Supplementary data

Proteins	M_w(kDa)	pI

Rapid synthesis of nitrogen doped carbon dots and their application as label free sensor array for simultaneous discrimination of multiple proteins

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Proteins	M_w(kDa)	pI

Pepsin (Pep)	35	1.0-2.5
Human serum albumin (HSA)	69.4	5.2
Transferrin (Tf)	77	5.6-6.6
Hemoglobin (Hb)	64.5	6.8
Catalse (CAT)	247.0	8.3
Trypsin (Try)	24.0	10.5
Cytochrome C (Cyt C)	12.3	10.7
Lysozyme (Lys)	14.4	9.6-11.0

Table S1 Basic properties of the eight target proteins

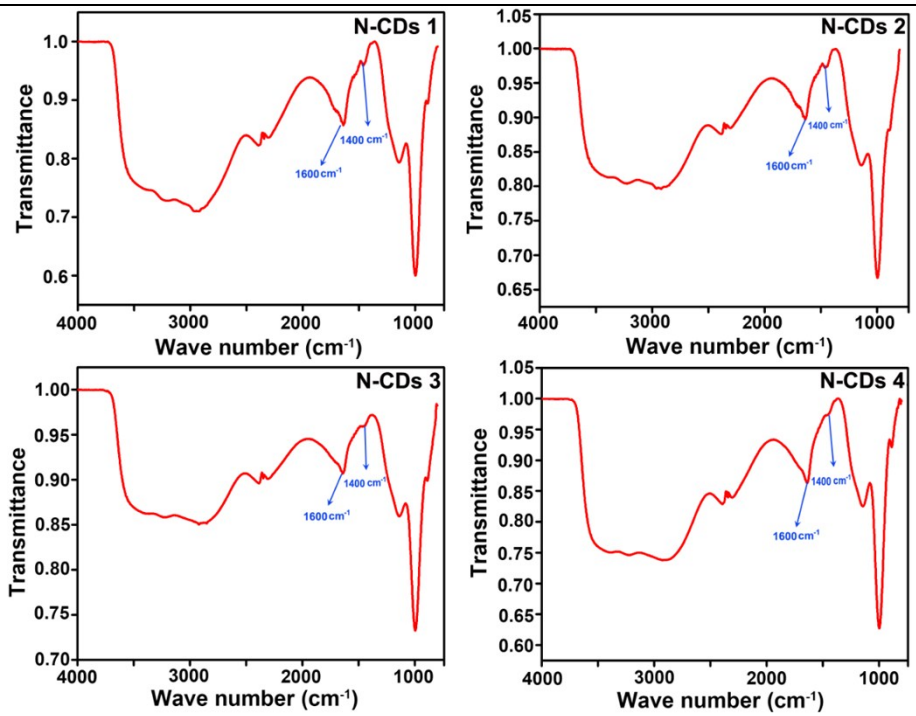

Fig. S1 FT-IR spectra of these four kinds of N-CDs.

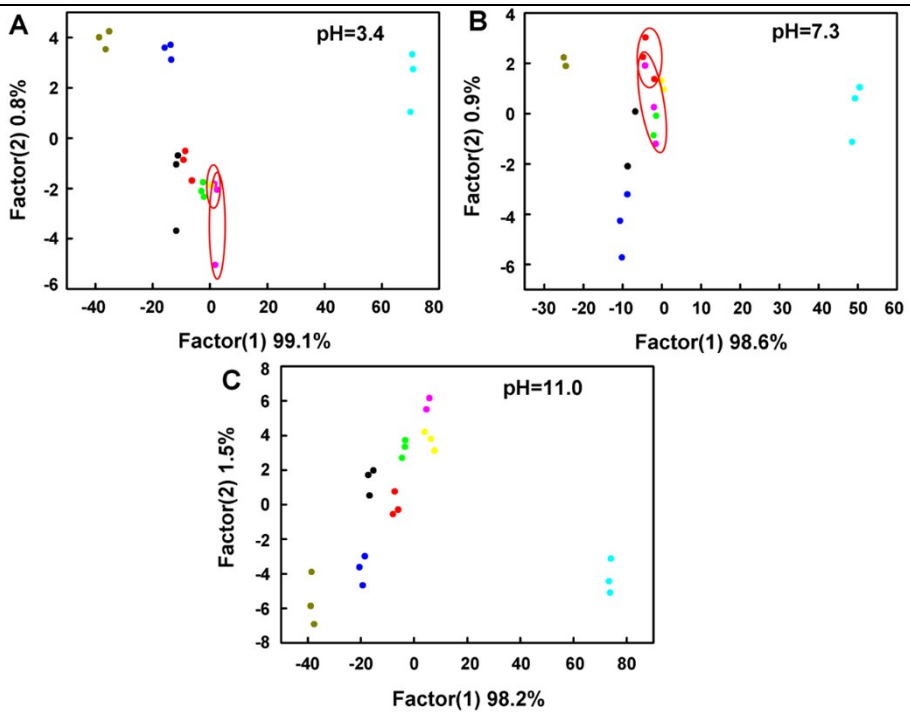

Fig.S2 The influence of pH value on the protein discrimination.

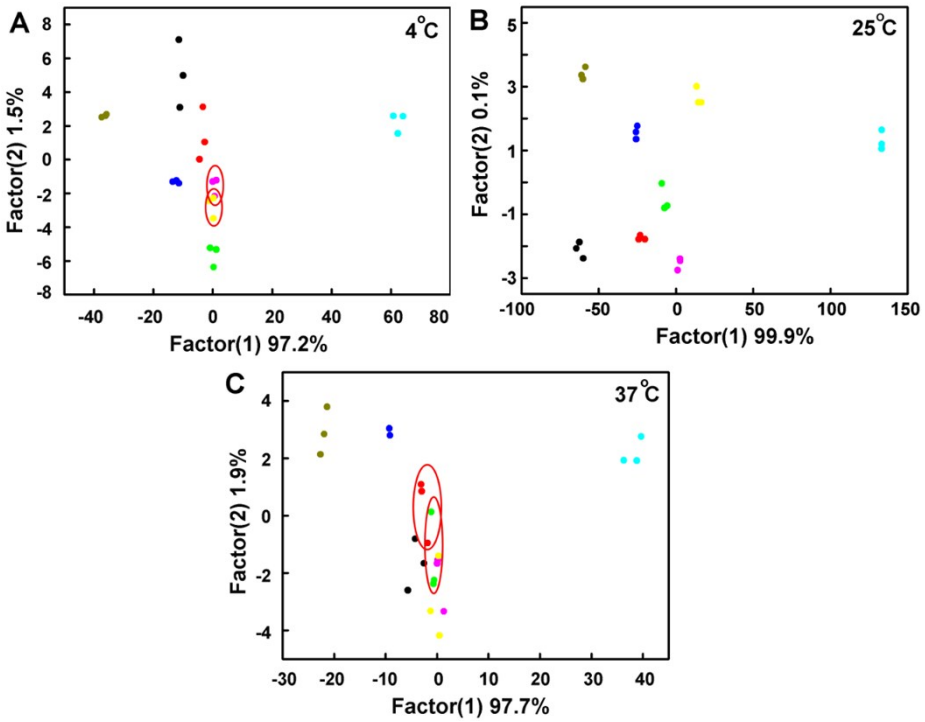

Fig. S3 The influence of temperature on the protein discrimination.

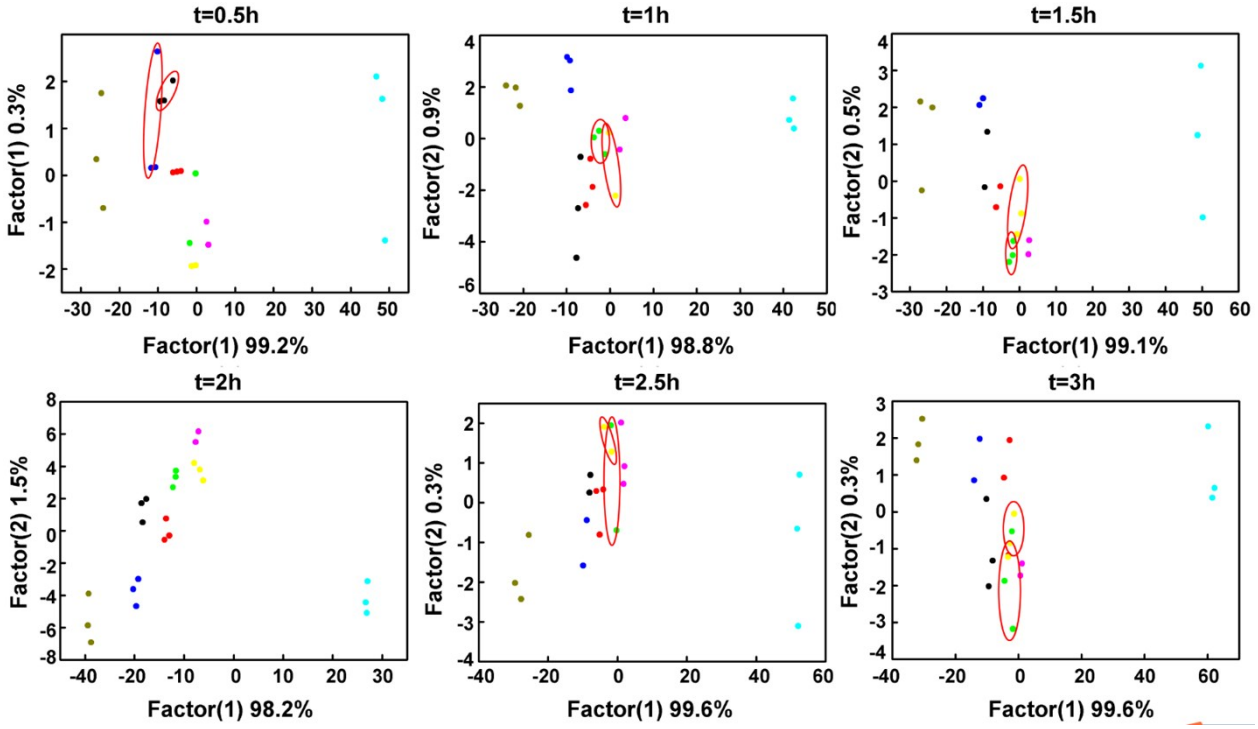

Fig.S4 The influence of time on the protein discrimination.

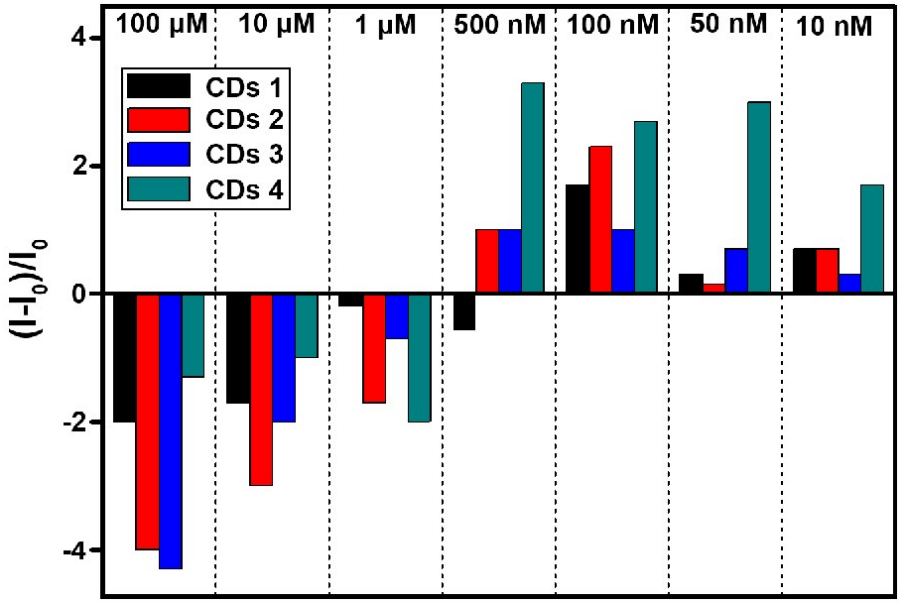

Fig. S5 Array-based sensing of HSA with different concentrations: Canonical score plot for the fluorescence response obtained from LDA with 95% confidence ellipses.