

*Supplementary Material*

# A Hydrophobic Derivative of Ciprofloxacin as a New Photoinitiator of Two-Photon Polymerization: Synthesis and Usage for the Formation of Biocompatible Polylactide-Based 3D Scaffolds

Kseniia N. Bardakova <sup>1,2,\*</sup>, Yaroslav V. Faletrov <sup>3,4</sup>, Evgenii O. Epifanov <sup>1</sup>, Nikita V. Minaev <sup>1</sup>, Vladislav S. Kaplin <sup>5</sup>, Yuliya A. Piskun <sup>3,4</sup>, Polina I. Koteneva <sup>6</sup>, Vladimir M. Shkumatov <sup>3,4</sup>, Nadezhda A. Aksanova <sup>5,6</sup>, Anastasia I. Shpichka <sup>2,6,7</sup>, Anna B. Solovieva <sup>5</sup>, Sergei V. Kostjuk <sup>3,4,6</sup> and Peter S. Timashev <sup>1,5,6,7</sup>

<sup>1</sup> Institute of Photonic Technologies, Research center "Crystallography and Photonics", Russian Academy of Sciences, 2 Pionerskaya st., Troitsk, 108840 Moscow, Russia; rammic0192@gmail.com (E.O.E); minaevn@gmail.com (N.V.M.); timashev.peter@gmail.com (P.S.T.)

<sup>2</sup> World-Class Research Center "Digital Biodesign and Personalized Healthcare", Sechenov University, 8-2 Trubetskaya st., 119991 Moscow, Russia; shpichka\_a\_i@staff.sechenov.ru (A.I.S.)

<sup>3</sup> Research Institute for Physical Chemical Problems of the Belarusian State University, Minsk, Belarus 14 Leningradskaya st., 220030 Minsk, Belarus; yaroslav82@tut.by (Y.V.F.); piskunyu@gmail.com (Y.A.P); biopharm@bsu.by (V.M.S.); kostjuks@bsu.by (S.V.K.)

<sup>4</sup> Department of Chemistry, Belarusian State University, 14 Leningradskaya st., 220006 Minsk, Belarus;

<sup>5</sup> Semenov Federal Research Center of Chemical Physics, Russian Academy of Sciences, 4 Kosygina st., 119991 Moscow, Russia; ann.solovieva@gmail.com (A.B.S.); naksenova@mail.ru (N.A.A.); vladislav.s.kaplin@gmail.com (V.S.K.)

<sup>6</sup> Institute for Regenerative Medicine, Sechenov University, 8-2 Trubetskaya St., 119991 Moscow, Russia;

<sup>7</sup> Department of Chemistry, Lomonosov Moscow State University, 1-3 Leninskiye Gory, 119991 Moscow, Russia

\* Correspondence: arie5@yandex.ru;

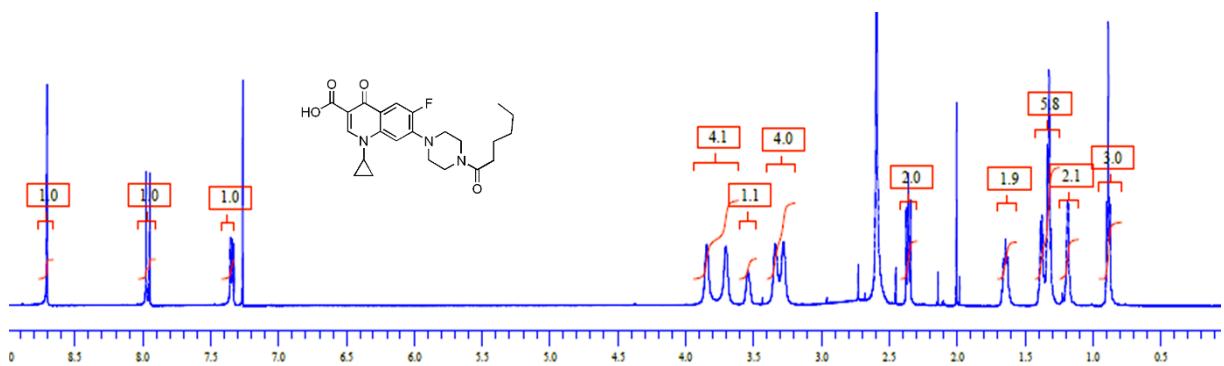
## Table of Contents:

**Figure S1** <sup>1</sup>H-NMR spectra of CPF-hex.

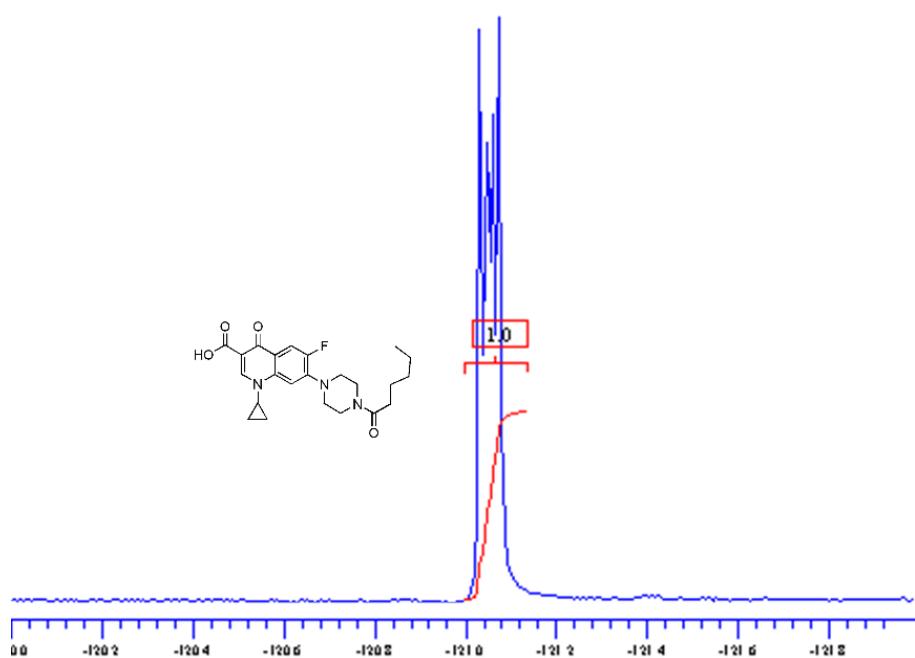
**Figure S2** <sup>19</sup>F-NMR spectra of CPF-hex.

**Figure S3** ESI-MS spectrum of CPF-hex.

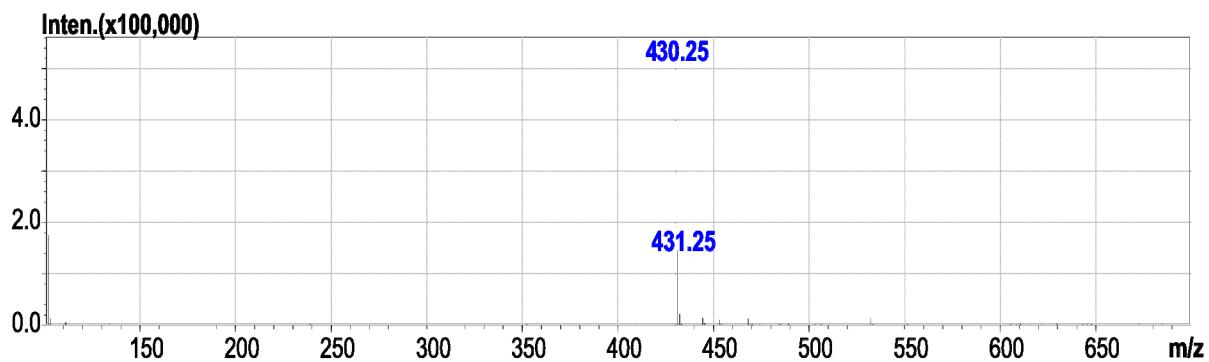
**Figure S4** DSC curves of initial star-shaped polylactide (PLA) and a polylactide-based resin after the 2PP processing ([PLA+ CPF-hex] after 2PP) (the second scan).



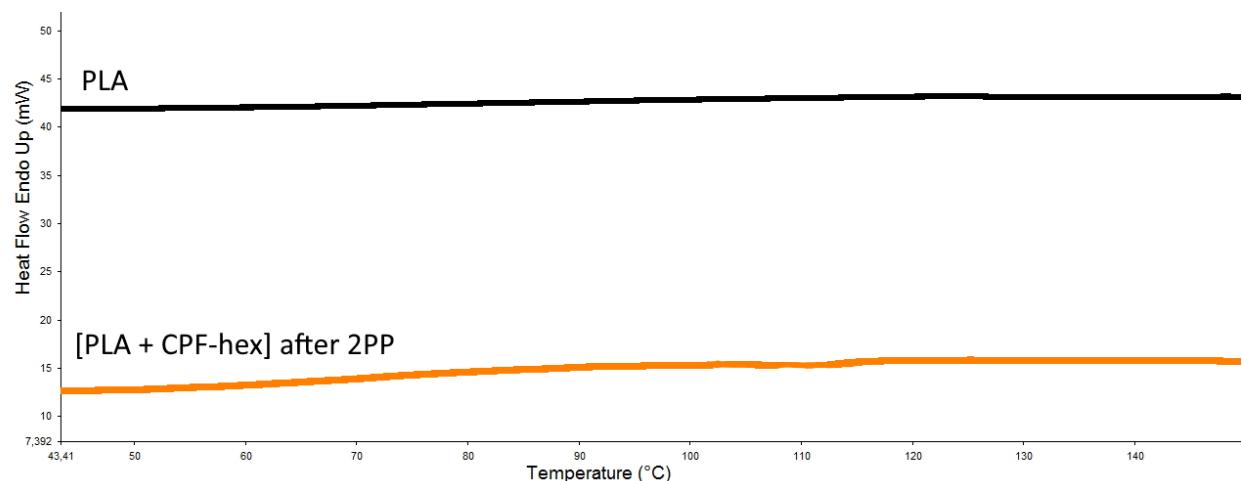
**Figure S1.** <sup>1</sup>H-NMR spectra of CPF-hex (1-cyclopropyl-6-fluoro-7-(4-hexanoylpiperazin-1-yl)-4-oxo-1,4-dihydroquinoline-3-carboxylic acid).



**Figure S2.** <sup>19</sup>F-NMR spectrum of CPF-hex (1-cyclopropyl-6-fluoro-7-(4-hexanoylpiperazin-1-yl)-4-oxo-1,4-dihydroquinoline-3-carboxylic acid).



**Figure S3.** ESI-MS spectrum of CPF-hex (positive ions registration mode).



**Figure S4.** DSC curves of initial methacrylate-terminated star-shaped polylactide (PLA) and a polylactide-based resin after the 2PP processing ([PLA+ CPF-hex] after 2PP) (the second scan).