

S1. Coverage estimation method

The metal coverage of TiO₂ (Θ) was estimated as the number of metal atoms per square angstrom of TiO₂ surface. The molar TiO₂ surface was assumed as the total surface of 1 mol of TiO₂ if consisted of spheres of 50 nm in diameter.

$$\Theta \approx m_{\text{metal}} / (S_{\text{TiO}_2} * M_{\text{metal}}) = (4/3 * \pi * R^3 * d_{\text{TiO}_2} * C_{\text{ICP-OES}}) * N_A / (4 * R^2 * \pi * M_{\text{metal}})$$
$$\Theta \approx 4/3 * R * d_{\text{TiO}_2} * C_{\text{ICP-OES}} / M_{\text{metal}} \quad (\text{Eq. S-1})$$

where R is the average radius of a TiO₂ sphere estimated from SEM micrographs (assumed 25 nm), d_{TiO_2} is the tabular value of TiO₂ rutile density (4.23 g/cm³), $C_{\text{ICP-OES}}$ – ICP-OES measured mass concentration of metal in TiO₂ sample (g/L), M_{metal} – metal molar mass, N_A – Avogadro number

S2. EDS spectra of the investigated samples

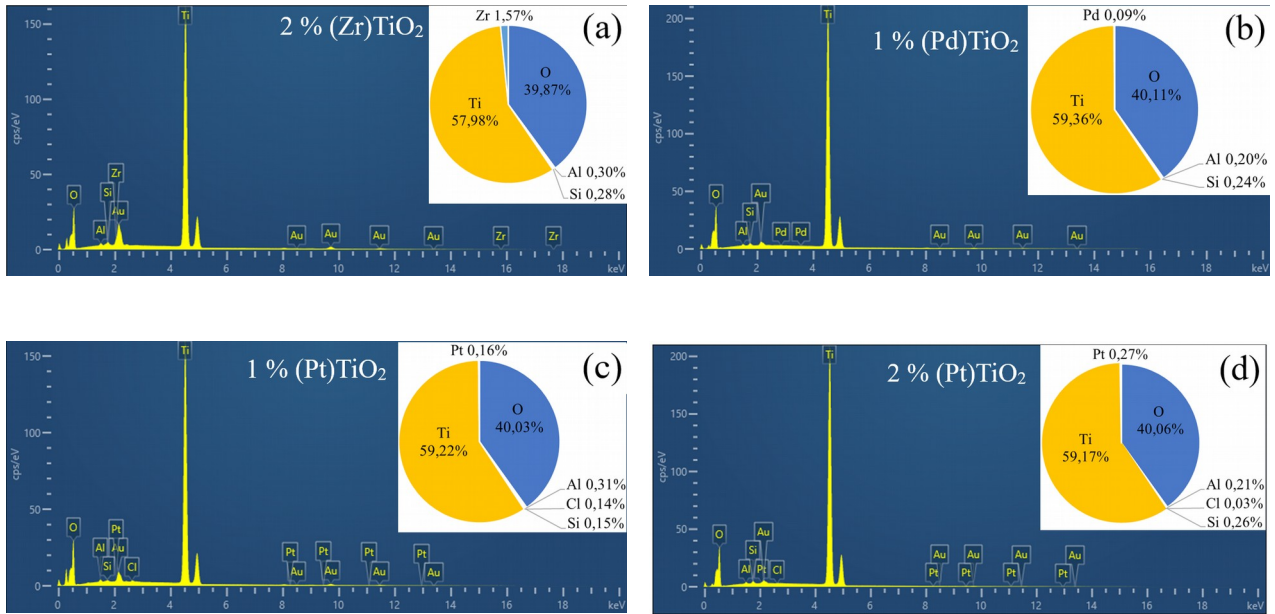


Figure S1. SEM-EDS spectra and normalized amount of the elements from EDS analysis: (a) 2 % (Zr)TiO₂, (b) 1 % (Pd)TiO₂, (c) 1 % (Pt)TiO₂ and (d) 2 % (Pt)TiO₂.

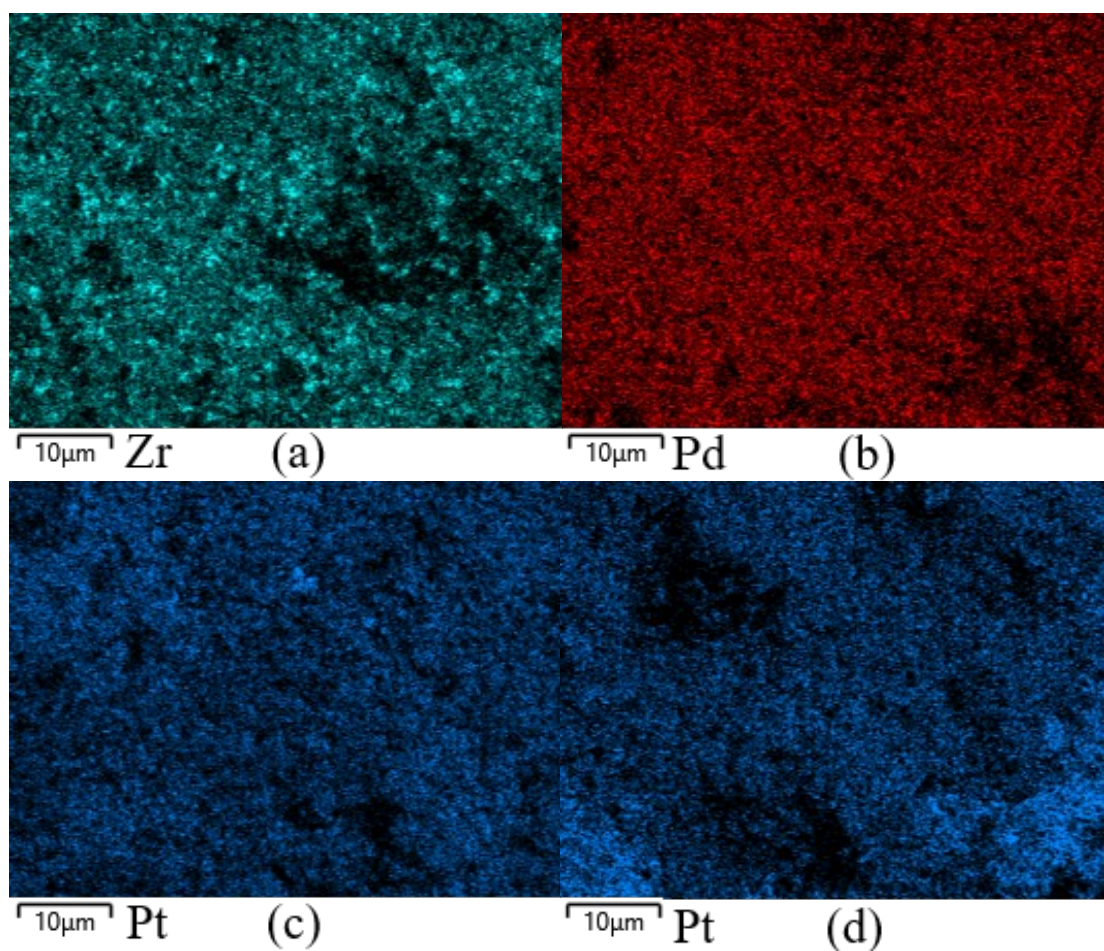
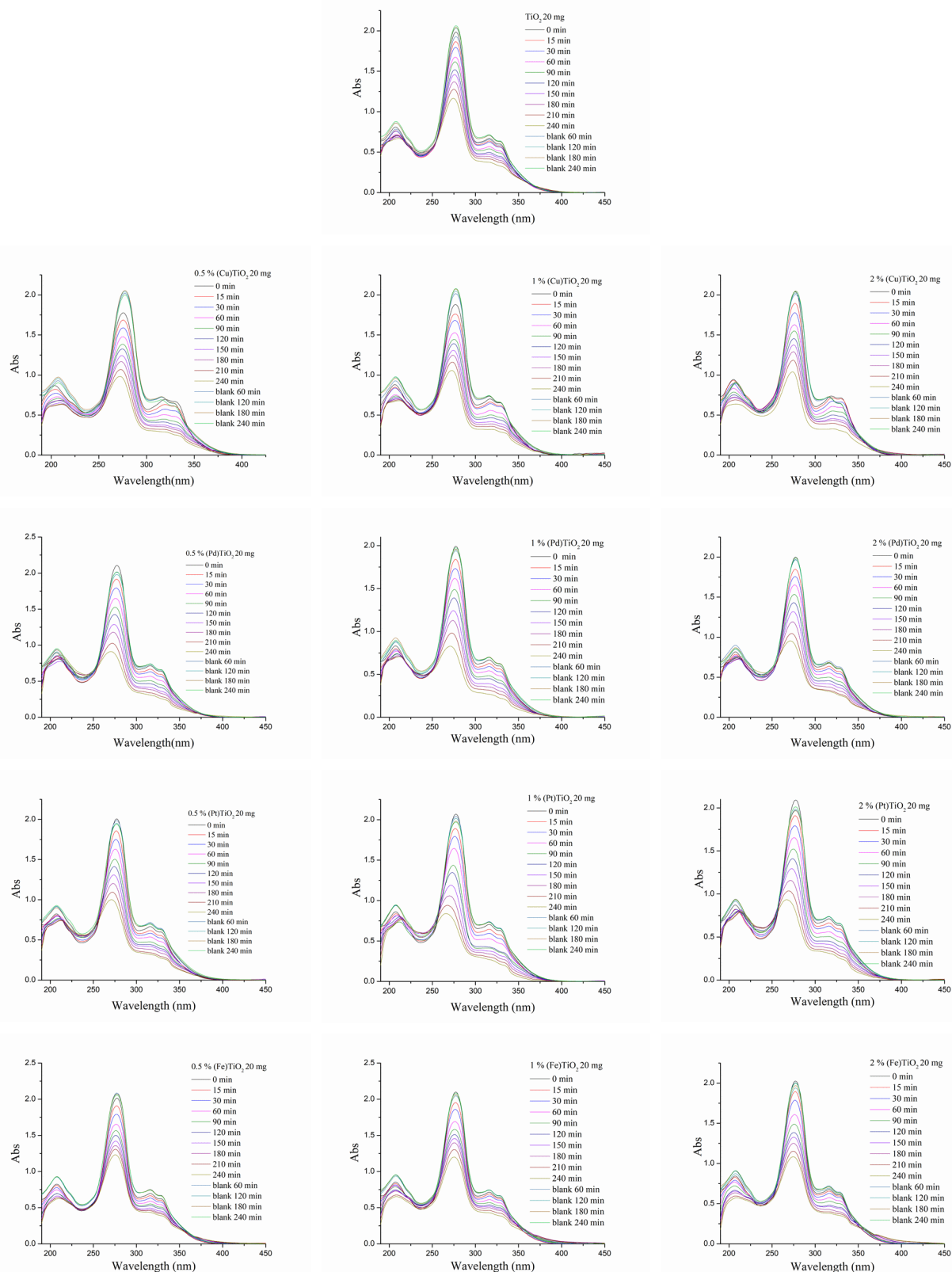


Figure S2. Elemental maps and distribution of metals (a) 2 % (Zr)TiO₂, (b) 1 % (Pd)TiO₂, (c) 1 % (Pt)TiO₂ and (d) 2 % (Pt)TiO₂.

S3. UV-Vis spectra of ciprofloxacin degradation with 20 mg of photocatalyst – all materials



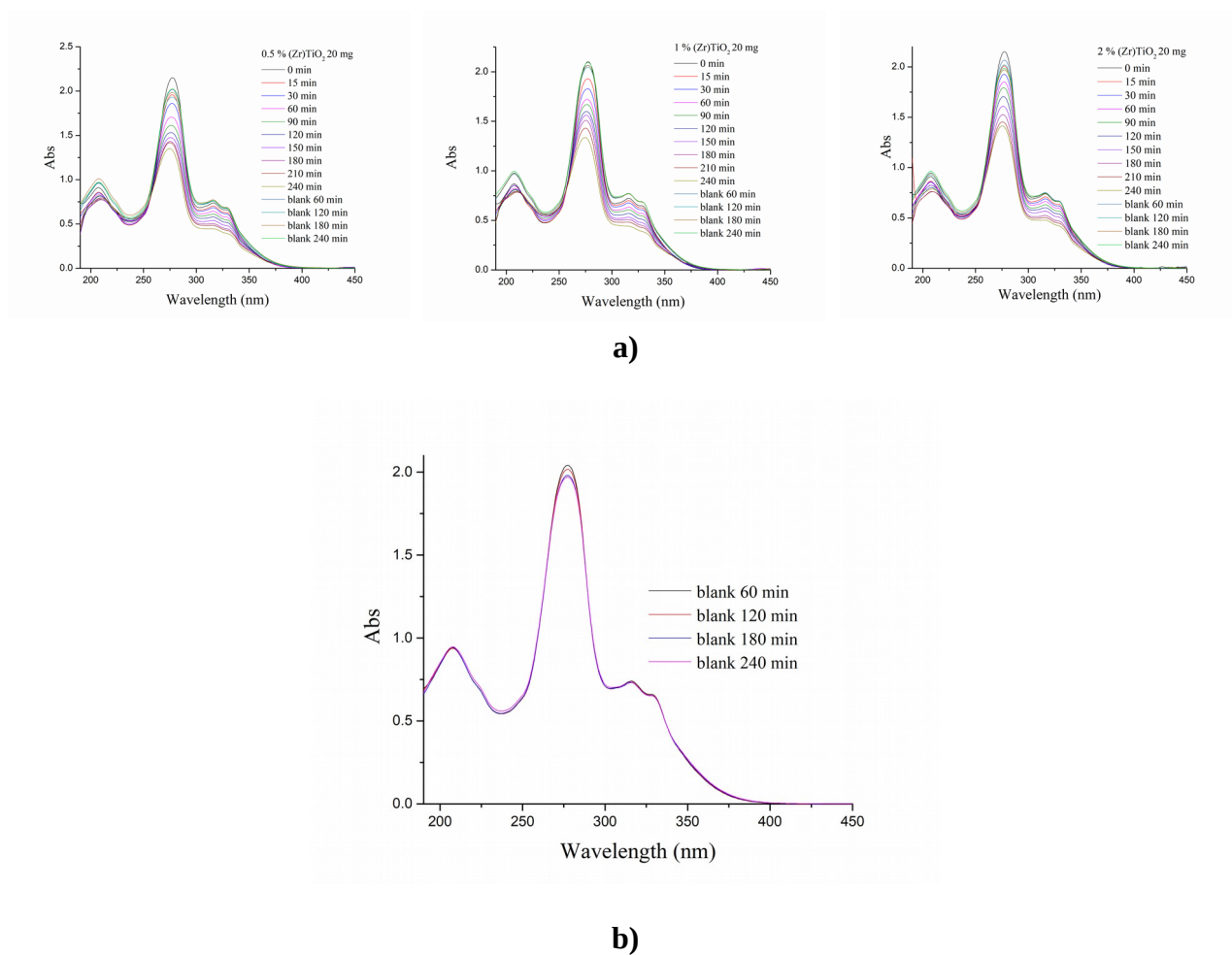


Figure S3. a) UV-Vis spectra of degradation process with 20 mg of catalyst for bare TiO₂ and investigated modified catalysts (Pd, Pt, Zr, Cu, Fe - TiO₂) b) UV-Vis spectra of the irradiated blank solution (CIP without photocatalyst) within 240 min.

S4. XRD stability check

Photocatalytic reaction does not induce any noticeable change in the crystal structure of TiO_2 support powder as evidenced by the *ex situ* XRD measurements (Figure S1).

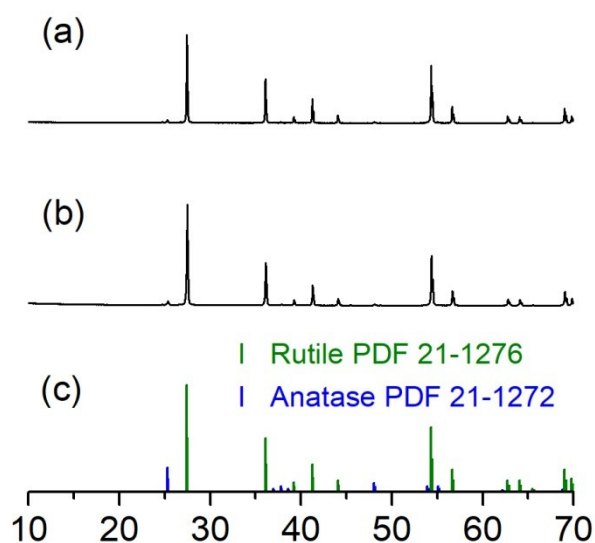


Figure S4. XRD pattern of the $(\text{Pt})\text{TiO}_2$ after photocatalytic reaction (a), as prepared $(\text{Pt})\text{TiO}_2$ (b) and reflections of the corresponding PDF cards (c).

S5. A mass chromatogram P1 - P6

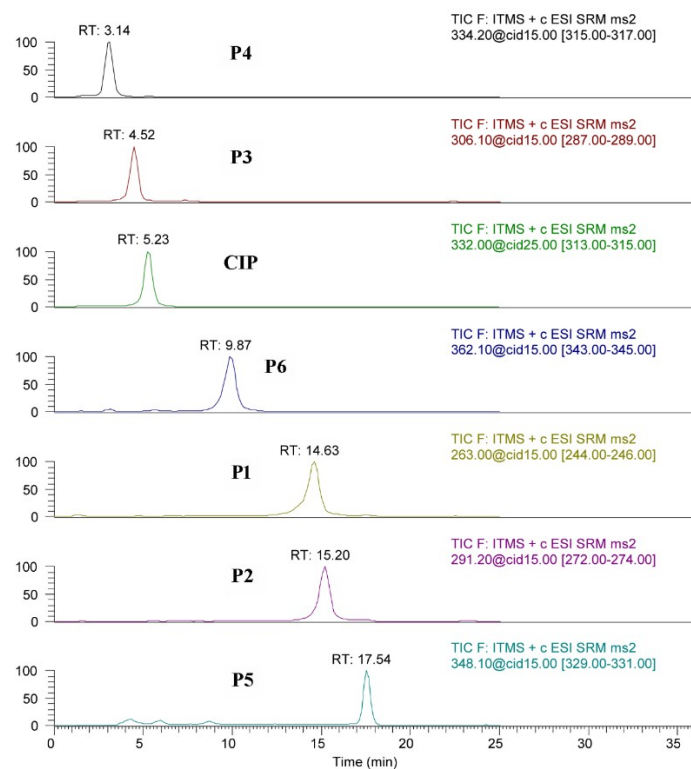


Figure S5. A mass chromatogram of the photocatalytic degradation samples after 60 min of photodegradation.

S-6. Mass spectra of degradation prodcuts P1-P6

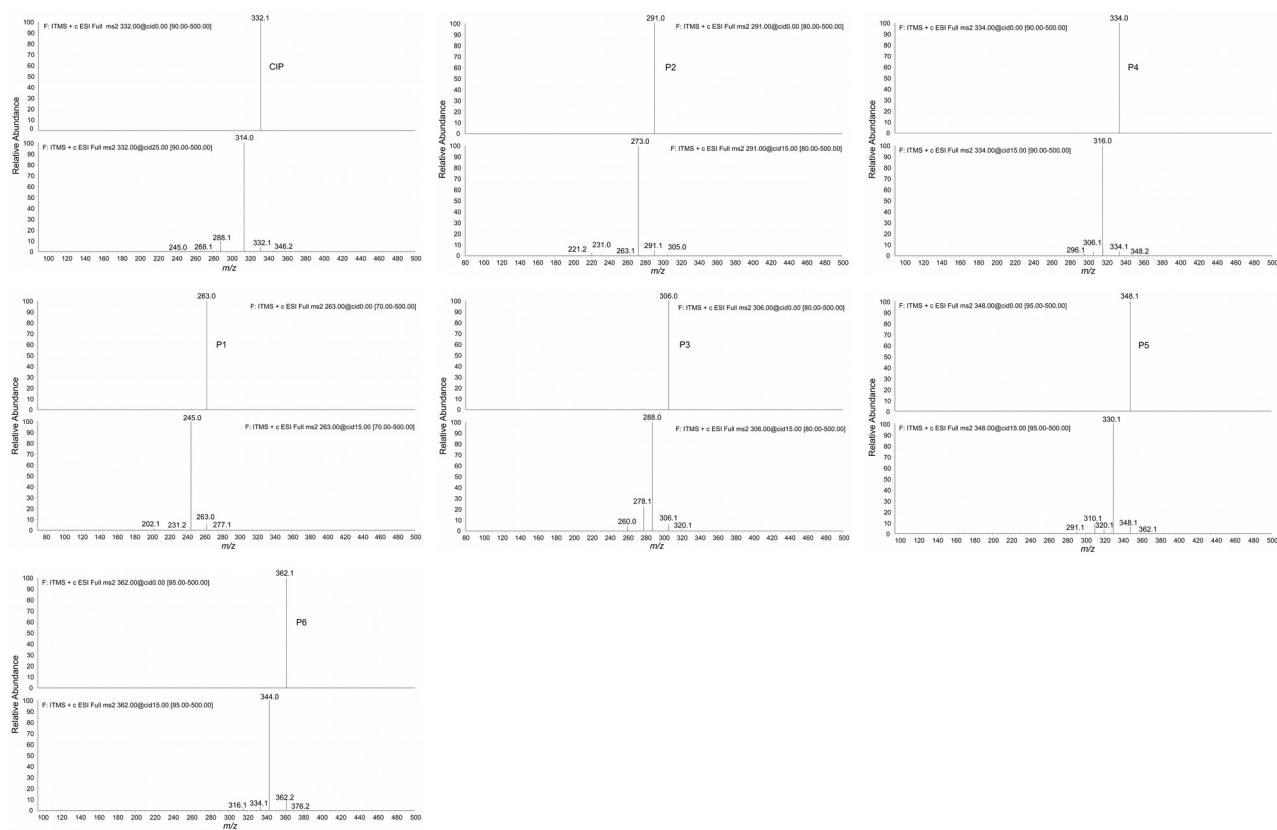


Figure S6. Mass spectra photocatalytic degradation products P1-P6 after 60 min of photodegradation.

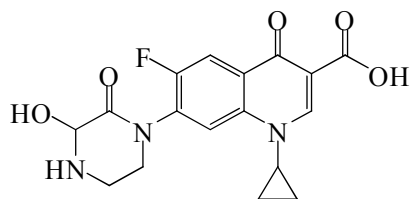
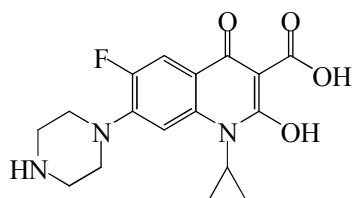
Table S1. CIP photocatalytic degradation products and their MS/MS fragment ions

Component formula	Precursor ion (<i>m/z</i>)	Fragment ions (<i>m/z</i>)	Proposed structure
CIP $C_{17}H_{18}FN_3O_3$	332 $[M+H]^+$	314, 288, 268, 245, 346	
P1 $C_{13}H_{11}FN_2O_3$	263	245, 277, 202, 231	
P2 $C_{14}H_{11}FN_2O_4$	291	273, 263, 231, 221, 305	
P3 $C_{15}H_{16}FN_3O_3$	306	288, 278, 320, 260	
P4 $C_{16}H_{16}FN_3O_4$	334	348, 316, 306, 296	

P5
 $C_{17}H_{18}FN_3O_4$

348

362, 330, 310,
320, 291



P6
 $C_{17}H_{16}FN_3O_5$

362

344, 334, 316,
376

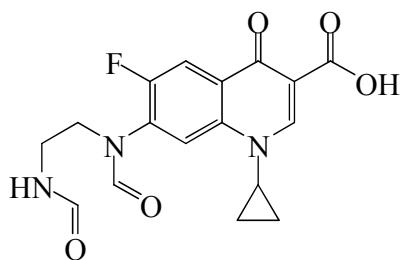


Table S2. Measured LCMS/MS signal intensities for the degradation times 0- 240 min.

<p>C:\Xcalibur\...\CPI_uz_0min_u_MF_50B1 protok 15 ul/min</p> <p>CPI_uz_0min_u_MF_50B1C#2-184 F: ITMS + c ESI Full ms [90.0 m/z= 200.00-500.00</p> <table> <tr> <th>m/z</th><th>Intensity</th><th>Relative</th></tr> <tr><td>206.96</td><td>13528.3</td><td>2.61</td></tr> <tr><td>210.98</td><td>6884.3</td><td>1.33</td></tr> <tr><td>214.92</td><td>14941.7</td><td>2.89</td></tr> <tr><td>216.98</td><td>11763.7</td><td>2.27</td></tr> <tr><td>218.93</td><td>24360.6</td><td>4.71</td></tr> <tr><td>220.97</td><td>13831.9</td><td>2.67</td></tr> <tr><td>222.97</td><td>24828.0</td><td>4.80</td></tr> <tr><td>235.04</td><td>8824.5</td><td>1.70</td></tr> <tr><td>238.05</td><td>6355.4</td><td>1.23</td></tr> <tr><td>238.99</td><td>17040.3</td><td>3.29</td></tr> <tr><td>246.93</td><td>48894.0</td><td>9.45</td></tr> <tr><td>248.94</td><td>29566.0</td><td>5.71</td></tr> <tr><td>250.07</td><td>9235.9</td><td>1.78</td></tr> <tr><td>250.97</td><td>72092.6</td><td>13.93</td></tr> <tr><td>252.03</td><td>7660.9</td><td>1.48</td></tr> <tr><td>252.98</td><td>8493.0</td><td>1.64</td></tr> <tr><td>254.95</td><td>19281.6</td><td>3.72</td></tr> <tr><td>266.98</td><td>9291.9</td><td>1.80</td></tr> <tr><td>274.83</td><td>16156.4</td><td>3.12</td></tr> <tr><td>277.00</td><td>8913.0</td><td>1.72</td></tr> <tr><td>279.03</td><td>65758.8</td><td>12.70</td></tr> <tr><td>280.11</td><td>11158.6</td><td>2.16</td></tr> <tr><td>281.04</td><td>7274.3</td><td>1.41</td></tr> <tr><td>282.88</td><td>48593.7</td><td>9.39</td></tr> <tr><td>287.01</td><td>8521.5</td><td>1.65</td></tr> <tr><td>296.14</td><td>14180.0</td><td>2.74</td></tr> <tr><td>301.10</td><td>10326.8</td><td>2.00</td></tr> <tr><td>310.90</td><td>25756.8</td><td>4.98</td></tr> <tr><td>314.83</td><td>13513.4</td><td>2.61</td></tr> <tr><td>332.09</td><td>517628.8</td><td>100.00</td></tr> <tr><td>333.11</td><td>99816.5</td><td>19.28</td></tr> <tr><td>334.15</td><td>13178.1</td><td>2.55</td></tr> <tr><td>348.16</td><td>8667.2</td><td>1.67</td></tr> <tr><td>354.12</td><td>10954.4</td><td>2.12</td></tr> <tr><td>376.34</td><td>6887.2</td><td>1.33</td></tr> </table>	m/z	Intensity	Relative	206.96	13528.3	2.61	210.98	6884.3	1.33	214.92	14941.7	2.89	216.98	11763.7	2.27	218.93	24360.6	4.71	220.97	13831.9	2.67	222.97	24828.0	4.80	235.04	8824.5	1.70	238.05	6355.4	1.23	238.99	17040.3	3.29	246.93	48894.0	9.45	248.94	29566.0	5.71	250.07	9235.9	1.78	250.97	72092.6	13.93	252.03	7660.9	1.48	252.98	8493.0	1.64	254.95	19281.6	3.72	266.98	9291.9	1.80	274.83	16156.4	3.12	277.00	8913.0	1.72	279.03	65758.8	12.70	280.11	11158.6	2.16	281.04	7274.3	1.41	282.88	48593.7	9.39	287.01	8521.5	1.65	296.14	14180.0	2.74	301.10	10326.8	2.00	310.90	25756.8	4.98	314.83	13513.4	2.61	332.09	517628.8	100.00	333.11	99816.5	19.28	334.15	13178.1	2.55	348.16	8667.2	1.67	354.12	10954.4	2.12	376.34	6887.2	1.33	<p>CIP_uz30min_u_MF_30B1C_mz_200-5 protok 15 ul/min</p> <p>CIP_uz30min_u_MF_30B1C_mz_200-5 F: ITMS + c ESI Full ms [200.0 m/z= 200.00-500.00</p> <table> <tr> <th>m/z</th><th>Intensity</th><th>Relative</th></tr> <tr><td>206.98</td><td>12651.5</td><td>12.56</td></tr> <tr><td>211.00</td><td>8733.7</td><td>8.67</td></tr> <tr><td>214.99</td><td>9702.8</td><td>9.63</td></tr> <tr><td>217.02</td><td>13973.3</td><td>13.87</td></tr> <tr><td>218.97</td><td>14837.5</td><td>14.73</td></tr> <tr><td>220.98</td><td>28730.7</td><td>28.51</td></tr> <tr><td>222.98</td><td>27393.6</td><td>27.19</td></tr> <tr><td>224.25</td><td>10901.8</td><td>10.82</td></tr> <tr><td>225.03</td><td>43306.5</td><td>42.98</td></tr> <tr><td>227.07</td><td>8490.0</td><td>8.43</td></tr> <tr><td>238.99</td><td>15568.8</td><td>15.45</td></tr> <tr><td>246.86</td><td>24206.7</td><td>24.02</td></tr> <tr><td>249.00</td><td>15940.5</td><td>15.82</td></tr> <tr><td>250.97</td><td>46645.3</td><td>46.29</td></tr> <tr><td>253.03</td><td>11671.0</td><td>11.58</td></tr> <tr><td>255.01</td><td>13473.1</td><td>13.37</td></tr> <tr><td>257.07</td><td>15313.0</td><td>15.20</td></tr> <tr><td>263.04</td><td>12155.9</td><td>12.06</td></tr> <tr><td>274.27</td><td>10444.5</td><td>10.37</td></tr> <tr><td>275.08</td><td>15210.2</td><td>15.10</td></tr> <tr><td>279.05</td><td>55554.0</td><td>55.13</td></tr> <tr><td>280.10</td><td>9791.0</td><td>9.72</td></tr> <tr><td>282.97</td><td>21107.3</td><td>20.95</td></tr> <tr><td>296.15</td><td>9742.0</td><td>9.67</td></tr> <tr><td>301.10</td><td>10166.2</td><td>10.09</td></tr> <tr><td>306.06</td><td>35422.7</td><td>35.16</td></tr> <tr><td>307.10</td><td>11463.0</td><td>11.38</td></tr> <tr><td>310.94</td><td>10380.5</td><td>10.30</td></tr> <tr><td>330.11</td><td>8996.8</td><td>8.93</td></tr> <tr><td>332.07</td><td>100760.5</td><td>100.00</td></tr> <tr><td>333.13</td><td>22682.0</td><td>22.51</td></tr> <tr><td>334.10</td><td>36241.9</td><td>35.97</td></tr> <tr><td>335.10</td><td>8359.4</td><td>8.30</td></tr> <tr><td>348.09</td><td>17532.1</td><td>17.40</td></tr> 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282.88	48593.7	9.39																																																																																																																																																																																																																																																																																																																																																			
287.01	8521.5	1.65																																																																																																																																																																																																																																																																																																																																																			
296.14	14180.0	2.74																																																																																																																																																																																																																																																																																																																																																			
301.10	10326.8	2.00																																																																																																																																																																																																																																																																																																																																																			
310.90	25756.8	4.98																																																																																																																																																																																																																																																																																																																																																			
314.83	13513.4	2.61																																																																																																																																																																																																																																																																																																																																																			
332.09	517628.8	100.00																																																																																																																																																																																																																																																																																																																																																			
333.11	99816.5	19.28																																																																																																																																																																																																																																																																																																																																																			
334.15	13178.1	2.55																																																																																																																																																																																																																																																																																																																																																			
348.16	8667.2	1.67																																																																																																																																																																																																																																																																																																																																																			
354.12	10954.4	2.12																																																																																																																																																																																																																																																																																																																																																			
376.34	6887.2	1.33																																																																																																																																																																																																																																																																																																																																																			
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206.98	12651.5	12.56																																																																																																																																																																																																																																																																																																																																																			
211.00	8733.7	8.67																																																																																																																																																																																																																																																																																																																																																			
214.99	9702.8	9.63																																																																																																																																																																																																																																																																																																																																																			
217.02	13973.3	13.87																																																																																																																																																																																																																																																																																																																																																			
218.97	14837.5	14.73																																																																																																																																																																																																																																																																																																																																																			
220.98	28730.7	28.51																																																																																																																																																																																																																																																																																																																																																			
222.98	27393.6	27.19																																																																																																																																																																																																																																																																																																																																																			
224.25	10901.8	10.82																																																																																																																																																																																																																																																																																																																																																			
225.03	43306.5	42.98																																																																																																																																																																																																																																																																																																																																																			
227.07	8490.0	8.43																																																																																																																																																																																																																																																																																																																																																			
238.99	15568.8	15.45																																																																																																																																																																																																																																																																																																																																																			
246.86	24206.7	24.02																																																																																																																																																																																																																																																																																																																																																			
249.00	15940.5	15.82																																																																																																																																																																																																																																																																																																																																																			
250.97	46645.3	46.29																																																																																																																																																																																																																																																																																																																																																			
253.03	11671.0	11.58																																																																																																																																																																																																																																																																																																																																																			
255.01	13473.1	13.37																																																																																																																																																																																																																																																																																																																																																			
257.07	15313.0	15.20																																																																																																																																																																																																																																																																																																																																																			
263.04	12155.9	12.06																																																																																																																																																																																																																																																																																																																																																			
274.27	10444.5	10.37																																																																																																																																																																																																																																																																																																																																																			
275.08	15210.2	15.10																																																																																																																																																																																																																																																																																																																																																			
279.05	55554.0	55.13																																																																																																																																																																																																																																																																																																																																																			
280.10	9791.0	9.72																																																																																																																																																																																																																																																																																																																																																			
282.97	21107.3	20.95																																																																																																																																																																																																																																																																																																																																																			
296.15	9742.0	9.67																																																																																																																																																																																																																																																																																																																																																			
301.10	10166.2	10.09																																																																																																																																																																																																																																																																																																																																																			
306.06	35422.7	35.16																																																																																																																																																																																																																																																																																																																																																			
307.10	11463.0	11.38																																																																																																																																																																																																																																																																																																																																																			
310.94	10380.5	10.30																																																																																																																																																																																																																																																																																																																																																			
330.11	8996.8	8.93																																																																																																																																																																																																																																																																																																																																																			
332.07	100760.5	100.00																																																																																																																																																																																																																																																																																																																																																			
333.13	22682.0	22.51																																																																																																																																																																																																																																																																																																																																																			
334.10	36241.9	35.97																																																																																																																																																																																																																																																																																																																																																			
335.10	8359.4	8.30																																																																																																																																																																																																																																																																																																																																																			
348.09	17532.1	17.40																																																																																																																																																																																																																																																																																																																																																			
362.09	12533.2	12.44																																																																																																																																																																																																																																																																																																																																																			
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206.98	13234.7	16.08																																																																																																																																																																																																																																																																																																																																																			
214.93	15692.5	19.07																																																																																																																																																																																																																																																																																																																																																			
216.93	10304.1	12.52																																																																																																																																																																																																																																																																																																																																																			
218.91	27762.0	33.73																																																																																																																																																																																																																																																																																																																																																			
220.95	12406.5	15.07																																																																																																																																																																																																																																																																																																																																																			
222.97	25699.6	31.23																																																																																																																																																																																																																																																																																																																																																			
235.04	9321.0	11.33																																																																																																																																																																																																																																																																																																																																																			
238.98	11970.5	14.54																																																																																																																																																																																																																																																																																																																																																			
246.90	56717.4	68.92																																																																																																																																																																																																																																																																																																																																																			
248.93	33254.6	40.41																																																																																																																																																																																																																																																																																																																																																			
250.07	9463.3	11.50																																																																																																																																																																																																																																																																																																																																																			
250.94	82300.0	100.00																																																																																																																																																																																																																																																																																																																																																			
252.01	8609.7	10.46																																																																																																																																																																																																																																																																																																																																																			
252.97	7105.3	8.63																																																																																																																																																																																																																																																																																																																																																			
254.80	21972.0	26.70																																																																																																																																																																																																																																																																																																																																																			
263.02	22158.2	26.92																																																																																																																																																																																																																																																																																																																																																			
266.97	7492.6	9.10																																																																																																																																																																																																																																																																																																																																																			
274.82	18557.7	22.55																																																																																																																																																																																																																																																																																																																																																			
276.98	10519.0	12.78																																																																																																																																																																																																																																																																																																																																																			
278.99	49033.3	59.58																																																																																																																																																																																																																																																																																																																																																			
280.08	7870.8	9.56																																																																																																																																																																																																																																																																																																																																																			
282.85	49965.3	60.71																																																																																																																																																																																																																																																																																																																																																			
291.06	7900.5	9.60																																																																																																																																																																																																																																																																																																																																																			
306.10	27012.4	32.82																																																																																																																																																																																																																																																																																																																																																			
307.09	7128.0	8.66																																																																																																																																																																																																																																																																																																																																																			
310.85	26420.6	32.10																																																																																																																																																																																																																																																																																																																																																			
330.13	7315.3	8.89																																																																																																																																																																																																																																																																																																																																																			
332.11	34409.4	41.81																																																																																																																																																																																																																																																																																																																																																			
333.21	9469.0	11.51																																																																																																																																																																																																																																																																																																																																																			
334.09	67798.4	82.38																																																																																																																																																																																																																																																																																																																																																			
335.10	13618.3	16.55																																																																																																																																																																																																																																																																																																																																																			
346.13	10699.1	13.00																																																																																																																																																																																																																																																																																																																																																			
348.07	20036.1	24.35																																																																																																																																																																																																																																																																																																																																																			
362.10	24302.3	29.53																																																																																																																																																																																																																																																																																																																																																			
366.15	8011.4	9.73																																																																																																																																																																																																																																																																																																																																																			
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<p>C:\Xcalibur\...\CPI_uz_120min_u_MF_50B1 protok 15 ul/min</p> <p>CPI_uz_120min_u_MF_50B1C#6-25 F: ITMS + c ESI Full ms [90.0 m/z= 200.00-500.00</p> <table> <tr> <th>m/z</th><th>Intensity</th><th>Relative</th></tr> <tr><td>206.98</td><td>26897.2</td><td>28.05</td></tr> <tr><td>214.91</td><td>13466.4</td><td>14.04</td></tr> <tr><td>217.00</td><td>11747.0</td><td>12.25</td></tr> <tr><td>218.94</td><td>21929.4</td><td>22.87</td></tr> <tr><td>220.96</td><td>13669.8</td><td>14.26</td></tr> <tr><td>222.96</td><td>35306.8</td><td>36.82</td></tr> <tr><td>235.00</td><td>17430.4</td><td>18.18</td></tr> <tr><td>238.97</td><td>18730.3</td><td>19.53</td></tr> <tr><td>246.92</td><td>44721.2</td><td>46.64</td></tr> <tr><td>248.94</td><td>28353.0</td><td>29.57</td></tr> <tr><td>250.09</td><td>8731.6</td><td>9.11</td></tr> <tr><td>250.94</td><td>95889.2</td><td>100.00</td></tr> <tr><td>252.03</td><td>10849.6</td><td>11.31</td></tr> <tr><td>252.99</td><td>9414.4</td><td>9.82</td></tr> <tr><td>254.93</td><td>28999.2</td><td>30.24</td></tr> <tr><td>263.04</td><td>32574.8</td><td>33.97</td></tr> <tr><td>267.00</td><td>10339.3</td><td>10.78</td></tr> <tr><td>275.00</td><td>9069.7</td><td>9.46</td></tr> <tr><td>277.01</td><td>9130.1</td><td>9.52</td></tr> <tr><td>279.03</td><td>81449.0</td><td>84.94</td></tr> <tr><td>280.10</td><td>14306.7</td><td>14.92</td></tr> <tr><td>281.02</td><td>8312.0</td><td>8.67</td></tr> <tr><td>282.87</td><td>73506.8</td><td>76.66</td></tr> <tr><td>283.99</td><td>8739.0</td><td>9.11</td></tr> <tr><td>285.01</td><td>7888.5</td><td>8.23</td></tr> <tr><td>287.00</td><td>11093.9</td><td>11.57</td></tr> <tr><td>291.03</td><td>10220.7</td><td>10.66</td></tr> <tr><td>296.13</td><td>18297.1</td><td>19.08</td></tr> <tr><td>301.09</td><td>11383.5</td><td>11.87</td></tr> <tr><td>306.11</td><td>8868.4</td><td>9.25</td></tr> <tr><td>310.84</td><td>38008.5</td><td>39.64</td></tr> <tr><td>314.40</td><td>9524.8</td><td>9.93</td></tr> <tr><td>315.00</td><td>13366.8</td><td>13.94</td></tr> <tr><td>324.19</td><td>10224.4</td><td>10.66</td></tr> <tr><td>332.15</td><td>8135.2</td><td>8.48</td></tr> <tr><td>334.09</td><td>55198.2</td><td>57.56</td></tr> <tr><td>335.13</td><td>11800.0</td><td>12.31</td></tr> <tr><td>339.05</td><td>8145.2</td><td>8.49</td></tr> <tr><td>348.16</td><td>11523.8</td><td>12.02</td></tr> <tr><td>362.12</td><td>18689.3</td><td>19.49</td></tr> </table>	m/z	Intensity	Relative	206.98	26897.2	28.05	214.91	13466.4	14.04	217.00	11747.0	12.25	218.94	21929.4	22.87	220.96	13669.8	14.26	222.96	35306.8	36.82	235.00	17430.4	18.18	238.97	18730.3	19.53	246.92	44721.2	46.64	248.94	28353.0	29.57	250.09	8731.6	9.11	250.94	95889.2	100.00	252.03	10849.6	11.31	252.99	9414.4	9.82	254.93	28999.2	30.24	263.04	32574.8	33.97	267.00	10339.3	10.78	275.00	9069.7	9.46	277.01	9130.1	9.52	279.03	81449.0	84.94	280.10	14306.7	14.92	281.02	8312.0	8.67	282.87	73506.8	76.66	283.99	8739.0	9.11	285.01	7888.5	8.23	287.00	11093.9	11.57	291.03	10220.7	10.66	296.13	18297.1	19.08	301.09	11383.5	11.87	306.11	8868.4	9.25	310.84	38008.5	39.64	314.40	9524.8	9.93	315.00	13366.8	13.94	324.19	10224.4	10.66	332.15	8135.2	8.48	334.09	55198.2	57.56	335.13	11800.0	12.31	339.05	8145.2	8.49	348.16	11523.8	12.02	362.12	18689.3	19.49	<p>C:\Xcalibur\...\CPI_uz_180min_u_MF_50B1 protok 15 ul/min</p> <p>CPI_uz_180min_u_MF_50B1C#8-4 F: ITMS + c ESI Full ms [100.0 m/z= 200.00-500.00</p> <table> <tr> <th>m/z</th><th>Intensity</th><th>Relative</th></tr> <tr><td>206.97</td><td>15272.0</td><td>18.92</td></tr> <tr><td>210.97</td><td>8530.1</td><td>10.57</td></tr> <tr><td>214.93</td><td>13503.6</td><td>16.73</td></tr> <tr><td>216.99</td><td>11697.4</td><td>14.49</td></tr> <tr><td>218.38</td><td>9200.8</td><td>11.40</td></tr> <tr><td>218.95</td><td>21743.1</td><td>26.93</td></tr> <tr><td>220.95</td><td>16601.9</td><td>20.57</td></tr> <tr><td>222.95</td><td>30474.9</td><td>37.75</td></tr> <tr><td>224.99</td><td>8187.3</td><td>10.14</td></tr> <tr><td>235.04</td><td>9284.0</td><td>11.50</td></tr> <tr><td>238.99</td><td>15658.7</td><td>19.40</td></tr> <tr><td>246.91</td><td>42466.8</td><td>52.61</td></tr> <tr><td>248.96</td><td>27043.7</td><td>33.50</td></tr> <tr><td>250.07</td><td>9067.2</td><td>11.23</td></tr> <tr><td>250.94</td><td>75767.9</td><td>93.86</td></tr> <tr><td>252.03</td><td>9942.3</td><td>12.32</td></tr> <tr><td>252.97</td><td>9944.2</td><td>12.32</td></tr> <tr><td>254.39</td><td>10724.3</td><td>13.29</td></tr> <tr><td>254.98</td><td>21149.5</td><td>26.20</td></tr> <tr><td>263.03</td><td>31764.1</td><td>39.35</td></tr> <tr><td>274.83</td><td>13888.1</td><td>17.20</td></tr> <tr><td>277.01</td><td>8432.4</td><td>10.45</td></tr> <tr><td>279.04</td><td>80724.5</td><td>100.00</td></tr> <tr><td>280.10</td><td>15275.8</td><td>18.92</td></tr> <tr><td>281.03</td><td>8490.3</td><td>10.52</td></tr> <tr><td>282.84</td><td>55533.2</td><td>68.79</td></tr> <tr><td>286.99</td><td>11622.4</td><td>14.40</td></tr> <tr><td>291.06</td><td>10130.9</td><td>12.55</td></tr> <tr><td>296.12</td><td>23534.7</td><td>29.15</td></tr> <tr><td>301.09</td><td>12821.4</td><td>15.88</td></tr> <tr><td>310.80</td><td>26180.4</td><td>32.43</td></tr> <tr><td>314.99</td><td>11190.8</td><td>13.86</td></tr> <tr><td>324.21</td><td>12830.5</td><td>15.89</td></tr> <tr><td>334.12</td><td>33082.6</td><td>40.98</td></tr> <tr><td>362.11</td><td>13877.6</td><td>17.19</td></tr> </table>	m/z	Intensity	Relative	206.97	15272.0	18.92	210.97	8530.1	10.57	214.93	13503.6	16.73	216.99	11697.4	14.49	218.38	9200.8	11.40	218.95	21743.1	26.93	220.95	16601.9	20.57	222.95	30474.9	37.75	224.99	8187.3	10.14	235.04	9284.0	11.50	238.99	15658.7	19.40	246.91	42466.8	52.61	248.96	27043.7	33.50	250.07	9067.2	11.23	250.94	75767.9	93.86	252.03	9942.3	12.32	252.97	9944.2	12.32	254.39	10724.3	13.29	254.98	21149.5	26.20	263.03	31764.1	39.35	274.83	13888.1	17.20	277.01	8432.4	10.45	279.04	80724.5	100.00	280.10	15275.8	18.92	281.03	8490.3	10.52	282.84	55533.2	68.79	286.99	11622.4	14.40	291.06	10130.9	12.55	296.12	23534.7	29.15	301.09	12821.4	15.88	310.80	26180.4	32.43	314.99	11190.8	13.86	324.21	12830.5	15.89	334.12	33082.6	40.98	362.11	13877.6	17.19	<p>C:\Xcalibur\...\CPI_uz240min_u_struji_MF_50B1 protok 15 ul/min</p> <p>CIP_uz240min_u_struji_MF#3- F: ITMS + c ESI Full ms [200.0 m/z= 200.00-500.00</p> <table> <tr> <th>m/z</th><th>Intensity</th><th>Relative</th></tr> <tr><td>202.94</td><td>271.4</td><td>3.90</td></tr> <tr><td>207.03</td><td>769.0</td><td>11.04</td></tr> <tr><td>209.04</td><td>306.6</td><td>4.40</td></tr> <tr><td>210.00</td><td>384.1</td><td>5.52</td></tr> <tr><td>211.00</td><td>499.4</td><td>7.17</td></tr> <tr><td>212.95</td><td>1395.4</td><td>20.04</td></tr> <tr><td>218.95</td><td>849.8</td><td>12.20</td></tr> <tr><td>220.97</td><td>501.5</td><td>7.20</td></tr> <tr><td>222.98</td><td>6695.1</td><td>96.16</td></tr> <tr><td>224.01</td><td>507.8</td><td>7.29</td></tr> <tr><td>225.02</td><td>606.8</td><td>8.72</td></tr> <tr><td>226.99</td><td>6962.4</td><td>100.00</td></tr> <tr><td>228.04</td><td>599.6</td><td>8.61</td></tr> <tr><td>229.03</td><td>989.5</td><td>14.21</td></tr> <tr><td>230.15</td><td>305.1</td><td>4.38</td></tr> <tr><td>231.04</td><td>327.3</td><td>4.70</td></tr> <tr><td>239.08</td><td>354.7</td><td>5.10</td></tr> <tr><td>244.97</td><td>1655.6</td><td>23.78</td></tr> <tr><td>249.06</td><td>242.6</td><td>3.48</td></tr> <tr><td>251.04</td><td>351.7</td><td>5.05</td></tr> <tr><td>255.00</td><td>1088.7</td><td>15.64</td></tr> <tr><td>262.96</td><td>641.6</td><td>9.22</td></tr> <tr><td>269.00</td><td>325.3</td><td>4.67</td></tr> <tr><td>279.10</td><td>1243.8</td><td>17.86</td></tr> <tr><td>294.99</td><td>686.2</td><td>9.86</td></tr> <tr><td>301.11</td><td>996.9</td><td>14.32</td></tr> <tr><td>305.08</td><td>327.9</td><td>4.71</td></tr> <tr><td>321.01</td><td>892.7</td><td>12.82</td></tr> <tr><td>344.99</td><td>836.7</td><td>12.02</td></tr> <tr><td>353.07</td><td>315.7</td><td>4.53</td></tr> <tr><td>370.99</td><td>751.1</td><td>10.79</td></tr> <tr><td>409.16</td><td>279.5</td><td>4.01</td></tr> <tr><td>413.21</td><td>341.1</td><td>4.90</td></tr> <tr><td>420.97</td><td>534.0</td><td>7.67</td></tr> <tr><td>427.02</td><td>432.6</td><td>6.21</td></tr> </table>	m/z	Intensity	Relative	202.94	271.4	3.90	207.03	769.0	11.04	209.04	306.6	4.40	210.00	384.1	5.52	211.00	499.4	7.17	212.95	1395.4	20.04	218.95	849.8	12.20	220.97	501.5	7.20	222.98	6695.1	96.16	224.01	507.8	7.29	225.02	606.8	8.72	226.99	6962.4	100.00	228.04	599.6	8.61	229.03	989.5	14.21	230.15	305.1	4.38	231.04	327.3	4.70	239.08	354.7	5.10	244.97	1655.6	23.78	249.06	242.6	3.48	251.04	351.7	5.05	255.00	1088.7	15.64	262.96	641.6	9.22	269.00	325.3	4.67	279.10	1243.8	17.86	294.99	686.2	9.86	301.11	996.9	14.32	305.08	327.9	4.71	321.01	892.7	12.82	344.99	836.7	12.02	353.07	315.7	4.53	370.99	751.1	10.79	409.16	279.5	4.01	413.21	341.1	4.90	420.97	534.0	7.67	427.02	432.6	6.21
m/z	Intensity	Relative																																																																																																																																																																																																																																																																																																																																																			
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214.91	13466.4	14.04																																																																																																																																																																																																																																																																																																																																																			
217.00	11747.0	12.25																																																																																																																																																																																																																																																																																																																																																			
218.94	21929.4	22.87																																																																																																																																																																																																																																																																																																																																																			
220.96	13669.8	14.26																																																																																																																																																																																																																																																																																																																																																			
222.96	35306.8	36.82																																																																																																																																																																																																																																																																																																																																																			
235.00	17430.4	18.18																																																																																																																																																																																																																																																																																																																																																			
238.97	18730.3	19.53																																																																																																																																																																																																																																																																																																																																																			
246.92	44721.2	46.64																																																																																																																																																																																																																																																																																																																																																			
248.94	28353.0	29.57																																																																																																																																																																																																																																																																																																																																																			
250.09	8731.6	9.11																																																																																																																																																																																																																																																																																																																																																			
250.94	95889.2	100.00																																																																																																																																																																																																																																																																																																																																																			
252.03	10849.6	11.31																																																																																																																																																																																																																																																																																																																																																			
252.99	9414.4	9.82																																																																																																																																																																																																																																																																																																																																																			
254.93	28999.2	30.24																																																																																																																																																																																																																																																																																																																																																			
263.04	32574.8	33.97																																																																																																																																																																																																																																																																																																																																																			
267.00	10339.3	10.78																																																																																																																																																																																																																																																																																																																																																			
275.00	9069.7	9.46																																																																																																																																																																																																																																																																																																																																																			
277.01	9130.1	9.52																																																																																																																																																																																																																																																																																																																																																			
279.03	81449.0	84.94																																																																																																																																																																																																																																																																																																																																																			
280.10	14306.7	14.92																																																																																																																																																																																																																																																																																																																																																			
281.02	8312.0	8.67																																																																																																																																																																																																																																																																																																																																																			
282.87	73506.8	76.66																																																																																																																																																																																																																																																																																																																																																			
283.99	8739.0	9.11																																																																																																																																																																																																																																																																																																																																																			
285.01	7888.5	8.23																																																																																																																																																																																																																																																																																																																																																			
287.00	11093.9	11.57																																																																																																																																																																																																																																																																																																																																																			
291.03	10220.7	10.66																																																																																																																																																																																																																																																																																																																																																			
296.13	18297.1	19.08																																																																																																																																																																																																																																																																																																																																																			
301.09	11383.5	11.87																																																																																																																																																																																																																																																																																																																																																			
306.11	8868.4	9.25																																																																																																																																																																																																																																																																																																																																																			
310.84	38008.5	39.64																																																																																																																																																																																																																																																																																																																																																			
314.40	9524.8	9.93																																																																																																																																																																																																																																																																																																																																																			
315.00	13366.8	13.94																																																																																																																																																																																																																																																																																																																																																			
324.19	10224.4	10.66																																																																																																																																																																																																																																																																																																																																																			
332.15	8135.2	8.48																																																																																																																																																																																																																																																																																																																																																			
334.09	55198.2	57.56																																																																																																																																																																																																																																																																																																																																																			
335.13	11800.0	12.31																																																																																																																																																																																																																																																																																																																																																			
339.05	8145.2	8.49																																																																																																																																																																																																																																																																																																																																																			
348.16	11523.8	12.02																																																																																																																																																																																																																																																																																																																																																			
362.12	18689.3	19.49																																																																																																																																																																																																																																																																																																																																																			
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214.93	13503.6	16.73																																																																																																																																																																																																																																																																																																																																																			
216.99	11697.4	14.49																																																																																																																																																																																																																																																																																																																																																			
218.38	9200.8	11.40																																																																																																																																																																																																																																																																																																																																																			
218.95	21743.1	26.93																																																																																																																																																																																																																																																																																																																																																			
220.95	16601.9	20.57																																																																																																																																																																																																																																																																																																																																																			
222.95	30474.9	37.75																																																																																																																																																																																																																																																																																																																																																			
224.99	8187.3	10.14																																																																																																																																																																																																																																																																																																																																																			
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238.99	15658.7	19.40																																																																																																																																																																																																																																																																																																																																																			
246.91	42466.8	52.61																																																																																																																																																																																																																																																																																																																																																			
248.96	27043.7	33.50																																																																																																																																																																																																																																																																																																																																																			
250.07	9067.2	11.23																																																																																																																																																																																																																																																																																																																																																			
250.94	75767.9	93.86																																																																																																																																																																																																																																																																																																																																																			
252.03	9942.3	12.32																																																																																																																																																																																																																																																																																																																																																			
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263.03	31764.1	39.35																																																																																																																																																																																																																																																																																																																																																			
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282.84	55533.2	68.79																																																																																																																																																																																																																																																																																																																																																			
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310.80	26180.4	32.43																																																																																																																																																																																																																																																																																																																																																			
314.99	11190.8	13.86																																																																																																																																																																																																																																																																																																																																																			
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222.98	6695.1	96.16																																																																																																																																																																																																																																																																																																																																																			
224.01	507.8	7.29																																																																																																																																																																																																																																																																																																																																																			
225.02	606.8	8.72																																																																																																																																																																																																																																																																																																																																																			
226.99	6962.4	100.00																																																																																																																																																																																																																																																																																																																																																			
228.04	599.6	8.61																																																																																																																																																																																																																																																																																																																																																			
229.03	989.5	14.21																																																																																																																																																																																																																																																																																																																																																			
230.15	305.1	4.38																																																																																																																																																																																																																																																																																																																																																			
231.04	327.3	4.70																																																																																																																																																																																																																																																																																																																																																			
239.08	354.7	5.10																																																																																																																																																																																																																																																																																																																																																			
244.97	1655.6	23.78																																																																																																																																																																																																																																																																																																																																																			
249.06	242.6	3.48																																																																																																																																																																																																																																																																																																																																																			
251.04	351.7	5.05																																																																																																																																																																																																																																																																																																																																																			
255.00	1088.7	15.64																																																																																																																																																																																																																																																																																																																																																			
262.96	641.6	9.22																																																																																																																																																																																																																																																																																																																																																			
269.00	325.3	4.67																																																																																																																																																																																																																																																																																																																																																			
279.10	1243.8	17.86																																																																																																																																																																																																																																																																																																																																																			
294.99	686.2	9.86																																																																																																																																																																																																																																																																																																																																																			
301.11	996.9	14.32																																																																																																																																																																																																																																																																																																																																																			
305.08	327.9	4.71																																																																																																																																																																																																																																																																																																																																																			
321.01	892.7	12.82																																																																																																																																																																																																																																																																																																																																																			
344.99	836.7	12.02																																																																																																																																																																																																																																																																																																																																																			
353.07	315.7	4.53																																																																																																																																																																																																																																																																																																																																																			
370.99	751.1	10.79																																																																																																																																																																																																																																																																																																																																																			
409.16	279.5	4.01																																																																																																																																																																																																																																																																																																																																																			
413.21	341.1	4.90																																																																																																																																																																																																																																																																																																																																																			
420.97	534.0	7.67																																																																																																																																																																																																																																																																																																																																																			
427.02	432.6	6.21																																																																																																																																																																																																																																																																																																																																																			
t=120 min	t=180 min	t=240 min																																																																																																																																																																																																																																																																																																																																																			

S8. UV -Vis calibration plots

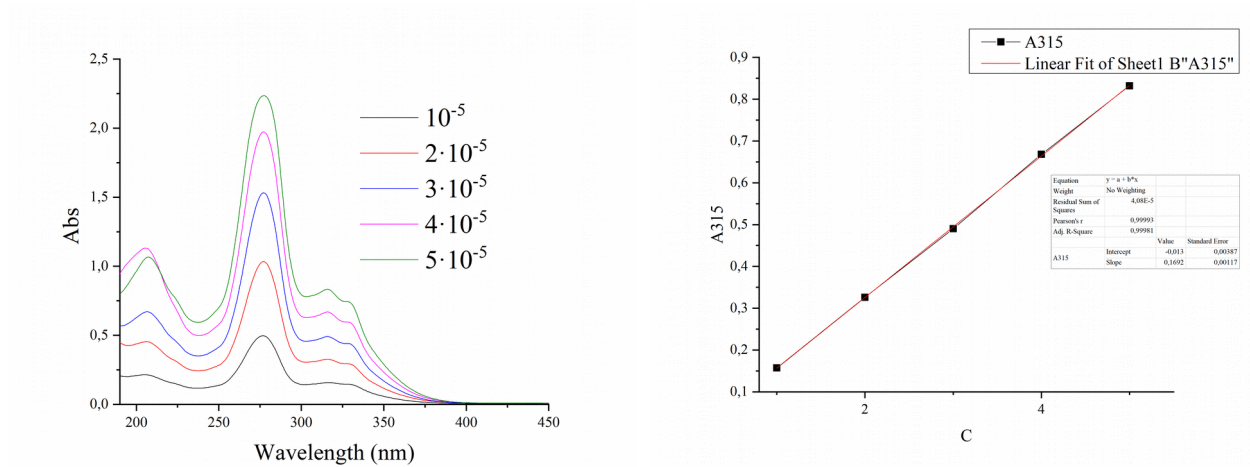


Figure S7: left -UV Vis spectra of commercial CIP solution in the concentration range $1 - 5 \times 10^{-5}$ M and right – calibration plot at 315 nm