

### Transparent Surface with Low Contact Angle Hysteresis prepared by a Simple Thermally Activated Equilibration Reaction

서광석, 오지윤, 위린복, 김지은, 김도현\*  
카이스트  
(dohyun.kim@kaist.edu\*)

Development of devices for small droplet transportation has recently attracted significant attention. Droplet transportation in small scale is closely related to digital microfluidics. It is important that a droplet should move smoothly on a surface for better control in the digital microfluidics. In order to move a small droplet smoothly on a surface, the surface should have a low contact angle hysteresis. Reactive functional group containing reagents have been used for the low-hysteresis surface. It is known as a common method in making low-hysteresis surface. However, Joseph W. Krumpfer and Thomas J. McCarthy(2010) used linear trimethylsilyl-terminated poly(dimethyl-siloxane)s, which are generally known as a reagent non-reactive with inorganic oxide surfaces, for making low-hysteresis surface employing a simple thermally activated equilibration reaction. They used silicone wafer as inorganic oxide surfaces. Herein, we prepared a transparent low-hysteresis surface using a glass slide and a silicone oil by employing the similar reaction above.