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Education

- 01/2008-06/2009 *Postdoctoral Fellow*, Northwestern University, USA. (Advisor: Prof. Chad A. Mirkin)
10/2004-10/2007 *Ph.D.* in Chemistry, University of Cambridge, UK. (Advisor: Prof. Wilhelm T. S. Huck)
09/1999-07/2003 *B. Eng.* in Polymer Materials and Engineering, Tsinghua University, China.

Professional Experience

- 06/2009-present *Assistant Professor*, The Hong Kong Polytechnic University, Hong Kong SAR
10/2003-08/2004 *Research Assistant*, The Hong Kong Polytechnic University, Hong Kong SAR

Awards and Honors

EPSRC Dorothy Hodgkin Postgraduate Award (2005-2007), Chinese Government Award (2006), Cambridge Display Technology (CDT) Studentship (2004-2007), Honored Graduate of Tsinghua University (2003), "SK" Award (2002), "12·9" Award (2001), Tsinghua Scholarship (2001).

Conference presentations

1. "Topography Printing to Locally Control Wettability". *ACS Summer Meeting*, San Francisco, CA, Sept. 2006.
2. "Uniaxial Alignment of Liquid-Crystalline Conjugated Polymers by Nanoconfinement". *MRS Spring Meeting*, San Francisco, CA, April 2007.
3. "Polymer Pen Lithography". *WACBE Meeting*, Hong Kong, July 2009. (invited speaker)

Patents

1. "Electrical Devices and Methods of Manufacturing the Same". J. Burroughes, J. Halls, R. H. Friends, W. T. S. Huck, Z. Zheng, GB2437328-A, WO2007128965-A1; US patent, pending.
2. "Multi-Scale Soft Pen Lithography". C. A. Mirkin, F. Huo, Z. Zheng, G. Zheng, US patent, pending.
3. "Dip-Pen Nanolithography Generated Metal Photomask". C. A. Mirkin, J.-W. Jang, R. G. Sanedrin, A. Senesi, Z. Zheng, US patent, pending.
4. "Multiplexed Protein Arrays Made by Polymer Pen Lithography". C. A. Mirkin, Z. Zheng, F. Huo, W. L. Daniel, L. R. Giam, US patent, pending.

Funded research grants

1. Li, Y.; Huck, W. T. S.; Zheng, Z.; "Controlled Assembly of Functional Polymer Brushes on Cotton Fibers", CERG (2008/2009), The Hong Kong Polytechnic University, HK\$ 409,231.
2. Li, Y.; Huck, W. T. S.; Zheng, Z.; "Self-Assembled Textile Biomaterials and Applications", NARG (2008/2009), The Hong Kong Polytechnic University, HK\$ 1,000,000.

Publications

15. "Force- and Time- Dependent Size and Shape Control in Molecular Printing via Polymer Pen Lithography (PPL)". X. Liao, A. B. Braunschweig, Z. Zheng, F. Huo, C. A. Mirkin, *Small in press*.

14. "Multiplexed Protein Arrays Enabled by Polymer Pen Lithography: Addressing the Inking Challenge". Z. Zheng, W. L. Daniel, L. R. Giam, F. Huo, A. J. Senesi, G. Zheng, C. A. Mirkin, *Angew. Chem. Int. Ed.* **in press**.
13. "Binary Oppositely Charged Polyelectrolyte Brushes for Highly Selective Electroless Deposition of Bimetallic Patterns". Z. Liu, H. Hu, B. Yu, M. Chen, Z. Zheng*, F. Zhou, *Electrochem. Commun.* **2009**, *11*, 492.
12. "Dip-Pen Nanolithography Generated Metal Photomask". J.-W. Jang, R. G. Sanedrin, A. Senesi, Z. Zheng, X. Chen, S. Hwang, L. Huang, C. A. Mirkin, *Small* **2009**, *5*, 1850.
11. "Polymer Pen Lithography". F. Huo, Z. Zheng, G. Zheng, L. R. Giam, H. Zhang, C. A. Mirkin, *Science* **2008**, *321*, 1658.
10. "Topographically Flat, Chemically Patterned PDMS Stamps Made by Dip-Pen Nanolithography". Z. Zheng, J.-W. Jang, G. Zheng, C. A. Mirkin, *Angew. Chem. Int. Ed.* **2008**, *47*, 9951.
9. "Surface-Directed Phase Separation of Conjugated Polymer Blends for Efficient Light-Emitting Diodes". K.-H. Yim, Z. Zheng, R. H. Friend, W. T. S. Huck, J.-S. Kim, *Adv. Funct. Mater.* **2008**, *18*, 2897.
8. "Efficient Conjugated-Polymer Optoelectronic Devices Fabricated by Thin-Film Transfer-Printing Technique". K.-H. Yim, Z. Zheng, Z. Liang, R. H. Friend, W. T. S. Huck, J.-S. Kim, *Adv. Funct. Mater.* **2008**, *18*, 1012.
7. "Polarization Anisotropy Dynamics for Thin Films of a Conjugated Polymer Aligned by Nanoimprinting". S. A. Schmid, K.-H. Yim, M. H. Chang, Z. Zheng, W. T. S. Huck, R. H. Friend, J.-S. Kim, L. M. Herz, *Phys. Rev. B* **2008**, *77*, 115338.
6. "Uniaxial Alignment of Liquid-Crystalline Conjugated Polymers by Nanoconfinement". Z. Zheng, K.-H. Yim, M. S. M. Saifullah, J.-S. Kim, R. H. Friend, M. E. Welland, W. T. S. Huck, *Nano Lett.* **2007**, *7*, 987.
5. "Multi-Component Polymer Brushes". F. Zhou, Z. Zheng, B. Yu, W. Liu, W. T. S. Huck, *J. Am. Chem. Soc.* **2006**, *128*, 16253.
4. "Polyelectrolyte Brushes as Efficient Ultrathin Platforms for Site-Selective Copper Electroless Deposition". O. Azzaroni, Z. Zheng, Z. Yang, W. T. S. Huck, *Langmuir* **2006**, *22*, 6730.
3. "Topography Printing to Locally Control Wettability". Z. Zheng, O. Azzaroni, F. Zhou, W. T. S. Huck, *J. Am. Chem. Soc.* **2006**, *128*, 7730.
2. "Polyelectrolyte Brushes as Ink Nanoreservoirs for Microcontact Printing of Ionic Species with Poly(dimethyl siloxane) Stamps". O. Azzaroni, S. E. Moya, A. A. Brown, Z. Zheng, E. Donath, W. T. S. Huck, *Adv. Funct. Mater.* **2006**, *16*, 1037.
1. "Transfer Printing Water-Soluble Inorganic Salts". Z. Zheng, O. Azzaroni, M. E. Vickers, W. T. S. Huck, *Adv. Funct. Mater.* **2006**, *16*, 805.