

Publications list
-Dr. Augustin C. Mot-

A) Books Chapters:

1. Christin Naumann, Augustin C. Mot, Nico Dissmeyer, Generation of artificial N-end rule substrate proteins *in vivo* and *in vitro*, Plant Proteostasis series, **Methods in Molecular Biology**, ed. Clifton, N.J., Volume: 1450, **2016**, pag. 55.
2. Augustin C. Mot, Bischin Cristina Maria, Damian Grigore, Silaghi-Dumitrescu Radu, Antioxidant activity evaluation involving hemoglobin-related free radical reactivity. Advanced protocols in oxidative stress III, **Methods in Molecular Biology**, ed. Donald Armstrong, Humana Press, Springer Science, capitol 18, **2015**, pag. 247.

B) ISI Thomson Reuters papers

49. Augustin C. Mot*, Cristina Puscas, Sorin Dorneanu, Radu Silaghi-Dumitrescu, EPR detection of sulfanyl radical during sulfhemoglobin formation–Influence of catalase, **Free Radical Biology and Medicine**, 137 (2019) 110-115.
48. Augustin C. Mot*, Cristina Puscas, Patricia Miclea, Galaba Naumova-Letia, Sorin Dorneanu, Dorina Podar, Nico Dissmeyer, Radu Silaghi-Dumitrescu, Redox control and autoxidation of class 1, 2 and 3 phytooglobins from *Arabidopsis thaliana*, **Nature-Scientific Reports**, 8, (2018), e113714.
47. Augustin C. Mot* Cristina Bischin Grigore Damian Amr A. A. Attia Emese Gal Nicoleta Dina Nicolae Leopold Radu Silaghi-Dumitrescu, Fe(III) – Sulfide interaction in globins: Characterization and quest for a putative Fe(IV)-sulfide species, **Journal of Inorganic Biochemistry**, 179 (2018) 32-39.
46. Augustin C. Mot, Erik Prell, Maria Klecker, Christin Naumann, Frederik Faden, Bernhard Westermann, Nico Dissmeyer, Real-time detection of N-end rule-mediated ubiquitination via fluorescently labeled substrate probes, **New Phytologist**, 217 (2018) 613-624.
45. Anca D. Farcas, Augustin C. Mot*, Cezara Zagrean-Tuza, Vlad Toma, Claudia Cimpoi, Anamaria Hosu, Marcel Parvu, Ioana Roman, Radu Silaghi-Dumitrescu, Chemo-mapping and biochemical-modulatory and antioxidant/prooxidant effect of Galium verum extract during acute restraint and dark stress in female rats, **PlosOne**, (2018), e0200022.
44. Denisa Hathazi, Florina Scurtu, Cristina Bischin, Augustin C. Mot, Amr A. A. Attia, Jacob Kongsted, Radu Silaghi-Dumitrescu, The Reaction of Oxy Hemoglobin with Nitrite: Mechanism, Antioxidant-Modulated Effect, and Implications for Blood Substitute Evaluation, **Molecules**, 23 (2018), e350.
43. Sanja Kostadinovic Velickovska, Augustin C. Mot, Sasa Mitrev Rubin Gulaboski, Ludger Bruhl, Hamed Mirhosseini, Radu Silaghi-Dumitrescu, Bertrand Matthaus, Bioactive compounds and “in vitro” antioxidant activity of some traditional and non-traditional cold-pressed edible oils from Macedonia, **Journal of Food Science and Technology**, 55 (2018) 1614–1623.
42. Cristina Puscas, Luana Radu, Francisco Carrascoza, Augustin C. Mot, Diana Amariei, Oana Lungu, Florina Scurtu, Paula Podea, Raluca Septeleian, Alina Matei, Mihaela Mic, Amr. A. Attia, Radu Silaghi-Dumitrescu, The high affinity of small-molecule antioxidants for hemoglobin, **Free Radical Biology and Medicine**, 124 (2018) 260-274.
41. Andra-Diana Andreicut, Alina Elena Pârvu, Augustin C. Mot, Marcel Pârvu, Eva Fischer Fodor, Adriana Florinela Cătoi, Vasile Feldrihan, Mihai Cecan, Alexandru Irimie,

Phytochemical Analysis of Anti-Inflammatory and Antioxidant Effects of *Mahonia aquifolium* Flower and Fruit Extracts, **Oxidative Medicine and Cellular Longevity**, (2018), e2879793.

40. Andra-Diana Andreicuț, Alina Elena Pârvu, Augustin C. Moț, Marcel Pârvu, Eva Fischer-Fodor, Vasile Feldrihan, Adriana Florinela Cătoi, Mihai Cecan, Alexandru Irimie, Anti-inflammatory and antioxidant effects of *Mahonia aquifolium* leaves and bark extracts, **Farmacia** 66 (2018) 49-58.

39. Daniela Hanganu, Daniela Benedec, Laurian Vlase, Neli Olah, Grigore Damian, Radu Silaghi-Dumitrescu, Augustin C. Moț, Claudia Crina Toma, **Farmacia**, 65 (2017) 449-453.

38. Cristina Bischin, Augustin C. Moț, Andrei Stefanu Nicolae Leopold Denisa Hathazi, Grigore Damian Radu Silaghi-Dumitrescu, Chlorite reactivity with myoglobin: Analogy with peroxide and nitrite chemistry?, **Journal of Inorganic Biochemistry**, 172 (2017) 122-128.

37. Augustin C. Moț, Parvu Marcel, Parvu Alina, Rosca-Casian Oana, Dina Nicoleta, Leopold Nicolae, Silaghi-Dumitrescu Radu, Mircea Cristina, Reversible naftifine-induced carotenoid depigmentation in *Rhodotorula mucilaginosa* (A. Jörg.) F.C. Harrison causing onychomycosis, **Nature-Scientific Reports**, 7 (2017) e11125.

36. Galaba Naumova-Letia, Augustin C. Moț*, Probing reducing power for ferryl phytooglobins of several phenolic compounds using their kinetic profiles assisted by chemometric methods, **Studia Universitatis Babeș-Bolyai Chemia** 62 (2017) 49-66.

35. Paulo T. Mioto, Marta R. Ruiz, Augustin C. Moț, Rafael Zuccarelli, Francisco J. Corpas, Luciano Freschi, Helenice Mercier, Alternative fluorimetric-based method to detect and quantify total S-nitrosothiols in plants, **Nitric oxide – Biology and Chemistry**, 68 (2017) 7-13.

34. Bernadett Porteka, Augustin C. Moț, Claudia Cimpoi, Anamaria Hosu, Cristina Bischin, Grigore Damian, Eva Fisher-Fodor, Radu, Silaghi-Dumitrescu, Selective protective effect of antioxidant-rich *Rumex acetosa* extracts, **Revista de Chimie** 67 (2016) 833-837.

33. Augustin C. Moț, Cristina Bischin, Bianca Muresan, Marcel Parvu, Grigore Damian, Laurian Vlase, Radu Silaghi-Dumitrescu, Antioxidant activity evaluation by physiologically relevant assays based on haemoglobin peroxidase activity and cytochrome c-induced oxidation of liposomes, **Natural Product Research** 30 (2016) 1315-1318.

32. Radu Tamaian, Augustin C. Moț*, Radu Silaghi-Dumitrescu, I. Ionuț, A. Stana, O. Oniga, C. Nastasa, D. Benedec, Brandusa Tiperciuc, Study of the relationships between the structure, lipophilicity and biological activity of some thiazolyl-carbonyl-thiosemicarbazides and thiazolyl-azoles, **Molecules** 20 (2015) 22188-22201. (*coresponding author)

31. Aniela Saplontai-Pop*, Augustin C. Moț*, Marioara Moldovan, Radu Oprean, Radu Silaghi-Dumitrescu, Olga Orășan, Marcel Pârvu, Emese Gal, Corina Ionescu, Testing antiplatelet and antioxidant activity of the extract of seven varieties of *Allium cepa* L., **Open Life Sciences** 10 (2015) 89-98. (*coresponding authors)

30. Denisa Hathazi, Augustin C. Moț, Anetta Vaida, Florina Scurtu, Iulia Lupan, Eva Fischer-Fodor, Grigore Damian, Donald M. Kurtz, Radu Silaghi-Dumitrescu, Oxidative protection of hemoglobin and hemerythrin by cross-linking with a nonheme iron peroxidase: Potentially improved oxygen carriers for use in blood substitutes, **Biomacromolecules** 15 (2014) 1920-1927.

29. Alina Parvu, Marcel Parvu, Laurian Vlase, Patricia Miclea, Augustin C. Moț, Radu Silaghi-Dumitrescu, Anti-inflammatory effects of *Allium schoenoprasum* L. leaves., **Journal of Physiology and Pharmacology** 65 (2014) 309-315.

28. Laurian Vlase, Daniela Benedec, Daniela Hanganu, Grigore Damian, Ioan Csillag, Bogdan Sevastre, Augustin C. Moț, Radu Silaghi-Dumitrescu, Ioan Tilea, Evaluation of antioxidant and antimicrobial activities and phenolic profile for *Hyssopus officinalis*, *Ocimum basilicum* and *Teucrium chamaedrys*, **Molecules** 19 (2014) 5490-5507.

27. Daniela Benedec, Ilioara Oniga, Bianca Muresan, Augustin C. Mot, Grigore Damian, Adriana Nistor, Radu Silaghi-Dumitrescu, Daniela Hanganu, Mihaela Duma, Laurian Vlase, Contrast between water- and ethanol-based antioxidant assays: aspen (*Populus tremula*) and black poplar (*Populus nigra*) extracts as a case study, **Journal of Food Quality** 37 (2014) 259-267
26. Istvan M. Takacs, Augustin C. Mot, Radu Silaghi-Dumitrescu, Grigore Damian, EPR investigation of libration motion of spin labeled hemerythrin, **Journal of Molecular Structure** 1073 (2014) 18-23
25. Augustin C. Mot, Cristina Coman, Carmen Miron, Grigore Damian, Costel Sarbu, Radu Silaghi-Dumitrescu, An assay for pro-oxidant reactivity based on phenoxyl radicals generated by laccase, **Food Chemistry** 143 (2014) 214-222.
24. Daniela Benedec, Laurian Vlase, Ioana Oniga, Augustin C. Mot, Radu Silaghi-Dumitrescu, Daniela Hanganu, Brindusa Tiperciuc, LC-MS analysis and antioxidant activity of phenolics compounds from two indigenous species of Mentha. Note I. **Farmacia** 61 (2013) 262-267.
23. Istvan M. Takacs, Augustin C. Mot, Radu Silaghi-Dumitrescu, Grigore Damian, Site directed spin labeling of hemerythrin and hemoglobin, **Studia Universitatis Babes-Bolyai Chemia** 58 (2013) 61-69.
22. Cristina Coman, Augustin C. Mot*, Emese Gal, Marcel Pârvu, Radu Silaghi-Dumitrescu, Laccase is upregulated via stress pathways in the phytopathogenic fungus *Sclerotinia sclerotiorum*, **Fungal Biology** 117 (2013) 528–539 (*coresponding author).
21. Daniela Benedec, Laurian Vlase, Ioana Oniga, Augustin C. Mot, Grigore Damian, Daniela Hanganu, Mihaela Duma, Radu Silaghi-Dumitrescu, Polyphenolic composition, antioxidant and antibacterial activities for two Romanian subspecies of *Achillea distans* Waldst. et Kit. ex Willd.. **Molecules**, 18 (2013) 8725-8739.
20. Jean de Dieu Tamokou, Jean Rodolphe Chouna, Eva Fischer-Fodor, Gabriela Chereches, Otilia Barbos, Grigore Damian, Daniela Benedec, Mihaela Duma, Alango Pépin Nkeng Efouet, Hippolyte Kamdem Wabo, Jules Roger Kuate, Augustin C. Mot*, Radu Silaghi-Dumitrescu*, Anticancer and antimicrobial activities of some antioxidant-rich Cameroonian medicinal plants, **PLOS One**, (2013) 8: e55880(*coresponding authors).
19. Augustin C. Mot, Radu Silaghi-Dumitrescu, Laccases: complex architectures for one-electron oxidations (review), **Biochemistry (Moscow)**, 77 (2012) 1395-1407.
18. Imre Anamaria, Augustin C. Mot, Radu Silaghi-Dumitrescu, Exploring the possibility of high-valent copper in models of copper proteins with a three-histidine copper-binding motif, **Central European Journal of Chemistry**, 10 (2012) 1527-1533.
17. Augustin C. Mot, Marcel Pârvu, Grigore Damian, Florin D. Irimie, Zsuzsana Darula, Katalin F. Medzihradzky, Balazs Brem, Radu Silaghi-Dumitrescu, A “yellow” laccase with “blue” spectroscopic features, from *Sclerotinia sclerotiorum*, **Process Biochemistry**, 47 (2012) 968-975.
16. Augustin C. Mot, Sergei A. Syrбу, Sergei V. Makarov, Grigore Damian, Radu Silaghi-Dumitrescu, Axial ligation in water-soluble copper porphyrinates: contrasts between EPR and UV–vis, **Inorganic Chemistry Communications**, 18 (2012) 1-3.
15. Alexandru Lupan, Csongor Matyas, Augustin C. Mot, Radu Silaghi-Dumitrescu, Can geometrical distortions make a laccase change color from blue to yellow?, **Studia Universitatis Babes-Bolyai Chemia** 56 (2011) 231-238.
14. Costel Sarbu, Augustin C. Mot, Ecosystem discrimination and fingerprinting of Romanian propolis by hierarchical fuzzy clustering and image analysis of TLC patterns, **Talanta** 85 (2011) 1112– 1117.
13. Eva Fischer-Fodor, Augustin C. Mot, Florina Deac, Marian Arkosi, Radu Silaghi-Dumitrescu, Towards hemerythrin-based blood substitutes: Comparative performance to

hemoglobin on human leukocytes and umbilical vein endothelial cells, **Journal of Bioscience**, 36 (2011) 215–221.

12. Augustin C. Moț*, Radu Silaghi-Dumitrescu, Costel Sarbu, Rapid and effective evaluation of the antioxidant capacity of propolis extracts using DPPH bleaching kinetic profiles, FT-IR and UV-vis spectroscopic data, **Journal of Food Composition and Analysis**, 24 (2011) 516-522 (*coresponding author).

11. Oana Zolog, Augustin C. Moț, Florina Deac, Alina Roman, Eva Fischer-Fodor, Radu Silaghi-Dumitrescu, A new polyethyleneglycol-derivatized hemoglobin derivative with decreased oxygen affinity and limited toxicity, **The Protein Journal**, 30 (2011) 27-31.

10. Augustin C. Moț, Alina Roman, Iulia Lupan, Donald M. Kurtz, Radu L. Silaghi-Dumitrescu, Towards the development of hemerythrin-based blood substitutes, **The Protein Journal**, 29 (2010) 387-393.

9. Augustin C. Moț, Zoltan Kis, Dimitri A. Svistunenko, Grigore Damian, Radu Silaghi-Dumitrescu, Sergei V. Makarov, ‚Super-reduced’ iron under physiologically-relevant conditions, **Dalton Transactions**, 39 (2010) 1464-1466.

8. Florin Soponar, Augustin C. Moț, Costel Sârbu, High-performance thin-layer chromatography and three-dimensional image analysis for the determination of rutin in pharmaceutical preparations, **Journal of AOAC International**, 93 (2010) 1-7.

7. Augustin C. Moț, Florin Soponar, Andrei Medvedovici, Costel Sârbu, Simultaneous spectrophotometric determination of aspirin, paracetamol, caffeine and chlorphenamine from pharmaceutical formulations using multivariate regression methods, **Analytical Letters**, 43 (2010) 804-813.

6. Augustin C. Moț, Florin Soponar Costel Sârbu, Multivariate analysis of reflectance spectra from propolis: geographical variation in Romanian samples, **Talanta** 81 (2010) 1010-1015.

5. Augustin C. Moț, Grigore Damian, Costel Sarbu, Radu Silaghi-Dumitrescu, Redox reactivity in propolis: direct detection of free radicals in basic medium and interaction with hemoglobin, **Redox Report**, 14 (2009) 267-274.

4. Augustin C. Moț, Florin Soponar, Dorina Casoni, Codruta S. Cobzac, Costel Sarbu, Simultaneous spectrophotometric determination of some food dyes from mixtures using Principal Component Regression, **Chemistry Magazine**, 60 (2009) 647-652.

3. Falk Hillmann, Oliver Riebe, Ralf-Jörg Fischer, Augustin C. Moț, Jonathan D. Caranto, Donald M. Kurtz Jr., Hubert Bahl, Reductive dioxygen scavenging by flavo-diiron proteins of *Clostridium acetobutylicum*, **FEBS Letters**, 583 (2009) 241-245.

2. Florin Soponar, Augustin C. Moț, Costel Sârbu, Quantitative evaluation of paracetamol and caffeine from pharmaceutical preparations using image analysis and RP-TLC, **Chromatographia**, 69 (2009) 151-155.

1. Florin Soponar, Augustin C. Moț, Costel Sârbu, Quantitative determination of some food dyes using digital processing of images obtained by thin-layer chromatography, **Journal of Chromatography A**, 1188 (2008) 295-300.

C) Oral communications at conferences

12. Augustin C. Moț, Cezara Zăgrean-Tuza, Costel Sarbu, Chemometric techniques applied in fast profiling of plants in abiotic stress, 46th International Conference of SSCHE, 2019, Tatranke-Matliare, Slovakia

11. Augustin C. Moț, Galaba Naumova Leția, Cezara Zăgrean-Tuza, Kim Hebelstrup, Costel Sarbu, Profiling non-symbiotic plant hemoglobins as regulators in oxidative and nitrosative stress: a chemometric approach, Euroanalysis, 2017, Stockholm, Sweden

- 10.** Augustin C. Mot, Cristina Bischin, Grigore Damian, Emese Gal, Nicoleta Dina, Nicolae Leopold, Radu Silaghi-Dumitrescu, Contrast between hemoglobin and myoglobin interactions with hydrogen sulfide. Evidence for radical-based mechanism involved in sulfhemoglobin formation and for sulfoferryl species, XIXth International conference on "Oxygen binding and sensing proteins, Septembrie **2016**, Hamburg, Germania
- 9.** Augustin C. Mot, Galaba Naumova-Letia, Cristina Bischin, Grigore Damian, Nicolae Leopold, Nico Dissmeyer, Radu Silaghi-Dumitrescu, A comparative in vitro mechanistic approach of nonsymbiotic plant hemoglobins as indirect NO scavengers via hydroxylamine reduction to ammonium, 6th Plant Nitric Oxide International Meeting, Septembrie **2016**, Granada, Spania
- 8.** Augustin C. Mot, Cristina Bischin, Grigore Damian, Emese Gal, Nicoleta Dina, Nicolae Leopold, Radu Silaghi-Dumitrescu, Contrast between hemoglobin and myoglobin interactions with hydrogen sulfide. Evidence for radical-based mechanism involved in sulfhemoglobin formation and for sulfoferryl species, 3rd European Colloquium on Inorganic Reaction Mechanisms, Iunie **2016**, Kracow, Poland
- 7.** Augustin C. Mot, Cristina Bischin, Galaba Naumova Leția, Grigore Damian, Nicoleta Dina, Nicolae Leopold, Radu Silaghi-Dumitrescu, Spectroscopic characterization of nonsymbiotic plant hemoglobins using UV-vis, Raman and EPR techniques, National Conference of Biophysics, June **2016**, Cluj-Napoca, Romania;
- 6.** Augustin C. Mot, Globins as multifaceted proteins. A never-ending and fascinating story, Romanian International Conference on Chemistry and Chemical Engineering, August **2015**, Sibiu, Romania;
- 5.** Augustin C. Mot, The free radical involved in the oxidation of flavonoids by laccase. An assay for prooxidant reactivity, 4th EuCheMS 26-30 August **2012**, Prague, Czech Republic
- 4.** Augustin C. Mot, Isolation and characterization of a new laccase, 11th International Symposium on „Metal Elements in Environment, Medicine and Biology”, December **2011**, Cluj-Napoca, Romania;
- 3.** Augustin C. Mot, Radu Silaghi-Dumitrescu, Marcel Parvu, Florin Dan Irimie, *Sclerotinia Sclerotiorum* laccase: a ‘yellow’ laccase with ‘blue’ spectroscopic features, 7th International Conference of the Chemical Societies of the South-Eastern European Countries, September **2010**, Bucharest, Romania;
- 2.** Augustin C. Mot, Origin discrimination of Romanian propolis by reflectance spectroscopy and high-performance thin layer chromatography assisted by PCA, 6th International Conference “Students for students”, April **2009**, Cluj-Napoca, Romania;
- 1.** Augustin C. Mot, Florin Soponar, Simultaneous spectrophotometric determination of aspirin, caffeine, paracetamol and chlorphenamine from pharmaceutical formulations using Principal Components Regression, 5th International Conference “Students for students”, April **2008**, Cluj-Napoca, Romania.