

1. Puskelova, J., Baia, L., Vulpoi, A., Baia, M., Antoniadou, M., Dracopoulos, V., Stathatos, E., Gabor, K., Pap, Z., Danciu, V., Lianos, P., Photocatalytic hydrogen production using TiO<sub>2</sub>-Pt aerogels, *Chemical Engineering Journal*, 242 (2014) 96-101
2. Pardi, A., Ballai, I., Marcu, A., Orza, B., Sausage Mode Propagation in a Thick Magnetic Flux Tube, *Solar Physics*, 289 (2014) 1203-1214
3. Mocanu, G.; Magyar, N.; Pardi, A.; Marcu, A, Appearance of an accretion disc perturbed by fractional Brownian Motion density, *Monthly Notices of the Royal Astronomical Society*, 439 (2014) 3790-3797
4. Găină, L., Torje, I., Gal, E., Lupan, A., Bischin, C., Silaghi-Dumitrescu, R., Damian, G., Lönnecke, P., Cristea, C., Silaghi-Dumitrescu, L., Microwave assisted synthesis, photophysical and redox properties of (phenothiazinyl)vinyl-pyridinium dyes, *Dyes and Pigments*, 102 (2014) 315-325
5. Tira, D.S., Focsan, M., Ulinici, S., Maniu, D., Astilean, S., Rhodamine B-coated gold nanoparticles as effective "turn-on" fluorescent sensors for detection of zinc II ions in water, *Spectroscopy Letters*, 47 (2014) 153-159
6. Marta, B., Jakab, E., Potara, M., Simon, T., Imre-Lucaci, F., Barbu-Tudoran, L., Popescu, O., Astilean, S., Pluronic-coated silver nanoprisms: Synthesis, characterization and their antibacterial activity, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 441 (2014) 77-83
7. Burghilea, M., Verellen, D., Gevaert, T., Depuydt, T., Poels, K., Simon, V., De Ridder, M., Feasibility of using the vero SBRT system for intracranial SRS, *Journal of Applied Clinical Medical Physics*, 15 (2014) 90-99
8. Cavalu, S., Simon, V., Ratiu, C., Oswald, I., Vlad, S., Ponta, O., Alternative approaches using animal model for implant biomaterials: Advantages and disadvantages, *Key Engineering Materials*, 583 (2014) 101-106
9. Moț, A.C., Coman, C., Miron, C., Damian, G., Sarbu, C., Silaghi-Dumitrescu, R., An assay for pro-oxidant reactivity based on phenoxyl radicals generated by laccase, *Food Chemistry*, 143 (2014) 214-222
10. Vulpoi, A., Simon, V., Ylänen, H., Simon, S., Development and in vitro assessment of bioactive glass/polymer nanostructured composites with silver, *Journal of Composite Materials*, 48 (2014) 63-70
11. Giloan, M., Astilean, S., Negative index optical chiral metamaterial based on asymmetric hexagonal arrays of metallic triangular nanoprisms, *Optics Communications*, 315 (2014) 122-129
12. Müller, C., David, L., Chiș, V., Pînzaru, S.C., Detection of thiabendazole applied on citrus fruits and bananas using surface enhanced Raman scattering, *Food Chemistry*, 145 (2014) 814-820
13. Coman, C., Leopold, L.F., Rugină, O.D., Barbu-Tudoran, L., Leopold, N., Tofană, M., Socaciu, C., Green synthesis of gold nanoparticles by *Allium sativum* extract and their assessment as SERS substrate, *Journal of Nanoparticle Research*, 16 (2014) 2158
14. Pardi, A., Magyar, N., Mocanu, G.R., Marcu, A., The effect of cooling on sausage and kink oscillation modes in expanding coronal loops, *AIP Conference Proceedings*, 1564 (2013) 194-199
15. Olenic, L., Vulcu, A., Chiorean, I., Crisan, M., Berghian-Grosan, C., Dreve, S., David, L., Tudoran, L.B., Kacso, I., Bratu, I., Neamtu, C., Voica, C., Effect of natural extracts pH on

- morphological characteristics of hybrid materials based on gold nanoparticles, AIP Conference Proceedings, 1565 (2013) 238-242
16. Chiş, V., Droghetti, A., Isai, R., Morari, C., Rungger, I., Sanvito, S., DFT structural investigation on Fe(1,10-phenanthroline)<sub>2</sub> (NCS)<sub>2</sub> spin crossover molecule, AIP Conference Proceedings, 1565 (2013) 57-62
  17. Falamas, A., Kalra, S., Chis, V., Notingher, I., Monitoring the RNA distribution in human embryonic stem cells using Raman micro-spectroscopy and fluorescence imaging, AIP Conference Proceedings, 1565 (2013) 43-47
  18. Schmutzer, G., Avram, V., Covaciu, F., Feher, I., Magdas, A., David, L., Moldovan, Z., Study of flavour compounds from orange juices by HS-SPME and GC-MS, AIP Conference Proceedings, 1565 (2013) 79-84
  19. Baia, M., Gajda-Schranz, K., Shen, S., Stathatos, E., Progress and perspectives in visible-light-driven photocatalysis, International Journal of Photoenergy, 2013 (2013) 314187
  20. He, G., Qin, S., Chin, W.-N., Craciun, F., Automated specification discovery via user-defined predicates, Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 8144 LNCS (2013) 397-414
  21. Thioune, N., Lidgi-Guigui, N., Cottat, M., Gabudean, A.-M., Focsan, M., Benoist, H.-M., Astilean, S., De La Chapelle, M.L., Study of gold nanorods-protein interaction by localized surface plasmon resonance spectroscopy, Gold Bulletin, 46 (2013) 275-281
  22. Bolfa, P., Vidrighinescu, R., Petruta, A., Dezmirean, D., Stan, L., Vlase, L., Damian, G., Catoi, C., Filip, A., Clichici, S., Photoprotective effects of Romanian propolis on skin of mice exposed to UVB irradiation, Food and Chemical Toxicology, 62 (2013) 329-342
  23. Simon, T., Boca-Farcau, S., Gabudean, A.-M., Baldeck, P., Astilean, S., LED-activated methylene blue-loaded Pluronic-nanogold hybrids for in vitro photodynamic therapy, Journal of Biophotonics, 6 (2013) 950-959
  24. Yang, D., Mircescu, N.E., Zhou, H., Leopold, N., Chiş, V., Oltean, M., Ying, Y., Haisch, C., DFT study and quantitative detection by surface-enhanced Raman scattering (SERS) of ethyl carbamate, Journal of Raman Spectroscopy, 44 (2013) 1491-1496
  25. Benyey, Z., Vanea, E., Tautan, M., Spinu, M., Simon, V., Synthesis and characterization of new bioceramic/antibiotic composites, Journal of Optoelectronics and Advanced Materials, 15 (2013) 1375-1379
  26. Bensouici, A., Ayadi, M., Iosin, M., Damian, G., Plaza, J.L., Astilean, S., Sebais, M., Chemical decomposition of CdTe and CdBr<sub>2</sub> dopants in KBr, International Conference on Transparent Optical Networks, (2013) -
  27. Iliut, M., Gabudean, A.-M., Leordean, C., Simon, T., Teodorescu, C.-M., Astilean, S., Riboflavin enhanced fluorescence of highly reduced graphene oxide, Chemical Physics Letters, 586 (2013) 127-131
  28. Craciun, C.T., Porosomes: Current concepts of the mechanism of exocytosis, Acta Endocrinologica, 9 (2013) 605-612
  29. Mureşan, S., Şimon, V., Miclăuş, V., Filip, A., Gal, A.F., Moldovan, R., Mureşan, A., Histopathological dynamic aspects in the rat cornea irradiated with repeated doses of UVB, Annals of the Romanian Society for Cell Biology, 18 (2013) 114-119
  30. Le, Q.L., Sharma, A., Craciun, F., Chin, W.-N., Towards complete specifications with an error calculus, Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 7871 LNCS (2013) 291-306

31. Craciun, F., Motogna, S., Lazar, I., Towards better testing of fUML models, Proceedings - IEEE 6th International Conference on Software Testing, Verification and Validation, ICST 2013, (2013) 485-486
32. Leopold, N., Chiş, V., Mircescu, N.E., Marişca, O.T., Buja, O.M., Leopold, L.F., Socaciu, C., Braicu, C., Irimie, A., Berindan-Neagoe, I., One step synthesis of SERS active colloidal gold nanoparticles by reduction with polyethylene glycol, Colloids and Surfaces A: Physicochemical and Engineering Aspects, 436 (2013) 133-138
33. Canpean, V., Gabudean, A.M., Astilean, S., Enhanced thermal stability of gelatin coated gold nanorods in water solution, Colloids and Surfaces A: Physicochemical and Engineering Aspects, 433 (2013) 9-13
34. Vanea, E., Simon, V., XPS and Raman study of zinc containing silica microparticles loaded with insulin, Applied Surface Science, 280 (2013) 144-150
35. Marcu, D., Damian, G., Cosma, C., Cristea, V., Gamma radiation effects on seed germination, growth and pigment content, and ESR study of induced free radicals in maize (*Zea mays*), Journal of Biological Physics, 39 (2013) 625-634
36. Iancu, V., Baia, M., Diamandescu, L., Pap, Z., Vlaicu, A.M., Danciu, V., Baia, L., Weighting the influence of TiO<sub>2</sub> anatase/brookite ratio in TiO<sub>2</sub>-Ag porous nanocomposites on visible photocatalytic performances, Materials Chemistry and Physics, 141 (2013) 234-239
37. Oltean, M., Mile, G., Vidrighin, M., Leopold, N., Chiş, V., Weakly bound PTCDI and PTCDA dimers studied by using MP2 and DFT methods with dispersion correction, Physical Chemistry Chemical Physics, 15 (2013) 13978-13990
38. Leordean, C., Gabudean, A.-M., Canpean, V., Astilean, S., Easy and cheap fabrication of ordered pyramidal-shaped plasmonic substrates for detection and quantitative analysis using surface-enhanced Raman spectroscopy, Analyst, 138 (2013) 4975-4981
39. Vanea, E., Gruian, C., Rickert, C., Steinhoff, H.-J., Simon, V., Structure and dynamics of spin-labeled insulin entrapped in a silica matrix by the sol-gel method, Biomacromolecules, 14 (2013) 2582-2592
40. Mihály Takács, I., Mot, A., Silaghi-Dumitrescu, R., Damian, G., Site directed spin labeling of hemerythrin and hemoglobin, Studia Universitatis Babeş-Bolyai Chemia, 2013 (2013) 61-69
41. Müller, C., David, L., Pînzaru, S.C., Detection of thiabendazole applied to organic fruit by near infrared surface-enhanced Raman spectroscopy, Spectroscopy Europe, 25 (2013) 6-11
42. Benedec, D., Vlase, L., Oniga, I., Mot, A.C., Damian, G., Hanganu, D., Duma, M., Silaghi-Dumitrescu, R., Polyphenolic composition, antioxidant and antibacterial activities for two Romanian subspecies of *Achillea distans* Waldst. et Kit. ex Willd., Molecules, 18 (2013) 8725-8739
43. Cioica, N., Fechete, R., Cota, C., Nagy, E.M., David, L., Cozar, O., NMR relaxation investigation of the native corn starch structure with plasticizers, Journal of Molecular Structure, 1044 (2013) 128-133
44. Todica, M., Udrescu, L., Damian, G., Astilean, S., Spectroscopic investigation of PVA-TiO<sub>2</sub> membranes gamma irradiated, Journal of Molecular Structure, 1044 (2013) 328-330
45. Iliut, M., Leordean, C., Canpean, V., Teodorescu, C.-M., Astilean, S., A new green, ascorbic acid-assisted method for versatile synthesis of Au-graphene hybrids as efficient surface-enhanced Raman scattering platforms, Journal of Materials Chemistry C, 1 (2013) 4094-4104
46. Crisan, M., David, L., Moldovan, B., Vulcu, A., Dreve, S., Perde-Schrepler, M., Tatomir, C., Filip, A.G., Bolfa, P., Achim, M., Chiorean, I., Kacso, I., Grosan, C.B., Olenic, L., New

nanomaterials for the improvement of psoriatic lesions, *Journal of Materials Chemistry B*, 1 (2013) 3152-3158

47. Potara, M., Boca, S., Licarete, E., Damert, A., Alupei, M.-C., Chiriac, M.T., Popescu, O., Schmidt, U., Astilean, S., Chitosan-coated triangular silver nanoparticles as a novel class of biocompatible, highly sensitive plasmonic platforms for intracellular SERS sensing and imaging, *Nanoscale*, 5 (2013) 6013-6022
48. Tamasan, M., Szilagy, H., Vanea, E., Simon, V., A study of expanded perlite for biomedical composites, *Journal of Optoelectronics and Advanced Materials*, 15 (2013) 879-882
49. Tămășan, M., Ozyegin, L.S., Oktar, F.N., Simon, V., Characterization of calcium phosphate powders originating from *Phyllacanthus imperialis* and *Trochidae Infundibulum concavus* marine shells, *Materials Science and Engineering C*, 33 (2013) 2569-2577
50. Lászlóffi, E., Vulpoi, A., Simon, V., Investigation of sol-gel derived silicate glasses loaded with vitamin C, *Journal of Optoelectronics and Advanced Materials*, 15 (2013) 883-887
51. Mureșan, S., Filip, A., Mureșan, A., Șimon, V., Moldovan, R., Gal, A.F., Miclăuș, V., Histological findings in the Wistar rat cornea following UVB irradiation, *Romanian Journal of Morphology and Embryology*, 54 (2013) 247-252
52. Mureșan, S., Filip, A., Simon, V., Gal, A.F., Miclăuș, V., Decea, N., Moldovan, R., Mureșan, A., Effects of a single dose of ultraviolet b irradiation on oxidant/antioxidant balance in the eye of wistar rats, *Studia Universitatis Babeș-Bolyai Chemia*, (2013) 7-19
53. Cottat, M., Thioune, N., Gabudean, A.-M., Lidgi-Guigui, N., Focsan, M., Astilean, S., Lamy de la Chapelle, M., Localized Surface Plasmon Resonance (LSPR) Biosensor for the Protein Detection, *Plasmonics*, 8 (2013) 699-704
54. Giloan, M., Astilean, S., Dual-band optical negative index metamaterial based on hexagonal arrays of triangular nanoholes in metal-dielectric films, *Optics Communications*, 296 (2013) 141-148
55. Geana, I., Iordache, A., Ionete, R., Marinescu, A., Ranca, A., Culea, M., Geographical origin identification of Romanian wines by ICP-MS elemental analysis, *Food Chemistry*, 138 (2013) 1125-1134
56. Muntean, C.M., Leopold, N., Halmagyi, A., Valimareanu, S., Surface-enhanced Raman scattering assessment of DNA from leaf tissues adsorbed on silver colloidal nanoparticles, *Journal of Raman Spectroscopy*, 44 (2013) 817-822
57. Veres, R., Vulpoi, A., Magyari, K., Ciuce, C., Simon, V., Synthesis, characterisation and in vitro testing of macroporous zinc containing scaffolds obtained by sol-gel and sacrificial template methods, *Journal of Non-Crystalline Solids*, 373-374 (2013) 57-64
58. Cavalu, S., Banica, F., Gruian, C., Vanea, E., Goller, G., Simon, V., Microscopic and spectroscopic investigation of bioactive glasses for antibiotic controlled release, *Journal of Molecular Structure*, 1040 (2013) 47-52
59. Killyeni, A., Nicoara, A., Canpean, V., Kun, A., Astilean, S., Popescu, I.C., S-acetyl-calix[8]arene adsorption on polycrystalline Au surface: A kinetic study, *Electrochimica Acta*, 102 (2013) 225-232
60. Herman, K., Mircescu, N.E., Szabo, L., Leopold, L.F., Chiș, V., Leopold, N., In Situ silver spot preparation and on-plate surface-enhanced Raman scattering detection in thin layer chromatography separation, *Journal of Applied Spectroscopy*, 80 (2013) 311-314
61. Daraban, L., Iancu, D., Nita, D., Daraban, L., Efficiency calibration in Gamma spectrometry by using <sup>232</sup>Th series radionuclides, *Romanian Reports of Physics*, 58 (2013) S99-S107

62. Horváth, L., Beu, T., Manghi, M., Palmeri, J., The vapor-liquid interface potential of (multi)polar fluids and its influence on ion solvation, *Journal of Chemical Physics*, 138 (2013) 154702
63. Simon, T., Boca, S., Biro, D., Baldeck, P., Astilean, S., Gold-Pluronic core-shell nanoparticles: Synthesis, characterization and biological evaluation, *Journal of Nanoparticle Research*, 15 (2013) 1578
64. Waringer, J., Graf, W., Bálint, M., KUČINIĆ, M., Pauls, S.U., Previšić, A., Keresztes, L., Vitecek, S., The larvae of *Drusus franzressli* Malicky 1974 and *Drusus spelaeus* (Ulmer 1920) (Trichoptera: Limnephilidae: Drusinae) with notes on ecology and zoogeography, *Zootaxa*, 3637 (2013) 1-16
65. Florescu, D., Iordache, A.M., Costinel, D., Horj, E., Ionete, R.E., Culea, M., Validation procedure for assessing the total organic carbon in water samples, *Romanian Reports of Physics*, 58 (2013) 211-219
66. Pap, Z., Radu, A., Hidi, I.J., Melinte, G., Diamandescu, L., Popescu, T., Baia, L., Danciu, V., Baia, M., Behavior of gold nanoparticles in a titania aerogel matrix: Photocatalytic activity assessment and structure investigations, *Cuihua Xuebao/Chinese Journal of Catalysis*, 34 (2013) 734-740
67. Stiuftuc, R., Iacovita, C., Lucaciu, C.M., Stiuftuc, G., Dutu, A.G., Braescu, C., Leopold, N., SERS-active silver colloids prepared by reduction of silver nitrate with short-chain polyethylene glycol, *Nanoscale Research Letters*, 8 (2013) 1-5
68. Saracut, V., Giloi, M., Gabor, M., Astilean, S., Farcau, C., Polarization-sensitive linear plasmonic nanostructures via colloidal lithography with uniaxial colloidal arrays, *ACS Applied Materials and Interfaces*, 5 (2013) 1362-1369
69. Suarasan, S., Focsan, M., Maniu, D., Astilean, S., Gelatin-nanogold bioconjugates as effective plasmonic platforms for SERS detection and tagging, *Colloids and Surfaces B: Biointerfaces*, 103 (2013) 475-481
70. Marcu, D., Cristea, V., Daraban, L., Dose-dependent effects of gamma radiation on lettuce (*Lactuca sativa* var. *capitata*) seedlings, *International Journal of Radiation Biology*, 89 (2013) 219-223
71. Tamokou, J.D., Chouna, J.R., Fischer-Fodor, E., Chereches, G., Barbos, O., Damian, G., Benedec, D., Duma, M., Efouet, A.P.N., Wabo, H.K., Kuate, J.R., Mot, A., Silaghi-Dumitrescu, R., Anticancer and Antimicrobial Activities of Some Antioxidant-Rich Cameroonian Medicinal Plants, *PLoS ONE*, 8 (2013) e55880
72. Ungurean, A., Leopold, N., David, L., Chiş, V., Vibrational spectroscopic and DFT study of trimethoprim, *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, 102 (2013) 52-58
73. Tămăşan, M., Radu, T., Simon, V., Spectroscopic characterisation and in vitro behaviour of kaolinite polyvinyl alcohol nanocomposite, *Applied Clay Science*, 72 (2013) 147-154
74. Radu, T., Chiriac, M.T., Popescu, O., Simon, V., Simon, S., In vitro evaluation of the effects of yttria-alumina-silica microspheres on human keratinocyte cells, *Journal of Biomedical Materials Research - Part A*, 101 A (2013) 472-477
75. Dadarlat, D., Pop, M.N., Onija, O., Streza, M., Pop, M.M., Longuemart, S., Depriester, M., Sahraoui, A.H., Simon, V., Photopyroelectric (PPE) calorimetry of composite materials, *Journal of Thermal Analysis and Calorimetry*, 111 (2013) 1129-1132

76. Farcau, C., Potara, M., Leordean, C., Boca, S., Astilean, S., Reliable plasmonic substrates for bioanalytical SERS applications easily prepared by convective assembly of gold nanocolloids, *Analyst*, 138 (2013) 546-552
77. Stiufiuc, R., Iacovita, C., Lucaciu, C.M., Stiufiuc, G., Nicoara, R., Oltean, M., Chis, V., Bodoki, E., Adsorption geometry of propranolol enantiomers on silver nanoparticles, *Journal of Molecular Structure*, 1031 (2013) 201-206
78. Craciun, C., Barbu-Tudoran, L., Identification of new structural elements within 'porosomes' of the exocrine pancreas: A detailed study using high-resolution electron microscopy, *Micron*, 44 (2013) 137-142
79. Ivascu, C., Cozar, I.B., Daraban, L., Damian, G., Spectroscopic investigation of P2O5-CdO-Li 2O glass system, *Journal of Non-Crystalline Solids*, 359 (2013) 60-64
80. Cavalu, S., Simon, V., Ratiu, C., Rus, V., Akin, I., Goller, G., Titania versus ceria alumina/zirconia composites: Structural aspects and biological tolerance, *Key Engineering Materials*, 529-530 (2013) 595-600