

# Curriculum Vitae



## **1. Etat Civil :**

Nom: **ZOUZOU**

Prénom : **SALAH-EDDINE**

Né le : 25-09-1963

Situation familial : Marié, 3 enfants

Nationalité : Algérienne

Adresse personnelle : 1, Rue Djezzar, Biskra 07000, Algérie

Téléphone personnel : 213 05 53 12 99 62

Tel/Fax: (Professional) :00 213 33 54 31 58

E-mail: zouzou\_s@hotmail.com

Grade : Professeur de l'université de Biskra

Responsabilité administrative: Directeur du Laboratoire de Génie Electrique de Biskra.

Adresse professionnelle : Département de génie électrique, Faculté des Sciences et de la technologie, Université de Biskra B.P 145, 07000 Biskra, Algérie.

## **2. Formation & Diplômes :**

1982 : Baccalauréat Mathématiques, Biskra, Algérie

1987 : Ingénieur en Electrotechnique, Alger, Algérie

1988 : D.E.A en Génie Electrique, I.N.P. Grenoble, France

1991 : Doctorat en Génie Electrique, I.N.P. Grenoble, France

2004 : Professeur

## **3-Domains de compétences :**

Machines électriques, Conception de Machines électriques, Matériaux magnétiques, Diagnostic des systèmes électro-énergétiques.

## **4. Activité d'Enseignement :**

### **4.1 Magistère**

1. Electrotechnique approfondie 1996

2. Machines spéciales (1997- 2009)

### **4.2 Ingénieur**

1. Machines Spéciales (2002 – 2018).

2. Mesures électriques (1992-1993-1994-2004)

3. Régimes transitoires des systèmes électro - énergétiques (1992 – 2005).

4. Asservissement linéaire (1993)

5. Appareillage et schémas électriques (2000-2004)

6. Conception de Machines électriques (2005 – 2014)

7. Modélisation des Machines électriques (2015-2017)

8. Diagnostic des Machines électriques (2015-2017)

## **5. Activité de Responsabilités collectives**

1. Membre de comité national pédagogique 1995-2001

2. Président du comité scientifique du département d'électrotechnique, 1999-2003

3. Président du 3ème Séminaire National de Génie Electrique, Biskra 2001.

4. Président du comité scientifique de 2ème Séminaire National de Génie Electrique Biskra 1997.

5. Membre expert à la commission régionale d'évaluation et d'habilitation des dossiers de post graduation.
6. Membre expert à la commission nationale d'évaluation des dossiers de projets de recherche.
7. Membre de comité sectoriel permanent national au niveau de la direction générale de la recherche.
8. Membre du comité de rédaction de la revue (scientific and technical periodical of the university of Biskra, ISSN-1112-3338).

## **6. Activité d'encadrement :**

### **6.1 Mémoires d'Ingénieur d'état :**

1. Réalisation d'un hacheur 1993
2. Contribution à l'élaboration des manipulations d'un laboratoire de capteurs physiques 1993
3. Commande d'un moteur à courant continu alimenté par un hacheur 1994
4. Simulation des machines électriques sur ordinateur analogique 1994
5. Identification, Modélisation et Simulation d'une machine synchrone 1995
6. Modélisation, Identification et Simulation d'une machine synchrone 1996
7. Techniques d'estimation des grandeurs non mesurables de la machine asynchrone triphasée à cage (Flux et Couple électromagnétiques) 1996
8. Modélisation et identification de la machine synchrone par l'essai indiciel de décroissance du courant 1997
9. Etude de la stabilité d'une machine asynchrone triphasée autour d'un point de fonctionnement 1997
10. Etude de stabilité et de la réduction d'ordre de la machine asynchrone triphasée par la théorie des variables d'états 1998
11. Simulation de la machine à réluctance variable 2000
12. Diagnostic des défauts dans les machines asynchrones triphasées à cage 2001
13. Etude de la machine asynchrone pendant la connexion, la déconnexion et la reconnexion 2003
14. Identification d'un modèle de la machine asynchrone dédiée au diagnostic 2004

### **6.2 Projets en post-graduation:**

#### **6.2.1 Magistère :**

1. Etude de la machine asynchrone triphasée pendant la connexion et la déconnexion (2001)
2. Contribution au diagnostic des défauts dans les machines asynchrones triphasées à cage (2003)
3. Modèle de la machine asynchrone triphasée à cage dédiée à la détection de défauts (prise en compte des harmoniques d'espace) par la fonction d'enroulement modifiée (2004)
4. Contribution à la conception d'une machine à réluctance variable (2004)
5. Diagnostique de la machine asynchrone triphasée par la modélisation par éléments finis(2010).
6. Diagnostique de la machine asynchrone triphasée tenant en compte le circuit magnétique(2012)

#### **6.2.2 Doctorat d'état :**

1. Contribution au diagnostic d'une machine asynchrone triphasée par la mesure du courant statorique (2005)
2. Contribution à la commande d'une machine asynchrone triphasée par logique floue (2006)
3. Analyse et gestion de la production des centrales électriques liées aux réseaux électriques de grandes tailles. (2007)
4. Etude Comparative des Techniques de Diagnostic des Machines Asynchrones(2010).
5. Contribution à la modélisation de la machine asynchrone triphasée dédiée au diagnostic(2010).
6. Contribution au diagnostic d'une machine asynchrone triphasée par l'approche modèle(2012).
7. Diagnostique de la machine asynchrone triphasée par la modélisation par éléments finis(2015).
8. Contribution au diagnostic d'une machine asynchrone triphasée par logic floue (2016).
9. Contribution au diagnostic d'une machine asynchrone triphasée par réseaux de neurones(2017).

10. Contribution au diagnostic d'une machine asynchrone triphasée avec variation de la charge(2017)
11. Contribution au diagnostic des défauts mécaniques d'une machine asynchrone triphasée (2017)
12. Contribution au diagnostic d'une machine asynchrone triphasée les nouvelles techniques de traitement de signal (en cours).
13. Contribution to the modeling of the permanent machine dedicated to faults diagnosis (en cours).
14. Contribution to the diagnosis of the defects in the squirrel cage asynchronous machines with vibration signal (2017).

## 7. Projets de recherche

- 1 - Chef de projet de recherche, " Coordination des isolements dans le réseau électrique national à très haute tension" agréé en 2003 par le ministère de l'enseignement supérieur et de la recherche scientifique J0701/02/04/03.
2. Chef de projet de recherche, " Développement d'un modèle approché d'une machine synchrone triphasée et estimation de ses paramètres par la méthode en ligne", agréé en 2004 par le ministère de l'enseignement supérieur et de la recherche scientifique J0701/02/05/03.
3. Chef de projet de recherche, " Modélisation et Développement de méthodes Dédiées à la Détection des défauts dans les Moteurs Asynchrones Triphasées à Cage", agréé en 2007 par le ministère de l'enseignement supérieur et de la recherche scientifique J0201420060030.
- 4- Chef de projet de recherche "Réalisation d'un Banc de Diagnostic d'une Machine Asynchrone Triphasée" agréé en 2010 par le ministère de l'enseignement supérieur et de la recherche scientifique J020142009003
- 5- Chef de projet de recherche, " Modélisation analytique et numérique de la machine à aimants permanent dédié au diagnostic", agréé en 2014 par le ministère de l'enseignement supérieur et de la recherche scientifique J0201420140017.
- 6- Chef de projet de recherche, " Diagnostic d'une machine asynchrone triphasée avec variation de la charge ", agréé en 2016 par le ministère de l'enseignement supérieur et de la recherche scientifique B\*01420120008.
7. Chef de projet national de recherche, "Diagnostic d'une machine asynchrone triphasée par les technique de traitement de signal avancés", agréé en 2009 par la Direction Générale de la Recherche Scientifique et du Développement Technologique National ; project PNR-DGRST, 2009-2011.

## 8. Travaux de recherche et production scientifiques

### 8.1- PUBLICATIONS INTERNATIONALES

- [1]S. E. Zouzou, A. Kedous-Lebouc and P. Brissonneau, "Magnetic properties under unidirectional and rotational field", Elsevier, Journal of magnetism and magnetic materials, Vol.112, PP. 106-108, 1992.
- [2]A. Kedous-Lebouc , S. E. Zouzou and P. Brissonneau , "Anisotropy influence on the rotational and alternating field behavior of soft magnetic materials", IEEE Transactions on Magnetics , Vol. 28, No. 5 , PP. 2796-2798, September 1992.
- [3]M. T. Benchouia, A. Golea, S. E. Zouzou, "Control of the DC output voltage of the AC/DC converter using adaptive fuzzy: application to PMSM", Journal of Electrical Engineering, JEE, Romania, Vol. 58, 2005.
- [4]A. Aboubou, M. Sahraoui, S. E. Zouzou, N. Harid, H. Razik, A. Rezzoug, "Comparative study of a three Method dedicated to the diagnosis of the broken bars in squirrel cage induction motors", Revue Internationale de Génie électrique (Journal of Electrical Engineering), RIGE, France, Vol. 8, N° 3-4, PP.557-576, 2005.
- [5]K. Yahia, S. E. Zouzou, F. Benchabane, "Indirect vector control of induction motor with on line rotor resistance identification", Asian Journal of Information Technology, Medwell journal, Vol.12, PP. 1416-1422, 2006.

- [6] A. Bensalem, A. Miloudi, S. E. Zouzou, "Optimal short term hydro scheduling of large power systems with discredited horizon", *Journal of Electrical Engineering, JEE, Romania*, Vol.58, N°4, PP. 214-219, August 2007.
- [7] M. Sahraoui, A. Ghoggal, S. E. Zouzou, A. Aboubou, H. Razik, "Analytical Study, Modeling and Detection of Inter-Turn Short-Circuits in Stator Windings of Induction Motors ", *International Review of Electrical Engineering, IREE, Italy*, Vol. 2, No. 5, PP. 711-722, October 2007.
- [8] A. Bensalem, A. Miloudi, S. E. Zouzou, "Optimal short-term scheduling of hydroelectric power systems ", *Advances in Modeling , Measurement and Control, D: Production Engineering and Management, Organization, Human and Social Problems, AMSE journal, France*, Vol. 28, N° 2 ,2007.
- [9] A. Bensalem, A. Miloudi, S. E. Zouzou, B. Mahdad, A. Bouhental, "Optimal short-term Scheduling of large power systems with discretized horizon", *Journal of Electrical Engineering, JEEC, Slovakia*, N° 4, Juillet Août 2007.
- [10] M. Sahraoui, A. Ghoggal, S. E. Zouzou, M. E. Benbouzid, "Dynamic eccentricity in squirrel cage induction motors – Simulation and analytical study of its spectral signatures on stator currents", *Elsevier, Simulation Modelling Practice and Theory*, Vol. 16, PP. 1503–1513, 2008.
- [11] M. T. Benchouia, A. Ghamri, M. E. H. Benbouzid, A. Golea, and S. E. Zouzou, "Adaptive fuzzy control of reversible rectifier feeding PMSM with improved power factor", *Advances in Modeling , Measurement and Control, A: General Physics and Electrical Applications, AMSE journal, France*, Vol. 81, N°2, PP. 60-70 , 2008.
- [12] A. Ghoggal, M. Sahraoui and S. E. Zouzou, "Analytical and experimental study of a squirrel cage induction motors with rotor bar faults", *Advances in Modeling, Measurement and Control, A: General Physics and Electrical Applications, AMSE, France*, Vol.81, N° 2, PP. 43-60, 2008.
- [13] A. Ghoggal, S. E. Zouzou, H. Razik, M. Sahraoui, A. Khezzar, "An improved model of induction motors for diagnosis purposes – Slot skewing effect and air-gap eccentricity faults", *Elsevier , Energy Conversion and Management*, Vol. 50, N° 5, PP. 1336-1347, May 2009.
- [14] A. Ghoggal, M. Sahraoui and S. E. Zouzou, "A Comprehensive Method for the Modeling of Axial Air-gap Eccentricities in Induction Motors", *Engineering Letters, Journal of the IAENG, International Association of Engineers*, Vol. 17, N° 2, 2009.
- [15] K. Yahia, S. E. Zouzou And F. Benchabane "Induction motors variable speed drives diagnosis through rotor resistance monitoring ", *Frontiers in Energy*, December 2012, Volume 6, N° 4, PP. 420-426.
- [16] K. Yahia, A. J. M. Cardoso and S. E. Zouzou, "Broken rotor bars diagnosis in an induction motor fed from a frequency converter: experimental research", *International Journal of System Assurance Engineering and Management* March 2012, Vol. 3, N° 1, PP. 40-46.
- [17] A. Ghoggal, M. Sahraoui, S.E. Zouzou and H. Razik, "A Fast Inductance Computation Devoted to the Modeling of Healthy, Eccentric, and Saturated Induction Motors", *Electric Power Components and Systems*, Vol. 41, No.10, PP.1002-1022, 2013.
- [18] N. Halem, S. E. Zouzou, K. Srairi, "Static eccentricity fault diagnosis using the signatures analysis of stator current and air gap magnetic flux by finite element method in saturated induction motors ", *International Journal of System Assurance Engineering and Management*, Vol. 4, No. 2, PP. 118-128, June 2013.
- [19] S. Guedidi, S. E. Zouzou, W. Laala, K. Yahia and M. Sahraoui, "Induction motors broken rotor bars detection using MCSA and neural network: experimental research", *International Journal of System Assurance Engineering and Management*, Vol. 4, pp 173-181, June 2013.
- [20] W. Laala, S. E. Zouzou, and S. Guedidi, "Induction motor broken rotor bars detection using fuzzy logic: experimental research ", *International Journal of System Assurance Engineering and Management*, DOI 10.1007/s13198-013-0171-8, 2013.
- [21] M. Sahraoui, A. Ghoggal, S. E. Zouzou and S. Guedidi, "Detection of inter-turn short-circuit in induction motors using Park–Hilbert method ", *International Journal of System Assurance Engineering and Management*, DOI 10.1007/s13198-013-0173-6, 2013.
- [22] A. E. Mabrouk, S. E. Zouzou, M. Sahraoui "Active-reactive power signature analyses for discriminating mechanical load unbalances from rotor cage fault", *Mediterranean journal of measurement and control* , Vol. 9, No. 4, PP. 159-166, 2013.

- [23]Chennai salim, Benchouia M.T, Goléa A, S. E. Zouzou , “Three-phase Three-wire Shunt Active Power Filter based on Hysteresis, Fuzzy and MLPNN Controllers to Compensate Currents Harmonics”, Journal of Electrical and Control Engineering, JECE, , Vol. 3, N0.3, pp.8-14, 2013.
- [24] K. Yahia, A.J.M.Cardoso , A.Ghoggal , S.E.Zouzou " Induction motors airgap-eccentricity detection through the discrete wavelet transform of the apparent power signal under non-stationary operating conditions ", Elsevier ,ISA Transactions, Vol. 53, No.2, PP. 603-611, March 2014.
- [25] K. Yahia, Antonio J. Marques Cardoso, A. Ghoggal, and S. E. Zouzou, "Induction Motors “Broken Rotor Bars Diagnosis Through the Discrete Wavelet Transform of the Instantaneous Reactive Power Signal under Time-varying Load Conditions”, Electric Power Components and Systems, Vol. 42, No.7, PP. 682-692, 2014.
- [26] N. Halem, K. Srairi, S. E. Zouzou, “Stator current signature analysis of healthy induction motor using time stepping finite element method ", International journal on electrical engineering and informatics, Vol. 6, No.1, PP. 144-154, March 2014.
- [27] N. Bessous, S. E. Zouzou, W. Bentrach, S. SBAA, M. Sahraoui, “Diagnosis of bearing defects in induction motors using Discrete Wavelet Transform”, International Journal of System Assurance Engineering and Management, 2015.
- [28] A. E. Mabrouk, S. E. Zouzou, S. Khelif, A.Ghoggal ,“On-line fault Diagnostics in operating three-phase Induction motors by the active and reactive currents”, International Journal of System Assurance Engineering and Management, DOI 10.1007/s13198-015-0364-4, 2015.
- [29] M. Sahraoui, A. Ghoggal, S. E. Zouzou and S. Guedidi, “Rotor fault detection algorithm based on a new fault indicator for induction motors fed from an industrial frequency inverter “, International Journal of Applied Electromagnetics and Mechanics, vol. 47, pp. 483–502, 2015.
- [30] N. Bessous, S. E. Zouzou, “A comparative study between the FFT and DWT method applied to a bearing fault in induction motor-results dedicated to the industry ”,Transaction on System and Control, WSEAS, 2015.
- [31] N. Bessous, S. E. Zouzou, W. Bentrach, S. Sbaa and M. Sahraoui, “ Diagnosis of bearing defects in induction motors using discrete wavelet transform, “ International Journal of Systems Assurance Engineering and Management, Springe, PP.1-9, 2016.
- [32] N. Halem, S. E. Zouzou, K. Srairi, and Konstantinos N. Gyftakis,” FEM Analysis for Comparative Investigation of The Stator Circuit Connexion Impact on The Induction Motor Broken Bar Fault Higher Order Signatures”, International Journal on Electrical Engineering and Informatics – Vol. 8, N°. 4, December 2016.
- [33] A. E. Mabrouk, S. E. Zouzou, S. Khelif, A.Ghoggal “On line fault in operation three-phase motor by the active and reactive currents”, International Journal of Systems Assurance Engineering and Management, Springe, Vol. 8, N°1,PP.160–168, January 2017.

## 8.2- PUBLICATIONS NATIONALES

- [1]A. Aboubou, **S. E. Zouzou**, "Contribution to the compensation of the harmonic pollution using a parallel active filter controlled by fuzzy logic", *Scientific and technical review of the university of Biskra*, N°1, PP.59-63, 2003.
- [2]M. Sahraoui, **S. E. Zouzou**, A. Aboubou, A. Menacer and A. Derghal, "Diagnosis of faults in three phase squired cage induction motors, I: Model dedicated to the simulation of the broken bars", *Scientific and technical review of the university of Biskra*, N°6, PP. 09-16, 2004.
- [3]M. Sahraoui, **S. E. Zouzou**, A. Aboubou, A. Menacer and A. Derghal, "Diagnosis of faults in three phase squired cage induction motors, II: Method dedicated to the detection of the broken bars ", *Scientific and technical review of the university of Biskra*, N°6, PP. 57-61, 2004.
- [4]A. Aboubou, M. Sahraoui,A. Ghoggal, **S. E. Zouzou**, "Analysis of the spectral contents of the neutral voltage of the three phase asynchronous machine for diagnosis", *Scientific and technical review of the university of Biskra*, N°6, PP. 95-102, June 2005.
- [5]A. Ghoggal, **S. E. Zouzou**, A. Aboubou, M. Sahraoui, "A 2-D model of induction motor dedicated to faults detection: Extension of the modified winding function", *Scientific and technical review of the university of Oum Elbuaghi*, N°.1, December 2005.

- [6] N. Halem, **S. E. Zouzou**, K. Srairi, "Analyse Of Induction Motor With Broken Bars And Constant Speed Using Circuit-Field Coupled Method ", *Journal of Fundamental and Applied Sciences*, Vol. 3, No. 1, PP.106 -120, 2011.
- [7] N. Halem, **S. E. Zouzou**, K. Srairi, S. Guedidi, F. A. Abood, " Detection of Static Eccentricity Fault in Saturated Induction Motors by Air-Gap Magnetic Flux Signature Analysis Using Finite Element Method ", *Journal of Fundamental and Applied Sciences*, Vol. 5, No. 1, PP. 51-56, 2013.
- [8] N. Halem, **S. E. Zouzou**, K. Srairi, S. Guedidi, " Influence Of Broken Rotor Bars Location In The Squirrel Cage Induction Motor Using Finite Element Method ", *Journal of Fundamental and Applied Sciences*, Vol. 5, No. 1, PP.110 - 119, 2013.

### 8.3- CONFERENCES INTERNATIONALES

- [1]S. E. Zouzou, A. Kedous-Lebouc, B. Cornut and P. Brissonneau, "Magnetic losses under rotational field", Conference of the research actions for the Ministry of Research and the Technology - Electrical Engineering, 5-6 November 1991, PP.173-182, Paris, France.
- [2]S. E. Zouzou, A. Kedous-Lebous, P. Brissonneau, "Magnetic properties under unidirectional and rotational field", Tenth International Conference on Soft Magnetic Materials, SMM, 11-13 September 1991, Dresden, Germany.
- [3]A. Kedous-Lebouc, S. E. Zouzou and P. Brissonneau, "On the magnetizing processes in electrical steel in unidirectional and rotational field", First international workshop on magnetic properties of electrical sheet steel under two-dimentional excitation, physikalisch technische bundesanstalt , April 1992, pp.36-47,Germany.
- [4]A. Kedous-Lebouc, S. E. Zouzou, P. Brissonneau, "Anisotropy influence on the rotational and alternating field behavior of soft magnetic materials", International Magnetics Conference INTERMAG 1992, 13-16 April 1992, St. Louis, MO, USA.
- [5]S. E. Zouzou, M. Sahraoui, A. Aboubou, A. Menacer and A. Derghal, "Method dedicated to the detection of the broken bars in three phase squired cage induction motors", Third International conference on Electrical Engineering and Automatics, JTEA 2004, 21-23 May 2004, Hammamet, Tunisia.
- [6]A. Aboubou, H. Razik, M. Sahraoui, S. E. Zouzou, and A. Rezzoug, "Broken bars and/or end rings detection in three-phase induction motors by the extended Park's vector approach", 9th IEEE International Power Electronics Congress, CIEP 2004, 17-22 October 2004, PP. 128-133, Celaya, Mexico.
- [7]M. T. Benchouia, S. E. Zouzou, A. Golea, "An Adaptive fuzzy logic DC output controller with minimization harmonics of side network", IEEE International Conference on Industrial Technology, ICIT 2004, 8-10 December 2004, Vol. 3, PP.1239-43, Hammamet, Tunisia.
- [8]M. T. Benchouia, S. E. Zouzou, A. Golea, "Modeling and simulation of variable speed drive system with adaptive fuzzy controller application to PMSM", IEEE International Conference on Industrial Technology, ICIT 2004, 8-10 December 2004, Vol. 2, PP.683-7 , Hammamet, Tunisia.
- [9]M. T. Benchouia, S. E. Zouzou, A. Golea, "Modeling and simulation of variable speed system with different regulators ", International Conference on Electrical Machines and Systems, ICEMS 2004, 1-3 November 2004, Seoul, Korea.
- [10]M. T Benchouia, S. E. Zouzou, A. Golea, "AC/DC /AC PWM three phase utility to provide a regulated DC output and to minimize line currents harmonics using fuzzy adaptative controller", International Conference on Electrical Machines and Systems, ICEMS 2004, 1-3 November 2004, Seoul, Korea.
- [11]A. Ghoggal, M. Sahraoui, A. Aboubou, S. E. Zouzou, H. Razik, "An improved model of the induction machine dedicated to faults detection extension of the modified winding function", IEEE International Conference on Industrial Technology, ICIT 2005, 14-17 December 2005, PP.191-196, Hong Kong, China.
- [12]S. E. Zouzou, H. Razik, A. Aboubou, M. Sahraoui, A. Ghoggal, "Modelling of Induction Machines with Skewed Rotor Slots Dedicated to Rotor Faults", 5th IEEE Symposium on Diagnostics for Electric Machines Power Electronics and Drives, SDEMPED 2005, 7-9 September 2005, Vienna, Austria.

- [13] A. Bensalem, A. Bouhental, S. E. Zouzou, "Optimal management of the production of the hydroelectric power plants ", Conseil International des Grands Réseaux Électriques (International board of the Big Electricity networks), CIGRE 21-23 November 2005, Cairo, Egypte.
- [14] A. Ghoggal, A. Aboubou, S. E. Zouzou, H. Razik, "Considerations about the modeling and simulation of air-gap eccentricity in induction motors", 32nd Annual Conference on IEEE Industrial Electronics, IECON 2006, 6-10 November 2006, PP.4987-4992, Paris, France
- [15] M. Sahraoui, A. Ghoggal, S. E. Zouzou, H. Razik, "Modelling and detection of inter-turn short circuits in stator windings of induction motor", 32nd Annual Conference on IEEE Industrial Electronics , IECON 2006, 6-10 November 2006, PP. 4981-4986, Paris, France.
- [16] M. T. Benchouia, A. Golea, S. E. Zouzou, A. Ghamri, "Adaptive Fuzzy Control of Reversible Rectifier Feeding Induction Motor With Improved Power Factor", International Conference on Electrical Machines, ICEM 2006, 2-5 september 2006, Chania, Greece.
- [17] A. Ghoggal S. E. Zouzou, "Note about inductances calculation of induction motor under radial and axial- air gap eccentricity", International Conference on Electrical Machines, ICEM 2006, 2-5 September 2006, Chania, Greece.
- [18] M. T. Benchouia, A. Ghamri, A. Golea, M. E. H Benbouzid and S. E. Zouzou, "Fuzzy model reference adaptive control of power converter for unity power factor and harmonics minimization ", International Conference on Electrical Machines and Systems, ICEMS 2007, 8-11 October 2007, PP.1239-1243, Seoul, South Korea.
- [19] M. T. Benchouia, A. Ghamri, A. Golea, M. E. H. Benbouzid and S. E. Zouzou, "Simulation and Control of AC/DC Converter and Induction Machine Speed Using Adaptive Fuzzy Controller ", International Conference on Electrical Machines and Systems ", ICEMS 2007, 8-11 October 2007, PP. 539-542, Seoul, South Korea.
- [20] S. E. Zouzou, W. Laala, S. Geudidi, M. Sahraoui, "A fuzzy logic approach for the diagnosis of rotor faults in squirrel cage Induction Motors", International Conference on Computer and Electrical Engineering , ICCEE 2009, 28-30 December 2009, PP.173-178, Dubai, UAE.
- [21] M. Sahraoui, S. E. Zouzou, A. Ghoggal, and S. Guedidi , "A New Method to Detect Inter-Turn Short-Circuit in Induction Motors", International Conference on Electrical Machines, ICEM 2010, 6-8 september 2010, Rome, Italy.
- [22] S. E. Zouzou, M. Sahraoui, A. Ghoggal, and S. Guedidi, " Detection of Inter-Turn Short-Circuit and broken Rotor Bars in Induction Motors Using the Partial Relative Indexes: Application on the MCSA ", International Conference on Electrical Machines, ICEM 2010, 6-8 september 2010, Rome, Italy.
- [23] A. Ghoggal, S. E. Zouzou, H. Razik, A. Hadri-Hamida, M. Sahraoui, " Application of the Convolution Theorem for the Modeling of Saturated Induction Motors", 36nd Annual Conference on IEEE Industrial Electronics, IECON 2010, 7-10 November 2010, Glendale, AZ, USA.
- [24] K. Yahia, S. E. Zouzou, A. R. Guattaf, F. Benchabane, D.Taibi, " Comparative Study of an Adaptive Luenberger Observer and Extended Kalman Filter Based a Sensorless Direct Vector Control of Induction Motor ", 6 th International Conference on Electrical Systems and Automatic Control , JTEA 2010 26-28 March 2010, Hammamet, Tunisia.
- [25] S. E. Zouzou, S. Khelif, N. Halem, and M. Sahraoui," Analysis of induction motor with broken rotor bars using finite element method", 2nd International Conference On Electric Power and Energy Conversion Systems, (EPECS), Sharjah , UAE, 15-17 Nov 2011.
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