

Concurs pentru ocuparea postului de PROFESOR, poz. 32  
 Facultatea Cibernetică, Statistică și Informatică economică,  
 Departamentul Informatică și Cibernetică Economică  
 Disciplinele: Baze de date; Pachete software  
 Domeniul: Informatică economică  
 post publicat în Monitorul Oficial al României nr. 395 din 28.11.2024.

## 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	A. Bâra, <b>S.V. Oprea</b> , Enabling coordination in energy communities: A Digital Twin model, Energy Policy, Volume184, DOI10.1016/j.enpol.2023.113910, Jan 2024, 0301-4215, WOS:001128156900001
Ri2	<b>S.V. Oprea</b> , A. Bâra, Devising a trading mechanism with a joint price adjustment for local electricity markets using blockchain. Insights for policy makers, Energy Policy, Volume 152, DOI: 10.1016/j.enpol.2021.112237, Article Number: 112237, Published: May 2021, ISSN: 0301-4215, WOS:000636054400028
Ri3	<b>S.V. Oprea</b> , A. Bâra, Edge and fog computing using IoT for direct load optimization and control with flexibility services for citizen energy communities, Knowledge-Based Systems, Volume 228, Article Number 107293, DOI10.1016/j.knosys.2021.107293, SEP 27 2021, WOS: 000659800800001
Ri4	Cebeci, ME, Tor, OB, <b>S.V. Oprea, Bâra</b> , A, Consecutive Market and Network Simulations to Optimize Investment and Operational Decisions Under Different RES Penetration Scenarios, IEEE Transactions on Sustainable Energy, Volume: 10, Issue: 4, Pages: 2152-2162, DOI: 10.1109/TSTE.2018.2881036, Published: OCT 2019, WOS:000487199700050
Ri5	<b>S.V. Oprea</b> , A. Bâra, 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, Computers in Industry, Volume: 120, Article Number: 103230, DOI: 10.1016/j.compind.2020.103230, pages:1-22, Published: SEP 2020, WOS:000538762600005
Ri6	<b>S.V. Oprea</b> , A. Bâra, A stacked ensemble forecast for photovoltaic power plants combining deterministic and stochastic methods, APPLIED SOFT COMPUTING, Volume147, DOI10.1016/j.asoc.2023.110781, NOV 2023, WOS:001155186800001
Ri7	<b>S.V. Oprea</b> , A. Bâra, G. Ifrim, 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, Computers & Industrial Engineering, Volume 122, August 2018, Pages 125-139, Elsevier, <a href="https://doi.org/10.1016/j.cie.2018.05.053">https://doi.org/10.1016/j.cie.2018.05.053</a> , WOS:000438478700008
Ri8	<b>S.V. Oprea</b> , A. Bâra, GA Ifrim, L. Coroianu, Day-ahead electricity consumption optimization algorithms for smart homes, Computers & Industrial Engineering, Volume: 135, Pages: 382-401, DOI: 10.1016/j.cie.2019.06.023, Published: SEP 2019, WOS:000482244100030
Ri9	<b>S.V. Oprea</b> , A. Bâra, Mind the gap between PV generation and residential load curves: Maximizing the roof-top PV usage for prosumers with an IoT-based adaptive optimization and control module, EXPERT SYSTEMS WITH APPLICATIONS, Volume212, DOI10.1016/j.eswa.2022.118828, FEB 2023, ISSN 0957-4174, WOS:000867544000005
Ri10	A. Bâra, <b>S.V. Oprea</b> , An ensemble learning method for Bitcoin price prediction based on volatility indicators and trend, ENGINEERING APPLICATIONS OF ARTIFICIAL INTELLIGENCE, Volume133 PartA, DOI10.1016/j.engappai.2024.107991, Jul 2024, WOS:001185778300001

### 2 Teza(-ele) de doctorat

T1	<b>Oprea Simona Vasilica</b> - Aspecte privind accesul deschis la rețelele electrice. Integrarea surselor regenerabile de energie, Universitatea Politehnica, Bucuresti, 2009, coordonator prof.dr. ing. Mircea Eremia
T2	<b>Oprea Simona Vasilica</b> - Soluții informatice de asistare a deciziilor privind optimizarea consumului de energie electrică 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, <b>Simona Vasilica Oprea</b> , 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	<b>Simona Vasilica Oprea</b> , <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, <b>Simona Vasilica Oprea</b> , <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, <b>Simona Vasilica Oprea</b> , 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, <b>Simona Vasilica Oprea</b> , 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 <a href="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">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</a>
Ca6	Adela Bâra, Iuliana Botha, Anca Fodor, Ion Lungu, <b>Simona Vasilica Oprea</b> – <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, <b>Simona Vasilica Oprea</b> , 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	<b>S.V. Oprea</b> , 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, <a href="https://www.intechopen.com/books/recent-improvements-of-power-plants-management-and-technology/key-technical-performance-indicators-for-power-plants">https://www.intechopen.com/books/recent-improvements-of-power-plants-management-and-technology/key-technical-performance-indicators-for-power-plants</a> , 18 pagini din care 9 pagini contribuție proprie;
D2	A.Bâra, <b>S.V. Oprea</b> - <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	<b>S.V. Oprea</b> , 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 CNCISIS (Rn1, Rn2 etc.), articole/studii publicate in extenso în volumele unor manifestări științifice naționale (cu ISSN/ISBN)(Vn1,Vn2 etc.), lucrări prezentate la diferitele seminarii/expoziții 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	Bara, A; <b>Oprea, SV</b> Devising single in-out long short-term memory univariate models for predicting the electricity price on the day-ahead markets, CONNECTION SCIENCE, ISSN:0954-0091, 2024, doi:10.1080/09540091.2024.2397351, WOS:001304331800001

Ri2	<b>Oprea, SV</b> ; Bara, A; Bucur, C; Tudorica, BG; Oprea, N Trading in the Quantum Era: optimizing Bitcoin gains and energy costs, JOURNAL OF APPLIED ECONOMICS, ISSN:1514-0326, 2024, doi:10.1080/15140326.2024.2404795, WOS:001316049900001
Ri3	Georgescu, IA; Bâra, A; <b>Oprea, SV</b> Challenges for low-carbon economies in Latin America. Testing pollution haven hypothesis in developing countries, ENERGY REPORTS, ISSN:2352-4847, 2024, doi:10.1016/j.egy.2024.11.009, WOS:001358462100001
Ri4	<b>Oprea, SV</b> ; Georgescu, IA; Bara, A Charting the BRIC countries' connection of political stability, economic growth, demographics, renewables and CO2 emissions, ECONOMIC CHANGE AND RESTRUCTURING, ISSN:1573-9414, 2024, doi:10.1007/s10644-024-09746-2, WOS:001308101300001
Ri5	<b>Oprea, SV</b> ; Bâra, A; Georgescu, IA Assessing the Dynamics of Ecological Footprint in Relation to Economic and Energy Factors: A Comparative Analysis of Finland and Japan, JOURNAL OF THE KNOWLEDGE ECONOMY, ISSN:1868-7865, 2024, doi:10.1007/s13132-024-02312-1, WOS:001319485700001
Ri6	<b>Oprea, SV</b> ; Bara, A Assessing the Dual Impact of the Social Media Platforms on Psychological Well-being: A Multiple-Option Descriptive-Predictive Framework, COMPUTATIONAL ECONOMICS, ISSN:0927-7099, 2024, doi:10.1007/s10614-024-10717-y, WOS:001315831600001
Ri7	Delcea, C; <b>Oprea, SV</b> ; Dima, AM; Domenteanu, A; Bâra, A; Cotfas, LA Energy communities: Insights from scientific publications, OECONOMIA COPERNICANA, ISSN:2083-1277, 2024, doi:10.24136/oc.3137, WOS:001334882100009
Ri8	<b>Oprea, SV</b> ; Bâra, A Generative literature analysis on the rise of prosumers and their influence on the sustainable energy transition, UTILITIES POLICY, ISSN:0957-1787, 2024, doi:10.1016/j.jup.2024.101799, WOS:001261253500001
Ri9	<b>Oprea, SV</b> ; Bara, A A Recommendation System for Prosumers Based on Large Language Models, SENSORS, ISSN:, 2024, doi:10.3390/s24113530, WOS:001245709800001
Ri10	Bâra, A; Vaduva, AG; <b>Oprea, SV</b> Anomaly Detection in Weather Phenomena: News and Numerical Data-Driven Insights into the Climate Change in Romania's Historical Regions, INTERNATIONAL JOURNAL OF COMPUTATIONAL INTELLIGENCE SYSTEMS, ISSN:1875-6891, 2024, doi:10.1007/s44196-024-00536-2, WOS:001233909600001
Ri11	<b>Oprea, SV</b> ; Bara, A Charting the course: America's energy crossroads and the quest for a sustainable future, AMERICAN JOURNAL OF ECONOMICS AND SOCIOLOGY, ISSN:0002-9246, 2024, doi:10.1111/ajes.12576, WOS:001221143700001
Ri12	Georgescu, IA; <b>Oprea, SV</b> ; Bâra, A Time-frequency connectedness between electricity prices in Romania and its determinants in the competitive markets, KYBERNETES, ISSN:0368-492X, 2024, doi:10.1108/K-01-2024-0268, WOS:001214182700001
Ri13	Bâra, A; <b>Oprea, SV</b> ; Panait, M Insights into Bitcoin and energy nexus. A Bitcoin price prediction in bull and bear markets using a complex meta model and SQL analytical functions, APPLIED INTELLIGENCE, ISSN:0924-669X, 2024, doi:10.1007/s10489-024-05474-2, WOS:001231097300005
Ri14	Georgescu, IA; <b>Oprea, SV</b> ; Bâra, A An analysis of the geopolitical and economics influence on tourist arrivals in Russia using a nonlinear autoregressive distributed lag model, KYBERNETES, ISSN:0368-492X, 2024, doi:10.1108/K-01-2024-0265, WOS:001207439700001
Ri15	Bâra, A; <b>Oprea, SV</b> Electricity price forecast on day-ahead market for mid- and short terms: capturing spikes in data sequences using recurrent neural network techniques, ELECTRICAL ENGINEERING, ISSN:0948-7921, 2024, doi:10.1007/s00202-024-02393-w, WOS:001200309400001
Ri16	Bara, A; <b>Oprea, SV</b> Machine Learning Algorithms for Power System Sign Classification and a Multivariate Stacked LSTM Model for Predicting the Electricity Imbalance Volume, INTERNATIONAL JOURNAL OF COMPUTATIONAL INTELLIGENCE SYSTEMS, ISSN:1875-6891, 2024, doi:10.1007/s44196-024-00464-1, WOS:001196972600002
Ri17	Georgescu, IA; <b>Oprea, SV</b> ; Bâra, A Investigating the relationship between macroeconomic indicators, renewables and pollution across diverse regions in the globalization era, APPLIED ENERGY, ISSN:0306-2619, 2024, doi:10.1016/j.apenergy.2024.123077, WOS:001223392400001
Ri18	<b>Oprea, SV</b> ; Bara, A Exploring excitement counterbalanced by concerns towards AI technology using a descriptive-prescriptive data processing method, HUMANITIES & SOCIAL SCIENCES COMMUNICATIONS, ISSN:, 2024, doi:10.1057/s41599-024-02926-5, WOS:001180921300002

Ri19	Bara, A; <b>Oprea, SV</b> The Impact of Academic Publications over the Last Decade on Historical Bitcoin Prices Using Generative Models, JOURNAL OF THEORETICAL AND APPLIED ELECTRONIC COMMERCE RESEARCH, ISSN:0718-1876, 2024, doi:10.3390/jtaer19010029, WOS:001192446400001
Ri20	<b>Oprea, SV</b> ; Nica, I; Bara, A; Georgescu, IA Are skepticism and moderation dominating attitudes toward AI-based technologies?, AMERICAN JOURNAL OF ECONOMICS AND SOCIOLOGY, ISSN:0002-9246, 2024, doi:10.1111/ajes.12565, WOS:001172029300001
Ri21	Bâra, A; <b>Oprea, SV</b> An ensemble learning method for Bitcoin price prediction based on volatility indicators and trend, ENGINEERING APPLICATIONS OF ARTIFICIAL INTELLIGENCE, ISSN:0952-1976, 2024, doi:10.1016/j.engappai.2024.107991, WOS:001185778300001
Ri22	<b>Oprea, SV</b> ; Georgescu, IA; Bâra, A Is Bitcoin ready to be a widespread payment method? Using price volatility and setting strategies for merchants, ELECTRONIC COMMERCE RESEARCH, ISSN:1389-5753, 2024, doi:10.1007/s10660-024-09812-x, WOS:001155905100001
Ri23	Tudorica, BG; Bucur, C; Panait, M; <b>Oprea, SV</b> ; Bara, A Energetic Equilibrium: Optimizing renewable and non-renewable energy sources via particle swarm optimization, UTILITIES POLICY, ISSN:0957-1787, 2024, doi:10.1016/j.jup.2024.101722, WOS:001175993200001
Ri24	Bara, A; <b>Oprea, SV</b> Embedding the weather prediction errors (WPE) into the photovoltaic (PV) forecasting method using deep learning, JOURNAL OF FORECASTING, ISSN:0277-6693, 2024, doi:10.1002/for.3064, WOS:001148012000001
Ri25	Bara, A; <b>Oprea, SV</b> Predicting Day-Ahead Electricity Market Prices through the Integration of Macroeconomic Factors and Machine Learning Techniques, INTERNATIONAL JOURNAL OF COMPUTATIONAL INTELLIGENCE SYSTEMS, ISSN:1875-6891, 2024, doi:10.1007/s44196-023-00387-3, WOS:001142393400001
Ri26	<b>Oprea, SV</b> ; Bara, A On-grid and off-grid photovoltaic systems forecasting using a hybrid meta-learning method, KNOWLEDGE AND INFORMATION SYSTEMS, ISSN:0219-1377, 2024, doi:10.1007/s10115-023-02037-8, WOS:001138337300001
Ri27	Bâra, A; <b>Oprea, SV</b> PV-OPTIM: A Software Architecture and Functionalities for Prosumers, ELECTRONICS, ISSN:, 2024, doi:10.3390/electronics13010161, WOS:001139319200001
Ri28	Bara, A; Georgescu, IA; <b>Oprea, SV</b> ; Cristescu, MP Exploring the Dynamics of Brent Crude Oil, S&P500 and Bitcoin Prices Amid Economic Instability, IEEE ACCESS, ISSN:2169-3536, 2024, doi:10.1109/ACCESS.2024.3370029, WOS:001174640600001
Ri29	Georgescu, IA; <b>Oprea, SV</b> ; Bâra, A ANALYZING CAUSALITY AND COINTEGRATION OF MACROECONOMICS AND ENERGY-RELATED FACTORS OF NORDIC AND SEE EUROPEAN COUNTRIES, JOURNAL OF BUSINESS ECONOMICS AND MANAGEMENT, ISSN:1611-1699, 2024, doi:10.3846/jbem.2024.21677, WOS:001263975400001
Ri30	<b>Oprea, SV</b> ; Bara, A Detecting Malicious Uniform Resource Locators Using an Applied Intelligence Framework, CMC-COMPUTERS MATERIALS & CONTINUA, ISSN:1546-2218, 2024, doi:10.32604/cmc.2024.051598, WOS:001268169500017
Ri31	Bâra, A; <b>Oprea, SV</b> A value sharing method for heterogeneous energy communities archetypes, ISCIENCE, ISSN:, 2024, doi:10.1016/j.isci.2023.108687, WOS:001143554500001
Ri32	Baroiu, AC; Diaconita, V; <b>Oprea, SV</b> Bitcoin volatility in bull vs. bear market- insights from analyzing on-chain metrics and Twitter posts, PEERJ COMPUTER SCIENCE, ISSN:, 2023, doi:10.7717/peerj-cs.1750, WOS:001132077200002
Ri33	Bâra, A; <b>Oprea, SV</b> Enabling coordination in energy communities: A Digital Twin model, ENERGY POLICY, ISSN:0301-4215, 2024, doi:10.1016/j.enpol.2023.113910, WOS:001128156900001
Ri34	Bâra, A; <b>Oprea, SV</b> ; Ciurea, CE IMPROVING THE STRATEGIES OF THE MARKET PLAYERS USING AN AI-POWERED PRICE FORECAST FOR ELECTRICITY MARKET, TECHNOLOGICAL AND ECONOMIC DEVELOPMENT OF ECONOMY, ISSN:2029-4913, 2024, doi:10.3846/tede.2023.20251, WOS:001103738000001
Ri35	Bara, A; <b>Oprea, SV</b> A holistic view on business model-oriented energy communities, KYBERNETES, ISSN:0368-492X, 2023, doi:10.1108/K-07-2023-1235, WOS:001092258700001
Ri36	Cristescu, MP; Mara, DA; Culda, LC; Nerisanu, RA; Bâra, A; <b>Oprea, SV</b> The Impact of Data Science Solutions on the Company Turnover, INFORMATION, ISSN:, 2023, doi:10.3390/info14100573, WOS:001095503900001
Ri37	<b>Oprea, SV</b> ; Bâra, A A stacked ensemble forecast for photovoltaic power plants combining deterministic and stochastic methods, APPLIED SOFT COMPUTING, ISSN:1568-4946, 2023, doi:10.1016/j.asoc.2023.110781, WOS:001155186800001

Ri38	Bâra, A; <b>Oprea, SV</b> ; Bucur, C; Tudorica, BG Unraveling the Impact of Lockdowns on E-commerce: An Empirical Analysis of Google Analytics Data during 2019-2022, JOURNAL OF THEORETICAL AND APPLIED ELECTRONIC COMMERCE RESEARCH, ISSN:0718-1876, 2023, doi:10.3390/jtaer18030075, WOS:001074137500001
Ri39	<b>Oprea, SV</b> ; Bâra, A; Dobria, G; Barbu, DC A Horizontal Tuning Framework for Machine Learning Algorithms Using a Microservice-based Architecture, STUDIES IN INFORMATICS AND CONTROL, ISSN:1220-1766, 2023, doi:10.24846/v32i3y202303, WOS:001089145600003
Ri40	Bâra, A; <b>Oprea, SV</b> Intelligent system to optimally trade at the interference of multiple crises, APPLIED INTELLIGENCE, ISSN:0924-669X, 2023, doi:10.1007/s10489-023-04823-x, WOS:001045138000005
Ri41	Bâra, A; <b>Oprea, SV</b> ; Baroiu, AC Forecasting the Spot Market Electricity Price with a Long Short-Term Memory Model Architecture in a Disruptive Economic and Geopolitical Context, INTERNATIONAL JOURNAL OF COMPUTATIONAL INTELLIGENCE SYSTEMS, ISSN:1875-6891, 2023, doi:10.1007/s44196-023-00309-3, WOS:001044924500001
Ri42	Bâra, A; <b>Oprea, SV</b> ; Tudorica, BG From the East-European Regional Day-Ahead Markets to a Global Electricity Market, COMPUTATIONAL ECONOMICS, ISSN:0927-7099, 2024, doi:10.1007/s10614-023-10416-0, WOS:001040215200002
Ri43	Bâra, A; <b>Oprea, SV</b> What makes electricity consumers change their behavior? Influence of attitude and perceived impact of DR programs on awareness, KYBERNETES, ISSN:0368-492X, 2024, doi:10.1108/K-01-2023-0032, WOS:000994120700001
Ri44	<b>Oprea, SV</b> ; Bâra, A An Edge-Fog-Cloud computing architecture for IoT and smart metering data, PEER-TO-PEER NETWORKING AND APPLICATIONS, ISSN:1936-6442, 2023, doi:10.1007/s12083-022-01436-y, WOS:000913563000002
Ri45	Bâra, A; <b>Oprea, SV</b> ; Georgescu, IA UNDERSTANDING ELECTRICITY PRICE EVOLUTION-DAY-AHEAD MARKET COMPETITIVENESS IN ROMANIA, JOURNAL OF BUSINESS ECONOMICS AND MANAGEMENT, ISSN:1611-1699, 2023, doi:10.3846/jbem.2023.19050, WOS:000991227200001
Ri46	<b>Oprea, SV</b> ; Bâra, A; Andreescu, AI; Cristescu, MP Conceptual Architecture of a Blockchain Solution for E-Voting in Elections at the University Level, IEEE ACCESS, ISSN:2169-3536, 2023, doi:10.1109/ACCESS.2023.3247964, WOS:000942211300001
Ri47	Vaduva, AG; Munteanu, M; <b>Oprea, SV</b> ; Bâra, A; Niculae, AM Understanding Climate Change and Air Quality Over the Last Decade: Evidence From News and Weather Data Processing, IEEE ACCESS, ISSN:2169-3536, 2023, doi:10.1109/ACCESS.2023.3345466, WOS:001131870500001
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<b>Pi2</b>	<b>Director consorțiu internațional</b> Service-oriented Open Platform for Citizen Energy Communities (OPEN4CEC), Driven Urban Transition 2022, Horizon Europe, COFUND, <a href="https://open4cec.ase.ro/">https://open4cec.ase.ro/</a> , <a href="https://dutpartnership.eu/funding-opportunities/dut_call_2022/">https://dutpartnership.eu/funding-opportunities/dut_call_2022/</a> , Ctr. 47/2024, 2024-2027
<b>Pi3</b>	<b>Director de proiect internațional</b> Valorisation and Integration of Extractive Waste towards the Sustainability of Raw Materials Industry, (VALORWASTE), Horizon Europe, ERA-NET, <a href="https://valorwaste.ase.ro/">https://valorwaste.ase.ro/</a> , <a href="https://www.era-min.eu/joint-call/era-min-joint-call-2023">https://www.era-min.eu/joint-call/era-min-joint-call-2023</a> , Ctr. 5/2024, 2024-2027
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<b>Pi5</b>	<b>Director de proiect internațional</b> 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 - SMART-MLA), PN III: Cooperarea Europeană și Internațională, Subprogram 3.2 - Orizont 2020, Tip proiect: ERANET H2020, Valoare 169.000 Euro, <a href="https://smart-mla.stimasoft.com/">https://smart-mla.stimasoft.com/</a> , 2018 – 2022

<b>Pi6</b>	<b>Director de proiect național</b> 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, durată 24 luni, Contract nr. 462PED/28.10.2020, 2020-2022
<b>Pi7</b>	<b>Director de proiect național</b> 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, mediu și schimbări climatice, Valoare totală buget 450.000, nr. Contract 77BG/ 2016, durată proiect 24 luni, 2026-2018;
<b>Membru în echipa de cercetare</b>	
<b>Pm1</b>	EMERGE România – Împunerea Comunităților pentru Tranziția Energetică către Neutralitatea Climatică în România. Total amount: 260.579 EUR. Funds for Bilateral Relations EEA and Norway grants for Romania: <a href="https://ase.ro/app/uploads/2024/09/Comunicat_de_presa_EMERGE.pdf">https://ase.ro/app/uploads/2024/09/Comunicat_de_presa_EMERGE.pdf</a> , 2024-2025
<b>Pm2</b>	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
<b>Pm3</b>	Sistem inteligent pentru realizarea ofertelor pe piața angro de energie electrică (SMARTRADE), Programul Operational Competitivitate - Axa1 (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 Bülent TÖR - responsabil ASE, valoare 5.165.712 RON
<b>Pm4</b>	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 Băra;
<b>Pm5</b>	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 Băra;

##### 5. Citări ale lucrărilor publicate

Nr. Crt	Articolul citat	Revista și articolul în care a fost citat	Cuarta
1	Oprea, SV; Băra, A Machine Learning Algorithms for Short-Term Load Forecast in Residential Buildings Using Smart Meters, Sensors and Big Data Solutions, IEEE ACCESS, ISSN:2169-3536, 2019, doi:10.1109/ACCESS.2019.2958383, WOS:000509483800046	Ali, HAE; Alham, MH and Ibrahim, DK, Big data resolving using Apache Spark for load forecasting and demand response in smart grid: a case study of Low Carbon London Project, JOURNAL OF BIG DATA, Apr 2024, Volume 11, Issue 1, DOI10.1186/s40537-024-00909-6, WOS:001209751500001	Q1
2	Preda, S; Oprea, SV; Băra, A; Belciu, A PV Forecasting Using Support Vector Machine Learning in a Big Data Analytics Context, SYMMETRY-BASEL, ISSN:2073-8994, 2018, doi:10.3390/sym10120748, WOS:000454725100086	Bianchini, D; De Antonellis, V and Garda, M, A big data exploration approach to exploit in-vehicle data for smart road maintenance, FUTURE GENERATION COMPUTER SYSTEMS-THE INTERNATIONAL JOURNAL OF ESCIENCE, DEC 2023, Volume 149, Page 701-716 DOI10.1016/j.future.2023.08.004, WOS:001076535400001	Q1

3	Oprea, SV; Bâra, A; Ifrim, GA Optimizing the Electricity Consumption with a High Degree of Flexibility Using a Dynamic Tariff and Stackelberg Game, JOURNAL OF OPTIMIZATION THEORY AND APPLICATIONS, ISSN:0022-3239, 2021, doi:10.1007/s10957-021-01876-1, WOS:000659800800001	Han, Y; Lam, JCK; Li, VOK ; Newbery, D; Guo, PY ; Chan, K, ENERGY POLICY, 2024, Volume 192, DOI10.1016/j.enpol.2024.114230, WOS:001259804700001	Q1
4	Oprea, SV; Bâra, A; Ifrim, G 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, COMPUTERS & INDUSTRIAL ENGINEERING, ISSN:0360-8352, 2018, doi:10.1016/j.cie.2018.05.053, WOS:000438478700008	Hossain, MB; Pokhrel, SR and Choi, J, IEEE INTERNET OF THINGS JOURNAL, DEC 2023, Volume 10, Issue 24, Page 22440-22450, DOI10.1109/JIOT.2023.3303870, WOS:001163472700018	Q1
5	Oprea, SV; Bâra, A; Ifrim, G 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, COMPUTERS & INDUSTRIAL ENGINEERING, ISSN:0360-8352, 2018, doi:10.1016/j.cie.2018.05.053, WOS:000438478700008	Zhang, L; Gao, Y ; Zhu, HB ; Tao, L, A distributed real-time pricing strategy based on reinforcement learning approach for smart grid, EXPERT SYSTEMS WITH APPLICATIONS, Volume 191, DOI10.1016/j.eswa.2021.116285, WOS:000744171800002	Q1
6	Oprea, SV; Bâra, A; Ifrim, G 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, COMPUTERS & INDUSTRIAL ENGINEERING, ISSN:0360-8352, 2018, doi:10.1016/j.cie.2018.05.053, WOS:000438478700008	He, YL; Qin, HL; Huang, JZ; Jin, Y ., Novel electricity pattern identification system based on improved I-nice algorithm, COMPUTERS & INDUSTRIAL ENGINEERING, 2020, Volume 150, DOI10.1016/j.cie.2020.106908, WOS:000604134500033	Q1
7	Oprea, SV; Bâra, A; Ifrim, G 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, COMPUTERS & INDUSTRIAL ENGINEERING, ISSN:0360-8352, 2018, doi:10.1016/j.cie.2018.05.053, WOS:000438478700008	Akbari-Dibavar, A; Nojavan, S; Mohammadi-Ivatloo, B; Zare, K., Smart home energy management using hybrid robust-stochastic optimization, COMPUTERS & INDUSTRIAL ENGINEERING, 2020, Volume 143, DOI10.1016/j.cie.2020.106425, WOS:000525872600031	Q1
8	S.V. Oprea, A. Bâra, Devising a trading mechanism with a joint price adjustment for local electricity markets using blockchain. Insights for policy makers, Elsevier Energy Policy, Volume 152, DOI: 10.1016/j.enpol.2021.112237, Article Number: 112237, Published: May 2021, ISSN: 0301-4215, WOS:000636054400028	Lin, BQ; Chen, JY and Wesseh, PK., Peak-valley tariffs and solar prosumers: Why renewable energy policies should target local electricity markets, ENERGY POLICY, 2022, Volume 165, DOI10.1016/j.enpol.2022.112984, WOS:000799658300008	Q1

9	<p>S.V. Oprea, A. Bâra, Edge and fog computing using IoT for direct load optimization and control with flexibility services for citizen energy communities, Elsevier Knowledge-Based Systems, Volume 228, Article Number 107293, DOI10.1016/j.knosys.2021.107293, SEP 27 2021, WOS: 000659800800001</p>	<p>Chen, ZZ; Wu, J; Fu, AM; Su, M; Deng, RH, MP-CLF: An effective Model-Preserving Collaborative deep Learning Framework for mitigating data leakage under the GAN, KNOWLEDGE-BASED SYSTEMS, 2023, Volume 270, DOI10.1016/j.knosys.2023.110527, WOS:000985285900001</p>	Q1
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