Sergio Vazquez (S'04–M'08–SM'14) was born in Seville, Spain, in 1974. He received the M.S. and Ph.D. degrees in industrial engineering from the University of Seville (US), Spain, in 2006 and 2010, respectively. Since 2002, he has been with the Power Electronics Group working on R&D projects. He is an Associate Professor with the Department of Electronic Engineering, US. His research interests include power electronics systems, modeling, modulation, and control of power electronics converters applied to renewable energy technologies. Dr. Vazquez received (as a coauthor) the 2012 Best Paper Award of the IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS and the 2015 Best Paper Award of the IEEE Industrial Electronics Magazine. He is a member of the Energy Storage Technical Committee of the IEEE Industrial Electronics Society. He is an Associate Editor of the IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS.

VAZQUEZ PEREZ, SERGIO

Categoría:
Profesor Titular de Universidad

Area de Conocimiento:
Tecnología Electrónica

Teléfono:
954486179
Ubicación geográfica

Correo Electrónico:
sergi@us.es

Departamento:
INGENIERÍA ELECTRÓNICA

Centro(s):
ESCUELA TÉCNICA SUPERIOR DE INGENIERÍA

Asignaturas:
Electrónica de Potencia

Integración de Energías Renovables

Electrónica de Potencia

Electrónica y Control de Sistemas de Energía

Sistemas Electrónicos para Gestión de Energías Renovables

Sistemas Electrónicos para Smart Grids

Sistemas Electrónicos para Gestión de Energías Renovables

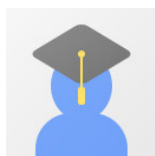Sistemas Electrónicos para Smart Grids

Sergio Vazquez

Profesor Contratado Doctor (US)

Power Electronics

	All	Since 2013
Citations	3737	3026
h-index	25	22
i10-index	38	33

TITLE	CITED BY	YEAR
Energy storage systems for transport and grid applications S Vazquez, SM Lukic, E Galvan, LG Franquelo, JM Carrasco IEEE Transactions on Industrial Electronics 57 (12), 3881-3895	722	2010
Model predictive control of an inverter with output $ LC $ filter for UPS applications P Cortés, G Ortiz, JI Yuz, J Rodríguez, S Vazquez, LG Franquelo IEEE Transactions on Industrial Electronics 56 (6), 1875-1883	350	2009
Guidelines for weighting factors design in model predictive control of power converters and drives P Cortés, S Kouro, B La Rocca, R Vargas, J Rodríguez, JI León, ... Industrial Technology, 2009. ICIT 2009. IEEE International Conference on, 1-7	272	2009
Model predictive control: A review of its applications in power electronics S Vazquez, JI Leon, LG Franquelo, J Rodriguez, HA Young, A Marquez, ... IEEE Industrial Electronics Magazine 8 (1), 16-31	211	2014
Enhanced decoupled double synchronous reference frame current controller for unbalanced grid-voltage conditions M Reyes, P Rodriguez, S Vazquez, A Luna, R Teodorescu, JM Carrasco IEEE Transactions on power electronics 27 (9), 3934-3943	158	2012
A model-based direct power control for three-phase power converters S Vazquez, JA Sanchez, JM Carrasco, JI Leon, E Galvan IEEE Transactions on Industrial Electronics 55 (4), 1647-1657	156	2008
Feed-forward space vector modulation for single-phase multilevel cascaded converters with any DC voltage ratio JI Leon, S Vazquez, AJ Watson, LG Franquelo, PW Wheeler, JM Carrasco IEEE Transactions on Industrial Electronics 56 (2), 315-325	139	2009
DC-voltage-ratio control strategy for multilevel cascaded converters fed with a single DC source S Vazquez, JI Leon, LG Franquelo, JJ Padilla, JM Carrasco IEEE Transactions on Industrial Electronics 56 (7), 2513-2521	131	2009
Conventional space-vector modulation techniques versus the single-phase modulator for multilevel converters JI Leon, S Vazquez, JA Sanchez, R Portillo, LG Franquelo, JM Carrasco, ... IEEE Transactions on Industrial Electronics 57 (7), 2473-2482	114	2010
Analysis of the power balance in the cells of a multilevel cascaded H-bridge converter S Vazquez, JI Leon, JM Carrasco, LG Franquelo, E Galvan, M Reyes, ... IEEE Transactions on Industrial Electronics 57 (7), 2287-2296	113	2010
Multidimensional modulation technique for cascaded multilevel converters JI Leon, S Kouro, S Vazquez, R Portillo, LG Franquelo, JM Carrasco, ... IEEE Transactions on Industrial Electronics 58 (2), 412-420	108	2011
Predictive optimal switching sequence direct power control for grid-connected power converters S Vazquez, A Marquez, R Aguilera, D Quevedo, JI Leon, LG Franquelo IEEE Transactions on Industrial Electronics 62 (4), 2010-2020	106	2015
Simple unified approach to develop a time-domain modulation strategy for single-phase multilevel converters JI Leon, R Portillo, S Vazquez, JJ Padilla, LG Franquelo, JM Carrasco IEEE Transactions on Industrial Electronics 55 (9), 3239-3248	105	2008
Three-dimensional feedforward space vector modulation applied to multilevel diode-clamped converters JI Leon, S Vazquez, R Portillo, LG Franquelo, JM Carrasco, PW Wheeler, ... IEEE Transactions on Industrial Electronics 56 (1), 101-109	96	2009
Extended state observer-based sliding-mode control for three-phase power converters J Liu, S Vazquez, L Wu, A Marquez, H Gao, LG Franquelo IEEE Transactions on Industrial Electronics 64 (1), 22-31	95	2017
Predictive control of a three-phase UPS inverter using two steps prediction horizon P Cortes, J Rodriguez, S Vazquez, LG Franquelo Industrial Technology (ICIT), 2010 IEEE International Conference on, 1283-1288	66	2010
Adaptive vectorial filter for grid synchronization of power converters under unbalanced and/or distorted grid conditions S Vazquez, JA Sanchez, MR Reyes, JI Leon, JM Carrasco IEEE Transactions on Industrial Electronics 61 (3), 1355-1367	63	2014
Unidimensional modulation technique for cascaded multilevel converters JI Leon, S Vazquez, S Kouro, LG Franquelo, JM Carrasco, J Rodriguez IEEE Transactions on Industrial Electronics 56 (8), 2981-2986	63	2009
Model predictive control with constant switching frequency using a discrete space vector modulation with virtual state vectors S Vazquez, JI Leon, LG Franquelo, JM Carrasco, O Martinez, J Rodriguez, ... Industrial Technology, 2009. ICIT 2009. IEEE International Conference on, 1-6	62	2009