

Supporting Information

Prussian Blue Nanospheres Synthesized in Deep Eutectic Solvents

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Table 1S. Comparison of the performance of other glucose biosensors.

Shape	Size (nm)	Electrode	Sensitivity ($\mu\text{A}\cdot\text{mM}^{-1}$)	Linear Range ($\times 10^{-3} \text{ mol}\cdot\text{L}^{-1}$)	Detection Limit ($\times 10^{-6} \text{ mol}\cdot\text{L}^{-1}$)	Ref.
Cage	1	GOD/PB-MSCF	0.047	1.0 – 12.0	20.0	[1]
Cubic	35	CS-PB@MWNTs/H-Pt Co/GOD/Nafion	3.0	0.003 – 3.6	0.85	[2]
Cubic	30	GOD-PB-SWNTs/CS	0.44	0.5 – 13.5	5	[3]
Clusters	50 – 200	PB/CTAB/AuNPs	2	0.02 – 0.4	7	[4]
Flake	20 – 40	PDA/PB/MWNTs	N/A	0.01 – 2.5	5	[5]
Tube	250	GOD/PB nanotube array	N/A	0.005 – 8.0	1.0	[6]
Particle	10 – 20	ODTA/PB/GOD LB	0.06	1.0 – 16.0	0.1	[7]
Sphere	20	GOD/PB/MWNTs	N/A	1.0 – 8.0	12.7	[8]
Sphere	100	GOD/PGNs/OSiFPB	9.8	0.006 – 1.3	2.0	[9]
Sphere	10	GOD-PB NSs/PVA	61.7	0.0009 – 0.12	0.3	This work

MSCF: mesocellular silica-carbon foam; MWNTs: multiwalled carbon nanotubes; PVP: poly(4-vinylpyridine); PGNs: positively charged gold nanoparticles; OSiFPB: organosilica nanosphere functionalized Prussian blue; CS: chitosan; H-PtCo: hollow PtCo (H-PtCo); SWNTs/CS: single-walled carbon nanotubes; CTAB: cetyltrimethylammonium bromide; AuNPs: Au nanoparticles; ODTA: octadecyltrimethylammonium; N/A, not available.

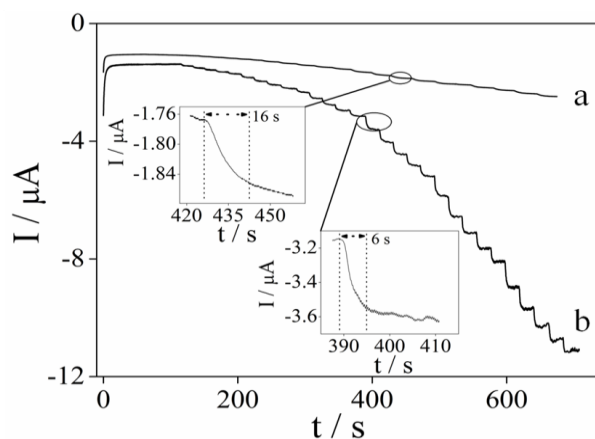


Figure 1S. Current-time responses of the (a) GOD-PB NSs/PVA/GCE and (b) GOD-PB MPs/PVA/GCE with successive addition of glucose into pH 7.0 0.05 M PBS (0.1 M KCl), applied potential: 0.1 V.

References

- [1] S. Wu, Y. Y. Liu, J. Wu, H. X. Ju, *Electrochem. Commun.* **2008**, *10*, 397.
- [2] X. Che, R. Yuan, Y. Q. Chai, J. J. Li, Z. J. Song, W. J. Li, *Electrochim. Acta* **2010**, *55*, 5420.
- [3] W. Zhang, L. L. Wang, N. Zhang, G. F. Wang, B. Fang, *Electroanalysis* **2009**, *21*, 2325.
- [4] J. Du, Y. F. Wang, X. B. Zhou, Z. H. Xue, X. H. Liu, K. Sun, X. Q. Lu, *J. Phys. Chem. C* **2010**, *114*, 14786.
- [5] J. X. Zeng, W. Z. Wei, X. Y. Liu, Y. Wang, G. M. Luo, *Microchim. Acta* **2008**, *160*, 261.
- [6] Y. Z. Xian, Y. Hu, F. Liu, Y. Xian, L. J. Feng, L. T. Jin, *Biosens. Bioelectron.* **2007**, *22*, 2827.
- [7] H. Ohnuki, T. Saiki, A. Kusakari, H. Endo, M. Ichihara, M. Izumi, *Langmuir* **2007**, *23*, 4675.
- [8] L. D. Zhu, J. L. Zhai, Y. N. Guo, C. Y. Tian, R. L. Yang, *Electroanalysis* **2006**, *18*, 1842.
- [9] W. J. Li, R. Yuan, Y. Q. Chai, *Talanta* **2010**, *82*, 367.