

Complete list of publications

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Main research area: Blue bioeconomy

Until 7. March 2021

WoS: publications appeared: 7, h-index: 2, total citations: 26

Contents:

A. Publications with peer review process

Research articles

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Articles

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A. Publications with peer review process

Research articles

No. ^a	ISI Ranking zone ^b	ISI zone colour code	Title	Authors, bibliographic information	Year	Impact factor ^c	AIS InCites JCR ^d
1	Q1		Single-cell Raman micro-spectroscopy for tracking of carotenoids in cyanobacteria exposed to Mn and Zn doped ferrite nanoparticles	Nekvapil, F. , Bunge, A., Barbu-Tudoran, L., Cinta Pinzaru, S. <i>Spectrochim. Acta A</i> ; early view, DOI: 10.1016/j.saa.2021.119607	2021	3.232	0.41
2	Q1	●	Promoting hidden natural design templates in wasted shells of the mantis shrimp into valuable biogenic composite	Nekvapil, F. , Glamuzina, B., Barbu-Tudoran, L., Suci, M., Tamas, T., Cinta Pinzaru, S. <i>Spectrochim. Acta A</i> 250: 119223, DOI: 10.1016/j.saa.2020.119223	2021	3.232	0.41
3	Q1	●	Color-specific porosity in double pigmented natural 3d-nanoarchitectures of blue crab shell	Nekvapil, F. , Cinta Pinzaru, S., Barbu-Tudoran, L., Suci, M., Tamas, T., Chis, V.; <i>Sci. Rep.</i> 10: 3019. DOI: 10.1038/s41598-020-60031-4	2020	3.998	1.261
4	Q1	●	From Blue Bioeconomy toward Circular Economy through High-Sensitivity Analytical Research on Waste Blue Crab Shells	Nekvapil, F. , Aluas, M., Barbu-Tudoran, L., Suci, M., Bortnic, R-A, Glamuzina, B., Cinta Pinzaru, S.; <i>ACS Sustainable Chem. Eng.</i> 7: 16820-16827. DOI: 10.1021/acssuschemeng.9b04362	2019	7.632	1.300
5	Q1	●	Citrus fruits freshness assessment using Raman spectroscopy	Nekvapil, F. , Brezestean, I., Barchewitz, D., Glamuzina, B., Chis, V., Cinta Pinzaru, S. <i>Food Chemistry</i> , 242: 560 – 567. DOI: 10.1016/j.foodchem.2017.09.105	2018	5.399	0.955

6	Q2	●	Raman spectra tell us so much more: Raman features and saturation magnetization for efficient analysis of manganese zinc ferrite nanoparticles	Nekvapil, F. , Bunge, A., Radu, T., Cinta Pinzaru, S, Turcu, R.; J. Raman Spectrosc. 51(6): 959-968. DOI: 10.1002/jrs.5852	2020	2	0.465
7	Q2	●	Microsphere packages of carotenoids: intact sea urchin eggs tracked by Raman spectroscopy tools	Nekvapil, F. , Brezeştean, I., Tomšić, S., Müller, Cs., Chiş, V., Cinta Pinzaru, S.; Photochem. Photobiol. Sci. 18: 1933-1944. DOI: 10.1039/c9pp00181f	2019	2.831	0.511
8	Q2	●	Biogeochemical specificity of adjacent natural carbonated spring waters from Swiss Alps promptly revealed by SERS and Raman technology	Cintă Pinzaru, S., Ardeleanu, M., Brezeştean, I., Nekvapil, F. , Venter, M.M.; Anal. Methods 11: 800 - 812. DOI: 10.1039/c8ay02580k	2019	2.596	0.414
9	Q3 and Q4	●	Tracking the growth rings in biogenic aragonite from fish otolith using confocal Raman microscopy and imaging	Lazar, G., Firta, C., Matic-Skoko, S., Peharda, M., Vroljak, D., Uvanovic, H., Nekvapil, F. , Glamuzina, B., Cinta Pinzaru, S.; Studia UBB Chemia. 65(1): 125-136. DOI: 10.24193/subbchem.2020.1.10	2019	0.494	0.036
10	non-ISI (BDI)		Exploring the biological protective role of carotenoids by Raman spectroscopy: mechanical stress of cells	Nekvapil, F. , Molnar Muller, Cs., Tomsic, S., Cinta Pinzaru, S.; Studia UBB Physica. 64(1--2): 75-82. DOI: 10.24193/subbphys.2019.08	2019	-	-
Sum of metrics of published articles related to the thesis topic (no. 1 – 6)						25.092	4.902
Total sum of metrics of all published articles						28.182	5.352

^aPublications no. 1 – 7 and 10 are included in the Doctoral Thesis

^bISI ranking zone as of date of publication

^cImpact factor according to Clarivate Journals Citation Report, for Food Chemistry IF 2018 (publication year), for all others IF 2019 (most recent available data)

^dAIS InCites JCR – Article influence score according to InCites Journal Citation Reports (Clarivate Analytics), for Food Chemistry AIS 2018 (publication year), for all others AIS 2019 (most recent available data)

Contributions to Conference Proceedings

2020

1. **Nekvapil, F.**, Bortnic, R-A., Cintă Pinzaru, S., Radu, T., Bunge, A., Turcu, R. Spectroscopy, diffraction and electron microscopy methods for characterization of ferrite nanoparticles for medical applications. NANOTEK - Nanomedicine Conference for Students. University of Medicine and Pharmacology (UMF) Cluj-Napoca; held online 17. 18. October 2020
2. **Nekvapil, F.**, Lazar, G., Hiriank, R., Barbu-Tudoran, L., Suciu, M., Tamas, T., Ganea, I-V., Glamuzina, B., Cinta Pinzaru, S. New added-value by-products from biogenic waste for sustainable seafood industry and Blue bioeconomy. Book of Abstracts, 19th Int. Conf. Life Sciences for Sustainable Development. University of Agricultural Sciences and Veterinary medicine (USAMV) of Cluj-Napoca; held online 24.-25. September 2020.
3. Lazar, G., **Nekvapil, F.**, Glamuzina, B., Cinta Pinzaru, S. New drug carrier from wasted biogenic carbonates. Book of Abstracts, 19th Int. Conf. Life Sciences for Sustainable Development. University of Agricultural Sciences and Veterinary medicine (USAMV) of Cluj-Napoca; held online 24.-25. September 2020.

2019

4. **Nekvapil, F.**, Bunge, A., Radu, T., Cinta Pinzaru, S., Turcu, R. Raman spectroscopy analysis of metal-ferrite nanoparticles: towards precise interpretation and extraction of structural information. In: Book of Abstracts of the 12th International Conference Processes in Isotopes and Molecules. National Institute for Research and Development

of Isotopic and Molecular Technologies, Cluj-Napoca, 25th - 27th September 2019, p. 17.
<http://pim.itim-cj.ro/pages/programme.html>

5. **Nekvapil, F.**, Cinta Pinzaru, S., Glamuzina, B. Hidden smart templates for blue bioeconomy: complex functional structures of marine invertebrates revealed by confocal Raman imaging. In: Book of Abstracts of the 16th Confocal Raman Imaging Symposium, WiTec GmbH, Ulm, 23rd - 25th September 2019, p. 61. <https://www.raman-symposium.com/assets/Uploads/Review2019/WITec-Abstract-Book-Symposium-2019-web.pdf>
6. Cinta Pinzaru, S., Matić-Skoko, S., Peharda, M., Vrdoljak, D., Uvanović, H., Firta, C., Lazar, G., **Nekvapil, F.**, Barbu-Tudoran, L., Suci M., Glamuzina, B. Raman spectroscopy and imaging tools for correlative analyses in otoliths sclerochronology. In: Peharda, M., Ezgeta-Balić, D., Uvanović, H. (Eds) Book of Abstracts. of the 5th International Sclerochronology Conference, Institute for Oceanography and Fisheries, Split, 2019, p. 144.
7. Suci M., Barbu-Tudoran, L., **Nekvapil, F.**, Cinta Pinzaru, S., Glamuzina, B. EDX in Bouligand pattern sclerochronology. In: Peharda, M., Ezgeta-Balić, D., Uvanović, H. (Eds) Book of Abstracts. of the 5th International Sclerochronology Conference, Institute for Oceanography and Fisheries, Split, 2019, p. 159

2018

8. **Nekvapil, F.**, Brezeştean, I., Tomsic, S., Muller, Cs., Chis, V., Cintă Pinzaru, S. Rapid and cost effective tracking carotenoids in native sea urchin eggs by multi-laser Raman spectroscopy. In: Vodnar, D.C. (ed.) Book of Abstracts. Faculty of Agricultural Sciences and Veterinary Medicine of Cluj-Napoca, 2018.
9. **Nekvapil, F.**, Brezestean, I., Glamuzina, Tomsic, S., B., Barbu-Tudoran, L., Chis, V., Cinta Pinzaru, S. (2018) Natural Biocomposite material with antioxidant properties and a source of valuable compounds: the cuticle of *Squilla* mantis shrimp. In: Florescu, M., Raicu, V., Turcu, I. (eds.) Book of Abstracts. Transilvania University Press, Brasov. ISSN: 2360-3461 , ISSN-L: 2360-3461. p. 153;
http://icanmbes.unitbv.ro/Astracts%20Book%20IC-ANMBES_2018_final.pdf
10. **Nekvapil, F.**, Brazestean, I., Tomsic, S., Cinta Pinzaru, S. (2018) Translation of SERS technique to hydrobiology: use of metallic plasmonic nanoparticles to quench fluorescence in Raman spectroscopy analysis of natural fluids. In: Florescu, M., Raicu, V., Turcu, I. (eds.) Book of Abstracts. Transilvania University Press, Brasov. ISSN: 2360-3461 , ISSN-L: 2360-3461. p. 60; http://icanmbes.unitbv.ro/Astracts%20Book%20IC-ANMBES_2018_final.pdf
11. **Nekvapil, F.**, Tomšić, S., Cintă Pinzaru, S. (2018) Comparative Raman spectroscopy study of the coelomic fluid of grazing sea urchins and their native seawater: prospect for a potential indicator of environmental aggression. In: Şerban, G., Bătinaş, R., Tudose, T., Horváth, Cs., Croitoru, A., Holobăcă, J. (eds.) Air and water components of the environment. University Press, Cluj-Napoca, ISSN: 2067-743. p. 27 – 34.
https://www.researchgate.net/publication/323915270_COMPARATIVE_RAMAN_SPECTROSCOPY_STUDY_OF_THE_COELOMIC_FLUID_OF_GRAZING_SEA_URCHINS_AND_THEIR_NATIVE_SEAWATER_PROSPECT_FOR_A_POTENTIAL_INDICATOR_OF_ENVIRONMENTAL_AGGRESSION

12. Brezeştean, I., **Nekvapil, F.**, Cintă Pinzaru, S. Analysis of hypersaline waters from Cojocna balneary resorts (Romania) using Raman spectroscopy techniques. In: Şerban, G., Bătinaş, R., Tudose, T., Horváth, Cs., Croitoru, A., Holobăcă, J. (eds.) Air and water components of the environment. University Press, Cluj-Napoca, ISSN: 2067-743, Air and Water Components of the Environment Conference, 15. – 17. March 2018, Sovata, Romania. p. 3
https://www.researchgate.net/publication/323854857_ANALYSIS_OF_HYPERSALINE_WATERS_FROM_COJOCNA_BALNEARY_RESORTS_ROMANIA_USING_RAMAN_SPECTROSCOPY_TECHNIQUES

2017 and earlier

13. **Nekvapil, F.**, Brezestean, I., Barchewitz, D., Glamuzina, B., Chis, V., Cintă Pinzaru, S., Andronie, L. Are the market citrus fresh? Raman spectroscopy can promptly tell it. In: Vodnar, D.C. (ed.) Book of Abstracts, no. 4/2017. Faculty of Agricultural Sciences and Veterinary Medicine of Cluj-Napoca, ISSN: 2392-6937, ISSN-L: 2392-6937. p. 230.
14. Cintă Pinzaru, **Nekvapil, F.**, Ljubimir, S., Tomšić, S., Glamuzina, B., Brezestean, I., Venter, M.M., Andronie, L.M., Barbu-Tudoran, L., Suci, M., Chis, V. Fucoxanthin distribution in single pennate diatom cell in vivo and cell reaction under aggression. In: Vodnar, D.C. (ed.) Book of Abstracts, no. 4/2017. Faculty of Agricultural Sciences and Veterinary Medicine, Cluj-Napoca, ISSN: 2392-6937, ISSN-L: 2392-6937. p. 231.
15. Firta, C., **Nekvapil, F.**, Brezestean, I., Cintă Pinzaru, S. Aquarium biofilm inhibition in the presence of AgNPs deposited on soda lime silica glass. In: Vodnar, D.C. (ed.) Book of Abstracts, no. 4/2017, Faculty of Agricultural Sciences and Veterinary Medicine, Cluj-Napoca, ISSN: 2392-6937, ISSN-L: 2392-6937. p. 225
16. Andronie, L., Mireaşan, V., Pop, I., Rotaru, A., Coroian, A., **Nekvapil, F.**, Cintă Pinzaru, S. Comparative citric acid (E330) analysis in citrus fruits using FT-IR and Raman spectroscopy. In: Vodnar, D.C. (ed.) Book of Abstracts, no. 4/2017, Faculty of Agricultural Sciences and Veterinary Medicine, Cluj-Napoca, ISSN: 2392-6937, ISSN-L: 2392-6937. p. 484
17. **Nekvapil, F.**, Tomšić, S., Glamuzina, B., Barbu-Tudoran, L., Brezestean, I., Cintă Pinzaru, S., Natural nanoarchitecture of blue crab (*Callinectes sapidus* Rathbun, 1896) claw studied by Raman spectroscopy and Scanning electron microscopy. In: Vladoiu, R., Mandes, A., Dinca Balan, V. (eds.) Conference proceedings. Issue 17/2017, University of Ovidius Press, ISSN 2501-9050, ISSN-L 2501-9058. p. 146 – 147.; http://ibwap.univ-ovidius.ro/2017/uploads/template/Book_of_abstracts_IBWAP2017.pdf
18. **Nekvapil, F.** Legislative provisions for control of spreading of the common slider, *Trachemys scripta* in Europe, In: Piria, M. (ed.) Book of abstracts, University of Zagreb, Faculty of Agriculture, Zagreb, Croatia. p. 39 – 40.

B. Submitted publications with peer review process

Articles

Currently no submitted manuscripts; 3 manuscripts in final preparation

Conference proceedings

Nekvapil, F., Tomšić, S., Chiş, V., Cintă Pinzaru, S. Raman spectroscopy in carotenoids metabolic pathways research: the example of sea urchins. Accepted as an oral presentation to the International Conference on Raman Spectroscopy, Rome, originally planned for August 2020, postponed to August 2021, postponed to August 2022 due to Covid-19 pandemic situation

C. Oral and poster presentations to conferences, workshops and seminars

1. *Raman Spectroscopy Techniques and Applications to Carotenoids Research in Marine Living Resources and to the Blue Bioeconomy*
Nekvapil F., Doctoral Thesis, Babeş-Bolyai University, Cluj-Napoca (Romania), 25 November 2020, Excellent grade, *Summa cum laude*
2. *Spectroscopy, diffraction and electron microscopy methods for characterization of ferrite nanoparticles for medical applications.*
Nekvapil, F., poster presentation to the NANOTEK - Nanomedicine Conference for Students. 17th October 2020
3. *New added-value by-products from biogenic waste for sustainable seafood industry and Blue bioeconomy.*
Nekvapil, F., oral presentation to the 19th Int. Conf. Life Sciences for Sustainable Development. 24th September 2020. <https://symposium.usamvcluj.ro/>
4. *Raman spectroscopy analysis of metal-ferrite nanoparticles: towards precise interpretation and extraction of structural information,*
Nekvapil, F., oral presentation to the 12th International conference "Processes in Isotopes and Molecules, Cluj-Napoca (Romania), 25th -27th September 2019; <http://pim.itim-cj.ro>
5. *Hidden smart templates for blue bioeconomy: complex functional structures of marine invertebrates revealed by confocal Raman imaging,*
Nekvapil, F., poster presentation to the 16th Confocal Raman Imaging Symposium, Ulm (Germany), 23rd - 25th September 2019; <https://www.raman-symposium.com/>
6. *Rapid and cost effective tracking carotenoids in native sea urchin eggs by multi-laser Raman spectroscopy,*
Nekvapil, F., oral presentation to the 18th International conference Prospects for 3rd Millennium Agriculture, Cluj-Napoca (Romania), 27th - 29th September 2018. <http://symposium2018.usamvcluj.ro/>
7. *Natural Biocomposite material with antioxidant properties and a source of valuable compounds: the cuticle of *Squilla mantis* shrimp,*
Nekvapil, F., poster presentation to the 5th International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, Brasov (Romania), 23th – 25th May 2018; <http://icanmbes.unitbv.ro/>
8. Translation of SERS technique to hydrobiology: use of metallic plasmonic nanoparticles to quench fluorescence in Raman spectroscopy analysis of natural fluids,
Nekvapil, F., oral presentation to the 5th International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, Brasov (Romania), 23th – 25th May 2018; <http://icanmbes.unitbv.ro/>

9. *Comparative Raman spectroscopy study of the coelomic fluid of grazing sea urchins and their native seawater: prospect for a potential indicator of environmental aggression*, **Nekvapil, F.**, oral presentation to the 10th Air and Water Components of the Environment International Conference, Sovata (Romania), 13th – 15th March 2018; <http://aerapa.conference.ubbcluj.ro/Engleza/index.htm>
10. *Are the market citrus fresh? Raman spectroscopy can promptly tell it*, **Nekvapil, F.**, oral presentation to the 16th International Symposium Prospects for the 3rd Millennium Agriculture, Cluj-Napoca (Romania), 28th – 30th September 2018; <http://symposium.usamvcluj.ro/>
11. *Natural nanoarchitecture of blue crab (*Callinectes sapidus* Rathbun, 1896) claw studied by Raman spectroscopy and Scanning electron microscopy*, **Nekvapil F.**, oral presentation to the 17th International Balkan Workshop on Applied Physics, Constanta (Romania), 11th – 14th July 2017; <http://ibwap.univ-ovidius.ro/2017/>
12. *Carotenoids assessment in aquatic macro- and microorganisms – with focus on the origin of blue colour of the Blue crab (*Callinectes sapidus*, Rathbun 1896)* **Nekvapil F.**, Seminar of the Department of Biomolecular Physics, Babes-Bolyai University, May 2017, http://phys.ubbcluj.ro/departamente/btsm/doc/fran_anunt.pdf
13. *Legislative provisions for control of spreading of the common slider, *Trachemys scripta* in Europe*, **Nekvapil, F.**, poster presentation to the FINS II – Freshwater Invasives – Networking for Strategy, Zagreb (Croatia), 11th – 14th July 2016; <http://finsconference.eu/>
14. *Study of pluripotency of the sea urchin *Paracentrotus lividus* (Lamarck, 1816.) blastomeres*, **Nekvapil F.**, oral presentation to the International Exploratory Workshop in cooperation with B&W tek „*Shedding Laser Light on the Adriatic Seawater Environment*”, October 23, 2015, University of Dubrovnik, Dubrovnik, Croatia; <http://www.unidu.hr/novost.php?idvijest=5607>

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