and rigid surface of stainless steel base plate with a moving sensor. A constant speed of 10 mm/min was used and the initial distance from the tips of the MN arrays to the mount was set at 10 mm. Then, the force to move the mount as a function of displacement of MN array was recorded. As shown in S1, the mechanical strength of the MN array decreased as the PVP content increased.



S1. Mechanical behavior of dissolving PVP/PVA MNs. Force measured as a function of MNs displacement. PVP/PVA MNs were measured in 600 μm in height and 300μm in base width.