ion trap mass spectrometer

An arrangement in which ions with a desired range of quotients mass/charge are first made to describe stable paths under the effect of a high-frequency electric quadrupole field, and are then separated and presented to a detector by adjusting the field so as to selectivity induce path instability according to their respective mass/charge ratios.

Source:

PAC, 1991, 63, 1541 (Recommendations for nomenclature and symbolism for mass spectroscopy (including an appendix of terms used in vacuum technology). (Recommendations 1991)) on page 1545