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Selected Scholarly Contributions [Data Provided by Scopus]

Yurur, O., Liu, C.-H., Moreno, W.
Unsupervised posture detection by smartphone accelerometer

Rosas-Guevara, G., Murphy-Arteaga, R., Moreno, W.
Small antenna based on MEMS and metamaterial properties for reconfigurable applications

Marquez, A.F., Sankar, R., Moreno, W.A.
Algorithms for hiding data in speech signals

Marquez, A.F., Castillo-Effen, M., Fitzgerald, S., Moreno, W.A.
Motion-logger: An attitude and motion sensing system

Rosas, G., Murphy, R., Moreno, W.
Design and fabrication of reconfigurable metamaterial devices using MEMS

A numerical simulation model to facilitate the understanding of the properties of a diffraction grating
Computer Applications in Engineering Education, . Article in Press.

Raptis, I.A., Valavanis, K.P., Moreno, W.A.
A novel nonlinear backstepping controller design for helicopters using the rotation matrix

Tejada-Martínez, A.E., Borberg, C.J., Venugopal, R., Carballo, C., Moreno, W.A., Quintero, R.A.
Computational fluid dynamic analysis of flow velocity waveform notching in umbilical arteries

Rosas, G., Murphy, R., Moreno, W.
Smart antenna using MTM-MEMS

Raptis, I.A., Valavanis, K.P., Moreno, W.A.
System identification and discrete nonlinear control of miniature helicopters using backstepping
Samala, R.K., Moreno, W.A., Danshong, S., You, Y., Qian, W.
Knowledge based optimum feature selection for lung nodule diagnosis on thin section thoracic CT
(2009) Progress in Biomedical Optics and Imaging - Proceedings of SPIE, 7260, art. no. 726036,

Samala, R., Moreno, W., You, Y., Qian, W.
A Novel Approach to Nodule Feature Optimization on Thin Section Thoracic CT

Raptis, I.A., Valavanis, K.P., Kandel, A., Moreno, W.A.
System Identification for a Miniature Helicopter at Hover Using Fuzzy Models

A numerical approach to simplify the diffraction grating model

Murthy, S.N., Alvis, W., Shirodkar, R., Valavanis, K., Moreno, W.
Methodology for implementation of unmanned vehicle control on FPGA using system generator

Castellanos, A., Leffew, J., Moreno, W.
FIB and E-beam cross-linked poly(N-isopropylacrylamide) patterning for BioMEMS/NEMS

Bieber, J.A., Pulecio, J.F., Moreno, W.A.
Applications of electron beam induced deposition in nanofabrication

Castillo-Effen, M., Castillo, C.L., Moreno, W.A., Valavanis, K.P.
Robustification of Decentralized PID Control for Small Unmanned Rotorcraft

Castillo-Effen, M., Moreno, W.A., Labrador, M.A., Valavanis, K.P.
Adapting sequential Monte-Carlo estimation to cooperative localization in wireless sensor networks
Alvis, W., Murthy, S., Valavanis, K., Moreno, W., Fields, M., Katkoori, S.
FPGA based flexible autopilot platform for unmanned systems

Castillo, C.L., Moreno, W., Valavanis, K.P.
Unmanned helicopter waypoint trajectory tracking using model predictive control

Dlutowski, J., Biver, C.J., Wang, W., Knighton, S., Bumgarner, J., Langebrake, L., Moreno, W., Cardenas-Valencia, A.M.
The development of BCB-sealed galvanic cells. Case study: Aluminum-platinum cells activated with sodium hypochlorite electrolyte solution

Size-exclusion “capture and release” separations using surface-patterned poly(N-isopropylacrylamide) hydrogels

Barnes, L., Alvis, W., Fields, M., Valavanis, K., Moreno, W.
Heterogeneous swarm formation control using bivariate normal functions to generate potential fields

Barnes, L., Alvis, W., Fields, M., Valavanis, K., Moreno, W.
Swarm formation control with potential fields formed by bivariate normal functions
(2006) 14th Mediterranean Conference on Control and Automation, MED’06, art. no. 1700722, .

Research and education network for the America’s Region, (RENAR): ISTEC’S Micro/Nano systems Mobile Training Program, (MTP)

Lukachan, G., Labrador, M.A., Moreno, W.
Scalable and energy-efficient routing for large-scale wireless sensor networks

Cardenas-Valencia, A.M., Dlutowski, J., Bumgarner, J., Langebrake, L., Moreno, W.
Long shelf-life, Al-anode micro-fabricated cells activated with alkaline-H2O2 electrolytes

Castillo-Effen, M., Alvis, W., Castillo, C., Moreno, W.A., Valavanis, K.P.
Modeling and visualization of multiple autonomous heterogeneous vehicles
Gonzalez, O.V., Moreno, W.A.
Narrowband interference detection in multiband UWB systems

Aristizábal, J., Hernández, J., Moreno, W., Gordillo, G.
Development of a system for measuring the parameters determining the quality of the electrical power generated by grid-connected PV systems

Castillo, C.L., Alvis, W., Castillo-Effen, M., Moreno, W., Valavanis, K.
Small scale helicopter analysis and controller design for non-aggressive flights

Centeno, G., Sampath, V., Moreno, W., Tadi, B., Maiguel, J.
Nondestructive characterization of CMP pads using statistical design analysis

Alvis, W.A., Leffew, J., Chawla, C., Moreno, W.
Using Sliding Mode Controller techniques to design PWM DC-DC

Castillo-Effen, M., Quintela, D.H., Jordan, R., Westhoff, W., Moreno, W.
Wireless sensor networks for flash-flood alerting

Bieber, J.A., Saddow, S.E., Moreno, W.A.
Synthesis of nanoscale structures in single crystal silicon carbide by electron beam lithography

Parameswaran, A., Labrador, M.A., Habib, I., Moreno, W.A.
Improving bandwidth efficiency in fault-tolerant opaque ip over optical mesh networks

Pernalete, N., Yu, W., Dubey, R., Moreno, W.A.
Telerobotic haptic system to assist the performance of occupational therapy tests by motion-impaired users

Camacho, O., Smith, C., Moreno, W.
Development of an internal model sliding mode controller
Rujano, J.R., Crane, R.A., Rahman, M.M., Moreno, W.  
**Numerical analysis of stabilization techniques for oscillatory convective flow in Czochralski crystal growth**  

Pernalete, N.P., Yu, W., Dubey, R.V., Moreno, W.A.  
**Augmentation of manipulation capabilities of persons with disabilities using scaled teleoperation**  

Pernalete, N., Yu, W., Dubey, R., Moreno, W.  
**Development of a robotic haptic interface to assist the performance of vocational tasks by people with disabilities**  

Moreno, Wilfrido A., Leffew, James, Cardenas, Oscar, Ramos, Niurka, Pernalete, Norali, Diaz, Franklyn, Alvarado, Victor  
**Integrating instructional technology methodologies in a state of the art Industrial Control Laboratory**  

Padhye, Chinmay, Christensen, Kenneth J., Moreno, Wilfrido  
**New adaptive FEC loss control algorithm for Voice Over IP applications**  

Pasham, Vikram, Falquez, F.J., Moreno, Wilfrido A.  
**Laser interconnects based multi-FPGA system**  

Moreno, W.A., Samson Jr., J.R., Falquez, F.J.  
**Laser injection of soft faults for the validation of dependability design**  

Pasham, Vikram, Moreno, Wilfrido A., Falquez, Fernando J.  
**Field programmable multi chip modules using programmable laser interconnects**  

Singh, P., Moreno, W., Ranganathan, N., Neinhaus, H.  
**Flexible MPEG audio decoder layer III chip architecture**  

Moreno, Wilfrido A., Falquez, Fernando J., Saini, Nitin  
**Fault tolerant design validation through laser fault injection**  
Moreno, Wilfrido A., Poladia, Ketan
Field programmable gate array design for an application specific signal processing algorithms

Rujano, Jose R., Cardenas, Rafael, Rahman, Muhammad M., Moreno, Wilfrido A.
Development of a thermal management solution for a ruggedized Pentium based notebook computer

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First test results of system level fault tolerant design validation through laser fault injection

Samson Jr., John R., Moreno, Wilfrido, Falquez, Fernando
Validating fault tolerant designs using Laser Fault Injection (LFI)

Chacon, Edgar, Moreno, Wilfrido, Dapena, Eladio
Framework to implement hierarchical hybrid control systems in industrial complexes

Moreno, Wilfrido A., Saini, Nitin, Acon, Otto
System integration for laser restructuring

Moreno, Wilfrido A., Lee, Rex, Saini, Nitin, Acon, Otto
Laser processing for electronic circuit restructuring

Lee, Rex, Moreno, Wilfrido, Saini, Nitin
Rapid prototyping using laser created interconnects

Lee, Rex A., Moreno, Wilfrido A., Saini, Nitin, Whittaker, Dennis
Laser created high density interconnects for quick prototyping of electronic circuits

Lee, Rex A., Moreno, Wilfrido A., Radomski, Aaron, Saini, Nitin, Whittaker, Dennis
High density interconnects for rapid prototyping of electronic systems