



SUPPLEMENTARY MATERIAL TO
**Influence of N doping on structural and photocatalytic
properties of hydrothermally synthesized TiO₂/carbon
composites**

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LC-MS/MS method

Surveyor HPLC system (Thermo Fisher Scientific) was used for the separation of the analytes on the reverse-phase Zorbax Eclipse XDB-C18 column, 75 mm long, 4.6 mm inner diameter (*i.d.*) and 3.5 μm particle size (Agilent Technologies). The mobile phase consisted of water (A), methanol (B) and 10 % acetic acid (C) and gradient changes are shown in Table S-I. An aliquot of 10 μl of the aqueous solution was injected into the HPLC system. Linear ion trap mass spectrometer, LTQ XL (Thermo Fisher Scientific), was used for the detection and quantification of pharmaceuticals. The electrospray ionization technique was used and all pharmaceuticals were analyzed in the positive ionization mode. The mass chromatogram of the pharmaceuticals is given in Fig. S-1. For quantification purposes, the selected reaction monitoring mode (SRM) was used. The selected precursor ion, the optimal collision energy, and the most abundant product ion, as well as its isolation width, for each analyte, are presented in Table S-II.

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TABLE S-I. Gradient of mobile phase

Time, min	Content, %			Flow, ml min ⁻¹
	A	B	C	
0	48	50	2	0,6
9.00	0	98	2	0,6
13.00	0	98	2	0,6
13.01	0	100	0	1
18.00	0	100	0	1
18.01	48	50	2	0,6
25.00	48	50	2	0,6

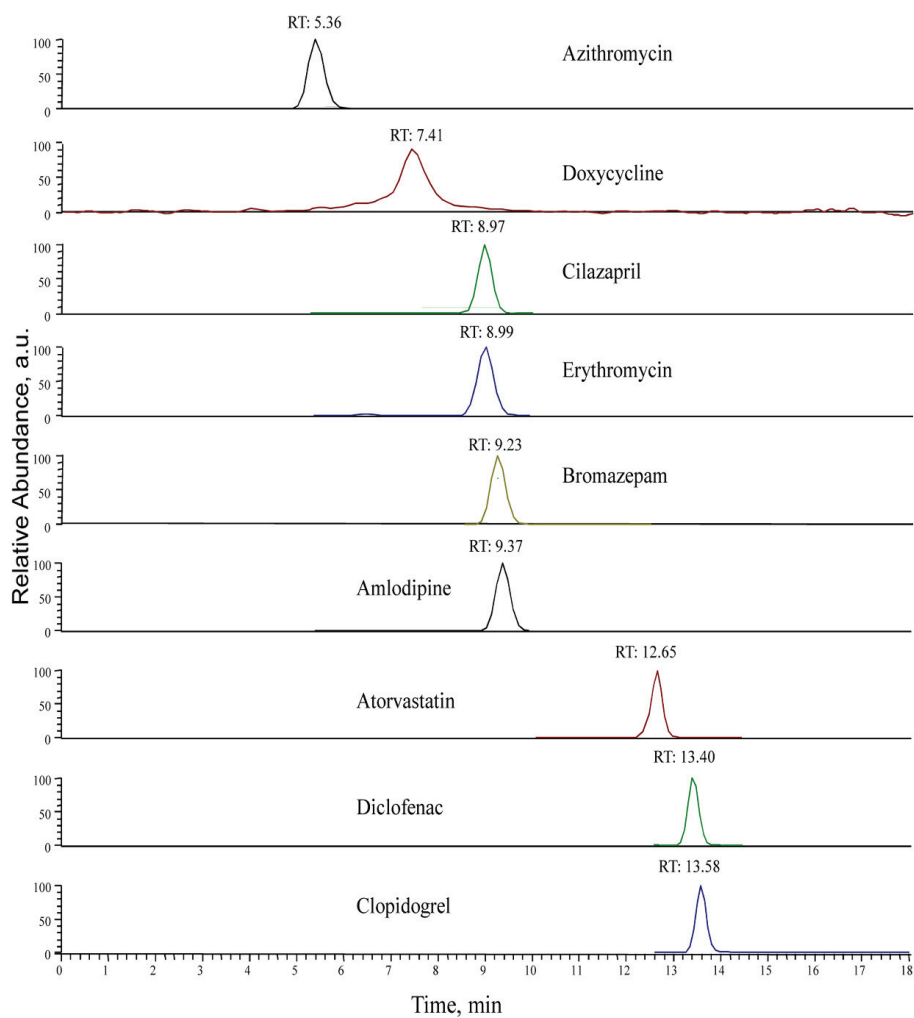


Fig. S-1. Mass chromatogram of selected pharmaceuticals.

TABLE S-II. LC/MS-MS quantification parameters for selected pharmaceuticals

Pharmaceutical	Retention time, min	Precursor ion, <i>m/z</i>	Collision energy, a.u.*	Product ion, <i>m/z</i>	Isolation width of product ion
Azithromycin	5.36	749	30	591	2
Doxycycline	7.41	445	25	428	2
Cilazapril	8.97	418	23	211	2
Erythromycin	8.99	734	26	576	2
Bromazepam	9.23	316	36	288	1
Amlodipine	9.37	408	25	237	2
Atorvastatin	12.65	559	25	466	2
Diclofenac	13.40	295	28	277	1
Clopidogrel	13.58	321	28	211	2

*arbitrary units defined by LCQ system