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LISTA DE LUCRĂRI
(Dr. Ing. Voicilă Iulian-Teodor)

I. TEZA (E) DE DOCTORAT (T)

“Sistem inteligent de sortare a bateriilor Li-Ion din industria auto care și-au atins limita de viață” – 2025, coordonator: Prof. Dr. Ing. George-Călin SERITAN

II. ALTE MATERIALE PUBLICATE (I,D)

I1 - Seritan, G. C., Enache, B. A., Vilciu, I., **Voicila, T. I.** (2024). *Electrical Experiments – From fundamentals to advanced measurements Vol. 1*. Editura POLITEHNICA Press, 95 pag., ISBN 978-630-339-001-7.

I2 - Seritan, G. C., Enache, B. A., Vilciu, I., **Voicila, T. I.** (2025). *Electrical Experiments – From fundamentals to advanced measurements Vol. 2*. Editura POLITEHNICA Press, 91 pag., ISBN 978-630-339-006-2.

III. ARTICOLE / STUDII IN EXTENSO PUBLICATE (R,V)

Ris1 – **Voicila, T. I.**, Enache, B. A., Mateescu, M. V., Seritan, G. C. (2025). *A HIGH-SPEED MULTI-CHEMISTRY AND MULTI-BATTERY STATE-OF-HEALTH SCREENING SYSTEM FOR RETIRED LITHIUM-ION BATTERIES*, University POLITEHNICA of Bucharest Scientific Bulletin Series C-Electrical Engineering and Computer Science, 87(3). **WOS:001562110500021**

<https://www.scientificbulletin.upb.ro/seria/c/cautare?q=a+high-speed>

Ris2 - **Voicila, T. I.**, Enache, B. A., Argyriou, V., Sarigiannidis, P., Pisla, M. A., Seritan, G. C. (2025). *Enhanced OCV Estimation in LiFePO₄ Batteries: A Novel Statistical Approach Leveraging Real-time Knee/Elbow Detection*, MDPI Batteries-Basel, 11(5), IF 4.8, Q2. **WOS:001496608900001**

<https://www.mdpi.com/2313-0105/11/5/186>

Ris3 - Pisla, M. A., **Voicila, T. I.**, Enache, B. A., Argyriou, V., Sarigiannidis, P., Seritan, G. C. (2025). *High Speed SMV Subscriber Design FPGA Architectures*, MDPI Electronics, 14(11), IF 2.6, Q2. **WOS:001505875500001**

<https://www.mdpi.com/2079-9292/14/11/2135>

Ris4 - **Voicila, T. I.**, Seritan, G. C., & Enache, B. A. (2024). *Analysis of bidirectional DC-DC power converters for screening systems of retired batteries*, Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, 69(3), 315-319. IF 0.7, Q4, **WOS:001319210900010**

<https://journal.iem.pub.ro/rrst-ee/article/download/813/423>

Ris5 - Enache, B. A., Seritan, G. C., Cepisca, C., Grigorescu, S. D., Argatu, F. C., Adochiei, F. C., & **Voicila, T. I.** (2020). *Comparative study of screening methods for second life LiFePO₄ batteries*, Revue Roumaine des Sciences Techniques – Serie Electrotechnique et Energetique, 5(14). **WOS:000552052900012**

http://www.revue.elth.pub.ro/upload/25045613_BEnache_RRST_1-2_2020_pp_71-74.pdf

Rio1 - VOICILA, T. I., BOGDAN, A.-G., ENACHE, B.-A. (2023). *Comparative analysis of medical equipment identification techniques: A multifaceted approach for enhanced hospital operations*, University of Pitesti Scientific Bulletin Series: Electronics and Computer Science, 23(2), pp. 7-12.

https://bulletin.feccupit.ro/archive/view/2023_2_2.html

Rio2 - VOICILA, T. I., BOGDAN, A.-G., ENACHE, B.-A. (2023). *Guidelines for developing an IOT-enabled application for enhanced hospital management*, University of Pitesti Scientific Bulletin Series: Electronics and Computer Science, 23(2), pp. 1-6

https://bulletin.feccupit.ro/archive/view/2023_2_1.html

Rio3 - Gkanatsios, S., Vilciu, I., & Voicila, T. I. (2023). *Evaluating the state of health of Lead-Acid battery used in UPS*. EMERG: Energy. Environment. Efficiency. Resources. Globalization, 9(3), (pp. 50-61).

<https://emerg.ro/files/evaluating-the-state-of-health-of-lead-acid-battery-used-in-ups/>

Rio4 - Gandescu, C. H., Gkanatsios, S., Cepisca, C., Vilciu, I., & Voicila, T. I. (2022). *Accurate Modelling of an Online Uninterrupted Power Supply*. Journal of Electrical Engineering, Electronics, Control and Computer Science, 8(4), 45-50.

<https://jeeccs.net/index.php/journal/article/download/307/234>

Vis1 - Dobre, A. L., Argatu, V. V., Enache, C. D., Voicila, T. I., & Voiculescu, D. I. (2021). *Monitoring System For Patients With Epilepsy*. In *2021 International Conference on e-Health and Bioengineering (EHB)*, (pp. 1-4). IEEE. **WOS:000802227900063**

<https://ieeexplore.ieee.org/abstract/document/9657602>

Vis2 - Ene, C., Adochiei, I., Enache, C. D., Voicila, T. I., & Voiculescu, D. I. (2021). *The identification and classification of facial expressions under stress using an emg*. In *2021 International Conference on e-Health and Bioengineering (EHB)*, (pp. 1-6). IEEE. **WOS:000802227900024**

<https://ieeexplore.ieee.org/abstract/document/9657559>

Vis3 - Enache, B. A., Seritan, G. C., Cepiscă, C., Grigorescu, S. D., Argatu, F. C., Adochiei, F. C., & Voicila, T. I. (2021). *Flyback Converter for a Multi-Chemistry Battery Balancer*. In *2021 12th International Symposium on Advanced Topics in Electrical Engineering (ATEE)*, (pp. 1-6). IEEE. **WOS:000676164800086**

<https://ieeexplore.ieee.org/abstract/document/9425205>

Vi1 - Voicilă, T. I., Seritan, G. C., Enache, B. A., Stănculescu, M., & Porumb, R. (2023). *Design and implementation of a multi-battery, multi-chemistry state of health screening system*. In *2023 10th International Conference on Modern Power Systems (MPS)*, (pp. 1-4), IEEE.

<https://0d106okae-y-https-ieeeexplore-ieee-org.z.e-nformation.ro/document/10187442/>

Vi2 - Voicilă, T. I., Seritan, G. C., Enache, B. A., Porumb, R., & Stănculescu, M. (2023). *First Steps Towards the Design of a multi-Chemistry, multi-Battery State of Health Screening System*. In *2023 13th International Symposium on Advanced Topics in Electrical Engineering (ATEE)* (pp. 1-6). IEEE.

<https://0d106okae-y-https-ieeeexplore-ieee-org.z.e-nformation.ro/document/10108169/>

Vi3 - Constantinescu, L. M., Enache, B. A., Dogaru, V. G., Voicila, T. I., Vilciu, I., & Vasile, S. C. (2023). *Statistical Analysis of Capacity Loss for Stored Batteries*. In *2023 15th International Conference on Electronics, Computers and Artificial Intelligence (ECAI)* (pp. 01-04). IEEE.

<https://0d106okae-y-https-ieeeexplore-ieee-org.z.e-nformation.ro/document/10193945/>

Vi4 - Vilciu, I., Enache, B. A., Seritan, G. C., & Voicilă, T. I. (2023). *An Indoor Air Quality Score Computation and System*. In *2023 13th International Symposium on Advanced Topics in Electrical Engineering (ATEE)* (pp. 1-4). IEEE.

<https://0d106okae-y-https-ieeeexplore-ieee-org.z.e-nformation.ro/document/10108307>

Vi5 - Grigorescu, S. D., Seritan, G. C., Enache, B. A., Adochiei, F. C., Argatu, F. C., Vilciu, I., & **Voicila, T. I.** (2022). *A Multipurpose Video Immersion Laboratory*. In 2022 E-Health and Bioengineering Conference (EHB) (pp. 1-4). IEEE.

<https://0d106okae-y-https-ieeeexplore-ieee-org.z.e-nformation.ro/document/9991365/>

Vi6 - Enache, B. A., Grigorescu, S. D., Argatu, F. C., Adochiei, F. C., Vilciu, I., & **Voicila, T. I.** (2022). Energy Evaluation of Bugs vs Birds Path Planning Strategies for Robots. In 2022 14th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), pp. 1-4. IEEE.

<https://0d106fyt5-y-https-ieeeexplore-ieee-org.z.e-nformation.ro/document/9847441>

Vi7 - Enache, B. A., Seritan, G. C., Grigorescu, S. D., Cepisca, C., Adochiei, F. C., Argatu, V. V., & **Voicila, T. I.** (2020). A battery screening system for second life LiFePO₄ batteries. In 2020 International Conference and Exposition on Electrical And Power Engineering (EPE), pp. 298-301. IEEE.

<https://0d106fyt5-y-https-ieeeexplore-ieee-org.z.e-nformation.ro/document/9305538>

IV. BREVETE DE INVENȚIE / INOVAȚII SAU CREAȚII ARTISTICE (B,A)

Cerere1 - Enache, B. A., **Voicila, T. I.**, Seritan, G. C. (2025). *Metoda și sistem de sortare automată a bateriilor care și-au atins limita de viață în vederea reutilizării lor*. Nr. A139035/30.07.2025 publicată în BOPI cu numărul 7/2025 la pagina 27.

Cerere2 - Enache, B. A., **Voicila, T. I.**, Cepisca, C., Neacsu, A. G. (2021). *Echipament inteligent pentru echilibrarea activă a grupurilor de baterii tip Pb-Acid și Li-Ion*. Nr. A100127/25.03.2021 publicată în BOPI cu numărul 8/2021 la pagina 46.

V. CONTRACTE ȘI RAPOARTE ȘTIINȚIFICE (P,F)

Pi1 – Membru în echipă: Inginer de cercetare în Electrotehnică: Evaluation and Valorization of Social Services for a Sustainable Transition (EVOSST), HORIZON-CL2-2024-DEMOCRACY-01, Grant agreement ID: 020256118, 01/02/2025-01/01/2028.

Pi2 – Membru în echipă: Inginer de cercetare în Electrotehnică: Digital Twin for Europe (TwinEU), H2020-CL5-2023-D3-03, Grant agreement ID: 101136119, 01/01/2024-01/01/2026.

Pi3 – Membru în echipă: Inginer de cercetare în Electrotehnică: rEsilient and seLf-healed EleCTRical pOwer Nanogrid (ELECTRON), H2020-SU-DS-2020, Grant agreement ID: 101021936, 01/10/2021-30/09/2024.

Pn1 – Membru în echipă: Inginer de cercetare în Electrotehnică: SC ADEMA EQUIP SRL, Sistem de management inteligent pentru creșterea eficienței sistemelor de stocare a energiei pe bază de baterii Pb-Acid și Li-Ion (STOCMAN), Cod proiect: 115939, 14/07/2020-14/09/2021.

VI. COMUNICĂRI ȘTIINȚIFICE NEPUBLICATE (E)

E1 - VOICILA T. I. Lucrare de master, 2021, “Proiectarea și realizarea unui sistem de selecție pentru bateriile din industria auto”, coordonator: Prof. Dr. Ing. George-Călin SERITAN și Ș. L. Dr. Ing. Bogdan-Adrian ENACHE

E2 - VOICILA T. I. Lucrare de licență, 2019, “Instrument virtual pentru generarea și măsurarea semnalelor periodice”, coordonator: Prof. Dr. Ing. Sorin-Dan GRIOGORESCU și As. Dr. Ing. Bogdan-Adrian ENACHE

Semnătura:

