RAPORT ACTIVITATE [1]

(2020)

1. Datele de identificare ale unității de cercetare

1.1. Denumire[2]: **Laboratorul de Modelare și Simulare SMlab**

1.2. Document de inființare: Hotararea Senatuluui universitar 17/13 iulie 2017

1.3. Pagina web (limba romana, limba engleză):

https://erris.gov.ro/-Modelling--Simulation-Labor
https://ugal.ro/files/cercetare/2020/9/2_MSN_09_09_2020.pdf
https://orcid.org/0000-0002-9121-5714

1.4. Adresa: Str Domneasca nr 111, corp cladire SB, cam 304

1.5 Telefon, fax, e-mail: luminita.moraru@ugal.ro

2. Scurta prezentare

2.1. Domeniul fundamental/ramura de știința[3]: Matematică și științe ale naturii/Fizica

2.2 Directii de cercetare-dezvoltare/obiective de cercetare/priorități de cercetare

a. domenii principale de cercetare-dezvoltare-inovare;

-metode computationale dedicate procesarii imaginilor medicale (reconstructie/imbunatatire/analiza)

- Imagistica medicală: Cercetări privind prelucrări de imagini medicale și interpretarea lor în vederea identificării de patologii. Dezvoltarea de aplicații CAD pentru susținerea activităților de diagnosticare;

- Procesarea de imagini: segmentarea și clasificarea imaginilor medicale pentru identificarea obiectelor biologice de interes prin metode combinate de tehnici de procesare și 'patern recognition';

- metode de deep learning (supervizate si ne suprvizate);

- Dezvoltarea tehnologiilor în domeniul ultra- și infrasunetelor în medii stratificate pentru detectarea și recunoașterea obiectelor interzise cu potența de risc major/securitate.

b. domenii secundare de cercetare-dezvoltare-inovare;

- Simulări numerice.

- Analize numerice si statistice.

- Crearea de baze de date complexe pentru tipuri de patologii analizate.

- Statistică aplicată în ingineria medicală; analiza propagarii si imprastierii infrasunetelor/ultrasunetelor.

-Detectia centrilor de imprastiere/reconstructii de suprafete vibrante/

- ANFH Acoustic Near Field Holography

c. servicii / microproductie.

- Algoritmi CAD (Computer Aded Diagnostic)

- Retele Neuronale Artificiale foloste ca instrumente de predicție obiectivă in domeniul medicinei

- Consultanta in domeniul prelucrarii semnalului si imaginii digitale, filtrare digitala, algoritmi pentru procesarea semnalelor, metode numerice, senzori

[1] Se întocmește și se predă anual.

[2] Inclusiv acronim.

[3] In acord cu Hotărârea nr. 376/2016 privind aprobarea Nomenclatorului domeniilor şi al specializărilor/programelor de studii universitare şi a structurii instituţiilor de învăţământ superior pentru anul universitar 2016-2017

- Instruire în domeniile procesării semnalelor digitale, filtrării digitale, metodelor matematice de prelucrare a semnalelor, statisticilor aplicate
Procesarea imaginilor medicale complexe pentru analiza detaliată.
- Asigurarea suportului științific și tehnologic pentru dezvoltarea de software de analiză.
- Modelări numerice și optimizări în medii stratificate.
- Instruire studenți, masteranzi, studenti doctoranzi în activități ce includ prelucrări de imagini, baze de date medicale, tehnici de analiză și recunoaștere a formelor, caracteristicilor, detectarea de obiecte etc.

3. Structura de conducere a centrului

3.1 Coordonator (Director/Responsabil) Prof. Dr. Ing. Fiz. Luminita Moraru
3.2 Consiliul de conducere/științific Prof.dr.ing.fiz. habil Antoaneta Ene
S.L. dr. Mat. Moldovanu Simona

4. Structura resursei umane

Numărul total de membri, din care:

a. Număr membri titulari: **3**
b. Număr membri asociați: **3**
c. Conducători de doctorat[4]: **2**
d. Număr de tineri cercetatori (postdoctoranzi, doctoranzi, masteranzi etc): **4**
e. Număr ingineri/tehnicieni: **2** (laborant Dragoi Luminita, ing. Patrascu Dan)

5. Infrastructura de cercetare-dezvoltare, facilități de cercetare

5.1. Laboratoare[5]

Compartimentul de Modelare

-metode computationale dedicate procesarii imaginilor medicale (reconstructie/ imbunatatire/analiza)

Responsabil: Moraru Luminita
Ene Antoaneta
Moldovanu Simona
Dimitrievici Lucian-dr
Stan Maria -drd
LAZARESCU ANDREEA - drd
MICHIŞ N. FELICIA-ANIŞOARA(DAMIAN)-drd
TOPORAȘ C. LENUȚA (PANĂ)- drd
Obreja Cristian Dragos- postdoc

Compartimentul de Simulare

- Simulări numerice.
- Analize numerice si statistice.

Responsabil: Bibicu Dorin
Moldovanu Simona
Stan Maria-drd

[4] Nume, prenume, domeniul de doctorat.
[5] Se vor nominaliza laboratoarele, responsabilul si principale direcțiile de cercetare.

5.2. Echipamente, instalații și software de interes național pentru cercetare fundamentală, dezvoltare tehnologică și inovare[6]

- Desktop computer Intel Core i5 (2017)
- Multifunctional printer Lexmark X734de
- Desktop computer
- Laptop (2017)
- Local network
- Internet access
- Matlab 2019b (2019)
- Statistica

6. Contracte de cercetare derulate[7]

6.1. Contracte câștigate în competiții:

- internaționale

MESMERISE 700399, -RIA
Title: Multi-Energy High Resolution Modular Scan System for Internal and External Concealed Commodities (http://cordis.europa.eu/project/rcn/203299_en.html)
Domeniul: BES-08-2015 Security/Suply chain Security

- naționale

6.2. Contracte cu agenți economici:

- din străinătate
- din țară

7. Rezultatele activității de cercetare, dezvoltare și inovare (CDI)

7.1.Rezultate ale activității CDI (cercetare fundamentala și aplicativă)[8]

		Nr.
7.1.1	Lucrări publicate în reviste cotate ISI	**18**
7.1.2	Factor de impact cumulat al lucrărilor cotate ISI 1. Journal: Biocybernetics and Biomedical Engineering, IF=2.159 2. Journal: Current Medical Imaging, IF=0,533 3. Physics Letters A, IF= 2,087 4. Physics Letters A, IF= 2,087	**31,732**

[6] Se se vor enumera numai acele laboratoare și acele echipamente care au fost folosite în activitatea de cercetare din ultimii 2 ani); Se vor nominaliza 1-2 repere reprezentative la nivel de universitate, regional și național.

[7] Se vor atasa liste pe categorii care să cuprindă următoarele detalii: nr. contract, titlu, domeniul (care se inscrie in lista domeniilor de cercetare declarate ale UC) de cercetare, director, parteneri (daca este cazul), valoare totala si valoarea regie și valoarea din regie care a fost solicitata pentru intretinerea UC.

[8] Se vor anexa lista acestor contribuții.

	5. Chinese Journal of Physics, IF = 2,544 6. Journal: Optik – International Journal for Light and Electron Optics IF = 2.187 7. Entropy, IF = 2,419 8. Journal: Optik – International Journal for Light and Electron Optics IF = 2.187 9. Chinese Journal of Physics, IF = 2,544 10. Physics of Wave Phenomena, IF = 0,745 11. Entropy, IF = 2,419 12. Journal of Cleaner Production FI= 7.246 13. Sustainability FI= 2.576	
7.1.3	Citări în reviste de specialitate cotate ISI. (lista in extenso, mai jos)	**233**
7.1.4	Lucrări ştiinţifice/tehnice în reviste indexate în baze de date internaționale	**16**
7.1.5	Comunicări ştiinţifice prezentate la conferinţe internaţionale	**32**
7.1.6	Comunicări ştiinţifice prezentate la conferinţe naţionale	0
7.1.7	Brevete de invenţie (solicitate / acordate)	0
7.1.8	Citări în sistemul ISI ale lucrărilor de cercetare/ brevete	0
7.1.9	Produse/servicii/tehnologii rezultate din activităţi de cercetare, bazate pe brevete, omologări sau inovații proprii.	0
7.1.10	Studii prospective şi tehnologice, normative, proceduri, metodologii şi planuri tehnice, noi sau perfecţionate, comandate sau utilizate de beneficiar.	0

Lucrări publicate în reviste cotate ISI

1. Deep- segmentation of plantar pressure images incorporating fully convolutional neural networks
Dan Wang, Zairan Li, Nilanjan Dey, Amira S.Ashour, Luminita Moraru, R.Simon Sherratt, FuqianShi
Journal: Biocybernetics and Biomedical Engineering,
Volume 40, Issue 1, January–March 2020, Pages 546-558
https://doi.org/10.1016/j.bbe.2020.01.004, ISSN 0208-5216

2. Colored Video Analysis in Wireless Capsule Endoscopy: A Survey of State-of-the-Art
Amira Ashour, Nilanjan Dey, Waleed Mohamed, Jolanda Tromp, R. Simon Sherratt, Fuqian Shi, Luminița Moraru
Journal: Current Medical Imaging, 2020, 16, 1-11, ISSN: 1573-4056

3. DARK, SINGULAR AND STRADDLED OPTICAL SOLITONS IN BIREFRINGENT FIBERS WITH GENERALIZED ANTI--CUBIC NONLINEARITY
Mehmet Ekici, Elsayed M. E. Zayed; Mohamed E. M. Alngar; Anjan Biswas; Luminita Moraru; Abdullah Kamis Alzahrani; Milivoj R. Belic
Physics Letters A, ID 126417, Volume 384, Issue 20, 16 July 2020
https://doi.org/10.1016/j.physleta.2020.126417

4. OPTICAL SOLITON PERTURBATION WITH KUDRYASHOV'S EQUATION BY SEMI-INVERSE VARIATIONAL PRINCIPLE
Anjan Biswas, Mir Asma, Padmaja Guggilla, Lipika Mullick, Luminita Moraru, Mehmet Ekici, Abdullah K. Alzahrani, Milivoj R. Belic
Physics Letters A - Volume 384, Issue 33, 27 November 2020, 126830, https://doi.org/10.1016/j.physleta.2020.126830 ISSN: 0375-9601

5. OPTICAL SOLITONS WITH KUDRYASHOV'S MODEL BY A RANGE OF INTEGRATION NORMS
Yakup Yıldırım; Anjan Biswas; Mehmet Ekici; Oswaldo Gonzalez--Gaxiola; Salam Khan; Houria Triki; Luminita Moraru; Abdullah Kamis Alzahrani; Milivoj R. Belic
Chinese Journal of Physics – Volume 66, August 2020, Pages 660-672 doi: 10.1016/j.cjph.2020.06.005, ISSN: 0577-9073

6. Brain tissue evaluation based on skeleton shape and similarity analysis between hemispheres
Pana Lenuta, Simona Moldovanu, Amira Ashour, Nilanjan Dey, Luminita Moraru
Computation 2020, 8 (2), 31; doi:10.3390/computation8020031

7. Feature selection of non-dermoscopic skin lesions images for nevi and melanomas classification

Felicia Anisoara Damian , Simona Moldovanu , Nilanjan Dey , Amira S. Ashour , Luminita Moraru
Computation 2020, 8, 41; doi:10.3390/computation8020041

8. HIGHLY DISPERSIVE OPTICAL SOLITONS IN BIREFRINGENT FIBERS WITH FOUR FORMS OF NONLINEAR REFRACTIVE INDEX BY THREE PROLIFIC INTEGRATION SCHEMES
Mehmet Ekici, Yakup Yıldırım; Anjan Biswas; Elsayed M. E. Zayed; Salam Khan; Luminita Moraru; Abdullah Kamis Alzahrani; Milivoj R. Belic
Journal: Optik – International Journal for Light and Electron Optics, Volume 220, October 2020, 165039, https://doi.org/10.1016/j.ijleo.2020.165039

9. Grey Wolf based Wang's Demons for Retinal Image Registration
Sayan Chakraborty , Ratika Pradhan , Amira S. Ashour , Luminita Moraru, Nilanjan Dey
Entropy 2020, 22, 659; doi:10.3390/e22060659, ISSN 1099-4300

10. SOLITONS AND CONSERVATION LAWS IN MAGNETO--OPTIC WAVEGUIDES WITH POLYNOMIAL LAW NONLINEARITY
Elsayed M. E. Zayed; Mahmoud M. El--Horbaty; Mohamed E. M. Alngar; Anjan Biswas; Abdul H. Kara; Luminita Moraru; Mehmet Ekici, Abdullah K. Alzahrani; Milivoj R. Belic
Journal: Optik—Volume 223, December 2020, 165397, https://doi.org/10.1016/j.ijleo.2020.165397

11. SOLITONS AND CONSERVATION LAWS IN MAGNETO-OPTIC WAVEGUIDES WITH TRIPLE-POWER LAW NONLINEARITY
Elsayed M. E. Zayed; Mohamed E. M. Alngar; Anjan Biswas; Abdul H. Kara; Luminita Moraru; Mehmet Ekici; Abdullah K. Alzahrani; Milivoj R. Belic
Journal of Optics - India (2020). J Opt (December 2020) 49(4):584–590
https://doi.org/10.1007/s12596-020-00650-2

12. OPTICAL SOLITONS WITH DIFFERENTIAL GROUP DELAY FOR KUDRYASHOV'S MODEL BY THE AUXILIARY EQUATION MAPPING METHOD
Elsayed M. E. Zayed, Reham M. A. Shohib, Anjan Biswas, Mehmet Ekici, Luminita Moraru, Abdullah Kamis Alzahrani, Milivoj R. Belic
Chinese Journal of Physics,
Volume 67, October 2020, Pages 631-645, https://doi.org/10.1016/j.cjph.2020.08.022

13. Optical Solitons with Kudryashov's Equation by Lie Symmetry Analysis
S. Kumara, S. Malika, A. Biswas, Q. Zhou, L. Moraru, A. K. Alzahrani, and M. R. Belic
Physics of Wave Phenomena, 2020, Vol. 28, No. 3, pp. 299–304.
ISSN 1541-308X,

14. Combining Sparse and Dense Features to Improve Multi-Modal Registration for Brain DTI Images
Simona Moldovanu, Lenuta Pana Toporas, Anjan Biswas and Luminita Moraru
Entropy 2020, 22(11), 1299; doi:10.3390/e22111299

15. Hynes Jesudoss Rajesh, J. Senthil Kumar, Hesam Kamyab, J. Angela Jennifa Sujana, Omar Ali Al-Khashman, Yasemin Kuslu, Antoaneta Ene, B. Suresh, Modern Enabling Techniques and Adsorbents based Dye Removal with Sustainability Concerns in Textile Industrial Sector -A comprehensive review, Journal of Cleaner Production 272, 2020, 122636, https://doi.org/10.1016/j.jclepro.2020.122636.
16. Moraru SS, Ene A., Badila A. Physical and Hydro-Physical Characteristics of Soil in the Context of Climate Change. A Case Study in Danube River Basin, SE Romania. Sustainability 2020;12(21):9174, DOI: 10.3390/SU12219174 0
17. Simionov, Ira-Adeline; Cristea, Victor; Petrea, Stefan-Mihai; Mogodan, Alina; Nica, Aurelia); Strungaru, Stefan-Adrian; Ene Antoaneta; Sarpe, D.A., HEAVY METAL EVALUATION IN THE LOWER SECTOR OF DANUBE RIVER, Scientific Papers-series e-Land Reclamation Earth Observation & Surveying Environmental Engineering 9(2020)11-16.
18. Ene A., Sloata F., XRF analysis of arsenic and selected metals in contaminated sand from the dismantling of industrial distillation plants, Journal of Science and Arts, Year 20, No. 4(53), pp. 1011-1018, 2020, https://doi.org/10.46939/J.Sci.Arts-20.4-c02

Lucrări ştiinţifice/tehnice în reviste indexate în baze de date internaționale _

1. Maria (Stan) Necula, Dorin Bibicu, Luminita Moraru, Cristian-Victor-Eugen Rusu,
Multiple closely spaced scatterers location based MUSIC via inverse scattering amplitude estimation,
ANNALS OF "DUNAREA DE JOS" UNIVERSITY OF GALATI, MATHEMATICS, PHYSICS, THEORETICAL MECHANICS
FASCICLE II, YEAR XII (XLIII) 2020, No. 1, pp 1-12, DOI: https://doi.org/10.35219/ann-ugal-math-phys-mec.2020

2. Lenuța Pană, Simona Moldovanu, Luminița Moraru
Differentiation of brain metastases in MRI image using the first- and second-order statistical features
ANNALS OF "DUNAREA DE JOS" UNIVERSITY OF GALATI, MATHEMATICS, PHYSICS, THEORETICAL MECHANICS
FASCICLE II, YEAR XII (XLIII) 2020, No. 1, pp 20-27 DOI: https://doi.org/10.35219/ann-ugal-math-phys-mec.2020

3. Felicia Anișoara Damian, Simona Moldovanu, Luminița Moraru
COMPARISON OF DISTANCE METRIC MEASURES IN DIFFERENTIATION OF NON-DERMOSCOPIC SKIN LESIONS

ANNALS OF "DUNAREA DE JOS" UNIVERSITY OF GALATI, MATHEMATICS, PHYSICS, THEORETICAL MECHANICS
FASCICLE II, YEAR XII (XLIII) 2020, No. 1, pp 20-27, DOI: https://doi.org/10.35219/ann-ugal-math-phys-mec.2020

4. M. Stan Necula, D. Bibicu and L. Moraru, Backscattering by closely spaced scatterers using the K matrix data from an active array of N transceivers, Sensors and Electronic Instrumentation Advances,vol 2020, pp7-13

5. "Vision Tracking: A Survey of the State-of-the-Art"
Anjan Dutta; Atreyee Mondal; Nilanjan Dey; Soumya Sen; Luminiţa Moraru; Aboul Ella Hassanien
SN Computer Science (2020) 1:57
https://doi.org/10.1007/s42979-019-0059-z

6. Necula (Stan), M.; Bibicu, D.; Moraru, L. Inverse scattering problem for concealed objects detection, AIP Conference Proceedings 2218, 030007 (2020); https://doi.org/10.1063/5.0001012

7. S Moldovanu, F. Damian, L Moraru
"An invisible DWT watermarking algorithm using noise removal with application to dermoscopic images", 9th Int'l Conference on Mathematical Modelling in Physical Sciences, September 7-10, 2020 , Tinos island, Greece (publication Journal of Physics: Conference Series (JPCS)

8. VALERIAN NOVAC, Luminita MORARU, Florin ONEA, Eugen RUSU
BALLAST WATER MANAGEMENT IN THE BLACK SEA BASIN
Conference: 20th International Multidisciplinary Scientific GeoConference Proceedings SGEM 2020 September 2020
DOI: 10.5593/sgem2020/3.1/s15.104

9. Căpriță Florina Cristiana, **Ene Antoaneta**, 2020, Biosorption of Heavy Metals from the Metallurgical Industry Wastewater by Macroalgae, AIP Conference Proceedings 2218, 030011, 2020, https://doi.org/10.1063/5.0001087

10. Ene Antoaneta, Mihaela-Aida Vasile, Gabriela Bahrim, Study of microbiological contamination level of surface water in MONITOX network areas before and after COVID-19 pandemic, Annals of the" Dunarea de Jos" University of Galati. Fascicle II, Mathematics, Physics, Theoretical Mechanics, 2020, Volume 43, No. 2, 75-81, https://doi.org/10.35219/ann-ugal-math-phys-mec.2020.2.01.
11. Arbanaș (Moraru), S., Ene, A. (2020) "Nutrient Stocks Study in Agroecosystems Located near the Steel Industry, Galati, Romania Annals of the" Dunarea de Jos" University of Galati. Fascicle II, Mathematics, Physics, Theoretical Mechanics, 43(2), pp. 82-93. doi: https://doi.org/10.35219/ann-ugal-math-phys-mec.2020.2.02.
12. Cioroi, M., Ene, A. A study on drinking water quality in SE Romania, Annals of the" Dunarea de Jos" University of Galati. Fascicle II, Mathematics, Physics, Theoretical Mechanics, 43(2) (2020) 108-114. doi: https://doi.org/10.35219/ann-ugal-math-phys-mec.2020.2.05.
13. Sion A., Gosav, S., Ene, A., ATR-FTIR qualitative mineralogical analysis of playground soils from Galati city, SE Romania", Annals of the" Dunarea de Jos" University of Galati. Fascicle II, Mathematics, Physics, Theoretical Mechanics, 43(2, (2020) 141-146. doi: https://doi.org/10.35219/ann-ugal-math-phys-mec.2020.2.10.
14. Spiridon, C., Burada, A., Teodorof, L., Despina, C., Seceleanu- Odor, D., Tudor, M. and Ene, A., Chlorophyll a and total nutrients distribution from surface waters in Romanian MONITOX network in 2019 and 2020, Annals of the "Dunarea de Jos" University of Galati. Fascicle II, Mathematics, Physics, Theoretical Mechanics, 43(2, (2020) 184-189. doi: https://doi.org/10.35219/ann-ugal-math-phys-mec.2020.2.17.
15. Teodorof L., Burada A., Despina C., Seceleanu-Odor D., Spiridon C., Tiganus M., Tudor I.-M., Tudor M., Ene A., Zubcov E., Spanos T., Bogdevich O., Sediments quality assessment in terms of single and integrated indices from Romanian MONITOX network (2019 – 2020), Annals Dunarea de Jos Univ. Galati, Fasc. II. Mathematics, Physics, Theoretical Mechanics, 43(2) (2020) 175-183, doi: https://doi.org/10.35219/ann-ugal-math-phys-mec.2020.2.16.
16. Simona Moldovanu, Diana Stefanescu, Felicia Damian, Watermarking skin lesion digital color images based on channels, 24th International Conference on System Theory, Control and Computing (ICSTCC), DOI: 10.1109/ICSTCC50638.2020.9259631 ,2020 IEEE, pp. 933-936

Comunicări ştiinţifice prezentate la conferinţe internaţionale

1. Maria (Stan) Necula Dorin Bibicu Luminita Moraru
Backscattering by closely spaced scatterers using the K matrix data from an active array of N transceivers
16th International Conference on Sensors and Electronic Instrumentation Advances (SEIA' 2020), 23-25 September 2020. Porto, Portugal

2. S Moldovanu, F. Damian, L Moraru
An invisible DWT watermarking algorithm using noise removal with application to dermoscopic images"
9th Int'l Conference on Mathematical Modelling in Physical Sciences, September 7-10, 2020 , Tinos island, Greece

3, Moldovanu Simona, Moraru Luminița, Pana Lenuta
Brain Tissue Evaluation Based on Skeleton Shape and Similarity Analysis between Hemispheres
8th International Conference on Experiments / Process / System Modeling / Simulation / Optimization

4. BALLAST WATER MANAGEMENT IN THE BLACK SEA BASIN,
VALERIAN NOVAC, Luminita MORARU, Florin ONEA, Eugen RUSU
XXth International Multidisciplinary Scientific GeoConference Surveying, Geology and Mining, Ecology and Management – SGEM 2020, online, Rescheduled: 16 - 25 August, 2020

1. Simona Moldovanu, Felicia Anișoara Damian, Lenuța Pană, Luminița Moraru
Machine Learning and Artificial Intelligence for health monitoring
International Conference "Environmental Challenges in the Black Sea Basin: Impact on Human Health" Galati, Romania, September 23-26, 2020, SECTION 4. Health and environmental education, innovative solutions to improve scientific information dissemination, pp.47

2. Valerian Novac, Eugen Rusu, Luminița Moraru, Gheorghe Stăvărache
Queen Hind Naval Accident – Causative Factors Analysis
Scientific Conference of Doctoral Schools SCDS-UDJG "Perspectives and challenges in doctoral research", 8th Edition, "Dunarea de Jos" University of Galati, 18-19 of June 2020

3. Obreja Cristian-Dragoș, Luminița Moraru
Centerline Extraction using Vessel Segmentation over Retinal Images of the Human Eye
Scientific Conference of Doctoral Schools SCDS-UDJG "Perspectives and challenges in doctoral research", 8th Edition, "Dunarea de Jos" University of Galati, 18-19 of June 2020

4. Dorin Bibicu, Maria (Stan) Necula, Luminița Moraru, Cistian-Victor-Eugen Rusu
MULTIPLE CLOSELY SPACED SCATTERERS LOCATION BASED MUSIC VIA INVERSE SCATTERING AMPLITUDE ESTIMATION
Scientific Conference of Doctoral Schools SCDS-UDJG "Perspectives and challenges in doctoral research", 8th Edition, "Dunarea de Jos" University of Galati, 18-19 of June 2020

5. Lenuța Pană, Simona Moldoveanu, Luminița Moraru
DIFFERENTIATION OF BRAIN METASTASES IN MRI IMAGE USING THE FIRST- AND SECOND-ORDER STATISTICAL FEATURES
Scientific Conference of Doctoral Schools SCDS-UDJG "Perspectives and challenges in doctoral research", 8th Edition, "Dunarea de Jos" University of Galati, 18-19 of June 2020

6. Felicia Anișoara Damian, Simona Moldovanu, Luminița Moraru
Comparison of distance metric measures in differentiation of non-dermoscopic skin lesions

Scientific Conference of Doctoral Schools SCDS-UDJG "Perspectives and challenges in doctoral research", 8th Edition, "Dunarea de Jos" University of Galati, 18-19 of June 2020

7. **Ene Antoaneta**, Thomas Spanos, Elena Zubcov, Oleg Bogdevich, Liliana Teodorof, Laurentia Ungureanu, Igor Nicoara, Adrian Burada, Cristina Despina, Christina Xatzichristou, Natural radioactivity and risk to population in selected recreational and beach sites from Black and Aegean Seas in Romania and Greece, MONITOX International Conference "Environmental Toxicants in Freshwater and Marine Ecosystems in the Black Sea Basin", Kavala, GREECE, September 8th-11th, 2020, 33, S1.16, IL.B.1
8. **Ene Antoaneta**, Liviu Vodarici, Active measurement methods of indoor radon and thoron in selected spaces in Galati town, MONITOX International Conference "Environmental Toxicants in Freshwater and Marine Ecosystems in the Black Sea Basin", Kavala, GREECE, September 8th-11th, 2020,34, S1.17, IL.B.6
9. **Ene Antoaneta**, Eugenia Pascu, Iulian Racovita, Ionut Marin, Sveta Voda, Alina Apetrei (Tudorache), Oana Istrate, Daniela Dumitrita Padurariu (Sarbu), Monitoring outdoor radiation doses in areas of the Black Sea and Aegean Sea Basins, MONITOX International Conference "Environmental Toxicants in Freshwater and Marine Ecosystems in the Black Sea Basin", Kavala, GREECE, September 8th-11th, 2020, 35, S1.18, P.B.5
10. **Ene Antoaneta**, Florina Cristiana Caprita, Ana Pantelica, Alina Ceoromila, Investigation of major and trace elements in marine algae and filter paper with algae mass additions using SEM-EDX and PIXE, MONITOX International Conference "Environmental Toxicants in Freshwater and Marine Ecosystems in the Black Sea Basin", Kavala, GREECE, September 8th-11th, 2020, 83, S3.06, P.B.10
11. Gosav Steluta, **Antoaneta Ene**, ATR-FTIR method applied to identification of plastics, MONITOX International Conference "Environmental Toxicants in Freshwater and Marine Ecosystems in the Black Sea Basin", Kavala, GREECE, September 8th-11th, 2020, 84, S3.07, P.B.11
12. **Antoaneta Ene**, Elena Zubcov, Thomas Spanos, Oleg Bogdevich, Liliana Teodorof, Yuriy Denga, Marina Frontasyeva, Claudia Stihi, Ana Pantelică, Octavian Duliu, International interdisciplinary cooperation for monitoring of inorganic and radioactive toxicants in the Lower Danube Euroregion, Black and Aegean Seas Basins, International Conference "Environmental Challenges in the Black Sea Basin: Impact on Human Health", Galati, Romania, September 23-26, 2020, p.6
13. **Antoaneta Ene**, Ana Pantelica, Marina Frontasyeva, Florin Sloata, Low-background high resolution gamma-ray spectrometry applied for assessment of natural and artificial radioactivity of industrial soils in Danube River region (SE Romania) and health risk, International Conference "Environmental Challenges in the Black Sea Basin: Impact on Human Health", Galati, Romania, September 23-26, 2020, p.16
14. **Antoaneta Ene**, Carmen Lidia Chitescu, Eric Carmona, Gabriela Bahrim, Ecological risk assessment of pharmaceuticals in aquatic ecosystems, International Conference "Environmental Challenges in the Black Sea Basin: Impact on Human Health", Galati, Romania, September 23-26, 2020, p.22

15. **Antoaneta Ene**, Elena Zubcov, Thomas Spanos, Oleg Bogdevich, Liliana Teodorof, Corina Bocaneala, MONITOX health risk calculator and ICT tools for improved dissemination of scientific information in the Black Sea Basin, International Conference "Environmental Challenges in the Black Sea Basin: Impact on Human Health", Galati, Romania, September 23-26, 2020, p.42
16. **Antoaneta Ene**, Iulian Racovita, Andreea Reclaru, Ionut Marin, Real time monitoring data of radiation doses in Lower Danube Euroregion and South-eastern part of Romania, International Conference "Environmental Challenges in the Black Sea Basin: Impact on Human Health", Galati, Romania, September 23-26, 2020, p.43
17. **Antoaneta Ene**, Maria Cioroi, Daniela Dumitrita Padurariu (Sarbu), Investigation of surface water quality from Lower Danube Region, Galati County, International Conference "Environmental Challenges in the Black Sea Basin: Impact on Human Health", Galati, Romania, September 23-26, 2020, p.44
18. **Antoaneta Ene**, Eugenia Pascu, Mădălina Stăvărache, Granite slabs between radiation emission and design, International Conference "Environmental Challenges in the Black Sea Basin: Impact on Human Health", Galati, Romania, September 23-26, 2020, p. 46
19. Natalia Zubcov, Elena Zubcov, Nina Bagrin, **Antoaneta Ene**,Dumitru Bulat, Denis Bulat, Victor Ciornea, Lucia Bileţchi, Nivelul de acumulare al unor microelemente în peştii Cyprinidae, Percidae şi Esocidae din fl. Nistru, Materialele Simpozionului "Modificări funcţionale ale ecosistemelor acvatice în contextul impactului antropic şi al schimbărilor climatice", 06 noiembrie 2020, Chişinău, Republica Moldova,"Tipografia Centrală", 2020, ISBN 978-9975-151-97-9, pp 28-32
20. Sloata F., **Ene A.,** Determination of trace elements in soils located around a former chemical plant using XRF atomic technique, 8th Edition of Scientific Conference of Doctoral Schools SCDS-UDJG -Perspectives and challenges in doctoral research, Galați, Section 2: Advanced investigation methods in environment and biohealth, Universitatea "Dunărea de Jos" din Galați, Romania, 18-19 iunie 2020, Book of Abstracts, p.226
21. Arbanas (Moraru) Sorina-Simona, **Antoaneta Ene**, Nutrient stocks study in agroecosystems located near the steel industry, Galati, Romania, 8th Edition of Scientific Conference of Doctoral Schools SCDS-UDJG -Perspectives and challenges in doctoral research, Galați, Section 2: Advanced investigation methods in environment and biohealth, Universitatea "Dunărea de Jos" din Galați, Romania, 18-19 iunie 2020, prezentare orală, p. 10 din Program, p. 73 din Book of Abstracts, OP.2.8.
22. **Ene Antoaneta**, Sorina-Simona Arbanas (Moraru), Steluta Gosav, Florin Sloata, Magdalena Aflori, Vasile Basliu, Alina Cantaragiu, Assessment of mineralogical composition of cultivated soils impacted by iron and steel industry using combined advanced techniques, 8th Edition of Scientific Conference of Doctoral Schools SCDS-UDJG -Perspectives and challenges in doctoral research, Galați, Section 2: Advanced investigation methods in environment and biohealth, Universitatea "Dunărea de Jos" din Galați, Romania, 18-19 iunie 2020, prezentare orală, p. 10 din Program, p. 74 din Book of Abstracts, OP.2.9.
23. Căpriță Florina Cristiana, **Antoaneta Ene**, Analysis of some physical-mechanical properties of filter paper with the addition of algal biomass, 8th Edition of Scientific Conference of Doctoral Schools SCDS-UDJG -Perspectives and challenges in doctoral research, Galați, Section 2: Advanced investigation methods in environment and biohealth, Universitatea "Dunărea de Jos" din Galați, Romania, 18-19 iunie 2020, prezentare orală, Book of abstracts, OP.2.6 pp 71
24. **Ene Antoaneta,** Thomas Spanos, Elena Zubcov, Oleg Bogdevich, Liliana Teodorof, Laurentia Ungureanu, Igor Nicoara, Adrian Burada, Cristina Despina, Christina Xatzichristou, Natural radioactivity and risk to population in selected recreational and beach sites from Black and Aegean Seas in Romania and Greece, MONITOX International Conference "Environmental Toxicants in Freshwater and Marine Ecosystems in the Black Sea Basin", Kavala, GREECE, September 8^{th}-11^{th}, 2020, 33, S1.16, IL.B.1
25. **Ene Antoaneta**, Sorina-Simona Arbanas (Moraru), Florin Sloata, Review of assessment methodology used for soil and sediments pollution by heavy metals based on single and multiple complex indexes, MONITOX International Conference "Environmental Toxicants in Freshwater and Marine Ecosystems in the Black Sea Basin", Kavala, GREECE, September 8^{th}-11^{th}, 2020, 41, S1.24, P.B.6
26. Spanos Thomas, Nikolaos Mittas, Christina Chatzichristou, Sophia Mitkidou, Konstantinos Dermentzis, Nikolaos Kokkinos, Vilson Topi, Despina Selina Spanou, **Antoaneta Ene**, Oleg Bogdevich, Elena Zubcov, Liliana Teodorof, Evaluation of groundwater quality through environmetrics. The case of Nestos and Strymon River regions, Northern Greece, MONITOX International Conference "Environmental Toxicants in Freshwater and Marine Ecosystems in the Black Sea Basin", Kavala, GREECE, September 8^{th}-11^{th}, 2020, 43, S2.01, IL.A.2
27. **Antoaneta Ene,** Florin Sloata, Ana Pantelica, Oleg Bodgevich, Elena Culighin, Dana Iulia Moraru, Geta Szabo, Vasile Basliu, Quantification of heavy metals and trace elements in industrial materials and wastes by combined analytical techniques, International Conference "Environmental Challenges in the Black Sea Basin: Impact on Human Health", Galati, Romania, September 23-26, 2020, p.17
28. **Antoaneta Ene,** Carmen Lidia Chitescu, Eric Carmona, Gabriela Bahrim, Ecological risk assessment of pharmaceuticals in aquatic ecosystems, International Conference "Environmental Challenges in the Black Sea Basin: Impact on Human Health", Galati, Romania, September 23-26, 2020, p.22
29. Roman Corobov, Ilya Trombitsky, **Antoaneta Ene**, Assessment of pressures as the first step in economic valuation of changes in ecosystems services, International Conference "Environmental Challenges in the Black Sea Basin: Impact on Human Health", Galati, Romania, September 23-26, 2020, p.34
30. **Antoaneta Ene**, Elena Zubcov, Study on the dynamics of the Prut river flow and level in Romania, International Conference "Environmental Challenges in the Black Sea Basin: Impact on Human Health", Galati, Romania, September 23-26, 2020, p.41
31. **Antoaneta Ene**, Elena Zubcov, Thomas Spanos, Oleg Bogdevich, Liliana Teodorof, Corina Bocaneala, MONITOX health risk calculator and ICT tools for improved dissemination of scientific information in the Black Sea Basin, International Conference "Environmental Challenges in the Black Sea Basin: Impact on Human Health", Galati, Romania, September 23-26, 2020, p.42
32. **Antoaneta Ene**, Ana Pantelica, Factors influencing the variation of radon and thoron activity concentration in selected indoor spaces in Romania, International Conference "Environmental Challenges in the Black Sea Basin: Impact on Human Health", Galati, Romania, September 23-26, 2020, p.43

Citari MORARU L 2020

Optical soliton perturbation with improved nonlinear Schrödinger's equation in nano fibers
M Savescu, KR Khan, RW Kohl, L Moraru, A Yildirim, A Biswas
Journal of Nanoelectronics and Optoelectronics 8 (2), 208-220, 2013

Citat de:
Propagation properties of chirped optical similaritons with dual-power law nonlinearity
A Merabti, H Triki, F Azzouzi, Q Zhou, A Biswas… - Chaos, Solitons & Fractals, Volume 140, November 2020, 110158 - Elsevier

Breather solutions and breather-to-soliton conversions for the (2+ 1)-dimensional complex modified Korteweg-de Vries and Maxwell-Bloch equations
HQ Hao, RR Jia – Optik Volume 207, April 2020, 164334 - Elsevier

Optical soliton perturbation with spatio-temporal dispersion having Kerr law nonlinearity by the variational iteration method
OG Gaxiola, A Biswas, AK Alzahrani… - Revista Mexicana de Física 2020 - rmf.smf.mx, https://doi.org/10.31349/RevMexFis.66.404

Optical solitons in photonic nano waveguides with an improved nonlinear Schrödinger's equation
M Savescu, KR Khan, P Naruka, H Jafari, L Moraru, A Biswas
Journal of Computational and Theoretical Nanoscience 10 (5), 1182-1191, 2013

Citat de

Optical singular and dark solitons with Biswas–Arshed model by modified simple equation method
M Tahir, AU Awan – Optik Volume 202, February 2020, 163523, 2020 - Elsevier

[Optical solitons of (2+ 1)-dimensional nonlinear Schrödinger equation involving linear and nonlinear effects
M Matinfar, K Hosseini – Optik Volume 228, February 2021, 166110, 2020 - Elsevier

Localized waves and interaction solutions to an extended (3+1)-dimensional Kadomtsev–Petviashvili equation
HD Guo, TC Xia, WX Ma - Modern Physics Letters BVol. 34, No. 06, 2050076 (2020) - World Scientific

Analysis of solitonic pulse propagation in metamaterials implemented in photonic crystals
M Savescu, SB Qadri, K Khan - Journal of Modern Optics Volume 67, 2020 - Issue 9, 2020 - Taylor & Francis

Perturbation of dispersive shallow water waves with Rosenau-KdV-RLW equation and power law nonlinearity
P Razborova, L Moraru, A Biswas
Rom. J. Phys 59 (7-8), 658-676

Citat de
Bifurcation and travelling wave solutions for a (2+1)-dimensional KdV equation
AA Elmandouha, AG Ibrahim - Journal of Taibah University for Science Volume 14, 2020 - Issue 1, 2020 - Taylor & Francis

Solitary Wave Solutions of the Generalized Rosenau-KdV-RLW Equation
Z Avazzadeh, O Nikan, JAT Machado - Mathematics, 2020, Volume 8 Issue 9 10.3390/math8091601 - mdpi.com

An efficient computational approach for two-dimensional variant of nonlinear-dispersive model of shallow water wave
K Omrani, A Ghiloufi - Engineering with Computers, 2020, https://doi.org/10.1007/s00366-020-00967-3 - Springer

A new conservative finite difference scheme for the generalized Rosenau–KdV–RLW equation
X Wang, W Dai - Computational and Applied Mathematics, 39, Article number: 237, 2020 - Springer

A variety of exact solutions to (2+ 1)-dimensional schrödinger equation
M Younis, N Cheemaa, SA Mehmood… - Waves in Random and Complex Media
Volume 30, 2020 - Issue 3 - Taylor & Francis

Optical solitons with polynomial and triple power law nonlinearities and spatio-temporal dispersion
AH Bhrawy, AA Alshaery, EM Hilal, D Milovic, L Moraru, M Savescu, ...
Proc. Rom. Acad. Ser. A 15 (3), 235-240

Citat de

Structure of optical soliton solution for nonliear resonant space-time Schrödinger equation in conformable sense with full nonlinearity term
M Alabedalhadi, M Al-Smadi, S Al-Omari… - Physica Scripta, Volume 95, Number 10 - iopscience.iop.org

Conservation laws of coupled Klein-Gordon equations with cubic and power law nonlinearities
A Biswas, AH Kara, L Moraru, AH Bokhari, FD Zaman
Proceedings of the Romanian academy, Series A 15 (2), 123-129

Citat de

Lie symmetry analysis, conservation laws and analytical solutions for chiral nonlinear Schrödinger equation in (2+ 1)-dimensions
JJ Mao, SF Tian, TT Zhang, XJ Yan - /Nonlinear Analysis: Modelling and Control /Vol 25 No 3 (2020) / - zurnalai.vu.lt

The energy-preserving finite difference methods and their analyses for system of nonlinear wave equations in two dimensions
D Deng, D Liang - Applied Numerical Mathematics Volume 151, May 2020, Pages 172-198, 2020 - Elsevier

Thyroid nodule recognition based on feature selection and pixel classification methods
D Bibicu, L Moraru, A Biswas
Journal of digital imaging 26 (1), 119-128, 2013

Citat de

Lung nodule detection and classification based on geometric fit in parametric form and deep learning
SM Naqi, M Sharif, A Jaffar - Neural Computing and Applications volume 32, pages4629–4647, 2020 – Springer

Computer-aided Diagnosis of Melanoma: A Review of Existing Knowledge and Strategies
A Maiti, B Chatterjee, AS Ashour… - Current Medical Imaging, Volume 16, Number 7, 2020 - ingentaconnect.com

Detection of Thyroid Nodules with Ultrasound Images Based on Deep Learning
X Yu, H Wang, L Ma - Current Medical Imaging, Volume 16, Number 2, 2020 - ingentaconnect.com

Logistic regression analysis of texture features of thyroid calcification based on computed tomography images
By: Chen, Kexin; Chen, Jiaxing; Qian, Yijia; et al.
INTERNATIONAL JOURNAL OF CLINICAL AND EXPERIMENTAL MEDICINE Volume: 13 Issue: 1 Pages: 112-117 Published: 2020

Bright-dark combo optical solitons with non-local nonlinearity in parabolic law medium
Q Zhou, Q Zhu, Y Liu, P Yao, AH Bhrawy, L Moraru, A Biswas
Optoelectronics and Advanced Materials-Rapid Communications 8 (September-October 2014) Pagini
837-839

Citat de

Exact solutions and bifurcation for the resonant nonlinear Schrödinger equation with competing weakly nonlocal nonlinearity and fractional temporal evolution
Y Wang, WR Shan, X Zhou… Waves in Random and Complex Media, 2020, https://doi.org/10.1080/17455030.2019.1706013 - Taylor & Francis

Interaction phenomena between lump and solitary wave of a generalized (3+ 1)-dimensional variable-coefficient nonlinear-wave equation in liquid with gas bubbles
JG Liu, WH Zhu, Y He, YK Wu - Communications in Theoretical Physics, 72 085002, 2020 - iopscience.iop.org

Solitons in optical metamaterials by F-expansion scheme
G Ebadi, A Mojavir, JV Guzman, KR Khan, MF Mahmood, L Moraru, ...
Optoelectronics and Advanced Materials–Rapid Communications 8 (9-10), 828-832

Citat de

Complex traveling-wave and solitons solutions to the Klein-Gordon-Zakharov equations
A Houwe, S Abbagari, Y Salathiel, M Inc, SY Doka… - Results in Physics Volume 17, June 2020, 103127, 2020 – Elsevier

Traveling wave with beta derivative spatial-temporal evolution for describing the nonlinear directional couplers with metamaterials via two distinct methods
MF Uddin, MG Hafez, Z Hammouch… - Alexandria Engineering Journal
Volume 60, Issue 1, Pages 1055-1065, 2020 – Elsevier

Analysis of solitonic pulse propagation in metamaterials implemented in photonic crystals
M Savescu, SB Qadri, K Khan - Journal of Modern Optics Volume 67, 2020 - Issue 9, 2020 - Taylor & Francis

Exact solution of perturbed nonlinear Schrödinger equation using (G'/ G, 1/G)-expansion method
Wen, Y., Xie, Y.
2020, Pramana - Journal of Physics, 94(1),18

Social-Group-Optimization based tumor evaluation tool for clinical brain MRI of Flair/diffusion-weighted modality
N Dey, V Rajinikanth, F Shi, JMRS Tavares, L Moraru, KA Karthik, H Lin, ...
Biocybernetics and Biomedical Engineering 39 (3), 843-856, 2019

Citat de

Deep-learning framework to detect lung abnormality–A study with chest X-Ray and lung CT scan images
A Bhandary, GA Prabhu, V Rajinikanth… - Pattern Recognition Letters Volume 129, January 2020, Pages 271-278, 2020 – Elsevier

Active deep neural network features selection for segmentation and recognition of brain tumors using MRI images
MI Sharif, JP Li, MA Khan, MA Saleem - Pattern Recognition Letters Volume 129, January 2020, Pages 181-189, 2020 – Elsevier

A Customized VGG19 Network with Concatenation of Deep and Handcrafted Features for Brain Tumor Detection
V Rajinikanth, AN Joseph Raj, KP Thanaraj, GR Naik - Applied Sciences, Volume 10 Issue 10, 10.3390/app10103429 2020 - mdpi.com

A novel privacy-supporting 2-class classification technique for brain MRI images
S Devi, MN Sahoo, S Bakshi - Biocybernetics and Biomedical Engineering
Volume 40, Issue 3, July–September 2020, Pages 1022-1035, 2020 – Elsevier

An automated computer-aided diagnosis system for classification of MR images using texture features and gbest-guided gravitational search algorithm
R Shanker, M Bhattacharya - Biocybernetics and Biomedical Engineering, Volume 40, Issue 2, April–June 2020, Pages 815-8352020 – Elsevier

Kadry, S., Rajinikanth, V., Raja, N.S.M. et al. Evaluation of brain tumor using brain MRI with modified-moth-flame algorithm and Kapur's thresholding: a study. Evol. Intel. (2021). https://doi.org/10.1007/s12065-020-00539-w

Optical solitons in birefringent fibers with four-wave mixing for parabolic law nonlinearity
M Savescu, AH Bhrawy, EM Hilal, AA Alshaery, L Moraru, A Biswas
Optoelectronics and Advanced Materials-Rapid Communications 9 (January 2015), pp10-13

Citat de

Optical solitons for the Lakshmanan-Porsezian-Daniel model by collective variable method
AA Al Qarni, AA Alshaery, HO Bakodah - Results in Optics, Volume 1, November 2020, 100017 - Elsevier

Academic internal stakeholder condition: a comparative approach
L Moraru
Procedia-Social and Behavioral Sciences 69 (1), 54-72, 2012

Citat de

Systematic review of program evaluation in baccalaureate nursing programs
By: Al-Alawi, Reem; Alexander, Gregory Lynn
JOURNAL OF PROFESSIONAL NURSING Volume: 36 Issue: 4 Pages: 236-244 Published: JUL-AUG 2020

Optical soliton perturbation in magneto-optic waveguides with spatio-temporal dispersion
J Vega-Guzman, AA Alshaery, EM Hilal, AH Bhrawy, MF Mahmood, ...
Journal of Optoelectronics and Advanced Materials 16 (September-October 2014), Pagini 1063-1070

Citat de

Solitons in magneto–optic waveguides with Kudryashov's law of refractive index
EME Zayed, MEM Alngar, A Biswas, M Asma… - Chaos, Solitons & Fractals Volume 140, November 2020, 110129, 2020 – Elsevier

Solitons and conservation laws in magneto–optic waveguides having parabolic–nonlocal law of refractive index
EME Zayed, MEM Alngar, MM El–Horbaty, A Biswas… Physics Letters A, Volume 384, Issue 31, 5 November 2020, 126814, 2020 – Elsevier

A pen-picture of solitons and conservation laws in magneto-optic waveguides having quadratic-cubic law of nonlinear refractive index
M Asma, A Biswas, AH Kara, EME Zayed, P Guggilla… - Optik, Volume 223, December 2020, 165330- Elsevier

Solitions in magneto–optic waveguides with anti–cubic nonlinearity
EME Zayed, MEM Alngar, RMA Shohib, A Biswas… - Optik, Volume 222, November 2020, 165313- Elsevier

Solitons and conservation laws in magneto-optic waveguides with triple-power law nonlinearity
EME Zayed, MEM Alngar, A Biswas, AH Kara… - Journal of Optics volume 49, pages584–590(2020)- Springer

SOLITONS AND CONSERVATION LAWS IN MAGNETO–OPTIC WAVEGUIDES WITH GENERALIZED KUDRYASHOV'S EQUATION
EME Zayed, MEM Alngar, A Biswas, AH Kara… - Chinese Journal of Physics, Volume 69, February 2021, Pages 186-205- Elsevier

Solitons in magneto–optic waveguides with parabolic law nonlinearity
EME Zayed, MEM Alngar, MM El–Horbaty, A Biswas… - OptikVolume 222, November 2020, 165314- Elsevier

Optical solitons with Biswas–Arshed equation by sine–Gordon equation method
Y Yıldırım – Optik, Volume 223, December 2020, 165622- Elsevier

Solitons and conservation laws in magneto-optic waveguides with polynomial law nonlinearity
EME Zayed, MM El-Horbaty, MEM Alngar, A Biswas… - Optik Volume 223, December 2020, 165397- Elsevier

On a study of symmetries and conservation laws of a class of time fractional Schrödinger equations with nonlocal nonlinearities
Q Hussain, FD Zaman, AH Bokhari, AH Kara – Optik Volume 224, December 2020, 165619- Elsevier

Solitons in magneto–optic waveguides with quadratic–cubic nonlinearity
EME Zayed, RMA Shohib, MM El–Horbaty, A Biswas… - Physics Letters A Volume 384, Issue 25, 7 September 2020, 126456– Elsevier

Optical solitons in multi-dimensions with spatio-temporal dispersion and non-Kerr law nonlinearity
Y Xu, Z Jovanoski, A Bouasla, H Triki, L Moraru, A Biswas
Journal of Nonlinear Optical Physics & Materials 22 (03), 1350035, 2013

Citat de

Soliton solutions of the Sasa–Satsuma equation in the monomode optical fibers including the beta-derivatives
K Hosseini, M Mirzazadeh, JF Gómez-Aguilar – Optik Volume 224, December 2020, 165425- Elsevier

Optical solitons with Biswas–Arshed equation by sine–Gordon equation method
Y Yıldırım – Optik Volume 223, December 2020, 165622- Elsevier

Cubic-quartic optical soliton perturbation having four laws non-linearity with a prolific integration algorithm
EME Zayed, M El-Horbaty, MEM Alngar – Optik Volume 220, October 2020, 165121- Elsevier

Biswas–Arshed equation with the beta time derivative: Optical solitons and other solutions
K Hosseini, M Mirzazadeh, M Ilie, JF Gómez-Aguilar – Optik Volume 217, September 2020, 164801- Elsevier

On a study of symmetries and conservation laws of a class of time fractional Schrödinger equations with nonlocal nonlinearities
Q Hussain, FD Zaman, AH Bokhari, AH Kara – Optik Volume 224, December 2020, 165619- Elsevier

Abundant closed form wave solutions to some nonlinear evolution equations in mathematical physics
Miah, M.M., Seadawy, A.R., Ali, H.M.S., Akbar, M.A.
2020, Journal of Ocean Engineering and Science 5(3), pp. 269-278

Cardiac cycle phase estimation in 2-D echocardiographic images using an artificial neural network
D Bibicu, L Moraru
IEEE Transactions on Biomedical Engineering 60 (5), 1273-1279

Citat de

Novel approach for automatic mid-diastole frame detection in 2D echocardiography sequences for performing planimetry of the mitral valve orifice
M Faraji, H Behnam, MN Cherloo, M Shojaeifard - IET Image Processing, Volume 14, Issue 12, 16 October 2020, p. 2890 – 2900, 2020 - IET

Singular optical solitons in birefringent nano-fibers
M Savescu, Q Zhou, L Moraru, A Biswas, SP Moshokoa, M Belic
Optik 127 (20), 8995-9000

Citat de

Soliton solutions of the Sasa–Satsuma equation in the monomode optical fibers including the beta-derivatives
K Hosseini, M Mirzazadeh, JF Gómez-Aguilar – Optik, Volume 224, December 2020, 165425- Elsevier

Soliton solutions of higher-order nonlinear schrödinger equation (NLSE) and nonlinear kudryashov's equation
S Arshed, A Arif – Optik Volume 209, May 2020, 164588- Elsevier

Investigation of different wave structures to the generalized third-order nonlinear Scrödinger equation
K Hosseini, MS Osman, M Mirzazadeh, F Rabiei – Optik Volume 206, March 2020, 164259- Elsevier

Dark optical solitons to the Biswas–Arshed equation with high order dispersions and absence of self-phase modulation
K Hosseini, M Mirzazadeh, F Rabiei, HM Baskonus… - Optik Volume 209, May 2020, 164576- Elsevier

Cubic-quartic optical soliton perturbation having four laws non-linearity with a prolific integration algorithm
EME Zayed, M El-Horbaty, MEM Alngar – Optik Volume 220, October 2020, 165121- Elsevier

Biswas–Arshed equation with the beta time derivative: Optical solitons and other solutions
K Hosseini, M Mirzazadeh, M Ilie, JF Gómez-Aguilar – Optik Volume 217, September 2020, 164801- Elsevier

Novel solutions of Biswas-Arshed equation by newly Φ6-model expansion method
N Sajid, G Akram – Optik Volume 211, June 2020, 164564- Elsevier

Conservation laws for optical solitons with Chen–Lee–Liu equation
AH Kara, A Biswas, Q Zhou, L Moraru, SP Moshokoa, M Belic
Optik 174, 195-198, 2018

Citat de

Optical soliton perturbation with Chen–Lee–Liu equation
Y Yıldırım, A Biswas, M Asma, M Ekici, BP Ntsime… Optik Volume 220, October 2020, 165177- Elsevier

Mathematical model of propagation pulse in optical fiber with power nonlinearities
NA Kudryashov – Optik Volume 212, June 2020, 164750- Elsevier

A unified analysis of exact traveling wave solutions for the fractional-order and integer-order Biswas–Milovic equation: via bifurcation theory of dynamical …
B Zhang, W Zhu, Y Xia, Y Bai - Qual. Theory Dyn. Syst. 19, 11 (2020). https://doi.org/10.1007/s12346-020-00352-x- Springer

Optical solitons with Biswas–Arshed equation by sine–Gordon equation method
Y Yıldırım - Optik, Volume 223, December 2020, 165622 - Elsevier

On a study of symmetries and conservation laws of a class of time fractional Schrödinger equations with nonlocal nonlinearities
Q Hussain, FD Zaman, AH Bokhari, AH Kara - Optik, Volume 224, December 2020, 16561 – Elsevier

Numerical investigation of the Adomian-based methods with W-shaped optical solitons of Chen-Lee-Liu equation
A Mohammed, H Bakodah - Physica Scripta, Volume 96, Number 3, 2020 - iopscience.iop.org

Investigation of optical solitons in birefringent polarization preserving fibers with four-wave mixing effect
M Younis, M Bilal, Shafqat-ur-Rehman… - International Journal of Modern Physics BVol. 34, No. 11, 2050113, 2020 - World Scientific

Characterization of myocardium muscle biostructure using first order features
S Moldovanu, L Moraru, D Bibicu
Dig J Nanomater Bios 6 (3), 1357-1365

Citat de

Computer-aided Diagnosis of Melanoma: A Review of Existing Knowledge and Strategies
A Maiti, B Chatterjee, AS Ashour… - Current Medical Imaging, Volume 16, Number 7, 2020, pp. 835-854(20)- ingentaconnect.com

Optical solitons in photonic crystal fibers with spatially inhomogeneous nonlinearities
Q Zhou, Q Zhu, C Wei, J Lu, L Moraru, A Biswas
Optoelectronics and Advanced Materials-Rapid Communications 8 (November2014), Pagini 995-997

Citat de

Soliton solutions of the Sasa–Satsuma equation in the monomode optical fibers including the beta-derivatives
K Hosseini, M Mirzazadeh, JF Gómez-Aguilar - Optik, Volume 224, December 2020, 165425 – Elsevier

Dark optical solitons to the Biswas–Arshed equation with high order dispersions and absence of self-phase modulation
K Hosseini, M Mirzazadeh, F Rabiei, HM Baskonus… - Optik, Volume 209, May 2020, 164576 – Elsevier

Optical solitons and modulation instability of the resonant nonlinear Schrödinger equations in (3+ 1)-dimensions
K Hosseini, R Ansari, A Zabihi, A Shafaroody… - Optik, Volume 209, May 2020, 164584- Elsevier

Cubic-quartic optical soliton perturbation having four laws non-linearity with a prolific integration algorithm
EME Zayed, M El-Horbaty, MEM Alngar - Optik, Volume 220, October 2020, 165121- Elsevier

Biswas–Arshed equation with the beta time derivative: Optical solitons and other solutions
K Hosseini, M Mirzazadeh, M Ilie, JF Gómez-Aguilar - Optik, Volume 217, September 2020, 164801 – Elsevier

Optimization of breast lesion segmentation in texture feature space approach
L Moraru, S Moldovanu, A Biswas
Medical engineering & physics 36 (1), 129-135, 2014

Citat de

Segmentation of breast ultrasound image with semantic classification of superpixels
Q Huang, Y Huang, Y Luo, F Yuan, X Li - Medical Image Analysis Volume 61, April 2020, 101657- Elsevier

Lung nodule detection and classification based on geometric fit in parametric form and deep learning
SM Naqi, M Sharif, A Jaffar - Neural Computing and Applications, 32, pages4629–4647, 2020 – Springer

Kriti, Virmani, J. & Agarwal, R. A Review of Segmentation Algorithms Applied to B-Mode Breast Ultrasound Images: A Characterization Approach. Arch Computat Methods Eng (2020). https://doi.org/10.1007/s11831-020-09469-3

Evolutionary intelligence for breast lesion detection in ultrasound images: A wavelet modulus maxima and SVM based approach
TP Shiji, S Remya, R Lakshmanan… - Journal of Intelligent & Fuzzy Systems, vol. 38, no. 5, pp. 6279-6290, 2020- content.iospress.com

Measurements of gross alpha and beta activity in drinking water from Galati region, Romania
V Pintilie, A Ene, LP Georgescu, L Moraru, C Iticescu
Romanian Reports in Physics 68 (3), 1208-1220, 2016

Citat de

Radiogenic quality assessment of ground and riverine water samples collected from Indian Sundarbans
N Naskar, S Lahiri, S Mitra, P Chaudhuri - Environmental Research, Volume 185, June 2020, 109407 – Elsevier

Ho, P.L., Hung, L.D., Minh, V.T. et al. Simultaneous Determination of Gross Alpha/Beta Activities in Groundwater for Ingestion Effective Dose and its Associated Public Health Risk Prevention. Sci Rep 10, 4299 (2020). https://doi.org/10.1038/s41598-020-61203-y

Pintilie-Nicolov, V., Georgescu, P.L., Iticescu, C. et al. The assessment of the annual effective dose due to ingestion of radionuclides from drinking water consumption: calculation methods. J Radioanal Nucl Chem (2020). https://doi.org/10.1007/s10967-020-07438-5

Bright and dark soliton solutions of the generalized Zakharov–Kuznetsov–Benjamin–Bona–Mahony nonlinear evolution equation
Ö Güner, A Bekir, L Moraru, A Biswas, Proc. Rom. Acad. Ser. A 16, 422-429, 2015

Citat de

Soliton solutions of the Sasa–Satsuma equation in the monomode optical fibers including the beta-derivatives
K Hosseini, M Mirzazadeh, JF Gómez-Aguilar - Optik, Volume 224, December 2020, 165425 – Elsevier

Investigation of different wave structures to the generalized third-order nonlinear Scrödinger equation
K Hosseini, MS Osman, M Mirzazadeh, F Rabiei - Optik, Volume 206, March 2020, 164259 – Elsevier

Dark optical solitons to the Biswas–Arshed equation with high order dispersions and absence of self-phase modulation
K Hosseini, M Mirzazadeh, F Rabiei, HM Baskonus… - Optik, Volume 209, May 2020, 164576 – Elsevier

Optical solitons and modulation instability of the resonant nonlinear Schrödinger equations in (3+ 1)-dimensions
K Hosseini, R Ansari, A Zabihi, A Shafaroody… - Optik, Volume 209, May 2020, 164584 – Elsevier

New extended generalized Kudryashov method for solving three nonlinear partial differential equations
EME Zayed, RMA Shohib, MEM Alngar - Nonlinear Analysis: Modelling and Control /Vol 25 No 4 (2020) / - zurnalai.vu.lt

Biswas–Arshed equation with the beta time derivative: Optical solitons and other solutions
K Hosseini, M Mirzazadeh, M Ilie, JF Gómez-Aguilar - Optik, Volume 217, September 2020, 164801 – Elsevier

Soliton solutions of higher-order nonlinear schrödinger equation (NLSE) and nonlinear kudryashov's equation
S Arshed, A Arif - Optik, Volume 209, May 2020, 164588 – Elsevier

On a family of (2+ 1)-dimensional Zakharov-Kuznetsov modified equal width equations
MS Bruzon, E Recio, TM Garrido… - AIP Conference Proceedings > Volume 2293, Issue 1 > 10.1063/5.0027730, 2020 - aip.scitation.org

Texture anisotropy technique in brain degenerative diseases
By: Moraru, Luminita; Moldovanu, Simona; Dimitrievici, Lucian Traian; et al.
NEURAL COMPUTING & APPLICATIONS Volume: 30 Issue: 5 Pages: 1667-1677 Published: SEP 2018

Citat de

Multi Level Directional Cross Binary Patterns New handcrafted descriptor for SVM-based texture classification
By: Kas, M.; Khadiri, I. El; Merabet, Y. El; et al.
ENGINEERING APPLICATIONS OF ARTIFICIAL INTELLIGENCE Volume: 94 Article Number: 103743 Published: SEP 2020

A reliable framework for accurate brain image examination and treatment planning based on early diagnosis support for clinicians
By: Fernandes, Steven Lawrence; Tanik, U. John; Rajinikanth, V; et al.
NEURAL COMPUTING & APPLICATIONS Volume: 32 Issue: 20 Special Issue: SI Pages: 15897-15908 Published: OCT 2020

Optical pressure sensors based plantar image segmenting using an improved fully convolutional network
D Wang, Z Li, N Dey, AS Ashour, L Moraru, A Biswas, F Shi
Optik 179, 99-114, 2019

Citat de

Simplified inverse filter tracked affective acoustic signals classification incorporating deep convolutional neural networks
Y Kuang, Q Wu, Y Wang, N Dey, F Shi, RG Crespo… - Applied Soft Computing, Volume 97, Part A, December 2020, 106775- Elsevier

Roy, N.D., Biswas, A. Fast and robust retinal biometric key generation using deep neural nets. Multimed Tools Appl 79, 6823–6843 (2020). https://doi.org/10.1007/s11042-019-08507-y

Dutta, A., Mondal, A., Dey, N. et al. Vision Tracking: A Survey of the State-of-the-Art. SN COMPUT. SCI. 1, 57 (2020). https://doi.org/10.1007/s42979-019-0059-z

Deep-segmentation of plantar pressure images convolutional neural networks
By: Wang, Dan; Li, Zairan; Dey, Nilanjan; et al.
BIOCYBERNETICS AND BIOMEDICAL ENGINEERING Volume: 40 Issue: 1 Pages: 546-558 Published: JAN-MAR 2020

Gaussian mixture model for texture characterization with application to brain DTI images
L Moraru, S Moldovanu, LT Dimitrievici, N Dey, AS Ashour, F Shi, SJ Fong, ...
Journal of advanced research 16, 15-23, 2019

Citat de

L. Tulczyjew, M. Kawulok and J. Nalepa, "Unsupervised Feature Learning Using Recurrent Neural Nets for Segmenting Hyperspectral Images," in IEEE Geoscience and Remote Sensing Letters, doi: 10.1109/LGRS.2020.3013205.

Region adaptive scheduling for time-dependent processes with optimal use of machine dynamics
By: Han, Yanjun; Zhu, Wu-Le; Zhang, Lei; et al.
INTERNATIONAL JOURNAL OF MACHINE TOOLS & MANUFACTURE Volume: 156 Article Number: 103589 Published: SEP 2020

A Survey on Computer-Aided Diagnosis of Brain Disorders through MRI Based on Machine Learning and Data Mining Methodologies with an Emphasis on Alzheimer Disease Diagnosis and the Contribution of the Multimodal Fusion
By: Lazli, Lilia; Boukadoum, Mounir; Mohamed, Otmane Ait
APPLIED SCIENCES-BASEL Volume: 10 Issue: 5 Article Number: 1894 Published: MAR 2020, https://doi.org/10.3390/app10051894 2020 - mdpi.com

Utilizing Statistical Information for Interval Analysis: A Method for Analyzing the Interval Uncertainty of Line-of-Sight Measurement Error of Space-Borne Observation Platforms
By: Ding, Wenzhe; Li, Xinhong; Yang, Hong; et al.
IEEE ACCESS Volume: 8 Pages: 67868-67886 Published: 2020

Multi-Resolution Intrinsic Texture Geometry-Based Local Binary Pattern for Texture Classification
By: Alpaslan, Nuh; Hanbay, Kazim
IEEE ACCESS Volume: 8 Pages: 54415-54430 Published: 2020

Roy, N.D., Biswas, A. Fast and robust retinal biometric key generation using deep neural nets. Multimed Tools Appl 79, 6823–6843 (2020). https://doi.org/10.1007/s11042-019-08507-y

Fast and robust retinal biometric key generation using deep neural netsRoy, N.D., Biswas, A.
2020, Multimedia Tools and Applications, 79(9-10), pp. 6823-6843

Dempster-shafer fusion for effective retinal vessels' diameter measurement
L Moraru, CD Obreja, N Dey, AS Ashour
Soft Computing Based Medical Image Analysis, 149-160, 2018

Citat de

Maji, D., Sekh, A.A. Automatic Grading of Retinal Blood Vessel in Deep Retinal Image Diagnosis. J Med Syst 44, 180 (2020). https://doi.org/10.1007/s10916-020-01635-1

Segmentation of Cerebrovascular Anatomy from TOF-MRA Using Length-Strained Enhancement and Random Walker
R Xiao, C Chen, H Zou, Y Luo… - BioMed Research International, Volume 2020, Article ID 9347215, 16 pages
https://doi.org/10.1155/2020/9347215, 2020 -.hindawi.com

Roy, N.D., Biswas, A. Fast and robust retinal biometric key generation using deep neural nets. Multimed Tools Appl 79, 6823–6843 (2020). https://doi.org/10.1007/s11042-019-08507-y

Edge-based structural similarity analysis in brain MR images
S Moldovanu, L Moraru, A Biswas
Journal of Medical Imaging and Health Informatics 6 (2), 539-546, 2016

Citat de

Lin D., Rajinikanth V., Lin H. (2021) Hybrid Image Processing-Based Examination of 2D Brain MRI Slices to Detect Brain Tumor/Stroke Section: A Study. In: Priya E., Rajinikanth V. (eds) Signal and Image Processing Techniques for the Development of Intelligent Healthcare Systems. Springer, Singapore. https://doi.org/10.1007/978-981-15-6141-2_2

Sindhu V., Singaravelan M., Ramadevi J., Vinitha S., Hemapriyaa S. (2021) Bat Algorithm Aided System to Extract Tumor in Flair/T2 Modality Brain MRI Slices. In: Dey N., Rajinikanth V. (eds) Applications of Bat Algorithm and its Variants. Springer Tracts in Nature-Inspired Computing. Springer, Singapore. https://doi.org/10.1007/978-981-15-5097-3_9

Level set method coupled with energy image features for brain MR image segmentation
MV Punga, R Gaurav, L Moraru
Biomedical Engineering/Biomedizinische Technik 59 (3), 219-229, 2014

Citat de

The improved level set evolution for ultrasound image segmentation in the high-intensity focused ultrasound ablation therapy
W Zhao, X Xu, P Liu, F Xu, L He - Optik, Volume 202, February 2020, 163669 - Elsevier

Apparent diffusion coefficient of the normal human brain for various experimental conditions
L Moraru, L Dimitrievici
AIP conference proceedings 1796 (1), 040005, 2017

Citat de

Ultra-early neurologic outcome prediction of out-of-hospital cardiac arrest survivors using combined diffusion-weighted imaging findings and quantitative analysis of apparent diffusion coefficient
JS Park, YN In, YH You, JH Min, HJ Ahn, IS Yoo… - Resuscitation, Volume 148, 1 March 2020, Pages 39-48 – Elsevier

Diffusion processes modeling in magnetic resonance imaging
S Morozov, K Sergunova, A Petraikin, E Akhmad… - Insights into Imaging (2020) 11:60
https://doi.org/10.1186/s13244-020-00863-w - Springer

Cerebrospinal Fluid Volume Proportion Using Magnetic Resonance Imaging as a Predictor of Poor Neurological Outcome in Survivors of Out-of-Hospital Cardiac …
Y You, JH Min, JS Park, YC Cho, WJ Jeong… - Therapeutic Hypothermia and Temperature Management.ahead of printhttp://doi.org/10.1089/ther.2020.00082020 - liebertpub.com

Apparent Diffusion Coefficient Value of Normal Brain in Relation to Age and Gender in Adults
NA Mohammed, DHS Abdullah Ann Med Health Sci Res. 2020;10:799-803., 2020 - amhsr.org

Optical solitons in multiple-core couplers
AA Alshaery, EM Hilal, MA Banaja, SA Alkhateeb, L Moraru, A Biswas
Journal of optoelectronics and advanced materials 16 (May-June 2014), 750-758

Citat de

Optical solitons with Biswas–Arshed equation by sine–Gordon equation method
Y Yıldırım - Optik, Volume 223, December 2020, 165622 – Elsevier

Solitons in nonlinear directional couplers with optical metamaterials by first integral method
S Arshed, A Biswas, AK Alzahrani, MR Belic - Optik, Volume 218, September 2020, 165208 – Elsevier

On a study of symmetries and conservation laws of a class of time fractional Schrödinger equations with nonlocal nonlinearities
Q Hussain, FD Zaman, AH Bokhari, AH Kara - Optik, Volume 224, December 2020, 165619 - Elsevier

Multi-resolution analysis of wavelet like soliton solution of KdV equation
B Bhosale, L Moraru, BS Ahmed, D Riser, A Biswas
Proceedings of the Romanian Academy. Series A. Mathematics, Physics, Technical Sciences, Information Science, Volumul 15, Numărul 1, Pagini 18-26, 2014

Citat de

Diabetic plantar pressure analysis using image fusion
By: Cao, Luying; Dey, Nilanjan; Ashour, Amira S.; et al.
MULTIMEDIA TOOLS AND APPLICATIONS Volume: 79 Issue: 15-16 Pages: 11213-11236 Published: APR 2020

Optical solitons in dual-core couplers
MA Banaja, SA Alkhateeb, AA Alshaery, EM Hilal, AH Bhrawy, L Moraru, ...
Wulfenia Journal 21, 366-380, 2014

Citat de

Analytical and numerical treatments for the Kaup–Newell dynamical equation
AA Al Qarni, AA Alshaery, HO Bakodah, MA Banaja… - Results in Physics, Volume 19, December 2020, 103461 - Elsevier

Moraru L., Praisler M., Marin S.A., Bentea C.C. (2013) The Academic Profession: Quality Assurance, Governance, Relevance, and Satisfaction. In: Kehm B., Teichler U. (eds) The Academic Profession in Europe: New Tasks and New Challenges. The Changing Academy – The Changing Academic Profession in International Comparative Perspective, vol 5. Springer, Dordrecht. http://doi-org-443.webvpn.fjmu.edu.cn/10.1007/978-94-007-4614-5_8

Citat de

Challenges in developing the academic profession in the Western Balkans
S Pavlin, Z Sušanj - European Journal of Education, CEPS Journal 10 (2020) 2, S. 77-100 - Wiley Online Library

Transnational mobility of academics: Some academic impacts | [Transnacionalna mobilnost akademikov: Nekateri akademski učinki]
Alemu, S.K.
2020, Center for Educational Policy Studies Journal, 10(2), pp. 77-100

De-Noising Ultrasound Images of Colon Tumors Using Daubechies Wavelet Transform
L Moraru, S Moldovanu, MC Nicolae
AIP Conference Proceedings 1387 (1), 294-299, 2011

Citat de

Diagnosis of colorectal cancer based on imperialist competitive algorithm
B Ratna Raju, GN Swamy… - Journal of Intelligent & Fuzzy Systems, vol. 39, no. 4, pp. 5359-5368, 2020, Published: 21 October2020 - content.iospress.com

Short-term forecast methods of electricity generation by solar power plants and its classification.
By: Tyunkov, D. A.; Gritsay, A. S.; Potapov, V., I; et al.
Conference: Mechanical Science and Technology Update (MSTU) Conference Location: Omsk State Tech Univ, Omsk, RUSSIA Date: APR 23-24, 2019
MECHANICAL SCIENCE AND TECHNOLOGY UPDATE (MSTU 2019) Book Series: Journal of Physics Conference Series Volume: 1260 Article Number: 052033 Published: 2019 (NERAPORTATA)

Ancient pottery analysis using SEM image processing
L Moraru, F Szendrei
European Journal of Science and Theology 6 (2), 69-78, 2010

Citat de

Vlase, D., Diaconescu, D., Bunoiu, V. et al. Analytical investigations of adornment pieces from Susani (Timiş County, Romania). J Therm Anal Calorim 141, 1067–1074 (2020). https://doi.org/10.1007/s10973-020-09878-3

SMARTPHONE COLORIMETRY OF FINE-PASTE WARE IN HINDU-BUDDHIST RITUALS
C Sirisathitkul, K Ekmataruekul, Y Sirisathitkul… European Journal of Science and Theology, June 2020, Vol.16, No.3, 179-186- ejst.tuiasi.ro

Influence of porosity on lipid preservation in the wall of archaeological pottery
By: Dreeu, L.; Horgnies, M.; Binder, D.; et al.
ARCHAEOMETRY Volume: 61 Issue: 5 Pages: 1081-1096 Published: OCT 2019 (NERAPORTAT)

Study concerning the electrical resistivity of some liquid metals in ultrasonic field
L Moraru
Czechoslovak journal of physics 49 (2), 253-261, 1999

Citat de

Effects of magnetic field melt temperature on the refinement of eutectic and primary phases in Al-Fe binary alloy melt by measuring thermopower
Q Lan, Q Le, R Guo, J Zhang - Journal of Crystal Growth, Volume 542, 15 July 2020, 125653 - Elsevier

Optical solitons with Kudryashov's model by a range of integration norms
Y Yıldırım, A Biswas, M Ekici, O Gonzalez-Gaxiola, S Khan, H Triki, ...
Chinese Journal of Physics 66, 660-672, 2020

Citat de

Highly dispersive optical solitons of equation with various polynomial nonlinearity law
NA Kudryashov - Chaos, Solitons & Fractals, Volume 140, November 2020, 110202- Elsevier

A variety of new traveling and localized solitary wave solutions of a nonlinear model describing the nonlinear low-pass electrical transmission lines
S El-Ganaini, H Kumar - Chaos, Solitons & Fractals, Volume 140, November 2020, 110218 – Elsevier

Optical solitons with Biswas–Arshed equation by sine–Gordon equation method
Y Yıldırım - Optik, Volume 223, December 2020, 165622- Elsevier

New extended direct algebraic method for the resonant nonlinear Schrödinger equation with Kerr law nonlinearity
Vahidi, J., Zabihi, A., Rezazadeh, H., Ansari, R. 2020, Optik, 165936

In oceanography, acoustics and hydrodynamics: an extended coupled (2+ 1)-dimensional Burgers system
XY Gao, YJ Guo, WR Shan - Chinese Journal of Physics, 2020 - Elsevier

Firefly algorithm and its variants in digital image processing: A comprehensive review
N Dey, J Chaki, L Moraru, S Fong, XS Yang
Applications of Firefly Algorithm and Its Variants, 1-28, 2020

Citat de

An improved Marine Predators algorithm with fuzzy entropy for multi-level thresholding: Real world example of COVID-19 CT image segmentation
M Abd Elaziz, AA Ewees, D Yousri, HSN Alwerfali… - IEEE Access (Volume: 8), Page(s): 125306 - 125330, 2020 - ieeexplore.ieee.org
DOI: 10.1109/ACCESS.2020.3007928

A Multilevel Image Thresholding Based on Hybrid Salp Swarm Algorithm and Fuzzy Entropy
HSN Alwerfali, M Abd Elaziz, MAA Al-Qaness… - IEEE Access (Volume: 7) Page(s): 181405 - 181422, 2020 - ieeexplore.ieee.org
DOI: 10.1109/ACCESS.2019.2959325

Improved Artificial Bee Colony Using Sine-Cosine Algorithm for Multi-Level Thresholding Image Segmentation
AA Ewees, M Abd Elaziz, MAA Al-Qaness… - IEEE Access (Volume: 8) Page(s): 26304 - 26315, 2020 - ieeexplore.ieee.org
DOI: 10.1109/ACCESS.2020.2971249

An enhanced firefly algorithm using pattern search for solving optimization problems
F Wahid, MS Zia, RNB Rais, M Aamir, UM Butt… - IEEE Access (Volume: 8), Page(s): 148264 - 148288, 2020 - ieeexplore.ieee.org
DOI: 10.1109/ACCESS.2020.3015206

A new metaheuristic approach based on orbit in the multi-objective optimization of wireless sensor networks
R Özdağ, M Canayaz - Wireless Networks, Wireless Netw (2020). https://doi.org/10.1007/s11276-020-02454-52020 - Springer

Multi-Level Image Thresholding Based on Modified Spherical Search Optimizer and Fuzzy Entropy
HS Naji Alwerfali, MAA Al-qaness, M Abd Elaziz… - Entropy, 2020, 22(3), 328; https://doi.org/10.3390/e22030328 - mdpi.com

Threshold selection for classification of MR brain images by clustering method
S Moldovanu, C Obreja, L Moraru
AIP conference proceedings 1694 (1), 040005, 2015

Citat de

Pathological Cluster Identification by Unsupervised Analysis in 3,822 UK Biobank Cardiac MRIs
Q Zheng, H Delingette, K Fung… - Front Cardiovasc Med. 2020; 7: 539788.- ncbi.nlm.nih.gov

A survey over image quality analysis techniques for brain MR images
L Moraru, S Moldovanu, CD Obreja
International Journal of Radiology 2 (1), 24-28, 2015

Citat de

Optimal co-clinical radiomics: Sensitivity of radiomic features to tumour volume, image noise and resolution in co-clinical T1-weighted and T2-weighted …
S Roy, TD Whitehead, JD Quirk, A Salter… - EBioMedicine, 2020, Volume 59, September 2020, 102963 - Elsevier

Texture analysis of parasitological liver fibrosis images
By: Moraru, Luminita; Moldovanu, Simona; Culea-Florescu, Anisia-Luiza; et al.
MICROSCOPY RESEARCH AND TECHNIQUE Volume: 80 Issue: 8 Pages: 862-869 Published: AUG 2017

Citat de

Toward automated classification of monolayer versus few-layer nanomaterials using texture analysis and neural networks
By: Aleithan, Shrouq H.; Mahmoud-Ghoneim, Doaa
SCIENTIFIC REPORTS Volume: 10 Issue: 1 Article Number: 20663 Published: DEC 26 2020

Computer-aided Diagnosis of Melanoma: A Review of Existing Knowledge and Strategies
By: Maiti, Ananjan; Chatterjee, Biswajoy; Ashour, Amira S.; et al.
CURRENT MEDICAL IMAGING Volume: 16 Issue: 7 Pages: 835-854 Published: 2020

Hematoxylin and Eosin (HE) Stained Liver Portal Area Segmentation Using Multi-Scale Receptive Field Convolutional Neural Network
By: Xiao, Qi-En; Chung, Pau-Choo; Tsai, Hung-Wen; et al.
Conference: 1st IEEE International Conference on Artificial Intelligence Circuits and Systems (AICAS) Location: Hsinchu, TAIWAN Date: MAR 18-20, 2019
Sponsor(s): IEEE; IEEE Circuits & Syst Soc; Minist Sci & Technol; Natl Chung Hsing Univ; Semicond Mfg & Design Al Edge
IEEE JOURNAL ON EMERGING AND SELECTED TOPICS IN CIRCUITS AND SYSTEMS Volume: 9 Issue: 4 Pages: 623-634 Published: DEC 2019 (NERAPORTAT)

Targeted Delivery of an siRNA/PNA Hybrid Nanocomplex Reverses Carbon Tetrachloride-Induced Liver Fibrosis
By: Jain, Akshay; Barve, Ashutosh; Zhao, Zhen; et al.
ADVANCED THERAPEUTICS Volume: 2 Issue: 8 Article Number: 1900046 Published: AUG 2019 (NERAPORTAT)

Classification of melanoma through fused color features and deep neural networks
Maiti, A., Shekhargiri, H., Chatterjee, B., (...), Shi, F., Dey, N.
2020 Frontiers in Artificial Intelligence and Applications 323, pp. 86-96

THE ACADEMIC PROFESSION IN EUROPE: NEW TASKS AND NEW CHALLENGES
CAPITOL: ACADEMIC PROFESSION: QUALITY ASSURANCE, GOVERNANCE, RELEVANCE AND SATISFACTION, autori Prof. Dr. Luminita Moraru, Prof. Dr. Mirela Praisler, Asist. Prof. Dr. Simona Alecu Marin, Lecturer Dr. Cristina Corina Bentea (Dunărea de Jos" University, Galaţi), Editors: Barbara M. Kehm; Ulrich Teichler, Auflage 2012, 180 Seiten, 2012 Springer Netherlands, pg. 141-162, ISBN 978-94-007-4613-8, KNV-Titelnr.: 33103205

Citat de

Theoretical, practical and hybrid ex-academics: Career transfer stories
P Kuoppakangas, K Suomi, E Pekkola… - European Educational Research Journal, 2020 - journals.sagepub.com,
https://doi.org/10.1177/1474904120915026

Pekşen, S., Queirós, A., Flander, A. et al. The Determinants of External Engagement of Hard Scientists: A Study of Generational and Country Differences in Europe. High Educ Policy (2020). https://doi.org/10.1057/s41307-020-00214-w

Constructing academic identity in the European higher education space: Experiences of early career educational researchers
S Djerasimovic, M Villani - European Educational Research Journal, 2020 - journals.sagepub.com
https://doi.org/10.1177/1474904119867186

Challenges in developing the academic profession in the Western Balkans
S Pavlin, Z Sušanj - European Journal of Education, 2020 - Wiley Online Library, https://doi.org/10.1111/ejed.12427

Have you heard about X?":(Mis) management of mortality in academia
KA Małecka - Death studies, 2020 - Taylor & Francis, https://doi.org/10.1080/07481187.2020.1830888

The academic profession in North Macedonia: A never ending transition
O Spasovski, S Pecakovska - European Journal of Education, 2020 - Wiley Online Library,
https://doi.org/10.1111/ejed.12419

Professional Support Staff at Higher Education Institutions: Navigating Ambiguities in Hybrid Roles
M Ryttberg - 2020 - diva-portal.org

Implementation of quality assurance systems in academic staff perspective–an overview
L Moraru, M Praisler, S Marin, C Bentea
ACADEMIC WORK AND CAREERS IN EUROPE: TRENDS, CHALLENGES, PERSPECTIVES Book Series: Changing Academy-The Changing Academic Profession in International Comparative Perspective Volume: 12 Pages: 151-176 Published: 2015,

Citat de

Everlasting friends and enemies? Finnish university personnel's perceptions of internal quality assurance in 2010 and 2017
J Overberg, T Ala-Vähälä Scandinavian Journal of Educational Research Volume 64, 2020 - Issue 5, Taylor & Francis, https://doi.org/10.1080/00313831.2019.1596977

Performance Funding and Management in Higher Education: The Autonomy Paradox and Failures in Accountability
S Mizrahi - Public Performance & Management Review, 2020 - Taylor & Francis, https://doi.org/10.1080/15309576.2020.1806087

Ultrasound action on strength properties of polycrystalline metals
L Moraru
Universitatea" Dunărea de Jos" din Galați, 2006

Citat de

Ultrasonic vibration-assisted laser engineered net shaping of Inconel 718 parts: Effects of ultrasonic frequency on microstructural and mechanical properties
H Wang, Y Hu, F Ning, W Cong - Journal of Materials Processing technology Volume 276, February 2020, 116395, - Elsevier

Optical soliton perturbation with Kudryashov's equation by semi–inverse variational principle
A Biswas, M Asma, P Guggilla, L Mullick, L Moraru, M Ekici, AK Alzahrani, ...
Physics Letters A 384 (33), 126830, 2020

Citat de

Variational principle and approximate solution for the generalized Burgers-Huxley equation with fractal derivative
KJ Wang - Fractals, 2020 - World Scientific, https://doi.org/10.1142/S0218348X21500444

Optical solitons of the model with arbitrary refractive index
NA Kudryashov - Optik, Volume 224, December 2020, 165767 - Elsevier

Highly dispersive optical solitons in birefringent fibers with four forms of nonlinear refractive index by three prolific integration schemes
Y Yıldırım, A Biswas, M Ekici, EME Zayed, S Khan, L Moraru, AK Alzahrani, ...
Optik 220, 165039, 2020

Citat de

Optical solitons with Biswas–Arshed equation by sine–Gordon equation method
Y Yıldırım - Optik, Volume 223, December 2020, 165622- Elsevier

Dark, singular and straddled optical solitons in birefringent fibers with generalized anti–cubic nonlinearity
EME Zayed, MEM Alngar, A Biswas, M Ekici, L Moraru, AK Alzahrani, ...
Physics Letters A, 126417, 2020

Citat de

Cubic-quartic optical soliton perturbation having four laws non-linearity with a prolific integration algorithm
EME Zayed, M El-Horbaty, MEM Alngar - Optik, Volume 220, October 2020, 165121 - Elsevier

An efficient local binary pattern based plantar pressure optical sensor image classification using convolutional neural networks
C Wang, D Li, Z Li, D Wang, N Dey, A Biswas, L Moraru, RS Sherratt, ...
Optik 185, 543-557, 2019

Citat de

A deep-learning approach for foot-type classification using heterogeneous pressure data
J Chae, YJ Kang, Y Noh - Sensors 2020, 20(16), 4481; https://doi.org/10.3390/s20164481 - mdpi.com

A reliable framework for accurate brain image examination and treatment planning based on early diagnosis support for clinicians
By: Fernandes, Steven Lawrence; Tanik, U. John; Rajinikanth, V; et al.
NEURAL COMPUTING & APPLICATIONS Volume: 32 Issue: 20 Special Issue: SI Pages: 15897-15908 Published: OCT 2020

Multifractal analysis of ceramic pottery SEM images in Cucuteni-Tripolye culture
E Dănilă, L Moraru, N Dey, AS Ashour, F Shi, SJ Fong, S Khan, A Biswas
Optik 164, 538-546, 2018

Citat de

Discrimination analysis of coal and gangue using multifractal properties of optical texture
C Fu, F Lu, G Zhang - International Journal of Coal Preparation and utilization, 2020 - Taylor & Francis, https://doi.org/10.1080/19392699.2020.1789974

A review on pore-fractures in tectonically deformed coals
S Yu, J Bo, L Ming, H Chenliang, X Shaochun - Fuel, Volume 278, 15 October 2020, 118248 - Elsevier

Natural radioactivity in drinking water from Galati and Vrancea areas, Romania
V Pintilie, LP Georgescu, L Moraru, A Ene, C Iticescu
Radiat Appl 1 (3), 165-170, 2016

Citat de

The assessment of the annual effective dose due to ingestion of radionuclides from drinking water consumption: calculation methods
V Pintilie-Nicolov, PL Georgescu, C Iticescu, Dana Iulia Moraru & Adelina Georgiana Pintilie - J Radioanal Nucl Chem (2020). https://doi.org/10.1007/s10967-020-07438-5- Springer

Optical solitons with differential group delay for Kudryashov's model by the auxiliary equation mapping method
EME Zayed, RMA Shohib, A Biswas, M Ekici, L Moraru, AK Alzahrani, ...
Chinese Journal of Physics 67, 631-645, 2020

Citat de

Optical solitons of the model with arbitrary refractive index
NA Kudryashov - Optik, Volume 224, December 2020, 165767 - Elsevier

SURVEY OF FOREST COVER CHANGES BY MEANS OF MULTIFRACTAL ANALYSIS
E Danila, H Valentin, PL Georgescu, L Moraru
CARPATHIAN JOURNAL OF EARTH AND ENVIRONMENTAL SCIENCES 14 (1), 51-60, 2019

Citat de

Individual Tree Detection from UAV Imagery Using Hölder Exponent
E Belcore, A Wawrzaszek, E Wozniak, N Grasso… - Remote Sens. 2020, 12(15), 2407; https://doi.org/10.3390/rs12152407 - mdpi.com

Linking deforestation patterns to soil types: A multifractal approach
A Urgilez-Clavijo, J de la Riva, David Andrés Rivas-Tabares Ana M. Tarquis- European Journal of …, 2020 - Wiley Online Library, **https://doi.org/10.1111/ejss.13032**

Monitoring of gross alpha and beta activity in drinking water from Galati during 2013-2014
V Pintilie, LP Georgescu, L Moraru, A Ene, C Iticescu
Annals of "Dunarea de Jos" University of Galati, Fascicle II. Mathematics, Physics, Theoretical mechanics, 2016

Citat de

Pintilie-Nicolov, V., Georgescu, P.L., Iticescu, C. et al. The assessment of the annual effective dose due to ingestion of radionuclides from drinking water consumption: calculation methods. J Radioanal Nucl Chem (2020). https://doi.org/10.1007/s10967-020-07438-5 - Springer

Solitons and conservation laws in magneto-optic waveguides with polynomial law nonlinearity
EME Zayed, MM El-Horbaty, MEM Alngar, A Biswas, AH Kara, L Moraru, ...
Optik 223, 165397, 2020

Citat de

Zayed, E.M.E., Alngar, M.E.M., Biswas, A. et al. Solitons and conservation laws in magneto-optic waveguides with triple-power law nonlinearity. J Opt 49, 584–590 (2020). https://doi.org/10.1007/s12596-020-00650-2

Colored video analysis in wireless capsule endoscopy: a survey of state-of-the-art
AS Ashour, N Dey, WS Mohamed, JG Tromp, RS Sherratt, F Shi, L Moraru
Current medical imaging 16 (9), 1074-1084

Citat de

Detection of abnormality in wireless capsule endoscopy images using fractal features
S Jain, A Seal, A Ojha, O Krejcar, J Bureš… - Computers in Biology and Medicine Volume 127, December 2020, 104094- Elsevier

Resonant optical soliton perturbation with full nonlinearity and time-dependent coefficients by trial equation method
A Biswas, Y Yildirim, E Yasar, Q Zhou, L Moraru, AS Alshomrani, MR Belic
Journal of Optoelectronics and Advanced Materials 21 (3-4), 213-221

Citat de

New generalized φ6-model expansion method and its applications to the (3+ 1) dimensional resonant nonlinear Schrödinger equation with parabolic law nonlinearity
EME Zayed, AG Al-Nowehy - Optik, Volume 214, July 2020, 164702 - Elsevier

Fragmented plant leaf recognition: Bag-of-features, fuzzy-color and edge-texture histogram descriptors with multi-layer perceptron
By: Chaki, Jyotismita; Dey, Nilanjan; Moraru, Luminita; et al.
OPTIK Volume: 181 Pages: 639-650 Published: 2019

Citat de

Multi-Resolution Intrinsic Texture Geometry-Based Local Binary Pattern for Texture Classification
By: Alpaslan, Nuh; Hanbay, Kazim
IEEE ACCESS Volume: 8 Pages: 54415-54430 Published: 2020

Tree species identification based on the fusion of bark and leaves
By: Zhao, Yafeng; Gao, Xuan; Hu, Junfeng; et al.
MATHEMATICAL BIOSCIENCES AND ENGINEERING Volume: 17 Issue: 4 Pages: 4018-4033 Published: 2020

Computer-aided Diagnosis of Melanoma: A Review of Existing Knowledge and Strategies
By: Maiti, Ananjan; Chatterjee, Biswajoy; Ashour, Amira S.; et al.
CURRENT MEDICAL IMAGING Volume: 16 Issue: 7 Pages: 835-854 Published: 2020

Efficient and Automated Herbs Classification Approach Based on Shape and Texture Features using Deep Learning
By: Muneer, Amgad; Fati, Suliman Mohamed
IEEE ACCESS Volume: 8 Pages: 196747-196764 Published: 2020

Color-based template selection for detection of gastric abnormalities in video endoscopy
By: Ali, Hussam; Sharif, Muhammad; Yasmin, Mussarat; et al.
BIOMEDICAL SIGNAL PROCESSING AND CONTROL Volume: 56 Article Number: 101668 Published: FEB 2020

Leaf Image Recognition Based on Bag of Features
By: Zhang, Yaonan; Cui, Jing; Wang, Zhaobin; et al.
APPLIED SCIENCES-BASEL Volume: 10 Issue: 15 Article Number: 5177 Published: AUG 2020

Deep convolutional neural network based plant species recognition through features of leaf
By: Bisen, Dhananjay
MULTIMEDIA TOOLS AND APPLICATIONS: OCT 2020, **DOI:** 10.1007/s11042-020-10038-w

Study concerning the electrical resistivity of some liquid metals in ultrasonic field
By: Moraru, L
CZECHOSLOVAK JOURNAL OF PHYSICS Volume: 49 Issue: 2 Pages: 253-261 Published: FEB 1999

Citat de

Effects of melt temperature on the magnetic treated refinement of eutectic and primary phases in Al-Fe binary alloy melt by measuring thermopower
By: Lan, Qing; Le, Qichi; Guo, Ruizhen; et al.
JOURNAL OF CRYSTAL GROWTH Volume: 542 Article Number: 125653 Published: JUL 15 2020

Social-Group-Optimization based tumor evaluation tool for clinical brain MRI of Flair/diffusion-weighted modality
N Dey, V Rajinikanth, F Shi, JMRS Tavares, L Moraru, KA Karthik, H Lin, ...
Biocybernetics and Biomedical Engineering 39 (3), 843-856, 2019

Citat de

Deep-learning framework to detect lung abnormality - A study with chest X-Ray and lung CT scan images
By: Bhandary, Abhir; Prabhu, G. Ananth; Rajinikanth, V; et al.
PATTERN RECOGNITION LETTERS Volume: 129 Pages: 271-278 Published: JAN 2020

Active deep neural network features selection for segmentation and recognition of brain tumors using MRI images
By: Sharif, Muhammad Irfan; Li, Jian Ping; Khan, Muhammad Attique; et al.
PATTERN RECOGNITION LETTERS Volume: 129 Pages: 181-189 Published: JAN 2020

An automated computer-aided diagnosis system for classification of MR images using texture features and gbest-guided gravitational search algorithm
By: Shanker, Ravi; Bhattacharya, Mahua
BIOCYBERNETICS AND BIOMEDICAL ENGINEERING Volume: 40 Issue: 2 Pages: 815-835 Published: APR-JUN 2020

A Customized VGG19 Network with Concatenation of Deep and Handcrafted Features for Brain Tumor Detection
By: Rajinikanth, Venkatesan; Raj, Alex Noel Joseph; Thanaraj, Krishnan Palani; et al.
APPLIED SCIENCES-BASEL Volume: 10 Issue: 10 Article Number: 3429 Published: MAY 2020

A novel privacy-supporting 2-class classification technique for brain MRI images
Associated Data
By: Devi, Swagatika; Sahoo, Manmath Narayan; Bakshi, Sambit
BIOCYBERNETICS AND BIOMEDICAL ENGINEERING Volume: 40 Issue: 3 Pages: 1022-1035 Published: JUL-SEP 2020

Social Group Optimization-Assisted Kapur's Entropy and Morphological Segmentation for Automated Detection of COVID-19 Infection from Computed Tomography Images
By: Dey, Nilanjan; Rajinikanth, V; Fong, Simon James; et al.
COGNITIVE COMPUTATION Volume: 12 Issue: 5 Pages: 1011-1023 Published: SEP 2020

Dual feature selection and rebalancing strategy using metaheuristic optimization algorithms in X-ray image datasets
J Li, S Fong, L Liu, N Dey, AS Ashour, L Moraru
Multimedia Tools and Applications 78 (15), 20913-20933, 2019

Citat de

COVID-19 image classification using deep features and fractional-order marine predators algorithm
By: Sahlol, Ahmed T.; Yousri, Dalia; Ewees, Ahmed A.; et al.
SCIENTIFIC REPORTS Volume: 10 Issue: 1 Article Number: 15364 Published: SEP 21 2020

Developing two heuristic algorithms with metaheuristic algorithms to improve solutions of optimization problems with soft and hard constraints: An application to nurse rostering problems
By: Chen, Ping-Shun; Zeng, Zhi-Yang
APPLIED SOFT COMPUTING Volume: 93 Article Number: 106336 Published: AUG 2020

Solving patient referral problems by using bat algorithm
By: Yao, Huan-Chung; Chen, Pei-Jarn; Kuo, Yu-Ting; et al.
TECHNOLOGY AND HEALTH CARE Volume: 28 Supplement: 1 Pages: S433-S442 Published: 2020

An effective neural network model for lung nodule detection in CT images with optimal fuzzy model
Veronica, B.K.J.
Multimedia Tools and Applications 79(19-20), pp. 14291-143112020

Mass detection and classification in breast ultrasound image using K-means clustering algorithm
S Moldovanu, L Moraru
2010 3rd International Symposium on Electrical and Electronics Engineering (ISEEE), 2010

Citat de

Hybridized Machine Learning based Fractal Analysis Techniques for Breast Cancer Classification
M Swain, S Kisan, JM Chatterjee, M Supramaniam… -, (IJACSA) International Journal of Advanced Computer Science and Applications,
Vol. 11, No. 10, 2020 expert.taylors.edu.my

Standalone functional CAD system for multi-object case analysis in hepatic disorders
By: Moraru, Luminita; Bibicu, Dorin; Biswas, Anjan
COMPUTERS IN BIOLOGY AND MEDICINE Volume: 43 Issue: 8 Pages: 967-974 Published: SEP 1 2013

Citat de

Diabetic plantar pressure analysis using image fusion
By: Cao, Luying; Dey, Nilanjan; Ashour, Amira S.; et al.
MULTIMEDIA TOOLS AND APPLICATIONS Volume: 79 Issue: 15-16 Pages: 11213-11236 Published: APR 2020

Dark, singular and straddled optical solitons in birefringent fibers with generalized anti-cubic nonlinearity
By: Zayed, Elsayed M. E.; Alngar, Mohamed E. M.; Biswas, Anjan; et al.
PHYSICS LETTERS A Volume: 384 Issue: 20 Article Number: 126417 Published: JUL 16 2020

Citat de

Optical soliton solutions for the generalized Kudryashov equation of propagation pulse in optical fiber with power nonlinearities by three integration algorithms
By: Zayed, Elsayed M. E.; Alngar, Mohamed E. M.
MATHEMATICAL METHODS IN THE APPLIED SCIENCES, 2020 DOI: 10.1002/mma.6736

Cubic-quartic optical soliton perturbation having four laws non-linearity with a prolific integration algorithm
Zayed, E.M.E., El-Horbaty, M., Alngar, M.E.M. 2020 Optik, 220,165121

Feature Selection of Non-Dermoscopic Skin Lesion Images for Nevus and Melanoma Classification
By: Damian, Felicia Anisoara; Moldovanu, Simona; Dey, Nilanjan; et al.
COMPUTATION Volume: 8 Issue: 2 Article Number: 41 Published: JUN 2020

Citat de

Genetic algorithm-based initial contour optimization for skin lesion border detection
By: Ashour, Amira S.; Nagieb, Reham Mohamed; El-Khobby, Heba A.; et al.
MULTIMEDIA TOOLS AND APPLICATIONS 2020, DOI: 10.1007/s11042-020-09792-8

Resonant optical soliton perturbation with full nonlinearity and time-dependent coefficients by trial equation method
By: Biswas, Anjan; Yildirim, Yakup; Yasar, Emrullah; et al.
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS Volume: 21 Issue: 3-4 Pages: 213-221 Published: MAR-APR 2019

Citat de

New generalized 0 6-model expansion method and its applications to the (3+1) dimensional resonant nonlinear Schr?dinger equation with parabolic law nonlinearity
By: Zayed, Elsayed M. E.; Al-Nowehy, Abdul-Ghani
OPTIK Volume: 214 Article Number: 164702 Published: JUL 2020

Citari ISI 2020 ENE A.

Ene A. 97 citări

1.Harry Harmens, DA Norris, Katrina Sharps, Gina Mills, Renate Alber, Yulia Aleksiayenak, Oleg Blum, S-M Cucu-Man, Maria Dam, Ludwig De Temmerman, Antoaneta Ene, **JA Fernández, Javier Martinez-Abaigar, Marina Frontasyeva, Barbara Godzik, Zvonka Jeran, Pranvera Lazo, Sébastien Leblond, Siiri Liiv, SH Magnússon, B Maňkovská, G Pihl Karlsson, Juha Piispanen, Jarmo Poikolainen, Jesús Miguel Santamaria, Mitja Skudnik, Z Spiric, Trajce Stafilov, Eiliv Steinnes, Claudia Stihi, Ivan Suchara, Lotti Thöni, Radu Todoran, Lilyana Yurukova, Heavy metal and nitrogen concentrations in mosses are declining across Europe whilst some "hotspots" remain in 2010, 200 pp. 93-104 (May 2015)**

1. Abdusamadzoda D, Abdushukurov DA, Duliu OG, Zinicovscaia I, Yushin NS, Frontasyeva MV. **Investigations of the Atmospheric Deposition of Major and Trace Elements in Western Tajikistan by Using the Hylocomium splendens Moss as Bioindicators**. Archives of environmental contamination and toxicology. 2020 Jan 1;78(1):60-7**.**
2. Baldantoni D, De Nicola F, Alfani A. **Potentially toxic element gradients in remote, residential, urban and industrial areas, as highlighted by the analysis of Quercus ilex leaves.** Urban Forestry & Urban Greening. 2020 Jan 1;47:126522.
3. Koroleva Y, Napreenko M, Baymuratov R, Schefer R. **Bryophytes as a bioindicator for atmospheric deposition in different coastal habitats (a case study in the Russian sector of the Curonian Spit, South-Eastern Baltic)**. International Journal of Environmental Studies. 2020 Jan 2;77(1):152-62.
4. Kapusta P, Godzik B. **Temporal and Cross-Regional Variability in the Level of Air Pollution in Poland—A Study Using Moss as a Bioindicator**. Atmosphere. 2020 Feb;11(2):157.
5. Godzik B. **Use of Bioindication Methods in National, Regional and Local Monitoring in Poland—Changes in the Air Pollution Level over Several Decades**. Atmosphere. 2020 Feb;11(2):143.
6. Trujillo-González JM, Zapata-Muñoz YL, Torres-Mora MA, García-Navarro FJ, Jiménez-Ballesta R. **Assessment of urban environmental quality through the measurement of lead in bryophytes: case study in a medium-sized city**. Environmental Geochemistry and Health. 2020 Mar 9:1-9.
7. Elvira NJ, Medina NG, Leo M, Cala V, Estébanez B. **Copper Content and Resistance Mechanisms in the Terrestrial Moss Ptychostomum capillare: A Case Study in an Abandoned Copper Mine in Central Spain**. Archives of environmental contamination and toxicology. 2020 79, pages 49–59(2020

8. Bohdálková L, Novák M, Krachler M, Míková J, Chrastný V, Veselovský F, Voldřichová P, Pacherová P, Komárek A, Přechová E. Cadmium contents of vertically and horizontally deposited winter precipitation in Central Europe: Spatial distribution and long-term trends**. Environmental Pollution. 2020** 265(Pt B):114949.
9. Kyllönen K, Vestenius M, Anttila P, Makkonen U, Aurela M, Wängberg I, Mastromonaco MN, Hakola H. **Trends and source apportionment of atmospheric heavy metals at a subarctic site during 1996–2018.** Atmospheric Environment. 2020 May 31: Volume 236, 117644.
10. Hu R, Zhou X, Wang Y, Fang Y. **Survey of atmospheric heavy metal deposition in Suqian using moss contamination**. Human and Ecological Risk Assessment: An International Journal. 2020 Aug 8;26(7):1795-809.
11. Barandovski L, Stafilov T, Šajn R, Frontasyeva M, Bačeva Andonovska K**. Atmospheric Heavy Metal Deposition in North Macedonia from 2002 to 2010 Studied by Moss Biomonitoring Technique.** Atmosphere. 2020 Sep;11(9):929.
12. Nelson SA, Aherne J. **Decadal Changes in Trace Metal Concentrations in Upland Headwater Lakes**. Bulletin of Environmental Contamination and Toxicology. 2020 Sep 11: 105(5):679-684.
13. Jevšenak J, Skudnik M. **A random forest model for basal area increment predictions from national forest inventory data.** Forest Ecology and Management.;479:118601.
14. Vergel K, Zinicovscaia I, Yushin N, Gundorina S. **Assessment of atmospheric deposition in Central Russia using moss biomonitors, neutron activation analysis and GIS technologies.** Journal of Radioanalytical and Nuclear Chemistry.: 325, pages 807–816(2020).
15. Stafilov T, Barandovski L, Šajn R, Bačeva Andonovska K. **Atmospheric Mercury Deposition in Macedonia from 2002 to 2015 Determined Using the Moss Biomonitoring Technique.** Atmosphere. 2020 Dec;11(12):1379.
16. Le Roux G, Hansson SV, Claustres A, Binet S, De Vleeschouwer F, Gandois L, Mazier F, Simonneau A, Teisserenc R, Allen D, Rosset T. **Trace metal legacy in mountain environments: a view from the Pyrenees Mountains**. Biogeochemical Cycles: Ecological Drivers and Environmental Impact. 2020 Feb 10:191-206.
17. Meyer C., Leblond S., Jacquemin B., Lequy E., **Métaux, pollution de l'air et santé-Les mousses, des alliées originales en épidémiologie.** MS-Medecine Sciences**,** 2020 ; 36(4) : 376–381.

2. H Harmens, G Mills, F Hayes, D Norris, the participants of the ICP Vegetation - Air pollution and vegetation: ICP Vegetation annual report 2010/2011 - NERC/Centre for Ecology & Hydrology (80)

1. Manisalidis I, Stavropoulou E, Stavropoulos A, Bezirtzoglou E. **Environmental and Health Impacts of Air Pollution: A Review.** Frontiers in Public Health. 2020; 8:14. DOI: 10.3389/fpubh.2020.00014.
2. Stafilov T, Barandovski L, Šajn R, Bačeva Andonovska K. **Atmospheric Mercury Deposition in Macedonia from 2002 to 2015 Determined Using the Moss Biomonitoring Technique**. Atmosphere. 2020 Dec;11(12):1379.

. A Ene, A Bosneaga, L Georgescu - Determination of heavy metals in soils using XRF technique - Rom. Journ. Phys 2010 Vol. 55. Issue 7-8, pages 815-820

1. Salih Z, Aziz F. **Heavy Metal Accumulation in Dust and Workers' Scalp Hair as a Bioindicator for Air Pollution from a Steel Factory**. Polish Journal of Environmental Studies. 2020 Feb 13;29(2):1805-13. (**102).**
2. Talabi AT, Odunaike KO, Akinyemi LP, Bashiru BO. **Investigation for heavy metals in river waters in the federal capital territory, North Central of Nigeria**. International Journal of Energy and Water Resources. 2020 Mar 16:1-7. **(4**, pages 213–219 (2020)).
3. Moustafa M, Alamri S, Al-Emam A, Alghamdi H, Shati A, Alrumman S, Sulayli A, Al-Khatani M, Abbas A. **Biological, Physical and Chemical Properties of Nanosilver Particles Collected from Soil in Asir, Saudi Arabia**. Arabian Journal for Science and Engineering. 2020:1-2.
4. Wijayanti I, Benjakul S, Sookchoo P. **Preheat-Treatment and Bleaching Agents Affect Characteristics of Bio-calcium from Asian Sea Bass (Lates calcarifer) Backbone**. Waste and Biomass Valorization. 2020:1-2.
5. Kanwar VS, Sharma A, Srivastav AL, Rani L**. Phytoremediation of toxic metals present in soil and water environment: a critical review**. Environmental Science and Pollution Research. 2020 :1-26 27, pages 44835–44860 (2020).
6. YUSUF A, Nuraddeen A. **ASSESSMENT OF SELECTED HEAVY METALS IN DRINKING WATER CONSUMED WITHIN KATSINA METROPOLIS**. FUDMA JOURNAL OF SCIENCES. 2020 Sep 30;4(3):531-537.
7. Mahalik G. **Studies on the Effect of Pollution on Avenue Plants in Different Heavy Traffic Area of Bhubaneswar, Odisha, India.** Indian Journal of Natural Sciences Vol.10 / Issue 60 2020, 26351- 26355.
8. Mahalik G. **Comparative Study of the Effect of Organic Fertilizer and Chemical Fertilizer on Brinjal Plant (Solanum melongena L.)**, Indian Journal of Natural Sciences, Vol.10 / Issue 60 / June / 2020, ISSN: 0976 – 0997.
9. Abdulrashid Y, Abdurrahman N, Abdullahi K, Shehu AA. **Impact of Water Treatment Processes on Selected Heavy Metals Concentrations in Drinking Water Within Katsina Metropolis.** International Research Journal of Science and Technology. 2020;2(1):336-42.
10. Nejres, A.M., Mohamed, S.K., **Assessment of environmental pollution with heavy metals in the soil of Mosul city**, Indian Journal of Environmental Protection 40(3), pp. 312-320, 2020.

4. C Stihi, C Radulescu, G Busuioc, IV Popescu, A Gheboianu, A Ene - Studies on accumulation of heavy metals from substrate to edible wild mushrooms - Romanian Journal of Physics 2011, Volume 56, Issue 1-2, Page 257-264 (2011) (77).

1. Sulaiman N, Zubairi SI, Sani NA, Kasim ZM. **The Efficacy of Treated Water from Water Filtration Machines for Safe Drinking Water Supply in Bandar Baru Bangi and Kajang, Selangor**. Journal of Food Quality. 2020, 9 pages | https://doi.org/10.1155/2020/3536420.
2. Karami H, Shariatifar N, Nazmara S, Moazzen M, Mahmoodi B, Mousavi Khaneghah A. **The Concentration and Probabilistic Health Risk of Potentially Toxic Elements (PTEs) in Edible Mushrooms (Wild and Cultivated) Samples Collected from Different Cities of Iran**. Biological Trace Element Research. 2020 Apr 20:1-2. Volume 199 (1).
3. Radziemska M, Gusiatin ZM, Kowal P, Bęś A, Majewski G, Jeznach-Steinhagen A, Mazur Z, Liniauskienė E, Brtnický M. **Environmental impact assessment of risk elements from railway transport with the use of pollution indices, a biotest and bioindicators**. Human and Ecological Risk Assessment: An International Journal. 2020 Mar 7:1-24.
4. Nnorom IC, Eze SO, Ukaogo PO. **Mineral contents of three wild-grown edible mushrooms collected from forests of south eastern Nigeria: An evaluation of bioaccumulation potentials and dietary intake risks**. Scientific African. 2020 Jul 1;8:e00163.
5. **Chen HX, Chen Y, Li S, Zhang W, Zhang Y, Gao S, Li N, Tao L, Wang Y. Trace elements determination and health risk assessment of Tricholoma matsutake from Yunnan Province, China.** Journal of Consumer Protection and Food Safety. 2020 Jun;15(2):153-62.
6. Adebiyi AO, Adeyemi FP. **Bioaccumulation of Heavy Metals in the Fruiting Bodies of Four Edible Mushrooms Collected From Polluted Areas in Akure, Ondo State, Nigeria.** EAS Journal of Nutrition and Food Sciences, ISSN: 2663-1873 (Print) & ISSN: 2663-7308 (Online).
7. Nakaona, L., Maseka, K.K., Hamilton, E.M., Watts, M.J., **Using human hair and nails as biomarkers to assess exposure of potentially harmful elements to populations living near mine waste dumps**, Environmental Geochemistry and Health 42(4), pp. 1197-1209.
8. Chen, H.-X., Chen, Y., Li, S., (...), Tao, L., Wang, Y., **Trace elements determination and health risk assessment of Tricholoma matsutake from Yunnan Province**, China, J Consum Prot Food Saf 15, 153–162. 2020.

5. H Harmens, D Norris, G Mills, the participants of the moss survey - Heavy metals and nitrogen in mosses: spatial patterns in 2010/2011 and long-term temporal trends in Europe - NERC/Centre for Ecology & Hydrology (2013)

1. Kapusta P, Godzik B. **Temporal and Cross-Regional Variability in the Level of Air Pollution in Poland—A Study Using Moss as a Bioindicator**. Atmosphere. 2020 Feb;11(2):157.
2. Kolon M, Kopeć M, Wojtuń B, Samecka-Cymerman A, Mróz L, Wąsowicz P, Rajsz A, Kempers AJ. **Sanionia uncinata, Racomitrium lanuginosum and Salix herbacea as ecological indicators of metals in Iceland**. Ecological Indicators. 2020 May 1;112:106058.
3. Godzik B. **Use of Bioindication Methods in National, Regional and Local Monitoring in Poland—Changes in the Air Pollution Level over Several Decades**. Atmosphere. 2020 Feb;11(2):143.
4. Hristozova G, Marinova S, Svozilík V, Nekhoroshkov P, Frontasyeva MV. **Biomonitoring of elemental atmospheric deposition: spatial distributions in the 2015/2016 moss survey in Bulgaria**. Journal of Radioanalytical and Nuclear Chemistry. 2020 Feb;323(2):839-49.

5. Leung F, Pang J, Tai AP, Lam T, Tao DK, Sharps K. **Evidence of ozone-induced visible foliar injury in Hong Kong using Phaseolus vulgaris as a bioindicator.** Atmosphere. 2020 Mar;11(3):266.
6. Stafilov T, Špirić Z, Glad M, Barandovski L, Bačeva Andonovska K, Šajn R, Antonić O. **Study of nitrogen pollution in the Republic of North Macedonia by moss biomonitoring and Kjeldahl method.** Journal of Environmental Science and Health, Part A. 2020 May 11;55(6):759-64.
7. Zinicovscaia I., **Management of the Quality of the Air in the Republic of Moldova Based on the Moss Biomonitoring Data**. In International Conference on Management Science and Engineering Management 2020 Jul 30 (pp. 297-306). Springer, Cham.
8. Makwe E, Okobia EL**. Seasonal Variation in Accumulation of Atmospheric Heavy Metals in Bryophyte Moss around the Mining Areas of Ebonyi State, Southeast Nigeria.** GSJ. 2020 Apr;8(4).
9. Hristozova G, Marinova S, Motyka O, Svozilík V, Zinicovscaia I. **Multivariate assessment of atmospheric deposition studies in Bulgaria based on moss biomonitors:** trends between the 2005/2006 and 2015/2016 surveys. Environmental Science and Pollution Research. 2020 Jul 9:1-3.
10. Gulan L, Jakšić T, Milenkovic B, Stajic JM, Vasić P, Simić Z, Zlatić N. **Mosses as bioindicators of radionuclide and metal pollution in northern Kosovo and Metohija mountain region.** Journal of Radioanalytical and Nuclear Chemistry. 2020 Aug 24:1-3.

6. A Ene, O Bogdevich, A Sion - Levels and distribution of organochlorine pesticides (OCPs) and polycyclic aromatic hydrocarbons (PAHs) in topsoils from SE Romania, Science of the total environment 2019, Volume 439, Pages 76-86 - Elsevier (2012) (52)

1. Sanchez V, López-Bellido FJ, Rodrigo MA, Fernández FJ, Rodriguez L. **A mesocosm study of electrokinetic-assisted phytoremediation of atrazine-polluted soils.** Separation and Purification Technology. 2020 Feb 15;233:116044.
2. Curtean-Bănăduc A, Burcea A, Mihuţ CM, Berg V, Lyche JL, Bănăduc D. **Bioaccumulation of persistent organic pollutants in the gonads of Barbus barbus (Linnaeus, 1758).** Ecotoxicology and environmental safety. 2020 Sep 15;201:110852.
3. Wang Z, Liu S, Lu K, Xu X, Zhang T. **Concentration, characterization and risk assessment of polycyclic aromatic hydrocarbons and organochlorine pesticides in soils from the Corn Belt of northeast China**. European Journal of Soil Science. 2020 Jul;71(4):654-66.
4. Passaro S, Gherardi S, Romano E, Ausili A, Sesta G, Pierfranceschi G, Tamburrino S, Sprovieri M. **Coupled geophysics and geochemistry to record recent coastal changes of contaminated sites of the Bagnoli industrial area, Southern Italy.** Estuarine, Coastal and Shelf Science. 2020; 246:107036.
5. Culighin E. **Organochlorine pesticides residues in soil of Soroca district, Republic of Moldova.** Chemistry Journal of Moldova. 2020 Jul 2;15(1):41-50.
6. Yukhimets A., Kuzu S. L., Akyüz E., Saral A., **Investigation of geospatial distribution of PAH compounds in soil phase and determination of soil–air exchange direction in a megacity**, Environmental Geochemistry and Health, volume 42, p. 2471–2484, (2020).

7. E Zubcov, N Zubcov, A Ene, L Biletchi - Assessment of copper and zinc levels in fish from freshwater ecosystems of Moldova - Environmental Science and Pollution Research 2012 - Springer-Verlag, Volume19 Issue 6, Pages 2238-2247 (40)

1. Arumugam A, Li J, Krishnamurthy P, Jia ZX, Leng Z, Ramasamy N, Du D. **Investigation of toxic elements in Carassius gibelio and Sinanodonta woodiana and its health risk to humans.** Environmental Science and Pollution Research,. 2020 Mar 30;27:19955-69.
2. Köse E, Emiroğlu Ö, Çiçek A, Aksu S, Başkurt S, Tokatli C, Şahin M, Uğurluoğlu A. **Assessment of Ecologic Quality in Terms of Heavy Metal Concentrations in Sediment and Fish on Sakarya River and Dam Lakes, Turkey**. Soil and Sediment Contamination: An International Journal. 2020 Apr 2;29(3):292-303.
3. Łuczyńska J, Tońska E, Paszczyk B, Łuczyński MJ. **The relationship between biotic factors and the content of chosen heavy metals (Zn, Fe, Cu and Mn) in six wild freshwater fish species collected from two lakes (Łańskie and Pluszne) located in northeastern Poland**. Iranian Journal of Fisheries Sciences. 2020 Jan 1;19(1):421-42.
4. Malhotra N, Ger TR, Uapipatanakul B, Huang JC, Chen KH, Hsiao CD. **Review of Copper and Copper Nanoparticle Toxicity in Fish.** Nanomaterials. 2020 Jun;10(6):1126.
5. Jordanova M, Rebok K, Rocha E, Rocha MJ. **Changes in Copper Load in Hepatocytes of Ohrid Trout in Relation to the Ovarian Maturation Cycle**. Toxicological & Environmental Chemistry. 2020, 102(5-6), 272-283.

8. A Ene, O Bogdevich, A Sion, T Spanos - *Determination of polycyclic aromatic hydrocarbons by gas chromatography–mass spectrometry in soils from Southeastern* Romania, Microchemical Journal 100 (2012) 36-41

1. Tong RL, Zhang HY, Lin XC, Wang YG, Meng XK. **Analysis of distillate product in the direct coal liquefaction of a Chinese bituminous coal**. International Journal of Oil, Gas and Coal Technology. 2020;23(3):375-94.
2. Omar Z, Bouajila A, Bouajila J, Rahmani R, Besser H, Hamed Y. **Spectroscopic and chromatographic investigation of soil organic matter composition for different agrosystems from arid saline soils from Southeastern Tunisia**. Arabian Journal of Geosciences. 2020 Jul;13(13):1-3.
3. Iordache AM, Nechita C, Pluhacek T, Iordache M, Zgavarogea R, Ionete RE. **Past and present anthropic environmental stress reflect high susceptibility of natural freshwater ecosystems in Romania**. Environmental Pollution. 2020 Dec 1;267:115505.

10. A Ene, IV Popescu, C Stihi, Applications of proton-induced X-ray emission technique in materials and environmental science, Ovidius Univ Ann Chem 20 (1), 35-39,(2009)

1. Smith JR, Orban C, Morrison JT, George KM, Ngirmang GK, Chowdhury EA, Roquemore WM. **Optimizing Laser-Plasma Interactions for Ion Acceleration using Particle-in-Cell Simulations and Evolutionary Algorithms.** New J. Phys. 22, 2020, **103067.**

13. T Spanos, A Ene, C Styliani Patronidou, C Xatzixristou - *Temporal variability of sewage sludge heavy metal content from Greek wastewater treatment plants* - Ecological Chemistry and Engineering. S 23 (2), 271-283 (2016)

1. Tytła M. **Identification of the Chemical Forms of Heavy Metals in Municipal Sewage Sludge as a Critical Element of Ecological Risk Assessment in Terms of Its Agricultural or Natural Use**. International Journal of Environmental Research and Public Health. 2020 Jan;17(13):4640**.**
2. Prochaska C, Zouboulis A. **A Mini-Review of Urban Wastewater Treatment in Greece: History, Development and Future Challenges.** Sustainability. 2020 Jan;12(15):6133.
3. Kujawska J, Wójcik-Oliveira K**. ECOTOXICOLOGICAL ASSESSMENT OF THE SOIL FERTILIZED WITH SEWAGE SLUDGE.** Present Environment & Sustainable Development. 2020 Jan 1;14(1).
4. Khakbaz A, De Nobili M, Mainardis M, Contin M, Aneggi E, Mattiussi M, Cabras I, Busut M, Goi D. **MONITORING OF HEAVY METALS, EOX AND LAS IN SEWAGE SLUDGE FOR AGRICULTURAL USE: A CASE STUDY.** DETRITUS (2020)12, pp. 160-168.
5. Wu, Gang, Wang, Jinfeng, Geng, Jinju, **Chemical HRPs in wastewater,** High-Risk Pollutants In Wastewater. 2020 Pages: 5-39.

14. A Pantelica, A Ene, M Gugiu, C Ciortea, O Constantinescu - *PIXE analysis of some vegetable species* - Romanian Reports in Physics 63 (4), 997-1008 (2011)

1. Venkata Surya Satyanarayana A, Jagannadharao M, Chandra Mouli K, Satya Mounika KS. **Review on Mineral Characterization of Precambrian Charnockites–using PIXE Technique.** Geoscientific Instrumentation, Methods and Data Systems Discussions. 2020 Aug 13:1-25.
2. Taylor A, Catchpole A, Day MP, Hill S, Martin N, Patriarca M. **Atomic spectrometry update: review of advances in the analysis of clinical and biological materials, foods and beverages.** Journal of Analytical Atomic Spectrometry. 2020;35(3):426-54.
3. Avupati AS, Rao MJ. **Various Experimental factors behind the Missing Elements in PIXE Spectrum of Charnockite Matrix.** Journal of Nuclear Physics, Material Sciences, Radiation and Applications. 2020 Nov 9;8(1):33-42.
4. Venkata Surya Satyanarayana A, Jagannadha Rao M, Seetharami Reddy B. **Low Z Elements of High Grade Metamorphic Rocks by PIXE Analysis–A Comprehensive Review.** Geoscientific Instrumentation, Methods and Data Systems Discussions. 2020 Dec 10:1-3 https://doi.org/10.5194/gi-2020-40.

15. V Pintilie, A Ene, LP Georgescu, L Moraru, C Iticescu - *Measurements of gross alpha and beta activity in drinking water from Galati region, Romania* - Romanian Reports in Physics 68 (3), 1208-1220 (2016) 16

1. Ho PL, Minh VT, Van Chinh D, Thanh TT, Van Tao C. **Simultaneous Determination of Gross Alpha/Beta Activities in Groundwater for Ingestion Effective Dose and its Associated Public Health Risk Prevention**. Scientific Reports. 2020 Mar 9;10(1):1-0.
2. Naskar N, Lahiri S, Mitra S, Chaudhuri P. **Radiogenic quality assessment of ground and riverine water samples collected from Indian Sundarbans.** Environmental Research. 2020 : Volume 185, 109407.

16. T Spanos, A Ene, IB Karadjova - *Assessment of toxic elements Cu, Cr, Ni, Pb, Cd, Hg, Zn, As and hexavalent chromium in sewage sludge from municipal wastewater treatment plants by combined spectroscopic techniques* - Romanian J Phys 60 (1-2), 237-245 (2015) 15

1. Moloi M, Ogbeide O, Otomo PV. **Probabilistic health risk assessment of heavy metals at wastewater discharge points within the Vaal River Basin, South Africa**. International Journal of Hygiene and Environmental Health. 2020 Mar 1;224:113421.
2. Barbosa ÉS, Cacique AP, de Pinhoa GP, Silvério FO. **Optimization of Methodology for Determination of Inorganic Chromium Species in Sewage Sludge Samples by HPLC-ICP-MS/MS.** Journal of the Brazilian Chemical Society. 2020 Dec;31(12):2491-2499.
3. Khatiwada B, Hasan MT, Sun A, Kamath KS, Mirzaei M, Sunna A, Nevalainen H. **Proteomic response of Euglena gracilis to heavy metal exposure–Identification of key proteins involved in heavy metal tolerance and accumulation.** Algal research-biomass biofuels and bioproducts. 2020 45:101764.

18. T Spanos, A Ene, C Xatzixristou, A Papaioannou - Assessment of groundwater quality and hydrogeological profile of Kavala area, Northern Greece - Rom. Journ. Phys 60 (7-8), 1139-1159 (2015) (10)

1. **Alfaifi HJ, Kahal AY, Abdelrahman K, Zaidi FK, Albassam A, Lashin A**. Assessment of groundwater quality in Southern Saudi Arabia: case study of Najran area**. Arabian Journal of Geosciences. 2020, 13(3):101.**

19. C Stihi, IV Popescu, M Frontasyeva, C Radulescu, A Ene, O Culicov, Inga Zinicovscaia, Ioana Daniela Dulama, Simona Cucu-Man, Radu Todoran, Anca Irina Gheboianu, Alin Bucurica, Iulian Bancuta, Gabriel Dima, Characterization of heavy metal air pollution in Romania using moss biomonitoring, neutron activation analysis, and atomic absorption spectrometry - Analytical Letters 50 (17), 2851-2858 (2017) (11)

1. Abdusamadzoda D, Abdushukurov DA, Duliu OG, Zinicovscaia I, Yushin NS, Frontasyeva MV**. Investigations of the Atmospheric Deposition of Major and Trace Elements in Western Tajikistan by Using the Hylocomium splendens Moss as Bioindicators**. Archives of environmental contamination and toxicology. 2020 Jan 1;78(1):60-7.
2. Farkas A, Mereuti F, Butiuc-Keul A, Podar D, Roba C, Bălc R. **Effects of Long-Term exposure to Heavy Metals upon Rhizosphere Bacteria from Baia Mare Area (Maramureş County, Romania).** Geomicrobiology Journal. 2020 Sep 1;37(9):867-76.
3. Hristozova G, Marinova S, Svozilík V, Nekhoroshkov P, Frontasyeva MV. **Biomonitoring of elemental atmospheric deposition: spatial distributions in the 2015/2016 moss survey in Bulgaria.** Journal of Radioanalytical and Nuclear Chemistry. 2020 Feb;323(2):839-49.

20. V Pintilie, A Ene, LP Georgescu, DI Moraru - *Gross alpha, gross beta and 40K activities and daily effective dose due to natural radionuclides from food supplements* - Rom. J. Phys 62, 703 (2017)

1. Calin MR, Radulescu I, Ion AC, Capra L, Almasan ER. Investigations on chemical composition and natural radioactivity levels from salt water and peloid used in pelotherapy from the Techirghiol Lake, Romania**. Environmental Geochemistry and Health. 2020 Feb;42(2):513-29**.

21. S Nickel, W Schröder, R Schmalfuss, M Saathoff, H Harmens, G Mills - Modelling spatial patterns of correlations between concentrations of heavy metals in mosses and atmospheric deposition in 2010 across Europe - Environmental Sciences Europe 30 (1), 53 (2018)

1. Abdusamadzoda D, Abdushukurov DA, Duliu OG, Zinicovscaia I, Yushin NS, Frontasyeva MV**. Investigations of the Atmospheric Deposition of Major and Trace Elements in Western Tajikistan by Using the Hylocomium splendens Moss as Bioindicators**. Archives of environmental contamination and toxicology. 2020 Jan 1;78(1):60-7.
2. Bauerová P, Krajzingrová T, Těšický M, Velová H, Hraníček J, Musil S, Svobodová J, Albrecht T, Vinkler M. **Longitudinally monitored lifetime changes in blood heavy metal concentrations and their health effects in urban birds.** Science of The Total Environment, Volume 723, 25 June 2020, 138002.
3. Stafilov T, Barandovski L, Šajn R, Bačeva Andonovska K. **Atmospheric Mercury Deposition in Macedonia from 2002 to 2015 Determined Using the Moss Biomonitoring Technique.** Atmosphere. 2020 (12):1379.

24. A Ene, I POPESCU, V Ghisa. STUDY OF TRANSFER EFFICIENCIES OF MINOR ELEMENTS DURING STEELMAKING BY NEUTRON ACTIVATION. Romanian Reports in Physics 61 (1), 165-171 (2009)

1. Stan LC, Faităr C. **Analysis of piston applications due to fuel burning**. IOP Conference Series: Materials Science and Engineering 2020 Sep 1 (Vol. 916, No. 1, p. 012110). IOP Publishing.

1. Kanwar VS, Sharma A, Srivastav AL, Rani L. **Phytoremediation of toxic metals present in soil and water environment: a critical review**. Environmental Science and Pollution Research (2020) 27, 44835–44860.

27. V Pintilie, A Ene, LP Georgescu, AG Pintilie, DI Moraru, C Iticescu Gross alpha, gross beta and radionuclides (^{210}Po, ^{210}Pb, ^{238}U, ^{232}Th, ^{226}Ra and ^{40}K) exposure assessment due to meat consumption, Journal of Radioanalytical and Nuclear Chemistry 318 (2), 991-1000 (2018) (2)

1**.** Monroy-Guzmán F, Sibaja YL, Caballero FJ. **Thin source spraying method for gross alpha/beta measurements with emphasis on alpha/beta particle self-absorption**. Applied Radiation and Isotopes. 2020 Oct 1;164:109320

28**. O Bogdevici, A Ene, O Cadocinicov, E Culîghin, E Nicolau, M Grigoraş, The study of POPs contaminated sites in Danube river basin of Republic Moldova for risk assessment and remediation actions, Contaminated sites, 64-68 (2016)**

1. Culighin E. **Organochlorine pesticides residues in soil of Soroca district, Republic of Moldova**. Chemistry Journal of Moldova. 2020 Jul 2;15(1):41-50.

29. NRJ Hynes, JS Kumar, H Kamyab, JAJ Sujana, OA Al-Khashman, Y Kuslu, A Ene, BS Kumar, Modern enabling techniques and adsorbents based dye removal with sustainability concerns in textile industrial sector-A comprehensive review, Journal of Cleaner Production**, 272** (2020)122636

1. Saharan P, Kumar V, Sharma AK, Mahmud HE, Mohamad NB, Santos JH, Zakaria SN. **Scalable fabrication of chitosan-grafted silica bionanocomposite for the superb sequestration of anionic dye from aqueous solution.** Emergent Materials 3, pages 871–879(2020).

37 A Pantelica, M do Carmo Freitas, A Ene, E Steinnes, Soil pollution with trace elements at selected sites in Romania studied by instrumental neutron activation analysis, Radiochimica Acta 101 (1), 45-50 (2013) 3

1. **Tudor D, Trache L, Chilug AI, Stefanescu IC, Spiridon A, Straticiuc M, Burducea I, Pantelica A, Margineanu R, Ghita DG, Pacesila DG**. A facility for direct measurements for nuclear astrophysics at IFIN-HH-a 3 MV tandem accelerator and an ultra-low background laboratory. **Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment. 2020 Feb 11;953:163178.**

42**. A Ene, A Pantelica, Characterization of metallurgical slags using low-level gamma-ray spectrometry and neutron activation analysis, Rom. Journ. Phys 56 (7-8), 1011-1018 (2011) 11**

1. BLAŠKO, Peter, et al. **The load dependence of the micro-hardness of the blast furnace slag.** Metallurgical and Materials Engineering, 2020, 26.3: 329-

43. E Zubcov, N Zubcov, A Ene, N Bagrin, L Biletchi, The dynamics of trace elements in Dniester river ecosystems, J Sci Art 2 (13), 281-286, (2010) 9

1. Diamanti, Konstantina S., et al. **Assessment of the chemical pollution status of the Dniester River Basin by wide-scope target and suspect screening using mass spectrometric techniques.** Analytical and Bioanalytical Chemistry 412 (2020) 4893–4907

44. A Ene, IV Popescu, T Badica, Determination of carbon in steels using particle-induced gamma ray spectrometry, Journal of optoelectronics and advanced materials 8 (1), 222-224 (2006) 9

1. Fernandes, S., et al. Multi-elemental analysis of roots and leaves from Oryza glaberrima rice plants at vegetative stage of growth by combined PIGE, RBS, PIXE and GC-TDS methods. **Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms 477 (2020): 109-115.**

48. O Bogdevich, A Ene, O Cadocinicov, C Elena, THE ANALYSIS OF OLD PESTICIDES AND PAHs POLLUTION SOURCES IN LOW DANUBE REGION. Journal of International Scientific Publications: Ecology & Safety 7, 233-243 (2013)

1. Culighin E. **Organochlorine pesticides residues in soil of Soroca district, Republic of Moldova**. Chemistry Journal of Moldova. 2020 Jul 2;15(1):41-50.

50. M Frontasyeva, H Harmens, A Uzhinskiy, O Chaligava, A.Ene…… et al., Mosses as biomonitors of air pollution: 2015/2016 survey on heavy metals, nitrogen and POPs in Europe and beyond (2020)

1. Zechmeister HG, Rivera M, Köllensperger G, Marrugat J, Künzli N. **Indoor monitoring of heavy metals and NO 2 using active monitoring by moss and Palmes diffusion tubes**. Environmental Sciences Europe. 2020 Dec;32(1):1-2.

7.2. Teze de doctorat finalizate și în derulare[9]

1. Titlul tezei: Imprastierea acustica pe sisteme complexe: cilindri, sferoizi rigizi si elastici. Aproximarea solutiilor pentru regimurile de camp apropiat si indepartat
Doctorand Necula (Stan) Maria
Conducător științific, Prof. univ. dr. ing. fiz. Luminița Moraru

2. Titlul tezei: Prognoza impactului energiilor alternative in raport cu sursele de energie conventionale
Doctorand CARANFIL VICTORIA
Conducător științific principal, Prof. univ. Dr. Ing. RUSU EUGEN
Conducator științific secundat (co-tutela) Prof. univ. dr. ing. fiz. Luminița Moraru

3. Titlul tezei: Aplicatii ale tomografiei computerizate cu fascicol conic in medicina dentara
Doctorand Andrei Victor Marinescu, Universitatea de Medicina si Farmacie „Carol Davila" din Bucuresti
Conducător științific principal, Prof. univ. Md. Dr. Andreea Didilescu
Conducator științific secundat (co-tutela) Prof. univ. dr. ing. fiz. Luminița Moraru

4. Titlul tezei: INSTRUMENTE MODERNE DE DEPISTARE A MELANOAMELOR. Aplicaţie SelfChecker pentru analiza nevilor (melanoamelor) prin intermediul imaginilor digitale

   Doctorand MICHIŞ N. FELICIA-ANIŞOARA(DAMIAN)
   Conducător științific, Prof. univ. dr. ing. fiz. Luminița Moraru

5. Titlul tezei: APLICAȚII ALE TEHNICILOR DE SCANARE DWI si DTI PENTRU EVALUAREA RAPIDĂ A MODIFICĂRILOR PARAMETRILOR SPECIFICI ÎN CAZUL AFECȚIUNILOR CEREBRALE
   Doctorand TOPORAȘ C. LENUȚA (PANĂ)
   Conducător științific, Prof. univ. dr. ing. fiz. Luminița Moraru

6. Titlul tezei: Monitorizarea substanțelor toxice în mediu prin utilizarea tehnicilor analitice performante pentru managementul deșeurilor periculoase
   Doctorand Sloată Florin,
   conducător Prof. Ene Antoaneta

7. Titlul tezei: Tehnici de învățare automată utilizate în procesarea imaginilor
   Doctorand: DINCĂ (LĂZĂRESCU) ANDREEA-MONICA
   Conducător științific, Prof. univ. dr. ing. fiz. Luminița Moraru

7.3. Oportunități de valorificare a rezultatelor CDI

- Elaborarea și depunerea de proiecte cu finanțare internațională diversă, în ariile de cercetare cu potențial recunoscut, alocarea de resurse optime pentru implementarea acestora și premierea echipelor de cercetare cu rezultate bune și foarte bune.

[9] Se va anexa lista tezelor de doctorat în derulare, cu specificarea titlului, domeniul de doctorat, nume doctorand, nume conducator de doctorat.

- Implicarea directă a tinerilor cercetători în activitățile experimentale și în implementarea proiectelor de cercetare – dezvoltare desfășurate în cadrul parteneriatelor internaționale.

- Contract de colaborare bilateral UDJG- Wenzhou University

-Contract de colaborare bilateral UDJG - Sinhgad Institutes, India

-Contract de colaborare bilateral UDJG - Dr. D. Y. Patil Institute, India

7.4. Rezultate ale activității CDI valorificate și efectele obținute

PN-III-P1-1.1-PRECISI-2020-43865, Optical solitons with Kudryashov's model by a range of integration norms
By:Yildirim, Y; Biswas, A; Ekici, M; Gonzalez-Gaxiola, O; Khan, S; Triki, H; Moraru, L; Alzahrani, AK; Belic, MR
CHINESE JOURNAL OF PHYSICS
Volume: 66, Pages: 660-672, DOI: 10.1016/j.cjph.2020.06.005,Published: AUG 2020

PN-III-P1-1.1-PRECISI-2020-43944
Dark, singular and straddled optical solitons in birefringent fibers with generalized anti-cubic nonlinearity
By:Zayed, EME; Alngar, MEM; Biswas, A; Ekici, M; Moraru, L; Alzahrani, AK; Belic, MR
PHYSICS LETTERS A, Volume: 384, Issue: 20, Article Number: 126417, DOI: 10.1016/j.physleta.2020.126417, Published: JUL 16 2020

PN-III-P1-1.1-PRECISI-2020-43988
Grey-Wolf-Based Wang's Demons for Retinal Image Registration
By:Chakraborty, S; Pradhan, R; Ashour, AS; Moraru, L; Dey, N
ENTROPY, Volume: 22, Issue: 6, Article Number: 659, DOI: 10.3390/e22060659, Published: JUN 2020

PN-III-P1-1.1-PRECISI-2020-44024
Deep-segmentation of plantar pressure images convolutional neural networks
By:Wang, D; Li, ZR; Dey, N; Ashour, AS; Moraru, L; Sherratt, RS; Shi, FQ
BIOCYBERNETICS AND BIOMEDICAL ENGINEERING
Volume: 40, Issue: 1, Pages: 546-558, DOI: 10.1016/j.bbe.2020.01.004, Published: JAN-MAR 2020

PN-III-P1-1.1-PRECISI-2020-49419
Optical solitons with differential group delay for Kudryashov's model by the auxiliary equation mapping method
By:Zayed, EME; Shohib, RMA; Biswas, A; Ekici, M; Moraru, L; Alzahrani, AK; Belic, MR
CHINESE JOURNAL OF PHYSICS
Volume: 67, Pages: 631-645, DOI: 10.1016/j.cjph.2020.08.022, Published: OCT 2020

PN-III-P1-1.1-PRECISI-2020-51223
By:Biswas, A; Asma, M; Guggilla, P; Mullick, L; Moraru, L (; Ekici, M; Alzahrani, AK ; Belic, MR
PHYSICS LETTERS A
Volume: 384 , Issue: 33, Article Number: 126830, DOI: 10.1016/j.physleta.2020.126830,Published: NOV 27 20205.

Proiect Cod SMIS: 124539, cu titlul „Burse pentru educația antreprenorială în rândul doctoranzilor și cercetătorilor postdoctorat (BeAntreprenor!)'', finanțat prin FONDUL SOCIAL EUROPEAN, Programul Operaţional Capital Uman 2014-2020, Axa prioritară: Educaţie şi competenţe, beneficiar: Universitatea „Dunărea de Jos" din Galați, perioada de desfășurare: iunie 2019 – ianuarie 2021.

Proiect contract nr. 36355/23.05.2019 POCU/380/6/13 - Cod SMIS: 123847, cu titlul „Excelența academică și valori antreprenoriale - sistem de burse pentru asigurarea oportunitatilor de formare si dezvoltare a competentelor antreprenoriale ale doctoranzilor și postdoctoranzilor ANTREPRENORDOC'', finanțat prin FONDUL SOCIAL EUROPEAN, Programul Operaţional Capital Uman 2014-2020, Axa prioritară: Educaţie şi competenţe, beneficiar: Universitatea „Dunărea de Jos" din Galați, perioada de desfășurare: mai 2019 – 30 Aprilie 2022.

Proiectului CNFIS-FDI-2020- 0451/2020, cu titlul „Inovare prin excelență CEREX - UDJG", director Prof. dr. Stanciu Silvius

CNFIS-FDI-2020-0094 Titlul proiectului: Creșterea vizibilității internationale a Universitatii "Dunarea de Jos" din Galati, UGAL20, Director proiect, Prof. univ. dr. habil. Cătălina Iticescu

9. Măsuri privind creșterea capacității activității CDI

-Urmarirea permanenta a call-urilor de finantare deschise. Se dezvolta o noua colaborare pentru depunerea unui proiect H2020 IMI2 – topic 6. In conditiile obtinerii finatarii, prin acest proiect se vor deschide 2 noi pozitii de tineri cercetatori/doctoranzi.

-Colaborare bilaterala cu China, Wenzhou University si India Sinhgad Institutes prin depunerea de proiecte ERASMUS KA 107

10. Măsuri pentru creșterea prestigiului și a vizibilității UC[10]

10.1. Dezvoltarea de parteneriate:

- dezvoltarea de parteneriate la nivel național și internațional (cu personalități/ instituții / asociații profesionale) în vederea participării la programele naţionale şi internaţionale specifice;

-Dezvoltarea parteneriatului cu universitatile chineze din Beijing, pe baza colaborarii initiate cu Wenzhou University.
-Dezvoltarea parteneriatului cu universitatile din India pe baza colaborarii initiate cu Sinhgad Institutes si Dr. D. Y. Patil Institute, India
-Dezvoltarea parteneriatului cu Universitatea de Medicina si Farmacie „Carol Davila" din Bucuresti
-Parteneriate dezvoltate pentru participarea la competia PCCDI 2018-2019:

1. Universitatea din Oradea
2. Institutul National pentru Fizică și Inginerie Nucleară "Horia Hulubei" Măgurele
3. Universitatea de Medicina si Farmacie Carol Davilla, Bucuresti
4. Centrul de diagnostic Pozitron-Diagnosztika, Oradea

- înscrierea UC în platforme naționale și internaționale care promovează parteneriatele;

-SMLAB este membru al clusterului ROHEALTH

- înscrierea UC în rețele de cercetare/asociații profesionale de prestigiu pe plan național/internațional;
- personalități științifice ce au vizitat UC;
- asigurarea de stagii de cercetare pentru specialiști din țară și străinătate;
- cursuri și seminarii susținute de personalitățile științifice invitate;
- membrii în colective editoriale ale revistelor recunoscute ISI sau incluse în baze internaționale de date.

1. Editorial Board of Computational and Mathematical Methods in Medicine, https://www.hindawi.com/journals/cmmm/editors/ (revista ISI, IF=1,563)
2. Editorial Board of JSM Mathematics and Statistics (http://www.j-scimedcentral.com/Mathematics/editors)
3. Editorial Board of International Journal of Radiology (http://www.ghrnet.org/index.php/ijr)
4. Editorial Board of International Journal of Ambient Computing and Intelligence (IJACI), http://www.igi-global.com/journal/international-journal-ambient-computing-intelligence/1110
5. Advances in Geospatial Technologies (AGT), http://www.igi-global.com/book-series/advances-geospatial-technologies/73686
6. Editorial Board ANALELE UNIVERSITĂŢII "DUNĂREA DE JOS" DIN GALAŢI, Fascicola II, MATEMATICĂ, FIZICĂ, MECANICĂ TEORETICĂ
7. Journal: Entropy (mdpi.com), Special Issue title: Entropy based image registration, Guest Editors Name: Professor Luminita Moraru, https://www.mdpi.com/journal/entropy/special_issues/entropy_image

[10] Se va descrie detaliat fiecare acțiune realizată.

8. 2020, MEMBRU AL Editorial Board Journal of Imaging (ISSN 2313-433X) HTTPS://WWW.MDPI.COM/JOURNAL/JIMAGING/EDITORS

10.2. Prezentarea rezultatelor la târgurile și expozițiile naționale și internaționale;

- târguri și expozitii internaționale;
- târguri și expoziții naționale.

10.3. Premii obținute prin proces de selecție/distincții, etc.

Premiere CNFIS-FDI-2020-0451/ Inovare prin Cercetare de Excelenta - CEREX_UDJG/ SECȚIUNEA CERCETĂTORII UDJG CARE AU AVUT ÎN 2020 CEL MAI MARE NUMĂR DE CITĂRI a acordat premii prof. Constantin Apetrei, Academician Eugen Victor Cristian Rusu, prof. Liliana Rusu, prof. Luminița Moraru și prof. Lidia Benea.

https://www.ugal.ro/anunturi/stiri-si-evenimente/8519-premii-importante-pentru-cercetatorii-universitatii-dunarea-de-jos-din-galati-la-gala-cercetarii-de-excelenta-cerex-udjg

Premiul I în cadrul proiectului POCU/380/6/13 - Burse pentru educația antreprenorială în rândul doctoranzilor și cercetătorilor postdoctorat (Be Antreprenor!), MySMIS 124539, 2020., cercetator postdoctorand Cristian Obreja, mentor prof. Luminita Moraru

Premiul II la Scientific Conference of Doctoral Schools SCDS-UDJG "Perspectives and challenges in doctoral research", 8th Edition, "Dunarea de Jos" University of Galati, 18-19 of June 2020, cu articolul "Differentiation of Brain Metastases in MRI Image using the First- and Second-Order Statistical Features". Autori Lenuța Pană, Simona Moldoveanu, Luminița Moraru

Mentiune la Scientific Conference of Doctoral Schools SCDS-UDJG "Perspectives and challenges in doctoral research", 8th Edition, "Dunarea de Jos" University of Galati, 18-19 of June 2020, cu articolul "Comparison of distance metric measures in differentiation of non-dermoscopic skin lesions". Autori Felicia Anișoara Damian, Simona Moldovanu, Luminița Moraru

10.4. Prezentarea activitătii de mediatizare:

- extrase din presa (interviuri);
- participare la dezbateri radiodifuzate / televizate.

-interviu TV Galati, ian 2018 -prezentarea vizitei in RP China, Wenzhou University

Data:24.02.2021

Responsabil UC
Prof. dr. ing. Fiz. Luminita Moraru