

LISTA DE LUCRĂRI

Candidat: OPREA C. Simona Vasilica - Dr.ing din 2009, Dr. ec. din 2017

1. Lista celor maximum 10 lucrări considerate de candidat a fi cele mai relevante pentru realizările profesionale proprii, care sunt incluse în format electronic în dosar și care se pot regăsi și în celelalte categorii de lucrări din prezenta listă de lucrări:

Ri1	S.V. Oprea, A. Bâra, <i>Devising a trading mechanism with a joint price adjustment for local electricity markets using blockchain. Insights for policy makers</i> , Elsevier Energy Policy, Volume 152, DOI: 10.1016/j.enpol.2021.112237, Article Number: 112237, Published: May 2021, ISSN: 0301-4215, WOS:000636054400028
Ri2	S.V. Oprea, A. Bâra, <i>Edge and fog computing using IoT for direct load optimization and control with flexibility services for citizen energy communities</i> , Elsevier Knowledge Based-Systems, Volume 228, Article Number 107293, DOI10.1016/j.knosys.2021.107293, SEP 27 2021, ISSN 0950-7051, WOS: 000659800800001
Ri3	Cebeci, ME, Tor, OB, S.V. Oprea, Bâra, A, <i>Consecutive Market and Network Simulations to Optimize Investment and Operational Decisions Under Different RES Penetration Scenarios</i> , IEEE Transactions on Sustainable Energy, Volume: 10, Issue: 4, Pages: 2152-2162, DOI: 10.1109/TSTE.2018.2881036, Published: OCT 2019, ISSN 1949-3029, WOS:000487199700050
Ri4	S.V. Oprea, A. Bâra, <i>Ultra-short-term forecasting for photovoltaic power plants and real-time key performance indicators analysis with big data solutions. Two case studies - PV Agiea and PV Giurgiu located in Romania</i> , Computers in Industry, Volume: 120, Article Number: 103230, DOI: 10.1016/j.compind.2020.103230, pages:1-22, Published: SEP 2020, ISSN0166-3615, WOS:000538762600005
Ri5	S.V. Oprea, A. Bâra, G. Ifrim, <i>Optimizing the Electricity Consumption with a High Degree of Flexibility Using a Dynamic Tariff and Stackelberg Game</i> , Springer Journal of Optimization Theory and Applications, Volume190, Issue1, Page151-182, DOI10.1007/s10957-021-01876-1, JUL 2021, ISSN0022-3239, WOS 000659800800001
Ri6	S.V. Oprea, A. Bâra, G. Ifrim, <i>Flattening the electricity consumption peak and reducing the electricity payment for residential consumers in the context of smart grid by means of shifting optimization algorithm</i> , Elsevier Computers & Industrial Engineering, Volume 122, August 2018, Pages 125-139, Elsevier, https://doi.org/10.1016/j.cie.2018.05.053 , ISSN0360-8352, WOS:000438478700008
Ri7	S.V. Oprea, A. Bâra, GA Ifrim, L. Coroianu, <i>Day-ahead electricity consumption optimization algorithms for smart homes</i> , Computers & Industrial Engineering, Volume: 135, Pages: 382-401, DOI: 10.1016/j.cie.2019.06.023, Published: SEP 2019, ISSN0360-8352, WOS:000482244100030
Ri8	S.V. Oprea, A. Bâra, <i>Setting the Time-of-Use Tariff Rates with NoSQL and Machine Learning to a Sustainable Environment</i> , IEEE ACCESS, Volume: 8, Pages: 25521-25530, DOI: 10.1109/ACCESS.2020.2969728, Published: 2020, ISSN2169-3536, WOS:000524658400002
Ri9	S.V. Oprea, A. Bâra, <i>Machine Learning Algorithms for Short-Term Load Forecast in Residential Buildings Using Smart Meters, Sensors and Big Data Solutions</i> , IEEE Access, Volume: 7, Pages: 177874-177889, DOI: 10.1109/ACCESS.2019.2958383, Published: 2019, ISSN2169-3536, WOS:000509483800046
Ri10	Oprea, SV., Bâra, A. <i>Machine learning classification algorithms and anomaly detection in conventional meters and Tunisian electricity consumption large datasets</i> , Computers and Electrical Engineering, Volume 94, September 2021, https://doi.org/10.1016/j.compeleceng.2021.107329 , ISSN 0045-7906, WOS:000694013100024

2 Teza(-ele) de doctorat

T1	Oprea Simona Vasilica - Aspecte privind accesul deschis la rețelele electrice. Integrarea surselor regenerabile de energie, Universitatea Politehnica, Bucuresti, 2009, coordonator prof.dr. ing. Mircea Eremia
T2	Oprea Simona Vasilica - Soluții informatice de asistare a deciziilor privind optimizarea consumului de energie electrica în rețele inteligente de tip smart grid, Academia de Studii Economice din București, 2017, coordonator prof.univ.dr. Ion LUNGU

3 Cărți/cursuri publicate în edituri recunoscute(Ca1, Ca2 etc.), îndrumare publicate(I1, I2 etc.), capitole publicate în volume colective, capitole teoretice redactate, (D1, D2 etc.), după caz, prin care se aduc contribuții a dezvoltarea activităților didactice/profesionale.

Ca	Cărți de specialitate publicate în edituri recunoscute
Ca1	Osman Bulent Tor, Adela Bâra, Simona Vasilica Oprea , Erkut Cebeci, Dan Preotescu, George Ifrim, Vlad Diaconita, Ana-Ramona Bologa, Anda Belciu, Anca Andreescu, Iuliana Botha - <i>INTELLIGENT SYSTEM FOR TRADING ON WHOLESALE ELECTRICITY MARKET (SMARTRADE), BEST PRACTICES GUIDE</i> , Editura ASE, 2020, ISBN 978-606-34-0348-4
Ca2	Simona Vasilica Oprea , <i>Solutii informatice pentru managementul consumului de energie electrica in retele de tip smart grid</i> , Editura ASE, 2018, ISBN 978-606-34-0246-3, 178 pagini
Ca3	Ileana Adina Uta, Anca Ioana Andreescu, Simona Vasilica Oprea , <i>Pachete software si aplicatii SAS</i> , Editura ASE, 2018, ISBN 978-606-34-0252-4, 206 pagini
Ca4	Adela Bâra, George Carutasu, Alexandru Pirjan, Cornelia Paulina Botezatu, Simona Vasilica Oprea , Iuliana Botha, Anda Belciu - <i>Sistem inteligent pentru predicția, analiza și monitorizarea indicatorilor de performanță a proceselor tehnologice și de afaceri în domeniul energiilor regenerabile (SIPAMER), Volumul II – Dezvoltarea și implementarea prototipului informatic</i> , Editura Pro Universitaria, ISBN: 978-606-26-0818-7, 152 pagini
Ca5	Adela Bâra, Cornelia Paulina Botezatu, George Carutasu, Simona Vasilica Oprea , Alexandru Pirjan, Ion Lungu, Adina Uta, Anca Andreescu, Alexandra Florea - <i>Sistem inteligent pentru predicția, analiza și monitorizarea indicatorilor de performanță a proceselor tehnologice și de afaceri în domeniul energiilor regenerabile (SIPAMER), Volumul I – Analiza sistemului și identificarea soluțiilor de realizare</i> , Editura Pro Universitaria, ISBN: 978-606-26-0748-7, 322 pagini http://www.prouniversitaria.ro/carte/sistem-inteligent-pentru-predictia-analiza-si-monitorizarea-indicatorilor-de-performanta-a-proceselor-tehnologice-si-de-afaceri-in-domeniul-energiilor-regenerabile-sipamer-volumul-i-analiza-sistemului-si-identificarea-solutiilor-de-realizare
Ca6	Adela Bâra, Iuliana Botha, Anca Fodor, Ion Lungu, Simona Vasilica Oprea – <i>SGBD Oracle. Limbajul SQL</i> , Editura ASE, 2016, ISBN 978-606-34-0133-6; 166 pagini din care 30 de pagini contribuție proprie
Ca7	Adela Bâra, Simona Vasilica Oprea , Iuliana Botha, Anda Belciu - <i>Sisteme informatice inteligente pentru asistarea deciziilor în medii cu predictibilitate redusă</i> , Editura ASE, 2017, ISBN 978-606-34-0149-7, 247 pagini, din care 62 pagini contribuție proprie
D	2. Capitole publicate în volume colective, capitole teoretice redactate
D1	S.V. Oprea , A.Bâra - <i>Recent Improvements of Power Plants Management and Technology, Chapter 2: Key technical performance indicators for power plants</i> , InTech — Open Access Company Publishing, 2017, ISBN 978-953-51-5317-7, https://www.intechopen.com/books/recent-improvements-of-power-plants-management-and-technology/key-technical-performance-indicators-for-power-plants , 18 pagini din care 9 pagini contribuție proprie;
D2	A.Bâra, S.V. Oprea - <i>Artificial Neural Networks, Chapter: Electricity consumption and renewables generation forecasting with artificial neural networks</i> , InTech — Open Access Company Publishing, 2017, ISBN 978-953-51-5676-5;
D3	S.V. Oprea , A. Pîrjan, I. Lungu, A.G. Fodor - <i>Forecasting solutions for photovoltaic power plants in Romania</i> , in: Silaghi G., Buchmann R., Boja C. (eds) Informatics in Economy. IE 2016. 15th International Conference, IE 2016. Cluj-Napoca, Romania, Series title: Lecture Notes in Business Information Processing, June 2-3, 2016, Revised Selected Papers, vol. 273, edition 1, pp. 144-158, Springer Cham, ISSN: 1865-1348; DOI: 10.1007/978-3-319-73459-0_12, Print ISBN 978-3-319-73458-3, Online ISBN 978-3-319-73459-0.

4 Cărți de specialitate publicate în edituri recunoscute(Cb1, Cb2 etc.), **articole/studii** publicate in extenso în reviste de specialitate de circulație internațională recunoscute (reviste cotate ISI sau indexate în baze de date internaționale specifice domeniului)(Ri1, Ri2etc.), **articole/studii in extenso** publicate în volumele unor manifestări științifice internaționale recunoscute din țară și din străinătate (cu ISSN/ ISBN)(Vi1,Vi2 etc.), precum și **alte lucrări similare**: articole/studii publicate in extenso în reviste de specialitate de circulație națională recunoscute CNCSIS (Rn1, Rn2 etc.), articole/studii publicate in extenso în volumele unor manifestări științifice naționale (cu ISSN/ISBN)(Vn1,Vn2 etc.), lucrări prezentate la diferite seminarii/expoziții, inovații etc.(E1, E2 etc.), după caz, prin care se aduc contribuții la dezvoltarea *domeniului*.

Ri	Articole/studii care prezintă contribuții științifice originale, in extenso, publicat într-o revistă indexată ISI
Ri1	Oprea S-V , Bâra A, V. Diaconita, C. Ceaparu, A. Ducman, Big Data Processing for Commercial Buildings and Assessing Flexibility in the Context of Citizen Energy Communities, IEEE Access, vol 9, pp 168715-168730, ISSN: 2169-3536, 2021, DOI: 10.1109/ACCESS.2021.3137352, WOS:000736732500001

Ri2	Oprea S-V , Bâra A, Puican FC, Radu IC. Anomaly Detection with Machine Learning Algorithms and Big Data in Electricity Consumption. Sustainability . 2021; 13(19):10963. https://doi.org/10.3390/su131910963 , WOS:000709154200001
Ri3	Oprea, SV. , Bâra, A. Machine learning classification algorithms and anomaly detection in conventional meters and Tunisian electricity consumption large datasets, Computers and Electrical Engineering , Volume 94, September 2021, https://doi.org/10.1016/j.compeleceng.2021.107329 , WOS:000694013100024
Ri4	Oprea, SV. , Bâra, A. Edge and fog computing using IoT for direct load optimization and control with flexibility services for citizen energy communities, Knowledge-Based Systems Volume 228, 27 September 2021, https://doi.org/10.1016/j.knosys.2021.107293 , SEP 27 2021, ISSN 0950-7051, WOS: 000659800800001
Ri5	Oprea, SV. , Bâra, A. & Ifrim, G.A. Optimizing the Electricity Consumption with a High Degree of Flexibility Using a Dynamic Tariff and Stackelberg Game. Journal of Optimization Theory and Application (2021), 190, pages 151–182, https://doi.org/10.1007/s10957-021-01876-1 , JUL 2021, ISSN0022-3239, WOS 000659800800001
Ri6	C. Bucur, BG Tudorică, SV Oprea , D Nancu, DM Dușmănescu, Insights into Energy Indicators Analytics Towards European Green Energy Transition using Statistics and Self-Organizing Maps, IEEE Access (Q1) , 2021, DOI: 10.1109/ACCESS.2021.3075175, Page(s): 64427 – 64444, Vol. 9, Page(s): 64427 – 64444, April 2021, WOS:000645858100001
Ri7	S.V. Oprea , A. Bara, Devising a trading mechanism with a joint price adjustment for local electricity markets using blockchain. Insights for policy makers, Energy Policy, (Q1) - Volume 152, May 2021, https://doi.org/10.1016/j.enpol.2021.112237 , Published: May 2021, ISSN: 0301-4215, WOS:000636054400028
Ri8	S.V. Oprea , A Bara, BG Tudorica, MI Calinoiu, Mihai Alexandru Botezatu, Insights into Demand Side Management with Big Data Analytics in Electricity Consumers' Behavior, Elsevier Computers & Electrical Engineering (Q2) - Volume 89, January 2021 https://www.sciencedirect.com/science/article/pii/S0045790620307540?dgcid=author , WOS:000640906400002
Ri9	S.V. Oprea ; A. Bâra, RC. Marales, MS. Florescu, Data Model for Residential and Commercial Buildings. Load Flexibility Assessment in Smart Cities Sustainability (Q2) 13, no. 4: 1736. https://doi.org/10.3390/su13041736 , WOS:000624830400001
Ri10	S.V. Oprea , A BÂRA, AI Andreescu, Two Novel Blockchain-Based Market Settlement Mechanisms Embedded into Smart Contracts for Securely Trading Renewable Energy, IEEE Access (Q1) , November 2020, DOI: 10.1109/ACCESS.2020.3040764, https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9272276 , WOS:000597982200001
Ri11	S. Teimourzadeh;O. B. Tör;M.E. Cebeci;A. Bara; S. V. Oprea ;S. M. Kısakürek, Enlightening Customers on Merits of Demand-Side Load Control: A Simple-But-Efficient-Platform, IEEE Access (Q1) , 21 Oct. 2020, DOI: 10.1109/ACCESS.2020.3032745, https://ieeexplore.ieee.org/document/9234487 , WOS:000587858000001
Ri12	S.V. Oprea , Bara, A, <i>Ultra-short-term forecasting for photovoltaic power plants and real-time key performance indicators analysis with big data solutions. Two case studies - PV Agigea and PV Giurgiu located in Romania</i> , Computers in Industry (Q1) , Volume: 120, Article Number: 103230, DOI: 10.1016/j.compind.2020.103230, Published: SEP 2020, WOS:000538762600005
Ri13	S.V. Oprea , Bara, A, Preda, S, Tor, OB, <i>A Smart Adaptive Switching Module Architecture Using Fuzzy Logic for an Efficient Integration of Renewable Energy Sources. A Case Study of a RES System Located in Hulubesti, Romania</i> , Sustainability (Q2) , Volume: 12, Issue: 15, Article Number: 6084, DOI: 10.3390/su12156084, Published: AUG 202, WOS:000559515100001
Ri14	S.V. Oprea , Bara, A, Tudorica, BG, Dobrita, G, <i>Sustainable Development with Smart Meter Data Analytics Using NoSQL and Self-Organizing Maps</i> , Sustainability (Q2) , Volume: 12, Issue: 8, Article Number: 3442, DOI: 10.3390/su12083442, Published: APR 2020, WOS:000535598700375
Ri15	S.V. Oprea , Bara, A, Preotescu, D, Bologa, RA, Coroianu, L, <i>A Trading Simulator Model for the Wholesale Electricity Market</i> , IEEE ACCESS (Q1) , Volume: 8, Pages: 184210-184230, DOI: 10.1109/ACCESS.2020.3029291, Published: 202, WOS:000579347600001
Ri16	Tor, OB, Cebeci, ME, Koc, M, Teimourzadeh, S, Atli, D, S.V. Oprea , Bara, A, <i>Peak shaving and technical loss minimization in distribution grids: a time-of-use-based pricing approach for distribution service tariffs</i> , Turkish Journal of Electrical Engineering and Computer Sciences (Q3) , Volume: 28, Issue: 3, Pages: 1386-1404, DOI: 10.3906/elk-1907-30, Published: 2020, WOS:000532359500014
Ri17	S.V. Oprea , Bara, A, <i>Setting the Time-of-Use Tariff Rates With NoSQL and Machine Learning to a Sustainable Environment</i> , IEEE ACCESS (Q1) , Volume: 8, Pages: 25521-25530, DOI: 10.1109/ACCESS.2020.2969728, Published: 2020, WOS:000524658400002

Ri18	Cebeci, ME, Tor, OB, Oprea, SV , Bara, A, <i>Consecutive Market and Network Simulations to Optimize Investment and Operational Decisions Under Different RES Penetration Scenarios</i> , IEEE Transactions on Sustainable Energy (Q1) , Volume: 10, Issue: 4, Pages: 2152-2162, DOI: 10.1109/TSTE.2018.2881036, Published: OCT 2019, WOS:000487199700050
Ri19	Oprea, SV , Bara, A, Ifrim, GA, Coroianu, L, <i>Day-ahead electricity consumption optimization algorithms for smart homes</i> , Computers & Industrial Engineering (Q1) , Volume: 135, Pages: 382-401, DOI: 10.1016/j.cie.2019.06.023, Published: SEP 2019, WOS:000482244100030
Ri20	Teimourzadeh, S, Tor, OB, Cebeci, ME, Bara, A, Oprea, SV , <i>A three-stage approach for resilience-constrained scheduling of networked microgrids</i> , Journal of Modern Power Systems and Clean Energy (Q2) , Volume: 7, Issue: 4, Pages: 705-715, DOI: 10.1007/s40565-019-0555-0, Springer, Published: JUL 2019, WOS:000477895600005
Ri21	Oprea, SV , Bara, A, <i>Machine Learning Algorithms for Short-Term Load Forecast in Residential Buildings Using Smart Meters, Sensors and Big Data Solutions</i> , IEEE Access (Q1) , Volume: 7, Pages: 177874-177889, DOI: 10.1109/ACCESS.2019.2958383, Published: 2019, WOS:000509483800046
Ri22	Oprea, SV , Bara, A, Preotescu, D, Elefterescu, L, <i>Photovoltaic Power Plants (PV-PP) Reliability Indicators for Improving Operation and Maintenance Activities. A Case Study of PV-PP Agigea Located in Romania</i> , IEEE Access (Q1) , Volume: 7, Pages: 39142-39157, DOI: 10.1109/ACCESS.2019.2907098, Published: 2019, WOS:000464212600001
Ri23	Oprea, SV , Bara, A, Diaconita, V, <i>Sliding Time Window Electricity Consumption Optimization Algorithm for Communities in the Context of Big Data Processing</i> , IEEE Access (Q1) , Volume: 7, Pages: 13050-13067, DOI: 10.1109/ACCESS.2019.2892902, Published: 2019, WOS:000458177800075
Ri24	Preda, S, Oprea, SV , Bara, A, Belciu, A, <i>PV Forecasting Using Support Vector Machine Learning in a Big Data Analytics Context</i> , Symmetry-Basel (Q2) , Volume: 10, Issue: 12, Article Number: 748, DOI: 10.3390/sym10120748, Published: DEC 2018, WOS:000454725100086
Ri25	S.V. Oprea , A.Bâra, A.Uță, A. Pîrjan, G. Căruțașu, <i>Analyses of Distributed Generation and Storage Effect on the Electricity Consumption Curve in the Smart Grid Context</i> , Sustainability (Q2) 2018, 10, 2264; doi:10.3390/su10072264, MDPI, 2017, IF 2,075, AIS 0,322 (2017), WOS:000440947600155
Ri26	S.V. Oprea , A. Bâra, G.Ifrim, <i>Flattening the electricity consumption peak and reducing the electricity payment for residential consumers in the context of smart grid by means of shifting optimization algorithm</i> , Elsevier Computers & Industrial Engineering (Q1) , Volume 122, August 2018, Pages 125-139, Elsevier, https://doi.org/10.1016/j.cie.2018.05.053 , IF 3.195, AIS 0,770 (2017), WOS:000438478700008
Ri27	S.V. Oprea , A. Pîrjan, G. Căruțașu, D.M. Petroșanu, A. Bâra, J.L. Stănică, C. Coculescu, <i>Developing a Mixed Neural Network Approach to Forecast the Residential Electricity Consumption Based on Sensor Recorded Data</i> , Sensors (Q2) , 2018, 18, 1443; doi:10.3390/s18051443, MDPI, 2018, IF 2,475, AIS 0,554 (2017), WOS:000435580300142
Ri28	S.V. Oprea , A.Bâra, G. Majstrovic, <i>Aspects Referring Wind Energy Integration from the Power System Point of View in the Region of Southeast Europe. Study Case of Romania</i> , Energies (Q3) , 2018, 11, 251; doi:10.3390/en11010251, MDPI, 2018, IF 2,676, AIS 0,468 (2017), WOS:000424397600250
Ri29	S.V. Oprea , A.Bâra, A. Reveiu, <i>Informatics Solution for Energy Efficiency Improvement and Consumption Management of Householders</i> , Energies (Q3) , 2018, 11, 138; doi:10.3390/en11010138, MDPI, 2018, IF 2,676, AIS 0,468 (2017), WOS:000424397600138
Ri30	S.V. Oprea , A.Bâra, <i>Analyses of Wind and Photovoltaic Energy Integration from the Promoting Scheme Point of View: Study Case of Romania</i> , Energies (Q3) , 2017, 10, 2101; doi:10.3390/en10122101, MDPI, 2017, IF 2,676, AIS 0,468 (2017), WOS:000423156900172
Ri31	A. Pîrjan, S.V. Oprea , G. Căruțașu, D.M. Petroșanu, A. Bâra, C. Coculescu - <i>Devising Hourly Forecasting Solutions Regarding Electricity Consumption in the Case of Commercial Center Type Consumers</i> , Energies (Q3) , 2017, 10(11), 1727; (doi:10.3390/en10111727); ISSN: 1996-1073, SRI: 0.498; IF: 2.707 (2016), WOS:000417046500046
Ri32	S.V. Oprea , A.Bâra, M. Cebeci, O.B. Tor, <i>Promoting peak shaving while minimizing electricity consumption payment for residential consumers by using storage devices</i> , TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES (Q3) , Turk J Elec Eng & Comp Sci, E-ISSN: 1303-6203 ISSN: 1300-0632, DOI: 10.3906/elk-1606-152, 2017, SRI: 0.119; IF:0.766 (2016), WOS:000412571400019
Ri33	I.Lungu, A.Bâra, G.Căruțașu, A.Pîrjan, S.V. Oprea - <i>Prediction intelligent system in the field of renewable energies through neural networks</i> , Economic Computation and Economic Cybernetics Studies and Research (Q3) , nr.1/2016, ISSN 0424-267X, factor impact 0.406, SRI: 0.029; WOS:000372478800005
Ri34	I. Lungu, G. Căruțașu, A. Pîrjan, S.V. Oprea , A. Bâra - <i>A two-step forecasting solution and upscaling technique for small size wind farms located on hilly terrain in Romania</i> , Studies in Informatics and Control (Q3) , vol 25/issue 1, 2016, ISSN 1220-1766, factor impact 0.913, SRI 0.170; WOS:000372945700009

Ri35	A. Bâra, I. Lungu, S.V. Oprea , I. Botha, A. Chinie - <i>Model assumptions for efficiency of wind power plants' operation</i> , Economic Computation and Economic Cybernetics Studies and Research (Q3) , nr. 4/2014, ISSN 0424-267X, factor impact 0.406, SRI: 0.029; WOS:000346684700007
Vi	Articole/studii publicate în volumele conferințelor indexate ISI Proceedings
Vi1	Marales R.C. Bara A., Oprea S.V - Edge Computing in Real-Time Electricity Consumption Optimization Algorithm for Smart Grids, 8th International Conference on Computers Communications and Control (ICCCC) Location: ELECTR NETWORK Date: MAY 11-15, 2020, INTELLIGENT METHODS IN COMPUTING, COMMUNICATIONS AND CONTROL Book Series: Advances in Intelligent Systems and Computing Volume: 1243 Pages: 188-197 Published: 2021 , DOI: 10.1007/978-3-030-53651-0_16, ISSN: 978-3-030-53651-0
Vi2	Oprea S.V , Bara A., Diaconița V, Preoteșcu D., Tor, O.B - Big Data solutions - data ingestion and stream processing for demand response management, 23rd International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, ROMANIA, OCT 09-11, 2019, Book Series: International Conference on System Theory Control and Computing, ISBN:978-1-7281-0699-1, ISSN: 2372-1618, Pages: 697-702, Published: 2019
Vi3	Ifrim G., Oprea S.V , Bara A. - Shifting Optimization Algorithm for Flattening the Electricity Consumption Peak of Residential Communities, 23rd International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, ROMANIA, OCT 09-11, 2019, Book Series: International Conference on System Theory Control and Computing, ISBN:978-1-7281-0699-1, ISSN: 2372-1618, Pages: 703-708, Published: 2019
Vi4	Oprea, SV , Bara, A, Tor, OB, <i>Three-layer informatics solution for demand response management in the smart grid context</i> , 4TH INTERNATIONAL SCIENTIFIC CONFERENCE SEA-CONF 2018, Book Group Author(s):Naval Academy Press, Book Series: IOP Conference Series-Earth and Environmental Science, Volume: 172, Article Number: 012001, DOI: 10.1088/1755-1315/172/1/012001, Published: 2018, ISSN: 1755-1307
Vi5	Ozen, K, Tor, OB, Cebeci, ME, Cetintas, M, Akgun, A, Bara, A, Oprea, SV , <i>Arc-Flash Risk Level Calculations based on Computer Simulations and Measures to Avoid Hazards</i> , 2018 20TH INTERNATIONAL SYMPOSIUM ON ELECTRICAL APPARATUS AND TECHNOLOGIES (SIELA), Book Group Author(s):IEEE, Book Series: International Symposium on Electrical Apparatus and Technologies, Published: 2018, ISBN:978-1-5386-3419-6
Vi6	Oprea, SV , Pirjan, A, Lungu, I, Fodor, AG, <i>Forecasting Solutions for Photovoltaic Power Plants in Romania</i> , INFORMATICS IN ECONOMY, Book Series: Lecture Notes in Business Information Processing, Volume: 273, Pages: 160-174, DOI: 10.1007/978-3-319-73459-0_12, Published: 2018, ISBN:978-3-319-73459-0; 978-3-319-73458-3
Vi7	Oguz, H, Cebeci, ME, Tor, OB, Aksu, O, Gumus, M, Bara, A, Oprea, SV , <i>Protection relay settings management at Akdeniz DISCO through DigSILENT StationWare</i> , 2018 6TH INTERNATIONAL ISTANBUL SMART GRIDS AND CITIES CONGRESS AND FAIR (ICSG ISTANBUL 2018), Pages: 213-216, Published: 2018, ISBN:978-1-5386-4478-2
Vi8	A.Okuslug, A.N.Guven, O.B.Tör, A.Bara, S.V.Oprea - <i>Price Based Unit Commitment For Bidding Strategies In Turkish Market Under Unit And System Constraints</i> , IEEE 8th International Conference on Energy and Environment, CIEM 2017, Univ.Politehnica Bucharest, 19-20 October 2017, DOI: 10.1109/CIEM.2017.8120803, Book Series: International Conference on Energy and Environment Pages: 59-63 Published: 2017 .
Vi9	Oprea, SV , Tudorica, BG, Belciu, A, Botha, I, <i>Demand Side Management of Internet of Things Data</i> , PROCEEDINGS OF THE 16TH INTERNATIONAL CONFERENCE ON INFORMATICS IN ECONOMY (IE 2017): EDUCATION, RESEARCH & BUSINESS TECHNOLOGIES, Pages: 311-316, Published: 2017, WOS:000418463600050
Vi10	S.V. Oprea , A. Bâra, M. Mircea - <i>Data acquisition solutions for electricity consumers connected to smart grids</i> , 18th International Carpathian Control Conference - ICC'2017, Sinaia, România, 28-31 mai, Pages: 70-75 Published: 2017
Vi11	S.V. Oprea , A. Bâra - <i>Electricity load profile calculation using self-organizing maps</i> , 20th International Conference on System Theory, Control and Computing (ICSTCC), (Joint conference SINTES 20, SACCS 16, SIMSIS 20), 13-15 oct 2016, Sinaia, Romania, ISBN 978-1-5090-2720-0, IEEE Catalog Number CFP1636P-ART, ISBN 978-1-5090-2719-4, IEEE Catalog Number CFP1636P-DVD, Book Series: International Conference on System Theory Control and Computing Pages: 860-865 Published: 2016
Vi12	S.V. Oprea , A. Bâra, G.Carutasu, A.Pirjan - <i>Prosumers' Renewable Small-Size Generation Forecasting Analyses With ARIMA Models</i> , ECAI 2016 - International Conference – 8th Edition Electronics, Computers and Artificial Intelligence, 30 June -02 July, 2016, Ploiesti, ROMÂNIA, ISSN 1843 – 2116, Book Series: International Conference

	on Electronics Computers and Artificial Intelligence, Published: 2016 http://ecai.ro/Documente/Program%20ECAI%202016.pdf
Vi13	S.V. Oprea , A. Pîrjan, I. Lungu, A.G. Fodor - <i>Forecasting solutions for photovoltaic power plants in Romania</i> , The 15th International Conference on Informatics in Economy (IE 2016) ISSN: 2247 – 1480, ISSN-L = 2247-1480, Cluj Napoca, 2-5 iunie 2016, http://www.conferenceie.ase.ro/ , Lecture Notes in Business Information Processing Volume: 273 Pages: 160-174
Vi14	SV. Oprea , A. Bâra, I. Lungu - <i>Methods for electricity load profile calculation within deregulated markets</i> , 19th International Conference on System Theory, Control and Computing Joint Conference SINTES 19, SACCS 15, SIMSIS 19, ISBN 978-1-4799-8481-7, IEEE Xplore, pag. 848 – 853, DOI: 10.1109, October 14 - 16, 2015 Cheile Gradistei - Fundata Resort, Romania, http://www.aie.ugal.ro/icstcc2015
Vi15	S.V. Oprea - <i>Informatics solutions for electricity consumption optimization</i> , 16th IEEE International Symposium on Computational Intelligence and Informatics – CINTI 2015, Universitatea Obuda, Budapesta, Ungaria, 19-21 noiembrie, 2015, Book Series: International Symposium on Computational Intelligence and Informatics Pages: 193-198 Published: 2015, ISBN 978-1-4673-8520-6, http://conf.uni-obuda.hu/cinti2015/ ;
Vi16	S.V. Oprea , I. Lungu - <i>Architecture of smart metering systems</i> , The 14th International Conference on Informatics in Economy , IE2015, 4/30/2015, Bucuresti, România, publicat in The 14th International Conference on Informatics in Economy, Book Series: International Conference on Informatics in Economy Published: 2015, 151-156, ISSN 2284-7472, ISBN , conferinta Internationala, http://www.conferenceie.ase.ro/
Vi17	A. Bâra, SV. Oprea , A. Velicanu, I. Botha - <i>Spatial collaborative system for Wind Power Plants using Service Oriented Architecture</i> , The 2013 International Conference of Computer Science and Engineering (ICCSE'13), World Congress on Engineering, London, UK, 30 iunie -7 iulie 2013, publicat in Lecture Notes in Engineering and Computer Science, pp 909-914, editura Newswood Limited International Association of Engineers, ISBN: 978-988-19252-8-2; ISSN: 2078-0958 (print), ISSN: 2078-0966 (online). http://www.iaeng.org/WCE2013/
Vi18	A. Bâra, I. Botha, I. Lungu, SV. Oprea - <i>Prototype for a decision support system in national power companies</i> , The 12th International Conference on Informatics in Economy (IE 2013), April 25-28, 2013, Bucharest, Romania, pp: 381-385, ISSN: 2284-7472, indexată ISI Proceedings, http://www.conferenceie.ase.ro/?page_id=28
Vi19	A. Bâra, I. Lungu, SV. Oprea - <i>Data Mining - Support for making decisions in public institutions -Proceeding of The 8th WSEAS International Conference on Artificial Intelligence</i> , Knowledge Engineering and Data Bases (AIKED'09), Cambridge UK, 21-23 feb. 2009, pag 325-330, ISBN: 978-960-474-051-2, ISSN, 1790-5109; Book Series: Artificial Intelligence Series-WSEAS Pages: 325-+ Published: 2009, http://www.wseas.us/e-library/conferences/2009/cambridge/AIKED/AIKED51.pdf
Vi20	SV. Oprea , D. Petrescu, M. Anton - <i>Wind Parks' Operation in the Context of System Adequacy</i> , IEEE Bucharest PowerTech International Conference, Innovative ideas toward the Electrical Grid of the Future, Bucharest, July 2009, indexata ISI Proceedings, Ieeexplore, INSPEC, http://scl.hanyang.ac.kr/scl/database/papers/POWERTECH/2009/papers/304.pdf , IEEE BUCHAREST POWERTECH, VOLS 1-5 Pages: 2264-2268 Published: 2009
	Articole publicate în cadrul conferințelor internaționale neindexate ISI Proceedings
Vi21	S.V. Oprea , A.M.I Corbea (Florea), A.I. Andreescu - <i>Modelling for electricity demand side management informatics solutions</i> , The 17th International Conference on Informatics in Economy (IE 2018), 17 – 20 Mai 2018, Iași, România;
Vi22	A. Bâra, S.V. Oprea , D.Preoteșcu - <i>Data management for photovoltaic power plants operation and maintenance</i> , The International Conference "Present Issues Of Global Economy" - 15th Edition (PIGE 2018), 7-9 iunie 2018, Constanța, România
Vi23	S.V. Oprea , A. Bâra, L. Elefterescu - <i>Decision Support System Design for Photovoltaic Systems Operation and Maintenance by using Big Data technologies</i> , The International Conference "Present Issues Of Global Economy" - 15th Edition (PIGE 2018), 7-9 iunie 2018, Constanța, România
Vi24	Burak Özçelik, Osman Bülent Tör, Mahmut Erkut Cebeci, Kürşat Tanrıöven, Adela Bâra, Simona Oprea , <i>Implementation of sweep frequency response analysis (SFRA) for condition assessment of power and distribution transformers</i> , Second SEERC conference, Kiev, Ucraina, 12.06.2018 - 13.06.2018, http://www.cigre-seerc.org/article/SEERC_kyiv_kiev_second_conference
Vi25	A. Bâra, S.V. Oprea , <i>Consumption Management Informatics Solution for Increasing Consumers' Awareness towards Energy Efficiency</i> , vol. XVII, nr. 2/2017 al <i>Analelor Universității Ovidius. Seria: Științe Economice</i> , Conferința Internațională „Global Economy Under Crisis” (GEUC) – ediția a VI-a, Constanța 14-15 decembrie C15

Vi26	A. Bâra, S.V. Oprea , A. Uță. O.B. Tör, M.E. Cebeci - Informatics solutions for smart trading on wholesale electricity markets containing RES bidders, 18th International Conference on Computer Systems and Technologies, CompSysTech'17, University of Ruse, Bulgaria, 23-24 June, 2017, http://www.compsystech.org/index.php?cmd=dPage&pid=acceptedPapers;
Vi27	S.V. Oprea , A. Bâra, A. Reveiu - Informatics solution for energy efficiency improvement and consumption management, 10th International Conference on Sustainable Energy & Environmental Protection, Seep2017, Slovenia, 27-30 iunie, 2017, http://www.bled.si/en/events/2017/06/30/2419-SEEP-2017-10th-International-Conference-on-Sustainable-Energy-Environmental-Protection;
Vi28	A. Reveiu, S.V. Oprea , A. Bâra - Identifying Energy Consumers Behaviour by Using Energy Big Data Analytics, 10th International Conference on Sustainable Energy & Environmental Protection, Seep2017, Slovenia, 27-30 iunie, 2017, http://www.bled.si/en/events/2017/06/30/2419-SEEP-2017-10th-International-Conference-on-Sustainable-Energy-Environmental-Protection;
Vi29	C.S. Dumbrăveanu, SV. Oprea - Technical legislation evolutions regarding RES integration into the National Power System, The 12th WEC CENTRAL & EASTERN EUROPE REGIONAL ENERGY FORUM - FOREN 2014, București, Romania, 22-26 Iunie 2014, http://cnr-cme.ro/foren2014/Call%20for%20Papers/FOREN%202014%20PAPERS%20AND%20POSTERS.pdf
Vi30	A. Tudor, A. Bâra, SV. Oprea - Comparative analysis of data mining methods for predicting credit default probabilities in a retail bank portfolio, The 1st International Conference on INFORMATION TECHNOLOGY and COMPUTER NETWORKS (ITCN '12), Vienna, Austria, Recent advances in computer engineering Series, Latest trends in Information Technology, ISSN: 1790-5190, ISBN: 978-1-61804-134-0, pp. 117-123; http://www.wseas.us/e-library/conferences/2012/Vienna/COMPUTERS/COMPUTERS-18.pdf
Vi31	SV. Oprea , I. Botha, A. Bâra, A. Velicanu - Prototype of a Decision Support System for analyzing and forecasting the Wind Energy Production in Romania. The 1st International Conference on INFORMATION TECHNOLOGY and COMPUTER NETWORKS (ITCN '12), Vienna, Austria, Recent advances in computer engineering Series, Latest trends in Information Technology, ISSN: 1790-5190, ISBN: 978-1-61804-134-0, pp. 123-129; http://www.wseas.us/e-library/conferences/2012/Vienna/COMPUTERS/COMPUTERS-19.pdf
Vi32	A. Bâra, A. Florea, I. Botha, SV. Oprea - Solutions for CRM systems integration in organizational systems, The 1st International Conference on INFORMATION TECHNOLOGY and COMPUTER NETWORKS (ITCN '12), Vienna, Austria, Recent advances in computer engineering Series, Latest trends in Information Technology, ISSN: 1790-5190, ISBN: 978-1-61804-134-0, pp. 146-152; http://www.wseas.us/e-library/conferences/2012/Vienna/COMPUTERS/COMPUTERS-22.pdf
Vi33	D. Bolborici, D. Petrescu, SV Oprea , O. Stanescu - Planning the electrical networks in the context of renewable energy integration, CIGRÉ Regional South-East European Conference, October 10th - 12th 2012, Hotel Hilton, Sibiu, Romania, (RSEEC 2012),
Vi34	SV. Oprea , A. Bâra, V. Vlăducu, A. Velicanu - Data Level's Integrated Model for the National Grid Company's Decision Support System, Recent Advances in Computers, Communications, Applied Social Science and Mathematics, International Conference on Computers, Digital Communications and Computing (ICDCCC'11), Barcelona, Spain, 15-17 septembrie 2011, pp 167-172, ISBN: 978-1-61804-030-5, published by WSEAS Press; http://www.wseas.us/books/2011/Barcelona/ICICIC.pdf
Vi35	A. Bâra, A. Velicanu, I. Botha, SV. Oprea - Solutions for the Data Level's Representation in a Decision Support System in Wind Power Plants, The 13th International Conference on Mathematical Methods, Computational Techniques and Intelligent Systems, Iasi, Romania, July 1-3, 2011, PUBLISHED IN the volume Recent Researches in Computational Techniques, Non-Linear Systems and Control, pp. 259-264, ISBN: 978-1-61804-011-4; http://www.wseas.us/e-library/conferences/2011/Iasi/DYMANOW/DYMANOW-42.pdf
Vi36	I Botha, A Bâra, SV. Oprea - An Implementation Perspective on Object-Relational Databases in Decision Support Systems, The 10th International Conference on Informatics in Economy, Bucharest, Romania, May 5-7, 2011, PUBLISHED IN The Proceedings of the Tenth International Conference on Informatics in Economy, 2011, ISSN: 2247-1480, ISSN-L: 2247-1480; http://conferenceie.ase.ro/arhive/2011/
Vi37	A Bâra, SV. Oprea , A Velicanu, V Diaconita - Decision Support Systems - Solutions for Predicting, Monitoring and Integrating Wind Energy Resources into the National Grid Companies, International Conference on Development, Energy, Environment, Economics, Puerto de la Cruz, Tenerife, November 30 - December 2, 2010, pag. 55-60, Publisher WSEAS Press, ISBN 978-960-474-253-0; http://www.wseas.us/e-library/conferences/2010/Tenerife/DEEE/DEEE-05.pdf
Vi38	A. Bâra, I. Lungu, M. Velicanu, SV. Oprea - Intelligent Systems for Predicting and Analyzing Data in Power Grid Companies, The IEEE International Conference on Information Society (i-Society 2010), London, UK, PUBLISHED

	IN the volume i-Society 2010 Proceedings, pp. 597-602, ISBN 978-0-9564263-3-8; ieeexplore.ieee.org/iel5/.../06018781.pdf
Vi39	SV. Oprea – Minimum technical requirements for the integration of wind generation within the European power systems, Forumul Regional al Energiei FOREN, Neptun-Olimp, 2008
Vi40	C. Diaconu, SV. Oprea – Energia eoliana in Romania, First International Conference: Wind Energy in Romania, Bucuresti, 2008
Vi41	SV. Oprea – Integrarea Centralelor Eoliene in SEN, Simpozionul International de Eficienta Energetica, Cluj-Napoca, 2008
Vi42	C. Diaconu, SV. Oprea – Renewable Energy Sources Integration into the Romanian Power System, 3rd Emerging Europe Energy Summit, Frankfurt, 2007
BDI	Articole/studii care prezintă contribuții științifice originale, in extenso, publicat într-o revistă indexată în cel puțin 2 din bazele de date internaționale recunoscute
BDI 1	Dan PREOTESCU, Simona-Vasilica OPREA , Adela BARA, Niculae OPREA, Osman Bülent TÖR, Data Analytics for the Transmission System Operators (p. 54-73), Database Systems Journal, 2020 Special issue: Software solutions for efficient trading on the electricity markets, Database Systems Journal, 2020, Special issue: Software solutions for efficient trading on the electricity markets
BDI 2	Anca ANDREESCU, Adela BARA, Simona-Vasilica OPREA , George Adrian IFRIM, Osman Bülent TÖR, Andrei BUCUR, Electricity Consumption Management Software Tool for Consumers - MY SMART HOME (p. 41-53), Database Systems Journal, 2020, Special issue: Software solutions for efficient trading on the electricity markets
BDI 3	Ana-Ramona BOLOGA, Simona-Vasilica OPREA , Adela BARA, Florin-Constantin CIOBANU, Osman Bülent TÖR, Consumption Management Software for Electric Power Suppliers (p. 31-40), Database Systems Journal, 2020, Special issue: Software solutions for efficient trading on the electricity markets
BDI 4	Simona-Vasilica OPREA , Adela BARA, Ciprian Georgian DRAGOMIR, Osman Bülent TÖR, Stefan PREDA, Dashboard for analysis of electricity imbalances at the Balancing Responsible Parties level (p. 17-30), Database Systems Journal, 2020, Special issue: Software solutions for efficient trading on the electricity markets
BDI 5	Madalina-Florina DANALACHE, Simona-Vasilica OPREA , Application for the efficiency improvement of the work process in an energy company, Database Systems Journal, Vol. XI, 2020, (p. 78-89)
BDI 6	S.V. Oprea , A.Bâra, Big Data Solutions for Efficient Operation of Microgrids, Ovidius University Annals: Economic Sciences Series 2019/08, Volumul 19, Numărul 1, Pagini: 266-271, ISSN 2391-3127, http://stec.univ-ovidius.ro/html/anale/RO/wp-content/uploads/2019/08/21.pdf
BDI 7	S.V. Oprea , A. Bâra, D. Preoteșcu, NoSQL Data Storage and Clustering Large Volume of Data from Smart Metering Systems with Impact on Electricity Consumption Peak and Tariff Settings, Ovidius University Annals: Economic Sciences Series, 2019/7/1, Volumul 19, Numărul 2; Pagini:327-333, ISSN 2391-3127, http://stec.univ-ovidius.ro/html/anale/RO/wp-content/uploads/2020/02/Section%20III/22.pdf
BDI 8	S. V. Oprea , R. A. Bologa, A. I. Andreescu, Design Functionalities for A Wholesale Electricity Market Simulator, Ovidius University Annals, Economic Sciences Series, 2019/7/1, Volumul 19, Numărul 2, Pagini 334-344, ISSN 2391-3127, http://stec.univ-ovidius.ro/html/anale/RO/wp-content/uploads/2020/02/Section%20III/23.pdf , https://ideas.repec.org/a/ovi/oviste/vxixy2019i2p334-344.html
BDI 9	S.V. Oprea , A. Bâra, L.Elefterescu - <i>Decision Support System Design for Photovoltaic Systems Operation and Maintenance by using Big Data Technologies</i> , Ovidius University Annals, Economic Sciences Series, Ovidius University of Constantza, Faculty of Economic Sciences, vol. 0(1), pages 104-110, July 2018, ISSN 2391-3127, http://stec.univ-ovidius.ro/html/anale/RO/wp-content/uploads/2018/08/8-1.pdf
BDI 10	A.Bâra, S.V. Oprea , D. Preoteșcu - <i>Data Management for Photovoltaic Power Plants Operation and Maintenance</i> , Ovidius University Annals, Economic Sciences Series, Ovidius University of Constantza, Faculty of Economic Sciences, vol. 0(1), pages 70-75, July 2018, ISSN 2391-3127, http://stec.univ-ovidius.ro/html/anale/RO/wp-content/uploads/2018/08/2-1.pdf
BDI 11	I. Simonca (Botha), S.V. Oprea , A. Uță, I. Lungu, O.B. Tor - <i>Data Model for Electricity Consumption Management</i> , Vol. IX, 2018, pp. 48-57, ISSN 2069-3230, http://www.dbjournal.ro/archive/29/29_6.pdf ,

BDI 12	L.C. Mazare, S.V. Oprea - <i>Designing a Carrier Optimized Route Mobile Application</i> , Database Systems Journal, Vol. IX, 2018, pp. 3-12, ISSN 2069-3230, http://www.dbjournal.ro/archive/29/29_1.pdf
BDI 13	D.A. Radu, S.V. Oprea - <i>Informatics solution for Smart Garden based on Sensors</i> , Database Systems Journal, Vol. IX, 2018, pp. 13-21, ISSN 2069-3230, http://www.dbjournal.ro/archive/29/29_2.pdf
BDI 14	S.V. Oprea , O.B. Tor - <i>Data model for Demand Side Management</i> , Database Systems Journal, vol. VIII, nr. 2, 2017, pg. 3-11, ISSN 2069-3230, http://www.dbjournal.ro/archive/28/28_1.pdf
BDI 15	S.V. Oprea , A. Bâra, A. Belciu - <i>Informatics solutions requirements for electricity consumption management</i> , Database Systems Journal, vol. VII, nr. 3, 2016, pg. 14-21, ISSN 2069-3230, http://dbjournal.ro/archive.html
BDI 16	A. Bara, S.V. Oprea , I. Botha, O.B. Tör - <i>Conceptual design and architecture of an informatics solution for smart trading on wholesale energy market in Romania</i> , Database Systems Journal, vol. VII, nr. 4, 2017, pg. 3-12, ISSN 2069-3230, http://dbjournal.ro/26.html
BDI 17	S.V. Oprea - <i>Electricity tariff systems for informatics system design regarding consumption optimization in smart grids</i> , Database Systems Journal, vol. 6, nr. 3, pg. 11-18, ISSN 2069-3230, http://www.dbjournal.ro/archive/21/21_2.pdf , 2015
BDI 18	S.V. Oprea , I. Lungu - <i>Informatics Solutions for Smart Metering Systems Integration</i> , Revista Informatică Economică, vol. 19, nr. 4/2015, ISSN 1453-1305, EISSN 1842-8088, pag. 28-42, http://revistaie.ase.ro/content/76/03%20-%20Oprea,%20Lungu.pdf
BDI 19	S.V. Oprea , A. Bâra - <i>Informatics Solutions for Data Processing of Electricity Consumption Optimization in Smart Grids</i> , Risk in Contemporary Economy, "Dunarea de Jos" University of Galati, Faculty of Economics and Business Administration, pages 118-123, 2016, https://ideas.repec.org/a/ddj/fsrec/y2016p118-123.html
BDI 20	A. Bâra, S.V. Oprea - <i>Consumption Management Informatics Solution for Increasing Consumers Awareness towards Energy Efficiency</i> , Ovidius University Annals, Economic Sciences Series, Ovidius University of Constantza, Faculty of Economic Sciences, vol. 0(2), pages 156-161, 2017, ISSN 2391-3127, http://stec.univ-ovidius.ro/html/anale/RO/2017-2/Section%20III/2.pdf
BDI 21	S.V. Oprea , B.G. Tudorică, A. Belciu, I. Botha - <i>Internet of Things, Challenges for Demand Side Management</i> , Informatica Economica, INFOREC Publishing House, Romania, vol. 21(4), pages 59-72, 2017, www.revistaie.ase.ro/content/84/05%20-%20oprea,%20tudorica,%20belciu,%20botha.pdf
BDI 22	M.I. Calinoiu, S.V. Oprea , Monitoring and Controlling Electricity Consumption Application for Smart Buildings, Database Systems Journal, vol. X, no. 1/2019, pp. 13-24, ISSN: 2069-3230; http://www.dbjournal.ro/archive/30/30_2.pdf , Indexat DOAJ, Cabells
BDI 23	S.V. Oprea - <i>Informatics solutions for prosumers connected to smart grids</i> , Database Systems Journal, vol. 4, nr. 4, pg. 12-20, ISSN 2069-3230, http://www.dbjournal.ro/archive/18/18_2.pdf , 2014
BDI 24	A. Bâra, I. Lungu, G. Căruțașu, C.P. Botezatu, C. Botezatu, S.V. Oprea - <i>Design workflow for cloud service information system for integration and knowledge management based in renewable energy</i> , International Conference e-Society Knowledge and Inovation, Universitatea Romano-Americana, 2014, 13-14 Noiembrie 2014, publicat in Journal of Information Systems & Operations Management, ISSN –1843-4711; https://ideas.repec.org/a/rau/journal/v8y2014i2p230-237.html
BDI 25	S.V. Oprea , A. Bâra - <i>Business Intelligence Solutions for Wind Power Plants Operation</i> , Revista Informatica Economică, vol. 18, no. 3/2014, pag. 41-54, ISSN 1453-1305, http://revistaie.ase.ro/content/71/04%20-%20Oprea,%20Bara.pdf EISSN 1842-8088
BDI 26	A. Bâra, I. Botha, I. Lungu, S.V. Oprea - <i>Decision Support System in National Power Companies. A Practical Example</i> , Database Systems Journal, vol. IV, no. 1/2013, pp. 37- 46, ISSN: 2069-3230; http://dbjournal.ro/archive/11/11_5.pdf , Indexat RePEC, DOAJ, Cabells
BDI 27	O Stanescu, D Bolborici, S Oprea - <i>Modeling of wind power plants generators in transient stability analysis</i> , Journal of Sustainable Energy, vol 3, no.4, 2012, ISSN 2067-5534, http://www.energy-cie.ro/archives/2012/nr_4-x/v3-n4-5.pdf

BDI 28	I.Botha, A. Bâra, SV. Oprea , T. C. Jordão - <i>Integrating XML Technology with Object-Relational Databases into Decision Support Systems</i> , Database Systems Journal, vol. III, no. 1/2012, pp. 11-20, ISSN: 2069-3230. http://dbjournal.ro/archive/7/7_2.pdf Indexat RePEC, DOAJ, Cabells, EBSCO
BDI 29	S.V Oprea. , D.E. Petrescu, D. Bolborici, O.R. Stănescu - <i>Aspects related to wind power plants operation in Romania</i> , <i>Journal of Sustainable Energy</i> Vol. 3, No. 3, September, 2012, ISSN 2067-5534, http://www.energy-cie.ro/archives/2012/nr_3-x/v3-n3-8.pdf , Indexat BDI
BDI 30	A. Bâra, I. Lungu, SV. Oprea - <i>Public Institutions' Investments with Data Mining Techniques</i> , JOURNAL WSEAS TRANSACTIONS ON COMPUTERS, Volume 8, 2009, ISSN: 1109-2750, http://www.worldses.org/journals/computers/computers-2009.htm sau http://www.wseas.us/e-library/transactions/computers/2009/29-108.pdf , Indexat Scopus, Cabells

Proiecte de cercetare

P1	Director de proiect internațional - Soluții de agregare multi-nivel pentru a facilita un răspuns optim la cererea de energie și flexibilitatea rețelei electrice (Multi-layer aggregator solutions to facilitate optimum demand response and grid flexibility), PN III: Cooperarea Europeană și Internațională, Subprogram 3.2 - Orizont 2020, Tip proiect: ERANET H2020, Acronim: SMART-MLA, PERIOADA DE IMPLEMENTARE: 1 noiembrie 2018 – 31 octombrie 2021, Valoare 150.000 Euro
P2	Director de proiect național - Soluții Big Data pentru managementul consumului de energie electrică în vederea îmbunătățirii strategiilor de piață și a decontării pentru operatorii rețelelor de distribuție (BIGDATA4GRID), PN-III-P2-2.1-PED-2019-1198, Proiect Experimental Demonstrativ, Competiția PED 2019, Valoare totală 600.000, coordonator ASE, partener ICPE România, durata 24 luni, Contract nr. 462PED/28.10.202
P3	Director de proiect național - Soluții informatice pentru analiza și optimizarea consumului de energie electrică în rețele inteligente (SMART-OPTIM), PN-III-P2-2.1-BG-2016-0286, Programul Creșterea competitivității economiei românești prin cercetare, dezvoltare și inovare, Subprogramul 2.1. Competitivitate prin cercetare, dezvoltare și inovare Competiția Bridge Grant (Transfer de cunoaștere la agentul economic), Domeniul 3 - Energie, medii și schimbări climatice, Valoare totală buget 450.000, nr. Contract 77BG/2016, durată proiect 24 luni;
P4	Membri în echipa de cercetare - Soluție informatică complexă de optimizare a procedurilor de operare tehnică a centralelor fotovoltaice (OPTIMPV), cod proiect PN-III-P2-2.1-PTE-2016-0032, Programului Creșterea competitivității economiei românești prin cercetare, dezvoltare și inovare, Subprogramul 2.1. Competitivitate prin cercetare, dezvoltare și inovare, Competiția Transfer la operatorul economic (PTE), 2016-2018, coordonator ICPE SA, responsabil ASE prof.univ.dr. Adela Bara, Valoare totală 1.646.491 RON
P5	Membri în echipa de cercetare - Sistem inteligent pentru realizarea ofertelor pe piața angro de energie electrică (SMARTRADE), Programul Operational Competitivitate - Axal (POC-A1-A1.1.4-E-2015) Tip de proiect: Proiecte CD pentru atragerea de personal cu competențe avansate din străinătate, 2016-2020, director proiect Osman Büilent TÖR - responsabil ASE, valoare 5.165.712 RON
P6	Membri în echipa de cercetare - Sistem inteligent pentru predicția, analiza și monitorizarea indicatorilor de performanță a proceselor tehnologice și de afaceri în domeniul energiilor regenerabile, cod PN-II-PT-PCCA-2013-4-0996, Proiecte Colaborative de Cercetare Aplicativă (PCCA2013), DOMENIUL 2 – ENERGIE, Valoare totală buget 1.000.000 RON, cofinanțare 150.000 RON, nr contract 49/2014, 2014-2016 - director Adela Bâra;
P7	Membri în echipa de cercetare - Soluții informatice pentru asistarea procesului decizional în mediile incerte și cu evoluții puțin predictibile în vederea integrării în rețele de tip grid, proiect câștigat prin competiția PN2-TE, Resurse Umane, Cod 332, Valoare totală 550.000 RON, director Adela Bâra;

5. Citări ale lucrărilor publicate

Nr. Crt	Articolul citat	Revista și articolul în care a fost citat	Cuartila
---------	-----------------	---	----------

1	<p>S.V. Oprea, A. Bâra, G. Ifrim, <i>Flattening the electricity consumption peak and reducing the electricity payment for residential consumers in the context of smart grid by means of shifting optimization algorithm</i>, COMPUTERS & INDUSTRIAL ENGINEERING, Volume 122, August 2018, Pages 125-139, Elsevier, ISSN: 0360-8352 https://doi.org/10.1016/j.cie.2018.05.053</p>	<p>Alic, O (Alic, Oguzkagan) Filik, UB (Filik, Ummuhan Basaran), A multi-objective home energy management system for explicit cost-comfort analysis considering appliance category-based discomfort models and demand response programs, Energy & Buildings, Volume 240, Article Number 110868, DOI10.1016/j.enbuild.2021.110868, JUN 1 2021</p>	Q1
2	<p>S. Teimourzadeh, OB. Tor, ME Cebeci, A.Bara, SV Oprea, <i>A three-stage approach for resilience-constrained scheduling of networked microgrids</i>, <i>Journal Of Modern Power Systems And Clean Energy</i>, Volume7, Issue4, Page 705-715, DOI 10.1007/s40565-019-0555-0, JUL 2019</p>	<p>Shaker, A, Safari, A, Shahidehpour, M - Reactive Power Management for Networked Microgrid Resilience in Extreme Conditions, IEEE Transactions on Smart Grids, Volume 12, Issue 5, Page3940-3953, DOI10.1109/TSG.2021.3068049, SEP 2021</p>	Q1
3	<p>S. Preda, S.V. Oprea, A. Bâra, A. Belciu (Velicanu)- <i>PV Forecasting Using Support Vector Machine Learning in a Big Data Analytics Context</i>, <i>Symmetry</i>. 2018;10(12):748 DOI 10.3390/sym10120748, WOS:000454725100086, (Q2)</p>	<p>Lin, Guo-Qian; Li, Ling-Ling; Tseng, Ming-Lang; et al. - An improved moth-flame optimization algorithm for support vector machine prediction of photovoltaic power generation JOURNAL OF CLEANER PRODUCTION, ELSEVIER Volume: 253 Article Number: 119966 Published: APR 20 2020</p>	Q1
4	<p>S. Preda, S.V. Oprea, A. Bâra, A. Belciu (Velicanu)- <i>PV Forecasting Using Support Vector Machine Learning in a Big Data Analytics Context</i>, <i>Symmetry</i>. 2018;10(12):748 DOI 10.3390/sym10120748, WOS:000454725100086, (Q2)</p>	<p>Soomro, Kamran; Bhutta, Muhammad Nasir Mumtaz; Khan, Zaheer; et al. - Smart city big data analytics: An advanced review WILEY INTERDISCIPLINARY REVIEWS-DATA MINING AND KNOWLEDGE DISCOVERY Volume: 9 Issue: 5 Article Number: e1319 Published: SEP-OCT 2019</p>	Q1
5	<p>S. Preda, S.V. Oprea, A. Bâra, A. Belciu (Velicanu)- <i>PV Forecasting Using Support Vector Machine Learning in a Big Data Analytics Context</i>, <i>Symmetry</i>. 2018;10(12):748 DOI 10.3390/sym10120748, WOS:000454725100086, (Q2)</p>	<p>Rehman, Hassam Ur; Korvola, Timo; Abdurafikov, Rinat; et al. - Data analysis of a monitored building using machine learning and optimization of integrated photovoltaic panel, battery and electric vehicles in a Central European climatic condition, ENERGY CONVERSION AND MANAGEMENT Volume: 221 Article Number: 113206 Published: OCT 1 2020</p>	Q1

6	Cebeci, ME, Tor, OB, S.V. Oprea , Bâra, A, <i>Consecutive Market and Network Simulations to Optimize Investment and Operational Decisions Under Different RES Penetration Scenarios</i> , IEEE Transactions on Sustainable Energy, Volume: 10, Issue: 4, Pages: 2152-2162, DOI: 10.1109/TSTE.2018.2881036, Published: OCT 2019, WOS:000487199700050	Kang, Wenfa; Chen, Minyou; Li, Qiang, Distributed optimization model and algorithms for virtual energy storage systems using dynamic price, JOURNAL OF CLEANER PRODUCTION Volume: 289 Article Number: 125440 Published: MAR 20 2021	Q1
7	S.V. Oprea , A.Bâra, A.Uță, A. Pirjan, G. Căruțașu, <i>Analyses of Distributed Generation and Storage Effect on the Electricity Consumption Curve in the Smart Grid Context</i> , Sustainability 2018, 10, 2264; ISSN: 2071-1050 doi:10.3390/su10072264, MDPI, 2017, IF 2,075, AIS 0,322 (2017), (Q2)	Mohseni, Soheil; Brent, Alan C.; Burmester, Daniel - A demand response-centred approach to the long-term equipment capacity planning of grid-independent micro-grids optimized by the moth-flame optimization algorithm ENERGY CONVERSION AND MANAGEMENT, ELSEVIER Volume: 200 Article Number: 112105 Published: NOV 15 2019	Q1
8	A. Pirjan, SV Oprea , G. Carutasu, DM Petrosanu, A. Bara, C. Coculescu, <i>Devising Hourly Forecasting Solutions Regarding Electricity Consumption in the Case of Commercial Center Type Consumers</i> , ENERGIES, Volume 10, Issue 11, Article Number 1727, DOI 10.3390/en10111727, Published NOV 2017	Mustapa, RF; Dahlan, NY; Nordin, AHM, Quantification of energy savings from an awareness program using NARX-ANN in an educational building, ENERGY AND BUILDINGS , May 15 2020	Q1
9	Oprea, Simona-Vasilica ; Bara, Adela ; Andreescu, Anca Ioana - <i>Two Novel Blockchain-Based Market Settlement Mechanisms Embedded Into Smart Contracts for Securely Trading Renewable Energy</i> , IEEE Access, Volume 8, Page 212548-212556, DOI10.1109/ACCESS.2020.3040764, Published 2020	Gimenez-Aguilar, M; de Fuentes, JM; Arroyo, Achieving cybersecurity in blockchain-based systems: A survey - FUTURE GENERATION COMPUTER SYSTEMS-THE INTERNATIONAL JOURNAL OF ESCIENCE , Nov 2021, 124 , pp.91-118	Q1
10	Oprea, Simona-Vasilica ; Bara, Adela - <i>Analyses of Wind and Photovoltaic Energy Integration from the Promoting Scheme Point of View: Study Case of Romania</i> , ENERGIES, Volume 10, Issue 12, Article Number 2101, DOI 10.3390/en10122101, Published: DEC 2017	Nastase, G; Serban, A; Bucur, I - Photovoltaic development in Romania. Reviewing what has been done, RENEWABLE & SUSTAINABLE ENERGY REVIEWS , Oct 2018 94 , pp.523-535	Q1

Candidat,
OPREA C. Simona Vasilica