

Supporting Information

Controlled release of doxorubicin from gelatin-based nanoparticles:

Theoretical and experimental approach

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Table S1. The experimental data sets used in ANN training and testing include pH, time, and Ge-NPs con. (%) and DOX release rate.

| S. No. | Input parameters | | | Output parameter |
|--------|------------------|-----|----------|------------------|
| | GNPs conc. (%) | pH | Time (h) | DOX Release (%) |
| 1 | 5 | 7.4 | 0 | 0 |
| 2 | 5 | 7.4 | 2 | 2.432 |
| 3 | 5 | 7.4 | 3 | 4.49 |
| 4 | 5 | 7.4 | 4 | 6.364 |
| 5 | 5 | 7.4 | 8 | 15.09 |
| 6 | 5 | 7.4 | 10 | 18.315 |
| 7 | 5 | 7.4 | 24 | 23.493 |
| 8 | 5 | 7.4 | 48 | 24.365 |
| 9 | 5 | 5 | 0 | 0 |
| 10 | 5 | 5 | 2 | 10.432 |
| 11 | 5 | 5 | 3 | 21.49 |
| 12 | 5 | 5 | 4 | 32.364 |
| 13 | 5 | 5 | 8 | 52 |
| 14 | 5 | 5 | 10 | 60.325 |
| 15 | 5 | 5 | 24 | 68.43 |
| 16 | 5 | 5 | 48 | 69.13 |
| 17 | 5 | 3 | 0 | 0 |
| 18 | 5 | 3 | 2 | 19 |
| 19 | 5 | 3 | 3 | 33.249 |
| 20 | 5 | 3 | 4 | 46.364 |
| 21 | 5 | 3 | 8 | 70.09 |
| 22 | 5 | 3 | 10 | 79.315 |
| 23 | 5 | 3 | 24 | 95.493 |
| 24 | 5 | 3 | 48 | 95.43 |
| 25 | 10 | 7.4 | 0 | 0 |
| 26 | 10 | 7.4 | 2 | 2.132 |
| 27 | 10 | 7.4 | 3 | 3.149 |
| 28 | 10 | 7.4 | 4 | 5.364 |
| 29 | 10 | 7.4 | 8 | 10.09 |

| | | | | |
|-----------|----|-----|----|--------|
| 30 | 10 | 7.4 | 10 | 12.315 |
| 31 | 10 | 7.4 | 24 | 17.493 |
| 32 | 10 | 7.4 | 48 | 18.365 |
| 33 | 10 | 5 | 0 | 0 |
| 34 | 10 | 5 | 2 | 7.432 |
| 35 | 10 | 5 | 3 | 15.49 |
| 36 | 10 | 5 | 4 | 22.364 |
| 37 | 10 | 5 | 8 | 44.898 |
| 38 | 10 | 5 | 10 | 50.325 |
| 39 | 10 | 5 | 24 | 55.43 |
| 40 | 10 | 5 | 48 | 59.13 |
| 41 | 10 | 3 | 0 | 0 |
| 42 | 10 | 3 | 2 | 12 |
| 43 | 10 | 3 | 3 | 27.249 |
| 44 | 10 | 3 | 4 | 36.364 |
| 45 | 10 | 3 | 8 | 60.09 |
| 46 | 10 | 3 | 10 | 69.315 |
| 47 | 10 | 3 | 24 | 81.493 |
| 48 | 10 | 3 | 48 | 85.43 |