

### ISI Publications

1. **C. Berghian-Grosan\***, S. Isik, A.S. Porav, I. Dag, K.O. Ay, G. Vithoukas\*, Ultra-high dilutions analysis: Exploring the effects of potentization by electron microscopy, Raman spectroscopy and deep learning, *J. Mol. Liq.* (2024) DOI: 10.1016/j.molliq.2024.124537
2. F.D. Covaciu, **C. Berghian-Grosan**, A.R. Hategan, D.A. Magdas, A. Dehelean, G. Cristea, Machine Learning Approach to Comparing Fatty Acid Profiles of Common Food Products Sold on Romanian Market, *Foods* 12 (2023) 4237, DOI: 10.3390/foods12234237
3. A.R. Hategan, M. David, **C. Berghian-Grosan**, D.A. Magdas, Geographical and varietal origin differentiation of alcoholic beverages through the association between FT-Raman spectroscopy and advanced data processing strategies, *Food Chemistry-X* 20 (2023) 100902, DOI: 10.1016/j.fochx.2023.100902
4. C.M. Molnar, **C. Berghian-Grosan**, D.A. Magdas, S.C. Pinzaru, Surface-Enhance Raman Spectroscopy Detection of Thiabendazole in Frozen Food Products: The Case of Blueberries and Their Extracts, *Chemosensors* 11 (2023) 505, DOI: 10.3390/chemosensors11090505
5. R.C. Suciu, M. Zagrai, A. Popa, D. Toloman, **C. Berghian-Grosan**, C. Tudoran, M. Stefan, The Influence of Ag<sup>+</sup>/Ti<sup>4+</sup> Ratio on Structural, Optical and Photocatalytic Properties of MWCNT-TiO<sub>2</sub>-Ag Nanocomposites, *Inorganics* 11 (2023) 249, DOI: 10.3390/inorganics11060249
6. D.A. Magdas, and **C. Berghian-Grosan\***, Botanical honey recognition and quantitative mixture detection based on Raman spectroscopy and machine learning, *Spectrochim. Acta A Mol. Biomol. Spectrosc.* 293 (2023) 122433, DOI: 10.1016/j.saa.2023.122433
7. **C. Berghian-Grosan**, A.R. Hategan, M. David, D.A. Magdas, Untargeted metabolomic analysis of honey mixtures: Discrimination opportunities based on ATR-FTIR data and machine learning algorithms, *Microchem. J.* 188 (2023) 108458, DOI: 10.1016/j.microc.2023.108458
8. I. Ayyubov, E. Talas, **C. Berghian-Grosan**, L. Romaszki, I. Borbath, Z. Paszti, A. Szegedi, J. Mihaly, A. Vulcu, A. Tompos, Nitrogen doped carbonaceous materials as platinum free cathode electrocatalysts for oxygen reduction reaction (ORR), *React. Kinet. Mech. Catal.* 136 (2023) 125-147, DOI: 10.1007/s11144-022-02331-6
9. M. David, A.R. Hategan, D.A. Magdas, **C. Berghian-Grosan**, B. Simionescu, Botanical Origin Assessment of Honey Based on ATR-IR Spectroscopy: A Comparison between the Efficiency of Supervised Statistical Methods and Artificial Intelligence, *Appl. Sci.-Basel* 12 (2022) 9645, DOI: 10.3390/app12199645
10. M. David, A.R. Hategan, **C. Berghian-Grosan**, D.A. Magdas, The Development of Honey Recognition Models Based on the Association between ATR-IR Spectroscopy and Advanced Statistical Tools, *Int. J. Mol. Sci.* 230 (2022) 9977, DOI: 10.3390/ijms23179977

11. I.A. Brezestean, N. Tosa, A. Falamas, D. Cuibus, C.M. Muntean, A. Bende, B. Cozar, **C. Berghian-Grosan**, C. Farcau, C, Silver Nanoparticle Films Obtained by Convective Self-Assembly for Surface-Enhanced Raman Spectroscopy Analyses of the Pesticides Thiabendazole and Endosulfan, *Front. Chem.* 10 (2022) 915337, DOI: 10.3389/fchem.2022.915337
12. S. Varvara\*, **C. Berghian-Grosan\***, G. Damian, M. Popa, F. Popa, Combined Electrochemical, Raman Analysis and Machine Learning Assessments of the Inhibitive Properties of an 1,3,4-Oxadiazole-2-Thiol Derivative against Carbon Steel Corrosion in HCl Solution, *Materials* 15(2022) 2224, DOI: 10.3390/ma15062224
13. I. Ayyubov, A. Vulcu, **C. Berghian-Grosan**, E. Talas, I. Borbath, I.E. Sajo, G. Safran, J. Mihaly, A. Tompos, Preparation of Pt electrocatalyst supported by novel,  $Ti_{(1-x)}Mo_xO_2$ -C type of composites containing multi-layer graphene, *React. Kinet. Mech. Catal.* 135 (2022) 49-69, DOI: 10.1007/s11144-021-02138-x
14. D.A. Magdas, M. David, **C. Berghian-Grosan\***, Fruit spirits fingerprint pointed out through artificial intelligence and FT-Raman spectroscopy, *Food Control* 133(B) (2022) 108630, DOI: 10.1016/j.foodcont.2021.108630
15. S. Varvara\*, **C. Berghian-Grosan\***, R. Bostan, R.L. Ciceo, Z. Salarvand, M. Talebian, K. Raeissi, J. Izquierdo, R.M. Souto, Experimental characterization, machine learning analysis and computational modelling of the high effective inhibition of copper corrosion by 5-(4-pyridyl)-1,3,4-oxadiazole-2-thiol in saline environment, *Electrochim. Acta* 398 (2021) 139282, DOI: 10.1016/j.electacta.2021.139282
16. **C. Berghian-Grosan** and D.A. Magdas, Novel insights into the vegetable oils discrimination revealed by Raman spectroscopic studies, *J. Mol. Struct.* 1246 (2021) 131211, DOI: 10.1016/j.molstruc.2021.131211
17. M. Dan, A. Vulcu, S.A. Porav, C. Leostean, G. Borodi, O. Cadar, **C. Berghian-Grosan\***, Eco-Friendly Nitrogen-Doped Graphene Preparation and Design for the Oxygen Reduction Reaction, *Molecules* 26 (2021) 3858, DOI: 10.3390/molecules26133858
18. D.A. Magdas, F. Guyon, **C. Berghian-Grosan**, C. Muller Molnar, Challenges and a step forward in honey classification based on Raman spectroscopy, *Food Control* 123 (2021) 107769, DOI: 10.1016/j.foodcont.2020.107769
19. A. Vulcu, T. Radu, A.S. Porav, **C. Berghian-Grosan\***, Low-platinum catalyst based on sulfur doped graphene for methanol oxidation in alkaline media, *Mater. Today Energy* 19 (2021) 100588, DOI: 10.1016/j.mtener.2020.100588
20. **C. Berghian-Grosan** and D.A. Magdas, Application of Raman spectroscopy and Machine Learning algorithms for fruit distillates discrimination, *Sci. Rep.* 10 (2020) 21152, DOI: 10.1038/s41598-020-78159-8

21. F.-D. Covaciu, **C. Berghian-Grosan**, I. Feher, D.A. Magdas, Edible Oils Differentiation Based on the Determination of Fatty Acids Profile and Raman Spectroscopy—a Case Study, *Appl. Sci.-Basel* 10 (2020) 8347 (1–20), DOI: 10.3390/app10238347
22. **C. Berghian-Grosan** and D.A. Magdas, Raman spectroscopy and machine-learning for edible oils evaluation, *Talanta* 218 (2020) 121176, DOI: 10.1016/j.talanta.2020.121176
23. M. Coros, F. Pogacean, A. Turza, M. Dan, **C. Berghian-Grosan**, I.O. Pana, S. Pruneanu, Green synthesis, characterization and potential application of reduced graphene oxide, *Physica E Low Dimens. Syst. Nanostruct.* 119 (2020) 113971, DOI: 10.1016/j.physe.2020.113971
24. C. Muller Molnar, **C. Berghian-Grosan**, D.A. Magdas, An optimized green preparation method for the successful application of Raman spectroscopy in honey studies, *Talanta* 208 (2020) 120432, DOI: 10.1016/j.talanta.2019.120432
25. A. Turza, A.M.R. Gherman, V. Chis, **C. Berghian-Grosan**, G. Borodi, Structural, spectroscopic and theoretical studies of sodium (2-carbamoylphenoxy) acetate salt, *J. Mol. Struct.* 1200 (2020) 127016, DOI: 10.1016/j.molstruc.2019.127016
26. **C. Berghian-Grosan**, T. Radu, A. R. Biris, M. Dan, C. Voica, F. Watanabe, A. S. Biris, A. Vulcu, Platinum nanoparticles coated by graphene layers: A low-metal loading catalyst for methanol oxidation in alkaline media, *J. Energ. Chem.* 40 (2020) 81-88, DOI: 10.1016/j.jechem.2019.03.003
27. O. Grad, M. Mihet, M. Dan, G. Blanita, T. Radu, **C. Berghian-Grosan**, M. D. Lazar, Au/reducedgraphene oxidecomposites: eco-friendly preparation method and catalytic applications for formic acid dehydrogenation, *J. Mater. Sci.* 54 (2019) 6991-7004, DOI: 10.1007/s10853-019-03394-y
28. M. Karabulut, A. Popa, **C. Berghian-Grosan**, H. Ertap, M. Yüksek, S. Tokdemir Öztürk, R. Stefan, On the structural features of iron-phosphate glasses by Raman and EPR: Observation of superparamagnetic behavior differences in HfO<sub>2</sub> or CeO<sub>2</sub> containing glasses, *J. Mol. Struct.* 1191 (2019) 59-65, DOI: 10.1016/j.molstruc.2019.04.086
29. A. Bunge, A. S. Porav, Gh. Borodi, T. Radu, A. Pirnau, **C. Berghian-Grosan**, R. Turcu, Correlation between synthesis parameters and properties of magnetite clusters prepared by solvothermal polyol method, *J. Mat. Sci.* 54 (2019) 2853-2875, DOI: 10.1007/s10853-018-3030-9
30. A. Vulcu, A. R. Biris, Gh. Borodi, **C. Berghian-Grosan\***, Interference of ascorbic and uric acids on dopamine behavior at graphene composite surface: An electrochemical, spectroscopic and theoretical approach, *Electrochim. Acta* 282 (2018) 822-834, DOI: 10.1016/j.electacta.2018.06.122
31. A. Vulcu, L. Olenic, G. Blanita, **C. Berghian-Grosan\***, The electrochemical behavior of a Metal-Organic Framework modified gold electrode for methanol oxidation, *Electrochim. Acta* 219 (2016) 630-637, DOI: 10.1016/j.electacta.2016.10.077

32. A. Vulcu, **C. Berghian Grosan**, L. Muresan, S. Pruneanu, L. Olenic, The reductive amination of  $\alpha$ -ketoisocaproic acid using a leucine dehydrogenase-modified gold electrode, *Particul. Sci. Technol.* 34 (2016) 96-102, DOI: 10.1080/02726351.2015.1051685
33. **C. Berghian-Grosan\***, A. R. Biris, M. Coros, F. Pogacean, S. Pruneanu, Electrochemical and spectroscopic studies of ssDNA damage induced by hydrogen peroxide using graphene based nanomaterials, *Talanta* 138 (2015) 209-217, DOI: 10.1016/j.talanta.2015.02.019
34. **C. Berghian-Grosan\***, L. Olenic, G. Katona, M. Perde-Schrepler, A. Vulcu, L-leucine for gold nanoparticles synthesis and their cytotoxic effects evaluation, *Amino Acids* 46 (2014) 2545-2552, DOI: 10.1007/s00726-014-1814-z
35. A. Vulcu, **C. Grosan**, L. M. Muresan, S. Pruneanu, L. Olenic, Modified gold electrodes based on thiocytosine/guanine-gold nanoparticles for uric and ascorbic acid determination, *Electrochim. Acta* 88 (2013) 839-846, DOI: 10.1016/j.electacta.2012.10.074
36. M. Crisan, L. David, B. Moldovan, A. Vulcu, S. Dreve, M. Perde-Schrepler, C. Tatomir, A. G. Filip, P. Bolfa, M. Achim, I. Chiorean, I. Kacso, **C. Berghian Grosan**, L. Olenic, New nanomaterials for the improvement of psoriatic lesions, *J. Mater. Chem. B* 1 (2013) 3152-3158, DOI: 10.1039/c3tb20476f
37. **C. Berghian Grosan\***, C. Varodi, A. Vulcu, L. Olenic, S. Pruneanu, V. Almasan, Structural and electrochemical characterization of novel leucine-gold nanoparticles modified electrode, *Electrochim. Acta* 63 (2012) 146-152, DOI: 10.1016/j.electacta.2011.12.071
38. S. Pruneanu, F. Pogacean, **C. Grosan**, E. M. Pica, L. C. Bolundut, A. S. Biris, Electrochemical investigation of atenolol oxidation and detection by using a multicomponent nanostructural assembly of amino acids and gold nanoparticles, *Chem. Phys. Lett.* 504 (2011) 56-61, DOI: 10.1016/j.cplett.2011.01.051
39. **C. Berghian Grosan\***, V. Almasan, Structure and vibrational spectrum of L-Leucine: A DFT-PCM investigation, *Studia UBB Chemia* 56 (2011) 199-210
40. A. Vulcu, **C. Berghian Grosan**, M. Chiriac, V. Almasan, The  $^{15}\text{N}$  labelled L-glutamic acid: Experimental and computational NMR studies, *Rev. Roum. Chim.* 56 (6) (2011) 667-674
41. M. Pinteá, M. Fazekas, P. Lameiras, I. Cadis, **C. Berghian**, I. Silaghi-Dumitrescu, F. Popa, C. Bele, N. Plé, M. Darabantu, Serinolic amino-s-triazines: iterative synthesis and rotational stereochemistry phenomena as N-substituted derivatives of 2-aminopropane-1,3-diols, *Tetrahedron* 64 (2008) 8851-8870, DOI: 10.1016/j.tet.2008.06.071
42. M. Fazekas, M. Pinteá, P. Lameiras, A. Lesur, **C. Berghian**, I. Silaghi-Dumitrescu, N. Plé, M. Darabantu, Serinolic amino-s-triazines: Iterative synthesis of N-substituted amino-1,3-dioxane derivatives from 1-(p-nitrophenyl)serinols and rotational stereochemistry phenomena, *Eur. J. Org. Chem.* 2008 (2008) 2473-2494, DOI: 10.1002/ejoc.200700847

43. M. Darabantu, M. Pinteau, M. Fazekas, P. Lameiras, **C. Berghian**, I. Delhom, I. Silaghi-Dumitrescu, N. Plé, A. Turck, First synthesis of a G-2 melamine dendrimer with serinolic peripheral groups, *Lett. Org. Chem.* 3 (2006) 905-910, DOI: 10.2174/157017806779467933
44. **C. Berghian**, P. Lameiras, L. Toupet, E. Condamine, N. Plé, N., A. Turck, C. Maieranu, M. Darabantu,  $\alpha$ -(3,7-Dioxa-r-1-azabicyclo[3.3.0]oct-c-5-ylmethoxy)-diazines. Part 1: Synthesis and stereochemistry. Extension to s-triazine series, *Tetrahedron* 62 (2006) 7319-7338, DOI: 10.1016/j.tet.2006.05.031
45. **C. Berghian**, E. Condamine, N. Plé, A. Turck, I. Silaghi-Dumitrescu, C. Maieranu, M. Darabantu,  $\alpha$ -(3,7-Dioxa-r-1-azabicyclo[3.3.0]oct-c-5-ylmethoxy)-diazines. Part 2: Functionalisation via directed orthometallation and cross-coupling reactions, *Tetrahedron* 62 (2006) 7339-7354, DOI: 10.1016/j.tet.2006.05.032
46. M. Fazekas, M. Darabantu, M. Pinteau, P. Lameiras, C. Bele, **C. Berghian**, N. Plé, First synthesis, rotamerism and herbicidal evaluation of substituted s-triazines with amino-1,3-dioxane groups, *Heterocycl. Commun.* 12 (2006) 151-156
47. M. Pinteau, M. Darabantu, M. Fazekas, P. Lameiras, **C. Berghian**, I. Delhom, C. Bele, N. Plé, First synthesis, rotamerism and herbicidal evaluation of substituted s-triazines with serinolic fragment, *Heterocycl. Commun.* 12 (2006) 135-140
48. **C. Berghian**, M. Darabantu, A. Turck, N. Plé, Metallation of pyridin-2-yl-diazines. Use of pyridine ring as ortho-directing group. Diazines. Part 45, *Tetrahedron* 61 (2005) 9637-9644, DOI: 10.1016/j.tet.2005.07.031
49. **C. Berghian**, M. Darabantu, P. Lameiras, N. Plé, A. Turck, First examples of the conformation chirality of heterobicyclo[3.3.0] octanes: 3,7-Dioxa-r-1-azabicyclo[3.3.0]octc-5-yl-methoxypyrazines, *Heterocycl. Commun.* 11 (2005) 517-522
50. C. Maieranu, M. Darabantu, E. Condamine, G Plé, Y. Ramondenc, M. Fazekas, M. Pinteau, **C. Berghian**, First example of long distance stereocontrolled synthesis in 1-aza-3,7-dioxabicyclo[3.3.0.]octane series, *Heterocycl. Commun.* 11 (2005) 305-310
51. **C. Berghian**, M. Darabantu, N. Plé, A. Turck, Adjacent-ring directed ortho metallation by the 2-pyridyl group in 2-pyridyldiazines, *Rev. Roum. Chim.* 50 (2005) 41-46
52. C. Maieranu, M. Darabantu, G. Plé, Y., Ramondenc, **C. Berghian**, Ring-ring tautomerism of some spirooxazolidines derived from l-phenylserinols, *Rev. Roum. Chim.* 50 (2005) 29-40
53. M. Darabantu, C. Maieranu, I. Silaghi-Dumitrescu, L. Toupet, E. Condamine, Y. Ramondenc, **C. Berghian**, G. Plé, N. Plé, 3,7-Dioxa-1-azabicyclo[3.3.0]octanes substituted at the C-5 position - From local to global stereochemistry, *Eur. J. Org. Chem.* 2004 (2004) 2644-2661, DOI: 10.1002/ejoc.200300584
54. C. Maieranu, M. Darabantu, G. Plé, **C. Berghian**, E. Condamine, Y. Ramondenc, I. Silaghi-Dumitrescu, S. Mager, Ring-chain tautomerism and other versatile behaviour of 1,4-diimino-

and 1,2-phenylene derivatives of some C substituted serinols, *Tetrahedron* 58 (2002) 2681-2693, DOI: 10.1016/S0040-4020(02)00111-4

55. M. Darabantu, C. Maiereanu, G. Plé, **C. Berghian**, E. Condamine, Y. Ramondenc, Convenient Synthesis of Chiral 5-Amino-1,3-Dioxanes Built on Some 1-p-Nitrophenylserinols Skeletons, *Heterocycl. Commun.* 7 (2001) 593-598

### ISI-indexed journals

56. F. Popa, I. Simioanca, M. Pinteaa, M. Fazekas, L. Gratecap, **C. Berghian**, C. Batiu, M. Darabantu, Synthesis of New Potential Dendritic Cores: (4-oxopiperidin-1-yl)-s-triazines, *Studia UBB Chemia* 53 (2008) 5-13

### ISI conference proceedings

57. S. Macavei, D. Toloman, M. Stefan, A. Popa, L. Barbu-Tudoran, **C. Grosan**, R. Suciua, O. Pana, R. Balan, Characterization of Cu<sub>2</sub>ZnSnS<sub>4</sub> thin film deposited by pulse laser deposition, *AIP Conference Proceedings* 1917 (2017) 040010
58. **C. Berghian-Grosan**, A.R. Biris, S. Pruneanu, M.D. Lazar, F. Pogacean, F. Watanabe, A.S. Biris, Electrochemical oxidation of adenine on graphene-platinum nanoparticles modified electrode, *AIP Conference Proceedings* 1565 (2013) 219-223
59. L. Olenic, A. Vulcu, I. Chiorean, M. Crisan, **C. Berghian-Grosan**, S. Dreve, L. David, L.B. Tudoran, I. Kacso, I. Bratu, C. Neamtu, C. Voica, Effect of natural extracts pH on morphological characteristics of hybrid materials based on gold nanoparticles, *AIP Conference Proceedings* 1565 (2013) 238-242
60. A. Vulcu, S. **Pruneanu**, **C. Berghian-Grosan**, L. Olenic, L.M. Muresan, L. Barbu-Tudoran, Impedimetric investigation of gold nanoparticles - Guanine modified electrode, *AIP Conference Proceedings* 1565 (2013) 273-277
61. S. Pruneanu, L. Olenic, F. Pogacean, L.B. Tudoran, V. Canpean, A., Vulcu, **C. Grosan**, A.S. Biris, Nanostructures based on metallic nanoparticles and biomolecules, *AIP Conference Proceedings* 1425 (2012) 144-147
62. C. Bele, M. Darabantu, C.T. Matea, M. Pinteaa, M. Fazekas, **C. Berghian**, Effects of two new N-substituted 2-chloro-4,6-diamino-s-triazines with herbicidal activity on Lemna minor, *Bulletin of the University of Agricultural Science and Veterinary Medicine-Agriculture* 61 (2005) 194-196. ISSN 1843-5246
63. C. Bele, M. Darabantu, E. Muntean, M. Pinteaa, M. Fazekas, **C. Berghian**, D. Lazar, Influence of new N-substituted 2-chloro-4,6-diamino-1,3,5-triazines on folliar galactolipids in Raphanus sativus L. and Cucumis sativus L., *Bulletin of the University of Agricultural Sciences and Veterinary Medicine-Agriculture* 60 (2004) 35-38. ISSN 1843-5246

### BDI-indexed journals (accredited by CNCSIS)

64. G. Vithoukias and **C. Berghian Grosan**, The Spin of Electrons and the Proof for the Action of Homeopathic Remedies, *J. Med. Life* 13 (2020) 278–282. ISSN 1844-122x (CNCSIS, rank B+)
65. **C. Berghian**, N. Plé, A. Turck, M. Darabantu,  $\alpha$ -(3,7-Dioxa-r-1-azabicyclo[3.3.0]oct-c-5-ylmethoxy)-diazines (II): Functionalisation via Directed *ortho*-Metallation and Cross-Coupling Reactions, *Studii si Cercetari Stiintifice-Chimie si Inginerie Chimica, Biotehnologii, Industrie Alimentara VII* (2006) 33-50. ISSN 1582-540X (CNCSIS, rank B+)
66. **C. Berghian**, N. Plé, A. Turck, M. Darabantu,  $\alpha$ -(3,7-Dioxa-r-1-azabicyclo[3.3.0]oct-c-5-ylmethoxy)-diazines (I): Synthesis and Stereochemistry. Extention in s-Triazine Series, *Studii si Cercetari Stiintifice-Chimie si Inginerie Chimica, Biotehnologii, Industrie Alimentara VII* (2006) 13-32. ISSN 1582-540X (CNCSIS, rank B+).
67. **C. Berghian**, N. Plé, A. Turck, M. Darabantu, First Report on 3,7-Dioxa-r-1-Azabicyclo[3.3.0]oct-c-5-ylmethoxy System Substituting s-Triazine, *Studia UBB* 1 (2005) 201-207. ISSN 1224-7154 (CNCSIS, rank A).
68. M. Fazekas, M. Darabantu, M. Pinteá, P. Lameiras, C. Bele, **C. Berghian**, N. Plé, First Synthesis, Rotamerism and Herbicidal Evaluation of Substituted s-Triazines with Serinolic Fragment (II): Amino-1,3-Dioxanes of (1S,2S)-p-Nitrophenylserinols, *Studia UBB Chemia 1* (2005) 219-228. ISSN 1224-7154 (CNCSIS, rank A).
69. M. Pinteá, M. Darabantu, M. Fazekas, P. Lameiras, **C. Berghian**, I. Delhom, C. Bele, N. Plé, First Synthesis, Rotamerism and Herbicidal Evaluation of Substituted s-Triazines with Serinolic Fragments (I): Open-Chain Structures, *Studia UBB Chemia 1* (2005) 209-218. ISSN 1224-7154 (CNCSIS, rank A).
70. **C. Berghian**, C. Maieréanu, N. Plé, A. Turck, E. Condamine, M. Darabantu, First Example of 1-Aza-3,7-dioxabicyclo[3.3.0]octane-5-yl-methoxy System as Directed Ortho-Metallation Group, *Studia UBB Chemia 2* (2003) 127-138. ISSN 1224-7154 (CNCSIS, rank A).
71. **C. Berghian**, C. Maieréanu, N. Plé, G. Plé, M. Darabantu, First Example of Selective Nucleophilicity of 1-Aza-5-hydroxymethyl-3,7-dioxabicyclo[3.3.0]octanes in Alkoxide Form, *Studia UBB Chemia 2* (2003) 113-125. ISSN 1224-7154 (CNCSIS, rank A).
72. C. Maieréanu, I. Silaghi-Dumitrescu, **C. Berghian**, M. Pinteá, M. Fazekas, M. Darabantu, Stereocontrolled Synthesis by Anomeric Effects of Substituted 1-Aza-3,7-dioxabicyclo [3.3.0]octanes, *Studia UBB Chemia 2* (2003) 103-111. ISSN 1224-7154 (CNCSIS, rank A).

### Books/chapters

73. L. Olenic, M. Crisan, A. Vulcu, **C. Berghian-Grosan**, D. Crisan, I. Chiorean, **Chapter 18: Green nanomaterials for psoriatic lesions** in *Nanomaterials and Regenerative Medicine*, Yunfeng Lin, Tao Gong (Eds), IAPCB-OBP, Zagreb, Croatia, 2016, 477-508.
74. D. A. Magdas, **C. Berghian-Grosan** (equal contribution) Raman spectroscopy in *Electromagnetic Technologies in Food Science*, Vicente M. Gomez-Lopez, Rajeev Bhat (Eds), Wiley-Blackwell, 1st edition, ISBN: 111975951X, 2021, doi: 10.1002/9781119759522.ch13

### Patents

75. L. Olenic, A. Vulcu, **A.C. Grosan**, S. Dreve, *Synthesis procedure for hybrid materials based on gold nanoparticles and anthocyanins* Patent no. RO130210 B1 (RO-BOPI 7/2018, 30.07.2018)
76. L. Olenic, A. Vulcu, **A.C. Grosan**, S. Dreve, *Synthesis procedure for hybrid materials based on silver nanoparticles and anthocyanins from natural extracts* RO130666 B1 (RO-BOPI 6/2021, 30.06.2021)
77. A. Vulcu, **A.C. Grosan**, A.S. Porav, *Hybrid material based on sulfur doped graphene and low platinum content, efficient for methanol oxidation reaction in alkaline medium* RO133711 A0 (RO-BOPI 11/2019, 29.11.2019)