

Supplementary Information

3D Nanoporous Anodic Alumina Structures for Sustained Drug Release

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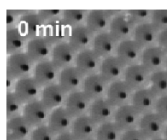
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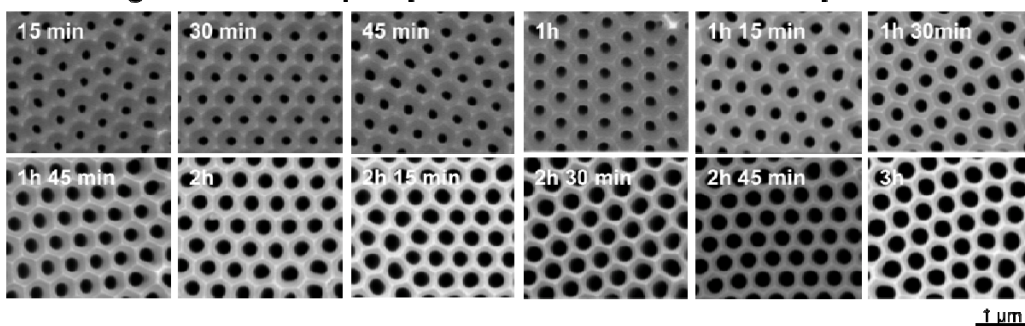
43007 Tarragona, Spain.

Figure S1. Pore widening progress for samples with and without temperature treatment.

ESEM images of NAA taken every 15 min of pore widening.



Pore widening calibration for phosphoric acid NAA with 500°C temperature treatment



Pore widening calibration for phosphoric acid NAA without temperature treatment

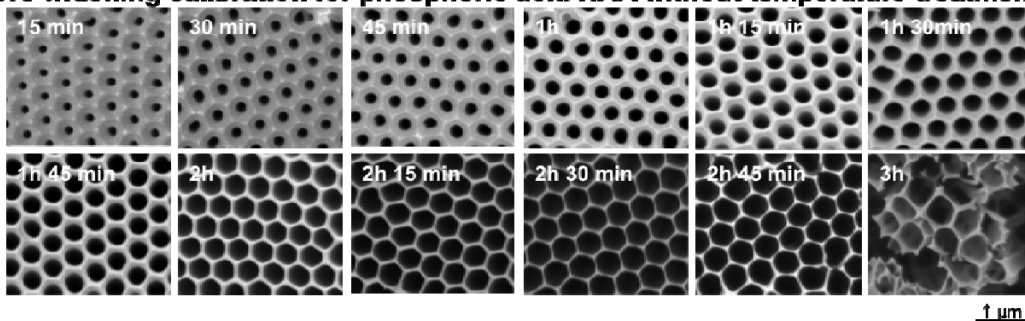


Figure S2. Pore widening calibration for samples thermally treated at 500 °C (red circles) and samples without temperature treatment (black squares).

Pore widening rate is calculated for the region where the relationship between pore diameter and pore widening time is linear (0 min to inflection point time):

- No thermal treatment: from 0 to 90 min.
- 500 °C thermal treatment: from 0 to 150 min.

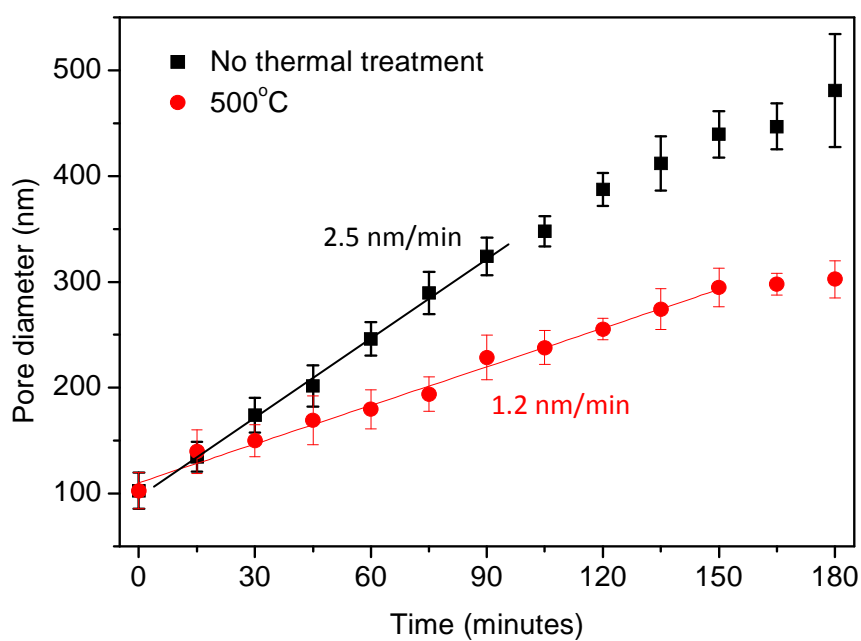


Figure S3. Cumulative drug release of different pore structures.

(A) Release from straight pores (SP), and (B) release from Normal Funnels (NF2, NF3) and from Inverted Funnels (IF2, IF3).

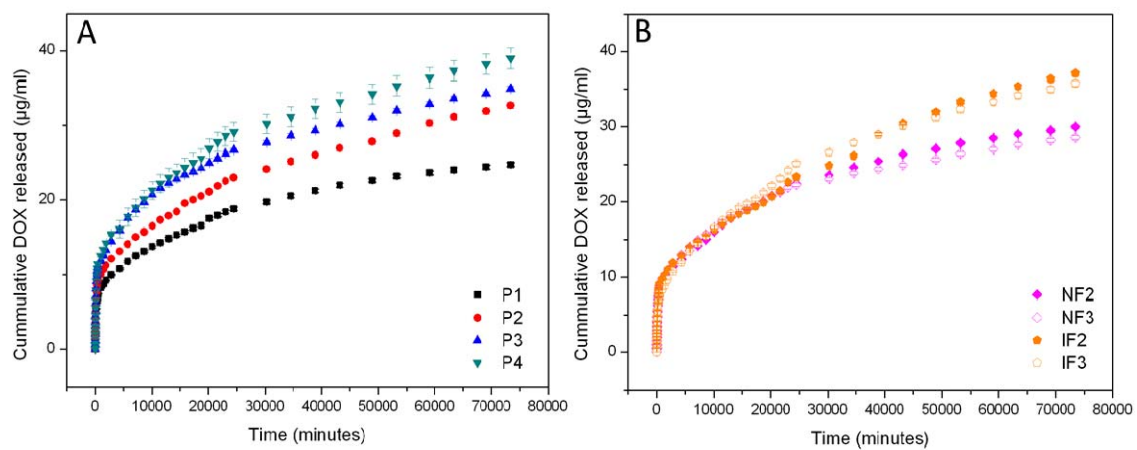


Table S1. Average dimensions of the pore structures.

Sample	Widening time (minutes)	Top pore diameter (nm)	Middle pore diameter (nm)	Bottom pore diameter (nm)	Top height (μm)	Middle height (μm)	Bottom height (μm)	Total volume (nm^3)
SP1	0	102,5	-	-	30	-	-	4,9 E+16
SP2	45	201,6	-	-	30	-	-	1,9 E+17
SP3	90	324,2	-	-	30	-	-	4,9 E+17
SP4	120	387,2	-	-	30	-	-	7,1 E+17
NF2	90	308,5	-	137,5	15	-	15	2,7 E+17
NF3	45+45	304,9	198,6	105,3	11,4	12,0	12,92	2,6 E+17
IF2	120	211,8	-	358,5	15,6	-	16,46	4,4 E+17
IF3	120	200,2	260,7	317,1	9,3	9,8	9,84	3,2 E+17