Supporting Information

Bioinspired Poly(N-isopropylacrylamide) / Silver Nanocomposite as Photonic Crystals with Both Optical and Thermal Responses

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**Figure S1.** TEM image of butterfly wing cross-section: (a) alkali-treated butterfly wing, (b) PC-PNIPAm. The multilamellar structure was well reserved after polymerization.

**Figure S2.** The color difference between (a) PC-PNIPAm and (b) PC-Ag@PNIPAm. The color of both also darken when they soaked.
Figure S3. Infrared imaging of PC-Ag@PNIPAm and PC-PNIPAm when they are under laser irradiation as time went by.
Figure S4. Spectral properties of PC-PNIPAm and PC-Ag@PNIPAm under laser irritation.