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1. Buse, C., O'Regan, D., Sailerli, O., Tabassum, A. Hyers-Ulam stability and discrete dichotomy for difference periodic systems, *BULLETIN DES SCIENCES MATHÉMATIQUES*, Volume: 140, Issue: 8, Pages: 908-934, ISSN: 0007-4497, eISSN: 1952-4773, 2016;
2. Cimporescu, A., Todea, A., Badea, V., Paul, C., Peter, F. Efficient kinetic resolution of 1,5-dihydroxy-1,2,3,4-tetrahydronaphthalene catalyzed by immobilized Burkholderia cepacia lipase in batch and continuous-flow system, *PROCESS BIOCHEMISTRY*, Volume: 51, Issue: 12, Pages: 2076-2083, ISSN: 1359-5113, eISSN: 1873-3298, 2016;
3. Davidescu, C.M., Ardelean, R., Popa, A. Performance of poly(styrene-co-divinylbenzene) functionalized with different aminophosphonate pendant groups, in the removal of phenolic compounds from aqueous solutions, *PURE AND APPLIED CHEMISTRY*, Volume: 88, Issue: 10-11, Pages: 993-1004, ISSN: 0033-4545, eISSN: 1365-3075, 2016;
4. Maranescu, B., Lupa, L., Visa, A. Synthesis, characterizations and Pb(II) sorption properties of cobalt phosphonate materials, *PURE AND APPLIED CHEMISTRY*, Volume: 88, Issue: 10-11, Pages: 979-992, ISSN: 0033-4545, eISSN: 1365-3075, 2016;
5. Motoc, S., Manea, F., Iacob, A., Martinez-Joaristi, A., Gascon, J., Pop, A., Schoonman, J. Electrochemical Selective and Simultaneous Detection of Diclofenac and Ibuprofen in Aqueous Solution Using HKUST-1 Metal-Organic Framework-Carbon Nanofiber Composite Electrode, *SENSORS*, Volume: 16, Issue: 10, Article Number: 1719, ISSN: 1424-8220, 2016;
6. Petrovic, A., Lelea, D., Laza, I. The comparative analysis on using the NEPCM materials and nanofluids for microchannel cooling solutions, *INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER*, Volume: 79, Pages: 39-45, ISSN: 0735-1933, eISSN: 1879-0178, 2016;
7. Sarbu, I. A Study of Energy Optimisation of Urban Water Distribution Systems Using Potential Elements, *WATER*, Volume: 8, Issue: 12, Article Number: 593, ISSN: 2073-4441, 2016;
8. Tigan, G., Constantinescu, D. Bifurcations in a family of Hamiltonian systems and associated nontwist cubic maps, *CHAOS SOLITONS & FRACTALS*, Volume: 91, Pages: 128-135, ISSN: 0960-0779, eISSN: 1873-2887, 2016;
9. Ancuti, C.O., Ancuti, C., De Vleeschouwer, C., Bovik, A.C. Single-Scale Fusion: An Effective Approach to Merging Images, *IEEE TRANSACTIONS ON IMAGE PROCESSING*, Volume: 26, Issue: 1, Pages: 65-78, PubMed ID: 27810821, ISSN: 1057-7149, eISSN: 1941-0042, 2017;
10. Banica, R., Ursu, D., Nyari, T., Kellenberger, A. Two step polyol-solvothermal growth of thick silver nanowires, *MATERIALS LETTERS*, Volume: 194, Pages: 181-184, ISSN: 0167-577X, eISSN: 1873-4979, 2017;
11. Belega, D., Petri, D. Effect of noise and harmonics on sine-wave frequency estimation by interpolated DFT algorithms based on few observed cycles, *SIGNAL PROCESSING*, Volume: 140, Pages: 207-218, ISSN: 0165-1684, eISSN: 1879-2677, 2017;
12. Bento, A.J.G., Lupa, N., Megan, M., Silva, C.M. INTEGRAL CONDITIONS FOR NONUNIFORM μ -DICHOTOMY ON THE HALF-LINE, *DISCRETE AND CONTINUOUS DYNAMICAL SYSTEMS-SERIES B*, Volume: 22, Issue: 8, Special Issue: SI, Pages: 3063-3077, ISSN: 1531-3492, eISSN: 1553-524X, 2017;
13. Binzar, T., Lazureanu, C. On the Wold-Type Decompositions for n-Tuples of Commuting Isometric Semigroups, *FILOMAT*, Volume: 31, Issue: 5, Pages: 1251-1264, ISSN: 0354-5180, 2017;

14. Bistran, D.A., Navon, I.M. Randomized dynamic mode decomposition for nonintrusive reduced order modelling, *INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN ENGINEERING*, Volume: 112, Issue: 1, Pages: 3–25, ISSN: 0029-5981, eISSN: 1097-0207, 2017;
15. Bistran, D.A., Navon, I.M. The method of dynamic mode decomposition in shallow water and a swirling flow problem, *INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS*, Volume: 83, Issue: 1, Pages: 73–89, ISSN: 0271-2091, eISSN: 1097-0363, 2017;
16. Bota, C. The approximation of solutions for second order nonlinear oscillators using the polynomial least square method, *JOURNAL OF NON-LINEAR SCIENCES AND APPLICATIONS*, Volume: 10, Issue: 1, Pages: 234–242, ISSN: 2008-1898, eISSN: 2008-1901, 2017;
17. Bota, C., Caruntu, B. ANALYTIC APPROXIMATE SOLUTIONS FOR A CLASS OF VARIABLE ORDER FRACTIONAL DIFFERENTIAL EQUATIONS USING THE POLYNOMIAL LEAST SQUARES METHOD, *FRACTIONAL CALCULUS AND APPLIED ANALYSIS*, Volume: 20, Issue: 4, Pages: 1043–1050, ISSN: 1311-0454, eISSN: 1314-2224, 2017;
18. Bota, C., Caruntu, B. Analytical approximate solutions for quadratic Riccati differential equation of fractional order using the Polynomial Least Squares Method, *CHAOS SOLITONS & FRACTALS*, Volume: 102, Pages: 339–345, ISSN: 0960-0779, eISSN: 1873-2887, 2017;
19. Bota, C., Caruntu, B. Approximate analytical solutions of nonlinear differential equations using the Least Squares Homotopy Perturbation Method, *JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS*, Volume: 448, Issue: 1, Pages: 401–408, ISSN: 0022-247X, eISSN: 1096-0813, 2017;
20. Bota, C., Caruntu, B., Lazureanu, C. THE LEAST SQUARE HOMOTOPY PERTURBATION METHOD FOR BOUNDARY VALUE PROBLEMS, *APPLIED AND COMPUTATIONAL MATHEMATICS*, Volume: 16, Issue: 1, Pages: 39–47, ISSN: 1683-3511, eISSN: 1683-6154, 2017;
21. Casu, I., Lazureanu, C. Stability and Integrability Aspects for the Maxwell - Bloch Equations with the Rotating Wave Approximation, *REGULAR & CHAOTIC DYNAMICS*, Volume: 22, Issue: 2, Pages: 109–121, ISSN: 1560-3547, eISSN: 1468-4845, 2017;
22. Cebrucean, D., Cebrucean, V., Ionel, I., Spliethoff, H. Performance of two iron-based syngas-fueled chemical looping systems for hydrogen and/or electricity generation combined with carbon capture, *CLEAN TECHNOLOGIES AND ENVIRONMENTAL POLICY*, Volume: 19, Issue: 2, Pages: 451–470, ISSN: 1618-954X, eISSN: 1618-9558, 2017;
23. Cioabla, A.E., Pop, N., Trif-Tordai, G., Calinoiu, D.G. Comparative analysis of agricultural materials influenced by anaerobic fermentation for biogas production in terms of ash melting behavior, *JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY*, Volume: 127, Issue: 1, Pages: 515–523, ISSN: 1388-6150, eISSN: 1588-2926, 2017;
24. Cioca, L.I., Ivascu, L. Risk Indicators and Road Accident Analysis for the Period 2012–2016, *SUSTAINABILITY*, Volume: 9, Issue: 9, Article Number: 1530, ISSN: 2071-1050, 2017;
25. Corici, L.N., Shova, S., Badea, V., Aparaschivei, D., Costisor, O., Cseh, L. Investigations on the photochromic properties of 2,6-bis(5-bromo-2-hydroxybenzylidene)cyclohexanone, *PHOTOCHEMICAL & PHOTOBIOLOGICAL SCIENCES*, Volume: 16, Issue: 6, Pages: 946–953, PubMed ID: 28443924, ISSN: 1474-905X, eISSN: 1474-9092, 2017;
26. Coricovac, D.E., Moaca, E.A., Pinzaru, I., Citu, C., Soica, C., Mihali, C.V., Pacurariu, C., Tutelyan, V.A., Tsatsakis, A., Dehelean, C.A. Biocompatible Colloidal Suspensions Based on Magnetic Iron Oxide Nanoparticles: Synthesis, Characterization and Toxicological Profile, *FRONTIERS IN PHARMACOLOGY*, Volume: 8, Article Number: UNSP 154, PubMed ID: 28400730, ISSN: 1663-9812, 2017;
27. Cornea, O., Andreescu, G.D., Muntean, N., Hulea, D. Bidirectional Power Flow Control in a DC Microgrid Through a Switched-Capacitor Cell Hybrid DC-DC Converter, *IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS*, Volume: 64, Issue: 4, Pages: 3012–3022, ISSN: 0278-0046, eISSN: 1557-9948, 2017;
28. De Sabata, A., Matekovits, L., Lipan, O. Band pattern of commensurate modulated periodic structures, *IET MICROWAVES ANTENNAS & PROPAGATION*, Volume: 11, Issue: 9, Pages: 1303–1307, ISSN: 1751-8725, eISSN: 1751-8733, 2017;
29. Dinu, F., Marginean, I., Dubina, D. Experimental testing and numerical modelling of steel moment-frame connections under column loss, *ENGINEERING STRUCTURES*, Volume: 151, Pages: 861–878, ISSN: 0141-0296, eISSN: 1873-7323, 2017;
30. Dogariu, A.I., Dubina, D. STRENGTHENING OF MASONRY SHEAR WALLS BASED ON METAL SOLUTIONS. PART I: EXPERIMENTAL INVESTIGATION, *PROCEEDINGS OF THE ROMANIAN ACADEMY SERIES A-MATHEMATICS PHYSICS TECHNICAL SCIENCES INFORMATION SCIENCE*, Volume: 18, Issue: 1, Pages: 81–88, ISSN: 1454-9069, 2017;

31. Dogariu, A.I., Dubina, D. STRENGTHENING OF MASONRY SHEAR WALLS BASED ON METAL SOLUTIONS. PART II: FE-MODEL FOR THE PERFORMANCE EVALUATION, PROCEEDINGS OF THE ROMANIAN ACADEMY SERIES A-MATHEMATICS PHYSICS TECHNICAL SCIENCES INFORMATION SCIENCE, Volume: 18, Issue: 2, Pages: 158-165, ISSN: 1454-9069, 2017;
32. Dumitru, R., Manea, F., Lupa, L., Pacurariu, C., Ianculescu, A., Baci, A., Negrea, S. Synthesis, characterization of nanosized CoAl₂O₄ and its electrocatalytic activity for enhanced sensing application, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, Volume: 128, Issue: 3, Pages: 1305-1312, ISSN: 1388-6150, eISSN: 1588-2926, 2017;
33. Feniser, C., Burz, G., Mocan, M., Ivascu, L., Gherhes, V., Otel, C.C. The Evaluation and Application of the TRIZ Method for Increasing Eco-Innovative Levels in SMEs, SUSTAINABILITY, Volume: 9, Issue: 7, Article Number: 1125, ISSN: 2071-1050, 2017;
34. Filip, I., Szeidert, I. Tuning the control penalty factor of a minimum variance adaptive controller, EUROPEAN JOURNAL OF CONTROL, Volume: 37, Pages: 16-26, ISSN: 0947-3580, eISSN: 1435-5671, 2017;
35. Filippov, S.N., Magadov, K.Y., Jivulescu, M.A. Absolutely separating quantum maps and channels, NEW JOURNAL OF PHYSICS, Volume: 19, Article Number: 083010, ISSN: 1367-2630, 2017;
36. Filip-Vacarescu, N., Vulcu, C., Dubina, D. NUMERICAL STUDY OF A HYBRID DAMPING SYSTEM COMPOSED OF A BUCKLING RESTRAINED BRACE WITH A MAGNETO RHEOLOGICAL DAMPER, PROCEEDINGS OF THE ROMANIAN ACADEMY SERIES A-MATHEMATICS PHYSICS TECHNICAL SCIENCES INFORMATION SCIENCE, Volume: 18, Issue: 3, Pages: 273-280, ISSN: 1454-9069, 2017;
37. Gabor, A., Davidescu, C.M., Negrea, A., Ciopec, M., Muntean, C., Negrea, P., Ianas, C., Butnariu, M. Magnesium silicate doped with environmentally friendly extractants used for rare earth elements adsorption, DESALINATION AND WATER TREATMENT, Volume: 63, Pages: 124-134, ISSN: 1944-3994, eISSN: 1944-3986, 2017;
38. Gheju, M., Balcu, I. Assisted green remediation of chromium pollution, JOURNAL OF ENVIRONMENTAL MANAGEMENT, Volume: 203, Special Issue: SI, Pages: 920-924, Part: 3, PubMed ID: 28479231, ISSN: 0301-4797, eISSN: 1095-8630, 2017;
39. Gheju, M., Balcu, I., Enache, A., Flueraș, A. A kinetic approach on hexavalent chromium removal with metallic iron, JOURNAL OF ENVIRONMENTAL MANAGEMENT, Volume: 203, Special Issue: SI, Pages: 937-941, Part: 3, PubMed ID: 28318824, ISSN: 0301-4797, eISSN: 1095-8630, 2017;
40. Grigorie, A.C., Muntean, C., Vlase, T., Locovei, C., Stefanescu, M. ZnO-SiO₂ based nanocomposites prepared by a modified sol-gel method, MATERIALS CHEMISTRY AND PHYSICS, Volume: 186, Pages: 399-406, ISSN: 0254-0584, eISSN: 1879-3312, 2017;
41. Ianos, R., Babuta, R., Pacurariu, C., Lazau, R., Istratie, R., Butaciu, C. Combustion synthesis of ZnAl₂O₄ powders with tuned surface area, CERAMICS INTERNATIONAL, Volume: 43, Issue: 12, Pages: 8975-8981, ISSN: 0272-8842, eISSN: 1873-3956, 2017;
42. Ianos, R., Muntean, E., Babuta, R., Lazau, R., Pacurariu, C., Băndas, C. Combustion synthesis of pink chromium-doped alumina with excellent near-infrared reflective properties, CERAMICS INTERNATIONAL, Volume: 43, Issue: 2, Pages: 2568-2572, ISSN: 0272-8842, eISSN: 1873-3956, 2017;
43. Ianos, R., Muntean, E., Pacurariu, C., Lazau, R., Băndas, C., Delinescu, G. Combustion synthesis of a blue Co-doped zinc aluminate near-infrared reflective pigment, DYES AND PIGMENTS, Volume: 142, Pages: 24-31, ISSN: 0143-7208, eISSN: 1873-3743, 2017;
44. Istratie, R., Babuta, R., Popa, A., Pacurariu, C., Stoia, M. Enhanced Adsorption of p-Nitrophenol from Aqueous Solutions Using a Functionalized Styrene-Divinylbenzene Copolymer, WATER AIR AND SOIL POLLUTION, Volume: 228, Issue: 8, Article Number: 276, ISSN: 0049-6979, eISSN: 1573-2932, 2017;
45. Jivulescu, M.A., Nechita, I., Gavruta, P. On symmetric decompositions of positive operators, JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, Volume: 50, Issue: 16, Article Number: 165303, ISSN: 1751-8113, eISSN: 1751-8121, 2017;
46. Lazureanu, C. The Real-Valued Maxwell-Bloch Equations with Controls: From a Hamilton-Poisson System to a Chaotic One, INTERNATIONAL JOURNAL OF BIFURCATION AND CHAOS, Volume: 27, Issue: 9, Article Number: 1750143, ISSN: 0218-1274, eISSN: 1793-6551, 2017;
47. Linul, E., Marsavina, L., Kovacic, J. Collapse mechanisms of metal foam matrix composites under static and dynamic loading conditions, MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING, Volume: 690, Pages: 214-224, ISSN: 0921-5093, eISSN: 1873-4936, 2017;

48. Linul, E., Movahedi, N., Marsavina, L. The temperature effect on the axial quasi-static compressive behavior of ex-situ aluminum foam-filled tubes, *COMPOSITE STRUCTURES*, Volume: 180, Pages: 709-722, ISSN: 0263-8223, eISSN: 1879-1085, 2017;
49. Linul, E., Serban, D.A., Marsavina, L., Kovacik, J. Low-cycle fatigue behaviour of ductile closed-cell aluminium alloy foam, *FATIGUE & FRACTURE OF ENGINEERING MATERIALS & STRUCTURES*, Volume: 40, Issue: 4, Pages: 597-604, ISSN: 8756-758X, eISSN: 1460-2695, 2017;
50. Linul, E., Serban, D.A., Marsavina, L., Sadowski, T. Assessment of collapse diagrams of rigid polyurethane foams under dynamic loading conditions, *ARCHIVES OF CIVIL AND MECHANICAL ENGINEERING*, Volume: 17, Issue: 3, Pages: 457-466, ISSN: 1644-9665, eISSN: 2083-3318, 2017;
51. Madescu, G., Biriescu, M., Tutelea, L.N., Mot, M., Svoboda, M., Boldea, I. Experimental Investigation of Rotor Currents Distribution in the Healthy and Faulty Cage of Induction Motors at Standstill, *IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS*, Volume: 64, Issue: 7, Pages: 5305-5313, ISSN: 0278-0046, eISSN: 1557-9948, 2017;
52. Marinica, O.M. Study of Static Magnetic Properties of Transformer Oil Based Magnetic Fluids for Various Technical Applications Using Demagnetizing Field Correction, *JOURNAL OF NANOMATERIALS*, Article Number: 5407679, ISSN: 1687-4110, eISSN: 1687-4129, 2017;
53. Marsavina, L., Berto, F., Negru, R., Serban, D.A., Linul, E. An engineering approach to predict mixed mode fracture of PUR foams based on ASED and micromechanical modelling, *THEORETICAL AND APPLIED FRACTURE MECHANICS*, Volume: 91, Special Issue: SI, Pages: 148-154, ISSN: 0167-8442, eISSN: 1872-7638, 2017;
54. Mazilescu, C.A., Gangloff, B. Value Assigned to Employees Who Preserve the Social and Organizational Environment, *SUSTAINABILITY*, Volume: 9, Issue: 2, Article Number: 170, ISSN: 2071-1050, 2017;
55. Micea, M.V., Stangaciu, C.S., Stangaciu, V., Curia, D.I. Novel Hybrid Scheduling Technique for Sensor Nodes with Mixed Criticality Tasks, *SENSORS*, Volume: 17, Issue: 7, Article Number: 1504, ISSN: 1424-8220, 2017;
56. Mihaicuta, S., Udrescu, M., Topirceanu, A., Udrescu, L. Network science meets respiratory medicine for OSAS phenotyping and severity prediction, *PEERJ*, Volume: 5, Article Number: e3289, PubMed ID: 28503375, ISSN: 2167-8359, 2017;
57. Moro, A.J., Parola, A.J., Pina, F., Pana, A.M., Badea, V., Pausescu, I., Shova, S., Cseh, L. 2,2'-Spirobis[chromene] Derivatives Chemistry and Their Relation with the Multistate System of Anthocyanins, *JOURNAL OF ORGANIC CHEMISTRY*, Volume: 82, Issue: 10, Pages: 5301-5309, PubMed ID: 28441475, ISSN: 0022-3263, 2017;
58. Movahedi, N., Linul, E. Quasi-static compressive behavior of the ex-situ aluminum-alloy foam-filled tubes under elevated temperature conditions, *MATERIALS LETTERS*, Volume: 206, Pages: 182-184, ISSN: 0167-577X, eISSN: 1873-4979, 2017;
59. Nanu, S., Ionel, R., Dughir, C., Ionel, I. Automation of a prototype for cutting, sorting and bundling of SRC crops for planting purposes, *MEASUREMENT*, Volume: 95, Pages: 201-209, ISSN: 0263-2241, eISSN: 1873-412X, 2017;
60. Niyonzima, S., Ilie, S., Pop, N., Mezei, J.Z., Chakrabarti, K., Morel, V., Peres, B., Little, D.A., Hassouni, K., Larson, A., Orel, A.E., Benredjem, D., Bultel, A., Tennyson, J., Reiter, D., Schneider, I.F. Low-energy collisions between electrons and BeH⁺: Cross sections and rate coefficients for all the vibrational states of the ion, *ATOMIC DATA AND NUCLEAR DATA TABLES*, Volume: 115, Pages: 287-308, ISSN: 0092-640X, eISSN: 1090-2090, 2017;
61. Oncioiu, I., Petrescu, A.G., Grecu, E., Petrescu, M. Optimizing the Renewable Energy Potential: Myth or Future Trend in Romania, *ENERGIES*, Volume: 10, Issue: 6, ISSN: 1996-1073, 2017;
62. Osaci, M., Cacciola, M. Study about the nanoparticle agglomeration in a magnetic nanofluid by the Langevin dynamics simulation model using an effective Verlet-type algorithm, *MICROFLUIDICS AND NANOFUIDICS*, Volume: 21, Issue: 2, Article Number: 19, ISSN: 1613-4982, eISSN: 1613-4990, 2017;
63. Pacurariu, C., Lazau, I., Lazau, R. Kinetic studies of the dehydroxylation and crystallization of raw kaolinite and fluorides-modified kaolinite, *JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY*, Volume: 127, Issue: 1, Pages: 239-246, ISSN: 1388-6150, eISSN: 1588-2926, 2017;
64. Pater, F. SOME INEQUALITIES ON POWER BOUNDED OPERATORS ACTING ON LOCALLY CONVEX SPACES, *JOURNAL OF MATHEMATICAL INEQUALITIES*, Volume: 11, Issue: 2, Pages: 485-494, ISSN: 1846-579X, 2017;
65. Pop, A., Manea, F., Flueraș, A., Schoonman, J. Simultaneous Voltammetric Detection of Carbaryl and Paraquat Pesticides on Graphene-Modified Boron-Doped Diamond Electrode, *SENSORS*, Volume: 17, Issue: 9, Article Number: 2033, ISSN: 1424-8220, 2017;

66. Popa, S., Iliescu, S., Iliă, G., Plesu, N., Popa, A., Visa, A., Macarie, L. Solid polymer electrolytes based on phosphorus containing polymers for lithium polymer batteries, *EUROPEAN POLYMER JOURNAL*, Volume: 94, Pages: 286-298, ISSN: 0014-3057, eISSN: 1873-1945, 2017;
67. Pozna, C., Precup, R.E. On a translated frame-based approach to geometric modeling of robots, *ROBOTICS AND AUTONOMOUS SYSTEMS*, Volume: 91, Pages: 49-58, ISSN: 0921-8890, eISSN: 1872-793X, 2017;
68. Precup, R.E., David, R.C., Petriu, E.M. Grey Wolf Optimizer Algorithm-Based Tuning of Fuzzy Control Systems With Reduced Parametric Sensitivity, *IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS*, Volume: 64, Issue: 1, Pages: 527-534, ISSN: 0278-0046, eISSN: 1557-9948, 2017;
69. Precup, R.E., Radac, M.B., Roman, R.C., Petriu, E.M. Model-free sliding mode control of nonlinear systems: Algorithms and experiments, *INFORMATION SCIENCES*, Volume: 381, Pages: 176-192, ISSN: 0020-0255, eISSN: 1872-6291, 2017;
70. Radac, M.B., Precup, R.E., Roman, R.C. Model-Free control performance improvement using virtual reference feedback tuning and reinforcement Q-learning, *INTERNATIONAL JOURNAL OF SYSTEMS SCIENCE*, Volume: 48, Issue: 5, Pages: 1071-1083, ISSN: 0020-7721, eISSN: 1464-5319, 2017;
71. Stefan, D., Rudolf, P., Muntean, S., Susan-Resiga, R. Proper Orthogonal Decomposition of Self-Induced Instabilities in Decelerated Swirling Flows and Their Mitigation Through Axial Water Injection, *JOURNAL OF FLUIDS ENGINEERING-TRANSACTIONS OF THE ASME*, Volume: 139, Issue: 8, Article Number: 081101, ISSN: 0098-2202, eISSN: 1528-901X, 2017;
72. Stoia, M., Muntean, C., Militaru, B. MnFe2O4 nanoparticles as new catalyst for oxidative degradation of phenol by peroxydisulfate, *JOURNAL OF ENVIRONMENTAL SCIENCES*, Volume: 53, Pages: 269-277, PubMed ID: 28372751, ISSN: 1001-0742, eISSN: 1878-7320, 2017;
73. Stoia, M., Muntean, E., Pacurariu, C., Mihali, C. Thermal behavior of MnFe2O4 and MnFe2O4/C nanocomposite synthesized by a solvothermal method, *THERMOCHIMICA ACTA*, Volume: 652, Pages: 1-8, ISSN: 0040-6031, eISSN: 1872-762X, 2017;
74. Stoia, M., Pacurariu, C., Muntean, E.C., Thermal stability of the solvothermal-synthesized MnFe2O4 nanopowder, *JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY*, Volume: 127, Issue: 1, Pages: 155-162, ISSN: 1388-6150, eISSN: 1588-2926, 2017;
75. Tigan, G. DEGENERATE WITH RESPECT TO PARAMETERS FOLD-HOPF BIFURCATIONS, *DISCRETE AND CONTINUOUS DYNAMICAL SYSTEMS*, Volume: 37, Issue: 4, Pages: 2115-2140, ISSN: 1078-0947, eISSN: 1553-5231, 2017;
76. Tigan, G. Using Melnikov functions of any order for studying limit cycles, *JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS*, Volume: 448, Issue: 1, Pages: 409-420, ISSN: 0022-247X, eISSN: 1096-0813, 2017;
77. Tigan, G., Llibre, J., Ciurdariu, L. Degenerate Fold-Hopf Bifurcations in a Rossler-Type System, *INTERNATIONAL JOURNAL OF BIFURCATION AND CHAOS*, Volume: 27, Issue: 5, Article Number: 1750068, ISSN: 0218-1274, eISSN: 1793-6551, 2017;
78. Tiwari, A.K., Albulescu, C.T., Yoon, S.M. A multifractal detrended fluctuation analysis of financial market efficiency: Comparison using Dow Jones sector ETF indices, *PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS*, Volume: 483, Pages: 182-192, ISSN: 0378-4371, eISSN: 1873-2119, 2017;
79. Topirceanu, A. Breaking up friendships in exams: A case study for minimizing student cheating in higher education using social network analysis, *COMPUTERS & EDUCATION*, Volume: 115, Pages: 171-187, ISSN: 0360-1315, eISSN: 1873-782X, 2017;
80. Topirceanu, A., Udrescu, M. Statistical fidelity: a tool to quantify the similarity between multi-variable entities with application in complex networks, *INTERNATIONAL JOURNAL OF COMPUTER MATHEMATICS*, Volume: 94, Issue: 9, Pages: 1787-1805, ISSN: 0020-7160, eISSN: 1029-0265, 2017;
81. Totorean, A.F., Hudrea, C.I., Bosioc, A.I., Bernad, S.I. FLOW FIELD EVOLUTION IN STENTED VERSUS STENOSED CORONARY ARTERY, *PROCEEDINGS OF THE ROMANIAN ACADEMY SERIES A-MATHEMATICS PHYSICS TECHNICAL SCIENCES INFORMATION SCIENCE*, Volume: 18, Issue: 3, Pages: 248-255, ISSN: 1454-9069, 2017;
82. Tudoran, R.M., Girban, A. Bifurcations of limit cycles of perturbed completely integrable systems, *NONLINEARITY*, Volume: 30, Issue: 3, Pages: 1058-1088, ISSN: 0951-7715, eISSN: 1361-6544, 2017;
83. Ungureanu, L., Carstoiu, G., Micea, M.V., Groza, V. Battery state of health estimation: a structured review of models, methods and commercial devices, *INTERNATIONAL JOURNAL OF ENERGY RESEARCH*, Volume: 41, Issue: 2, Pages: 151-181, ISSN: 0363-907X, eISSN: 1099-114X, 2017;

84. Vlazan, P., Stoia, M., Poienar, M., Sfirloaga, P. Phase transition behaviour and physicochemical properties of KNbO₃ ceramics, CERAMICS INTERNATIONAL, Volume: 43, Issue: 8, Pages: 5963-5967, ISSN: 0272-8842, eISSN: 1873-3956, 2017;
85. Vulcu, C., Stratan, A., Ciutina, A., Dubina, D. Beam-to-CFT High-Strength Joints with External Diaphragm. I: Design and Experimental Validation, JOURNAL OF STRUCTURAL ENGINEERING, Volume: 143, Issue: 5, Article Number: 04017001, ISSN: 0733-9445, eISSN: 1943-541X, 2017;
86. Vulcu, C., Stratan, A., Ciutina, A., Dubina, D. Beam-to-CFT High-Strength Joints with External Diaphragm. II: Numerical Simulation of Joint Behavior, JOURNAL OF STRUCTURAL ENGINEERING, Volume: 143, Issue: 5, Article Number: 04017002, ISSN: 0733-9445, eISSN: 1943-541X, 2017.

EXECUTIVE UNIT FOR FINANCING HIGHER EDUCATION, RESEARCH, DEVELOPMENT AND INNOVATION - UEFISCDI AWARDS - GRANTED PATENTS

1. Pinca-Bretotean, C. Installation for Determining Thermal Endurance, OSIM, RO 126966 B1, 30.03.2016;
2. Gheju, M.T., Pode, R., Iovi, A., Balcu, I., Coheci, L., Ciopec, M.E. Process for Removal of Hexavalent Chrome from Waste Water, OSIM, RO 127099 B1, 30.09.2016;
3. Negrea, A.G., Lazau, I., Lupa, L.A., Lazau, R.I., Ciopec, M.E. Process for Removing Arsenic from Water and Immobilizing the Resulting Waste in Vitreous Matrices, OSIM, RO 127098 B1, 30.01.2017;
4. Susan-Resiga, R.F., Tanasa, C., Bosioc, A.I., Ciocan, T., Stuparu, A.C., Muntean, S. Method and Equipment for Controlling the Swirling Flow Through the Conical Diffuser of Hydraulic Turbines, OSIM, RO 130075 B1, 28.04.2017;

