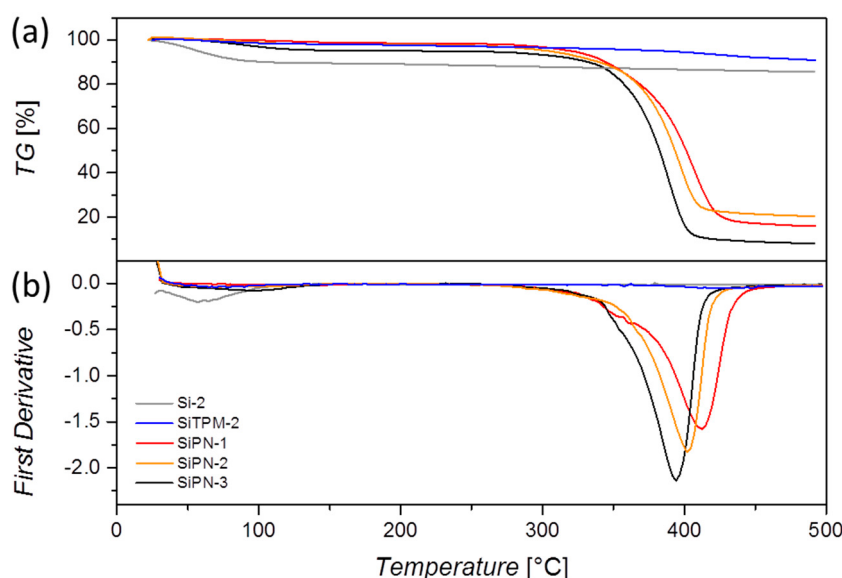


# Tuning the Size of Thermoresponsive Poly(*N*-Isopropyl Acrylamide) Grafted Silica Microgels

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## 1. TGA measurements



**Figure S1.** TGA measurements (a) and its derivative (b) of Si-2, SiTPM-2, SiPN-1, SiPN-2 and SiPN-3.

**Table S1.** Weight loss of the sample: Si2, SiTPM-2, SiPN-1, SiPN-2 and SiPN-3 within the temperature range 25–150 °C (region 1) and within the temperature range 150–500 °C (region 2) and residue at 500 °C. In the first region the weight loss corresponds to the solvent evaporation. In the second region the weight loss corresponds to the thermal decomposition of the organic content.

| name    | 1 <sup>st</sup> region |           |                 | 2 <sup>nd</sup> region |           |                 | Residue at 500°C |
|---------|------------------------|-----------|-----------------|------------------------|-----------|-----------------|------------------|
|         | Range [°C]             | Peak [°C] | Weight loss [%] | Range [°C]             | Peak [°C] | Weight loss [%] |                  |
| Si-2    | 25–150                 | 56.8      | 10.3            | 150–500                | -         | 3.9             | 85.8             |
| SiTPM-2 | 25–150                 | -         | 2.0             | 150–500                | 422.3     | 7.2             | 90.8             |
| SiPN-1  | 25–150                 | -         | 1.4             | 150–500                | 412.3     | 83.0            | 15.6             |
| SiPN-2  | 25–150                 | -         | 2.9             | 150–500                | 401.3     | 77.8            | 19.3             |
| SiPN-3  | 25–150                 | 99.3      | 5.6             | 150–500                | 394.3     | 87.2            | 7.2              |