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Prof Andrew Forsyth

Professor

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Biography

Andrew Forsyth graduated with the BSc(Eng) degree in Electrical Engineering from Imperial College, London, in 1981 and he obtained the PhD degree in Power Electronics from the University of Cambridge in 1987. Following industrial experience with GEC Electrical Projects, he has held lecturing positions at the universities of Bath and Birmingham and was appointed to the Chair in Power Electronics at Manchester in 2004 - a post that is cosponsored by the Royal Academy of Engineering and Rolls-Royce.

Research Networks and Beacons

Aerospace Research Institute

Related information

Publications

75 MHz discrete GaN based multilevel buck converter for envelope tracking applications

Research output: Contribution to conference > Paper

Systematic Comparison of Graphene Materials for Supercapacitor Electrodes

Research output: Contribution to journal > Article

Cell Optimisation of Supercapacitors Using a Quasi-Reference Electrode and Potentiostatic Analysis

Research output: Contribution to journal > Article

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Student Theses

Design and Analysis of High Performance DC-DC Converters with SiC Technology

UoM administered thesis: Phd

High Performance DC-AC Conversion Techniques for the More Electric Aircraft

UoM administered thesis: Phd

PROFILE OF 12-V VOLTAGE-REGULATED LEAD-ACID BATTERY

UoM administered thesis: Master of Philosophy

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1 - 10 out of 92 **Sort by:** Publication date **!**

2019

Published

75 MHz discrete GaN based multi-level buck converter for envelope tracking applications

Villarruel-Parra, A. & Forsyth, A., 27 May 2019.

Research output: Contribution to conference > Paper

Systematic Comparison of Graphene Materials for Supercapacitor Electrodes

Accepted/In press

Le Fevre, L., Cao, J., Kinloch, I., Forsyth, A. & Dryfe, R., 11 Feb 2019, (Accepted/In press) In: ChemistryOpen.

Research output: Contribution to journal > Article

Cell Optimisation of Supercapacitors Published Using a Quasi-Reference Electrode and Potentiostatic Analysis

Dryfe, R., Le Fevre, L., Forsyth, A., Todd, R., Redondo, E. & Fields, R., 2019, In: Journal of Power Sources.

Research output: Contribution to journal > Article

DOI: 10.1016/j.jpowsour.2019.03.062

Graphene Electrode for HighPerformance Rechargeable Chloroaluminate and Dual-Ion Batteries

Ejigu, A., Le Fevre, L. W., Fujisawa, K., Terrones, M., Forsyth, A. J. & Dryfe, R. A. W., 2019, In: ACS applied materials & interfaces.

Research output: Contribution to journal > Article

DOI: 10.1021/acsami.9b06528

2018

Thermal management of compact nanocrystalline inductors for power dense converters

Published

Wang, Y., Calderon-Lopez, G. & Forsyth, A., 18 Apr 2018, *APEC 2018 - 33rd Annual IEEE Applied Power Electronics Conference and Exposition: CES/IEEE 5th International Power Electronics and Motion Control Conference.* Institute of Electrical and Electronics Engineers , Vol. 2018-March. p. 2696-2703 8 p. 4078459

Research output: Chapter in Book/Report/Conference proceeding > Conference contribution

DOI: 10.1109/APEC.2018.8341398

Topology and magnetics optimisation Published for a 100-kW Bi-directional DC-DC Converter

Scoltock, J., Calderon-Lopez, G. & Forsyth, A. J., 3 Apr 2018, 2017 IEEE Vehicle Power and Propulsion Conference, VPPC 2017 - Proceedings. Institute of Electrical and Electronics Engineers, Vol. 2018-January. p. 1-6 6 p.

Research output: Chapter in Book/Report/Conference proceeding > Conference contribution

DOI: 10.1109/VPPC.2017.8330900

A Comparison of Digital PWM Control Strategies for High Power Interleaved DC-DC Converters

Calderon-Lopez, G., Villarruel-Parra, A., Kakosimos, P., Ki, S-K., Todd, R. & Forsyth, A., 8 Feb 2018, In: IET Power Electronics.

Research output: Contribution to journal > Article

DOI: 10.1049/iet-pel.2016.0886

An ANN-based grid voltage and

frequency forecaster



Published

Massi Pavan, A., Chettibi, N., Mellit, A., Feehally, T., Forsyth, A. & Todd, R., 2018.

Research output: Contribution to conference > Paper

Efficiency analysis for a gridconnected battery energy storage system

Published

Noyanbayev, N. K., Forsyth, A. & Feehally, T., 2018, In: Materials Today: Proceedings. p. 22811-22818 8 p.

Research output: Contribution to journal > Article

Efficiency Analysis of a High Power Grid-connected Battery Energy Storage System

Published



Feehally, T., Forsyth, A., Todd, R., Liu, S. & Noyanbayev, N. K., 2018.

Research output: Contribution to conference > Paper

1 2 3 4 5 6 7 8 ... 10 >

Research Explorer downloads

Enhanced 309 ♣ Average-Value Modelling of Interleaved

DC-DC Converters Using Sampler Decomposition

Research output: Contribution to journal > Article

Adaptive Rate-Limit Control for Energy Storage Systems

Research output: Contribution to journal > Article

DC-bus power 164 quality for aircraft power systems during generator fault conditions

Research output: Contribution to journal > Article

Soft-Switching 154 & Operation of the Dual-Interleaved Boost Converter over all Duty Ratios

Research output: Contribution to journal > Article

Battery energy 147 storage systems for the electricity grid: UK research facilities

Research output: Contribution to conference > Paper

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