

Supporting Information

Mechanism study for abnormal accumulation and deposition of islet amyloid polypeptide by cold-spray ionization mass spectrometry

Su Chen,^{a,b} Yang Liu,^b Yanan Zhou,^b Lan He,^{*b} and Jin Ouyang,^{*a}

^a Key Laboratory of Theoretical and Computational Photochemistry, Ministry of Education, College of Chemistry, Beijing Normal University, Beijing 100875, China.
E-mail: jinoyang@bnu.edu.cn.

^b National Institutes for Food and Drug Control, Beijing 102629, China. E-mail: helan1961@aliyun.com.

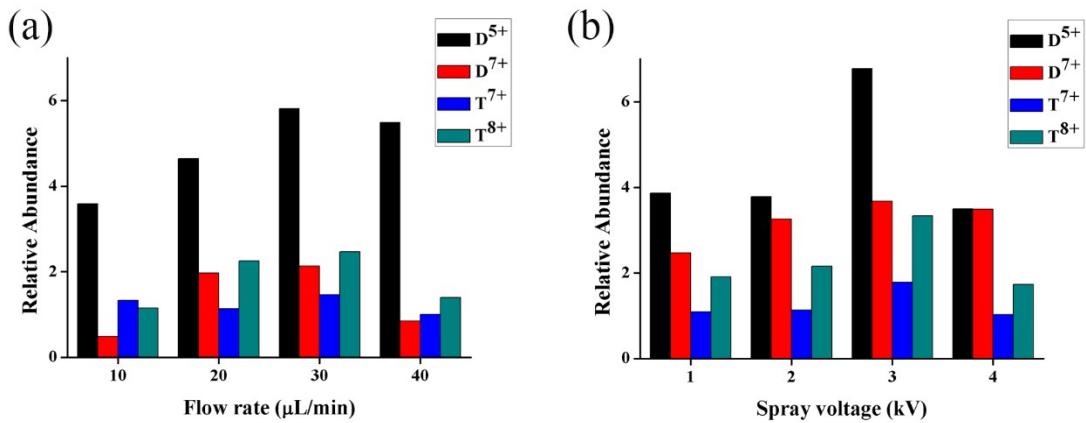


Figure S1. The influence of flow rate (a) and spray voltage (b) on the detection of IAPP oligomers.

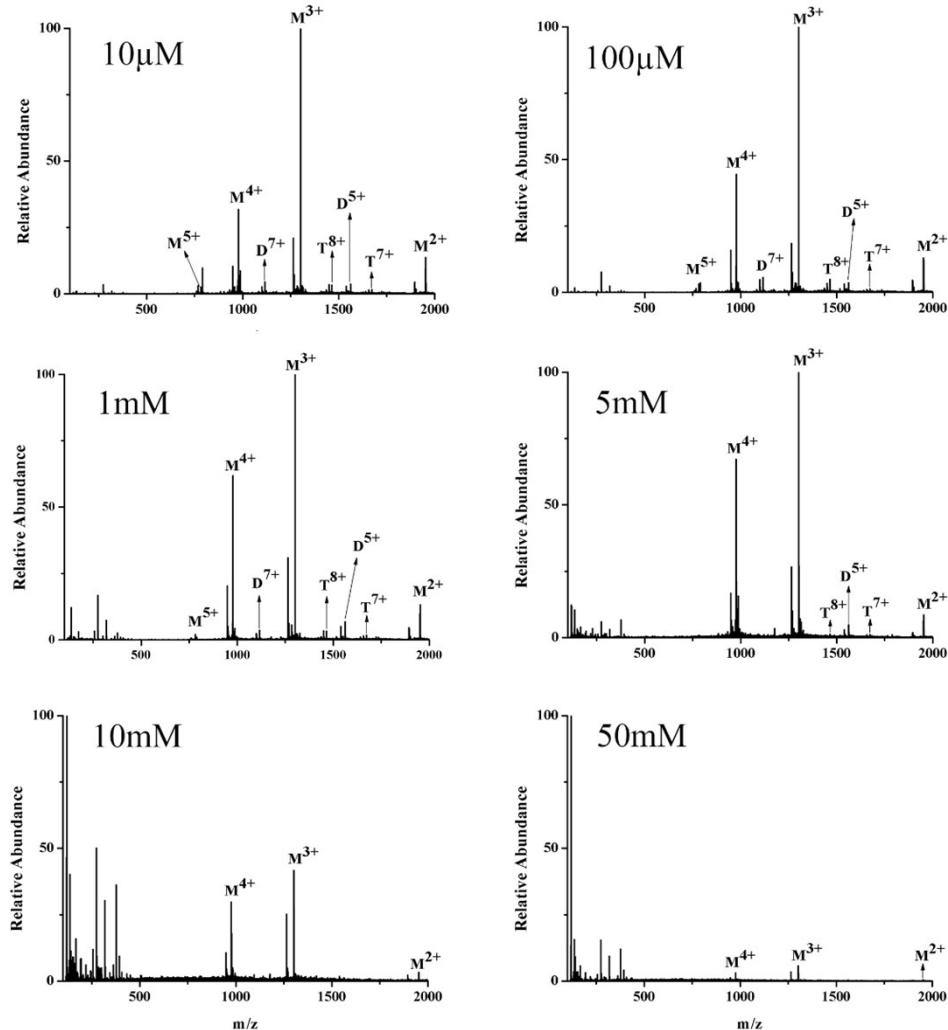


Figure S2. CSI-MS mass spectra of 40 μM IAPP at different concentration of ammonium acetate.

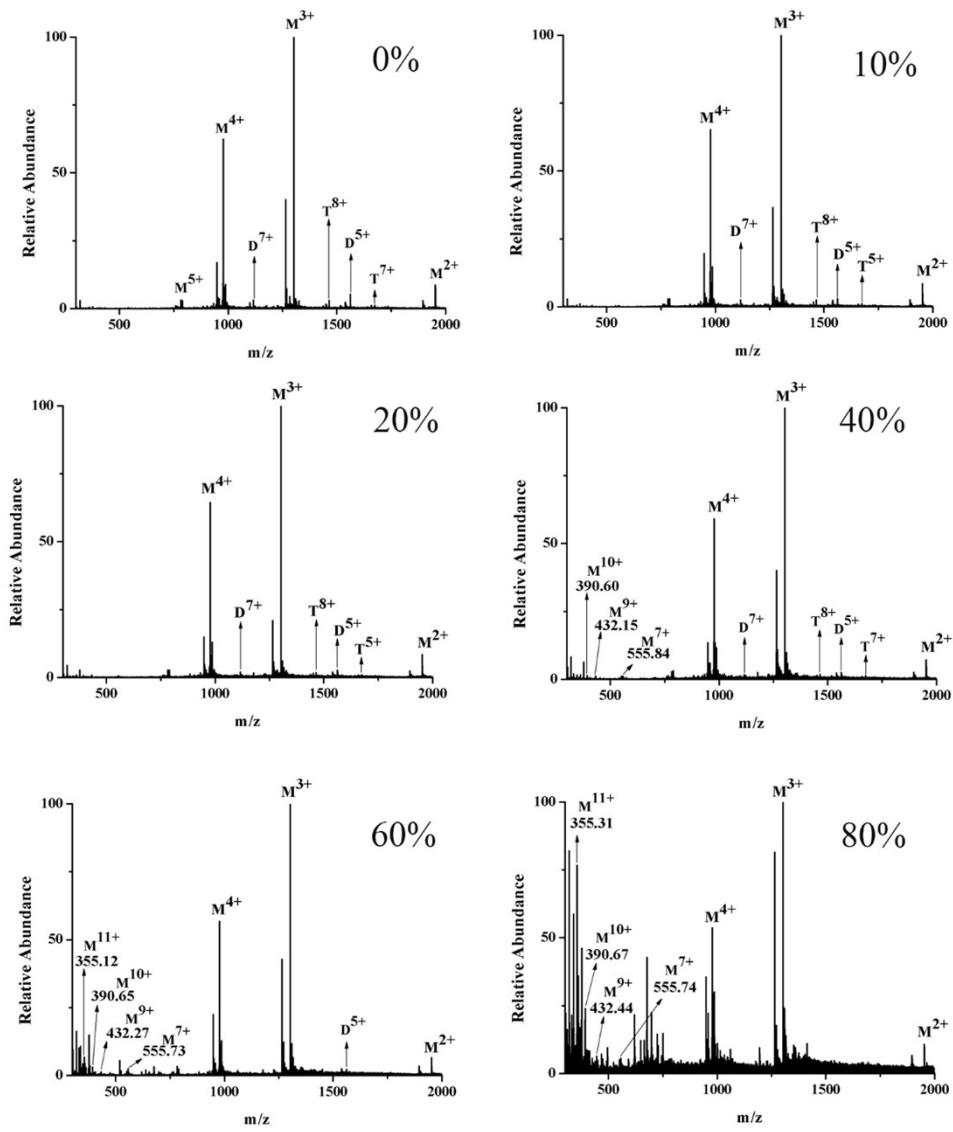


Figure S3. CSI-MS mass spectra of 40 μM IAPP at different concentrations of methanol.

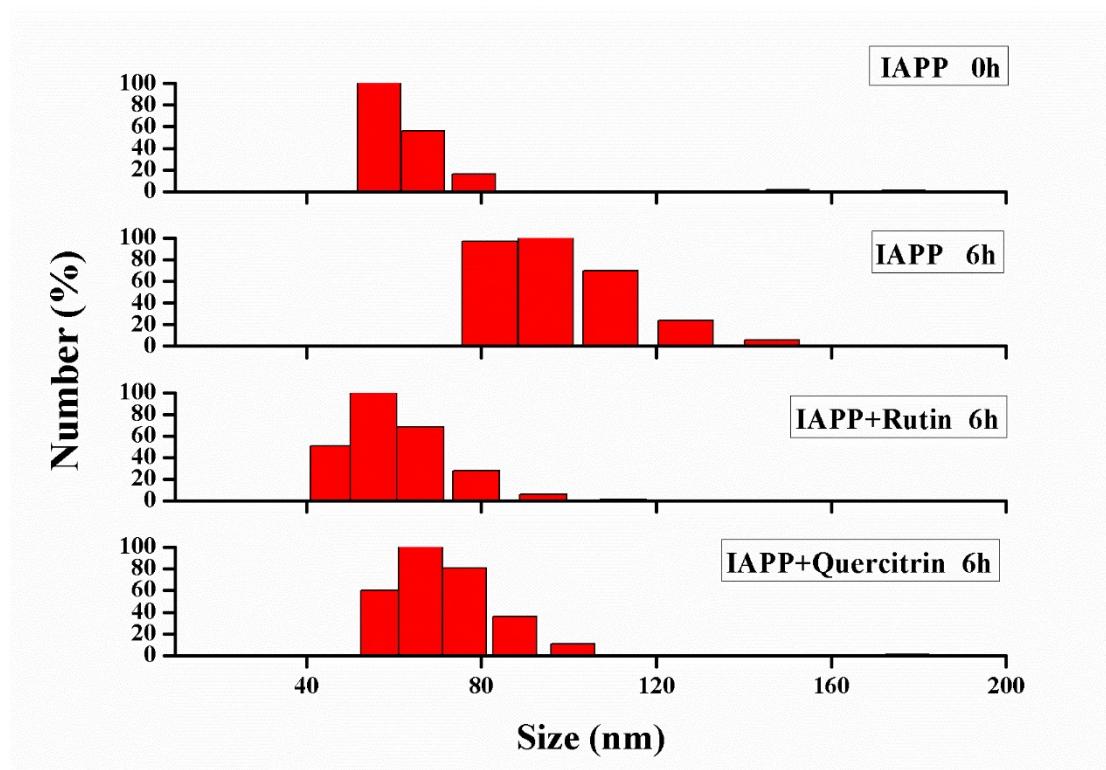
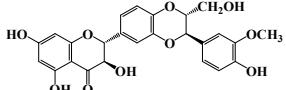
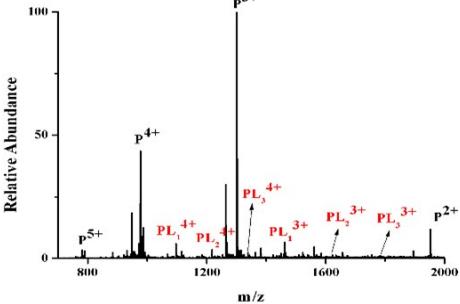
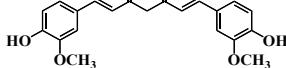
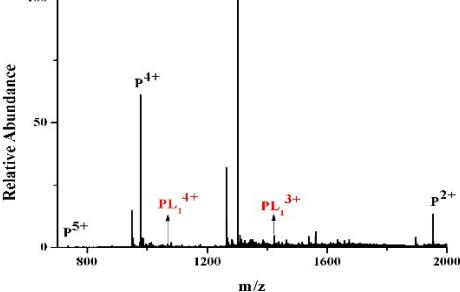
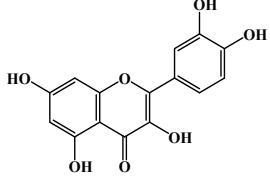
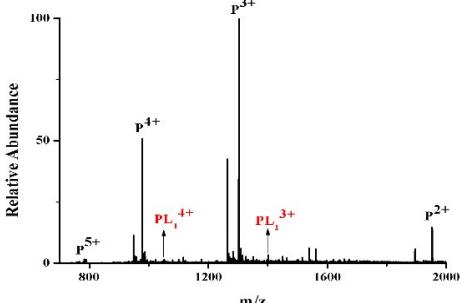
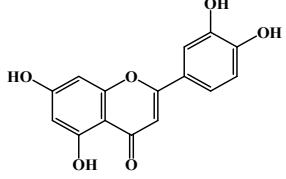
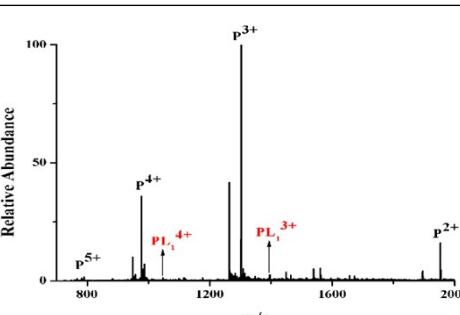
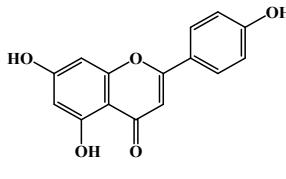
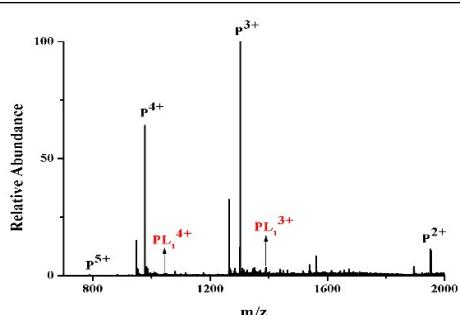


Figure S4. Effect of rutin and quercitrin on particle size distribution of IAPP determined by DLS.

Table S1. The mass spectra of complex formed by flavonoids and IAPP determined by CSI-MS method.

Small Molecule	Structure	Mass Spectra	stoichio -metry
Silybin			1:1 1:2 1:3
Curcumin			1:1
Quercetin			1:1
Luteolin			1:1
Apigenin			1:1

Small Molecule	Structure	Mass Spectra	stoichio -metry
Chrysin			none
Kaempferol			1:1
Morin			1:1
Quercitrin			1:1 1:2
Rutin			1:1 1:2 1:3