

REVUE ROUMAINE  
DES  
SCIENCES TECHNIQUES  
SÉRIE  
**ÉLECTROTECHNIQUE  
ET  
ÉNERGÉTIQUE**

Tome 63, 2018, N° 2, Avril-Juin

Paraît quatre fois par an

Revue incluse dans "Thomson Reuters Science Citation Index Expanded (also known as SciSearch\*) and Journal Citation Reports/Science Edition"

**S o m m a i r e**

MIHAI OCTAVIAN POPESCU, A letter to Academician ANDREI ȚUGULEA..... 121

**Électrotechnique et électroénergétique**

- RADU MIRCEA CIUCEANU, IOSIF VASILE NEMOIANU, VERONICA MANESCU (PALTANEA), GHEORGHE PALTANEA, On Professor Țugulea's visionary power theory: a review, recent advances and perspectives..... 123
- IOAN R. CIRIC, IOAN FLOREA HĂNȚILĂ, MIHAI MARICARU, New analytic solution for the magnetization of two spheres ..... 128
- GEORGIANA ROSU, GHEORGHE SAMOILESCU, OCTAVIAN BALTAG, Statistical approach of underwater magnetic field measurements of the naval magnetic signature ..... 132
- MARILENA STĂNCULESCU, MIHAI IORDACHE, DRAGOȘ NICULAE, LAVINIA BOBARU, VICTOR BUCATĂ, Algorithm for computing  $\underline{S}$  parameters and their use for studying efficiency of electromagnetic energy wireless transfer systems ..... 138
- AUREL CAMPEANU, RADU MUNTEANU, VASILE IANCU, Dynamic stability of permanent magnet synchronous machine versus synchronous machine with electromagnetic excitation ..... 145
- TIBERIU TUDORACHE, VASILE BOSTAN, Analysis of a grid tie dual rotor counter rotating wind system ..... 151
- MOHAMMED OMAR BENAÏSSA, SAMIR HADJERI, SID AHMED ZIDI, YOUCEF ISLAM DJILANI KOBIBI, Photovoltaic solar farm with high dynamic performance artificial intelligence based on maximum power point tracking working as STATCOM..... 156
- MIHAELA MOREGA, ILEANA MARIA BĂRAN, ALEXANDRU MIHAIL MOREGA, ALNAMIR KAZEM LEAIBI HUSSAIN, On the assessment of human exposure to low frequency magnetic field at the workplace ..... 162

**Électronique et transmission de l'information**

- ALEXANDRU SERBANESCU, CORNEL IOANA, ANGELA DIGULESCU, Overview of our recent results in signal analysis using recurrence plots ..... 172
- TATTAYA PUKKALANUN, WORAPONG TANGSRIRAT, Low-voltage all-NMOS four-quadrant current multiplier..... 178
- NENAD MILOSEVIC, SLAVIMIR STOSOVIC, BOJAN DIMITRIJEVIC, MILOS BANDJUR, ZORICA NIKOLIC, Frequency offset resistant reception algorithm for orthogonal frequency division multiplexing systems..... 184
- UDAYABHASKAR PATTAPU, SUSHRUT DAS, A frequency selective surface loaded high gain slant antenna for 2.45 GHz rectenna applications..... 190

VENKATRAMAN THIYAGARAJAN, PERIASAMY SOMASUNDARAM, Design of new symmetrical nine level inverter with reduced number of switches.....	196
EMA-MARIA GALEȘ, VICTOR CROITORU, MARIUS IORDACHE, Proposed scenarios of the load balancing mechanism in multiprotocol label switching networks.....	202

### **Automatique et ordinateurs**

OUAMRI BACHIR, AHMED-FOITIH ZOUBIR, Comparative analysis of robust controller based on classical proportional-integral controller approach for power control of wind energy system .....	210
YAKHELEF YASSINE, BOULOUEH MESSAOUD, Improving accuracy and order of astatism of rolling mill drives using feedforward compensation.....	217

### **Termotechnique et termoénergétique**

IOAN-DRAGOȘ DEACONU, VALENTIN NĂVRĂPESCU, AUREL-IONUȚ CHIRILĂ, Thermal analysis of an electric aircraft tail rotor .....	223
--	-----

### **Génie biomédicale**

ALEXANDRU MIHAIL MOREGA, ALIN A. DOBRE, MIHAELA MOREGA, The brachial electrical bioimpedance as a localized cardiovascular investigation technique.....	227
OANA-MARIA FERCHE, ALIN MOLDOVEANU, FLORICA MOLDOVEANU, MARIA-IULIANA DASCĂLU, ROBERT-GABRIEL LUPU, CONSTANȚA-NICOLETA BODEA, Deep understanding of augmented feedback and associated cortical activations, for efficient virtual reality based neuromotor rehabilitation.....	233