Bibliography

- Scientific Computing World. 2003. Fuel cell design: Fuel for thought on cars of the future [online]. Available: http://www.scientific-computing.com/ features/feature.php?feature_id=126 [2011, June 10].
- [2] Bazylak A, *Liquid water visualization in PEM fuel cells: A review*. International Journal of Hydrogen Energy 2009; 34: 3845-3857.
- [3] Spernjak D, Prasad A and Advani S, *In situ comparison of water content and dynamics in parallel, single-serpentine, and interdigitated flow fields of polymer electrolyte membrane fuel cells.* Journal of Power Source 2010; 195: 3553-3568.
- [4] Sugiura K, Nakata M, Yodo T, et al., Evaluation of a cathode gas channel with a water absorption layer/waste channel in a PEFC by using visualization technique. Journal of Power Source 2005; 145: 526-533.
- [5] Buaphad P, Investigation of water buildup on the gas diffusion layer of proton exchange membrane fuel cell. Bachelor' Independent Study (Physics), Chiang Mai University, 2008.
- [6] THz handbook. 2007. *Introduction* [Online]. Available: http://thzhandbook. com/ index.php/Introduction [2010, August 16].
- [7] Auston D, *Picosecond optoelectronic switching and gating in silicon*. Applied Physics Letters 1975; 26: 101-103.
- [8] Humphreys K, Loughran J, Gradziel M, et. al., Medical applications of Terahertz Imaging: a Review of Current Technology and Potential Applications in Biomedical Engineering. Conference of Proceeding IEE Engineering in Medicine & Biology Society 2004; 2: 1302-1305.

- [9] Lee Y, Principles of Terahertz Science and Technology, 1st ed, New York: Springer Science+Bussiness Media, 2009.
- [10] Hu B and Nuss M, *Imaging with terahertz waves*. Optics Letters 1995; 20: 1716-1718.
- [11] Woods N and Wiedemann H, The relationship between dynamics and structure in the far infrared absorption spectrum of liquid water. Chemical Physics Letters 2004; 393: 159-165.
- Thamboon P, Buaphad P, Thongbai C, et al., Investigation of water distribution in proton exchange membrane fuel cells via Terahertz imaging. Nuclear Instruments and Methods in Physics Research A 2011; 637: S161-S164.
- [13] Reid C, Spectroscopic methods for medical diagnosis at terahertz wavelengths. Doctor of Philosophy's thesis. University College London, London, England, 2009.
- [14] Orfanidis S, *Electromagnetic Waves and Antennas*. Rutgers University [online]. Available: www.ece.rutgers.edu/~orfanidi/ewa [1999-2010].
- [15] RefractiveIndex.INFO, *Refractive index database* [Online]. Available: http:// refractiveindex.info/ [2010, October 20].
- [16] Tanabe T, Nakada Y, Kamijo F, Sakata A, Far-Infrared Absorption Measurements of Graphite, Amorphous Carbon, and Silicon Carbide. Astronomical Society of Japan 1983; 35: 397-404.
- [17] SIGMA-ALDRICH, nafion [Online]. Avialable: http://www.sigmaaldrich.com /catalog/ProductDetail.do?lang=en&N4=70160|ALDRICH&N5=SEARCH_C ONCAT_PNO|BRAND_KEY&F=SPEC [2010, October 20].
- [18] Ulrich R, Far-infrared properties of metallic mesh and its complementary structure. Infrared Physics 1967; 7: 37-55.

- [19] Holah G and Smith S, *Far infrared interference filters*. Journal of Physics E: Scientific Instruments 1977; 10: 101-111.
- [20] Spiegel C, "Fuel cell thermodynamics" in *PEM fuel cell modeling and simulation using MATLAB*[®]. pp 15-48, Elsevier Inc. 2008.
- [21] Kim H and Min K, Experimental investigation of dynamic responses of a transparent PEM fuel cell to step changes in cell current density with operating temperature. Journal of Mechanical Science and Technology 2008; 22: 2274-2285.
- [22] Wu H, Li X and Berg P, Numerical analysis of dynamic processes in fully humidified PEM fuel cell. International Journal of Hydrogen Energy 2007; 23: 2022-2031.
- [23] Mench M, Wang C and Ishikawa M, In situ current distribution measurements in polymer electrolyte fuel cells. Journal of the Electrochemical Society 2003; 150: A1052-A1059.
- [24] Rimjaem S, Generation of far infra-red radiation from relativistic electron beam. Doctor of Philosophy's thesis. Chiang Mai University, Chiang Mai, Thailand, 2006.
- [25] Thongbai C, Kusoljariyakul K, Rimjaem S, et al., Femtosecond electron bunches, source and characterization. Nuclear Instruments and Methods in Physics Research A 2008; 587: 130-135.
- [26] Settakorn C, Generation and use of coherent transition radiation from short electron bunches. Doctor of Philosophy's thesis. Stanford University, CA, USA, 2001.
- [27] Greffet J, Carminati R, Image Formation in Near-Field Optics, Progress in Surface Science 1997; 56: 133-237.