## Controllable synthesis of silver nanoparticles in hyperbranched macromolecule templates for printed flexible electronics

Zhiliang Zhang,\*ab and Huayong Zhanga

<sup>1</sup>Research Center of Analysis and Test, Qilu university of technology, Jinan 250353, China <sup>2</sup>Beijing National Laboratory for Molecular Sciences (BNLMS), Institute of Chemistry, Chinese Academy of Sciences, Beijing 100190, China.

\*E-mail: zhzhl@iccas.ac.cn

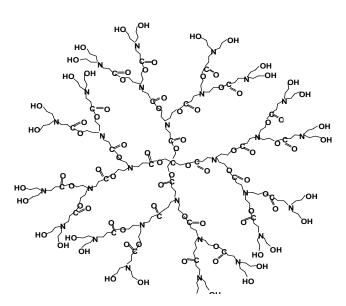
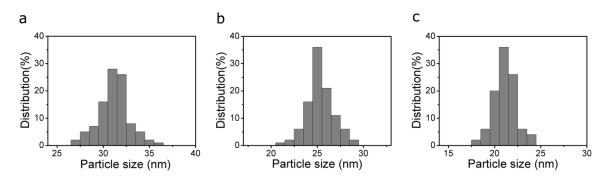
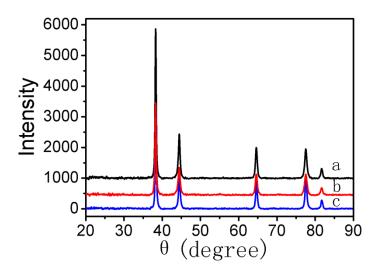


Fig.S1 Structure of HBMs with pentaerythritol as core.



**Fig. S2** The size distribution histograms of synthesized AgNPs encapsulated with G4 (a), G5 (b) and G6 HBMs (c) respectively.



**Fig.S3** XRD spectra of the synthesized AgNPs encapsulated with G4 (curve a), G5(curve b) and G6 HPMs(curve c) respectively.

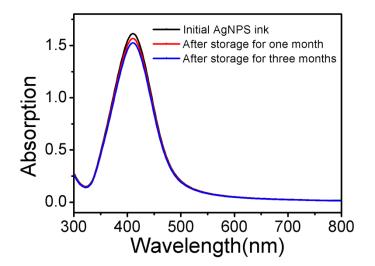


Fig.S4 The plasmon absorption band of AgNPs conductive ink at different storage time.

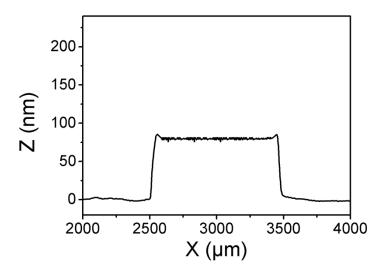


Fig. S5 The cross-sectional profile of the printed electrocircuits.