



**Production scientifique  
2012-2015  
Laboratoire de physique de l'atmosphère, matériaux et modélisation**

**\* Projets internationaux financés**

| <b>ID</b> | <b>Intitulé</b>  | <b>Responsable</b> | <b>Année</b> |
|-----------|--|--------------------|--------------|
| 259       | Préparation et caractérisation de couches minces de semiconducteur à bande intermédiaire ZnTe :O en vue de réaliser une cellule solaire de troisième génération                              | ELMANOUNI Ahmed    | 2012         |
| 261       | Actualización de las capacidades docentes e tecnológicas en el campo de las energías renovables y fortalecimiento de la investigación en células solares fotovoltaicas de tercera generación | ELMANOUNI Ahmed    | 2012         |

**\*Projets nationaux financés**

| ID  | Intitulé  | Responsable         | Année |
|-----|---|---------------------|-------|
| 229 | e-doaur à Béni M'Ghit Commune Béni Yekhlaf, Mohammedia  | KHEDDIOUI Elm'kadem | 2015  |
| 230 | Analyse des contaminants émergents et élaboration de procédé hybride de dépollution   |                     | 2013  |
| 260 | Préparation et caractérisation de couches minces de semiconducteur à bande intermédiaire ZnTe :O en vue de réaliser une cellule solaire de troisième génération | ELMANOUNI Ahmed     | 2012  |

### \*Publications indexées

| ID    | Intitulé   | Année | Journal   | Auteurs  |
|-------|--|-------|---|--|
| 10960 | numerical study of the influence of ZnTe thickness on CdS/ZnTe solar cell performance                              | 2015  | EPJ-AP  | . SKHOUNI, A. EL MANOUNI, B. MARI and U. HANIF                 |
| 10962 | A numerical simulation study of ZnTe-based solar cells   | 2014  | IEEE, ISBN 978-1-4799-7336-1  | U. HANIF, B. MARI, O. SKHOUNI and A. EL MANOUNI                |
| 10963 | ZnTe thin films grown by electrodeposition technique on Fluorine Tin Oxide substrates                              | 2014  | Thin Solid Films, Volume 564, P. 195-200                                  | O. SKHOUNI, A. EL MANOUNI, M. MOLLAR, R. SCHREBLER and B. MARI |
| 10966 | Parameter identification of solar cell model using Levenberg-Marquardt algorithm combined with Simulated Annealing | 2014  | Solar Energy, 110, 781-788, (ELSEVIER) ISBN: 0038-092X                    | . DKHICHI, B. OUKARFI, A. FAKKAR, N. BELBOUNAGUIA              |
| 10970 | Elaboration d'un identificateur de creux de tension pour contrôler une   | 2015  | Journal International de technologie, de l'innovation, de la physique, de | .BOUJOU DI, E. KHEDDIOUI, N. RABBAH, N. BELBOUNAGUIA, N.       |

| ID    | Intitulé   | Année | Journal   | Auteurs   |
|-------|--|-------|---|---|
|       | génératrice éolienne connectée à un réseau électrique perturbé   |       | l'énergie et de l'enviro  | MACHKOUR  |
| 10971 | Voltage Dip Characterization in Order to Study Wind Turbine Connected to Disrupted Network                   | 2015  | International Journal of Applied Engineering Research ISSN 0973-4562 Volume 10, Number 21, pp 42357 | B. BOUJOURDI, N. MACHKOUR, N. RABBAH, N. BELBOUNAGUIA, M. ZEGRARI et Elm. KHEDDIOUI |
| 10973 | Adaptive Nonlinear Control Of Wind Energy Conversion System Involving Induction Generator                    | 2015  | Asian Journal of Control, 17(4) : 1365-1376   | Lajouad, R., El Magri, A., El Fadili, A., Chaoui, F.-Z. and Giri, F                 |
| 10974 | Reference Voltage Optimizer for Maximum Power Point Tracking in Triphase Grid-Connected Photovoltaic Systems | 2014  | International Journal of Electrical Power and Energy Systems, 60: 293-301                           | El Fadili, A., Giri, F. and El Magri, A   |
| 10975 | Adaptive control strategy with flux refernece optimization for sensorless induction motors                   | 2014  | Control Engineering Practice, 26(2): 91-106   | El Fadili, A., Giri, F., El Magri, A., Lajouad, R., and Chaoui, F.Z                 |
| 10977 | Sensorless induction machine observation with nonlinear magnetic characteristic                              | 2013  | , Int. J. Adapt. Control Signal Process, doi: 10.1002/acs.2398                                      | El Fadili, A., Giri, F., El Magri, A. and Besançon, G                               |
| 10978 | Reference Voltage Optimizer for Maximum Power Tracking in Single-Phase Grid-Connected Photovoltaic Systems   | 2013  | Journal of Control and Systems Engineering, 1(2): 57-66   | El Fadili, A., Giri, F. and El Magri, A.  |
| 10980 | Sensorless Adaptive Output Feedback Control of Wind Energy Systems with PMS Generators                       | 2013  | Control Engineering Practice, 21(4): 530-543  | EL Magri, A., Giri, F., Besançon, G., El Fadili, A., Dugard, L. and Chaoui F.Z.     |

| ID    | Intitulé   | Année | Journal   | Auteurs  |
|-------|--|-------|---|--|
| 10981 | State Observation of Induction Machine in Presence Of Magnetic Saturation Theoretical design and experimental evaluation | 2012  | International Journal of Integrated Energy Systems, 4(1): 27-55                                     | El Fadili, A., Giri F., Ouadi H. and El Magri A.                   |
| 10982 | Adaptive Nonlinear Control of Induction Motors Through AC/DC/AC Converters   | 2012  | Journal of Control, 14: 1470-1483. doi: 10.1002/asjc.478  | El Fadili, A., Giri, F., El Magri, A., Dugard, L. and Chaoui, F.Z. |
| 10983 | An adaptive control strategy for wound rotor synchronous machines  | 2012  | Int. J. Adapt. Control Signal Process, 26: 821-847. doi: 10.1002/acs.2271                           | El Magri, A., Giri, F., El Fadili, A. and Chaoui, F.Z.             |
| 10984 | Towards a global control strategy for Induction motor. Speed regulation, Flux optimization and power factor correction   | 2012  | , International Journal of Electrical Power and Energy Systems, 43: 230-244                         | El Fadili, A, Giri, F, Magri, A, Lajouad R. and Chaoui, F.Z.       |
| 10986 | Modeling and Analysis of Laminated Composite Structures  | 2012  | International Journal of Computer Applications (0975- 8887) Volume 50-No. J3                        | Saleh Alsubari, Hassan Chaffoui                                    |
| 10987 | Numerical Solutions of Luikov and Philipe and De Vries Equations of Heat and Mass Transfer in Porous Media               | 2015  | International Journal of Science and Research (IJSR) Volume 4, Issue 3, March 2015                  | R. Saadani , S. Ou ben moh , M. Rahmoune , A. Sbaibi               |
| 10988 | Numerical Resolution of the Coupled Equations of Heat and Mass Transfer in Porous Media                                  | 2012  | International Journal of Research and Reviews in Mechatronic Design and Simulation(IJRRMDS) Vol. 2, | R. Saadani, A. Jamil,A. Sbaibi, Y. Mourad                          |
| 10991 | CHARACTERIZATION OF A DIESEL SPRAY STRUCTURE AT HIGH PRESSURE  | 2014  | Journal of Mathematics and Technology, ISSN: 2078-0257, Vol. 5. No. 2,                              | L. Souinida1*, M. Mouqallid1, I. Affad2                            |

| ID    | Intitulé  | Année | Journal  | Auteurs  |
|-------|---|-------|--|--|
| 10994 | The Effect of the Random Inflow Conditions and Initial Conditions to Cycle-to-Cycle Variations Using Detachment Eddy Simulation | 2012  | SAE International<br>doi:10.4271/2012-01-1758  | Mustapha Mahdaoui, Abdelouahad Ait Msaad, Mhamed Mouqallid and                                       |
| 10999 | Reduced Detailed Mechanism for Methane Combustion   | 2012  | Energy and Power Engineering, 2012, 4, 28-33 doi:10.4236/epe.2012.41004<br>Published Online January 201    | Abdelouahad Ait Msaad1, Abdeltif Belcadi1, Mustapha Mahdaoui1, Elhoussin Aaffad2, M'hamed Mouqallid1 |
| 11001 | The Influence of Inflow Condition on the Generation of Tumbling Flow Using Detached Eddy Simulation                             | 2012  | Energy and Power Engineering, 2012, 4, 34-40 doi:10.4236/epe.2012.41005<br>Published Online January 201    | Mustapha Mahdaoui1, Abdelouahad Ait Msaad1, Mhmed Mouqallid1, Elhoussin Affad2                       |
| 11002 | CH4/NOx Reduced Mechanisms Used for Modeling Premixed Combustion  | 2012  | Energy and Power Engineering, 2012, 4, 264-273<br>doi:10.4236/epe.2012.44036<br>Published Online July 2012 | Abdellatif Belcadi1, Mohammed Assou2, El Houssine Affad2, El Houssine Chatri1                        |
| 11009 | Local field within a non linear thin film illuminated by a gaussian laser beam  | 2013  | IJRRAS 14 (2)  | R. CHIFAHY & R. MOUNTASSER   |
| 13297 | Characterization of a diesel spray structure at high pressure.  | 2014  | Journal of Mathematics and Technology, ISSN: 2078-0257, Vol. 5. No. 2, 2014                                | L. Souinida, M. Mouqallid, I. Affad  |
| 13298 | Bluff Body methane flame simulation: influence of turbulence modeling   | 2016  | J. Mater. Environ. Sci. 7 (12) (2016) 4361-4374  | R. El amraoui*1, M. Mouqallid2, H. El mghari1, E. Affad3, M. Obounou4, D. Garreton5                  |
| 13299 | The differentiation between the turbulence and two-phase models to  | 2015  | American Journal of Engineering Research (AJER)  | L. Souinida1, M. Mouqallid1 and L. Affad2  |

| ID    | Intitulé   | Année | Journal  | Auteurs   |
|-------|--|-------|--|---|
|       | characterize a Diesel spray at high injection pressure   |       |  |   |
| 13300 | Sensorless DTC Drive of Induction Motor Using 3-Level Inverter   | 2016  | International Review of Automatic Control (I.RE.A.CO.), Vol. 9, N. 4                       | A. Achalhi, M. Bezza, N. Belbounaguia                                 |
| 13301 | Backstepping Control for Semi-Active Suspension of Half-Vehicle with Dahl Magnetorheological Damper Model        | 2015  | International Journal on Engineering Applications (I.R.E.A.) Vol. 3, N. 4                  | K. El Majdoub, H. Ouadi   |
| 13302 | Adaptive Backstepping Control of Three-Phase Four-Wire Shunt Active Power Filters for Energy Quality improvement | 2015  | J Control Autom Electr Syst  | A. Ait Chihab1 · H. Ouadi1 · F. Giri2 · K. El Majdoub2                |
| 13303 | Boosting the performance of solar cells with intermediate band absorbers. The case of ZnTe:O                     | 2016  | Eur. Phys. J. Appl. Phys. Submitted (2016).  | O. SKHOUNI, A. EL MANOUNI, B. MARI                                    |
| 13304 | numerical study of the influence of ZnTe thickness on CdS/ZnTe solar cell performance                            | 2016  | Eur. Phys. J. Appl. Phys. (2016) 74: 24602   | O. SKHOUNI, A.EL MANOUNI, B. MARI, U. HANIF                           |
| 13305 | Energy's Method for Experimental Life Prediction of a 1 + 6 Strand   | 2016  | The International Journal Of Engineering And Science (IJES) ; Volume 5 Issue 7 Pages 27-33 | Amal Tijani ; Meryam MEKNASSI ; Hassan CHAFFOUI, Mohamed EIGHorba     |
| 13309 | A Simple High Gain Observer for the Wind Energy System Based on the Doubly Fed Induction Generator               | 2015  | Advances on Systems, Signals, Control, Communications and Computers                        | Rachid Lajouad, Fatima Zahra Chaoui, Abderrahime El Fadili            |
| 13310 | Low voltage breker arc behavior as function of breaking currents   | 2015  | IJAER, Vol 10, N° 19 pp 40739-40745  | □ N.Machkour, Elm. Kheddioui, N. Rabbah, N. Belbounaguia, M. Zegrari, |

| ID    | Intitulé  | Année | Journal  | Auteurs   |
|-------|---|-------|--|---|
| 13311 | DC / DC converters for the conditioning of Photovoltaic energy- Modeling and command strategy   | 2015  | American Journal of Engineering Research AJER- Volume 4. Issue 2                                     | □ Z.Sabiri, N. Machkour, Elm. Kheddioui, B. Boujoudi, M.B. Camara, B.Dakyo                    |
| 13314 | Backstepping Control of the Web Winding System  | 2015  | International Journal of Engineering & Technology (IJET-IJENS). Vol. 15, N°06, pp. 31-35             | . Rabbah, N. Machkour, M. Zegrari, Elm.Kheddioui, H. Ait El Mahjoub                           |
| 14400 | Perform sensing and transmission in parallel in cognitive radio systems: Spectrum and energy efficiency   | 2016  | Digital Signal Processing  | Mohammed Ridouani, Aawatif Hayar and Abdelkrim Haqiq  |
| 14402 | A novel power control based on a relaxed constraint in cognitive system   | 2016  | Transactions on Emerging Telecommunications Technologies   | Mohammed Ridouani, Aawatif Hayar and Abdelkrim Haqiq  |
| 14403 | Continuous-Transmit in Cognitive Radio Systems: Outage Performance of Selection Decode-and-Forward Relay Networks over Nakagami-m Fading Channels | 2015  | EURASIP Journal on Wireless Communications and Networking  | Mohammed Ridouani, Aawatif Hayar and Abdelkrim Haqiq  |
| 14416 | • Article: Technique of communications using a UE Transporter and Wi-Fi link  | 2015  | ©2014 IEEE   | Mohamed Riduan Abid, Ismail Fassi Fihri +5 more authors.. .Aawatif Hayar and Mohamed Essaaidi |
| 19253 | New Renewable Energy Allocation Algorithms based on Bin Packing in a Smart Home   | 2016  | Proceeding of the 5th International Conference on Smart Cities and Green ICT Systems (SMARTGREENS 20 | N. Benjamin Sendama, Mehdi Laraki; Awatif Hayar and Yassine Rifi                              |
| 19254 | Network Architecture of Smart Metering basing on Zigbee Sensors   | 2016  | International Journal of Scientific & Engineering Recherche, Vol 7, Issue                            | A. EL KHANTACH, M. HAMLICH, N. BELBOUNAGUIYA  |

| ID    | Intitulé   | Année | Journal                                       | Auteurs   |
|-------|--|-------|---|---|
|       | Network  |       | 11  |   |
| 30078 | Numerical investigation of thermohydraulic performance of air to water double pipe heat exchanger with helical fins  | 2017  | Applied Thermal Engineering                   | Anas El Maakoul, Mustapha El Metoui , Abdellatif Ben Abdellah, Said Saadeddine, , Mohamed Meziane                 |
| 30079 | Numerical design and investigation of heat transfer enhancement and performance for an annulus with continuous helical baffles in a double pipe heat exchanger | 2017  | Energy Conversion and Management              | Anas El Maakoul, Azzeddine Laknizi, Said Saadeddine, Abdellatif Ben Abdellah, Mohamed Meziane, Mustapha El Metoui |
| 30080 | Numerical comparison of shell-side performance for shell and tube heat exchangers with trefoil-hole, helical and segmental baffles                             | 2016  | Applied Thermal Engineering                   | A. El Maakoul, A. Laknizi, S. Saadeddine, A. Benabdellah, M. Meziane and M. El Metoui,                            |
| 30081 | Investigation du système de dessalement par humidification-déshumidification   | 2016  | Revue de l'Entrepreneuriat et de l'Innovation | El Maâkoul Anas, Abdellatif Ben Abdellah, Saadeddine Said, Meziane Mohamed, Azzeddine Laknizi                     |
| 30086 | Influence of P+-ZnTe back surface contact on photovoltaic performance of ZnTe based solar cells  | 2018  | Optical and Quantum Electronics               | H. BAYAB, A. EL MANOUNI, , B. MARI, Y. H; KHATTAK; S. ULLAH; F.BAIG   |
| 30087 | Boosting the performance of solar cells with intermediate band absorbers. The case of ZnTe:O   | 2017  | Journal of Energy and Power Engineering       | O. SKHOUNI, A. EL MANOUNI, H. BAYAB, B. MARI  |
| 30120 | Non-linear command of wind turbine based on Doubly-fed Induction generator   | 2018  | European Journal of Electrical Engineering    | Z. SABIRI, N. MACHKOUR, M. BEZZA, Elm. KHEDDIOUI, D. OUOBA  |



### \*Publications avec comité de lecture

| ID    | Intitulé   | Année | Journal                                  | Auteurs  |
|-------|--|-------|--|--|
| 11479 | Commande Non Linéaire à Retour de Sortie de la Génératrice Synchrone à Aimants Permanents, Conférence Internationale Francophone d'Automatique | 2012  | CIFA'12), pp : 961—966, Grenoble, France | A. El Magri, F. Giri, A. Elfadili, Luc Dugard. |

### \*Communications internationales

| ID   | Intitulé   | Auteurs  | Conférence   | Ville      | Pays  | Date       |
|------|--|--|--|------------|-------|------------|
| 8920 | COUPLING OF THE MAGNETIC DIAGNOSTIC METHOD BASED ON TITE DECONVOLUTION PRINCIPLE WITH AN I{\\IERSE METHOD, * TO STTIDY A LOW VOLTAGE BREAKER ARC | Elm. KHEDDIOUI., N.MACHKOUR*, N. BELBOTINAGUIA*                                | Congrès Méditerranéen des Télécornmunications, CMT 14  | Mohammedia | maroc | 2014-05-22 |
| 8922 | EFFECT OF NTJMBER OF HIDDEN NETJRONS ON THE PERFORMANCE OF THE PHOTOVOLTAIC CELL MODEL   | fayrouz DKHICHI, Benyounes OUKARFI, Abderrahim FAKKA& Nour-Eddine BELBOUNAGUIA | Congrès Méditerranéen des Télécommunications, CMT' 1 4 | Mohammedia | maroc | 2014-05-22 |
| 9445 | Adaptive command for double boost chopper with backstepping  | Z. sabiri , N. Machkour, . CAMARA  | Renewable and sustainable energy conference IRSEC 14   | Mohammedia | maroc | 2014-10-17 |

| ID    | Intitulé  | Auteurs  | Conférence   | Ville      | Pays   | Date       |
|-------|---|--|--|------------|--------|------------|
|       | approach  |  |  |            |        |            |
| 9455  | DC/DC converters for photovoltaic applications modeling and simulations   | Sabiri, Machkour                               | IRSEC14  | ouarzazate | Maroc  | 2014-10-17 |
| 9896  | Couplag of the maghetic diagnostic method based on the deconvolution principle with an inverse method, to stydy a low voltage breaker ARC | N. machkour                                    | Congrès M éd iterranéen des Télécornm unications, CMT 14                     | Mohammedia | maroc  | 2014-05-22 |
| 9898  | Experimental validation of new magnetic method applied to diagnose a low voltage breaker aRC  | machkour, A. bourjilate                        | Matec web conference   | Marrakech  | maroc  | 2012-04-30 |
| 11486 | Commande Non Linéaire à Retour de Sortie de la Génératrice Synchrone à Aimants Permanents,  | A. El Magri, F. Giri, A. Elfadili, Luc Dugard. | Conférence Internationale Francophone d'Automatique (CIFA'12), pp : 961—966, | Grenoble,  | France | 2012-07-04 |
| 11522 | Observateur interconnecté adaptatif sans capteur mécanique pour la machine asynchrone avec prise en compte de la saturation magnétique    | A. Elfadili, F. Giri, A. El Magri.             | Conférence Internationale Francophone d'Automatique (CIFA'12)                | Grenoble   | France | 2012-07-04 |

| ID    | Intitulé  | Auteurs   | Conférence   | Ville    | Pays   | Date       |
|-------|---|---|--|----------|--------|------------|
| 11529 | An Interconnected Adaptive Observer for PMS Motors  | El Magri A., F. Giri , A. El Fadili.                                      | IFAC Symposium on Power Plants and Power Systems control (PPPSC'12)  | Toulouse | France | 2012-09-02 |
| 11533 | Output Feedback Control for Induction Machine in Presence of Nonlinear Magnetic Characteristic      | El Fadili A., F. Giri, A. El Magri, R. Lajouad.                           | Symposium on Power Plants and Power Systems control (PPPSC'12),  | Toulouse | France | 2012-09-02 |
| 11541 | Wind Sensorless Control of Wind Energy Conversion System With PMS Generator                         | A. El Magri, F. Giri, A Elfadili, L. Dugard.                              | American Control Conference, Fairmont Queen Elizabeth  | Montreal | Canada | 2012-06-27 |
| 11544 | State Feedback Control Of Wind Energy Conversion System Involving Squirrel Cage Induction Generator | Lajouad R., A. El Magri., A. El Fadili, F.Z Chaoui, F. Giri, Besançon, G, | 11th IFAC International Workshop on Adaptation and Learning in Control and Signal Processing, University of Caen Basse-Normandie | Caen     | France | 2013-07-03 |
| 11548 | Adaptive Nonlinear Control of Wind Energy Conversion System with PMS Generator                      | A. El Magri., F. Giri, A. El Fadili, L. Dugard,                           | 11th IFAC International Workshop on Adaptation and Learning in Control and Signal Processing                                     | Caen     | France | 2013-07-03 |
| 11552 | Nonlinear controller for Doubly Fed Induction Motor with bi-directional AC/DC/AC converter          | El Fadili A., F. Giri, A. El Magri, L. Dugard,                            | 11th IFAC International Workshop on Adaptation and Learning in Control and Signal Processing, University of Caen Basse-          | Caen     | France | 2013-07-03 |

| ID    | Intitulé   | Auteurs   | Conférence   | Ville            | Pays      | Date       |
|-------|--|---|--|------------------|-----------|------------|
|       |  |   | Normandie  |                  |           |            |
| 11557 | Backstepping Control for Maximum Power Tracking in Single- Phase Grid-Connected Photovoltaic Systems   | El Fadili A., F. Giri, A. El Magri,                           | 11th IFAC International Workshop on Adaptation and Learning in Control and Signal Processing, University of Caen Basse-Normandie | Caen             | France    | 2013-07-03 |
| 11563 | Sampled-Data Nonlinear Observer Design PMSM  | A.A.R.Al Tahir, A.ElMagri, T.Ahmed-Ali, El Fadili A., F. Giri | IFAC-PapersOnLine 48-11 (2015) 327-332   | Saint Petersburg | Russie    | 2014-06-24 |
| 11581 | QoS of Cognitive and Primary Networks and Spectrum Sensing Tradeoff Using Always Transmit              | Mohammed Ridouani, Aawatif Hayar and Abdelkrim Haqiq          | IEEE International workshop CCS  | Rhine River      | Allemagne | 2014-09-02 |
| 11586 | Technique of Communications Using a UE and Wi-Fi Link  | Ahmed Laguidi and Aawatif Hayar                               | IEEE NGNS 2014   | Casablanca       | Maroc     | 2014-05-28 |
| 11589 | Combining Renewable Energy and Vehicle to Grid sources for QoS in EAAS Concept for Smart Grids Systems | B. Sendama, A. Moutabir and A. Hayar,                         | IEEE CISTEM Conference   | Tunis            | Tunis     | 2014-11-03 |
| 11592 | General Scheme for Always Transmit Solution in Cognitive Radio Systems                                 | M. Ridouani, A. Hayar   | IEEE COMMUNICATION SOCIETY, 20th International Conference on Telecommunications  | Casablanca       | Maroc     | 2014-05-06 |

| ID    | Intitulé  | Auteurs  | Conférence  | Ville      | Pays  | Date       |
|-------|---|--|---|------------|-------|------------|
|       |   |  | ICT2013   |            |       |            |
| 11626 | New ICT-Based Architecture for Energy Management and Energy as a Service Concept in Smart Grids                 | B. Sendama, A. Hayar and S. Bouferda   | International Conference on Engineering Education and research ICEER 2013                                 | Marrakech  | Maroc | 2013-07-01 |
| 30094 | Evaluation of the LVRT Requirement for Wind Farms specified in the Moroccan Grid Co                             | Drhorhi I. A. El Fadili, D. Kasmi . and M. Stitou                            | Conference Internationale Renewable Energies, Power Systems and Green Inclusive Economy (REPS & GIE-2018) | Casablanca | Maroc | 2018-04-23 |
| 30095 | Evaluation of the Moroccan Electrical Grid Dynamic Stability after Large Scale Renewable Energies Integration   | Drhorhi I. El Fadili, A, D. Kasmi . and M. Stitou                            | Conference Internationale Renewable Energies, Power Systems and Green Inclusive Economy (REPS & GIE-2018) | Casablanca | Maroc | 2018-04-23 |
| 30096 | Reference Speed Optimizer Controller for Maximum Power Tracking in Wind Energy Conversion System Involving DFIG | Boutahar S., A. El Fadili, I. Drhorhi, M. Stitou, A. El Magri and R. Lajouad | Conference Internationale Renewable Energies, Power Systems and Green Inclusive Economy (REPS & GIE-2018) | Casablanca | Maroc | 2018-04-23 |
| 30097 | Output Feedback Control of Sensorless Photovoltaic Systems, with Maximum Power                                  | Stitou. M, El Fadili, A, F.Z Chaoui, F. Giri                                 | Conference Internationale Renewable Energies, Power Systems and Green Inclusive                           | Casablanca | Maroc | 2018-04-23 |

| ID    | Intitulé   | Auteurs  | Conférence  | Ville         | Pays   | Date       |
|-------|--|--|---|---------------|--------|------------|
|       | Point Tracking   |  | Economy (REPS & GIE-2018)   |               |        |            |
| 30100 | Management Strategy of a hybrid renewable energy system  | - Z. Sabiri, N. Machkour, K. El Majdoub, M. Bezza, Elm. Kheddioui                  | Conference Internationale Renewable Energies, Power Systems and Green Inclusive Economy (REPS & GIE-2018) | Casablanca    | Maroc  | 2018-04-23 |
| 30101 | Optimal Control of Semi-Active Quarter Vehicle Suspension with Magnetorheological Damper and Dahl Model, | - K. EL Majdoub, H. Ouadi, N. Belbounaguia, Elm. Kheddioui, R. Souhail, O. Ammari, | Conference Internationale Renewable Energies, Power Systems and Green Inclusive Economy (REPS & GIE-2018) | Casablanca    | Maroc  | 2018-04-23 |
| 30115 | Firefly Algorithm for Solving Load Flow Problem  | A. Tazi, Z. Sabiri, N. Belbounaguia, Elm. Kheddioui, M. Bezza,                     | Conference Internationale Renewable Energies, Power Systems and Green Inclusive Economy (REPS & GIE-2018) | Casablanca    | Maroc  | 2018-04-23 |
| 30147 | Localized Boundary Layer Receptivity To a Free Stream Acoustic Disturbance                               | Y. BANDADI , A. SBAIBI   | 17eme Congrès Français de Mécanique   | Lille, France | France | 2017-08-28 |
| 30500 | Comparative study between Direct Torque Control and Field Oriented Control of                            | A. ACHALHI, M. BEZZA, et N. BELBOUNAGUIA   | Development and Manufacturing of Electronic Systems (DEMESYS)   | Rabat         | Maroc  | 2015-05-01 |

| ID    | Intitulé  | Auteurs   | Conférence    | Ville      | Pays  | Date       |
|-------|---|---|---------------|------------|-------|------------|
|       | Induction Machine   |   |               |            |       |            |
| 30501 | « Improvement of Direct Torque Control by using a Space Vector Modulation Control of three Level Inverter » | A . ACHALHI, M.BEZZA, N. BELBOUNAGUIA and B. BOUJOUDI | XII ème JMSM, | Fès        | Maroc | 2015-11-19 |
| 30505 | Firfly Algorithm for Solving Load Flow Problem “  | M.BEZZA, A. ACHALHI, N. BELBOUNAGUIA                  | AETEEMS 2017  | Casablanca | Maroc | 2017-07-10 |

### \*Communications nationales

| ID    | Intitulé   | Auteurs  | Conférence  | Ville              | Date       |
|-------|--|--|---|--------------------|------------|
| 11019 | Elaboration de la Relativité Générale  | D. EL KASMI  | Centenaire de la Relativité Générale              | Mohammedia         | 2015-12-03 |
| 11025 | numerical study of the influence of ZnTe thickness on CdS/ZnTe solar cell performance  | O. SKHOUNI, A.EL MANOUNI, B. MARI, U. HANIF                | International Conference on Material and Energy   | ENS Martil Tetouen | 2015-05-19 |
| 11027 | Préparation de couches minces de ZnTe par la technique de l'électrodéposition cathodique pour application dans les cellules solaires | . SKHOUNI, A. EL MANOUNI, M. MOLLAR, R. SCHREBLER, B. MARI | 8ème Rencontre Nationale d'Electrochimie (RNE08), | ENIM Rabat         | 2015-03-26 |

| ID    | Intitulé   | Auteurs   | Conférence  | Ville                  | Date       |
|-------|--|---|---|------------------------|------------|
| 11031 | Coupling of the magnetic diagnostic method based on the deconvolution principle with an inverse method, to study a low voltage breaker arc | Elm. KHEDDIOUI, N. MACHKOUR, N. BELBOUNAGUIA                    | Congrès Méditerranéen des Télécommunications, CMT'14  | Mohammedia             | 2014-05-22 |
| 11034 | effect of number of hidden neurons on the performance of the photovoltaic cell model   | F. DKHICHI, B. OUKARFI, A. FAKKAR et N. BELBOUNAGUIA            | Congrès Méditerranéen des Télécommunications, CMT'14  | Mohammedia             | 2014-05-22 |
| 11035 | Modélisation VHDL AMS et application à la commande direct du couple (DTC) de la machine asynchrone   | M. BEZZA, A. ACHALHI, et N. BELBOUNAGUIA                        | Workshop International sur les Systèmes Avancés en Génie Electrique et Energie Renouvelable (SAGEER'2015) | Oujda                  | 2015-03-21 |
| 11038 | Comparative study between Direct Torque Control and Field Oriented Control of Induction Machine  | A. ACHALHI, M. BEZZA, et N. BELBOUNAGUIA                        | Development and Manufacturing of Electronic Systems (DEMESYS)   | Rabat                  | 2015-04-01 |
| 11305 | Performance during load variations of photovoltaic system with an auto-scaling step-size based MPPT device                                 | . OUOBA, A. FAKKAR, B. OUKARFI, N. BELBOUNAGUIA et K. ELKAMOUNY | Development and Manufacturing of Electronic Systems (DEMESYS)   | Rabat                  | 2015-04-01 |
| 11314 | Improvement of Direct Torque Control by using a Space Vector Modulation Control of three Level Inverter                                    | A . ACHALHI, M. BEZZA, N. BELBOUNAGUIA and B. BOUJOURDI         | XII ème JMSM  | Fès                    | 2015-11-12 |
| 11328 | Application of Direct Torque Control of Induction Motor in a   | . ACHALHI, D. OUOBA, M. BEZZA, N. BELBOUNAGUIA et               | 3rd International Renewable and Sustainable Energy  | Marrakech & Ouarzazate | 2015-12-10 |



| ID    | Intitulé  | Auteurs  | Conférence  | Ville                  | Date       |
|-------|---|--|---|------------------------|------------|
|       | Photovoltaic Water Pumping System   | F.DKHICHI  | Conference ISERC'15   |                        |            |
| 11338 | Etude expérimentale de l'endommagement d'un câble métallique par fatigue                            | A. TIJANI, M. ELGHORBA, H. CHAFFOUI  | 12ème congrès de mécanique  | Casablanca             | 2015-04-21 |
| 11351 | Endommagement Critique d'un Cable Metallique Soumis a des Sollicitations Cycliques                  | Amal TIJANI, Nadia Mouhib, Mohamed El Ghorba and Hassan Chaffoui   | 5ème Congrès Algérien de Mécanique  | EL-OUED, ALGERIE       | 2015-10-25 |
| 11363 | Evaluation of earth-air heat exchanger for cooling and heating a poultry house: case study Morocco  | Azzeddine Laknizi, Anas El Maakoul, Abdellatif Ben Abdellah, Mohsine Bouya, Said Dhimdi and Saadeddine Said. | 3rd International Renewable and Sustainable Energy Conference.  | Marrakech & Ouarzazate | 2015-12-13 |
| 11368 | Utilisation d'un échangeur air-sol comme solution de conditionnement d'air dans un bâtiment avicole | Laknizi, Anas El Maakoul, Abdellatif Ben Abdellah, Saadeddine Said, Meziane Mohamed                          | 3ème colloque CepiC : Le brevet, outil stratégique de l'innovation et de la valorisation de la recherche scientifique | Ben Msik Casablanca    | 2015-12-17 |
| 11371 | Investigation du système de dessalement par humidification-déshumidification                        | Maâkoul Anas, Azzeddine Laknizi, Abdellatif Ben Abdellah, Saadeddine Said, Meziane Mohamed                   | Le brevet, outil stratégique de l'innovation et de la valorisation de la recherche scientifique                       | Ben Msik Casablanca    | 2015-12-17 |
| 11379 | QoS of Cognitive and Primary Networks and Spectrum Sensing Tradeoff Using Always Transmit           | Mohammed Ridouani, Aawatif Hayar and Abdelkrim Haqiq   | IEEE International workshop CCS   | Germany                | 2014-01-07 |
| 11385 | Technique of Communications   | Ahmed Laguidi and Aawatif  | IEEE NGNS 2014  | Casablanca             | 2014-05-28 |

| ID    | Intitulé   | Auteurs                               | Conférence  | Ville      | Date       |
|-------|--|---------------------------------------|---|------------|------------|
|       | Using a UE and Wi-Fi Link  | Hayar                                 |   |            |            |
| 11393 | Combining Renewable Energy and Vehicle to Grid sources for QoS in EAAS Concept for Smart Grids Systems | B. Sendama, A. Moutabir and A. Hayar, | IEEE CISTEM Conference  | Tunis      | 2014-11-03 |
| 11398 | General Scheme for Always Transmit Solution in Cognitive Radio Systems                                 | M. Ridouani, A. Hayar                 | IEEE COMMUNICATION SOCIETY, 20th International Conference on Telecommunications ICT2013 | Casablanca | 2013-05-06 |

### \*Ouvrages

| ID    | Intitulé   | Auteurs   | Editeur   | Date |
|-------|--|---|---|------|
| 11427 | Modélisation et optimisation des structures composites - Outils de calculs et démarches de conception                | H. Chaffoui   | Editions Universitaires Européennes, 2012, ISBN 978-3-8417-9660-8 | 2012 |
| 11440 | Control Models for Induction Motors, in AC Electric Motors Control: Advanced Design Techniques and Applications      | EL Fadili, A., Giri, F. and EL Magri, A             | (ed F. Giri), John Wiley & Sons Ltd, Oxford, UK.                  | 2013 |
| 11443 | Control Models for Synchronous Machines , in AC Electric Motors Control: Advanced Design Techniques and Applications | EL Magri, A., EL Fadili, A. and Giri, F.            | (ed F. Giri), John Wiley & Sons Ltd, Oxford, UK.                  | 2013 |
| 11454 | Nonlinear Control for Speed Regulation of Induction Motor with Optimal   | EL Fadili, A., EL Magri, A., Ouadi, H. and Giri, F. | (ed F. Giri), John Wiley & Sons Ltd, Oxford, UK                   | 2013 |

| ID    | Intitulé   | Auteurs  | Editeur  | Date |
|-------|--|--|--|------|
|       | Energetic Efficiency, in AC Electric Motors Control: Advanced Design Techniques and Applications   |  |  |      |
| 11457 | Backstepping Controller for DFIM with Bidirectional AC/DC/AC Converter, in AC Electric Motors Control: Advanced Design Techniques and Applications         | EL Fadili, A., Assche, V. V., EL Magri, A. and Giri, F.                | (ed F. Giri), John Wiley & Sons Ltd, Oxford, UK. | 2013 |
| 11463 | Nonlinear State-Feedback Control of Three-Phase Wound Rotor Synchronous Motors, in AC Electric Motors Control: Advanced Design Techniques and Applications | EL Magri, A., Assche, V. V., EL Fadili, A., Chaoui, F.-Z. and Giri, F. | (ed F. Giri), John Wiley & Sons Ltd, Oxford, UK. | 2013 |

### \*Thèses en cours

| ID   | Nom Prénom      | Sujet   | Directeur de thèse | Année de première inscription |
|------|-----------------|---|--------------------|-------------------------------|
| 2329 | ALIMOU Dounya   | Etude du comportement mécanique des câbles métalliques                            | CHAFFOUI Hassan    | 2015                          |
| 2331 | ACHHAL Saloua   | Analyse des défaillances dans les comportements mécaniques des câbles métalliques | CHAFFOUI Hassan    | 2015                          |
| 2334 | EDDARAKI Meryem | Développement d'un nouvel outil pour la gestion de la qualité dans l'entreprise   | CHAFFOUI Hassan    | 2015                          |
| 2337 | RIFFI Mohammed  | Simulation Numérique de Phénomènes Aéro   | SBAIBI Ahmed       | 2015                          |

| ID   | Nom Prénom        | Sujet   | Directeur de thèse  | Année de première inscription |
|------|-------------------|---|---------------------|-------------------------------|
|      |                   | Acoustiques   |                     |                               |
| 2339 | MAFTAH Anas       | Elaboration et caractérisation de matériaux hybrides pérovskites et simulation de performances photovoltaïques de cellules solaires à base de ces matériaux | ELMANOUNI Ahmed     | 2015                          |
| 2341 | NAJJAJ Jilali     | Etude et caractérisation des mécanismes d'endommagement d'un acier doux   | CHAFFOUI Hassan     | 2015                          |
| 2342 | HIBAOUI Meyssae   | Scénario de transition énergétique 100% renouvelable  | EL KASMI DRISS      | 2015                          |
| 2344 | LAGHMARI Abdeslam | Modélisation et élaboration de commandes avancées des convertisseurs de puissance pour la gestion du flux d'énergie dans un réseau intelligent              | EL KASMI DRISS      | 2015                          |
| 2355 | ESSABAR Sanae     | Modélisation de Transfert de chaleur et d'humidité dans un milieu poreux  | SBAIBI Ahmed        | 2014                          |
| 2360 | SABIRI Zakaria    | Efficacité d'intégration de multi sources d'énergies renouvelables à un réseau électrique   | KHEDDIOUI Elm'kadem | 2013                          |
| 2362 | BOUJOURDI Basma   | Etude de problèmes liés au creux de tension dans un réseau électrique. Application : cas d'une éolienne   | KHEDDIOUI Elm'kadem | 2013                          |
| 2367 | BANDADI Youssef   | Réceptivité d'une couche limite dynamique   | SBAIBI Ahmed        | 2013                          |
| 2369 | EL KASTALI Ayoub  | Modélisation des comportements des structures   | CHAFFOUI Hassan     | 2013                          |
| 2374 | TIJANI Amal       | Modélisation des structures appliquée au génie civil  | CHAFFOUI Hassan     | 2013                          |

## \*Thèses soutenues

| ID   | Nom Prénom      | Sujet   | Directeur de thèse      | Année de première inscription | Date de soutenance |
|------|-----------------|---|-------------------------|-------------------------------|--------------------|
| 2325 | Rachid CHIFAH   | Couche mince à effet Kerr optique illuminée par un faisceau gaussien au voisinage de l'angle d'incidence limite                                     | MOUNTASSER Rachid       | 2010                          | 2014-10-03         |
| 2947 | Othmane SKHOUNI | Préparation et caractérisation de couches minces de ZnTe. Simulations de performances photovoltaïques de cellules solaires à base de ZnTe et ZnTe:O | ELMANOUNI Ahmed         | 2012                          | 2015-12-28         |
| 5781 | Zakaria Sabiri  | Etude de l'efficacité de l'intégration de multi-sources d'énergies renouvelables dans un réseau électrique intelligent et isolé                     | KHEDDIOUI Elm'kadem     | 2013                          | 2018-04-25         |
| 5782 | Basma Boujoudi  | Commande d'une Eolienne à Base d'une Génératrice Asynchrone à Double Alimentation reliée à un Réseau Perturbé par des Creux de Tensions Electriques | kheddioui el mkaddem    | 2013                          | 2018-07-07         |
| 5783 | Amina Achalhi   | Contribution à l'amélioration de la commande directe du couple (DTC) de la machine asynchrone   | BELBOUNAGUIA NourEddine | 2013                          | 2018-06-20         |