Hanady Hussien, Khaled A. Shehata, Salwa El Ramly and Nihal M.S. Tawfik, "Design of a Merged Algorithm for Luby Transform Decoder", 3rd International Conference on Signal and Information Processing (ICSIP 2012), Paris, France, July 7-8, 2012.

Hazem El Deeb, Khaled Shehata, Nabil Hamdy, Ahmed AbdlHafez,"HANK-1, a new compact, efficient and secure block cipher algorithm for limited resources Devices", 8th International Conference on Electrical Engineering, ICEENG 2012, M.T.C., Cairo, Egypt, May 29-31, 2012.

A.M. Bayoumi, "Simplified Analytical Iterations for Electron Wavefunction using Self-Consistent Solution for nm MOS Gate Stacks", Proceedings of the 29th National Radio Science Conference (NRSC), April 10-12, 2012, Cairo, Egypt

M. M. Dawoud, M. El Mahallawy, M. Waleed Fakhr, M. Abdel Azeem, "Video Copy Detection Based On Hidden Markov Models and Invariant Moments", International Journal of Engineering Research and Applications (IJERA), Vol. 2, Issue 1, Jan-Feb.2012, pp. 339-344.

M.Aboul-Dahab" The Egyptian Experience in Realizing Quality of Pre-University Education", Regional Workshop on Improving the Total Quality of General Education in the Arab Region, Ministry of Education in Saudi Arabia in collaboration with the UNSCO, Riyadh, Saudi Arabia, 29-30 Jan 2012

Emad Wageeh, Khaled Shehata, Mohamed Aboul-Dahab, "Design and Implementation of a Software- Defined Data Authentication Algorithm for RFID Applications", 6<sup>th</sup> International Conference on Design principles and Practices, University of California at Los Angles, pp.121-126, 20-22 January, 2012.

Mohammed R. Abaza, Nazmi Azzam, and Moustafa Aly, Free-Space Optical Communication Systems in Turbulent Channels, Lambert Academic Publishing, Saarbrucken, Germany, 2012.

Khaled Shehata, Atalla Hashad, Hanady Husien, and Hany Fahmy, "Design and Implementation of a video compression technique for High Definition videos implemented on a FPGA", 21<sup>st</sup> International Conference on System Engineering, Las Vegas, USA, pp 638-643, August 16-18, 2011.

Manal S. Gamal, Mohamed Zaki, and Khaled Shehata, "Protecting Historical Documents through Secured Watermarking," Egyptian Journal in Computer Science, September, 2011.

A.M. Bayoumi and Y. Hanafy, Bias dependence of NMOS and PMOS equivalent input circuits for 32–16nm gate length, 28th National Radio Science Conference (NRSC), April 26-28 2011, Cairo, Egypt

Khaled Shehata, Gamal Selim, Maged Elgendy, and Mohamed Kota," A controlled Proxy-Protected Signature Scheme with Instantanious Revocation", International Journal of Computer Science and Network Security, Vol. 11, No. 3, pp. 27-30, March 2011

Nabil Hamdy, Khaled Shehata and Haitham Eldemerdash, "Design and Implementation of Encryption Unit Based on Customized AES Algorithm," International Journal of Video & Image Processing and Network Security (IJVIPNS-IJENS) Vol 11, No 01, pp. 33-40, Feb. 2011.

Attia, M., Almazyad A., El-Mahallawy, M., Al-Badrashiny, M., Nazih, W., Soft Vector Quantization with Inverse Power-Function Distributions for Machine Learning Applications, Book Chapter of the book: Intelligent Automation and Systems Engineering, Springer Verleg 2011, Volume 103, pp. 339-35.

M. El-Mahallawy, E. Hagras, A. Eldin, M. Fakhr, "Robust Blind and Secure Biometric Watermarking Based on Partial Multi-Map Chaotic Encryption," 4th IFIP International Conference on New Technologies, Mobility and Security, Paris–France, 7-10 February, 2011

Mohamed A. Abd Egawad, Mohsen M. Tantawy, M. El-Mahallawy, "New cross-layer QoS-based scheduling algorithm in LTE system", 5th WSEAS international conference on Communications and information technology, Corfu Island, Greece, July 14-16, 2011.

- M. El-Mahallawy, M. B.Abdelhalim, M. Ayyad, A. Elhennawy, "Security Analysis For A Lightweight Modified Cryptographic TEA Algorithm", 4th International Conference on Computer and Electrical Engineering (ICCEE), Singapore, October 2011.
- M. B.Abdelhalim, M. El-Mahallawy, M. Ayyad, A. Elhennawy, "Implementation of a Modified Lightweight Cryptographic TEA Algorithm in RFID System", 6<sup>th</sup> International Conference for Internet Technology and Secured Transactions (ICITST), AbouDhabi, December 2011.

Hussein ElAttar, Hussein Abdelaty, Salwa H. ElRamly, Mohamed A.Aboul-Dahab. "PHY-MAC Cross-Layer Optimized Design for Power Conservation in Wireless Ad Hoc Networks". The Fourth IFIP International Conference on New Technologies, Mobility and Security (NTMS 2011), PARIS, FRANCE. February 2011.

Hussein ElAttar, Hussein Abdelaty, Salwa H. ElRamly, Mohamed A.Aboul-Dahab. "PHY-MAC Cross Layer Issues for QoS Provisioning in Wireless Ad Hoc Networks". The Eighth International Conference on Information Technology: New Generations (ITNG'11), pp.100-105, LAS VEGAS, NEVADA, USA. April 11-13, 2011.

Mohammed R. Abaza and Kamran Kiasaleh, "Erratum to Performance of APD-Based, PPM Free-Space Optical Communication Systems in Atmospheric Turbulence," IEEE Transactions on Communications, vol. 59, no. 9, pp. 2638-2639, September 2011.

Nazmi A. Mohammed, Mohammed R. Abaza, and Moustafa H. Aly, "Improved Performance of M-ary PPM in Different Free-space Optical Channels due to Reed Solomon Code Using APD," International Journal of Scientific & Engineering Research, vol. 2, no. 4, pp. 82-85, April 2011.

Mohammed R. Abaza, Nazmi A. Mohammed, and Moustafa H. Aly, "BER Performance of M-ary PPM Free-Space Optical Communications with Channel Fading," Proceeding of the 8th International Conference on High Capacity Optical Networks & Enabling Technologies (HONET 2011), Riyadh, Saudi Arabia, December 2011

M.Aboul-Dahab and Hosam Kamal "Path Loss Bounds for WiMAX; Concept and Analysis", Proc. Of the 27<sup>th</sup> National Radio Science Conference (NRSC 2010), Menouf, Egypt, 16- 18 Mar. 2010

Hussein ElAttar, Hussein Abdelaty, Salwa H. ElRamly, Mohamed A.Aboul-Dahab. "Lifetime Maximization for Wireless Ad Hoc Networks Using Power Aware Routing". Proc. of the Fourth UK Sim European Modelling Symposium on Computer Modeling and Simulation (EMS'10), pp.455-459, PISA, ITALY. November 2010.

M.Aboul-Dahab, "Acquiring Total Quality in Pre-University Education: Sharing the Experience of the Ministry of Education in Egypt", The 1<sup>st</sup> Conference on Total Quality in Education, Ministry of Education, KUWAIT, 5-7 Jan. 2010.

M.Aboul-Dahab"School Improvement Plan- A Success Story Towards Acquiring total Quality in Pre-University Education in Egypt, *UNICEF Learning Series III*, Marrakesh, Morocco, 28-30 June 2010

Adly, H. F. Ragai, A. E. Elhennawy, K. A. Shehata, "Adaptive Packet Sizing for OTAP of PSoC Based Interface Board in WSN", IEEE 22<sup>nd</sup> International Conference on Microelectronics, ICM'10, Cairo, Egypt, pp 148-151, 19-22 December, 2010.

.Adly, H.F.Ragai, A.El-Hennawy, K. A. Shehata, "Over-The-Air Programming of PSoC Sensor Interface in Wireless Sensor Networks", MELECON 2010- 15<sup>th</sup> IEEE Mediterranean Electrotechnical Conference, Valletta, Malta, 26-28 April, 2010.

Adly, H.F.Ragai, A.El-Hennawy, K.A.Shehata, "Wireless Configuration Controller Designfor FPGAs in Software Defined Radios", Online Journal in Electrical and Electronics Engineering(OJEEE), Vol.2, No.3, pp 293-297, 2010. Lamiaa S. Hamed, Khaled A. Shehata, Hassan E. Ghitanyb and Mohamed E. Sayed, "Design of Generic Floating Point Multiplier and Adder/Subtractor Units" IEEE Computer Society,12<sup>th</sup> International Conference on Computer Modeling and Simulation, England, pp.615-618, January 2010.

Ahmed Ali, Gouda I. salama, M. S. Hamed, and Khaled A. Shehata, "Image Tracking Technique for Missile Applications", 7<sup>th</sup> International Conference on Electrical and Electronics Engineering (ICEENG), Military Technical Collage, Egypt, 25-27 May 2010.

E. mohamed, S. Shedeid, K. Shehata, H. Taha, "Development and Performance Analysis of on-Board Computer Software for Real Time Auto-Pilot Control System", 7<sup>th</sup> International Conference on Electrical and Electronics Engineering (ICEENG), Military Technical Collage, Egypt, 25-27 May 2010.

M. Attia, A. Al-Mazyad, M. El-Mahallawy, M. Al-Badrashiny, W. Nazih, "Post-Clustering Soft Vector Quantization with Inverse Power-Function Distribution, and Application on Discrete HMM-Based Machine Learning", International Conference on Signal Processing and Imaging Engineering San Francisco, USA, 20-22 October 2010

M. Waleed Fakhr, M., Moftah, M., Rashwan, M., El-Mahallawy,, "Printed-Arabic Large Text Corpus for OCR Research (P-ALTEC)", Tenth Conference on Language Engineering—Ain Shams University, Cairo, Egypt, December 2010.

Hussein ElAttar, Hussein Abdelaty, Salwa H. ElRamly, Mohamed A.Aboul-Dahab. "Lifetime Maximization for Wireless Ad Hoc Networks Using Power Aware Routing. Fourth UKSim European Modeling Symposium on Computer Modeling and Simulation (EMS'10), pp.455-459, PISA, ITALY. November 2010.

Albashir A. Mohamed, Maha M. Elsabrouty, and Salwa H. El-Ramly, "Bootstrapped Low Complexity Iterative Decoding Algorithm for Low Density Parity Check (LDPC) Codes", Canadian Journal on electrical and electronics engineering, vol. 1, no. 1, pp. 10-14, Feb. 2010. Albashir A. Mohamed, Maha M. Elsabrouty, and Salwa H. El-Ramly, "Bootstrapped Iterative Decoding Algorithms for Low Density Parity Check (LDPC) Codes", Fifth International Conference on Systems and Networks Communications (ICSNC), Nice, France, pp. 335 – 339, 2010.

Albashir A. Mohamed, Maha M. Elsabrouty, and Salwa H. El-Ramly, "Bootstrapped Low Complexity Iterative Decoding Algorithm for Low Density Parity Check (LDPC) Codes", Mobilware 2010, LNICST 48, Chicago, USA, pp. 377--389. Institute for Computer Sciences, Social Informatics and Telecommunications Engineering (2010).

S.El-Khamy, M.Aboul-Dahab, M.A.Attia, "A Hybrid of Practice Swarm Optimization and Genetic Algorithm for Multicarrier cognitive Radio", Proc. of the 26<sup>th</sup> National Radio Science Conference (NRSC' 2009), Cairo, Egypt, Mar. 2009.

M.Aboul-Dahab, K.Shehata, K.Hammouda and S. El ramly, "FPGA Prototyping of Digital RF Transmitter Employing Delta-Sigma Modulation for SDR"; Proc. of the 26<sup>th</sup> National Radio Science Conference (NRSC' 2009), Cairo, Egypt, Mar. 2009.

M.Aboul-Dahab, H.El-Badawy, M. Tantawy and A.El-Sayed "Modeling and Simulation for Handover process in Mobile WiMAX with Different Classes of Services", Proc. of the 19<sup>th</sup> International Conference on Computer Theory and Applications (ICCTA2009), Alexandria, Egypt, 17-19 Oct. 2009.

S.Salah, M.Aboul-Dahab, and M.Omar "Effect of the Mutual Coupling on the Bartlett algorithm to Estimate the Direction of Arrival "Proc. of the 19<sup>th</sup> International Conference on Computer Theory and Applications (ICCTA2009), Alexandria, Egypt, 17-19 Oct. 2009.

M.Aboul-Dahab and Hosam Kamal "Methodology for Calculating Path Loss Bounds for WiMAX", Proc. of the 3<sup>rd</sup> International Conference on New Technologies, Mobility and Security (NTMS2009), Cairo, Egypt, 20- 23 Dec. 2009.

Emad Samweil, Khaled Ali Shehata, and Ahmed Madian. "Design of Triple-Mode Digital Down Converter for WCDMA, WCDMA2000 and GSM of Software Defined Radio", IEEE 21st International Conference on Microelectronics, ICM'09, Marrakech, Morocco, 19-22 December, 2009. Pp 266-269.

Sherif Welsen Shaker, Salwa Hussien El Ramly, and Khaled Ali Shehata. "FPGA Implementation of a Reconfigurable Viterbi Decoder for WiMAX Receiver", IEEE 21st International Conference on Microelectronics, ICM'09, Marrakech, Morocco, pp 258-261, 19-22 December, 2009.

Amani Sabry, Hesham El Badawi, Khaled Shehata and Ahmed Ali, "A novel resource Allocation Technique for VBR Video Traffic in the Uplink over WiMAX Networks," 2009 International Conference on Mobile, Wireless and Optical Communications (2009 MWOC), Jeju Island, South Korea, December 18-19, 2009.

A.M. Bayoumi Michale Chu, Y. Hanafy, Patricia Harrell, and Gamal Refai-Ahmed, "Scientific and Engineering Computing using ATI Stream Technology", IEEE Magazine "Computing in Science and Engineering", pp. 92-97, Nov./Dec. 2009 issue.

Sherif Welsen Shaker, Salwa Hussien El Ramly, and Khaled Ali Shehata, "Design and Implementation of Low-Power Turbo Encoder for DVB-RCS Software Radio", 17th Telecommunication Forum 2009 'TELFOR'09, Belgrade, Serbia, 24-26 November, 2009.

Sherif Welsen Shaker, Salwa Hussien El Ramly, and Khaled Ali Shehata, "Design and Implementation of Low-Power Viterbi Decoder for Software-Defined WiMAX Receiver", 17th Telecommunication Forum 2009 'TELFOR'09, Belgrade, Serbia, 24-26 November, 2009.

Ramy Said Agieb, Hassan Ahmed El\_Ghitany, and Khaled Ali Shehata, "4-Bit Piplined ADC for Monolithic Active Pixel Sensors," 2<sup>nd</sup> International Conference on Advanced Computer Theoryand Engineering (ICACTE 2009), Cairo, Egypt, pp 905-912, September 25-27, 2009.

Sherif Welsen Shaker, Salwa Hussien El Ramly, and Khaled Ali Shehata, "FPGA Implementation of a Configurable Viterbi Decoder for Software Radio Receiver", IEEE 44th AUTOTESTCON 2009, Anaheim, California, USA, 14-17 September 2009.

Sherif Welsen Shaker, Salwa Hussien El Ramly, and Khaled Ali Shehata, "Implementation of a Generic-Configurable Viterbi Decoder on FPGA for Software Defined Radio Receiver", IEEE Regional Symposium on Microelectronics, RSM 2009, Kota Bahru, Malaysia, 10-12 August 2009.

Hesham ElBadwi, Khaled Shehata and Hesham ElSawi, "Joint Radio Resource Management for HSDPA and WiMAX Networks," first International Conference on Computational Inelegance, Communication Sysyems and Networks (CICSyN2009), Indora, India, 23-25 July, 2009.

Ghada Farouk, Salwa Elramly, Bahaa Eldeen Hasan, and Khaled Shehata, "Anew Symmetric Key Generation Algorithm," 26<sup>th</sup> National Radio Science Conference (NRSC 2009), 17-19 March, 2009, Cairo, Egypt.

Mohamed A. Aboul Dahab, Khaled A. Shehata, Karim A. Hamouda and Salwa H. El Ramly "FPGA Prototyping of Digital RF Transmitter Employing Delta Segma Modulation for SDR" 17-19 March, 2009, Cairo, Egypt.

K.A. Shehata, S.M. Eissa, H.F. Ragaai, "Design and Implementation of an11-bit Interpolation DAC", International Journal of Electonics 95:3, pp. 177-192, Jan. 2009.

M. El-Mahallawy, A. Hashad, H. Hassan Ali, and H. Sami Zaky, "Quality Estimation Of Video Transmitted Over An Additive WGN Channel Based On Digital Watermarking And Wavelet Transform", Journal of World Academy of Science, Engineering and Technology, Vol. 57, Sept. 2009.

M., El-Mahallawy, A. Hashad, H. Hassan Ali, and H. Sami Zaky, "Quality Estimation Of Video Transmitted Over An Additive WGN Channel Based On Digital Watermarking And Wavelet Transform", Int. Conf. on Signal and Image Processing Netherlands, September, 2009.

M., Attia, M., Rashwan, M., El-Mahallawy, "Autonomously Normalized Horizontal Differentials as Features for HMM-Based Omni Font-Written OCR Systems for Cursively Scripted Languages", IEEE International Conference on Signal and Image Processing Applications(ICSIPA), Kuala Lumpur, Malaysia, 17-18 November, 2009.

K.Shehata, M.A.Aboul-Dahab, S.H.El Ramly and K.A.Hamouda," An FPGA Based 1-bit Digital Transmitter Employing Delta-Sigma Modulation With RF Output for SDR", 2<sup>nd</sup> International conference on Signals, Circuits and Systems SCS'2008, Hammamat, Tunisia Nov.2008.

Khaled A. Shehata, Mohamed A. Aboul Dahab, Salwa H. El Ramly and Karim A. Hamouda, "AN FPGA BASED 1-BIT ALL DIGITAL DIGITALTRANSMITTER EMPLOYING DELTA-SIGMA MODULATION WITH RF OUTPUT FOR SDR," IEEE International Conference on Signal, Circuits and Systems (IEEE SCS2008), Hammamat, Tunisia, 7-9 November, 2008.

Khaled Ali Shehata, Hanady Hussien, and Hani Fekri Ragai, "DESIGN AND IMPLEMENTATION OF 2.5 GBPS PIPELINED DIGITAL ENCODER FOR FLASH A/D CONVERTERS," IEEE International Conference on Signal, Circuits and Systems (IEEE SCS2008), Hammamat, Tunisia, 7-9 November, 2008.

A.Mahfouz, K.Shehata and M.Hanna, "A secure spreader/despreader for CDMA applications," IEEE International Conference on Signal, Circuits and Systems (IEEE SCS2008), Hammamat, Tunisia, 7-9 November, 2008.

A.M. Bayoumi and Y. Hanafy, "Massive Parallelization of SPICE Device Model Evaluation on GPU-Based SIMD Architectures", First International Forum on Next-Generation Multicore / Manycore Technologies, Cairo, Egypt, Nov.24, 2008

Ghada Farouk Naiem, Salwa Elramly, Bahaa Eldeen Hasan, and Khaled Shehata, "FPGA Implementation of RSA processor," Second International Conference on Advanced Control Circuits and Systems (ACCS08), March 30 – April 2, 2008, Cairo, Egypt.

Ghada Farouk Naiem, Salwa Elramly, Bahaa Eldeen Hasan, and Khaled Shehata, "An Efficient Implementation of CBC Mode Rijndeal AES on an FPGA," 25<sup>th</sup> National Radio Science Conference (NRSC 2008), D09, Cairo, Egypt, 18-20 March, 2008.

A.Hashad, S. Welson, M. Aboul Dahab and K.A. Shehata, "Design and Implementation of Carrier Phase Synchronization Module for Software Defined Radio on FPGA" WoSPA'08 Sharja, U.A.E, March, 2008.

Khaled Shehata, Saleh Eisa and Hani Fikry," Design and Implementation of an 11-bit Nonlinear Interpolation DAC," International Journal of Electronics, Volume 95, Issue 3, January 2008, p. 177-192.

M. Aboul-Dahab, "The Global Maritime Distress and Safety System- An Overview", ITU Joint Regional Conference on Disaster: Relief and Management: International Cooperation & Role of ICT, Alexandria, EGYPT, April 2007.

K. A. Shehata, H. Fikry, and Hanady Husien "1.5GSPS 4-bit flash ADC using 0.18um CMOS" ICM 2007, Cairo, Egypt, pp341-344, December 16, 2007. Sahar El Shazly, Omima Abdel Mohsen, Khaled Shehata "Enhancing MPLS Fault Recovery using P-Cycle with QoS Protection" ICICT 2007 Cairo, Egypt, pp.112-118, 2007.

Sahar El Shazly, Omima Abdel Mohsen, Khaled Shehata "Enhancing Fault Recovery in MPLS Networks using P-Cycle Structure" ICCTA 2007 Alexandria, Egypt, pp70-73, 1-3 September, 2007.

K. A. Shehata ,H. F. Ragai , and H. Husien, "Design and Implementation of a High Speed Low power 4-bit Flash ADC", DTIS2007,Rabat,Morako, pp 200 – 203, 1-4 September 2007.

Shehata, K.A, Husien, H.; Ragai, H.F. "Design and implementation of a high speed low power 4-bit Flash ADC", International Conference in Design & Technology of Integrated Systems (DTIS2007) in Nanoscale Era, Rabat, Morocco, pp200 – 203, 2-5 September, 2007.

Khaled Shehata, Alaa Eldin Omar and Salah Kholif, "Design and Implementation of Stream Cipher Algorithm," Journal of Al Azhar University Engineering Sector, vol. 2 No. 4, pp. 863-873, July, 2007.

M. Attia, M. El-Mahallawy, "Histogram-Based Lines & Words Decomposition for Arabic Omni Font-Written OCR Systems; Enhancements and Evaluation", Lecture Notes on Computer Science (LNCS): Computer Analysis of Images and Patterns, Springer-Verlag Berlin Heidelberg, Vol. 4673, pp. 522-530, 2007.

M., Rashwan, M. Waleed Fakhr, M. Attia, M., El-Mahallawy, "Arabic OCR System Analogous to HMM-Based ASR Systems; Implementation and Evaluation", Journal of Engineering and Applied Science, Cairo University, www.Journal.eng.CU.edu.eg, Dec. 2007

M. Attia. M., El-Mahallawy, "Histogram-Based Lines & Words Decomposition for Arabic Omni Font-Written OCR Systems; Enhancements and Evaluation",12th International Conference on Computer Analysis of Images and Patterns (CAIP07) - Vienna University, Vienna, Austria, August 26-29, 2007.

Khaled Shehata, Saleh Eisa and Hani Fikry," Design and Implementation of an 11-bit Nonlinear Interpolation DAC," Mentor Graphics Egypt Higher Educational Program 3rd annual workshop, December 2007.

Waleed Abdel Hamid, Khaled Shehata, and Amro Baiomy, "Bi-directional Bubble-Sorting-Based Non-Manhattan Channel Routing," Al Azhar University Engineering Journal (AUEJ), March, 2006.

Khaled Shehata, Saleh Eisa, and Hani Fikry, "Design and Implementation of An 11-bit Non-linear Interpolation DAC", 1<sup>st</sup> International Conference on Design and Test of Integrated Systems in Nanoscale Technology (IEEE DTIS'06), Tunis, Tunisia, pp 136-139, September 5-7, 2006.

Waleed Abdel Hamid, Khaled Shehata, and Amro Baiomy, "Bi-directional Bubble-Sorting-Based Non-Manhattan Channel Routing," 5<sup>th</sup> International Conference on Electrical and Electronics Engineering (ICEENG), Military Technical Collage, Egypt, 16-18 May 2006

Islam Tawfik, Khaled Shehata, Magdy Kfafy, "FPGA Hardware implementation of flow control Algorithm for External Modems" 5<sup>th</sup> International Conference on Electrical and Electronics Engineering (ICEENG), Military Technical Collage, Egypt, 16-18 May 2006

Nabil Shaker, Khaled Shehata and Alaa Shobky, "Stream Ciphers Combining LFSR and FCSR Architectures with Linear and 2-adic Complexity Near to Period "5th International Conference on Electrical and Electronics Engineering (ICEENG), Military Technical Collage, Egypt 16-18 May 2006

Khaled Shehata, Saleh Eisa, and Hani Fikry, "Design of a 10-bit Non-linear Interpolation DAC", 5<sup>th</sup> International Conference on Electrical and Electronics Engineering (ICEENG), Military Technical Collage, Egypt 16-18 May 2006.

Khaled Sheata, Mauris Hana, and Asmaa Mahfouz, "FPGA Design And Implementation of an 8-users CDMA Transceiver Using D-sequence Generator", Second Workshop on VLSI Technology and EDA Tools, Egypt, December, 26, 2006 pp 13-24.

Khalid Shehata, Atalla Hashad, M. Aboul-Dahab, and Sherif Wilson," Carrier Phase Synchronization for QPSK Software Radio Receiver", Scientific Bulletin, Faculty of Engineering, Ain Shams University, Vol. 40 No. 3 PP441-451, Sept. 2005

Khalid Shehata, Atalla Hashad,M.Aboul-Dahab, and Sherif Wilson, "FPGA Implementation of Direct Digital Synthesizer for Software Radio Receiver", 1<sup>st</sup> workshop on VLSI Technology and EDA Tools", Arab Academy for Science, Technology and Maritime Transport in Cooperation with MENTOR GRAPHICS Co., Cairo, EGYPT, Dec. 2005.

M.Aboul-Dahab,"The Arab Academy for Sciences, Technology and Maritime Transport: An Overview" A review paper presented in the 27<sup>th</sup> meeting of the Organization of the Islamic Ship Owners Association –OISA, Cairo, EGYPT, Sept. 2005

M.Aboul-Dahab, "Realizing the Match Between the Scientific Research and the Information Society: Some Proposed Guidelines", The 2<sup>nd</sup> International Conference for Scientific Research And its Applications, Cairo, Egypt Dec.2005.

Atalla Hashad, Khaled Shehata, M. AboulDahab, and Sherif Welson, "FPGA Implementation of Direct Digital Synthesizer for Software Radio Receiver" First Workshop on VLSI Technology and EDA Tools, Egypt, December, 4, 2005 pp 14-23.

Khaled A Shehata, "Design and Impementation of Speech Encryption and Decryption Units on an FPGA" 5<sup>th</sup> Conference on Language Engineering, Ain Shams University, Cairo, Egypt, pp. 197-211, 14-15 September, 2005.

Khaled A. Shehata, "Design and Implementation of a CDMA Base-Band Module for Indoor Systems"1<sup>st</sup> Intrnational Workshop on Advanced Control Circuits and Systems (ACCS05), Cairo, Egypt, March 6-10, 2005.

Islam Tawfic, Khaled Shehata, and Magdy Kafafy, "Design and Implementation of a flow control module for external Modem on an FPGA" First Workshop on VLSI Technology and EDA Tools, Egypt, December, 4, 2005 pp 24-36.

S.H. Elramly, H. El-Attar, "Practical Field Measurements for Evaluating Radiation from Mobile Base Stations", Proc. Of 1<sup>st</sup> Ain Shams International Conference on Environmental Engineering, April 9-11, 2005, Cairo, Egypt.

S.H. Elramly, H. El-Attar, "Proposed Techniques to Increase Capacity of Mobile Communications Systems Without Increasing the EM Radiation Level", Proc. Of the 1<sup>st</sup> Ain Shams International Conference on Environmental Engineering, April 9-11, 2005, Cairo, Egypt.

M.Abou El Dahab, M.Fouad, Abd El Monem Mokhtar, "Hybrid DS/SFH Technique Over Micro and Macrocellular Communication Systems", Jpurnal of Engineering Sciences, Faculty of Engineering, Assiut university, Egypt, Vol.32-No.3-Part B- July 2004.

Khaled Shehata, Ahmed Bahaa, Kareem Mourad, and Ahmed Sharaf, "Design and Implementation of FPGA Based and Microcontroller Based Digital Current Relay" 16<sup>th</sup> International Conference on Microelectronics (ICM2004), Tunis, Tunisia, pp. 783-786, 5-8 December, 2004.

Atalla Hashad, Khaled Shehata, and Safa Gaser, "Efficient Two Dimensional Discrete Wavelet Transform for JPEG2000, Realization and Optimization" 14<sup>th</sup> International Conference on Computer Theory and Applications ICCTA'2004, Alexandria, Egypt, 28-30 September, 2004.

Atalla Hashad, Khaled Shehata, and Safa Gaser, "Realization of an efficient VLSI architecture for discrete wavelet transform in real time image compression " 2004 International Conference on Electrical, Electronic and Computer Engineering, Egypt, pp 673-676, 5-7 September, 2004.

Nabil Hamdy, Khaled Shehata, Salah El Agooz, and Mohamed Helmy, "Design and Implementation of a fast invers modulo ( $2^{16} + 1$ ) multiplier used in IDEA Algorithmkey Schedule on FPGA" 2004 International Conference on Electrical, Electronic and Computer Engineering, Cairo, Egypt , pp 507-51, 5-7 September, 2004.

Khaled Shehata, Ahmed Bahaa, and Atala Hashad "Design and Implementation of an FPGA based Protection Relay" 21st National Radio Science Conference (NRSC 2004), Egypt pp D4-1:D4\_6, 16-18 March 2004.

S.Elramly, Hussein El Attar, "GSM Base Station Antenna Model for Evaluating Human Exposure", 2004 International Conference on Electrical, Electronics and Computer Engineer in. (ICEEC'04), Sept.5-7, 2004, Cairo-Egypt.

Khalid Shehata, Atalla Hashad, M. Aboul-Dahab, and Khaled El-Dars, "Design and Implementation of VoIP Signalling and Control Module", Scientific Bullitin, Faculty of Engineering, - Ain Shams University, Vol. 38-No 4 – PP487-503, Dec. 2003.

Khalid Shehata, Atalla Hashad, M. Aboul-Dahab, and Khaled El-Dars, "Dsign and Implementation of a Signalling Unit for a Simple IP Phone", Proc. of the 46<sup>th</sup> IEEE MIDWEST Conference, Cairo, EGYPT, Dec. 2003.

Atalla Hashad, Khaled Shehata, Khaled Dars, and Mohamed Abo El Dahab, "Design And Implementation Of VOIP Signaling Module", 46<sup>rd</sup> Midwest IEEE Symposium on Circuits and Systems, Cairo, Egypt, December 27-29, 2003, pp851-854.

Khaled Shehata, Hanady Husien, and Nabil Hamdy, "design and Implementation of a Universal Security Unit using FPGA" ",  $46^{rd}$  Midwest IEEE Symposium on Circuits and Systems, Cairo, Egypt , December 27-29, 2003, pp855-859.

Khaled Shehata, N. Hamdy, S. Elagooz, and M. Helmy, "Design and Implementation of IDEA Algorithm Key Schedule on FPGA", 10<sup>th</sup> International Conference on Aerospace and Aviation Technology, MTC, Cairo, Egypt, 13-15 May, 2003, pp 717-727.

Khaled Shehata, M. Helmy, N. Hamdy, and S. Elagooz, "Design and Implementation of High and Low Modulo (2<sup>16</sup>+1) Multiplier used in IDEA Algorithm on FPGA", 20<sup>th</sup> National Radio Science Conference (NRSC), Cairo, Egypt, March 18-20, 2003, pp. C10 1- C10 10.

M. El-Mahallawy, N. Hamdy, M. Waleed Fakhr, "A Novel Wavelet Based Speech Enhancement Technique", Ain Shams University Journal, Cairo, Egypt, Sept. 2003.

M.A.Mangoud, R.A.Abd-Alhameed, P.S.Excell and M.Aboul-Dahab, "Computational Electromagnetic Technique for Broadband Analysis of Microstrip Antennas", Proc. of the 19<sup>th</sup> National Radio Science Conference (NRSC' 2002), Alexandria, Egypt, Mar. 2002.

M.Aboul-Dahab, M.A.Nassar, M.Fouad and A.E.Mokhtar, "AdaptiveHybrid DS/SFH Spread Spectrum Multible Access Communications", Proc. of the 19<sup>th</sup> National Radio Science *Conference (NRSC' 2002)*, Alexandria, Egypt, Mar. 2002.

M.Aboul-Dahab, M.A.Nassar, M.Fouad and A.Mokhtar. "Coherent Hybrid DS/SFH – SSMA Micro and Macro Cellular Communictions" Proc. of the IEEE 11<sup>th</sup> Mediterranean Electrothnical Conference (MELECON 2002), Cairo, EGYPT, May 2002.

M.Aboul-Dahab, "Bridging the Digital Divide: Implication of Standards",

Proc. of the ITU/BDT Arab Regional Forum on Telecommunication Polices & International Standards: Impacts and Implications, Cairo, EGYPT, May 2002
Khaled Shehata, A. Taha, M. Esmail, and K. Morsi, "VLSI Design and Implementation of a CMOS Static 16-bit Block Cipher Module", Proceedings of the Third International Conference of Electrical Engineering (ICEENG), Cairo, Egypt, May, 14-16, 2002, pp43-54.

M. Helmy, N. Hamdy, Khaled Shehata, and A. Hashad, "Design and Implementation of High Performance Modulo (2<sup>16</sup>+1) Multiplier on FPGA", Proceedings of the Third International Conference of Electrical Engineering (ICEENG), Cairo, Egypt, May, 14-16, 2002, pp125-135.

M. El-Mahallawy, N. Hamdy, M. Waleed Fakhr, "Quality Improvement Of Low Bit Rate Noisy Speech Using The Subspace Method", nineteenth National Radio Science Conference— Alexandria university, Alexandria, Egypt, March 19-21, 2002.

M. El-Mahallawy, N. Hamdy, M. Waleed Fakhr, "Wavelet Transform-Based Speech Enhancement Using Wiener Filter and Spectral Subtraction", Third Conference on Language Engineering- Ain Shams University, Cairo, Egypt, October 2002.

M. Aboul-Dahab, "E-Commerce Security Controls and Systems", ITU Regional E-Commerce Conference for the Arab Region, Tunis, Tunisia, May 2001.

Aboul-Dahab, "Development of Quality E-Learning in the (GTU/GTTI) Project", Human Resources Development Quarterly, BDT, ITU, Geneva, Switzerland, July 2001.

Abdallah Othman (student), M. Aboul-Dahab (supervisor), "A Simplified Design Performance Procedure for Chebysshes Antenna Arrays", (poster paper) 18<sup>th</sup> National Radio Science Conference (NRSC'2001), Mansoura, Egypt, Mar. 2001.

M. Aboul-Dahab, M. Fouad and A. Moukhtar, "Hybrid DS/SFH-SSMA Over Mobile Satellite Lognormal Shadowing Channels", Proc. of the 18<sup>th</sup> National Radio Science Conference (NRSC' 2001), Mansoura, Egypt, Mar. 2001.

M. Aboul-Dahab, A. Abdel-Naiem, M. Fouad, T. El-Hanafy and Abou-El-Wafa, "A Back Multiplication Algorithm (BMA) for Decoding BCH Codes", Proc. of the 18<sup>th</sup> National Radio Science Conference (NRSC' 2001), Mansoura, Egypt, Mar. 2001.

M.Aboul-Dahab "Aspects of E-Learning", Proc. of the 9<sup>th</sup> Annual Meeting of the Arab Network for Human Resources Management and Development (HRM/D), ITU (Arab Regional Office), Cairo, EGYPT, 11-14 Nov., 2001.

Hanady Hussien, Khaled Shehata, Nabil Hamdy and Khairy Abu Elsoud, "Design and Simulation of a universal Communication Security Unit," IETA2001, Cairo, Egypt, Dec. 2001.

Khaled A. Shehata, Hazem Hassan, Nabil Hamdy and Khaled Morsy, "VLSI Implementation Of A High Speed Block-Cipher Module," 43<sup>rd</sup> Midwest IEEE Symposium on Circuits and Systems, Dayton, Ohio August 13-17, 2001, pp 572-575.

Khaled A. Shehata, Abdullah Khoder, Anis Ismail and Khaled Morsy, "CMOS Logic Families for VLSI Design," Ninth International Conference on Aerospace sciences and Aviation Technology (ASAT-9), Military Technical Collage, Cairo, Egypt, 13-15 May 2001.

Mokhtar Halouda, Atalla Hashad, Khaled Shehata, Fawzy Ibrahim, Khaled Morsy and Ehab Adly, "Integrated Circuit Design, Fabrication and Testing," Mechanical Engineering Technologies and Applications in the beginning of third Millenium, Alexandria, Egypt, 28-31 March 2001, pp-2/2/1-2/2/22.

A.Abdel Halem, M.Aboul-Dahab and W.M.Rabie "Mobile Channel Model Estimators and Their performance Evaluation Using Computer Simulation", Proc. of the Seventeenth National Radio Science Conference, Menouf, Egypt, Feb.2000.

M.Aboul-Dahab, A.Abdel Halem, and W.M.Rabie
"Characterization of Mobile Channels Using Chi-Squre Goodness of Fit
Estimator" Proc. of the Progress In Electromagnetics Research
Symposium (PIERS 2000) Cambridge, Massachusetts, USA, July 2000.

- S. E. El-Khamy, M. A. Aboul-Dahab and M. Kashllan, "A Simplified Koch Multiband Fractal Array Using Windowing and Quantization Techniques", Proc. of the 2000 IEEE AP-S International Symposium (AP-S 2000), Salt Lake City, Utah, USA, July 2000.
- S. E. El-Khamy, M. A. Aboul-Dahab and M. Kashllan, "Simplifying and Size Reduction of kaiser-Koch Multiband Fractal Arrays Using Windowing and Quantization Techniques", Proc. Of the 17<sup>th</sup> National Radio Science Conference (NRSC'2000, Menouf, Egypt, Feb. 2000.

M.Aboul-Dahab "Teaching of Electromagnetics and Antennas", Proc. of the Workshop on Teaching of Electromagnetics, the National Committee for Radio Science, National Academy of Scientific Research, Cairo, Egypt, Nov.2000.

G.Moukhtar and M. Aboul-Dahab "The AASTMT as a Point for the Center of Excellence for the Arab States", Proc. of the 8th Annual Meeting of the Arab Network for Human Resources Development, Beirut, Lebanon, Nov.2000.

- Khaled A. Shehata, and D. J. Fouts, "Enhanced Performance of Complementary Gallium Arsenide (CGaAs) Circuits," Second International Conference on electrical Engineering, Military Technical Collage, Cairo, Egypt, 13-15 November 2000, pp. 357-367.
- Douglas J. Fouts, and Khaled Ali Shehata, "Two-Phase Dynamic Logic Circuits for Gallium Arsenide Complementary HIGFET Fabrication" US Patent #6150848, November, 2000.
- M.Aboul-Dahab," Outlines for the Development of Engineering Education Towards the B.Sc. Degree", Proc. of Workshop on the Development of Engineering Education, Egyptian Syndicate for Engineers (Alexandria Branch), Alexandria, Egypt, Nov. 1999.
- M.Aboul-Dahab, M. S.E.El-Mahallawy and M.M. Megahed, "Design and Computer Simulation of Convolutional Encoder and Viterbi Decoder", Proc. of the 16<sup>th</sup> National Radio Science Conference (NRSC'99), Cairo, Egypt, Feb. 1999.
- S.El-Khamy, M. Aboul-Dahab, W. Kassem, "On the performance of the VESPA algorithm for blind beam forming and signal detection of multi-source multipath signals", Proc. of the IEEE International Antennas and Propagation Symposium (AP-S), Orlando, Florida, USA, July 1999.
- S.El-Khamy, M. Aboul-Dahab, K. Hijjah "Sidelobes Reduction and Steerable nulling of Antenna Arrays using Neural Networks", Proc. Of the IEEE International Antennas and Propagation Symposium (AP-S), Orlando, Florida, USA, July 1999.
- S. E. El-Khamy, M. A. Aboul-Dahab and K. A. Hijjah, "Sidelobes Reduction and Steerable Nulling of Antenna Arrays Using Neural Networks," Proc. Of the IEEE AP-S International Symposium (AP-S 1999), Orlando, Florida. USA, July 1999.
- S. E. El-Khamy, M. A. Aboul-Dahab and M. Kashllan, "Computer Algorithm for the Generation and Performance Analysis of Generalized Fractal Cantor arrays," Proc. of the 9<sup>th</sup> International Conference on Computer Theory and Applications, ICCTA'99, Alexandria, Egypt, Sept. 1999.

- S. E. El-Khamy, M. A. Aboul-Dahab and M. Kashllan, "Design of Multiband Fractal Array Factors with Reduced Array Size," Proc. of the 2<sup>nd</sup> International Conference on Electrical Engineering, MTC, Cairo, Egypt, Nov. 1999.
- M.Aboul-Dahab "Mobile Satellite Communications", Proc. of the 6<sup>th</sup> International Maritime Conference Alexandria, Egypt, Oct. 1999.
- M. El-Mahallawy, M. Abou-Eldahab, "Design and Computer Simulation of Conventional Encoder and Viterbi Decoder", Sixteenth National Radio Science Conference—Ain Shams University, Cairo, Egypt, February 23-25, 1999.
- M.A.Aboul-Dahab, K.Hijjah and S.E.El-Khamy, "A New Technique for Linear Array Processing for Reduced Sidelobes Using Neural Networks", Proc. Of the 15<sup>th</sup> National Radio Science Conference (NRSC'98) Cairo, Egypt, Feb. 1998.
- M. A. Aboul-Dahab, M. Ashry, S. Salih & M. Abd-El-Galil, "An Implementation Scheme for a Viterbi Decoder", Proc. Of the 15<sup>th</sup> National Radio Science Conference (NRSC'98) Cairo, Egypt, Feb. 1998.
- M. Aboul-Dahab, S.Abdalla, M. Sabry, "Design, Implementation of Golay Code Encoder", Proc. of the 15<sup>th</sup> National Radio Science Conference (NRSC'98) Cairo, Egypt, Feb. 1998.
- M. Aboul-Dahab, K.Hijjah and S. El-Khamy, "A Neural Network Based Linear Antenna Array Processing for Highly Reduced Sidelobes". Prof. of "Progress in Electromagnetics Research Symposium (PIERS 98), Nice, France, July 1998.
- M. A. Aboul-Dahab, K. A. Hijjah, "A New Technique for Linear Antenna Array Processing for Reduced Sidelobes Using Neural Networks," Proc. of the 15<sup>th</sup> National Radio Science Conference (NRSC'98), Cairo, Egypt, Feb. 1998.
- El-Gamal and M. Aboul-Dahab "Proposed Educational Schemes for Dual Qualifications of Deck Officers", Proc. Of "Ocean Community Conference 1998, Baltimore, Maryland, USA, Nov.1998.
- M.Aboul-Dahab, "Enhancing GPS Performance Via Mobile Satellite Communication Systems (MSCS's). Inmarsat as a Case Study", Proc. Of the Global Navigation Satellite Systems Conference". (GNS- Egypt 98) Alexandria, Egypt, Dec. 1998.

- M. A. Aboul-Dahab, M.N. Sabha, K.Fadda &W.M.Abu-Eseifan, "An Algorithm for Memory Management of Viterbi Decoder, Proc. of the 14<sup>th</sup> National Radio Science Conference. (NRSC'97), Cairo, Egypt, Mar.1997.
- M. A. Aboul-Dahab, "Overview on the Potential of Sat- applications for Mediterranean Countries", Proc. Of the Workshop on "Space Applications in the Euro-Med Region", organized by the European Commission in cooperation with the European Space Agency and with the Arab Institute of Navigation, Cairo, Egypt, 26-27 May 1997.
- M. A. Aboul-Dahab, "The Role of the GMDSS in the Environmental Protection at Sea", Proc. of the International Conference on Earth Observation & Environmental Protection (EOEI' 97), Alexandria, Egypt,. Oct. 1997.
- M. Aboul-Dahab and A. Metawwee, "The Role of AASTMT in Research and Development in the field of Arab Telecommunications", Proc. of the 1<sup>st</sup> Meeting of the Administrators of the Research and Development in the Arab Region, ITU, ROAS, Cairo, Egypt, Dec.1997.
- Y.El-Gamal and M. Aboul-Dahab "Development of Engineering Syllabi at AASTMT" Proc. of the Workshop on Strategies and Economics of Telecommunications in the Arab Region", The League of Arab States, Cairo, Egypt, Sept. 1996.
- Y.El-Gamal and M. Aboul-Dahab "AASTMT Response to the Market Demands In the Arab Region A case study" Proc. of the 16<sup>th</sup> annual conference of Organization for the Registers in the Arab Universities, Alexandria, Egypt, Mar.1995.
- Y.El-Gamal and M. Aboul-Dahab "The Development of the students Evaluation in the AASTMT", Proc. of the Workshop of the Arab Network for staff Development in the Arab Universities", Damascus, Syria, Apr.1995.
- El-Gamal, M. Aboul-Dahab and S.A.Abdel-Wahab "Diverse Computational Graphics Techniques for Visualizing Antenna Radiation Patterns", Proc. of the Software Engineering in Higher Education (WIT-95) Conference, Southampton, UK, Nov. 1995.
- Y.El-Gamal and M. Aboul-Dahab "The Role of AAST to Meet the Regional Engineering Needs", Proc. of the 4th World Conference on Engineering Education (WCEE'95), Minnesota, USA, Oct. 1995

- M. Aboul-Dahab, "The Global Maritime Distress and Safety System- An Overview", (invited paper), Proc. of the 11 <sup>th</sup> National Radio Science Conference (NRSC'95) Alexandria, Egypt, Mar. 1995.
- El-Gamal, M. Aboul-Dahab and S.A.Abdel-Wahab "Diverse Computational Graphics Techniques for Displaying Antenna Radiation Patterns", Proc. of the 4<sup>th</sup> International Conference on Computer Theory and Applications, ICCTA'94, Alexandria, Egypt, Sept. 1994.
- Y.El-Gamal and M.Aboul-Dahab "Modern Trends in Maritime Communications." Proc. of the Telecommunications For Consumers in the Middle East Seminar, University of Bahrain, Manama, Bahrain, Oct. 1994.
- M.A. Aboul-Dahab and S. E. El-Khamy, "Simple Partially Adaptive Antenna Array Techniques for Interference Detection and Elimination", Proc. of the Progress in Electromagnetics Research Symposium (PIERS 93), Pasadena, California, U.S.A., Jul. 1993.
- Y.S. El-Gamal, M.A. Aboul-Dahab and A. El-Jaghoub, "Towards Computerizing the Curricula of Engineering Courses", Proc. of the 3<sup>rd</sup> International Conference on Evolution of Maritime Transport in Developing Countries "(MARDCON'93), Alexandria, Egypt, May 1993.
- M.A. Aboul-Dahab and A.A. Al-Jaghoub, "Learning Approach for Computerized Smith Chart In Propagation and Transmission Line Analysis", Proc. of the IEEE International Symposium on Antennas and Propagation (APS'93), Ann Arbor, Michigan, U.S.A., Jun. 1993.
- Y.S. El-Gamal and M.A. Aboul-Dahab,"A Comprehensive Approach For Utilizing Personal Computers In Engineering Education", Proc. of the Workshop of the "Arab Network for Staff Development in Higher Education", Alexandria, Egypt, Oct. 1993.
- S.E. El-Khamy, M.A. Aboul-Dahab, S. Al-Shale, K. Turki and G. Al-Gawish, "Simple Side lobe Cancellation Techniques using Partially Adaptive Antenna Arrays', Proc. of the 9<sup>th</sup> National Radio Science Conference (NRSC'92), Cairo, Egypt, Feb. 1992.
- M.A.Aboul-Dahab, "On Computer Aided Learning of Communications and Antennas at AMTA", Proc. of the 2<sup>nd</sup> International IASTED Conference, Alexandria, Egypt, May 1992.

- M.A. Aboul-Dahab, "Adaptive Antenna Array Techniques for Combining Multipath Received Signals", Proc. of the 8<sup>th</sup> National Radio Science Conference (URSI), Cairo, Egypt, Feb. 1991.
- M.SA. Aboul-Dahab and S.E. El-Khamy, "Optimum and Sub optimum Gain Maximization Techniques for Anti-Multipath Adaptive Antenna Arrays", Proc. of the International Conference on Antennas and Propagation (ICAP'91), York, U.K., Apr. 1991.
- S.E. El-Khamy and M.A. Aboul-Dahab, "On the Performance of Anti-Multipath Adaptive Antenna Array", Proc. of the Journees Internationals De Nice Sur Les Antennas (JINA'90), NICE, France, Nov. 1990.
- Y. Y.Hanafy and M.Aboul-Dahab "Electronic Automation Laboratory Experience at AASTMT" Proc. of the Workshop on Teaching of Electronic Devices, National Radio Science Committee, Cairo, Egypt, Nov.1988.
- .A. Mandour, S.E. El-Khamy and M.A. Aboul-Dahab, "A performance Criterion for the Multipath Immune Adaptive Antenna Array", Proc. of the Conference on Antennas and Communications (MONTECH'86), Montreal, Quebec, Canada, Sept.- Oct. 1986
- S.E. El-Khamy, I.A. Mandour and M.A.Aboul-Dahab, "A Multipath Immune Adaptive Antenna", Proc. of the International Symposium on Antennas and Propagation (ISAP'85) Kyoto, Japan, Aug. 1985.
- I.A Mandour, S.E. El-Khamy and M.A. Aboul-Dahab. "Maximally Flat Second Order Feedback Loop for Fast Adaptive Antenna Arrays", Proc. of the IEEE International Symposium on Antennas and Propagation (AP-S'81), Los Angles, U.S.A., June 1981.