

Figure S1: A) Surface pressure-area (π - A) isotherms of the mixed monolayer DA:SP = 1:1. Red line: before the polymerization . Grey line: after the polymerization at 20 mN/m for 8 minutes. B) Static elastic modulus, $\kappa = -A(d\pi/dA)$ vs area. Red line: before the polymerization. Grey line: after the polymerization.

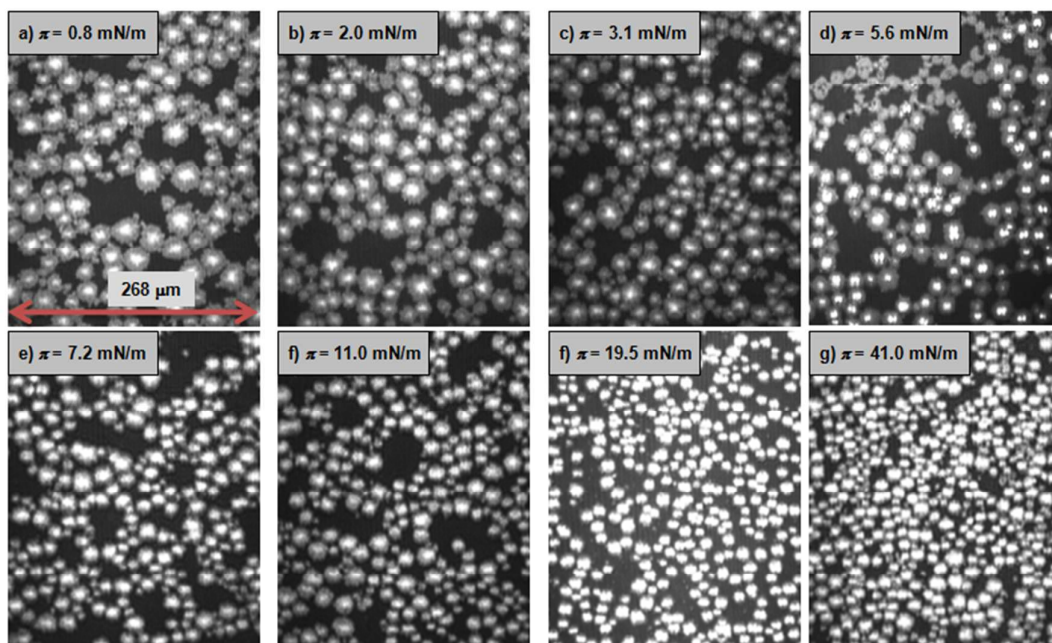


Figure S2: BAM images of the mixed monolayer DA:SP = 1:1 monolayer after the polymerization. The mixed monolayer was polymerized at 20 mN/m during 8 minutes. Then the monolayer was decompressed and again compressed. The BAM images were obtained during this second compression process.

Complete References with more of 10 authors:

48. Lu, Y. F.; Yang, Y.; Sellinger, A.; Lu, M. C.; Huang, J. M.; Fan, H. Y.; Haddad, R.; Lopez, G.; Burns, A. R.; Sasaki, D. Y.; Shelnutt, J.; Brinker, C. J. Self-Assembly of Mesoscopically Ordered Chromatic Polydiacetylene/Silica Nanocomposites *Nature* **2001**, *411*, 617-617.