

Breast Cancer Diagnosis by Surface-Enhanced Raman Scattering (SERS) of Urine

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Table S1. The age and stage of breast cancer patients and controls.

Sample Number	Age of Controls	Age of Breast Cancer Patients	Stage of Breast Cancer
1.	45	33	I A
2.	44	46	II A
3.	50	47	II B
4.	44	60	II A
5.	42	56	III B
6.	48	43	II A
7.	52	51	I A
8.	43	59	III B
9.	42	71	III B
10.	37	80	III A
11.	50	54	III B
12.	44	65	III A
13.	48	67	II B
14.	59	65	III B
15.	48	46	II A
16.	46	58	III A
17.	42	46	I A
18.	45	39	II B
19.	36	73	III A

20.	39	59	II B
21.	48	54	III B
22.	46	64	II B
23.		58	III A
24.		77	II B
25.		63	II B
26.		70	II B
27.		61	II A
28.		50	III A
29.		53	III A
30.		70	III A
31.		44	III B
32.		41	III A
33.		72	III B
34.		56	II B
35.		35	II B
36.		67	II B
37.		40	III B
38.		54	III B
39.		46	III A
40.			III A
41.		66	III B
42.		57	II B
43.		60	III B
44.		53	III B
45.		48	II B
46.		50	III A
47.		65	II A
48.		59	III A
49.		40	III A
50.		38	II A
51.		67	III A
52.		58	II A
53.		46	III A

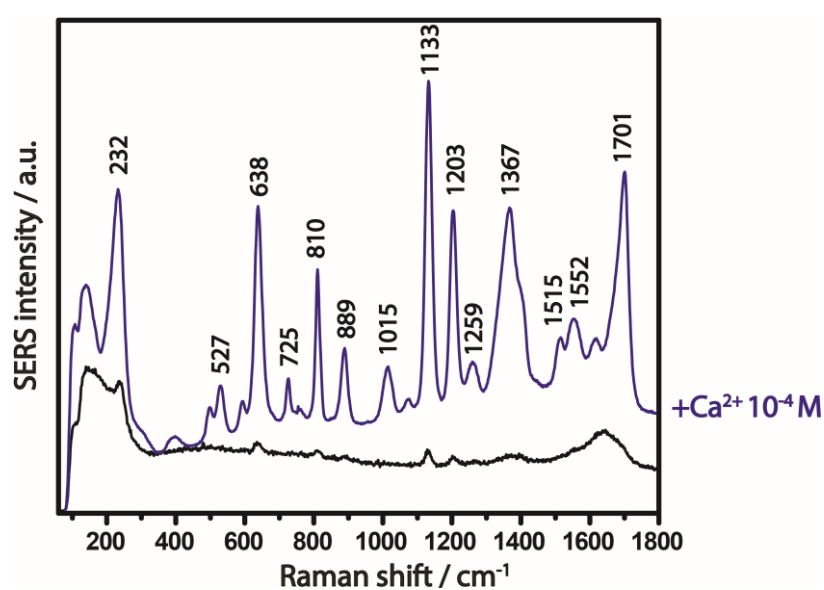


Figure S1. The SERS spectrum of uric acid 10^{-4} M before (black) and after activation with $\text{Ca}^{2+} 10^{-4}$ M (blue).

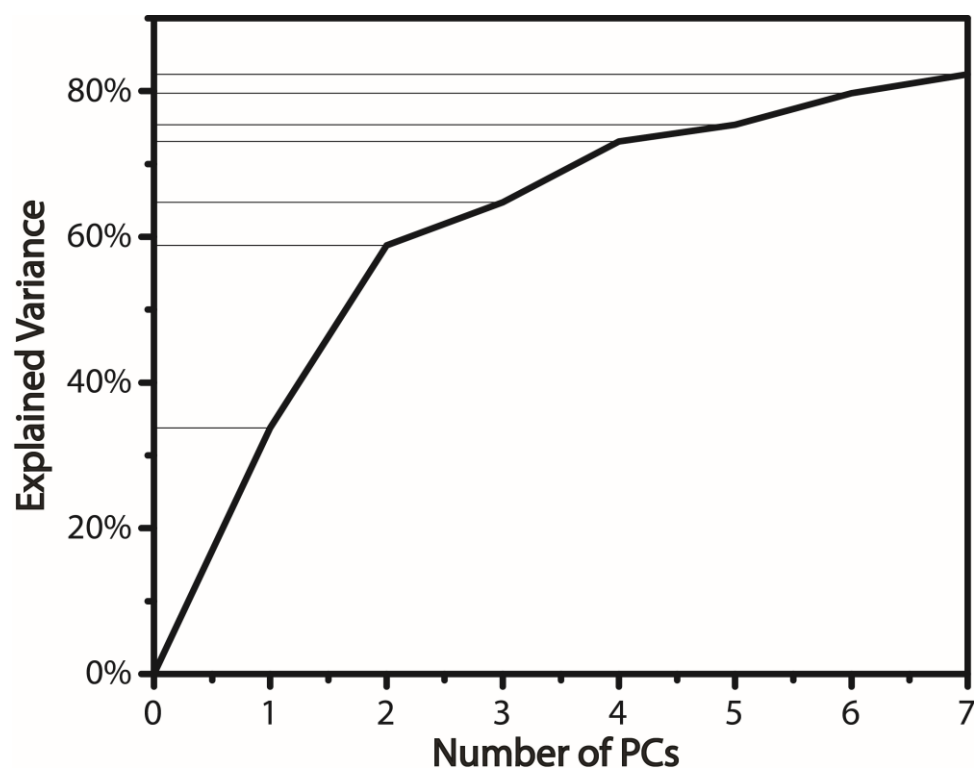


Figure S2. The explained variance by the first 7 principal components (PCs).

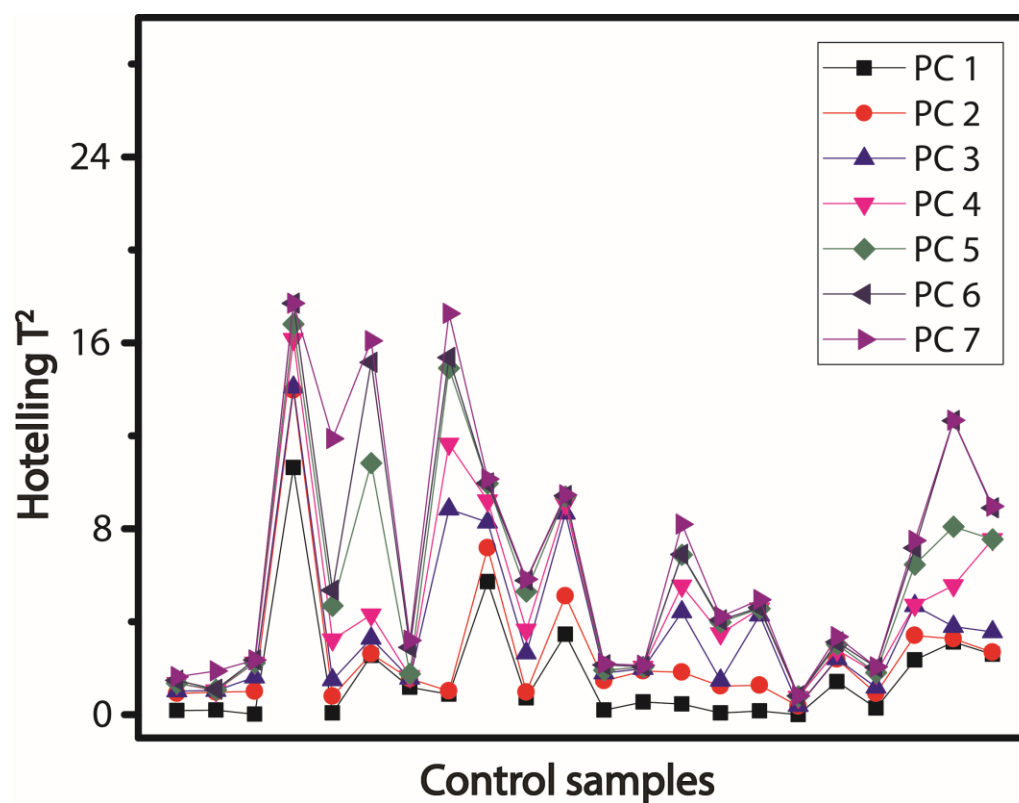


Figure S3. The Hotelling T² values of n = 22 samples in the control group corresponding to the first 7 principal components (PCs).

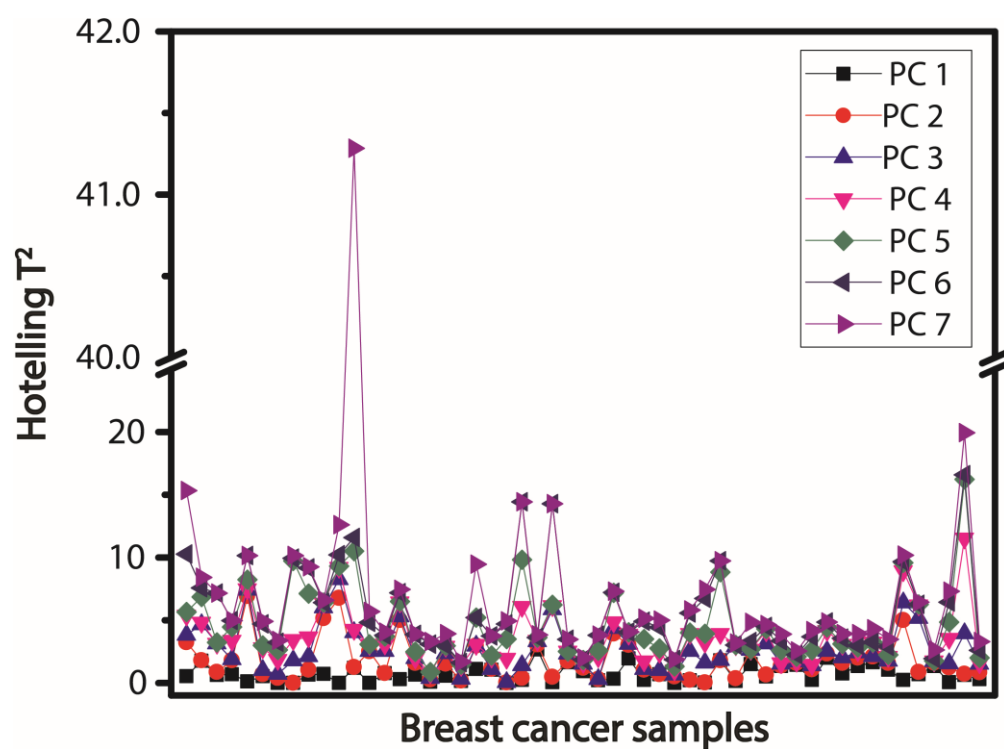


Figure S4. The Hotelling T^2 values of $n = 53$ samples in the breast cancer group corresponding to the first 7 principal components (PCs).