Electrostatic Trapping of Double-Stranded DNA by Using Inorganic Nanostrands

Surface positive-charged inorganic nanostrands were used to separate short DNA fragments from highly diluted solutions through electrostatic interaction. By filtration, more than 95% of DNA was isolated from the dilute solution with a concentration less than 40 ng/mL. The nanostrands quickly disappeared after adding aqueous EDTA, and DNA was released.

