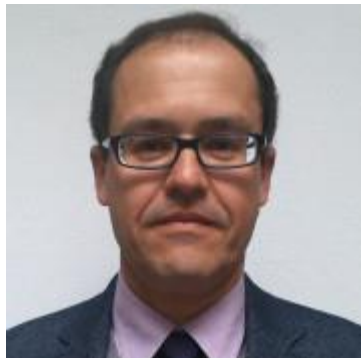


CURRICULUM VITAE (includes a publication list)

Prof. Federico Barrero



PERSONAL DATA

Born: 1 May 1967
Sevilla, Spain

Marital Status: Married, with two children

Business Address: Electronic Engineering Department
School of Engineering, University of Seville
Avda. Camino de los Descubrimientos sn
Sevilla 41092

Phone: +34 954481304, +34 666389737
E-mail: fbarrero@us.es; fbarrero@etsi.us.es; fbarrero.us@gmail.com

CV reference and full details:
University of Seville: http://investigacion.us.es/sisius/sis_showpub.php?idpers=3201
Researcher ID: A-9626-2013
Google Scholar: <http://scholar.google.com/citations?user=B4ouwAgAAAAJ&hl=es>
Research Gate: https://www.researchgate.net/profile/Federico_Barrero

Referees:

Prof. Emil Levi E.levi@ljmu.ac.uk
Position: Full Professor, School of Engineering
Liverpool John Moores University
Byrom Street, Liverpool, L3 3AF, UK
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Prof. Sergio Toral storal@us.es
Position: Full Professor, Electronic Engineering Department
University of Seville
Avda. Camino de los Descubrimientos sn, 41092, Sevilla, Spain
+34 954481293

Prof. Manuel R. Arahal arahal@us.es
Position: Full Professor, Automatic Control and Systems Dep.
University of Seville
Avda. Camino de los Descubrimientos sn, 41092, Sevilla, Spain
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EDUCATION

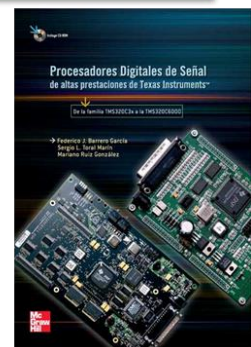
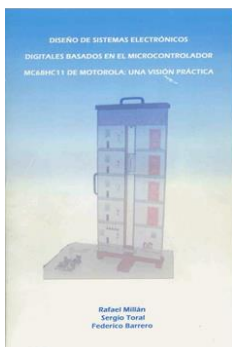
<i>Degree</i>	<i>Year</i>	<i>Institution</i>
Doctor of Technical Sciences (PhD)	1998	<u>University of Seville, Spain</u> Research work: Fuzzy-logic application to the control of 3-phase induction drives
Master and Degree of Electrical and Electronic Engineering	1992	<u>University of Seville, Spain</u>

EMPLOYMENT

March 2012 – present	Full Professor position credential/recognition from the Spanish Government
March 2001 – present	Associate Professor, School of Engineering, University of Seville, Spain
Oct. 1995 – March 2001	Assistant Professor, School of Engineering, University of Seville, Spain
Jan. 1994 – Sept. 1995	Research assistant, School of Engineering, University of Seville, Spain

TEACHING EXPERIENCE

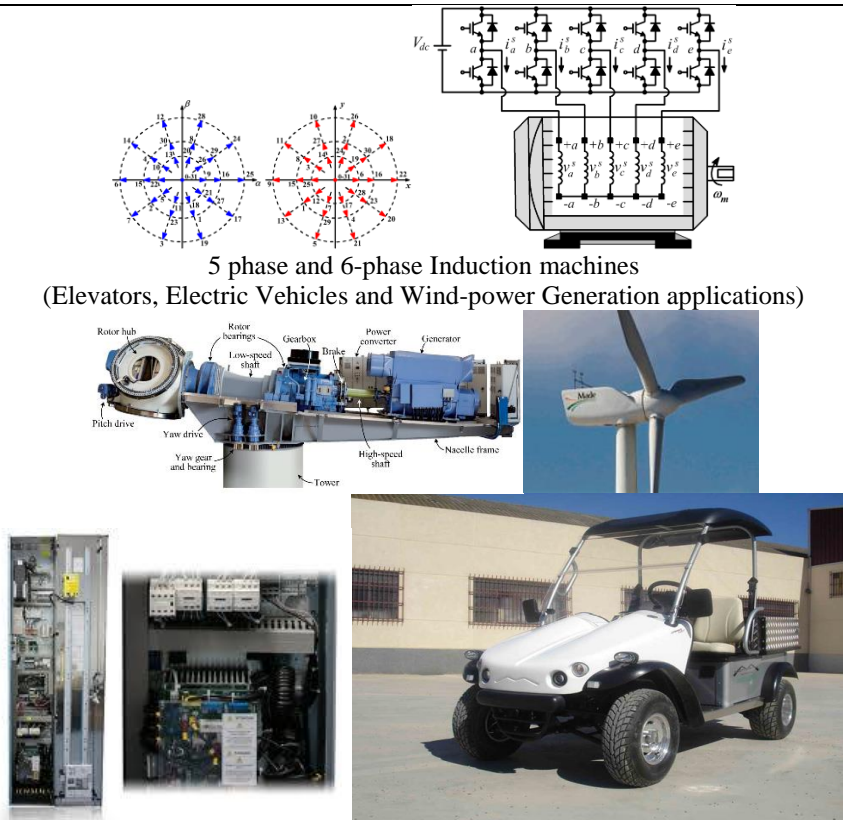

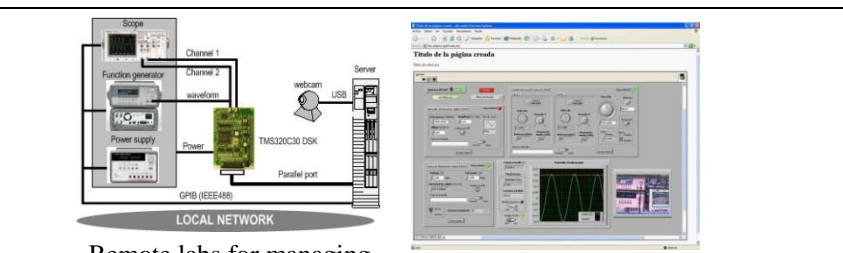
- 20 years of teaching experience to undergraduate students at an Engineering School (University of Seville)
- 15 years of teaching experience to graduate students at an Engineering School (University of Seville)
- Teaching in 17 different courses in 5 Engineering Degrees (Electronic Engineering field at the University of Seville). Principal lecturer in 6 of these courses
- Teaching in 4 different courses in MSc Engineering Degrees (Electronic Engineering field at the University of Seville). Principal lecturer in 2 of these courses
- Supervisor of 67 BSc final projects
- Supervisor of 11 MSc final projects
- Principal lecturer in 9 innovative teaching projects. About 40 k EUR granted
- 5 edited books in the embedded systems' field:



McGRAW HILL

RESEARCH EXPERIENCE

Research lines

<p>Control of multiphase drives</p>	 <p style="text-align: center;">5 phase and 6-phase Induction machines (Elevators, Electric Vehicles and Wind-power Generation applications)</p>
<p>Embedded systems and smart sensors</p>	 <p style="text-align: center;">Embedded multimedia processors ITS Systems and Applications V2V & V2I</p>
<p>E-learning systems</p>	 <p style="text-align: center;">Remote labs for managing microprocessors (DSPs)</p>

Research responsibilities (public funds)

More than 1.5 million EUR granted in total

Jan. 2012 – present

Research leader, ACETI group, TIC 201 recognized by Junta de Andalucía

10 researchers (PhD degree), 3 professors

Jan. 2006 – Dec. 2011	Research member of ACETI group
Jan. 1994 – Dec. 2005	Research member of GTE group, recognized by Junta de Andalucía
Jan. 2006 – Dec. 2009	Principal researcher, “Análisis y evaluación de nuevos actuadores para máquinas de inducción de doble devanado trifásico en aplicaciones con vehículos eléctricos (DPI2005-04438)”, Spanish Government. 185.000,00 EUR.
Jan. 2010 – Dec. 2012	Principal researcher, “Evaluación e Integración de Accionamientos Rotativos Multifásicos en Vehículos Eléctricos (DPI2009-07955), Spanish Government. 85.000,00 EUR
Jan. 2008 – Dec. 2009	Principal researcher, “Proyecto Fénix: I+D de pulsera de localización permanente y plataforma TIC para proteger a las mujeres maltratadas (TSI-020302-2008-21)”, Spanish Government. 450.000,00 EUR
March 2011 – March 2015	Principal researcher, “Aplicación de Sistemas de Propulsión Basados en Motores Multifásicos al Desarrollo de Vehículos Eléctricos (TEP-5791)”, Spanish Government. 145.000,00 EUR
March 2013 – March 2017	Principal researcher, “Movilidad Eléctrica en Entornos Urbanos (TEP-7555)”, Spanish Government. 120.000,00 EUR
Jan 2014 – Dec 2016	Principal researcher, “Sistemas de Propulsión Multifásica en Vehículos Eléctricos (DPI2013-44278-R)”, Spanish Government. 68.000,00 EUR

Research responsibilities (private funds)

More than 250000 EUR granted in total

1995 – 2001	Development of ASICs and embedded systems for controlling vertical elevators. Funded by the Spanish company MACPUARSA.
2002 – 2004	Development of the control system for an AE-52 wind generator. Funded by the Spanish Company MADE).
2005 – 2008	Development of an embedded system for the estimation of road traffic control data using on-line video signals (development of VisioWay system). Funded by the Spanish Company ACISA.

Supervision of PhD Students

Successful PhD completions (as Director of Studies):

1. R. Gregor, “Aportaciones al control de corriente de máquinas de inducción de seis fases con doble devanado trifásico independiente y asimétrico” (Completion date: March 2010).
2. F. Cortés, “Interoperabilidad dinámica de servicios mediante comunicaciones inalámbricas Bluetooth en entornos urbanos y sistemas inteligentes de transporte” (Completion date: June 2011).
3. J. Riveros, “Aportaciones en el Control de Accionamientos Multifásicos” (Completion date: March 2013).
4. D. Gutiérrez-Reina, “Enhanced Probabilistic Broadcasting and Optimized Deployment in Multi-Hop Ad Hoc Networks” (Completion date: March 2015).
5. H. Guzmán, “Extension of Finite-Control Set Model-based Predictive Control Techniques to Fault-Tolerant Multiphase Drives: Analysis and Contributions” (Completion date: July 2015).
6. J. Guevara, “Arquitectura de Nodo Inteligente para Redes de Sensores Inalámbricos y Escalables: Aplicación en Monitorización Ambiental” (to be completed in the second semester of 2015).

Another 8 PhD students under my supervision: Ignacio González, Blas Bogado, Joel Prieto, Sergio Gallardo, Mario Bermúdez, Cristina Martín, Jorge E. Rodas, Jesús Sánchez.

Awards and Recognitions

Full Professor credentials from the Spanish Government (ANECA agency) since March, 2012.

Senior member IEEE from 2005.

Best IEEE Transactions on Industrial Electronics paper award for the paper published in 2009.

Best IET Electric Power Applications paper award for the paper published in 2010.

Best conference paper award: 5.

Visiting Lectureships

- Visiting Lecturer, Facultad de Ingeniería de la Universidad de Río Cuarto, Córdoba, Argentina (one month): July-August 1997.
- Visiting Lecturer, Facultad de Ingeniería de la Universidad de Río Cuarto, Córdoba, Argentina (3 weeks): Dec. 1999.
- Visiting Lecturer, ERASMUS program. Politecnico University of Lodz, Poland (one month): August-Sept. 2001.
- Visiting Lecturer, ERASMUS program. Politecnico University of Torino, Italy (1 week): July-August 2004.
- Visiting Lecturer, Universidad Católica Nuestra Señora de la Asunción, Paraguay (1 week). Founded by AECI (Co-operation agency for the development of Latinamerica), program PCI-Iberoamérica 2004. August 2005.
- Visiting Lecturer, ERASMUS program. University of Genova, Italy (1 week). May-June 2007.
- Visiting Lecturer, ERASMUS program. University of Amiens, France (1 week). June 2008.
- Visiting Lecturer, Universidad Católica Nuestra Señora de la Asunción, Paraguay (1 week). Founded by AECI (Co-operation agency for the development of Latinamerica), project “Análisis y Desarrollo de Líneas de Investigación conjuntas que incentiven el fortalecimiento institucional del departamento de ingeniería electrónica e informática (DEI) mediante la formación de doctores y el desarrollo de la actividad investigadora (D/7596/07)”. May 2009.
- Research Stay, Liverpool John Moores University, UK (3 months). July-October 2009.
- Research Stay, Liverpool John Moores University, UK (6 weeks). July-August 2010.
- Research Stay, Universidad Nacional de Asunción, Paraguay (1 month). August-Sept. 2011. Research Project founded by CONACYT (paraguayan government) called “Análisis y evaluación de accionamientos multifásicos orientado a la generación de energía eléctrica basada en fuentes potenciales de energías renovables”.
- Research Stay, Liverpool John Moores University, UK (3 months). June-August 2012.
- Research Stay, Liverpool John Moores University, UK (4 months). May-September 2013.
- Research Stay, Liverpool John Moores University, UK (3 months). June-September 2015.

Publications

Full papers and details are available in https://www.researchgate.net/profile/Federico_Barrero/publications

- 77 papers in scientific journals (**2 awards: best paper awards**).
- h index of 16 (obtained from Thomson Reuters, times cited, researcher ID: A-9626-2013). December, 2014.
- 146 Conference papers (**5 awards: paper recognition**).

Publications (ISI journals from 2007)

- **77 journal papers since 2002 (2 awards).**
- A Learning Methodology Using Matlab/Simulink for Undergraduated Electrical Engineering Courses Attending to Learner Satisfaction Outcomes.
M. J. Durán, S. Gallardo, S. L. Toral, M.R. Martínez-Torres, F. Barrero.
International Journal of Technology and Design Education, Vol. 17, No. 1, 2007.
ISSN 0957-7572.

- Interactive Multimedia Teaching of Digital Signal Processors.
S. Toral, F. Barrero, M.R. Martínez-Torres, S. Gallardo.
Computer Applications in Engineering Education, Vol. 15, No. 1, 2007, pp. 88-98.
ISSN 1061-3773.
- Addressing Learner Satisfaction Outcomes in Electronic Instrumentation and Measurement Laboratory Course Organization.
S. Gallardo, F. Barrero, M.R. Martínez-Torres, S. Toral, M. J. Durán.
IEEE Transaction on Education, Vol. 50, No. 2, 2007, pp. 129-136.
ISSN 0018-9359.
- Real-Time Implementation of Multi-Dimensional Five-Phase Space Vector Pulse Width Modulation.
M. J. Durán, S. Toral, F. Barrero, E. Levi.
Electronics Letter, Vol. 43, Issue 17, 2007, p. 949-950.
ISSN 0013-5194.
- An Electronic Engineering Curriculum Design based on Concept Mapping Technique.
S. Toral, M.R. Martínez-Torres, F. Barrero, S. Gallardo, M. J. Durán.
International Journal of Technology and Design Education, Vol. 17, No. 3, 2007, pp. 341-356.
ISSN 0957-7572.
- Improving learning performance in laboratory instruction by means of SMS messaging.
M.R. Martínez-Torres, S. Toral, F. Barrero, S. Gallardo.
Innovations in Education and Teaching International, Vol. 44, Issue 4, 2007, pp. 409-422.
ISSN 1470-3297.
- Analysis of utility and use of a Web based tool for Digital Signal Processing Teaching by means of a Technological Acceptance Model.
S. Toral, F. Barrero, M.R. Martínez-Torres.
Computers and Education, Vol. 49, issue 4, 2007, pp. 957-975.
ISSN 0360-1315.
- eDSPLab: Remote laboratory for experiments on DSP applications.
F. Barrero, S. Toral, S. Gallardo.
Internet Research, Vol. 18, No. 1, pp. 79-92, 2008.
ISSN 1066-2243.
- A technological acceptance of e-learning tools used in practical and laboratory teaching, according to the European higher education area.
M.R. Martínez-Torres, S. Toral, F. Barrero, S. Gallardo, M. Arias, T. Torres.
Behaviour & Information Technology, Vol. 17, No. 6, pp. 495-505, 2008.
ISSN 0144-929X.
- Estudio y análisis de las listas de distribución en proyectos de software de código abierto como medio para compartir el conocimiento: el caso de Linux embebido sobre procesadores ARM.
M.R. Martínez-Torres, S. Toral, F. Barrero.
Investigaciones Europeas de Dirección y Economía de la Empresa, Vol. 14, No. 3, pp. 79-90, 2008.
ISSN 1135-2523.
- Improved Sigma-Delta Background Estimation for Vehicle Detection.
S. Toral, M. Vargas, F. Barrero, M. Ortega.
Electronics Letter, Vol. 45, No. 1, pp. 32-34, 2009.
ISSN 0013-5194.
- Modelling Learner Satisfaction in an Electronic Instrumentation and Measurement Course using Structural Equations Models.
S. Toral, F. Barrero, M.R. Martínez-Torres, S. Gallardo, M. J. Durán.
IEEE Transaction on Education. Vol. 52, No. 1, pp. 190-199, 2009.
ISSN 0018-9359.
- A proof of concept study of predictive current control for VSI driven asymmetrical dual three-phase AC machines.
F. Barrero, M. R. Arahall, R. Gregor, S. Toral, M. J. Durán.
IEEE Transaction on Industrial Electronics. Vol. 56, No. 6, pp. 1937-1954, 2009.
ISSN 0278-0046.
- **Best paper award (2010).**
One-step Modulation Predictive Current Control Method for the Asymmetrical Dual-three phase Induction Machine.
F. Barrero, M. R. Arahall, R. Gregor, S. Toral, M. J. Durán.
IEEE Transaction on Industrial Electronics. Vol. 56, No. 6, pp. 1974-1983, 2009.
ISSN 0278-0046.

- Multi-phase current control using finite-state model-predictive control.
M. R. Arahal, F. Barrero, S. Toral, M. J. Durán, R. Gregor.
Control Engineering Practice. Vol. 17, No. 5, pp. 579-587, 2009.
ISSN 0967-0661.
- Modelling Mailing List Behaviour in Open Source Projects: the Case of ARM Embedded Linux
S. Toral, M.R. Martínez-Torres, F. Barrero.
Journal of Universal Computer Science, Vol. 15, No. 3, pp. 648-664, 2009.
ISSN 0948-695x.
- An Empirical Study about the Driving Forces behind Online Communities.
S. Toral, M.R. Martínez-Torres, F. Barrero, F. Cortés.
Internet Research, Vol. 19, No. 4, pp. 378-392, 2009.
ISSN 1066-2243.
- Embedded Multimedia Processors for Road-Traffic Parameter Estimation.
S. Toral, M. Vargas, F. Barrero.
Computer, Vol. 42, No. 12, pp. 61-68, 2009.
ISSN 0018-9162.
- Virtual Communities as a resource for the development of OSS projects: the case of Linux ports to embedded processors
S. L. Toral, M.R. Martínez-Torres, F. Barrero
Behavior and Information Technology, Vol. 28, No. 5, pp. 405-419, 2009.
ISSN 0144-929X.
- Predictive-SVPWM Current Control Method for Asymmetrical Dual-three phase Induction Motor Drives.
F. Barrero, M. R. Arahal, R. Gregor, M. J. Durán, S. Toral, J. Prieto, J. L. Mora.
IET Electric Power Applications, Vol. 4, No. 1, pp. 26-34, 2010.
ISSN 1751-8660.
- **Best paper award 2010-2011 (2012).**
- Analysis of Virtual Communities supporting OSS Projects using Social Network Analysis
S. L. Toral, M.R. Martínez-Torres, F. Barrero
Information and Software Technology, Vol. 52, pp. 296-303, 2010.
ISSN 0950-5849.
- The Role of Internet in the Development of Future Software Projects.
M.R. Martínez-Torres, S. Toral, F. Barrero, F. Cortés.
Internet Research, Vol. 20, No. 1, pp. 72-86, 2010.
ISSN 1066-2243.
- Internet in the Development of Future Road-Traffic Control Systems.
F. Barrero, S. Toral, M. Vargas, F. Cortés, J.M. Milla.
Internet Research, Vol. 20, No. 2, pp. 154-168, 2010.
ISSN 1066-2243.
- An Enhanced Background Estimation Algorithm for Vehicle Detection in Urban Traffic Scenes.
M. Vargas, J.M. Milla, S. Toral, F. Barrero.
IEEE Transactions on Vehicular Technology. Vol. 59, No. 8, pp. 3694-3709, 2010.
ISSN 0018-9545.
- Current Paradigms in Intelligent Transportation Systems.
S. Toral, F. Barrero, M.R. Arahal, M.R. Martínez-Torres.
IET Intelligent Transport Systems, Vol. 4, No. 3, pp. 201-211, 2010.
ISSN 1751-956X.
- Stability Analysis of Five-Phase Induction Motor Drives with Variable Third Harmonic Injection.
M.R. Arahal, M.J. Durán, F. Barrero, S. Toral.
Electric Power System Research, Vol. 80, No. 12, pp. 1459-1468, 2010.
ISSN 0378-7796.
- Reforming ICT Graduate Programs to Meet Professional Needs.
S. Toral, M.R. Martínez-Torres, F. Barrero.
Computer, Vol. 43, No. 10, pp. 22-29, 2010.
ISSN 0018-9162.
- Switching Ripple Characteristics of Space Vector PWM Schemes for Five-Phase Two-Level Voltage Source Inverters – Part 1: Flux Harmonic Distortion Factors.
D. Dujic, M. Jones, E. Levi, J. Prieto, F. Barrero.
IEEE Transaction on Industrial Electronics, Vol. 58, No. 7, pp. 2789-2798, 2011.
ISSN 0278-0046.

- Switching Ripple Characteristics of Space Vector PWM Schemes for Five-Phase Two-Level Voltage Source Inverters – Part 2: Current Ripple.
D. Dujic, M. Jones, E. Levi, J. Prieto, F. Barrero.
IEEE Transaction on Industrial Electronics, Vol. 58, No. 7, pp. 2799-2808, 2011.
ISSN 0278-0046.
- Predictive Current Control of Dual Three-Phase Drives Using Restrained Search Techniques.
M.J. Durán, F. Barrero, S. Toral, J. Prieto.
IEEE Transaction on Industrial Electronics, Vol. 58, No. 8, pp. 3253-3263, 2011.
ISSN 0278-0046.
- Website Structure Mining using Social Network Analysis.
S. Toral, M.R. Martínez-Torres, B. Palacios, F. Barrero.
Internet Research, Vol. 21, No. 2, pp. 104-123, 2011.
ISSN 1066-2243.
- Aplicación de Algoritmos Genéticos a la identificación de la Estructura de Enlaces en Portales WEB.
M.R. Martínez-Torres, B. Palacios, S. Toral, F. Barrero.
Revista española de documentación científica, Vol. 34, No. 2, pp. 234-254, 2011.
ISSN 0210-0614.
- An Enhanced Predictive Current Control Method for Asymmetrical Six-phase Motor Drives.
F. Barrero, J. Prieto, E. Levi, R. Gregor, S. Toral, M.J. Durán, M. Jones.
IEEE Transaction on Industrial Electronics, Vol. 58, No. 8, pp. 3242-3252, 2011.
ISSN 0278-0046.
- Distributed Urban Traffic Applications based on CORBA Event Services.
S.L. Toral, D. Gregor, M. Vargas, F. Barrero, F. Cortés.
International Journal of Space-Based and Situated Computing, Vol. 1, No. 1, pp. 86-97, 2011.
ISSN 2044-4893.
- Plataforma para el Aprendizaje de Tecnologías Inalámbricas y Redes de Sensores basada en el Sistema Open Hardware Denominado Openmoko.
J.M. Hinojo, F. Barrero, S.L. Toral, F. Cortés.
IEEE Revista Iberoamericana de Tecnologías del Aprendizaje, Vol. 6, No. 1, pp. 49-57, 2011.
ISSN 1932-8540.
- Comparative Analysis of Discontinuous and Continuous PWM Techniques in VSI-Fed Five-Phase Induction Motor.
J. Prieto, M. Jones, F. Barrero, E. Levi, S. Toral.
IEEE Transaction on Industrial Electronics, Vol. 58, No. 12, pp. 5324-5335, 2011.
ISSN 0278-0046.
- Identification of the Design Variables of eLearning Tools.
S. Toral, M.R. Martínez-Torres, F. Barrero.
Interacting with Computers, Vol. 23, pp. 279-288, 2011.
ISSN 0953-5438.
- A Reliable Route Selection Scheme Based on Caution Zone and Nodes' Arrival Angle.
D.G. Reina, S. Toral, P. Johnson, F. Barrero.
IEEE Communications Letters, Vol. 15, No. 11, pp. 1252-1255, 2011.
ISSN 1089-7798.
- Environmental Wireless Sensor Network for Road Traffic Applications.
J. Guevara, F. Barrero, E. Vargas, J. Becerra, S. Toral.
IET Intelligent Transport Systems, Vol. 6, No. 2, pp. 177-186, 2012.
ISSN 1751-956X.
- A Text Categorization Tool for Open Source Communities based on Semantic Analysis.
S. Toral, M.R. Martínez-Torres, F. Barrero.
Behaviour & Information Technology. 2011. DOI: 10.1080/0144929X.2011.624634.
ISSN 0144-929X.
- Identification of new added value services on Intelligent Transportation Systems.
M.R. Martínez-Torres, C. Díaz, S.L. Toral, F. Barrero.
Behaviour & Information Technology Vol. 32, No. 3, pp. 307-320, 2013.
ISSN 0144-929X.
- An Evolutionary Computation Approach for designing Mobile Ad Hoc Networks.
D.G. Reina, S. Toral, P. Johnson, F. Barrero.
Experts Systems with Applications, Vol. 39, pp. 6838-6845, 2012.
ISSN 0957-4174.
- An Evolutionary Factor Analysis Computation for Mining Website Structures.

- M.R. Martínez-Torres, S. Toral, B. Palacios, F. Barrero.
 Experts Systems with Applications, Vol. 39, pp. 11623-11633, 2012.
 ISSN 0957-4174.
- Networked Electronic Equipments using the IEEE 1451 Standard: VisioWay, a Case Study in the ITS Area.
 F. Barrero, S. Toral, M. Vargas, J. Becerra.
 International Journal of Distributed Sensor Networks, Vol. 2012, pp. 1-12, 2012, Article ID 467124,
 DOI:10.1155/2012/467124.
 ISSN: 1550-1329.
 - Variable-Speed Five-Phase Induction Motor Drive Based on Predictive Torque Control.
 J. Riveros, F. Barrero, E. Levi, M.J. Durán, M. Jones, S. Toral.
 IEEE Transactions on Industrial Electronics, Vol. 60, No. 8, pp. 2957-2968, 2013.
 ISSN 0278-0046.
 - Reduction of Common-Mode Voltage in Five-Phase Induction Motor Drives using Predictive Control Techniques.
 M.J. Durán, J. Prieto, F. Barrero, H. Guzmán, J. Riveros.
 IEEE Transactions on Industry Applications, Vol. 48, No. 6, pp. 2059-2067, 2012.
 ISSN 0093-9994.
 - Route Duration Improvement in Wireless Sensor and Actuator Networks based on Mobility Parameters and Flooding Control.
 D.G. Reina, S. Toral, P. Johnson, F. Barrero.
 EURASIP Journal on Wireless Communication and Networking, Vol. 2012, Abril 2012, Paper 147,
 DOI: 10.1186/1687-1499-2012-147.
 ISSN 1687-1499.
 - Space Vector PWM with Reduced Common-Mode Voltage for Five-Phase Induction Motor Drives.
 M.J. Durán, J. Prieto, F. Barrero, H. Guzmán, J. Riveros.
 IEEE Transactions on Industrial Electronics, Vol. 60, No. 10, pp. 4159-4168, 2013.
 ISSN 0278-0046.
 - Networked Transducers in Intelligent Transportation Systems based on the IEEE 1451 Standard.
 F. Barrero, J.A. Guevara, E. Vargas, S. Toral, M. Vargas.
 Computer Standars & Interfaces, 2012, DOI: 10.1016/j.csi.2012.05.004.
 ISSN 0920-5489.
 - Understanding Power Electronics and Electrical Machines in Multidisciplinary Wind Energy Conversion System Courses.
 M.J. Durán, F. Barrero, A. Pozo, F. Guzman, J. Fernández, H. Guzman.
 IEEE Transactions on Education, Vol. 56, No. 2, pp. 174-182, 2012.
 ISSN 0018-9359.
 - Analysis of Embedded CORBA Middleware Performance on Urban Distributed Transportation Equipments.
 S. Toral, F. Barrero, F. Cortés, D. Gregor.
 Computer Standars & Interfaces, Vol. 35, No. 1, pp. 150-157, 2013. DOI: 10.1016/j.csi.2012.06.004.
 ISSN 0920-5489.
 - Parameter Identification of Multiphase Induction Machines with Distributed Windings – Part 1: Sinusoidal Excitation Methods.
 A. Yepes, J. Riveros, J. Doval-Gandoy, F. Barrero, O. López, B. Bogado, M. Jones, E. Levi.
 IEEE Transactions on Energy Conversion, Vol. 27, No. 4, pp. 1056-1066, 2012.
 ISSN 0885-8969.
 - Parameter Identification of Multiphase Induction Machines with Distributed Windings – Part 2: Time Domain Techniques.
 J. Riveros, A. Yepes, F. Barrero, J. Doval-Gandoy, B. Bogado, O. López, M. Jones, E. Levi.
 IEEE Transactions on Energy Conversion, Vol. 27, No. 4, pp. 1067-1077, 2012.
 ISSN 0885-8969.
 - An Ontology-based Semantic Service for Cooperative Urban Equipments.
 D. Gregor, S. Toral, T. Ariza, F. Barrero.
 Journal of Network and Computer Applications, Vol. 35, Iss. 6, 2012, pp. 2037–2050.
 ISSN 1084-8045.
 - Analytical Evaluation of Switching Characteristics in Five-Phase Drives with Discontinuous Space Vector Pulse Width Modulation Techniques.
 J. Prieto, F. Barrero, E. Levi, S. Toral, M. Jones, M.J. Durán.
 EPE Journal (European Power Electronics and Drives Journal), Vol. 23, No. 2, 2013.

- ISSN 0939-8368.
- A Dual-Rate Background Subtraction Approach for Estimating Traffic Queue Parameters in Urban Scenes.
J.M. Milla, M. Vargas, S.Toral, F. Barrero.
IET Intelligent Transport Systems, Accepted 2012. DOI: 10.1049/iet-its.2012.0020.
ISSN 1751-956X.
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