Αναλυτικό Βιογραφικό Σημείωμα Καθηγητή Βόκα Γεώργιου

Γνωστικό Αντικείμενο (από ΦΕΚ): Ηλεκτρονικα Ισχυος και Εφαρμογες τους στα Συστηματα Ελεγχου Εναλλακτικων Πηγων Ενεργειας

Σπουδές

1995 – Διδακτορικό Δίπλωμα (PhD) στις ΑΠΕ, Ποιότητα & Ηλεκτρονικά Ισχύος, Τομέας Ηλεκτρικής Ισχύος, Τμήμα Ηλεκτρολόγων Μηχανικών και Μηχανικών Υπολογιστών, Ε.Μ.Π.

1990 – Δίπλωμα Ηλεκτρολόγου Μηχανικού και Μηχανικού Υπολογιστών, Τμήμα Ηλεκτρολόγων Μηχανικών, Ε.Μ.Π.

Ερευνητικά Ενδιαφέροντα

- SMART GRIDS & OPTIMIZATION SCHEMES FOR ENERGY PLANNING USING RENEWABLE ENERGY SOURCES (RES)
- CIRCULAR ECONOMY AND RATIONAL USE OF ENERGY IN INDUSTRY AND BUILDING SECTOR
- ENERGY STORAGE IN SMART GRIDS FOR HIGH RES PENETRATION
- ELECTROMOBILITY WITH RES AND INDUCTION CHARGING
- POWER QUALITY OF ELECTRIC POWER SYSTEMS
- ENERGY STRATEGIES AND ENVIRONMENTAL ISSUES USING RES
- WAYS FOR INCREASING THE EFFICIENCY (PR OPTIMIZATION) OF PV PARKS
- MEASURING ELECTRICAL CHARACTERISTICS OF GRID CONNECTED PV SYSTEMS
- FEASIBILITY STUDY, ENERGY MANAGEMENT & DESIGN OF LARGE SCALE PV PARKS
- DESIGN & CONSTRUCTION OF 3-PHASE 6-PULSE CONTROLLED RECTIFIERS / INVERTERS
- EXPERIMENTAL SIMULATION OF PV STATIONS USING POWER ELECTRONIC CIRCUITS

Αντιπροσωπευτικές Δημοσιεύσεις

Α. ΔΙΕΘΝΗ ΠΕΡΙΟΔΙΚΑ ΜΕ ΚΡΙΤΕΣ

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Β. ΠΡΑΚΤΙΚΑ ΔΙΕΘΝΩΝ ΣΥΝΕΔΡΙΩΝ ΜΕ ΚΡΙΤΕΣ

(Ενδεικτικές Δημοσιεύσεις με προπτυχιακούς και μεταπτυχιακούς φοιτητές)

- P.A. Langouranis, S.D. Kaminaris, **G.A. Vokas**, T.E. Raptis, G.Ch. Ioannidis, "Fuzzy Total Power Quality Index for Electric Networks", 9th Mediterranean Conference on Power Generation, Transmission Distribution and Energy Conversion MEDPOWER 2014; 11/2014.
- G.E. Tsokolas, **G.A. Vokas**, "Functional characteristics of a typical grid photovoltaic system with various topologies and inverter types", 9th Mediterranean Conference on Power Generation, Transmission Distribution and Energy Conversion MEDPOWER 2014; 11/2014.
- A.G.Theodorakis, **G.A.Vokas**, P.Fergadiotis, Basic operating principles and pilot prototype development of a medium scale induction heating machine", 10th Mediterranean Conference on Power Generation, Transmission, Distribution and Energy Conversion (MEDPOWER), 6 - 9 November 2016, Belgrade, Serbia.
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- Koutsouvelis, D., **Vokas, G.A.**, "Lithium batteries: Storage applications and methods to improve efficiency", American Institute of Physics (AIP) Conference Proceedings, 2019.
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- D.Ch. Koutsouvelis, **G.A. Vokas**, G.Ch. Ioannidis, "Cell Balancing using a Modified CUK Converter", MEDPOWER - Mediterranean Conf. on Power Generation, Transmission, Distribution & Energy Conversion, 9-12 November 2020.

Προπτυχιακά μαθήματα

1. Ηλεκτρονικά Ισχύος Ι (6ο Εξάμηνο)
2. Ηλεκτρονικά Ισχύος ΙΙ (7ο Εξάμηνο)
3. Αποθήκευση Ενέργειας (7ο Εξάμηνο)
4. Ανανεώσιμες Πηγές Ενέργειας Ι (7ο Εξάμηνο)
5. Ανανεώσιμες Πηγές Ενέργειας ΙΙ (8ο Εξάμηνο)
6. Ευφυή Ενεργειακά Δίκτυα & Διεσπαρμένη Παραγωγή (9ο Εξάμηνο)

Μεταπτυχιακά μαθήματα

- ΠΜΣ «Διαχείριση και Βελτιστοποίηση Ενεργειακών Συστημάτων» του ΠΑΔΑ: «Προηγμένες Εφαρμογές Ηλεκτρονικών Ισχύος & Ηλεκτρικής Κίνησης - Ποιότητα Ηλεκτρικής Ισχύος»
- ΠΜΣ «Διαχείριση και Βελτιστοποίηση Ενεργειακών Συστημάτων» του ΠΑΔΑ: «Έξυπνα Δίκτυα και Διεσπαρμένη Παραγωγή Ηλεκτρικής Ενέργειας»
- ΠΜΣ «MSc in Energy» του ΠΑΔΑ – Heriot Watt University: «ΣΗΕ & Ηλεκτρονικά Ισχύος»
- ΠΜΣ «Ηλεκτρικές και Ηλεκτρονικές Επιστήμες μέσω Έρευνας» του ΠΑΔΑ: «Εφαρμογές Διατάξεων Ηλεκτρονικών Ισχύος για έλεγχο και Ποιότητα Ισχύος»
- ΠΜΣ «Ηλεκτρικές και Ηλεκτρονικές Επιστήμες μέσω Έρευνας» του ΠΑΔΑ: «Ευφυή Ενεργειακά Συστήματα & IoE»
- Διδασκαλία σε 3 Προγράμματα Μεταπτυχιακών Σπουδών του Τμήματος Ηλεκτρολόγων Μηχανικών του ΠΑΔΑ και στο Μεταπτυχιακό του ΕΚΠΑ-ΠΑΔΑ του μαθήματος «Τεχνικές Συγγραφής και Έρευνας»

Βιογραφικό Σημείωμα