

Representative Publications

- Lee TMH. Over-the-counter biosensors: past, present, and future. *Sensors*, 2008, accepted.
- Luo X, Lee TMH, Hsing, IM. Immobilization-free sequence-specific electrochemical detection of DNA using ferrocene-labeled peptide nucleic acid. *Analytical Chemistry*, 2008, accepted.
- Yeung SW, Lee TMH, Hsing, IM. Electrochemistry-based real-time PCR on a microchip. *Analytical Chemistry*, 2008, vol. 80, 363-368.
- Zhao W, Lee TMH, Hsing IM. Tunable stabilization of gold nanoparticles in aqueous solution by mononucleotides. *Langmuir*, 2007, vol. 23, 7143-7147.
- Yeung SW, Lee TMH, Hsing, IM. A DNA biochip for on-the-spot multiplexed pathogen identification, *Nucleic Acids Research*, 2006, vol. 34, e118.
- Yeung SW, Lee TMH, Hsing, IM. Electrochemical real-time polymerase chain reaction. *Journal of the American Chemical Society*, 2006, vol. 128, 13374-13375.
- Lee TMH, Hsing, IM. DNA-based bioanalytical microsystems for handheld device application. *Analytica Chimica Acta*, 2006, vol. 556, 26-37.
- Cai H, Lee TMH, Hsing IM. Label-free protein recognition using an aptamer-based impedance measurement assay. *Sensors & Actuators B*, 2006, vol. 114, 433-437.
- Kawde AN, Rodriguez MC, Lee TMH, Wang J. Label-free bioelectronic detection of aptamer-protein interactions. *Electrochemistry Communications*, 2005, vol. 7, 537-540.
- Liu G, Lee TMH, Wang J. Nanocrystal-based bioelectronic coding of single nucleotide polymorphisms. *Journal of the American Chemical Society*, 2005, vol. 127, 38-39.
- Lee TMH, Cai H, Hsing IM. Effects of gold nanoparticle and electrode surface properties on electrocatalytic silver deposition for electrochemical DNA hybridization detection. *Analyst*, 2005, vol. 130, 364-369.
- Lee TMH, Cai H, Hsing IM. Gold nanoparticle-catalyzed silver electrodeposition on an indium tin oxide electrode and its application in DNA hybridization transduction. *Electroanalysis*, 2004, vol. 16, no. 19, 1628-1631.
- Lee TMH, Carles MC, Hsing IM. Microfabricated PCR-electrochemical device for simultaneous DNA amplification and detection. *Lab on a Chip*, 2003, vol. 3, 100-105.
- Lee TMH, Li LL, Hsing IM. Enhanced electrochemical detection of DNA hybridization based on electrode surface modification. *Langmuir*, 2003, vol. 19, 4338-4343.
- Lee TMH, Hsing IM. Sequence-specific electrochemical detection of asymmetric PCR amplicons of traditional Chinese medicinal plant DNA. *Analytical Chemistry*, 2002, vol. 74, 5057-5062.
- Trau D, Lee TMH, Lao AIK, Lenigk R, Hsing IM, Ip NY, Carles MC, Sucher NJ. Genotyping on a complementary metal oxide semiconductor silicon polymerase chain reaction chip with integrated DNA microarray. *Analytical Chemistry*, 2002, vol. 74, 3168-3173.
- Lee TMH, Hsing IM, Lao AIK, Carles MC. A miniaturized DNA amplifier: its application in traditional Chinese medicine. *Analytical Chemistry*, 2000, vol. 72, 4242-4247.
- Lee TMH, Hsing IM, Liaw CYN. An improved anodic bonding process using pulsed voltage technique. *Journal of Microelectromechanical Systems*, 2000, vol. 9, no. 4, 469-473.