參考文獻

[1] Mathias Fink, "TIME-REVERSED ACOUSTICS," Scientific American, pp. 91-97 Nov. 1999.

[2] Geoffrey F. Edelmann, T. Akal, William S. Hodgkiss, Seongil Kim, William A. Kuperman, and Hee Chun Song,"An Initial Demonstration of Underwater Acoustic Communication Using Time Reversal," IEEE Journal of Oceanic Engineering, vol. 27,no. 3, 2002.

[3] Najet Chakroun, Mathias A. Fink, François Wu, "Time Reversal Processing in Ultrasonic Nondestructive Testing," IEEE Trans. Ultrason., Ferroelec., Freq. Contr, vol. 42, No. 6, pp. 1087-1097, Feb. 1995.

[4] David H. Chambers, James G. Berryman, "Time-Reversal Analysis for Scatterer Characterization," Phys. Rev. Lett. 92, 023902 (2004).

[5] Arnaud Derode, Arnaud Tourin, Mathias Fink, "Random multiple scattering of ultrasound. II. Is time reversal a self-averaging process?," Phys. Rev. E, vol. 64 036606 (2001).

[6] Arnaud Derode, Arnaud Tourin, Julien de Rosny, Mickaël Tanter, Sylvain Yon, Mathias Fink, "Taking Advantage of Multiple Scattering to Communicate with Time-Reversal Antennas," Phys. Rev. Lett. 90, 014301(2003).

[7] G. Lerosey, J. de Rosny, A. Tourin, A. Derode, G. Montaldo, M. Fink, "Time Reversal of Electromagnetic Waves," Phys. Rev. Lett., vol. 92, no. 19, 193904 (2004).

[8] Hung Tuan Nguyen, Jørgen Bach Andersen, Gert Frølund Pedersen, "The Potential Use of Time Reversal Techniques in Multiple Element Antenna Systems," IEEE Communications Lett., vol. 9, no. 1, Jan. 2005.

[9] Benjamin E. Henty, Daniel D. Stancil, "Multipath-Enabled Super-Resolution for rf and Microwave Communication using Phase-Conjugate Arrays," Phys. Rev. Lett. 93, 243904 (2004).

[10] K. S. Yee, "Numerical solution of initial boundary value problems involving Maxwell's equations in isotropic media," IEEE Trans. Antennas and Propagation, vol. AP14, pp. 302-307, May 1966.

[11] Allen Taflove, Computational Electrodynamics-The Finite-Difference Time-Domain Method 2nd, Norwood, MA: Artech House, 1995.

[12] 林振華,"電磁場與天線分析 使用時域有限差分法(FDTD)" 全華科技圖書.

[13] J. P. Berenger, "A perfectly matched layer for the absorption of electromagnetic waves", *J. Comput. Phys.*, vol.114, pp.185-200, 1994.

[14] G. Mur, "Absorbing boundary conditions for the finite-difference approximation of the time-domain electromagnetic field equations," IEEE Trans. Electromag. Compact., vo. EMC-23, pp 377-382, Nov. 1981.

[15] John B. Schneider, Christopher L. Wagner, Omar M. Ramahi, "Implementation of

Transparent Sources in FDTD Simulations," IEEE Trans. Antennas Propagat., vol. 46, no. 8, pp. 1159-1168, Aug. 1998.

[16] Bernard D.Steinberg, Harish M.Subbaram, Microwave Imaging Techniques, Wiley 1991.

[17] 張維正,"國防通資半年刊-第六期," Jul. 2005.

[18] Ph.D.Fu-Chiarng Chen, ULTRA-WIDEBAND MICROWAVE IMAGING RADAR SYSTEM, Thesis, Univ. of Illinois at Urbana-Champaign,1998.

[19] Mathias Fink, "Time Reversal of Ultrasonic Fields – Part I: Basic Principles," IEEE Trans. Ultrason., Ferroelec., Freq. Contr, vol. 39, No. 5, pp. 555-566, Sept. 1992.

[20] John David Jackson, CLASSICAL ELECTRODYNAMICS 3rd, Wiley 1998.

[21] Francois Wu, Jean-Louis Thomas, Mathias Fink, "Time Reversal of Ultrasonic Fields – Part II: Experimental Results," IEEE Trans. Ultrason., Ferroelec., Freq. Contr, vol. 39, no. 5, pp. 567-578, Sept. 1992.

[22] Didier Cassereau, Mathias Fink, "Time Reversal of Ultrasonic Fields – Part III: Theory of the Closed Time-Reversal Cavity," IEEE Trans. Ultrason., Ferroelec., Freq. Contr, vol. 39, No. 5, pp. 579-592, Sept. 1992.

[23] David K. Cheng, Field and wave electromagnetics, Addison-Wesley 1989.

[24] Matlab help "gmonopuls".

[25] Tzyh-Ghuang Ma,Shyh-Kang Jeng,"Planar Minature Tapered-Slot-Fed Annular Slot Antennas for Ultrawide-Band Radios," IEEE Trans. Antennas Propagat., vol. 53, no. 3, pp. 1194-1202, 2005.

[26] Michael R. Andrews, Partha P. Mitra, Robert deCarvalho, "Tripling the capacity of wireless communications using electromagnetic polarization," Nature, vol.409, pp.316-pp318, 2001.

[27] Claire Prada, Sébastien Manneville, Dimitri Spoliansky, Mathias Fink, "Decomposition of the time reversal operator: Detection and selective focusing on two scatterers," J. Acoust. Soc. Am. 99, pp. 2067-2076 (1996).

[28] David H. Chambers, James G. Berryman, "Analysis of the Time-Reversal Operator for a Small Spherical Scatterer in an Electromagnetic Field," IEEE Trans. Antennas Propagat., vol. 52, no. 7, pp. 1729-1738, 2004.

[29] Gilles Micolau, Marc Saillard, Pierre Borderies, "DORT Method as Applied to Ultrawideband Signals for Detection of Buried Objects," IEEE Trans. Geosci. Remote Sensing, vol. 41, no. 8, Aug 2003.

[30] Carsten Draeger, Mathias Fink, "One-channel time-reversal in chaotic cavities: Theoretical limits," J. Acoust. Soc. Am. 105, pp. 611-617 (1999).

[31] Carsten Draeger, Mathias Fink, "One-Channel Time Reversal of Elastic Waves in a Chaotic 2D-Silicon Cavity," Phys. Rev. Lett. 79, 3 (1997).

[32] J. de Rosny, M. Fink, "Overcoming the Diffraction Limit in Wave Physics Using a Time-Reversal Mirror and a Novel Acoustic Sink," Phys. Rev. Lett. 89, 124301(2002).