Electronic Supplementary Material (ESI) for Analyst

Characterization of pathogenic bacteria using ionic liquid via single drop microextraction combined with MALDI-TOF MS

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Supporting information:

Figure captions of supporting information.

Fig. S1 The MALDI-TOF MS spectra of *E. coli* as direct analysis at ~ 10^6 cfu/ml (a), and ~ 10^7 cfu/ml (b). The mass spectra were obtained without SDME.

Fig. S2 The MALDI-TOF MS spectra of *Serratia marcescens* as direct analysis at ~ 10^6 cfu/ml (a), and ~ 10^7 cfu/ml (b). The mass spectra were obtained without SDME.

Fig. S3 MALDI-TOF MS spectra of the mixture of both bacteria viz., *E. coli* and *S. marcescens* obtained after SDME from spiked selective concentrate aqueous sample in a 1.5 mL glass vial. The ionic liquid was used as organic drop (a), platinum nanoparticles in ionic liquid (b). Prior to SDME, an aliquot of the bacteria was adjusted with sterilized distilled water to approximately ~10^7 cfu/mL and mixed with equal ratio in glass vial.

Fig. S4 MALDI-TOF MS spectra of the mixture of both bacteria viz., *E. coli* and *S. marcescens* obtained after SDME from spiked selective concentrate aqueous sample in a 1.5 mL glass vial. The ionic liquid was used as organic drop (a), platinum nanoparticles in ionic liquid (b). Prior to SDME, an aliquot of the bacteria was adjusted with sterilized distilled water to approximately ~10^6 cfu/mL and mixed with equal ratio in glass vial.

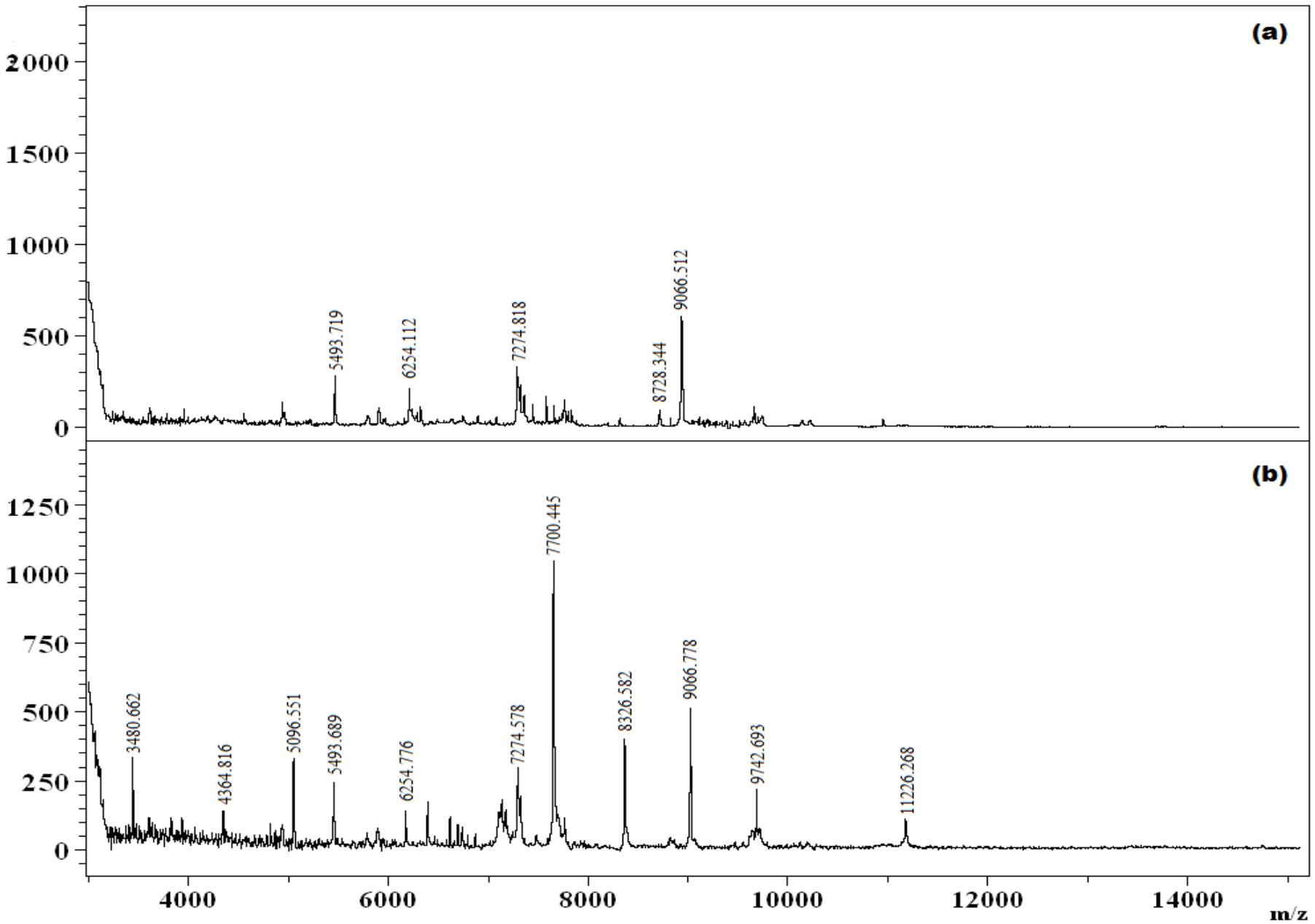

Fig. 1

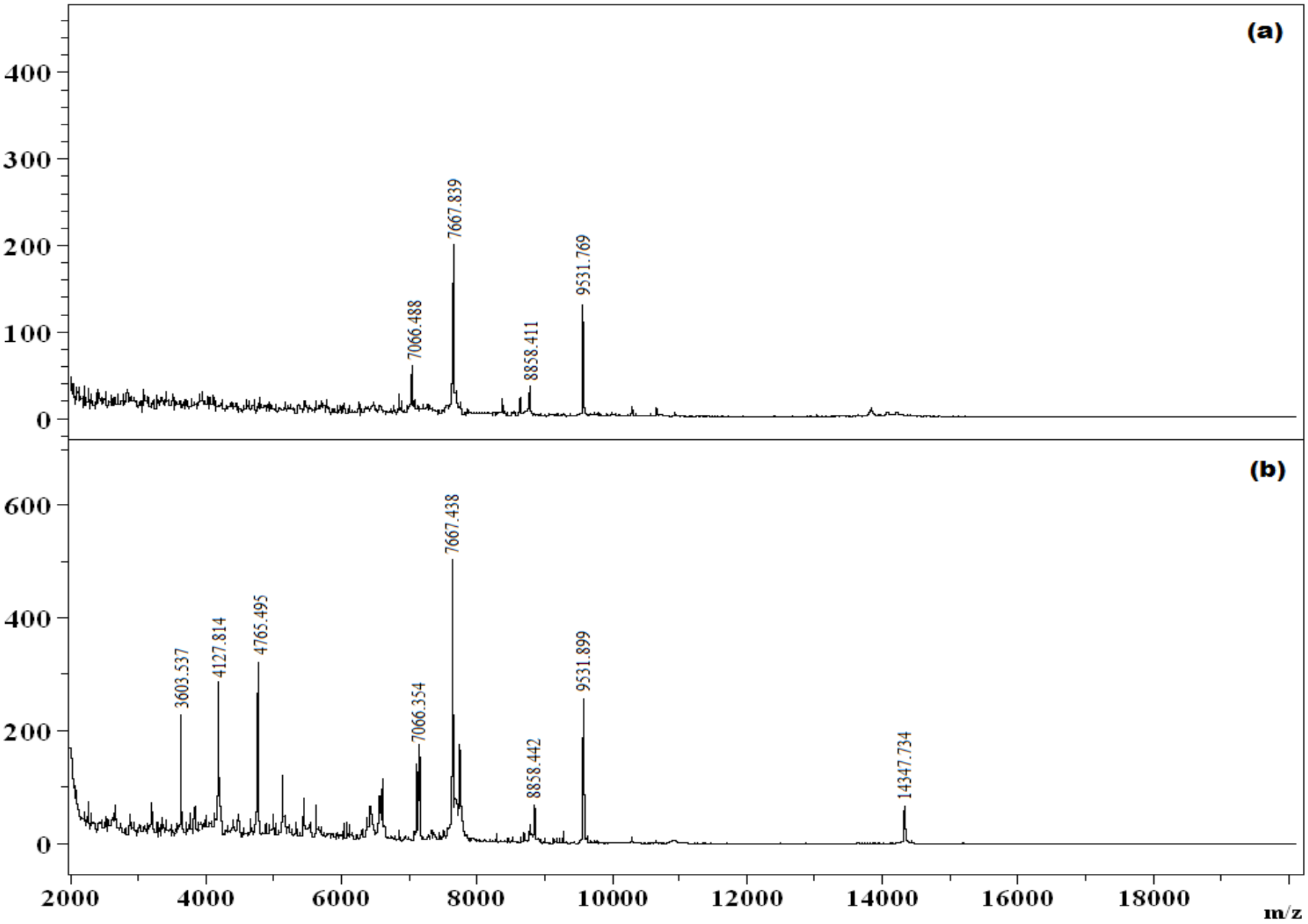

Fig. 2

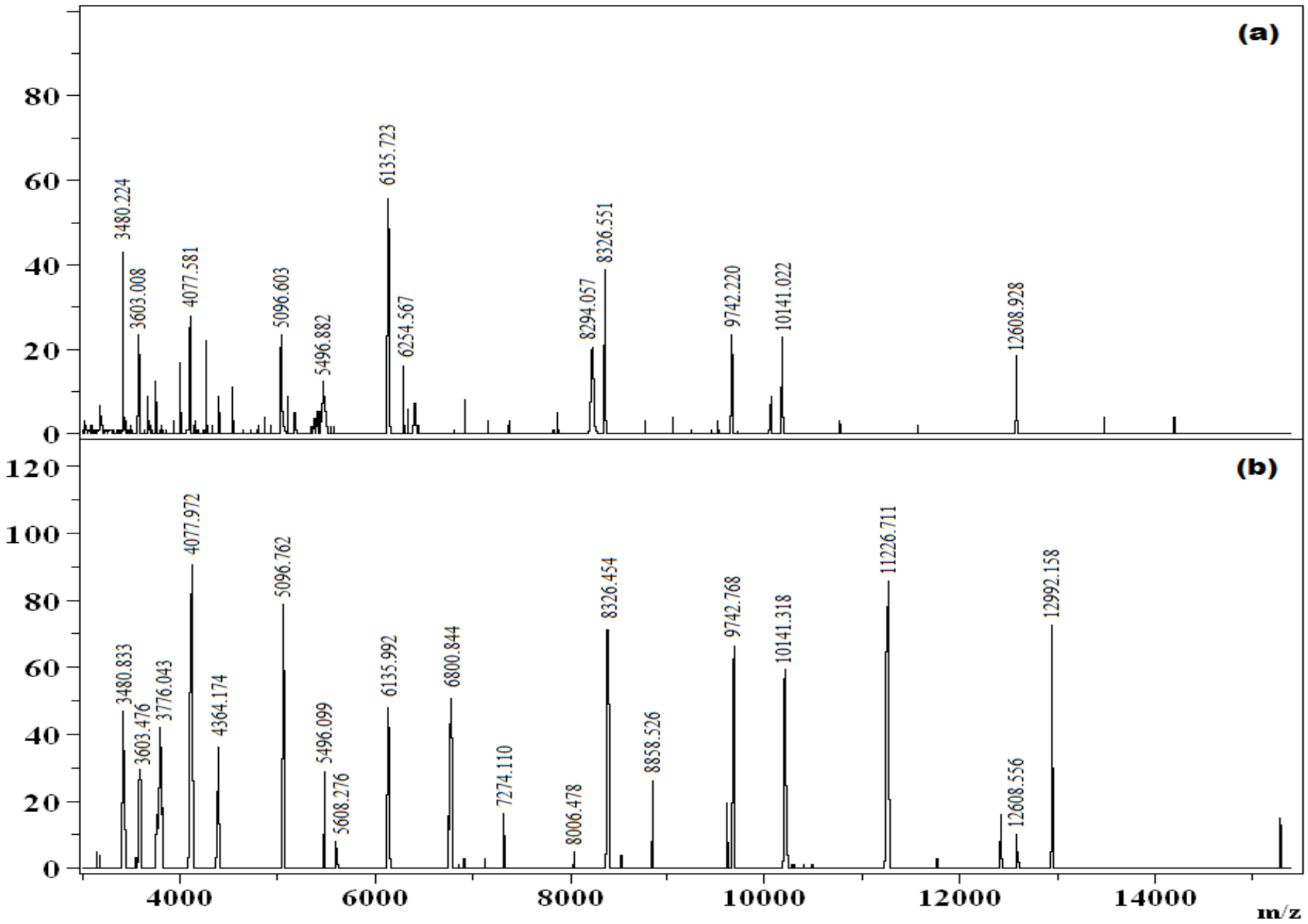

Fig. 3

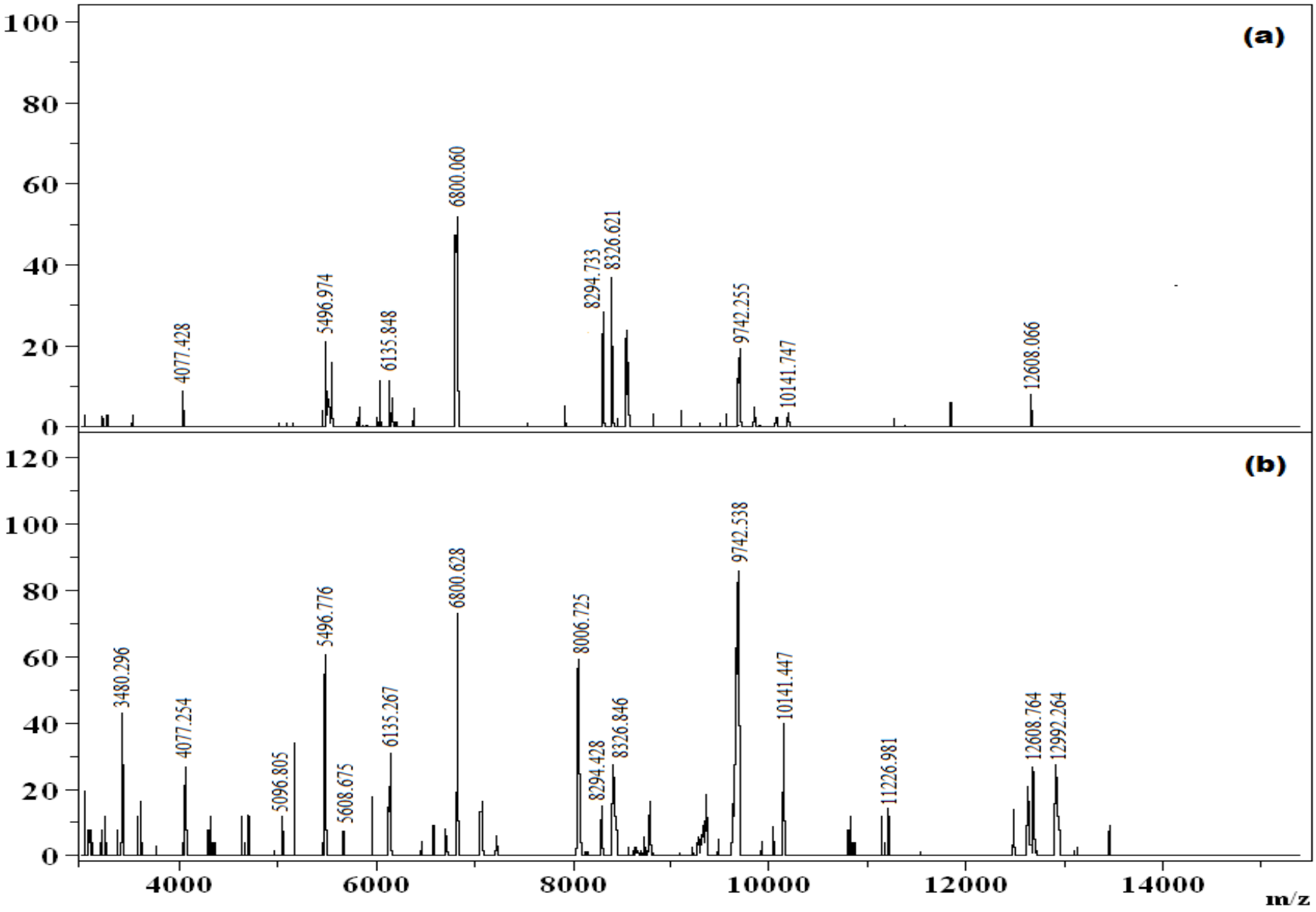

Fig. 4