

Degradation Dependent Controlled Delivery of Doxorubicin by Glyoxal Crosslinked Magnetic and Porous Chitosan Microspheres

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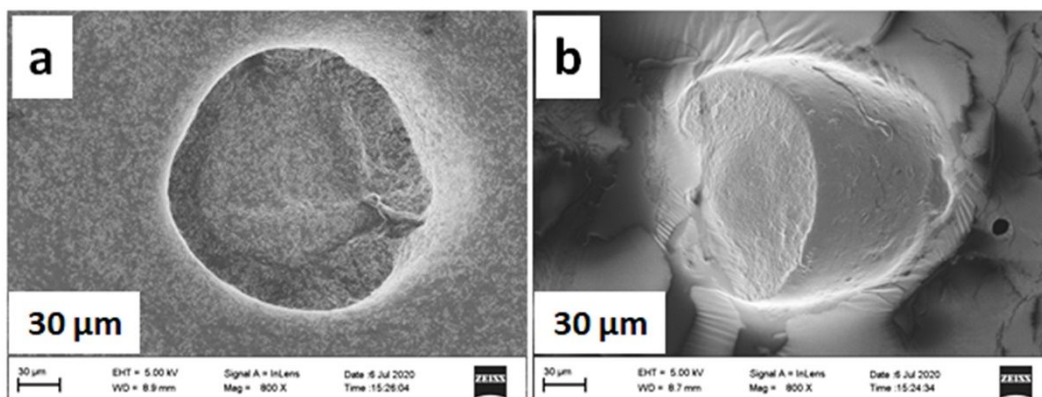


Figure S1. FESEM image of (a) GMS; (b) Cross section of GMS.

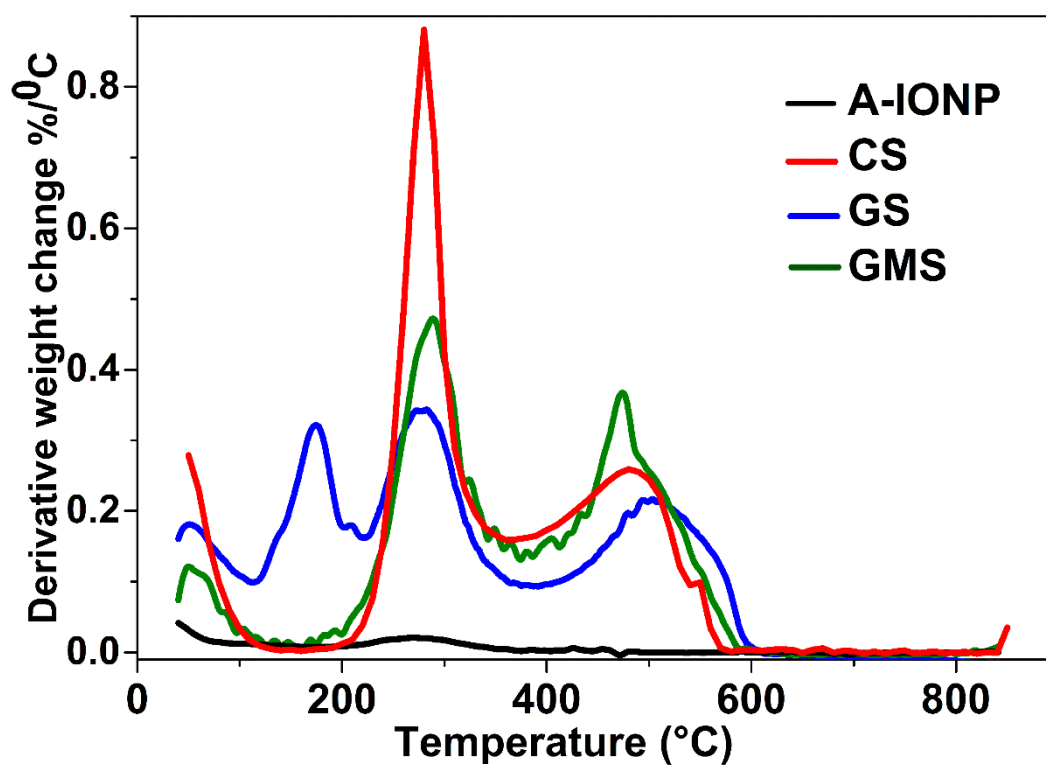


Figure S2. Differential thermogravimetric (DTG) curves of CS, GS, GMS and A-IONP.

Table S1. $T_{50\%}$, $T_{90\%}$ and residual weight (at 700 °C) of CS, GS, GMS and A-IONP from thermogravimetric analysis conducted under N_2 atmosphere from 40-800 °C.

| Sample | $T_{50\%}$ (°C) | $T_{90\%}$ (°C) | Residual weight at 800 °C (%) |
|--------|--------------------|--------------------|----------------------------------|
| CS | 299 | 492 | 0 |
| GS | 278 | 524 | 0 |
| GMS | 394 | - | 12.8 |
| A-IONP | - | - | 94.8 |

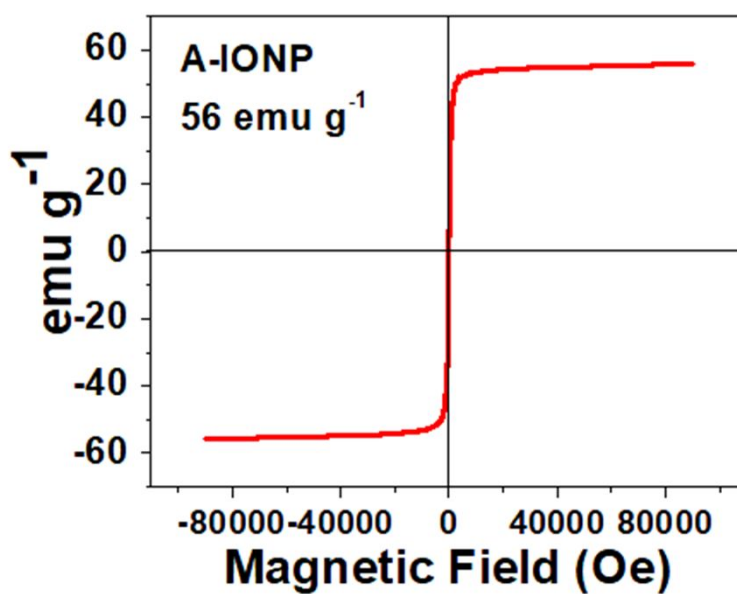


Figure S3. Magnetization curve of A-IONP recorded at room temperature with magnetic field sweeping from -80000 Oe to $+80000$ Oe.

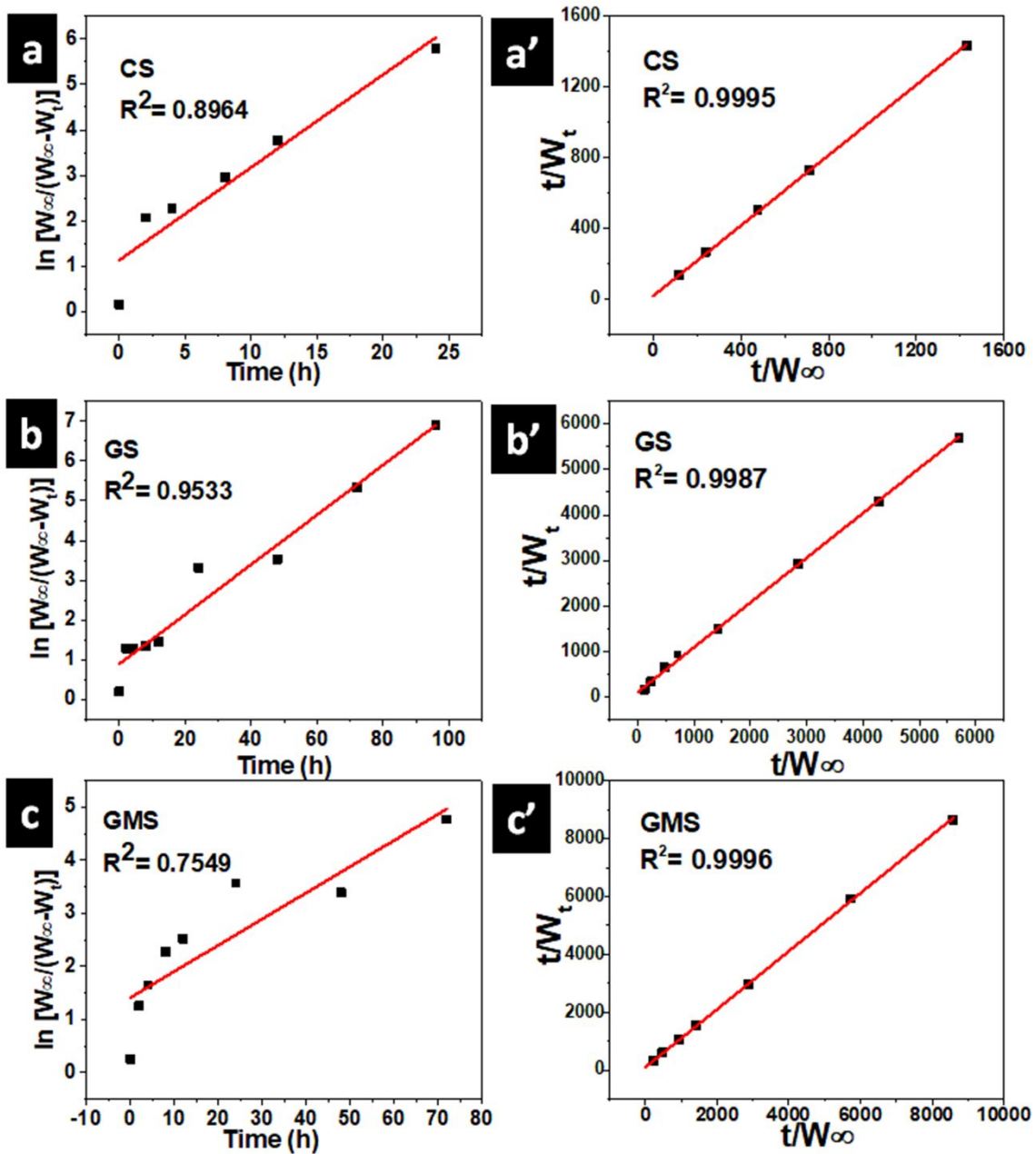


Figure S4. Swelling kinetic curve fitting by first order and second order kinetic models respectively: (a, a') CS; (b, b') GS; (c, c') GMS.