

The logo of the University of Boumerdes is a circular emblem. It features a sun in the upper left, a building in the center, and Arabic calligraphy. The text 'جامعة' (University) is at the top, and 'بومرداس' (Boumerdes) is in the middle. Below the emblem is a ribbon containing the university's name in French and English.

Laboratoire Signaux & Systèmes

Université de Boumerdes
University of Boumerdes

Laboratoire
Signaux & Systèmes
Agréé en Février 2001

Directeur : **REFOUFI Larbi**

Grade : Professeur

Publications Internationales :

Année 2012 :

- M. Bitchikh, R. Aksas, H. Kimouche, And A. Azrar, "New UWB Antenna Design For Wireless Communications", Microwave and Optical Technology Letters / Vol. 54, No. 3, pp. 692-697, March 2012.
- M. Challal, A. Boutejdar, M. Dehmas, A. Azrar and A. Omar "Compact Microstrip Low-Pass Filter Design with Ultra-Wide Reject Band using a Novel Quarter-Circle DGS Shape, " ACES Journal- The Applied Computational Electromagnetics Society, vol. 27, n° 10, pp. 808-815, Oct. 2012.
- Abdelmadjid Recioui: Sidelobe Level Reduction in Linear Array Pattern Synthesis Using Particle Swarm Optimization. (2): 497-512 (2012).
- M. Chafai, H.Bentarzi, "Reliability Assessment and Improvement of Large Power Transformer Protection System Using Predictive Analysis", International Review on Modelling and Simulation, Vol.5 N°1, February 2012.
- Zitouni And H.Bentarzi, "A new approach for surface state modelling using charge pumping technique in submicron", Int. J. Surface Science and Engineering, Vol. 6, Nos. 1/2, pp 35- 44, 2012.
- Abdelmoumene andH. Bentarzi,"Reliability Enhancement of Power Transformer Protection System", J. Basic. Appl. Sci. Res., 2(10)10534-10539, 2012.
- Abdelmoumene and H. Bentarzi, Study Of The Influence Of Power Fluctuation On Power Transformers, International Journal Of Industrial Engineering & Technology (Ijiet, Vol.2, Issue 2 Pp. 31-37, Sep 2012.

Année 2011 :

- Ouadi, H. Bentarzi and J. C. Maun, "Phasor Measurement Unit Reliability Enhancement Using Real-Time Digital Filter", International Journal of Circuits, Systems and Signal processing, Issue 1, Volume 5, pp.1-8, (2011).
- R. Bouderbala, H. Bentarzi, A. Ouadi, "Digital Differential Relay Reliability Enhancement of Power Transformer », International Journal of Circuits, Systems and Signal processing,, Issue 1, Volume 5, pp.263-270, (2011).
- S. Boutora, H. Bentarzi, A. Ouadi "Analysis of the Disturbances in Distribution Networks using Matlab and ATP », International Journal of Energy, Issue 1, Volume 5, pp.9-16, (2011).

- Analysis of a self excited Induction Generator steady state performance using a new efficient algorithm', Aissa KHELDOUN, Larbi REFOUFI, Djalal Eddine Khodja ,Electr. Power Syst. Res. (2011),
- M. Challal, F. Labu, M. Dehmas and A. Azrar, "Comparative Study of Three Shapes of DGS Pattern and Design of Compact Microstrip Low-Pass and Band-Pass Filters, " Wseas Trans. on Circuits and Systems, vol. 10, Issue 12, pp. 413- 422, December 2011.
- M. Challal and A. Azrar, "A Good Conversion Loss and a Very High LO-to-RF Isolation of 24 GHz Single Balanced Mixer for RF front-end Receiver, " Maejo International Journal of Science and Technology, vol. 5, Issue 3, pp. 350- 357, October 2011.
- M. Challal, A. Azrar, M. Dehmas, "Rectangular Patch Antenna Performances Improvement Employing Slotted Rectangular shaped for WLAN Applications, " IJCSI- International Journal of Computer Science Issues, vol. 8, Issue 3, pp. 254- 258 , May 2011.
- Boutejdar, M. Challal and A. Azrar, " A Novel Band-Stop Filter Using Octagonal- Shaped Patterned Ground Structures along with Interdigital and Compensated Capacitors," ACES Journal- The Applied Computational Electromagnetics Society, vol. 26, n° 4, pp. 312-318, April 2011.
- Hachour Ouarda, Neural Path planning For Mobile Robots, International Journal Of Systems Applications, Engineering & Development , Issue 3, Volume 5, Pp 367-376,2011.
- Hachour Ouarda, Route Map Generation, International Journal Of Systems Applications, Engineering & Development, Issue 3, Volume 5, Pp 412-419,2011.
- Hachour Ouarda ,Cognitive tasks behavior of Intelligent Autonomous Mobile Robots , International journal of mathematical models and methods in applied sciences, Issue 3, Volume 5, pp 610-619,2011.
- Hachour Ouarda, Intelligent Autonomous Path Planning Systems, international journal of systems applications, engineering & development, Issue 3, Volume 5, pp377-386, 2011.
- Hachour Ouarda, World understanding and planning missions, International Journal Of Systems Applications, Engineering & Development, Issue 3, Volume 5, pp 404-411,2011.

Année 2010 :

- Recioui and H. Bentarzi, Pattern nulling in linear array antennas with mutual coupling effects using Taguchi method", AMSE Journal, Trans.Modelling, Measurement and Control, Vol. 83, Issue 3, p. 78, (2010).
- Recioui and H. Bentarzi, Nulling Steering of Dolph-Chebyshev Arraysd using Taguchi methed, wseas transactions on communications, Issue 11, Volume 9, November (2010).
- M.Akroum, and K. Hariche, Right matrix fraction description models identification using constrained PEM, J. Sci. & Eng. Vol. 37, N°.1B, pp. 69-88, June (2010).

- F.Amrani, A.Azrar, M. Trabelsi And R. Aksas, "Bandwidth Improvement Of A Single Stage Distributed Amplifier, Microwave Journal, Vol.53, N°5, Pp.112-122, (2010).
- Recioui And H. Bentarzi, Genetic Algorithm Based Mimo Capacity Enhancement In Spatially Correlated Channels Including Mutual Coupling, Springer, (2010).
- Hachour Ouarda, Novel Mobile Robot Path Planning Algorithm , International Journal Of Systems Applications, Engineering & Development, Issue 4, Volume 4, 2010, pp 114-123.Hachour Ouarda,"The Proposed Grid Based Navigation Approach",International Journal Of Systems Applications, Engineering & Development , Issue 4, Volume 4, Pp 124-133,2010.
- M.Akroum And K.Hariche "Identification Of Right Matrix Fraction Dscription Model Using Constrainezd Pem", Kuwait Journal Of Science And Engineering, N°1b, Vol 37, June 2010,
- Hachour Ouarda;"A Genetic Learning Motion Planning Of An Autonomous Mobile Robots ", International Journal Of Systems Applications, Engineering & Development , Issue 4, Issue 4, Volume 4, Pp134- 144, 2010.

Année 2009 :

- Hachour O., « The proposed Fuzzy Logic navigation approach of autonomous Mobile robots in unknown environments », International Journal of Mathematical Models and Methods in Applied Sciences, Vol 3, pp.204-218, (2009).
- Azrar A., « Characterization of polarization in the spun fibers », Microwave and Optical Technology Letters, Vol 51, N°2, pp.341-347, (2009).
- Azrar A., « Application of the FCEL Method to Microstrip Disk Antenna With a parasitic director », Microwave and Optical Technology Letters, Vol 51, N°8, pp.1911-1918, (2009).
- Akroum M., Hariche K., « Extending the SRIV algorithm to LMFD models », Journal of Electrical Engineering and Technologie, Korean Institute of Electrical Engineering, Vol 4, N°1, (2009).
- Hachour O., « The proposed hybrid intelligent system for path planning of Intelligent Autonomous Systems », International Journal of Mathematics and Computers In Simulation, Vol 3, pp.133-145, (2009).
- Hachour O., « Towards an approach of fuzzy control motion for mobile robots in unknown environments », Wseas Transactions On Systems, Vol 8, Pp.876-890, (2009).
- Bentarzi H., Chentir R., Belaidi N., Dif S., Mastorakis N., « A New Approach Applied to a Thermal Power Plant Using Fuzzy Logic», Wseas Transactions On Advances In Engenering Education, Vol 6, N°9, pp.275-284, (2009).

- Chafai M., Refoufi L., Bentarzi H., « Reliability Assessment and Improvement of Medium Power Induction Motor Winding Insulation Protection System Using Predictive Analysis », in Advance in Numerical Methods, Book-Chapter Verlag-Springer, pp.367-378, (2009).

Année 2008 :

- Recioui A., Azrar A., Bentarzi H., Dehmas M., « Synthesis of linear Arrays with Sidelobe Level Reduction Constraint Using Genetic Algorithms », International Journal of Microwave and Optical Technology, Vol 13, N°5, (2008).
- Akroum M., Harriche K., « An Optimal Identification approach for LMFD Models », Studies in Informatics and Control, Vol 17, N°4, (2008).
- Bentarzi H., Zitouni A., Kribes Y., « Oxide Charge Densities Determination Using Charge Pumping Technique with BTS in MOS Structures », WSEAS Transactions on Electronics, Issue 4, Vol 5, (2008).
- Chafai M., Refoufi L., Bentarzi H., « Reliability Assessment and Improvement of Large Power Induction motor Winding Insulation Protection System Using Predictive Analysis », WSEAS Transactions on Circuits and Systems, Issue 4, Vol 17, (2008).
- Dahimene H., Noureddine M., Azrar A., « A Simple Algorithm for the Restoration of Chipped Speech Signal », Informatics 32, (2008).
- Chafai M., Refoufi L., Bentarzi H., « Failure Mode Effects and Criticality Analysis of A Cement Plant Rotary Kiln Drive system », Asset Management and Maintenance Journal (AMMJ), Vol 21, N°1, (2008).
- Hachour O., Harriche K., « A Digital Implementation for Robot Path planning using genetic algorithms », wseas transactions on circuits and systems, 11, (2008).

Année 2007 :

- Chafai M., Refoufi L., « Reliability Estimation and Enhancement of OLC Relay Output Units using FMECA », Journal of Electrical Engineering, Vol 7, (2007).
- Zaimeddine R., Berkouk E-M., « A novel DTC Scheme of Double- star induction motors using three –level voltage source inverter », Journal of Engineering and Applied Sciences 2 (1), pp.136-142, (2007).
- Chafai M., Refoufi L., Bentarzi H., « Large Squirrel Cage Induction Motor Reliability Modelling », Journal of Engineering and Applied Sciences, 2(5), pp. 909-914, (2007).
- Recioui A., Azrar A., « Use of Genetic Algorithms in linear and planar Antenna array Synthesis Based on Schelkunoff Method », Microwave and Optical technology letters, Vol 49, N°7, pp. 1619-1623, (2007).

- Zaimeddine R., Berkouk E-M., Refoufi L., Bousalah M., « A Scheme of EDTC control using three –level voltage source inverter for an induction Motor », Journal of Engineering and applied Sciences, pp.2250-2255, (2007).
- Zaimeddine R., Refoufi L., Berkouk E-M.,« An improved direct torque control strategy for induction motor drive », International Journal of Electrical and Power Engineering, (1), pp.21-27, (2007).

Année 2006 :

- Refoufi L., Bentarzi H., Dekhandji F-Z., « New approach of induction motor performance study under different voltage unbalance conditions », WSEAS Transactions On Power Systems Issue 8,Vol 1, (2006).
- Zaimeddine R., Berkouk E. M., « Switching strategies in direct torque control of double-Star induction motors », WSEAS Transaction on Circuits and Systems ISSUE 2 ,Vol 5 , (2006).

Année 2005 :

- Refoufi L., Arras A.H., Bentarzi H., « Harmonic losses in Inverter fed Induction Motor including Skin Effect », Amse Periodicals Best of Book, pp. 119-128, (2005).

Année 2004 :

- Bentarzi H., Bouderbala R., Zerguerras A., « Ionic current in MOS structures », Ann. Telecommun, 59, N° 3-4, pp. 471-78, (2004).

Année 2003 :

- Bentarzi H., Bouderbala R., Zerguerras A., « Simulation of Ion density distribution in the gate oxide of MOS structures », AMSE Trans. On Modelling, Measurement and Control Journal, Vol 76, N°8, (2003).

Publications Nationales :

Année 2012 :

- A. Abdelmoumene and H. Bentarzi, Etude du Comportement de Transformateur de Puissance lors de la Variation de la Charge, Journal of Scientific Research, 2012.

Année 2007 :

- Achour A., Refoufi L., Kribes Y., « GTO tail current prediction using an improved spice circuit model », Algerian Journal of Technology AJOT Série B, Vol 17, N° 1, (2007).