**Facile synthesis and fractal feature of pH-responsive Poly(acrylic acid) hollow microspheres for ibuprofen delivery**

Qian Wang, XiaoQi Jin, JiHong Sun\*, ShiYang Bai, Xia Wu, [Hamida Panezai](http://www.tandfonline.com/author/Panezail%2C+Hamida)

**Supporting Information:**



Figure S1.FT-IR spectra of (a) SiO2-MPS, (b) P(AA-co-DVB)@SiO2, and (c) HPAA



Figure S2. GPC traces of (a) HPAA-1, (b) HPAA-2, (c) HPAA-3 and (d) HPAA-5



Figure S3. EDS spectra of (a) P(AA-co-DVB)@SiO2-7 and (b) HPAA-7

Table S1. Kinetic parameters obtained from fitting release data to Korsmeyer-Peppas model of IBU-loaded HPAA

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| model | pH | I/HPAA-4 | | | I/HPAA-5 | | | I/HPAA-7 | | |
|  |  | *k*×102 | *n* or *b*\* | *R*2 | *k*×102 | *n* or *b*\* | *R*2 | *k*×102 | *n* or *b*\* | *R*2 |
| Korsmeyer  -Peppas | 7.4 | 20.93 | 0.57 | 0.97 | 20.92 | 0.50 | 0.99 | 22.85 | 0.35 | 0.97 |
| 3.0 | 18.83 | 0.42 | 0.99 | 16.37 | 0.29 | 0.99 | 16.30 | 0.23 | 0.98 |