Electronic Supplementary Material (ESI) for Analytical Methods.
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Supplementary Information

Direct and Rapid Analysis of Trace Level Steroids in Water by Thermal Desorption Atmospheric Pressure Photoionization Mass Spectrometry

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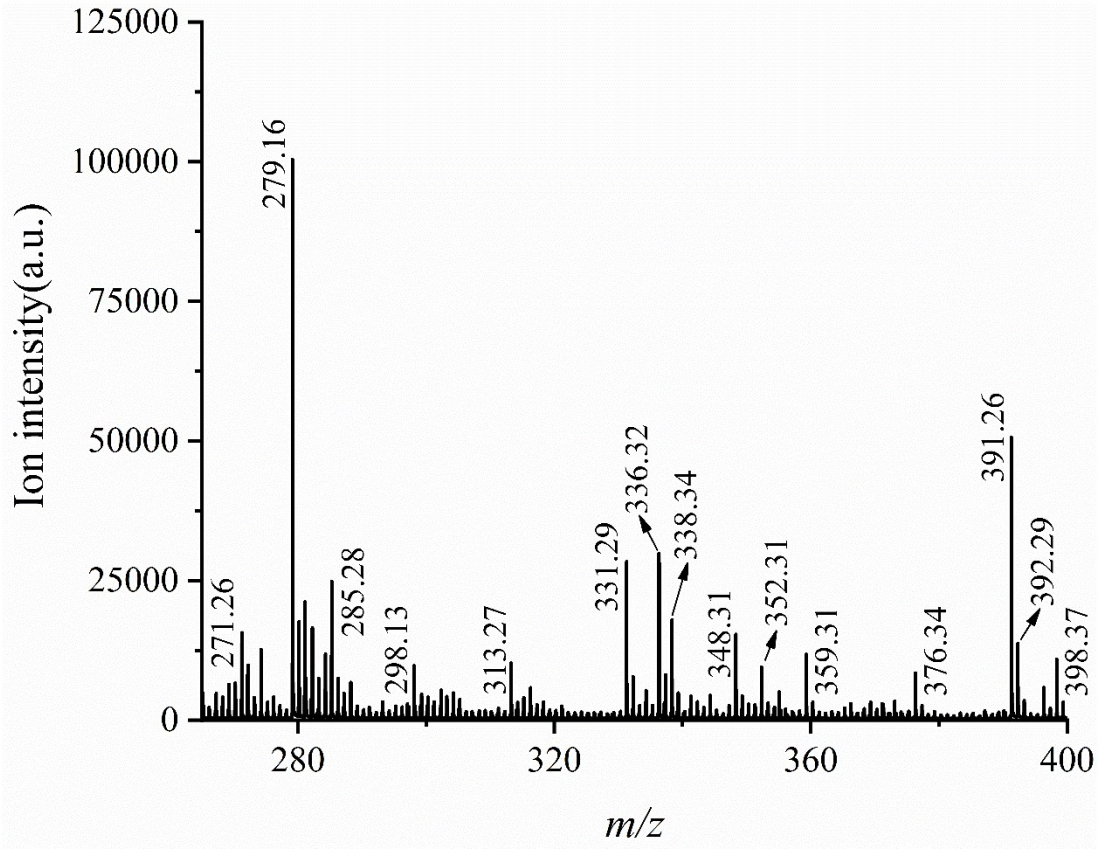

Figure S1. Mass spectrum of blank solution (methanol/distilled water, v:v = 1:9).

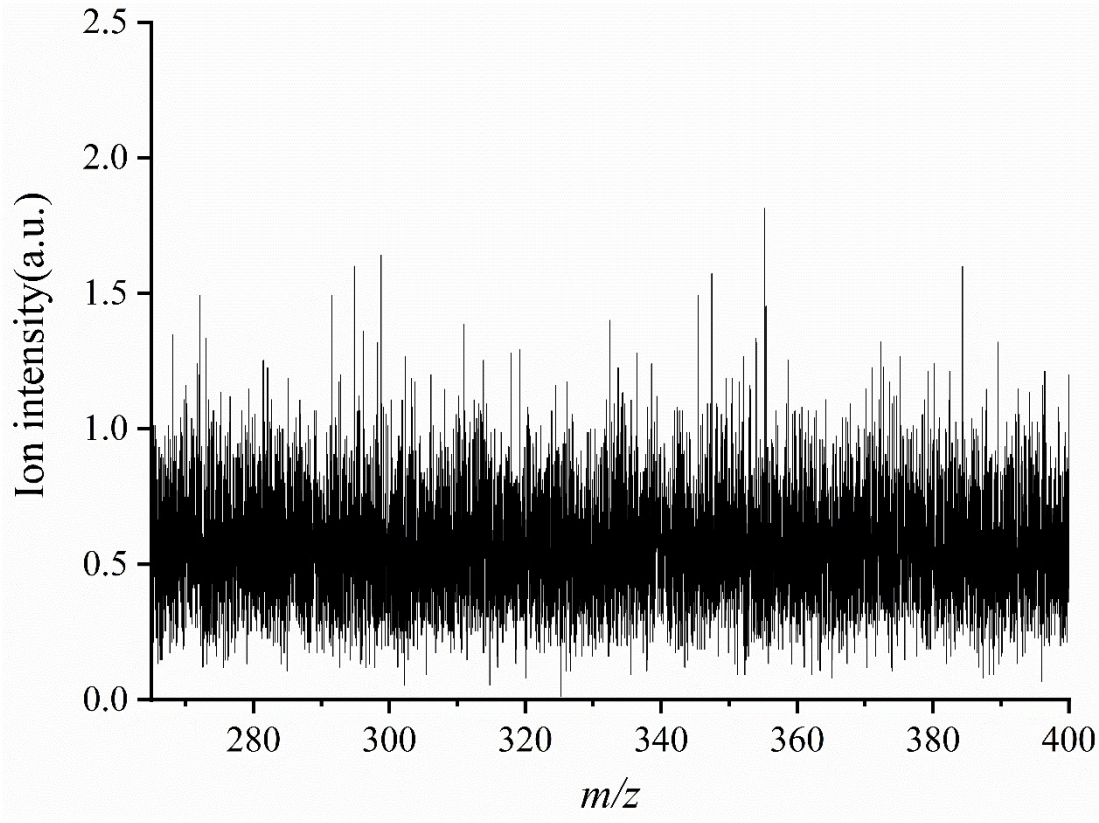

Figure S2. Mass spectrum for steroids (1 μg/mL) in methanol/ distilled water (v:v = 9: 1) with the VUV lamp off.

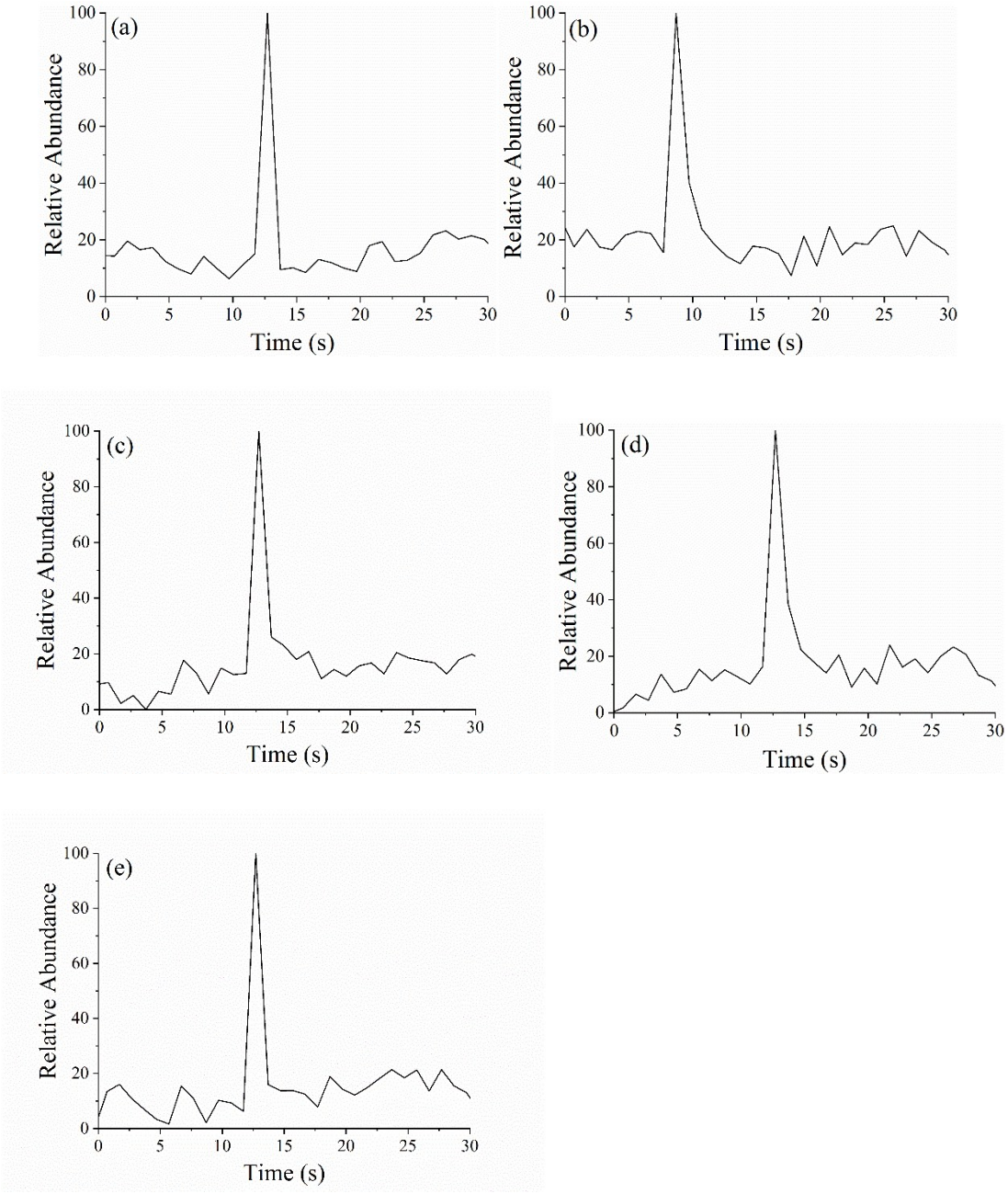

Figure S3. The extracted ion chromatogram (EIC) of (a) estradiol (m/z 272.18), (b) androstenedione (m/z 287.20), (c) norethindrone (m/z 299.20), (d) methyltestosterone (m/z 303.23), (e) progestin (m/z 315.23) in methanol/ distilled water (v:v = 9:1) at the concentration of LOD level.

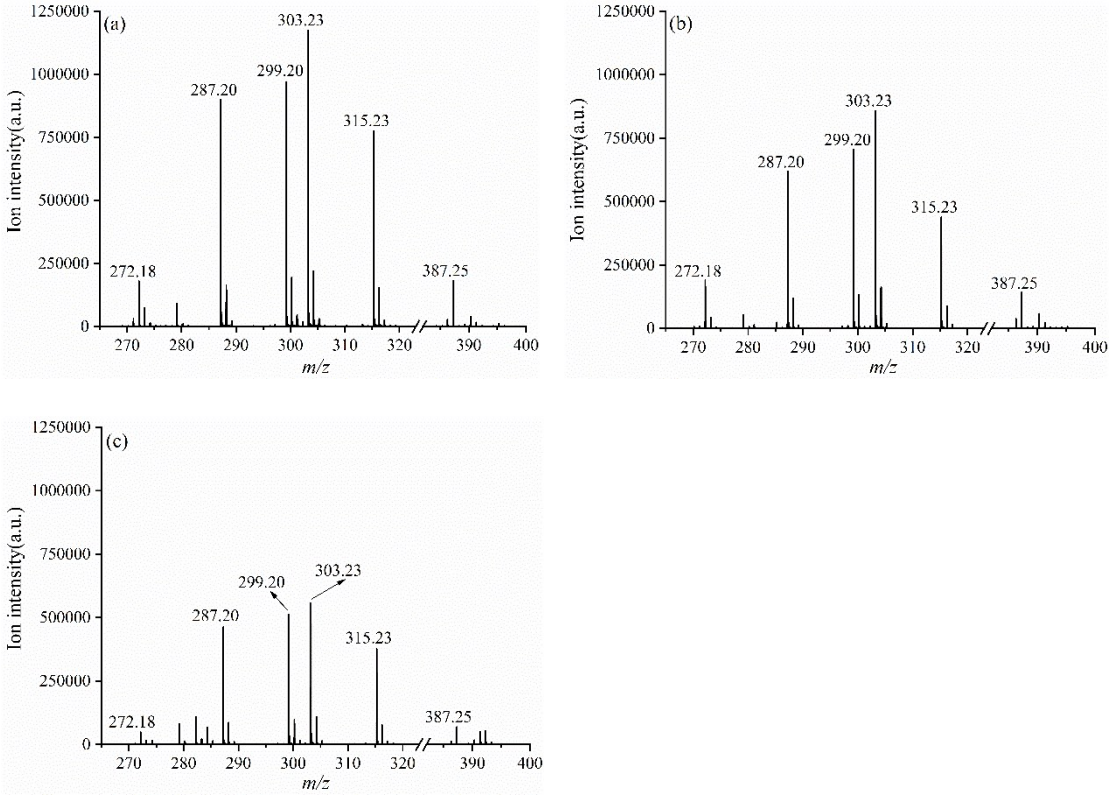

Figure S4. Mass spectra of five steroids (estradiol, androstenedione, norethindrone, methyltestosterone and progestin, 1 μg/mL) and internal standard (medroxyprogesterone acetate, 50 ng/mL) in real waters: (a) steroids in methanol/tap water (v:v = 9:1); (b) steroids in methanol/surface water (v:v = 9:1); (c) steroids in methanol/river water (v:v = 9:1).