Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information

Poly(*N*,*N*–Dimethylacrylamide – Octadecyl Acrylate) – Clay Hydrogels with High Mechanical Properties and Shape Memory Ability

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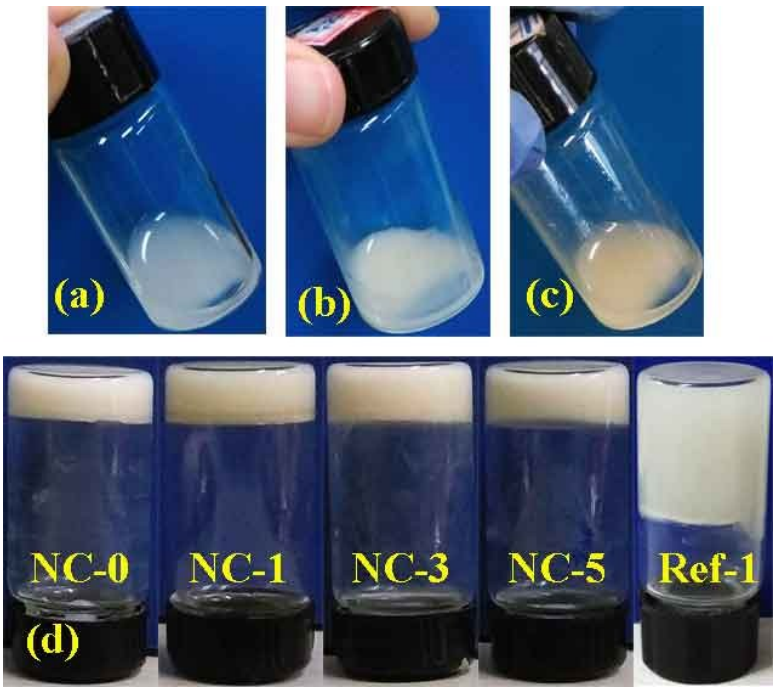

Figure S1. Typical photographs of (a) clay dissolved in deionized water at room temperature; (b) gelatin emulsified octadecyl acrylate in clay solution; (c) after DMA addition in mixed solution; (d) hydrogels

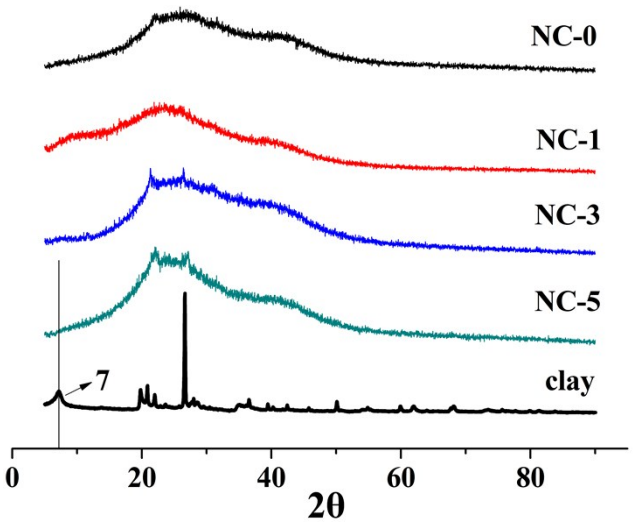

Figure S2. X–ray diffraction patterns of clay and three hydrogels.

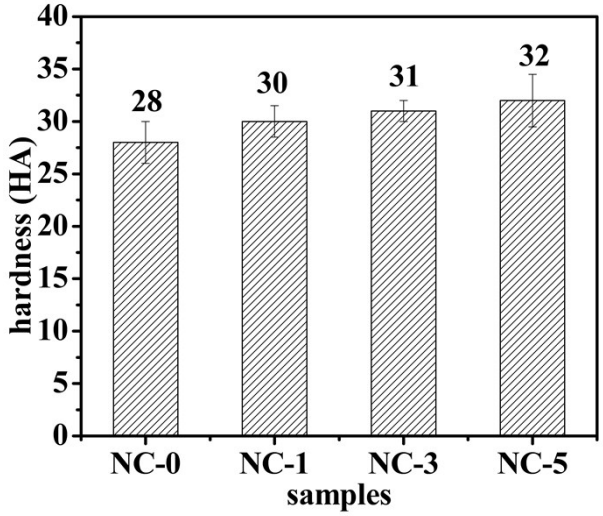

Figure S3. Shore hardness of the hydrogels with different clay contents.

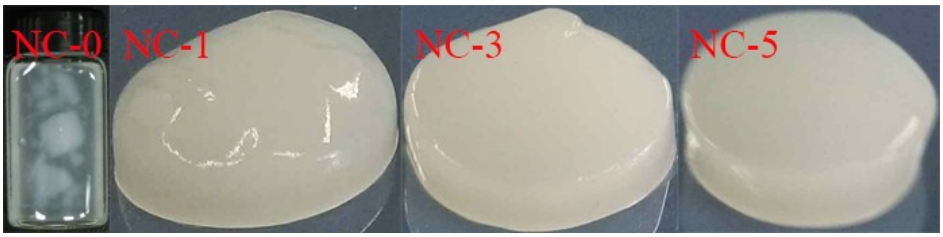

Figure S4. The shape of hydrogels after 30 days in pH = 7.4 PBS, 37 ℃. (After immersing for 5 days, NC–0 hydrogel became a turbid solution.)

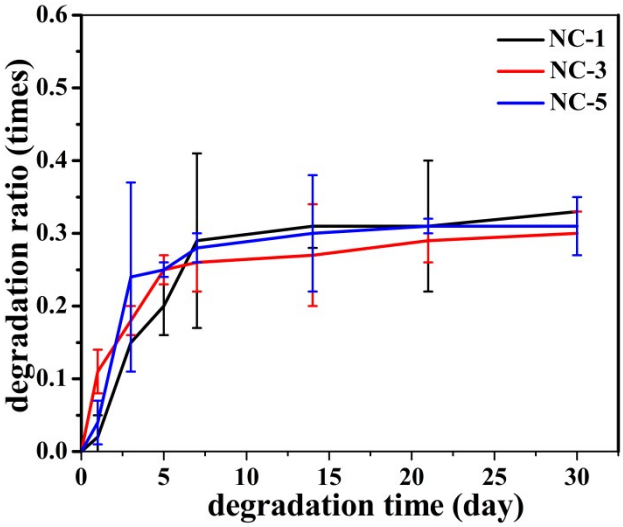

Figure S5. Degradation ratio of hydrogels. (Degradation ratio = $(W_o - W_d)/W_o$, W_o and W_d were the dry hydrogel weights before and after degradation, respectively.)

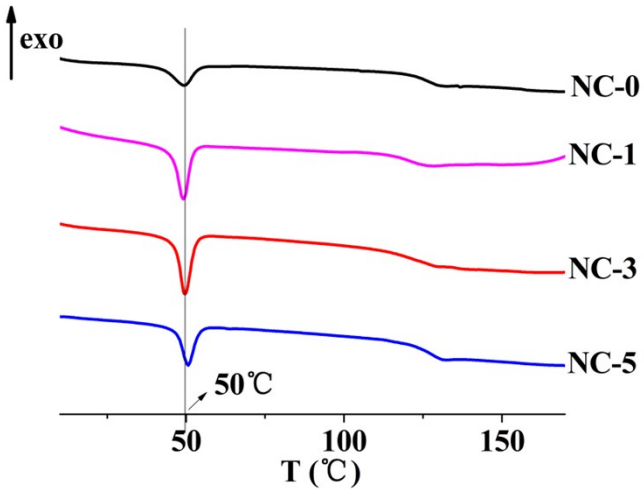

Figure S6. DSC curves of dried hydrogels.

Figure S7. (a) permanent rod shape, (b) temporary spiral shape of Ref-1 hydrogel.