

Fig. 2f EC

GP(mg/ml)	the uptake rates of EC		
0	0.7	1.21	0.86
2.5	16	20.5	14.3
5	36.3	40.1	42.7
10	56.8	62.4	58.3
15	62.1	65.7	63.4

Fig.2g VNP

GP(mg/ml)	the uptake rates of VNP		
0	0.94	1.36	1.12
2.5	15.9	11.7	17.4
5	27.1	29.4	33.5
10	50.5	48.1	53.8
15	57.2	53.9	61.3

Fig. 3a

time (s)	temperature (°C)					
	PBS	EC	VNP	GP-ICG- ξ Trojan	EC Trojan	VN Trojan
0	21.3	21.5	21.6	21.7	21.5	21.6
10	21.6	22.1	22.7	29.6	27.1	26.9
20	21.9	22.5	23.2	32.4	30.4	30.1
30	22.2	22.9	23.6	35.3	32.1	32.3
40	22.5	23.2	23.9	37.1	33.9	34.2
50	22.7	23.5	24.1	38.6	35.5	35.4
60	22.8	23.7	24.3	40.2	36.3	36.2
70	22.9	23.8	24.4	41.1	37.8	37.1
80	23.1	24	24.5	42.3	38.9	37.9
90	23.3	24.2	24.7	43.3	39.8	39.3
100	23.4	24.3	24.8	44.2	40.8	40.2
110	23.5	24.4	24.9	45.1	41.5	41.3
120	23.6	24.6	24.9	46	42.7	42.1
130	23.7	24.7	25.1	47.1	43.4	42.9
140	23.8	24.8	25.3	47.9	44.3	43.7
150	23.9	24.9	25.4	48.5	45.9	44.5
160	24.1	25.1	25.6	49.3	46.4	45.2
170	24.2	25.2	25.8	50.1	47.1	46
180	24.3	25.3	25.9	50.9	47.7	46.7
190	24.4	25.3	26.2	51.4	48.3	47.4
200	24.5	25.4	26.2	52	48.8	48
210	24.6	25.5	26.3	52.5	49.1	48.5
220	24.8	25.6	26.3	52.9	49.5	49.2
230	24.9	25.7	26.5	53.3	49.9	49.7
240	24.9	25.9	26.6	53.7	50.2	50
250	25	25.9	26.7	54	50.8	50.4
260	25.2	26	26.8	54.3	51.3	50.8
270	25.2	26.1	26.9	54.5	51.5	51.1
280	25.3	26.2	27.1	54.8	51.9	51.3
290	25.4	26.3	27	55	52.2	51.5
300	25.4	26.3	27.1	55.3	52.5	51.7
310	25.5	26.4	27.2	55.5	52.8	51.9
320	25.6	26.5	27.2	55.7	53	52.2
330	25.6	26.5	27.3	55.9	53.2	52.5

340	25.7	26.7	27.4	56.1	53.4	52.8
350	25.8	26.8	27.5	56.3	53.7	53
360	26	26.9	27.6	56.5	54.1	53.1
370	26	26.9	27.8	56.7	54.4	53.3
380	26.1	27	27.9	56.9	54.6	53.5
390	26.2	27	27.9	57.1	54.8	53.5
400	26.1	27.2	28	57.2	54.9	53.6

Fig. 3b

temperature (°C)	bacteria cell viability (%)					
	EC			VNP		
laser-	103	98	101	100	102	95
42	95	86	93	82	75	87
45	76	83	71	80	73	70
48	58	61	50	69	64	61
52	50	42	48	43	36	33
55	21	15	12	9	7	11

Fig. 3e

G422 cell viability (%)			
PBS	100	102	100
EC	95	95	89
VNP	89	93	90
GP-ICG-SiNPs	90	93	101
Trojan EC	91	94	93
Trojan VNP	101	97	90
EC+Laser	93	93	89
VNP+Laser	91	89	99
3P-ICG-SiNPs+Lase	13	11	14
Trojan EC+Laser	19	12	20
Trojan VNP+Laser	11	18	16

Fig. 3h

the maturation of DCs (%)			
Control	21.4	17.9	18.7
Blank	24.1	16.8	22.2
EC	51.7	44.1	47.3
VNP	47.2	53.1	49.6
GP-ICG-SiNPs	27.5	23.4	19.8
3P-ICG-SiNPs+Lase	37.4	30.2	39.3
Trojan EC	60.6	61.9	65.3
Trojan VNP	64.8	67.3	61.2

Fig.4a

time (days)	body weight (g)							
	0	2	4	6	8	10	12	14
PBS	21.2	21.4	21.8	21.1	21.5	20.9	21.9	22
	20.8	20.5	21	21.2	20.9	20.7	21.6	21.4
	19.7	20.1	20.8	20.2	19.5	20.3	20.6	20.8
	21.9	22.2	22	22.5	22.1	22.7	22.9	22.6
VNP10 ⁸	22.5	22.1	22.6	23.1	23.3	23	23.5	23.7
	22.2	19.3	18.4	19.5	18.6	18	17.5	16.9
	22.6	20	19.1	20.8	19.4	18.2	17.1	16.6
	21.8	18.1	19.6	18.6	18.4	17.6	16.2	15.8
	20	die						
	21.8	19.7	17.8	die				
VNP10 ⁷	24.6	22.1	22.8	22.6	23.1	22.2	22.8	23.4
	22.3	19.4	20	20.3	20.9	21	21.2	21.7
	23.7	21.5	22	21.7	22.7	21.6	22.3	22.9
	24.5	24.3	23.8	24.5	24.8	25	24.7	25.1
	22.8	22.2	23	23.6	23.2	23.3	22.8	23.2
VNP10 ⁶	19.1	19.5	19.5	19.3	19.2	19.7	20.1	19.7
	21.6	22.2	22.1	21.8	22.3	22.5	22.8	22.7
	20	20.2	20	20.4	20.8	21.1	21.4	20.9
	22.2	22.6	22	22.4	22.9	23.2	23	23.3
	21.6	21.3	21.5	21.9	22.2	22.5	22.7	22.4
EC10 ⁸	20.1	19.3	18.3	17.6	17.1	16.8	16.3	15.6
	21.9	20.7	19.2	18.4	17.5	17	16.7	16.1
	20	17.5	16.9	15.2	die			
	20.3	18.5	17.2	16.8	16.1	15.4	15	14.7
	19.3	17.6	16.4	15.7	15.2	14.6	14.2	15.1
EC10 ⁷	20	20.6	20.8	20.6	21.1	21.4	21.3	21.7
	20.7	21.3	22.7	22.2	21.8	22.5	22.3	22
	20.5	20.7	20.0	20.6	21.2	20.8	21.3	21.1
	20	20.0	19.3	19.8	20.4	20.6	21.1	20.9
	21.8	22.3	21.6	22.1	22.3	21.7	22.2	22.3
EC10 ⁶	20.8	20.9	20.5	20.2	21.1	21.3	21.5	21
	21.9	22.1	22.0	22.4	22.7	22.5	22.7	23
	22.5	22.2	22.6	22.8	23.1	23.2	22.9	23.4
	21.5	22.7	22.3	21.9	22.2	22.6	23.1	22.8
	22	22.3	22.3	22.5	22.8	23.1	22.7	23

Fig. 4c

	Intensity					
		12h			24h	
Heart	0.314	0.426	0.517	0.434	0.349	0.486
liver	6.231	8.073	6.975	6.244	7.679	5.965
spleen	2.341	1.937	2.012	2.113	1.834	1.693
lung	1.43	0.921	1.148	0.923	1.206	0.839
kidney	1.206	0.937	0.743	0.964	0.711	1.302
brain	0.802	0.723	0.875	0.922	0.838	0.793

Heart		72h				
liver	0.327	0.291	0.415			
spleen	4.922	5.703	4.172			
lung	1.303	0.824	1.182			
kidney	1.134	0.866	0.791			
brain	0.885	0.727	0.693			
	0.916	0.843	0.738			
		120h			360h	
Heart	0.277	0.436	0.351	0.366	0.472	0.231
liver	1.785	1.264	2.347	0.945	0.817	1.159
spleen	1.143	0.974	0.738	0.835	1.047	0.986
lung	0.943	0.779	1.12	1.039	0.885	1.214
kidney	0.836	0.693	1.137	0.852	0.768	0.704
brain	0.776	0.891	0.935	0.784	0.837	0.821

Fig. 4d

		Intensity				
		12h			24h	
Heart	0.295	0.376	0.451	0.524	0.439	0.364
liver	6.887	8.634	7.893	7.146	7.679	6.913
spleen	1.809	2.122	1.726	1.897	2.077	1.794
lung	1.249	1.023	0.918	1.031	1.295	1.302
kidney	1.196	0.854	0.723	1.036	0.729	1.177
brain	0.846	0.752	0.901	0.812	0.928	0.895
		72h				
Heart		0.327	0.391	0.442		
liver	0.327	0.391	0.442			
spleen	5.922	4.699	5.73			
lung	1.216	1.085	1.149			
kidney	1.027	0.926	0.892			
brain	0.949	0.681	0.825			
	0.829	0.747	0.901			
		120h			360h	
Heart	0.304	0.353	0.331	0.297	0.386	0.334
liver	2.459	2.217	2.616	1.437	0.911	1.249
spleen	0.913	0.862	0.992	0.734	0.907	0.835
lung	0.839	1.036	0.926	0.923	0.851	0.796
kidney	0.736	0.893	1.024	0.924	0.842	0.715
brain	0.742	0.801	0.839	0.674	0.765	0.821

Fig. 4f

		CFU/g tissue weight				
		heart			liver	
12h	1259	501	312	211300	152400	130200
24h	542	237	223	61400	79800	53500
72h	121	209	184	34300	51700	25200
120h	126	47	19	2800	1300	900
360h	0	0	0	0	0	0
		spleen			lung	

12h	1208	974	1069	457	831	542
24h	537	802	618	361	442	510
72h	202	376	269	212	161	127
120h	96	195	71	45	24	69
360h	0	0	0	0	0	0

		kidney			brain	
12h	12430	9860	8750	17	10	11
24h	6640	5210	4860	13	8	5
72h	3470	1650	2730	1	3	6
120h	1120	570	410	1	0	1
360h	0	0	0	0	0	0

Fig. 4g

CFU/g tissue weight						
		heart			liver	
12h	824	507	418	121400	132500	181800
24h	302	391	283	65500	96500	78000
72h	277	231	208	35700	13800	20600
120h	42	68	51	1700	600	900
360h	0	0	0	0	0	0
		spleen			lung	
12h	1039	1403	816	537	651	483
24h	751	803	617	359	277	401
72h	550	602	490	111	87	69
120h	185	249	286	58	43	37
360h	0	0	0	0	0	0
		kidney			brain	
12h	10210	13380	9140	24	16	12
24h	7290	6620	5308	11	20	9
72h	1620	2510	4050	1	10	7
120h	590	1430	830	0	3	2
360h	0	0	0	0	0	0

Fig. 4h	RBC						
ime (days)		EC			VNP		
0	10.31	7.35	9.7		8.4	11.77	7.83
1	6.32	7.17	8.76		9.8	7.86	8.12
5	6.32	7.36	10.4		9.45	7.86	8.11
15	8.32	7.2	9.7		10.1	8.24	7.61

Fig. 4i	WBC					
time (days)		EC			VNP	
0	9.69	10.43	8.08	10.72	8.56	7.91
1	2.47	2.22	3.76	3.41	2.99	4.33
5	6.8	10.47	7.84	8.43	7.87	9.31
15	8.1	7.33	10.4	7.2	10.32	8.69

Fig. 4j	MCH					
ime (days)		EC			VNP	
0	15.5	13.4	11.7	14.2	13.6	15.3
1	15.2	12.4	14.3	15.2	12.9	13.8
5	12.1	13.9	14.4	14.9	12.8	14.1
15	14.8	13.3	12.6	15.2	14.1	13.8

Fig. 4k	MCHC					
ime (days)		EC			VNP	
0	28.9	30.8	24.9	27	27.9	29.8
1	31.1	25.6	27.1	26.2	28.4	27.2
5	29.5	26.5	26.7	30.4	28.7	26.4
15	28.8	26.1	27.4	25.4	27.8	31.2

Fig. 4l	MCV					
ime (days)		EC			VNP	
0	53.6	53.3	47.1	49.7	52.1	54.5
1	52.9	47.3	52.5	48.5	52.4	54.2
5	52.5	55	53.5	53.8	55.2	56.2
15	54.1	51.2	48.7	51.3	53.7	49.8

Fig. 4m	PLT					
ime (days)		EC			VNP	
0	514	685	718	621	763	553
1	225	165	317	197	213	350
5	871	736	815	725	853	761
15	697	719	561	715	682	593

Fig. 4n	EC					
ime (days)		ALT			AST	
0	25.42	31.37	23.12	106.34	95.49	73.97
1	47.65	53.29	46.04	164.27	143.87	159.23
5	30.3	29.65	24.34	102.32	118.35	89.11
15	27.17	22.05	29.53	84.21	96.34	100.3

ime (days)		ALP		
0	127.88	134.1	119.39	
1	73.4	85.17	65.81	
5	126.92	120.34	128.53	
15	138.42	126.95	121.62	

Fig. 4o	VNP					
ime (days)		ALT			AST	
0	32.03	29.15	33.78	98.43	86.17	103.22
1	57.44	61.81	52.69	154.71	162.21	146.93
5	27.69	31.26	32.96	121.68	108.04	103.1
15	28.93	30.81	31.64	92.47	101.65	90.38

ime (days)		ALP		
0	135.38	130.19	128.7	
1	78.58	84.71	86.19	

5	129.54	132.6	125.26
15	128.27	131.4	136.34

Fig. 4p	BUN					
time (days)		EC			VNP	
0	7.53	8.02	7.28	7.79	8.14	7.96
1	5.13	5.39	4.94	5.26	5.66	5.31
5	7.39	7.62	7.14	7.82	7.43	7.01
15	7.74	7.93	7.35	8.03	8.21	7.62

Fig. 4q	A/G					
time (days)		EC			VNP	
0	2.53	2.44	2.27	2.71	2.52	2.39
1	2.19	2.41	2.33	2.28	2.36	2.47
5	1.89	2.07	2.12	2.06	2.18	1.99
15	2.37	2.52	2.48	2.43	2.28	2.56

Fig. 5b

time (h)		the penetration rates (%)				
		Trojan EC			Trojan VNP	
1	10.2	6.1	8.3	11.1	15.8	8.5
2	20.5	15.9	17.8	28.5	25.3	22.7
3	30.06	38.5	35.1	39.1	45.3	42.9
4	45.1	47.6	51.2	60	58.7	55.4

Fig. 5d

EC						
			Intensity			
		12h			24h	
Heart	4.398	3.982	4.926	4.063	3.586	4.979
liver	85.77	91.61	83.53	81.46	77.01	84.55
spleen	9.731	5.463	7.825	3.912	8.134	6.325
lung	14.27	10.32	11.92	12.96	10.35	13.87
kidney	10.32	9.63	7.142	11.85	8.74	6.409
brain	9.635	13.91	11.87	10.3	12.76	15.33
		72h			120h	
Heart	5.214	3.849	4.859	4.531	2.862	3.983
liver	47.63	58.03	52.76	42.04	32.77	38.32
spleen	6.648	8.93	11.9	10.43	8.124	9.404
lung	17.62	9.995	10.941	12.83	12.25	14.96
kidney	8.892	7.743	5.706	9.132	8.044	7.208
brain	19.91	16.87	17.43	23.05	26.26	25.11

Fig. 5e

VNP						
			Intensity			
		12h			24h	
Heart	4.846	5.613	4.215	3.633	5.232	4.429
liver	80.68	85.12	79.24	72.15	76.12	82.03

spleen	12.48	8.642	9.524	8.131	11.35	9.017
lung	11.49	15.24	10.56	10.42	11.39	12.01
kidney	9.731	11.03	8.543	8.24	9.831	10.85
brain	14.82	12.18	13.45	13.7	16.48	15.2
		72h			120h	
Heart	4.156	5.369	4.926	6.245	4.782	3.731
liver	54.44	46.51	48.02	34.08	26.49	28.69
spleen	12.9	11.24	0.985	9.659	10.24	9.983
lung	10.02	13.64	14.12	18.04	10.73	13.57
kidney	8.433	10.51	8.983	10.94	11.862	9.404
brain	18.53	20.48	21.02	33.14	31.17	35.22

Fig. 5g	EC	CFU/g tissue weight				
time (h)		Heart			liver	
12	1040	780	850	171100	214700	138500
24	420	350	500	59200	78500	91700
72	220	280	190	13300	31700	21400
120	10	40	60	400	1100	500
		spleen			lung	
12	4020	3640	3310	1090	670	480
24	2190	1620	2010	210	330	290
72	850	650	910	40	60	90
120	70	150	110	0	0	50
		kidney			brain	
12	9670	7920	12250	25000	14000	38000
24	4010	3460	2730	36000	49000	53000
72	1260	2080	950	126000	148000	175000
120	110	210	290	643000	382000	511000

Fig. 5h	VNP	CFU/g tissue weight				
time (h)		Heart			liver	
12	1120	870	930	157400	242100	194900
24	540	620	650	108800	77200	63700
72	270	310	380	21700	19800	35500
120	20	30	40	1100	2500	4100
12	3570	4910	5520	1440	970	1160
24	2920	3650	4290	460	530	400
72	890	740	1020	90	120	100
120	80	190	140	20	10	20
12	10700	13670	9320	47000	24000	32000
24	5150	5370	5240	71000	49000	52000
72	1530	1360	1650	302000	184000	214000
120	230	300	420	631000	759000	834000

Fig. 6c

temperature (°C)

time (s)	PBS	EC	VNP	GP-ICG-SiNPs	Trojan EC	Trojan VNP
0	23.5	24.2	22.8	24.5	23.2	23.8
15	26.3	27.6	26.1	27.7	38.3	39.1
30	28.7	29.3	28.4	29.4	42.7	43.5
45	31.1	31.9	31.6	32.7	44.5	45.8
60	32.4	33.8	32.9	34	46	47.2
90	32.9	34.6	33.7	34.8	47.6	49.3
120	33.5	35.2	34.4	35.7	48.8	50.5
150	33.8	35.7	35.2	36.6	49.2	51
180	34.2	36.1	35.8	37.4	49.6	51.4
210	34.6	36.4	36.1	38.1	50.1	51.5
240	34.9	36.6	36.3	38.5	50.4	51.8
270	35.2	36.9	36.5	38.9	50.6	51.9
300	35.4	37	36.7	39.2	50.7	51.9

Fig. 6e and 6f

PBS					
time (days)	Bioluminescence ($10^6 \text{p}^{-1} \text{s}^{-1} \text{cm}^{-2} \text{sr}^{-1}$)				
0	8.387	7.978	12.438	2.106	6.858
4	19.41	25.53	34.11	11.63	25.92
8	65.32	87.9	92.51	48.49	59.26
12	131.98	156.5	173.2	102.38	146.52
16	223.6	249.4	236.25	160.21	215.64

EC					
time (days)	Bioluminescence ($10^6 \text{p}^{-1} \text{s}^{-1} \text{cm}^{-2} \text{sr}^{-1}$)				
0	2.761	4.896	11.45	8.834	0.7326
4	8.091	11.84	26.52	19.57	5.166
8	35.09	42.47	67.84	75.36	29.04
12	70.51	93.57	130.7	124.52	76.25
16	156.1	188.9	223.6	205.76	135.77

VNP					
time (days)	Bioluminescence ($10^6 \text{p}^{-1} \text{s}^{-1} \text{cm}^{-2} \text{sr}^{-1}$)				
0	3.049	6.979	13.53	8.179	7.495
4	6.851	12.06	34.39	22.35	18.64
8	42.07	63.09	79.22	65.21	71.58
12	89.36	139.58	118.9	145.23	126.9
16	170.04	201.9	187.6	225.4	171.3

GP-ICG-SiNPs					
time (days)	Bioluminescence ($10^6 \text{p}^{-1} \text{s}^{-1} \text{cm}^{-2} \text{sr}^{-1}$)				
0	4.186	9.85	6.239	8.711	5.011
4	7.294	25.27	32.65	21.492	16.59
8	61.43	57.36	62.69	76.49	48.18
12	117.49	124.6	107.8	130.6	97.13
16	208.2	223.9	183.4	214.5	168.2

Trojan EC					
time (days)	Bioluminescence ($10^6 \text{p}^{-1} \text{s}^{-1} \text{cm}^{-2} \text{sr}^{-1}$)				
0	4.153	2.979	0.9421	8.186	1.291
4	21.7004	15.9068	6.834	18.32	8.459
8	33.21	27.12	12.48	39.47	15.14
12	61.37	39.58	31.67	55.92	30.87
16	107.06	55.14	64.59	81.15	58.33

Time (days)	Trojan VNP				
	Bioluminescence ($10^6 \text{p}^{-1} \text{s}^{-1} \text{cm}^{-2} \text{sr}^{-1}$)				
0	4.153	2.979	0.9421	8.186	1.291
4	21.7004	15.9068	6.834	18.32	8.459
8	33.21	27.12	12.48	39.47	15.14
12	61.37	39.58	31.67	55.92	30.87
16	107.06	55.14	64.59	81.15	58.33

Fig. 6g Survival curves

Time (days)	PBS	EC	VNP	GP-ICG-SiNPs	Trojan EC	Trojan VNP
19	1					
20	1					
22	1					
22	1					
25	1					
25	1					
26	1					
29	1					
21		1				
23		1				
26		1				
28		1				
29		1				
32		1				
35		1				
35		1				
23			1			
24			1			
28			1			
30			1			
32			1			
32			1			
34			1			
37			1			
20				1		
21				1		
23				1		
25				1		
27				1		
27				1		
30				1		
31				1		
43					1	
46					1	
48					1	
50					1	
51					1	
53					1	
56					1	
58					1	
41						1
47						1
51						1
54						1
56						1
58						1

60
63

1
1

Fig. 6j

	DC maturation (%)		
PBS	15	16.5	19.7
EC	29.3	24.5	26.4
VNP	32.1	30.4	27.8
GP-ICG-SiNPs	16.2	22.3	18.8
Trojan EC	39.4	43.8	38.3
TrojanVNP	39.7	42.7	45.2

Fig. 6k spleen

	the percent of CD3 ⁺ CD8a ⁺ T cells		
PBS	19.8	22.5	23.3
EC	27.3	25.8	26.5
VNP	26.3	28.2	26.9
GP-ICG-SiNPs	21.2	23.8	20.7
Trojan EC	30.6	32.7	29.5
TrojanVNP	34.1	30.9	31.3

Fig. 6l tumour

	the percent of CD3 ⁺ CD8a ⁺ T cells		
PBS	7.06	11.5	9.27
EC	12.8	15.3	13.7
VNP	13.4	16.5	12.8
GP-ICG-SiNPs	8.31	12.2	10.9
Trojan EC	19.1	21.5	17.9
TrojanVNP	22.4	20.3	18.2

Fig. 6m IFN- γ

	pg/ml				
PBS	5.76	8.88	3.31	6.27	11.72
EC	22.29	30.17	24.21	19.74	32.27
VNP	28.84	25.92	32.97	18.98	21.36
GP-ICG-SiNPs	10.6	6.74	5.06	13.26	4.21
Trojan EC	59.88	54.78	50.56	45.61	46.45
TrojanVNP	60.4	58.47	54.26	48.97	46.38

Fig. 6n TNF- α

	pg/ml				
PBS	19.56	13.62	16.44	26.87	22.43
EC	56.4	60.78	70.29	47.84	62.13
VNP	64.06	77.84	59.21	51.89	71.25
GP-ICG-SiNPs	20.17	16.27	27.88	13.68	23.34
Trojan EC	87.18	104.94	91.51	80.79	93.52
TrojanVNP	98.21	82.92	100.87	112.31	93.24

Fig.7b

	Intensity					
	Heart			Liver		
PBS	3.479	3.031	4.034	4.181	4.503	3.719
EC	4.697	4.939	4.545	15.37	18.81	14.24
VNP	5.763	5.237	5.025	15.28	18.3	12.62
Trojan EC	4.027	3.611	4.713	9.95	11.71	14.42
Trojan VNF	4.011	4.676	4.461	12.37	10.56	11.35
	Spleen			Lung		
PBS	3.683	5.365	3.923	3.04	5.247	3.714
EC	3.424	5.823	4.24	5.667	3.362	4.271
VNP	5.029	4.546	5.13	3.35	3.823	4.356
Trojan EC	5.303	4.234	3.432	5.259	3.807	3.428
Trojan VNF	4.198	3.531	3.192	4.555	4.012	3.137
	Kidney			Brain		
PBS	3.113	3.412	4.025	3.794	3.405	2.947
EC	3.91	4.481	5.72	32.64	30.83	24.12
VNP	5.13	3.68	4.21	27.83	36.016	29.42
Trojan EC	3.945	4.684	5.32	15.48	12.31	9.29
Trojan VNF	3.466	4.013	2.79	13.69	14.98	10.24

Fig. 7d

	CFU/g tissue weight					
	EC			VNP		
Heart	39	53	34	42	46	31
Liver	5040	4830	4120	4510	4730	4230
Spleen	130	109	173	119	153	145
Lung	28	34	21	11	24	32
Kindeg	485	426	529	472	435	392
Brain	438000	496000	379000	564000	415000	486000
	TrojanEC			Trojan VNP		
Heart	28	21	35	22	31	11
Liver	2940	2150	2730	2650	2140	1710
Spleen	76	101	88	66	97	75
Lung	1	0	4	0	0	5
Kindeg	245	303	310	268	226	313
Brain	41000	5900	32000	41000	53000	2700

Fig. S3

	Diameter (Number %)			Diameter (Number %)			Diameter (Number %)	
SiNPs	1.499	0	GP-SiNPs	1.499	0	GP-ICG-SiNPs	1.499	0
	1.736	0		1.736	0		1.736	0
	2.01	0		2.01	0		2.01	0
	2.328	0		2.328	0		2.328	0
	2.696	10.9		2.696	0		2.696	0
	3.122	32.9		3.122	0		3.122	0
	3.615	36		3.615	0		3.615	0
	4.187	16.9		4.187	1.1		4.187	0
	4.849	2.9		4.849	16.9		4.849	3.8
	5.615	0		5.615	39.4		5.615	23.9
	6.503	0		6.503	32.8		6.503	41.3

7.531	0	7.531	9.5	7.531	26.1
8.721	0	8.721	0.3	8.721	4.9
10.1	0	10.1	0	10.1	0
11.7	0	11.7	0	11.7	0
13.54	0	13.54	0	13.54	0

Fig.S4a

Wavelength (nm)	SiNPs	ICG	GP-SiNPs-ICG
200	3.0972	0.2157	3.4981
202	3.2887	0.2133	3.27
204	3.3822	0.2151	3.3797
206	3.4602	0.2191	3.5165
208	3.5941	0.2241	3.4
210	3.2713	0.2299	3.4936
212	3.3257	0.2335	3.5662
214	3.3708	0.2331	3.424
216	3.5672	0.2278	3.6429
218	3.3126	0.2149	3.4878
220	3.5094	0.1988	3.5944
222	3.48	0.1788	3.4547
224	3.3695	0.1587	3.5405
226	3.4455	0.1417	3.6121
228	3.4707	0.1284	3.6822
230	3.4101	0.1195	3.6203
232	3.2609	0.111	3.5482
234	3.1719	0.101	3.4802
236	3.0779	0.0912	3.4682
238	3.0171	0.0819	3.3486
240	2.9643	0.0722	3.3498
242	2.9293	0.0647	3.2988
244	2.8645	0.0597	3.2236
246	2.7438	0.0545	3.1606
248	2.6301	0.0511	3.0818
250	2.4646	0.0486	2.9175
252	2.2584	0.0464	2.7249
254	2.1031	0.0461	2.5483
256	1.9165	0.0446	2.3483
258	1.7517	0.0446	2.1581
260	1.6011	0.045	1.9987
262	1.4916	0.0454	1.8651
264	1.3737	0.0449	1.7288
266	1.282	0.0438	1.6193
268	1.2148	0.0418	1.5365
270	1.1559	0.0397	1.4619
272	1.11	0.0375	1.4018
274	1.0718	0.036	1.3511
276	1.0376	0.0347	1.303
278	1.0137	0.0328	1.269
280	0.9923	0.0315	1.2383
282	0.9728	0.0304	1.2132
284	0.9562	0.0296	1.1926
286	0.9449	0.0282	1.1754
288	0.9374	0.0275	1.1648
290	0.9317	0.0266	1.1573
292	0.9287	0.0258	1.1541

294	0.9278	0.0256	1.1538
296	0.9292	0.0244	1.1548
298	0.9313	0.0241	1.1564
300	0.9337	0.0233	1.1587
302	0.936	0.0232	1.1612
304	0.9382	0.0232	1.1642
306	0.9414	0.0227	1.1678
308	0.9436	0.0233	1.1712
310	0.9467	0.0233	1.174
312	0.9488	0.0224	1.1767
314	0.9504	0.0226	1.1786
316	0.9494	0.0216	1.1772
318	0.9451	0.0215	1.1744
320	0.9396	0.0223	1.1681
322	0.9295	0.0223	1.1576
324	0.9158	0.0216	1.1432
326	0.9028	0.0216	1.1256
328	0.8833	0.0214	1.1055
330	0.8636	0.0179	1.0773
332	0.8432	0.0189	1.0515
334	0.8214	0.018	1.0242
336	0.7986	0.0176	0.9905
338	0.7738	0.0161	0.9593
340	0.7461	0.0161	0.9259
342	0.7159	0.0165	0.8874
344	0.6809	0.0166	0.8446
346	0.6492	0.0186	0.8057
348	0.6175	0.017	0.7642
350	0.583	0.0177	0.7241
352	0.5507	0.0189	0.6858
354	0.5201	0.0196	0.6509
356	0.492	0.019	0.6181
358	0.4688	0.0205	0.5907
360	0.4443	0.0211	0.5653
362	0.4238	0.0221	0.542
364	0.4037	0.0234	0.5207
366	0.3825	0.0237	0.4985
368	0.3606	0.0232	0.4768
370	0.3409	0.0263	0.4572
372	0.3216	0.0255	0.4355
374	0.3052	0.0264	0.4181
376	0.2878	0.0262	0.4008
378	0.274	0.0275	0.3841
380	0.2606	0.0271	0.371
382	0.2484	0.0271	0.3579
384	0.2397	0.0275	0.3473
386	0.2287	0.0284	0.3385
388	0.2189	0.0278	0.3283
390	0.2112	0.0296	0.3211
392	0.2036	0.0287	0.3112
394	0.1956	0.0282	0.3037
396	0.1899	0.0277	0.295
398	0.1823	0.0263	0.2876
400	0.1753	0.0256	0.2791
402	0.1685	0.025	0.2717
404	0.162	0.0235	0.2632
406	0.1574	0.0224	0.2541
408	0.1521	0.0215	0.246

410	0.1473	0.021	0.2372
412	0.1445	0.0196	0.2295
414	0.1405	0.0191	0.2217
416	0.1369	0.0197	0.2165
418	0.1338	0.0195	0.2106
420	0.1309	0.0191	0.2059
422	0.1292	0.0183	0.2016
424	0.1262	0.0174	0.197
426	0.1247	0.0171	0.1934
428	0.1214	0.0173	0.1886
430	0.1193	0.0172	0.1856
432	0.1162	0.0162	0.1813
434	0.1146	0.016	0.1779
436	0.1112	0.0153	0.1742
438	0.1091	0.0149	0.1708
440	0.1055	0.0143	0.1657
442	0.1053	0.0147	0.1629
444	0.1023	0.0138	0.1595
446	0.099	0.0132	0.1553
448	0.0976	0.0144	0.1531
450	0.0959	0.0143	0.1505
452	0.0931	0.0133	0.1465
454	0.0911	0.0127	0.1438
456	0.0888	0.0135	0.1413
458	0.0863	0.0124	0.1369
460	0.0845	0.011	0.1347
462	0.0831	0.0118	0.1316
464	0.0799	0.0114	0.1287
466	0.0775	0.0099	0.1245
468	0.0766	0.0106	0.1216
470	0.0742	0.0091	0.1194
472	0.0714	0.0088	0.1138
474	0.0707	0.009	0.1108
476	0.0688	0.0076	0.1087
478	0.0663	0.0075	0.1042
480	0.0664	0.0076	0.1018
482	0.0628	0.0079	0.0993
484	0.0623	0.007	0.0963
486	0.0605	0.0066	0.0946
488	0.0589	0.0073	0.0928
490	0.0581	0.0067	0.0903
492	0.0567	0.0068	0.0879
494	0.055	0.0071	0.0869
496	0.0528	0.0052	0.0838
498	0.0526	0.0058	0.0823
500	0.0509	0.0047	0.0816
502	0.0487	0.007	0.08
504	0.0487	0.0067	0.0771
506	0.048	0.0058	0.0751
508	0.0477	0.0063	0.0738
510	0.0458	0.0069	0.0731
512	0.0435	0.0036	0.0691
514	0.0424	0.0063	0.0679
516	0.0437	0.0056	0.0681
518	0.0399	0.0059	0.0657
520	0.039	0.004	0.063
522	0.0392	0.0053	0.0616
524	0.0392	0.0058	0.0614

526	0.0352	0.0055	0.0575
528	0.0362	0.0062	0.0575
530	0.0348	0.0047	0.0558
532	0.0333	0.0061	0.0551
534	0.0321	0.0062	0.0527
536	0.0316	0.006	0.052
538	0.0321	0.0054	0.051
540	0.0304	0.0062	0.0505
542	0.0299	0.0053	0.0486
544	0.0296	0.0062	0.049
546	0.0279	0.0059	0.0457
548	0.0288	0.0087	0.048
550	0.0262	0.008	0.0481
552	0.0242	0.0067	0.0454
554	0.0248	0.0051	0.0436
556	0.0248	0.0077	0.0482
558	0.0236	0.0098	0.0467
560	0.0233	0.0093	0.0433
562	0.0217	0.0103	0.0423
564	0.022	0.007	0.0426
566	0.0223	0.0092	0.0444
568	0.0194	0.0107	0.0419
570	0.0219	0.0128	0.0467
572	0.0198	0.011	0.0442
574	0.0179	0.0109	0.0433
576	0.0188	0.0121	0.0473
578	0.0181	0.0105	0.0472
580	0.0191	0.0116	0.0458
582	0.0161	0.0135	0.0461
584	0.0183	0.0141	0.0489
586	0.0185	0.0157	0.0481
588	0.0157	0.0162	0.0492
590	0.0165	0.0152	0.0498
592	0.0179	0.0168	0.0547
594	0.0146	0.0158	0.0538
596	0.0153	0.0176	0.0496
598	0.015	0.0184	0.0552
600	0.0121	0.0188	0.0565
602	0.0128	0.0182	0.0582
604	0.0146	0.0197	0.0582
606	0.0098	0.021	0.0627
608	0.0124	0.0214	0.0617
610	0.0127	0.0252	0.0664
612	0.0149	0.027	0.0708
614	0.0103	0.0282	0.0709
616	0.0109	0.0285	0.074
618	0.0111	0.0258	0.0762
620	0.0115	0.0352	0.0822
622	0.0133	0.0335	0.0844
624	0.0102	0.0312	0.0826
626	0.0129	0.035	0.0896
628	0.0115	0.0334	0.0945
630	0.0119	0.0362	0.0962
632	0.01	0.0388	0.1028
634	0.0112	0.0428	0.1092
636	0.0106	0.0393	0.1113
638	0.0098	0.0428	0.1155
640	0.0094	0.0468	0.1211

642	0.0102	0.0471	0.1299
644	0.0093	0.0499	0.1342
646	0.008	0.0516	0.1433
648	0.0112	0.0531	0.1476
650	0.0091	0.0557	0.1537
652	0.0074	0.0609	0.1647
654	0.007	0.0576	0.1711
656	0.0115	0.0605	0.1767
658	0.0095	0.0617	0.1862
660	0.0073	0.0646	0.1955
662	0.0049	0.0668	0.2052
664	0.0089	0.0695	0.2131
666	0.0077	0.071	0.2228
668	0.005	0.0727	0.2302
670	0.0088	0.0764	0.2401
672	0.0073	0.0821	0.2539
674	0.0074	0.0841	0.2646
676	0.0046	0.0872	0.2747
678	0.0059	0.0927	0.2835
680	0.0071	0.0964	0.2961
682	0.0095	0.0986	0.306
684	0.0086	0.0994	0.3148
686	0.0074	0.1112	0.3355
688	0.0069	0.1155	0.3411
690	0.0104	0.1177	0.3503
692	0.0019	0.1226	0.3646
694	0.0091	0.126	0.3788
696	0.0043	0.1349	0.3891
698	0.0057	0.134	0.398
700	0.0023	0.1369	0.4092
702	0.0061	0.1431	0.4196
704	0.0042	0.1501	0.4259
706	0.0029	0.146	0.4383
708	0.0048	0.1542	0.4467
710	0.0057	0.1564	0.4585
712	0.0053	0.1576	0.4586
714	0.0047	0.1579	0.4641
716	0.0083	0.1648	0.472
718	0.0089	0.1603	0.4755
720	0.0063	0.1635	0.4774
722	0.0041	0.1606	0.476
724	0.004	0.1633	0.4844
726	0.0054	0.1606	0.4879
728	0.0099	0.1665	0.4786
730	0.0075	0.1666	0.4767
732	0.0053	0.1659	0.4725
734	0.0065	0.1681	0.4719
736	0.0044	0.1709	0.4663
738	0.0032	0.1725	0.4606
740	0.0037	0.1812	0.4601
742	0.0082	0.1861	0.4572
744	7.00E-04	0.1922	0.4476
746	0.0043	0.1959	0.4479
748	0.0055	0.2056	0.4534
750	0.0088	0.2148	0.4479
752	0.0032	0.2208	0.453
754	0.0051	0.234	0.4535
756	0.0015	0.2477	0.4592

758	0.0043	0.2602	0.4695
760	0.001	0.2703	0.4811
762	0.0032	0.2835	0.4875
764	0.0051	0.296	0.5033
766	0.0068	0.3059	0.514
768	0.0028	0.3172	0.5283
770	0.004	0.3287	0.5453
772	0.006	0.3335	0.5605
774	0.0029	0.3417	0.5746
776	0.0032	0.3428	0.5917
778	0.0015	0.3496	0.6054
780	0.0022	0.3513	0.6168
782	0.0039	0.3471	0.6332
784	0.0107	0.3421	0.6397
786	0.0024	0.338	0.6506
788	0.0039	0.3256	0.6537
790	0.0041	0.3146	0.6607
792	0.0075	0.303	0.667
794	0.0027	0.2803	0.6568
796	0.0052	0.265	0.6552
798	0.005	0.2493	0.6452
800	0.0085	0.229	0.6317
802	0.0049	0.2143	0.6216
804	0.0049	0.1875	0.5976
806	0.0049	0.1712	0.5819
808	0.0066	0.161	0.5689
810	0.0028	0.1402	0.5399
812	0.0077	0.1256	0.5134
814	0.0037	0.1117	0.4903
816	0.0066	0.1027	0.4642
818	0.0044	0.0847	0.4425
820	0.0031	0.0808	0.4158
822	0.0035	0.0654	0.3834
824	0.0034	0.0595	0.3592
826	0.0049	0.0553	0.3376
828	0.0015	0.0472	0.3084
830	0.0047	0.0421	0.2912
832	3.00E-04	0.0348	0.2636
834	0.0047	0.0316	0.2451
836	0.0048	0.0314	0.2311
838	0.007	0.0264	0.21
840	0.0037	0.0228	0.1906
842	0.0028	0.0165	0.1724
844	0.0033	0.0208	0.1565
846	0.0033	0.0157	0.15
848	0.0096	0.016	0.1323
850	0.0047	0.013	0.1217
852	#####	0.0076	0.1123
854	0.0053	0.0203	0.1061
856	0.0048	0.0092	0.0966
858	0.004	0.0101	0.0847
860	0.0024	0.0037	0.0737
862	0.0076	0.0079	0.0724
864	0.0044	0.0096	0.0632
866	0.0067	0.0026	0.0607
868	0.0046	0.0073	0.0526
870	0.0027	0.0061	0.0476
872	0.0038	0.0024	0.0439

874	0.0041	0.0027	0.0358
876	0.002	0.003	0.0375
878	0.0052	0.0025	0.0322
880	0.0022	0.0031	0.0306
882	0.0034	0.0022	0.0273
884	0.0037	0.001	0.0235
886	0.0036	0.0034	0.0231
888	0.0031	0.002	0.0211
890	0.0042	0.0011	0.0183
892	0.0063	0.007	0.0204
894	0.0019	0.0031	0.0183
896	0.0033	6.00E-04	0.0158
898	0.0041	0.003	0.0152
900	0.0015	0.004	0.0137
902	0.0032	0.0017	0.0143
904	0.0042	0.0021	0.014
906	0.0039	0.0021	0.0128
908	0.0027	0.0052	0.0157
910	0.0041	0.0025	0.0118
912	0.0041	0.0036	0.0145
914	0.0063	0.0023	0.0141
916	0.0035	0.0018	0.0101
918	0.0026	5.00E-04	0.0106
920	0.004	#####	0.0074
922	0.0049	-0.0015	0.0093
924	0.0034	0	0.0114
926	0.0025	0.0064	0.0133
928	0.0056	0.0053	0.0109
930	0.0041	0.0018	0.0099
932	0.0027	#####	0.0071
934	0.0043	0.0038	0.0098
936	0.0067	0.0016	0.0097
938	0.0051	0.0022	0.0097
940	0.0041	0.0029	0.009
942	0.004	9.00E-04	0.0073
944	0.0023	0.0031	0.0087
946	0.002	0.0035	0.0086
948	0.005	0.0032	0.0104
950	0.0028	0.0029	0.0089
952	0.0046	0.0024	0.0089
954	0.0042	0.0032	0.0088
956	0.0051	0.0052	0.0113
958	0.0073	0.0041	0.0107
960	0.0048	0.0061	0.0131
962	0.0062	0.0053	0.0111
964	0.0058	0.0032	0.0084
966	0.0032	0.0041	0.0117
968	0.005	0.0025	0.0093
970	0.0061	0.0036	0.0096
972	0.0062	0.0029	0.0097
974	0.0053	5.00E-04	0.0072
976	0.0028	0.0048	0.0096
978	0.0042	0.0036	0.0089
980	0.0034	0.0023	0.0076
982	0.0038	0.0029	0.0078
984	0.0013	0.0038	0.0103
986	0.0053	0.0057	0.01
988	2.00E-04	0.0055	0.009

990	0.0026	0.0028	0.0081
992	0.003	0.0016	0.0077
994	0.0029	5.00E-04	0.0059
996	0.0031	0.0022	0.0066
998	0.0074	0.0013	0.0083
1000	0.0024	0.0042	0.0093

Fig.S4b

Wavelength (nm)	GP	GP-ICG-SiNPs	GP-ICG-SiNPs+phenol-sulfuric
300	0.0638	1.2234	0.0604
301	0.0621	1.2246	0.1177
302	0.0602	1.2257	0.2564
303	0.0586	1.2279	0.3782
304	0.0576	1.2297	0.5421
305	0.0558	1.2313	0.6598
306	0.0538	1.2327	0.7392
307	0.0528	1.2344	0.8023
308	0.0518	1.2369	0.8423
309	0.0506	1.2385	0.8666
310	0.0494	1.2402	0.8851
311	0.0482	1.2423	0.8945
312	0.0467	1.2431	0.8966
313	0.0459	1.2433	0.8979
314	0.0449	1.2438	0.8967
315	0.043	1.2433	0.8943
316	0.0422	1.2434	0.8911
317	0.0414	1.2387	0.8852
318	0.0398	1.2366	0.8775
319	0.0391	1.2328	0.8706
320	0.0381	1.2284	0.8627
321	0.0364	1.2226	0.8526
322	0.0364	1.2149	0.8415
323	0.0353	1.2071	0.8293
324	0.0339	1.1979	0.8163
325	0.0333	1.1892	0.8053
326	0.033	1.179	0.7898
327	0.0305	1.1664	0.7757
328	0.0293	1.1554	0.7599
329	0.0303	1.1429	0.7439
330	0.029	1.127	0.7254
331	0.0282	1.1136	0.7091
332	0.0265	1.0992	0.693
333	0.0246	1.0872	0.6794
334	0.0243	1.0739	0.6663
335	0.0241	1.0566	0.6507
336	0.0236	1.0418	0.6365
337	0.0229	1.0272	0.6235
338	0.0215	1.0096	0.6096
339	0.022	0.9929	0.5972
340	0.0186	0.9745	0.5846
341	0.0193	0.9531	0.5695
342	0.0174	0.9336	0.5589
343	0.0184	0.9098	0.5456
344	0.018	0.8899	0.5322
345	0.017	0.8711	0.5214
346	0.0165	0.8475	0.5122

347	0.0159	0.826	0.5007
348	0.0151	0.8031	0.4922
349	0.0154	0.7829	0.4855
350	0.0145	0.7594	0.4751
351	0.0139	0.7405	0.4686
352	0.0137	0.718	0.4612
353	0.0125	0.6946	0.4532
354	0.0125	0.678	0.4486
355	0.0138	0.6592	0.4421
356	0.0119	0.6414	0.4355
357	0.0127	0.6254	0.4304
358	0.0112	0.6093	0.4261
359	0.0111	0.594	0.4212
360	0.0115	0.5781	0.4166
361	0.0114	0.5651	0.4125
362	0.01	0.5518	0.4075
363	0.0108	0.5405	0.4051
364	0.0112	0.5268	0.4007
365	0.0094	0.5107	0.3958
366	0.0099	0.4967	0.3924
367	0.0101	0.4829	0.3898
368	0.0103	0.4709	0.3842
369	0.0093	0.4581	0.3832
370	0.009	0.4436	0.3785
371	0.0097	0.4319	0.3733
372	0.0103	0.4203	0.3704
373	0.0095	0.4106	0.3688
374	0.0104	0.3987	0.3637
375	0.0093	0.3858	0.3621
376	0.01	0.3749	0.358
377	0.0084	0.3652	0.3557
378	0.0084	0.3561	0.3531
379	0.0079	0.3477	0.3508
380	0.0071	0.339	0.348
381	0.0101	0.3314	0.3481
382	0.0082	0.3224	0.3446
383	0.008	0.3161	0.3445
384	0.0083	0.3105	0.3427
385	0.0074	0.3032	0.3412
386	0.0081	0.2978	0.3404
387	0.0079	0.2924	0.3399
388	0.0071	0.2859	0.3386
389	0.008	0.2812	0.3394
390	0.0077	0.2765	0.3386
391	0.0071	0.2697	0.338
392	0.008	0.2653	0.3383
393	0.0071	0.2602	0.3391
394	0.0072	0.2549	0.3392
395	0.0067	0.2507	0.3409
396	0.008	0.2471	0.3422
397	0.0077	0.2407	0.3437
398	0.008	0.2358	0.3448
399	0.0069	0.2318	0.3466
400	0.0068	0.2265	0.349
401	0.0071	0.2242	0.3504
402	0.0065	0.2199	0.3537
403	0.0062	0.2145	0.3547
404	0.0075	0.2119	0.3579

405	0.0059	0.2067	0.3596
406	0.0069	0.2046	0.362
407	0.0061	0.2015	0.3658
408	0.0069	0.1988	0.3669
409	0.0058	0.1951	0.3698
410	0.0073	0.1926	0.373
411	0.0061	0.1896	0.3748
412	0.0068	0.1873	0.3784
413	0.0078	0.1857	0.3823
414	0.0063	0.1815	0.3844
415	0.0053	0.1798	0.3885
416	0.0054	0.1786	0.3903
417	0.0058	0.1766	0.3936
418	0.007	0.1745	0.3966
419	0.0063	0.1729	0.3992
420	0.0054	0.1708	0.4019
421	0.0054	0.1692	0.4044
422	0.0057	0.1681	0.4064
423	0.006	0.166	0.4086
424	0.0059	0.165	0.4104
425	0.0056	0.1635	0.4131
426	0.0055	0.1612	0.4148
427	0.0055	0.1601	0.4164
428	0.0052	0.1589	0.4177
429	0.005	0.1567	0.4184
430	0.0066	0.1561	0.4205
431	0.0048	0.1528	0.4225
432	0.0055	0.1529	0.4233
433	0.0053	0.1496	0.4232
434	0.0046	0.1486	0.4246
435	0.0054	0.1477	0.4266
436	0.006	0.1463	0.4286
437	0.0053	0.1448	0.4292
438	0.0051	0.1425	0.4311
439	0.0057	0.1411	0.4337
440	0.0058	0.1385	0.4348
441	0.0062	0.1374	0.4374
442	0.0055	0.1369	0.4414
443	0.0048	0.1337	0.4445
444	0.0046	0.1323	0.4488
445	0.0057	0.133	0.4541
446	0.0043	0.1298	0.4592
447	0.0046	0.1284	0.466
448	0.0052	0.1276	0.4717
449	0.0049	0.1258	0.4793
450	0.0054	0.1256	0.4873
451	0.0057	0.1239	0.4955
452	0.0037	0.1217	0.5051
453	0.0045	0.1204	0.5151
454	0.0044	0.1192	0.5246
455	0.0042	0.117	0.5355
456	0.0043	0.1161	0.5492
457	0.0044	0.1145	0.5609
458	0.0044	0.1128	0.5741
459	0.0052	0.1114	0.59
460	0.0052	0.1104	0.603
461	0.0044	0.1095	0.616
462	0.0051	0.1078	0.6341

463	0.0036	0.1048	0.6515
464	0.0055	0.1045	0.6669
465	0.005	0.1021	0.6852
466	0.0043	0.101	0.7034
467	0.0047	0.1	0.7212
468	0.0054	0.0988	0.7408
469	0.0048	0.0983	0.7616
470	0.0052	0.0967	0.7839
471	0.0035	0.0961	0.8034
472	0.0049	0.0938	0.8252
473	0.0052	0.0928	0.847
474	0.0061	0.0918	0.8688
475	0.0047	0.0918	0.8909
476	0.0039	0.0898	0.9102
477	0.0043	0.088	0.9319
478	0.0043	0.0876	0.9495
479	0.0046	0.0856	0.9672
480	0.0045	0.0828	0.9867
481	0.0037	0.083	1.0031
482	0.0044	0.083	1.0197
483	0.0038	0.0812	1.0318
484	0.0038	0.08	1.0391
485	0.0046	0.0804	1.0454
486	0.0046	0.0777	1.0508
487	0.0045	0.0773	1.0539
488	0.004	0.0762	1.0529
489	0.0036	0.0758	1.05
490	0.004	0.074	1.044
491	0.0048	0.0731	1.0344
492	0.004	0.0725	1.0216
493	0.0043	0.0718	1.0095
494	0.0056	0.0726	0.9877
495	0.0043	0.0707	0.9649
496	0.0051	0.0697	0.9377
497	0.005	0.0686	0.9085
498	0.0044	0.067	0.8807
499	0.0047	0.0671	0.8494
500	0.0021	0.0636	0.8114
501	0.0055	0.0653	0.7816
502	0.0062	0.0652	0.7432
503	0.0041	0.0622	0.7036
504	0.0058	0.0633	0.6713
505	0.0055	0.0613	0.6353
506	0.0028	0.0606	0.5983
507	0.0046	0.0611	0.5677
508	0.0033	0.061	0.5357
509	0.0031	0.0568	0.5065
510	0.006	0.0589	0.4816
511	0.003	0.0568	0.4565
512	0.0043	0.0534	0.4322
513	0.0044	0.0553	0.4126
514	0.0056	0.0555	0.3967
515	0.0027	0.0522	0.3786
516	0.0045	0.0534	0.3665
517	0.0058	0.053	0.3523
518	0.0032	0.0514	0.3421
519	0.0037	0.0504	0.3328
520	0.0031	0.0496	0.3239

521	0.0027	0.0505	0.3162
522	0.0046	0.0503	0.3127
523	0.002	0.0473	0.3039
524	0.0043	0.0474	0.3
525	0.0038	0.0468	0.2926
526	0.0045	0.0458	0.2857
527	0.0031	0.0458	0.2795
528	0.0041	0.045	0.2732
529	0.0041	0.0439	0.2647
530	0.0035	0.0444	0.2591
531	0.0034	0.0434	0.2479
532	0.0022	0.0411	0.2407
533	0.003	0.0425	0.2324
534	0.0038	0.0404	0.2241
535	0.0045	0.0406	0.218
536	0.0038	0.0403	0.2087
537	0.0028	0.0397	0.1977
538	0.0043	0.0406	0.1904
539	0.0024	0.0395	0.182
540	0.004	0.0379	0.1732
541	0.0025	0.0361	0.1676
542	0.0047	0.0369	0.1604
543	0.0025	0.0367	0.1549
544	0.0041	0.0362	0.15
545	0.0039	0.0355	0.145
546	0.003	0.0337	0.1408
547	0.005	0.0352	0.1352
548	0.0049	0.0343	0.1324
549	0.0043	0.0319	0.1273
550	0.0024	0.0318	0.1256
551	0.0037	0.031	0.1202
552	6.00E-04	0.0307	0.1184
553	0.0055	0.0297	0.1162
554	0.0022	0.0295	0.1137
555	0.0041	0.0296	0.1123
556	0.0064	0.0316	0.1098
557	0.0012	0.0294	0.1078
558	0.0044	0.0289	0.1078
559	0.0041	0.0278	0.1037
560	0.0019	0.0269	0.0989
561	0.0029	0.0276	0.1002
562	0.0044	0.0284	0.1007
563	0.004	0.0262	0.0965
564	0.0035	0.0264	0.0962
565	0.0041	0.0249	0.0921
566	0.0062	0.0253	0.0903
567	0.004	0.0257	0.0924
568	0.0027	0.0243	0.0877
569	0.0029	0.0247	0.0873
570	0.003	0.0237	0.0865
571	0.0026	0.0227	0.0823
572	0.003	0.0229	0.0842
573	0.0045	0.0243	0.0801
574	0.0042	0.0221	0.076
575	0.0047	0.0242	0.0778
576	0.0011	0.0215	0.0772
577	0.0027	0.0219	0.0747
578	0.0035	0.022	0.074

579	0.0025	0.0185	0.072
580	0.0054	0.0205	0.0685
581	0.0029	0.0216	0.0685
582	0.0018	0.0206	0.0649
583	0.0035	0.0197	0.0657
584	0.0068	0.0198	0.0624
585	0.0011	0.019	0.0604
586	0.0032	0.0199	0.0615
587	0.0045	0.0196	0.0593
588	0.0045	0.0182	0.0581
589	0.0064	0.0201	0.0583
590	0.005	0.0188	0.0557
591	0.0042	0.0183	0.0569
592	0.004	0.0196	0.0548
593	0.0023	0.02	0.0529
594	0.0028	0.0163	0.0527
595	0.0028	0.0198	0.0527
596	7.00E-04	0.0161	0.0482
597	0.0025	0.0178	0.0488
598	0.0051	0.0182	0.0484
599	0.001	0.0151	0.0459
600	0.0031	0.0166	0.047
601	0.0027	0.0157	0.0468
602	0.0028	0.0168	0.0428
603	0.0018	0.0153	0.0463
604	0.0034	0.0151	0.0437
605	0.0048	0.016	0.0436
606	0.0054	0.017	0.0426
607	0.0031	0.015	0.0413
608	0.0029	0.0138	0.043
609	0.0037	0.0154	0.0428
610	0.0012	0.013	0.0394
611	0.0041	0.0146	0.0428
612	0.0024	0.0144	0.0427
613	0.0025	0.0122	0.0376
614	0.0025	0.0135	0.0418
615	0.0035	0.0134	0.0368
616	0.0044	0.0153	0.037
617	0.0038	0.0127	0.0374
618	0.0033	0.0106	0.0392
619	0.0023	0.0143	0.0356
620	0.0017	0.0099	0.0386
621	#####	0.0092	0.0326
622	0.0018	0.0117	0.035
623	0.0043	0.0123	0.0356
624	0.0033	0.0111	0.0358
625	0.0023	0.0087	0.0334
626	0.0031	0.0106	0.0353
627	0.0022	0.0091	0.032
628	0.0026	0.0103	0.0323
629	0.0036	0.0117	0.0308
630	0.0036	0.0117	0.0307
631	0.004	0.007	0.033
632	0.0012	0.0096	0.0318
633	0.0019	0.0105	0.0322
634	0.0049	0.0102	0.0325
635	0.0019	0.0077	0.0291
636	0.0044	0.012	0.0301

637	0.0022	0.0072	0.0321
638	0.0012	0.0069	0.0319
639	0.0018	0.0105	0.0313
640	9.00E-04	0.007	0.0282
641	0.0038	0.0111	0.0284
642	0.0058	0.0126	0.03
643	0.003	0.0087	0.029
644	0.0042	0.0062	0.0259
645	0.0042	0.0104	0.0268
646	6.00E-04	0.0063	0.0276
647	0.0038	0.0099	0.0261
648	0.0032	0.0096	0.0269
649	#####	0.0104	0.0227
650	0.0026	0.0089	0.0268
651	0.002	0.0089	0.0265
652	0.0011	0.0095	0.0237
653	0.0021	0.008	0.0259
654	0.0028	0.0078	0.0237
655	0.0017	0.0063	0.0259
656	0.0044	0.0074	0.0253
657	1.00E-04	0.0065	0.0249
658	0.0019	0.0052	0.0241
659	0.0037	0.0093	0.023
660	0.0025	0.0067	0.0233
661	0.0028	0.0079	0.0253
662	0.0017	0.0064	0.0195
663	0.0051	0.0101	0.0225
664	0.0047	0.0122	0.0234
665	0.0023	0.0046	0.0198
666	0.003	0.0068	0.0225
667	0.0051	0.007	0.0219
668	0.0042	0.0062	0.0194
669	0.0023	0.0061	0.0208
670	0.0034	0.0071	0.0211
671	0.0038	0.0071	0.0217
672	0.0045	0.0073	0.0217
673	7.00E-04	0.0048	0.0212
674	0.0034	0.007	0.0205
675	0.0036	0.0053	0.0215
676	0.0026	0.0062	0.0173
677	0.0027	0.0057	0.0206
678	0.0046	0.0078	0.0179
679	0.0014	0.0053	0.018
680	0.0024	0.0045	0.0212
681	0.0021	0.0072	0.0185
682	0.0035	0.0039	0.0196
683	0.0024	0.0061	0.0193
684	0.0034	0.0054	0.0153
685	0.0032	0.004	0.0193
686	0.0036	0.0087	0.0167
687	0.0019	0.0037	0.0176
688	0.0011	0.0053	0.0182
689	0.0033	0.001	0.0207
690	0.0031	0.0075	0.0212
691	#####	0.0074	0.0179
692	0.0018	0.0024	0.0176
693	0.0049	0.0068	0.0195
694	0.0064	0.0023	0.0198

695	#####	0.003	0.0141
696	#####	0.0012	0.0182
697	0.0028	0.0059	0.018
698	0.0017	0.0041	0.0146
699	0.0031	0.003	0.0187
700	0.0024	0.0031	0.0172
701	0.0046	0.0044	0.0165
702	0.0047	0.0067	0.0167
703	0.0029	0.0017	0.0151
704	0.0059	0.0066	0.0191
705	0.0013	0.0059	0.0164
706	2.00E-04	0.0021	0.0178
707	0.0015	0.0039	0.0133
708	6.00E-04	0.0037	0.017
709	0.001	0.002	0.0169
710	0.0023	0.0033	0.0193
711	-0.0013	0.0044	0.0139
712	0	0.0048	0.0147
713	#####	0.0024	0.0169
714	0.0037	0.0036	0.0134
715	0.006	0.0065	0.018
716	0.0043	0.0045	0.0188
717	0.0054	0.0062	0.0172
718	0.0066	0.0062	0.0178
719	0.0026	0.0044	0.014
720	0.0053	0.0017	0.0193
721	0.0024	0.0052	0.0183
722	-0.0037	-0.0022	0.0122
723	0.0041	0.0018	0.0155
724	0.0015	0.0029	0.0167
725	-0.001	0	0.0194
726	0.0075	0.0033	0.0182
727	0.0018	0.0054	0.0128
728	0.005	0.0069	0.0144
729	7.00E-04	0.0074	0.0159
730	0.0034	-0.0022	0.0156
731	0.0015	0.0056	0.0221
732	0.0017	0.0051	0.015
733	0.0016	0.0024	0.0154
734	0.0067	0.0065	0.0178
735	0.0019	#####	0.0135
736	#####	0.0021	0.0169
737	0.0022	0.0038	0.0195
738	-0.0025	0.0027	0.0189
739	0.0039	0.0013	0.0173
740	2.00E-04	0.0022	0.0157
741	-0.0016	0.002	0.0173
742	0.0027	0.0063	0.0155
743	0.0025	0.0022	0.0198
744	0.006	0.0019	0.0196
745	0.0044	0.0066	0.0175
746	0.0068	0.0014	0.0171
747	0.0045	3.00E-04	0.0224
748	0.0013	0	0.0172
749	3.00E-04	0.0013	0.0181
750	0.0075	0.0081	0.0155
751	0.0043	0.003	0.015
752	0.001	#####	0.0168

753	0.0035	0.0026	0.0174
754	6.00E-04	4.00E-04	0.015
755	0.0056	0.0057	0.0158
756	0.0063	0.0034	0.0165
757	0.0041	0.0027	0.0145
758	0.005	0.0036	0.0193
759	#####	0.0016	0.0164
760	0.0052	0.0055	0.015
761	0.0025	0.0016	0.019
762	0.0022	0.003	0.0152
763	0.0035	0.0033	0.0172
764	0.0035	0.002	0.0158
765	0.0028	0.0044	0.0175
766	0.002	0.0029	0.0157
767	0.0035	0.0038	0.0133
768	0.0037	0.0032	0.0173
769	0.0044	0.0041	0.0187
770	0.003	4.00E-04	0.0118
771	0.003	0.0043	0.0199
772	0.0012	0.0037	0.0127
773	0.003	0.0017	0.0154
774	0.0061	0.008	0.0206
775	#####	0.0012	0.0133
776	0.0038	0.0026	0.0173
777	0.0019	0.0032	0.0158
778	8.00E-04	0.0012	0.0139
779	0.0028	0.0046	0.0156
780	0.0048	0.0018	0.0149
781	0.0045	0.0017	0.0164
782	0.0054	6.00E-04	0.0154
783	0.0059	0.0027	0.0119
784	0.0023	0.0045	0.017
785	0.0053	3.00E-04	0.0183
786	0.0058	0.0012	0.017
787	0.0074	0.0064	0.0141
788	-0.0028	-0.0026	0.0153
789	0.0062	0.0038	0.0105
790	2.00E-04	0.0037	0.0152
791	0.0037	0.0025	0.0104
792	0.0045	0.0019	0.0131
793	0.002	9.00E-04	0.0152
794	0.0046	0.0025	0.0154
795	0.0049	0.0043	0.0181
796	3.00E-04	5.00E-04	0.0164
797	0.0038	-0.0015	0.0137
798	0.0026	0.0045	0.0165
799	0.0039	0.004	0.0135
800	0.0011	0.0037	0.0157
801	-0.001	0	0.0102
802	6.00E-04	2.00E-04	0.0125
803	0.004	0.0057	0.0156
804	5.00E-04	-0.0015	0.0133
805	0.0048	0.0045	0.0132
806	-0.0022	-0.0025	0.0101
807	0.004	0.0025	0.0128
808	0.0017	0.0037	0.0121
809	0.0035	0.0011	0.0163
810	0.0058	0.0024	0.02

811	0.0038	0.0042	0.01
812	0.0024	0.001	0.0116
813	0.0061	0.0059	0.0179
814	0.0044	0.0032	0.0114
815	0.0022	0.0025	0.0176
816	0.0105	0.0067	0.0109
817	0.0032	0.0021	0.0147
818	0.0029	0.0063	0.0146
819	8.00E-04	0.0031	0.0114
820	0.0021	0.0046	0.0158
821	0.0043	0.005	0.0109
822	0.0027	0.0027	0.0118
823	0.0024	0.0022	0.0125
824	5.00E-04	0.0022	0.0128
825	0.0018	0.0015	0.0127
826	0.0013	0.0035	0.0132
827	0.0013	#####	0.0111
828	0.0023	0.0038	0.0136
829	0.0025	0.0028	0.0129
830	4.00E-04	3.00E-04	0.0122
831	0.0024	0.0036	0.0167
832	0.0068	#####	0.0111
833	0.002	0.0044	0.0136
834	0.0035	0.0039	0.0131
835	0.0025	0.0018	0.0155
836	0.0027	0.0017	0.014
837	-0.0013	0.0021	0.0141
838	0.0029	8.00E-04	0.0148
839	0.0051	0.001	0.0149
840	#####	-0.0025	0.0132
841	0.002	0.0015	0.0161
842	0.0022	0.0021	0.0114
843	0.0027	0.0042	0.0199
844	0.0032	0.002	0.0115
845	0.0013	0.0023	0.0102
846	-0.0041	0.0025	0.0132
847	#####	-0.0021	0.0145
848	0.0016	0.0024	0.0116
849	0.0061	0.0068	0.0153
850	-0.0026	-0.0013	0.0149
851	0.004	0.003	0.0185
852	#####	#####	0.0169
853	0.0063	0.0045	0.0081
854	0.0068	0.0041	0.0164
855	0.0058	#####	0.0096
856	0.0078	0.0059	0.0116
857	5.00E-04	-0.0021	0.0154
858	-0.0021	0.0054	0.0095
859	0.0052	0.0056	0.0128
860	-0.0024	-0.0069	0.0118
861	-0.0036	0.001	0.0144
862	0.0046	0.0039	0.0121
863	0.0052	7.00E-04	0.0185
864	0.0014	0.0012	0.0129
865	0.0026	1.00E-04	0.0107
866	0.0033	0.0018	0.0157
867	0.0032	#####	0.0134
868	-0.0019	0.0025	0.0132

869	0.0017	0.0033	0.0117
870	-0.003	2.00E-04	0.0126
871	5.00E-04	0.0021	0.0155
872	0.0058	0.0046	0.0141
873	0.0046	#####	0.0103
874	0.0062	#####	0.0124
875	0.0015	-0.002	0.0131
876	0.0043	0.0045	0.0152
877	0.0031	0.0023	0.0125
878	0.0011	0.0014	0.0115
879	0.002	0.0021	0.0119
880	0.0014	9.00E-04	0.0129
881	0.0021	0.001	0.0138
882	0.0012	0.002	0.0122
883	6.00E-04	0.0013	0.0111
884	0.0011	0.0023	0.0129
885	0.002	0.0017	0.0101
886	0.0034	0.002	0.0142
887	0.0039	0.0033	0.0133
888	0.0014	8.00E-04	0.011
889	0.0028	0.002	0.0124
890	4.00E-04	0.0014	0.0112
891	-0.0014	6.00E-04	0.0134
892	0.0038	0.0018	0.0125
893	7.00E-04	-0.0015	0.0118
894	0.004	0.0032	0.0118
895	9.00E-04	0.0014	0.0121
896	6.00E-04	0.0024	0.013
897	1.00E-04	0.0023	0.012
898	0.0025	0	0.0144
899	0.002	-0.0012	0.0152
900	6.00E-04	0.0017	0.0108
901	0.004	0.0016	0.0117
902	0.0043	0.0046	0.0102
903	0.0031	0.0027	0.0143
904	0.0033	0.0025	0.0131
905	5.00E-04	0.0013	0.012
906	0.0018	0.0016	0.0133
907	#####	6.00E-04	0.0145
908	0.005	0.0013	0.0149
909	0.0043	0.0043	0.0156
910	0.0032	0.0011	0.0119
911	0.0056	0.0019	0.0136
912	0.003	0.0023	0.0106
913	6.00E-04	9.00E-04	0.0129
914	0.0026	0.0012	0.0147
915	0.0032	0.0012	0.0155
916	0.0021	0.0021	0.013
917	7.00E-04	0.0014	0.0134
918	0.0013	0.0015	0.0124
919	0.0038	0.0022	0.0162
920	0.0015	0.0033	0.0157
921	0.001	0.0017	0.0144
922	0.0018	8.00E-04	0.0136
923	-0.0021	0.0019	0.0197
924	0.0027	5.00E-04	0.0169
925	0.0034	-0.0017	0.0175
926	0.001	8.00E-04	0.0168

927	0.0024	-0.0014	0.0127
928	0.0018	3.00E-04	0.0171
929	0.0015	0.0012	0.0188
930	0.001	0.0025	0.0164
931	0.0014	5.00E-04	0.0179
932	0	#####	0.0189
933	0.0014	0.0029	0.0201
934	0.007	0.0049	0.0213
935	0.0011	9.00E-04	0.0197
936	7.00E-04	0.0018	0.0188
937	6.00E-04	#####	0.0208
938	0.0011	0.0013	0.0214
939	6.00E-04	9.00E-04	0.0207
940	0.0017	#####	0.0211
941	0.0017	#####	0.022
942	6.00E-04	0.0017	0.0211
943	0.0019	0.0017	0.0253
944	0.0014	0	0.0242
945	7.00E-04	7.00E-04	0.0249
946	0.0021	2.00E-04	0.0252
947	0.0016	3.00E-04	0.0259
948	4.00E-04	0.0018	0.0261
949	7.00E-04	-0.0019	0.0275
950	0	#####	0.0272
951	#####	2.00E-04	0.0288
952	6.00E-04	0.0023	0.0305
953	#####	0.0016	0.0309
954	3.00E-04	-0.001	0.0325
955	0.0026	0.0026	0.0327
956	#####	-0.0014	0.0351
957	0.0011	4.00E-04	0.0378
958	#####	1.00E-04	0.0384
959	-0.0011	-0.0016	0.0387
960	0.001	-0.0014	0.0427
961	#####	#####	0.0459
962	0.0014	0.0023	0.0456
963	0.0044	0.0023	0.0462
964	9.00E-04	0.0019	0.0474
965	0.0014	0.0021	0.0484
966	#####	4.00E-04	0.0486
967	5.00E-04	9.00E-04	0.0509
968	8.00E-04	-0.0012	0.0506
969	#####	0.0011	0.052
970	5.00E-04	8.00E-04	0.0525
971	0.0012	0.0019	0.0507
972	#####	0.0012	0.0514
973	0	7.00E-04	0.0539
974	#####	#####	0.0516
975	2.00E-04	1.00E-04	0.0525
976	9.00E-04	0.001	0.0546
977	0.0024	8.00E-04	0.0512
978	#####	#####	0.0528
979	9.00E-04	0.0018	0.0527
980	3.00E-04	8.00E-04	0.0511
981	#####	0.0016	0.0511
982	#####	#####	0.0516
983	1.00E-04	#####	0.0511
984	3.00E-04	0.001	0.0525

985	-0.002	8.00E-04	0.0466
986	5.00E-04	#####	0.0507
987	#####	-0.0012	0.0457
988	0.0014	-0.0022	0.0465
989	0.0026	0.0013	0.0446
990	0.0018	#####	0.0442
991	5.00E-04	0	0.0445
992	0.0011	0.0016	0.0424
993	6.00E-04	0.0015	0.0421
994	2.00E-04	0.0011	0.0404
995	#####	#####	0.0398
996	0.0022	0.001	0.0397
997	5.00E-04	7.00E-04	0.0398
998	0.003	0.0016	0.0385
999	#####	#####	0.0362
1000	0.0037	0.0035	0.0368

Fig. S5a GP

Wavelength(nm)	GP					
	30µg/ml	40µg/ml	60µg/ml	80µg/ml	100µg/ml	120µg/ml
	absorbance					
400	0.0406	0.1139	0.1005	0.1614	0.2434	0.2693
402	0.0408	0.1136	0.1032	0.1658	0.2485	0.2721
404	0.0413	0.1131	0.106	0.1707	0.2536	0.2754
406	0.0418	0.1128	0.1092	0.176	0.2589	0.2788
408	0.0424	0.1129	0.1126	0.1815	0.2647	0.2827
410	0.0432	0.1129	0.1164	0.1877	0.271	0.287
412	0.0442	0.1131	0.1204	0.194	0.2772	0.2916
414	0.0453	0.1137	0.1248	0.2005	0.2841	0.2965
416	0.0466	0.1142	0.1292	0.2074	0.291	0.3018
418	0.0477	0.1149	0.1336	0.2139	0.2977	0.3071
420	0.0491	0.1159	0.1383	0.2207	0.3046	0.313
422	0.0502	0.1167	0.1429	0.2275	0.3112	0.319
424	0.0515	0.1181	0.1475	0.2339	0.3177	0.3252
426	0.0526	0.1193	0.1518	0.2402	0.324	0.3319
428	0.0536	0.1205	0.156	0.2459	0.3299	0.3385
430	0.0544	0.1219	0.1601	0.2516	0.3355	0.3457
432	0.0552	0.1234	0.164	0.2568	0.341	0.3536
434	0.0558	0.1251	0.1678	0.2619	0.3463	0.3623
436	0.0562	0.1269	0.1712	0.2664	0.3513	0.3717
438	0.0564	0.1289	0.1747	0.2708	0.3565	0.3822
440	0.0567	0.1315	0.1786	0.2757	0.3626	0.395
442	0.0568	0.134	0.1827	0.2811	0.3694	0.4091
444	0.0569	0.1372	0.1874	0.287	0.3774	0.4258
446	0.057	0.1413	0.1928	0.294	0.3872	0.4451
448	0.0572	0.1455	0.199	0.3024	0.3984	0.4665
450	0.0576	0.1505	0.2064	0.3123	0.4122	0.4913
452	0.0582	0.1564	0.2151	0.324	0.4281	0.5188
454	0.0591	0.1631	0.2253	0.3378	0.4468	0.5495
456	0.0604	0.1708	0.2371	0.3538	0.4685	0.5836
458	0.0621	0.1791	0.2498	0.3709	0.4915	0.6185
460	0.0643	0.1881	0.2643	0.3909	0.5181	0.6581
462	0.0666	0.1976	0.2796	0.4118	0.5459	0.6987
464	0.0694	0.2084	0.2969	0.4353	0.5771	0.7425
466	0.0727	0.2199	0.3153	0.4606	0.6103	0.789
468	0.076	0.2319	0.335	0.4877	0.6459	0.838
470	0.0797	0.2443	0.355	0.5152	0.681	0.8846
472	0.0835	0.2569	0.3759	0.5441	0.7176	0.9322

474	0.0878	0.2703	0.3981	0.5752	0.7558	0.9801
476	0.0919	0.2823	0.4196	0.605	0.7922	1.0221
478	0.0978	0.2946	0.4421	0.6364	0.8289	1.062
480	0.1031	0.3052	0.4633	0.666	0.8613	1.0921
482	0.1091	0.3139	0.4831	0.6925	0.8866	1.1081
484	0.1148	0.3213	0.5017	0.72	0.9193	1.1408
486	0.1202	0.3248	0.5149	0.7381	0.9334	1.1425
488	0.1253	0.3261	0.5261	0.7546	0.9478	1.1452
490	0.1289	0.3221	0.5296	0.7589	0.9428	1.1208
492	0.131	0.3158	0.5288	0.7593	0.9381	1.1025
494	0.1306	0.3033	0.5183	0.7456	0.9128	1.0588
496	0.1273	0.2853	0.4973	0.7173	0.8687	0.9918
498	0.1218	0.2654	0.4708	0.6837	0.8233	0.928
500	0.1142	0.2408	0.4353	0.6361	0.7592	0.8441
502	0.1045	0.2145	0.3933	0.5803	0.6863	0.7512
504	0.0946	0.1904	0.351	0.5248	0.6178	0.6671
506	0.0841	0.167	0.3079	0.467	0.5468	0.5842
508	0.0747	0.1464	0.2671	0.4122	0.4812	0.5093
510	0.0664	0.1296	0.2324	0.3648	0.4259	0.4486
512	0.0595	0.116	0.2031	0.3239	0.3785	0.3986
514	0.0533	0.1052	0.1777	0.2884	0.3385	0.3583
516	0.0491	0.0973	0.1582	0.2606	0.3072	0.328
518	0.0457	0.0904	0.1419	0.2369	0.2807	0.3036
520	0.0428	0.0849	0.1297	0.2188	0.2604	0.2855
522	0.0397	0.0809	0.1191	0.2019	0.2422	0.2699
524	0.0376	0.0765	0.1096	0.188	0.2265	0.2564
526	0.0357	0.0732	0.102	0.1757	0.2129	0.2444
528	0.0334	0.0694	0.0945	0.1633	0.1987	0.2312
530	0.0313	0.0654	0.0887	0.1537	0.1867	0.2189
532	0.0286	0.0608	0.0805	0.1404	0.1719	0.2023
534	0.0256	0.0563	0.0732	0.1288	0.1568	0.1849
536	0.0231	0.0521	0.0658	0.1175	0.1423	0.167
538	0.0205	0.0467	0.0588	0.1068	0.1284	0.1497
540	0.0186	0.0432	0.0524	0.0957	0.1154	0.1327
542	0.0167	0.0388	0.0473	0.0882	0.1045	0.1189
544	0.0151	0.0362	0.0428	0.0813	0.0955	0.1073
546	0.0131	0.0331	0.0385	0.0746	0.0866	0.0962
548	0.0126	0.0313	0.0355	0.0697	0.0806	0.0884
550	0.0123	0.0297	0.0335	0.0655	0.0747	0.0812
552	0.0104	0.0283	0.0295	0.0613	0.0701	0.0758
554	0.0101	0.0272	0.0283	0.058	0.0666	0.0717
556	0.0094	0.026	0.0268	0.056	0.0629	0.0685
558	0.0101	0.026	0.0262	0.0545	0.061	0.0659
560	0.0101	0.0254	0.0256	0.0537	0.0599	0.0648
562	0.0093	0.0244	0.0247	0.0515	0.0575	0.0613
564	0.0091	0.0243	0.0231	0.0504	0.0556	0.0602
566	0.0086	0.024	0.0228	0.0496	0.0539	0.0588
568	0.0089	0.0239	0.0227	0.049	0.0534	0.0579
570	0.0089	0.0236	0.0225	0.0482	0.052	0.0562
572	0.0091	0.0232	0.0221	0.0474	0.0515	0.0552
574	0.0082	0.022	0.0207	0.0464	0.0503	0.054
576	0.009	0.0225	0.0216	0.0463	0.0499	0.054
578	0.0087	0.0216	0.0212	0.046	0.0487	0.0532
580	0.0084	0.0206	0.0195	0.0448	0.0475	0.0513
582	0.0087	0.0209	0.02	0.0453	0.0475	0.0508
584	0.0075	0.0206	0.0188	0.0439	0.0457	0.0491
586	0.0084	0.0206	0.0194	0.0435	0.0455	0.0483
588	0.0079	0.0197	0.0168	0.0415	0.0437	0.0472

590	0.0074	0.0199	0.0181	0.0418	0.0436	0.0468
592	0.007	0.0184	0.0178	0.0407	0.0427	0.0456
594	0.0077	0.0201	0.0181	0.0416	0.0432	0.046
596	0.0073	0.0179	0.0164	0.0396	0.0415	0.0445
598	0.0064	0.018	0.0166	0.0397	0.0408	0.0431
600	0.0073	0.0177	0.0168	0.0402	0.0405	0.0427

Fig. S6a PL spectra

	SiNPs	GP-ICG-SiNPs
Wavelength	Intensity	
430	6280000	4450000
431	6470000	4630000
432	6680000	4810000
433	6910000	4980000
434	7090000	5160000
435	7290000	5320000
436	7480000	5510000
437	7690000	5670000
438	7870000	5860000
439	8080000	6030000
440	8250000	6210000
441	8450000	6380000
442	8610000	6530000
443	8760000	6690000
444	8930000	6830000
445	9100000	6990000
446	9250000	7150000
447	9380000	7300000
448	9560000	7460000
449	9710000	7600000
450	9840000	7730000
451	9970000	7890000
452	10100000	8030000
453	10200000	8180000
454	10400000	8300000
455	10500000	8430000
456	10600000	8580000
457	10700000	8690000
458	10800000	8810000
459	10900000	8940000
460	11000000	9040000
461	11100000	9150000
462	11200000	9250000
463	11300000	9340000
464	11400000	9430000
465	11400000	9510000
466	11500000	9620000
467	11600000	9680000
468	11600000	9760000
469	11700000	9830000
470	11700000	9870000
471	11800000	9930000
472	11800000	9980000
473	11800000	10000000
474	11800000	10100000

475	11800000	10100000
476	11800000	10100000
477	11800000	10100000
478	11800000	10200000
479	11800000	10200000
480	11800000	10200000
481	11800000	10200000
482	11800000	10200000
483	11800000	10200000
484	11800000	10200000
485	11800000	10200000
486	11800000	10200000
487	11700000	10300000
488	11700000	10300000
489	11700000	10300000
490	11700000	10300000
491	11700000	10300000
492	11700000	10300000
493	11700000	10300000
494	11700000	10300000
495	11700000	10300000
496	11600000	10300000
497	11600000	10200000
498	11600000	10200000
499	11600000	10200000
500	11500000	10200000
501	11500000	10200000
502	11500000	10200000
503	11500000	10200000
504	11400000	10200000
505	11400000	10100000
506	11400000	10100000
507	11300000	10100000
508	11300000	10100000
509	11300000	10000000
510	11200000	10000000
511	11200000	9970000
512	11100000	9960000
513	11100000	9920000
514	11000000	9870000
515	11000000	9840000
516	10900000	9800000
517	10900000	9770000
518	10800000	9740000
519	10800000	9680000
520	10700000	9650000
521	10700000	9620000
522	10600000	9560000
523	10600000	9520000
524	10500000	9460000
525	10500000	9420000
526	10400000	9370000
527	10300000	9330000
528	10300000	9260000
529	10200000	9220000
530	10200000	9140000
531	10100000	9110000
532	10000000	9050000

533	9970000	8970000
534	9910000	8930000
535	9850000	8870000
536	9760000	8790000
537	9690000	8730000
538	9640000	8660000
539	9550000	8610000
540	9480000	8540000
541	9400000	8450000
542	9320000	8380000
543	9210000	8310000
544	9130000	8230000
545	9080000	8170000
546	9000000	8070000
547	8920000	7990000
548	8820000	7920000
549	8730000	7840000
550	8650000	7750000
551	8560000	7650000
552	8470000	7580000
553	8380000	7490000
554	8290000	7410000
555	8190000	7310000
556	8100000	7230000
557	8000000	7130000
558	7910000	7040000
559	7820000	6970000
560	7730000	6880000
561	7630000	6790000
562	7560000	6690000
563	7430000	6610000
564	7350000	6520000
565	7260000	6420000
566	7170000	6350000
567	7080000	6250000
568	6970000	6170000
569	6880000	6050000
570	6800000	5980000
571	6690000	5910000
572	6600000	5800000
573	6510000	5710000
574	6410000	5640000
575	6320000	5540000
576	6240000	5450000
577	6130000	5360000
578	6050000	5270000
579	5980000	5200000
580	5870000	5100000
581	5790000	5030000
582	5700000	4930000
583	5600000	4860000
584	5500000	4760000
585	5420000	4700000
586	5330000	4620000
587	5250000	4560000
588	5180000	4480000
589	5080000	4410000
590	4980000	4320000

591	4920000	4270000
592	4830000	4200000
593	4740000	4130000
594	4640000	4060000
595	4580000	3990000
596	4490000	3930000
597	4400000	3860000
598	4330000	3800000
599	4270000	3750000
600	4180000	3690000
601	4110000	3630000
602	4030000	3560000
603	3950000	3510000
604	3860000	3430000
605	3800000	3370000
606	3720000	3310000
607	3670000	3250000
608	3590000	3180000
609	3520000	3120000
610	3440000	3060000
611	3360000	2980000
612	3300000	2920000
613	3230000	2860000
614	3160000	2800000
615	3100000	2740000
616	3030000	2670000
617	2970000	2610000
618	2910000	2540000
619	2830000	2490000
620	2790000	2430000
621	2730000	2370000
622	2650000	2320000
623	2610000	2250000
624	2540000	2200000
625	2480000	2140000
626	2430000	2080000
627	2380000	2030000
628	2320000	1990000
629	2260000	1920000
630	2200000	1870000
631	2150000	1830000
632	2100000	1770000
633	2050000	1740000
634	2010000	1690000
635	1960000	1650000
636	1920000	1610000
637	1870000	1570000
638	1830000	1530000
639	1800000	1500000
640	1770000	1460000
641	1720000	1430000
642	1680000	1390000
643	1650000	1360000
644	1610000	1320000
645	1570000	1290000
646	1530000	1260000
647	1500000	1230000
648	1460000	1190000

649	1420000	1160000
650	1380000	1130000
651	1340000	1100000
652	1320000	1070000
653	1290000	1040000
654	1250000	1010000
655	1210000	980830
656	1180000	960980
657	1150000	919960
658	1120000	899520
659	1080000	876280
660	1050000	848460
661	1020000	818580
662	999810	797510
663	967380	775140
664	936180	746620
665	914380	729110
666	885570	705000
667	860050	681860
668	826620	661590
669	816180	641450
670	787990	617740
671	765410	604180
672	743020	582160
673	721830	565600
674	694790	551050
675	680480	527340
676	660010	513050
677	641350	498230
678	619890	484250
679	602300	470080
680	582910	456980
681	571200	441010
682	544380	426110
683	531800	415370
684	510260	405190
685	503820	393640
686	487030	384740
687	467820	369880
688	453510	360920
689	439400	349230
690	426610	338620
691	411380	329650
692	398730	322570
693	386940	310600
694	376700	300950
695	362530	294820
696	348780	282530
697	338810	276150
698	328490	268220
699	316170	261490
700	305720	251400
701	299010	247050
702	289050	239070
703	280460	232040
704	268300	222660
705	263500	218770
706	253410	212600

707	240180	203090
708	239590	197520
709	226720	188120
710	220850	182600
711	212580	179060
712	204220	170970
713	201020	164450
714	194650	159990
715	187290	153060
716	180570	148780
717	174040	144400
718	166510	141500
719	164190	132070
720	158580	127160
721	152520	125140
722	144990	120390
723	141020	115480
724	139410	112840
725	133490	108380
726	129360	103170
727	122880	101010
728	121040	97640
729	116350	93760
730	112590	91380
731	108340	86960
732	104620	83710
733	104290	81620
734	101140	78120
735	95870	76430
736	94060	74740
737	91310	71220
738	86600	68220
739	84350	66140
740	81330	64380
741	80180	63240
742	77470	60070
743	75290	57420
744	72580	55840
745	70810	53140
746	67520	52510
747	67250	52270
748	64130	50600
749	63000	47040
750	59120	45320

Fig. S6b PL spectra
ICG GP-ICG-SiNPs

Wavelength	Intensity	
770	29200	35360
771	31060	37130
772	31820	38820
773	33960	39160
774	34800	41420
775	37320	43510

776	38350	48490
777	42740	49520
778	44400	50700
779	45750	54540
780	48470	56950
781	50590	60470
782	53610	63440
783	55030	66680
784	58260	69990
785	62450	72730
786	65560	75230
787	68100	79610
788	71460	84590
789	74110	87880
790	77970	91280
791	83520	96690
792	87620	100950
793	89640	105200
794	94580	108240
795	100090	115540
796	103170	120330
797	106760	125270
798	112560	129270
799	119010	132740
800	121100	135700
801	122590	138960
802	128980	141900
803	129920	144130
804	133980	146810
805	134500	149680
806	139210	153450
807	142100	155590
808	143580	157560
809	143890	158780
810	144540	159220
811	145790	159330
812	146120	158700
813	145560	158360
814	144980	157020
815	142700	156440
816	141190	155050
817	140220	153500
818	138720	150470
819	136120	146550
820	133740	143350
821	131740	140530
822	130750	137990
823	126520	135010
824	124690	133410
825	120380	129990
826	116220	125880
827	113160	120630
828	109210	116940
829	104610	111780
830	101620	109470
831	100010	104630
832	97180	100470
833	92410	96790

834	89060	93880
835	83990	90530
836	81670	86530
837	79330	81930
838	74150	80790
839	73610	75570
840	67770	73540
841	66620	68410
842	61880	67360
843	59410	61920
844	56440	60540
845	52450	56080
846	50610	53890
847	46000	50360
848	44820	46890
849	41520	44830
850	39390	42210
851	36650	40000
852	33800	37520
853	31770	34200
854	29660	32490
855	27760	29580
856	25730	28080
857	23600	24930
858	22390	23780
859	20560	21080
860	18410	20120
861	15870	17100
862	14990	15610
863	14350	15130
864	12400	13610
865	11720	12030
866	10420	11260
867	9570	10250
868	8120	8880
869	7750	8260
870	6990	7630
871	6090	6340
872	5480	6280
873	5180	5340
874	4690	4590
875	4270	4490
876	3720	3790
877	3260	3750
878	3030	2960
879	2810	3340
880	2460	2520
881	2270	2560
882	2260	2190
883	1800	1970
884	1810	1660
885	1680	1760
886	1540	1550
887	1420	1640
888	1320	1380
889	1130	1250
890	1070	1160
891	1050	1230

892	1090	1110
893	850	930
894	850	1120
895	900	880
896	870	850
897	730	860
898	700	760
899	680	670
900	660	780
901	720	780
902	690	710
903	800	610
904	600	690
905	770	440
906	670	610
907	680	510
908	450	720
909	470	480
910	650	570
911	590	630
912	600	440
913	570	720
914	440	520
915	520	520
916	550	550
917	480	610
918	600	540
919	580	550
920	460	400
921	430	440
922	500	520
923	490	430
924	310	400
925	520	510
926	490	550
927	420	470
928	430	450
929	390	510
930	500	490
931	470	440
932	470	540
933	530	500
934	330	560
935	430	510
936	360	450
937	500	450
938	500	470
939	500	430
940	430	470
941	380	450
942	410	430
943	390	540
944	530	430
945	380	370
946	430	470
947	440	470
948	440	390
949	320	520

950	380	520
951	360	610
952	340	270
953	400	410
954	400	430
955	440	460
956	420	420
957	280	430
958	390	480
959	390	360
960	380	390
961	360	460
962	350	400
963	450	520
964	370	460
965	330	480
966	420	490
967	410	340
968	320	360
969	460	360
970	440	550
971	440	540
972	380	510
973	410	410
974	240	420
975	380	420
976	480	480
977	270	370
978	380	340
979	390	490
980	450	500
981	490	320
982	410	400
983	370	620
984	390	390
985	420	510
986	460	430
987	330	420
988	340	370
989	380	380
990	290	450
991	360	520
992	380	530
993	590	400
994	490	530
995	450	540
996	580	560
997	480	680
998	540	690
999	540	670
1000	490	620

Fig. S7 GP-ICG-SiNPs

time	temperature (°C)						
	H ₂ O	25µg/ml	50µg/ml	100µg/ml	150µg/ml	200µg/ml	400µg/ml
0s	25.4	25.3	25.6	25.8	25.5	25.6	25.7

10s	25.9	27.8	28.3	29.4	30.7	31.2	31.7
20s	26.2	29.7	31.7	32.2	33.5	34.1	34.4
30s	26.3	31.4	34.6	36.7	37.4	38.1	38.7
40s	26.4	32.8	36.5	39.1	39.5	40.1	41.3
50s	26.6	34.2	38.6	40.7	41.6	42.3	42.9
1min	26.7	35.3	40.1	42.3	43.4	44.0	44.8
70s	26.8	36.7	42.3	43.4	44.6	45.3	45.7
80s	26.9	37.5	44.8	44.7	46.2	46.7	46.8
90s	27.0	38.4	46.5	46.0	48.5	48.9	49.2
100s	27.1	38.4	47.8	47.1	49.5	49.3	49.8
110s	27.2	39.5	48.1	48.1	50.4	50.7	50.8
2min	27.3	39.9	49.4	49.2	51.5	51.2	51.9
130s	27.5	40.2	50.1	49.7	52.6	53.4	53.5
140s	27.4	40.5	51.3	50.5	54.1	54.5	54.3
150s	27.6	40.7	51.8	51.0	56.3	56.2	55.8
160s	27.8	40.8	52.0	51.7	57.4	57.9	56.5
170s	27.9	40.9	52.4	52.4	58.7	58.5	58.3
3min	28.1	41.0	52.5	53.1	59.5	59.2	59.8
190s	28.2	41.2	52.7	53.7	59.9	59.9	59.7
200s	28.4	41.2	52.8	54.3	60.3	60.0	60.1
210s	28.6	41.4	52.9	54.7	60.8	60.5	60.7
220s	28.8	41.4	52.8	55.7	61.5	61.1	61.2
230s	28.9	41.4	52.9	55.9	61.7	61.4	61.4
4min	29.1	41.5	52.7	56.3	62.0	61.6	61.5
250s	29.2	41.5	52.6	56.8	62.1	61.9	61.8
260s	29.3	41.4	52.7	57.1	62.3	62.0	62.1
270s	29.3	41.3	52.8	57.5	62.5	62.2	62.2
280s	29.4	41.4	52.5	57.9	62.7	62.3	62.5
290s	29.5	41.4	52.6	58.0	62.9	62.5	62.4
5min	29.7	41.3	52.7	58.4	63.0	62.6	62.6
310s	29.9	41.2	52.5	58.8	62.9	62.5	62.8
320s	30.0	41.1	52.4	59.0	62.9	62.4	62.9
330s	30.1	41.2	52.6	59.2	62.8	62.6	63.1
340s	30.2	41.3	52.4	59.5	62.9	63.0	63.2
350s	30.3	41.4	52.3	59.7	63.0	63.2	63.2
6min	30.4	41.5	52.5	59.8	62.9	63.2	63.1
370s	30.4	41.3	52.5	59.9	62.8	63.1	63.3
380s	30.5	41.4	52.4	60.1	62.6	63.0	63.4
390s	30.6	41.5	52.5	60.3	62.8	63.2	63.4
400s	30.7	41.3	52.5	60.4	62.7	63.4	63.5
410s	30.8	41.2	52.6	60.6	62.9	63.5	63.7
7min	30.9	41.4	52.5	60.3	63.1	63.4	63.8
430s	30.8	41.5	52.6	60.5	63.2	63.6	63.8
440s	31.0	41.3	52.4	60.4	63.4	63.7	63.9
450s	31.0	41.3	52.6	60.3	63.6	63.8	64.0
460s	31.1	41.4	52.7	60.2	63.7	63.9	64.2
470s	31.2	41.2	52.6	60.3	63.6	64.1	64.4
8min	31.1	41.2	52.7	60.5	63.5	64.0	64.5
490s	31.3	41.3	52.8	60.3	63.7	64.1	64.6
500s	31.4	41.1	52.7	60.4	63.6	64.2	64.6
510s	31.6	41.2	52.9	60.7	63.7	64.1	64.7
520s	31.7	41.3	52.8	60.8	63.8	64.1	64.8
530s	31.6	41.4	52.7	60.9	63.7	64.2	64.9
9min	31.8	41.4	52.8	61.0	63.8	64.3	64.8
550s	31.7	41.3	52.9	61.2	63.9	64.5	65.1
560s	31.7	41.5	53.0	61.3	63.8	64.6	65.2
570s	31.6	41.5	52.8	61.2	63.9	64.5	65.2
580s	31.8	41.4	52.9	61.1	63.7	64.6	65.3

590s	31.8	41.5	52.9	61.3	63.8	64.7	65.4
10min	32	41.5	53.0	61.3	64.0	64.5	65.5

Fig. S8b

time (h)	The bacteria cell viability (%)					
	Trojan VNP			Trojan EC		
6	91	94	96	97	89	93
12	96	90	88	95	93	87
24	89	87	85	87	101	98

Fig. 13a

time (day)	TEER(Ω/cm^2)		
1	30	42	35
2	55	61	68
3	93	90	103
4	132	126	143
5	175	170	186
6	244	231	236
7	247	235	239
8	224	233	237

Fig. 14b

time(h)	Intensity							
	PBS		GP-ICG-SiNPs		Trojan EC		Trojan VNP	
0	1.229	1.316	1.333	1.132	1.27	1.307	1.346	1.165
12	1.32	1.149	2.043	1.821	8.9	7.73	10.77	8.797
24	1.244	1.293	1.421	1.579	4.023	5.262	5.82	6.538

