

PERSONAL INFORMATION



ALEXANDRU-LUCIAN ONACA

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🌐 https://geografie.uvt.ro/?page_id=10008

Sex Male | Date of birth | Nationality Romanian

JOB APPLIED FOR
POSITION
PREFERRED JOB
STUDIES APPLIED FOR

PROJECT DIRECTOR

WORK EXPERIENCE

2023 to present

Associate Professor

West University of Timișoara (Romania) (WUT)

Teaching Physical Geography disciplines and research in Geomorphology, Natural Hazards, Spatial Analysis, Geophysics

[Higher Education and Research](#)

2015 to 2023

Lecturer

West University of Timișoara (Romania)

Teaching Physical Geography disciplines and research in Geomorphology, Natural Hazards, Spatial Analysis, Geophysics

[Higher Education and Research](#)

2006 to 2015

Teaching Assistant

West University of Timișoara (Romania)

Teaching Physical Geography disciplines and research in Geomorphology, Natural Hazards, Spatial Analysis, Geophysics

[Higher Education and Research](#)

EDUCATION AND TRAINING

2009-2013

PhD in Geography (WUT)

2005-2007

MSc in Territorial Planning and Sustainable Development (WUT)

2001-2005

Bachelor in Geography (WUT)

2018

Training in geophysical investigations of landslides (Universite de Liege, Belgium)

2013

EGU Summer School: Understanding Earth surface processes in the alpine environment from high resolution topography (Padova University, Italy)

2010

Radar remote sensing courses organized by ROSA, ESA and DLR

2009

International Geochronology Summer School (Zurich University, Switzerland)

2009

CEEPUS scholarship in GIS and Remote Sensing (Jagiellonian University, Poland)

2007

CEEPUS scholarship in GIS and Remote Sensing (Salzburg University, Austria)

2006

Climate change in the Danube watershed Summer School (West University of Hungary) (WUH)

2005-2006

CEEPUS scholarship in GIS and Remote Sensing (WUH)

PERSONAL SKILLS Geomorphological mapping, Geophysics (ERT and GPR), Dendrochronology, Remote Sensing, GIS, Data loggers, GPS systems, geoarchaeology, natural hazards.

Mother tongue(s) Romanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
Certificate of linguistic competence					
Replace with language	Enter level	Enter level	Enter level	Enter level	Enter level
Replace with name of language certificate. Enter level if known.					

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Communication skills ▪ good communication skills gained through my experience as teacher (experience 17 years)

Organisational / managerial skills ▪ leadership (leading role in 4 research projects as principal investigator/institutional responsible)
Job-related skills ▪ project management (management skills achieved in the projects I was involved)

Computer skills ▪ good command of Microsoft Office™ tools, GIS softwares (ArcGIS), remote sensing (Idrisi), geophysics (Reflexw, Res2Dinv), dendrochronology (TSAP-Win).

Other skills ▪ organising scientific events (organiser of conferences, workshops, meetings)
▪ dissemination (participation to conferences, invited lecture)
▪ review skills (reviewer of many scientific articles and projects)
▪ working in the field (coordination of field applications with students, researchers etc.)

ADDITIONAL INFORMATION

PUBLICATIONS

44 publication in Web of Science and 70 in total

ID: [C-2247-2018 \(WOS\)](https://orcid.org/0000-0002-4518-1779); <https://orcid.org/0000-0002-4518-1779>; <https://scholar.google.ro/citations?user=b2KR6TkAAAAJ&hl=ro>

Hirsch index: 13 (WOS), 18 (Google Scholar)

1. Popescu, R., Filhol, S., Eitzelmüller, B., Vasile, M., Pleşoianu, A., Virghileanu, M., **Onaca, A.**, Şandric, I., Săvulescu, I., Cruceru, N., Vespremeanu-Stroe, A., Westermann, S., Sîrbu, F., Mihai, B., Nedelea, A., Gascoin, S., in press. Permafrost distribution in the Southern Carpathians, Romania, derived from machine learning modeling. *Permafrost and Periglacial Processes*. <https://doi.org/10.1002/ppp.2232>
2. Micu, M., Vasile, M., Miron, M., **Onaca, A.**, Sîrbu, F., 2023. Deciphering complex morphology and structural connectivity of high-magnitude deep-seated landslides via airborne laser scanning: a case study in the Vrancea Seismic Region, Romanian Carpathians. *Remote Sensing*, 15, 5286.
3. Urdea, P., Ardelean, F., Ardelean, M., **Onaca, A.**, Berzescu, O., 2023. Glacial landscape evolution during the Holocene in the Romanian Carpathians, in *European Glacial Landscapes. The Holocene*, Editor D. Palacios et al., Elsevier, p. 331-352.
4. Chiroiu, P., Onaca, A., Favillier, A., Voiculescu, M., Corona, C., Urdea, P., Stoffel, M., 2024. Snow avalanche synchronicity derived from multi-path tree-ring reconstruction in the Făgăraş Mountains (Southern Carpathians, Romania). *Quaternary Geochronology*, 79, 101474.
5. Urdea, P., Ardelean, F., Ardelean, M., **Onaca, A.**, 2023, Chapter 54 - The Romanian Carpathians: glacial landforms from the Younger Dryas, in *European Glacial Landscapes. The Last Deglaciation*, Editor D. Palacios et al., Elsevier, p. 517-524

6. Urdea, P., Ardelean, F., Ardelean, M., **Onaca, A.**, 2023, Chapter 36 - The Romanian Carpathians: glacial landforms during Bølling–Allerød Interstadial (14.6–12.9 ka), in *European Glacial Landscapes. The Last Deglaciation*, Editor D. Palacios et al., Elsevier, p. 347-353
7. Urdea, P., Ardelean, F., Ardelean, M., **Onaca, A.**, 2023, Chapter 19 - The Romanian Carpathians: glacial landforms during deglaciation (18.9–14.6 ka), in *European Glacial Landscapes. The Last Deglaciation*, Editor D. Palacios et al., Elsevier, p. 165-173
8. Sheishah, D., Sipos, G., Barta, K., Abdelsamei, E., Hegyi, A., **Onaca, A.**, Abbas, A.M. 2023. Comparative evaluation of the material of the artificial levees: a case study along the Tisza and Maros rivers, Hungary. *Journal of Environmental Geography*, 16, 1-10.
9. Hegyi, A., Lăzărescu, V., Pisz, M., Lenkey, L., Pethe, M., **Onaca, A.**, Nica, M. 2023. Geophysical investigations within the Latus Dextrum of Porolissum Fort, northwestern Romania – the layout of a Roman Edifice. *Heritage*, 6, 829-848.
10. Urdea, P., Ardelean, F., Ardelean, M., **Onaca, A.**, 2022, Chapter 57 - The Romanian Carpathians: glacial landforms from the Last Glacial Maximum (29–19 ka), in *European Glacial Landscapes. Maximum Extent of Glaciations*, Editor D. Palacios et al., Elsevier, p. 411-447
11. Urdea, P., Ardelean, F., Ardelean, M., **Onaca, A.**, 2022, Chapter 38 - The Romanian Carpathians: glacial landforms prior to the Last Glacial Maximum, in *European Glacial Landscapes. Maximum Extent of Glaciations*, Editor D. Palacios et al., Elsevier, p. 277-282
12. Urdea, P., Ardelean, F., Ardelean, M., **Onaca, A.**, 2022, Chapter 14 – Glacial landscapes of the Romanian Carpathians, in *European Glacial Landscapes. Maximum Extent of Glaciations*, Editor D. Palacios et al. Elsevier, p. 109-114
13. Sheishah, D., Sipos, G., Hegyi, A., Kozák, P., Abdelsamei, E., Tóth, C., **Onaca, A.**, Páll, D.G., 2022. Assessing the structure and composition of artificial levees along the lower Tisza river (Hungary), *Geographica Pannonica*, 26, 3, 258-272.
14. Sipos, G., Blanka-Végi, V., Ardelean, F., **Onaca, A.**, Ladányi, Z., Rácz, A., Urdea, P., 2022. Human-nature relationship and public perception of environmental hazards along the Maros/Mureş river (Hungary and Romania), *Geographica Pannonica*, 26, 3, 297-307.
15. Chiroiu, P., **Onaca, A.**, Matica, A., Lopătiță, I-O., Berzescu, O., 2022. Active geomorphic hazards in the Sâmbăta Valley, Făgăraş Mountains (Romania): a tree-ring based approach. *Geographica Pannonica*, 26, 3, 284-296.
16. Nagavciuc, V., Perşoiu, A., Bădăluță, C-A., Bogdevich, O., Bănică, S., Bîrsan, M-V., Boengiu, S., **Onaca, A.**, Ionita, M., 2022. Defining a precipitation stable isotope framework in the wider Carpathian region. *Water*, 14, 2547. <https://doi.org/10.3390/w14162547>
17. **Onaca, A.**, Gachev, E., Ardelean, F., Ardelean, F., Ardelean, A., Perşoiu, A., Hegyi, A., 2022. Small is strong: Post LIA resilience of Europe's Southernmost glaciers assessed by geophysical methods. *Catena*, 213, 106143. <https://doi.org/10.1016/j.catena.2022.106143>
18. Hegyi, A., Diaconescu, D., Urdea, P., Sarris, A., Pisz, M., **Onaca, A.**, 2021. Using Geophysics to Characterize a Prehistoric Burial Mound in Romania. *Remote Sensing*, 13, 842. <https://doi.org/10.3390/rs13050842>
19. Perşoiu, A., Buzjak, N., **Onaca, A.**, Pennos, C., Sotiriadis, Y., Ionita, M., Zachariadis, S., Styllas, M., Kosutnik, J., Hegyi, A., Butorac, V. 2021. Record summer rains in 2019 led to massive loss of surface and cave ice in SE Europe. *The Cryosphere*, 15, 2383-2399. <https://doi.org/10.5194/tc-15-2383-2021>
20. Mreyen, A.-S., Cuachie, L., Micu, M., **Onaca, A.**, H.-B., Havenith, 2021. Multiple geophysical investigations to characterize massive slope failure deposits: application to the Balta rockslide, Carpathians. *Geophysical Journal International*, 225, 1032-1047. doi: 10.1093/gji/ggab028
21. Hegyi A, Sarris A, Curta F, Floca C, Forţiu S, Urdea P, **Onaca A**, Timofte F, Pisz M, Timuţ S, Nica M, Maciulschi D, Staviľă A., 2020. Deserted Medieval Village Reconstruction Using Applied Geosciences. *Remote Sensing* 12(12):1975. <https://doi.org/10.3390/rs12121975>
22. Ardelean, F., **Onaca, A.**, Cheţan, M., Dornik, A., Georgievski, G., Hagemann, S., Timofte, F., Berzescu, O., 2020. Assessment of Spatio-Temporal Landscape Changes from VHR Images in Three Different Permafrost Areas in the Western Russian Arctic. *Remote Sensing*, 12, 3999. DOI: 10.3390/rs12233999
23. Cheţan, M., Dornik, A., Ardelean, F., Georgievski, G., Hagemann, S., Romanovsky, V., **Onaca, A.**, Drozdov, D., 2020, 35 Years of Vegetation and Lake Dynamics in the Pechora Catchment, Russian European Arctic, *Remote Sensing*, 12 (11), 1863. <https://doi.org/10.3390/rs12111863>
24. Magori, B., Urdea, P., **Onaca, A.**, Ardelean, F., 2020. Distribution and characteristics of rock glaciers in the Balkan Peninsula. *Geografiska Annaler: Series A, Physical Geography*, 102:4, 354-375. DOI: 10.1080/04353676.2020.1809905
25. **Onaca, A.**, Ardelean, F., Ardelean, A., Magori, B., Sîrbu, F., Voiculescu, M., Gachev, E., 2020. Assessment of permafrost conditions in the highest mountains of the Balkan Peninsula. *Catena*, 185, 104288. <https://doi.org/10.1016/j.catena.2019.104288>
26. Hegyi, A., Urdea, P., Floca, C., Ardelean, A., **Onaca, A.**, 2019. Mapping the subsurface structures of a lost medieval village in South-Western Romania, by combining conventional geophysical methods. *Archaeological Prospection*, 26(1), 21-32. DOI: 10.1002/arp.1720

27. Şerban, R-D., **Onaca, A.**, Şerban, M., Urdea, P., 2019. Block stream characteristics in Southern Carpathians (Romania). *Catena*, 178, 20-31. <https://doi.org/10.1016/j.catena.2019.03.003>
28. **Onaca, A.**, Urdea, P., Ardelean, A.C., Şerban, R., Ardelean, F., 2017. *Present-day periglacial processes in the alpine zone*. In Rădoane, M., Vespremeanu-Stroe, A. (Eds.), *Landform dynamics and evolution in Romania*, Springer, 147-176, doi: 10.1007/978-3-319-32589-7_7.
29. Popescu, R., **Onaca, A.**, Urdea, P., Vespremeanu-Stroe, A., 2017. *Spatial distribution and main characteristics of alpine permafrost from Southern Carpathians*, In Rădoane, M., Vespremeanu-Stroe, A. (Eds.), *Landform dynamics and evolution in Romania*, Springer, 117-146, doi: 10.1007/978-3-319-32589-7_6.
30. **Onaca, A.**, Ardelean, F., Urdea, P., Magori, B., 2017. Southern Carpathian rock glaciers: inventory, distribution and environmental controlling factors, *Geomorphology*. 293, 391-404. doi.org/10.1016/j.geomorph.2016.03.03.
31. Mreyen A-S., Micu, M., **Onaca, A.**, Cerfontaine, P., Havenith, H-B., 2017, Integrated geological-geophysical models of unstable slopes in seismic areas, In: *The 4th World Landslide Forum*, Ed. M. Mikos, Springer Nature. 269-278. DOI 10.1007/978-3-319-53498-5_31
32. Popescu, R., Vespremeanu-Stroe, A., **Onaca, A.**, Vasile, M., Cruceru, N., Pop, O., 2017. Low-altitude permafrost research in an overcooled talus slope-rock glacier system in the Romanian Carpathians (Detunata Goală, Apuseni Mountains), *Geomorphology*, 295, 840-854. <https://doi.org/10.1016/j.geomorph.2017.07.029>
33. Ardelean, A., **Onaca, A.**, Urdea, P., Sărăşan, A., 2017. Quantifying postglacial sediment storage and denudation rates in a small alpine catchment of the Făgăraş Mountains (Romania), *Science of the Total Environment*, 599-600, 1756-1767. <http://dx.doi.org/10.1016/j.scitotenv.2017.05.131>
30. Magori, B., **Onaca, A.**, Urdea, P., 2017. The influence of contributing area parameters on the size of rock glaciers in the Southern Carpathian Mountains. *Forum geografic. S.C.G.P.M.*, XVI, 1, 5-11. <http://dx.doi.org/10.5775/fg.2017.101.i>
35. Necsoiu, M., **Onaca, A.**, Wigginton, S., Urdea, P., 2016. Rock glacier dynamics in Southern Carpathian Mountains from high-resolution optical and multi-temporal SAR satellite imagery, *Remote Sensing of Environment*, 177, 21-36. doi:10.1016/j.rse.2016.02.025
36. Voiculescu, M., **Onaca, A.**, Chiroiu, P., 2016. Dendrogeomorphic reconstruction of past snow avalanche events and identification of triggering weather conditions in the Bălea glacial valley – Făgăraş massif (Southern Carpathians), Romanian Carpathians. *Quaternary International*, 415, 286-302. doi:10.1016/j.quaint.2015.11.115
37. **Onaca, A.**, Ardelean, A.C., Urdea, P., Ardelean, F., Sărăşan, A., 2016. Genetic typologies of talus deposits derived from GPR measurements in the alpine environment of Făgăraş Mountains, *Carpathian Journal of Earth and Environmental Sciences*, 11, 2, 609-616.
38. Chiroiu, P., Ardelean, A., **Onaca, A.**, Voiculescu, M., Ardelean, F., 2016. Assessing the anthropogenic impact on geomorphic processes using tree-rings: a case study in the Făgăraş Mountains (Romanian Carpathians). *Carpathian Journal of Earth and Environmental Sciences*, 11, 1, 27-36.
39. Necsoiu, M., Mîndrescu, M., **Onaca, A.**, Wigginton, S., 2016. Recent morphodynamics of alpine lakes in Southern Carpathians Mountains using high-resolution optical imagery. *Quaternary International*, 415, 164-174. doi:10.1016/j.quaint.2015.12.032
40. Timofte, F., **Onaca, A.**, Urdea, P., Pravetz, T., 2016. The evolution of Mureş channel in the lowland section between Lipova and Nădlac (in the last 150 years), assessed by GIS analysis. *Carpathian Journal of Earth and Environmental Sciences*, 11, 2, 319-330.
41. Popescu, M., Şerban, R.D., Urdea, P., **Onaca, A.**, 2016. Conventional geophysical surveys for landslide investigations: two case studies from Romania. *Carpathian Journal of Earth and Environmental Sciences*, 11, 1, 281-292.
42. Timofte, F., **Onaca, A.**, 2016, Paleo discharge of Mureş River in the lowland area, *Ecoterra journal of environmental research and protection*, 13 (1), 7-13.
43. Chiroiu, P., Stoffel, M., Onaca A., Urdea, P., 2015, Testing dendrogeomorphic approaches and thresholds to reconstruct snow avalanche activity in the Făgăraş Mountains (Romanian Carpathians), *Quaternary Geochronology*, 27, 1–10. <http://dx.doi.org/10.1016/j.quageo.2014.11.001>
44. **Onaca, A.**, Ardelean, A. C., Urdea, P., Ardelean, F., Sîrbu, F., 2015, Detection of mountain permafrost by combining conventional geophysical methods and thermal monitoring in the Retezat Mountains, Romania, *Cold Regions Science and Technology*, 119, 111-123. <http://dx.doi.org/10.1016/j.coldregions.2015.08.001>
45. Popescu, R., Vespremeanu-Stroe, A., **Onaca, A.**, Cruceru, N., 2015. Permafrost in the granitic massifs of Southern Carpathians (Parâng Mountains). *Zeitschrift für Geomorphologie*, 59, 1, 1-20. doi.org/10.1127/0372-8854/2014/0145.
46. Şerban, R.D., Sipos, G., Popescu, M., Urdea, P., **Onaca, A.**, Ladányi, Z., 2015, Comparative grain-size measurements for validating sampling and pretreatment techniques in terms of solifluction landforms, Southern Carpathians, Romania, *Journal of Environmental Geography*, 8, 1–2, 39–47. DOI: [10.1515/jengeo-2015-0005](https://doi.org/10.1515/jengeo-2015-0005)
47. Ardelean, A.C., **Onaca, A.**, Urdea, P., Şerban, R.D., Sîrbu, F., 2015. A first estimate of permafrost distribution from BTS measurements in the Romanian Carpathians (Retezat Mountains). *Géomorphologie: Relief, Processus, Environment*, 21 (4), 297-312. DOI: 10.4000/geomorphologie.11131

48. Șerban, R.D., **Onaca, A.**, Urdea, P., Popescu, M., 2015, Multivariate prediction model for block streams occurrence in Retezat Mountains (Southern Carpathians), *Carpathian Journal of Earth and Environmental Sciences*, 10, 1, 113-122
49. **Onaca, A.**, Magori, B., Urdea, P., Chiroiu, P., 2015, Near surface thermal characteristics of alpine steep rockwalls in the Retezat Mountains, *Forum geografic. S.C.G.P.M*, XIV, 2, 124-133. <http://dx.doi.org/10.5775/fg.2067-4635.2015.091.d>
50. Voiculescu, M., **Onaca, A.**, 2014, Spatio-temporal reconstruction of snow avalanche activity using dendrogeomorphological method in Bucegi Mountains-Romanian Carpathians, *Cold Region Science and Technology*, 104-105, 63-75. <http://dx.doi.org/10.1016/j.coldregions.2014.04.005>
51. **Onaca, A.**, Urdea, P., Ardelean, A.C., 2013, Internal structure and permafrost characteristics of the rock glaciers of Southern Carpathians (Romania) assessed by geoelectrical soundings and thermal monitoring, *Geografiska Annaler, Series A: Physical Geography*, 95, 3, 249-266. DOI:10.1111/geoa.12014
52. Voiculescu, M., **Onaca, A.**, 2013, Snow avalanche assessment in the Sinaia ski area (Bucegi Mountains, Southern Carpathians) using the dendrogeomorphology method, *Area*, 45 (1), 109-122. doi:10.1111-area.12003. doi: 10.1111/area.12003
53. **Onaca, A.**, Urdea, P., Ardelean, A., Șerban, R., 2013, Assessment of internal structure of periglacial landforms from Southern Carpathians (Romania) using DC resistivity tomography, *Carpathian Journal of Earth and Environmental Sciences*, 8 (2), 113-122.
54. Katona, O., Sipos, G., **Onaca, A.**, Ardelean F., 2012, Reconstruction of palaeo-hydrology and fluvial architecture at the Orosháza palaeo-channel of river Maros, Hungary, *Journal of Environmental Geography*, 5 (1-2): 29-38.
55. **Voiculescu, M.**, Ardelean, F., **Onaca, A.**, Török-Oance, M., 2011, Analysis of snow avalanche potential in Bâlea glacial area - Făgăraș massif, (Southern Carpathians - Romanian Carpathians), *Zeitschrift für Geomorphologie*, Stuttgart, 55 (3): 291-316, [doi:10.1127/0372-8854/2011/0054](https://doi.org/10.1127/0372-8854/2011/0054).
56. Voiculescu, M., Popescu, F., Török-Oance, M., Olaru, M., **Onaca, A.**, 2011, Features of the ski area from the Romanian Banat, *Forum geografic. S.C.G.P.M*, 10, 1 / June, 58-69.
57. **Urdea, P.**, **Onaca, A.**, Ardelean F., Ardelean, M., 2011, New Evidence on the Quaternary Glaciation on the Romanian Carpathians (Chapter 24) in *Developments in Quaternary Science*, vol. 15 (Quaternary Glaciations - Extent and Chronology), ed.: J. Ehlers, P.L. Gibbard, P.D. Hughes, Elsevier, 305-323, [doi:10.1016/B978-0-444-53447-7.00024-6](https://doi.org/10.1016/B978-0-444-53447-7.00024-6);
58. Ardelean, F., Török-Oance, M., Urdea, P., **Onaca, A.**, 2011, Application of object based image analysis for glacial cirques detection. Case study: the Țarcu Mountains (Southern Carpathians). *Forum geografic. S.C.G.P.M*, 10(1): 20-26, [doi:10.5775/fg.2067-4635.2011.007.i](https://doi.org/10.5775/fg.2067-4635.2011.007.i)
59. Török-Oance, M., Ardelean, F., Onaca, A., 2009. The semiautomated Identification of the planation surfaces on the basis of the digital terrain model. Case study: The Mehedinți Mountains (Southern Carpathians), *Forum geografic. S.C.G.P.M*, 8: 5-13.
60. Niebieszczański, J., Pető, A., Serlegi, G., Hildebrandt-Janke, I., Galas, J., Sipos, G., Gergely Páll, D., **Onaca, A.**, Spychalski, W., Jaeger, M., Kulcsár, G., Taylor, N., Márkus, G., 2018. Geoarchaeological and non-invasive investigations of the site and its surroundings, in: Jaeger, M., Kulcsár, G., Taylor, N., Staniuk (Eds.) *Kakucs-Turjan, a Middle Bronze Age multi-layered fortified settlement in Central Hungary*, Studien zur Archäologie in Ostmitteleuropa, Totem, 43-73.
61. Șerban, R.D., **Onaca, A.**, Urdea, P., Popescu, M., 2015. Generation and accuracy assessment of Digital Elevation Models in mountain area, *Geographica Timisiensis*, 24(1).
62. Voiculescu, M., **Onaca, A.**, Chiroiu, P., 2013, Dynamique forestiere et impact des avalanches par la methode dendrochronologique. Vallée glaciaire Bâlea, Massif de Făgăraș (Carpates Meridionales, Roumanie), in: A. Decaune (ed.), *Arbres & dynamiques, Maison des Sciences de l'Homme, Clermont-Ferrand*, 89-102.
63. Urdea, P., Sipos, G., Kiss, T., **Onaca, A.**, 2012, The Maros/Mureș, in: G. Sipos (ed.), *Past, Present, Future of the Maros/Mureș River*, Editura Universității de Vest din Timișoara, 9-33 / 159-167;
64. Kiss, T., Urdea, P., Sipos, G., Sümeghy, B., Katona, O., Tóth, O., **Onaca, A.**, Ardelean, F., Timofte, F., Ardelean, C., 2012, The past of the river, in: G. Sipos (ed.), *Past, Present, Future of the Maros/Mureș River*, Editura Universității de Vest din Timișoara, 33-64 / 167-178;
65. Sipos, G., Právetz, T., Katona, O., Ardelean, F., Timofte, F., **Onaca, A.**, Kiss, T., Kovács, F., Tobak, Z., 2012, The ever changing river, in: G. Sipos (ed.), *Past, Present, Future of the Maros/Mureș River*, Editura Universității de Vest din Timișoara, 65-106 / 179-192;
66. Blanka, V., Mezösi, G., Sipos, G., van Leeuwen, B., Urdea, P., **Onaca, A.**, 2012, Climatic perspectives in: G. Sipos (ed.), *Past, Present, Future of the Maros/Mureș River*, Editura Universității de Vest din Timișoara.
67. Voiculescu, M., Popescu, F., **Onaca, A.**, Török-Oance M., 2011, Ski activity in western part of Southern Carpathians. Case study: Straja ski area, *Analele Universității din Oradea – Seria Geografie*, XXI, 2 (December), 159-171.
68. Voiculescu, M., **Onaca, A.**, Milian, N., Ardelean, F., Török-Oance, M., Stăncescu, M., 2010, Analysis of Snow Avalanche from Mars, 07, 2007 within the Călțun-Negoiu Area, in the Făgăraș Massif (Southern Carpathians), *Analele Universității din Oradea – Seria Geografie*, XX, 1 (June), 22-33.

69. Urdea, P., Ardelean, M., Ardelean, F., **Onaca, A.**, 2008. An outlook on periglacial of the Romanian Carpathians, *Analele Universității de Vest din Timișoara, GEOGRAFIE*, 18, 5-22.
70. Urdea, P., Ardelean, M., **Onaca, A.**, Ardelean, F., Török-Oance, M., 2008. Application of DC resistivity tomography in the alpine area of Southern Carpathians (Romania). In: Kane DL., Hinkel, K. (eds). *Proceedings of the ninth international conference on permafrost*. Fairbanks, Institute of Northern Engineering, 323-335.
71. Urdea, P., **Onaca, A.**, Ardelean, F., 2007. Application of DC resistivity tomography on glacial deposits in the Bâlea-Valea Doamnei area, Făgăraș Mountains, *Analele Universității de Vest din Timișoara, GEOGRAFIE*, 17, 5-22.

Scientific books

Ardelean, F., Hegyi, A., Mocioacă, E., **Onaca, A.**, Timofte, F., Urdea, P., 2019. Current status and new challenges in geomorphological research, Proceedings of the 35th Romanian Symposium of Geomorphology. Editura Universității de Vest, Timișoara, 83 pp.

Onaca, A., 2017. Periglacial processes and landforms in Southern Carpathians. A geomorphological and geophysical approach (in Romanian). Editura Universității de Vest, Timișoara, 264 pp (revised version of the PhD dissertation).

RESEARCH FUNDING AND GRANTS

Leader/Responsible

Quantifying ground ice content and assessing its geomorphological and hydrological significance in the Romanian Carpathians (CARPPERM), Young Teams Research Projects, UEFISCDI Romania, 2025-2026.

The response of climate-sensitive environments to global warming, sea-level rise and increasing extremes: The Carpathians and Danube delta (ClimaLAND), Norwegian Grants, 2020-2023 <https://climaland.unibuc.ro/>

Study of the development of extreme events over permafrost areas (SODEEP), ERA.Net RUS Plus, FP7 ERA-NET, 2018-2020. <http://sodeep.projects.uvt.ro/>

Exploring permafrost occurrence and evolution in Rila and Pirin Mountains (Bulgaria) using a combined geomorphological, geophysical and dendrochronological approach (PERMBULG), Post Doctoral Research Projects, UEFISCDI Romania, 2018-2020. <http://permbulg.projects.uvt.ro/>

CCN1 Rock glacier kinematics in the Carpathians (Romania), an option to the Permafrost CCI Project, 2018-2020 and 2023-2024. <http://cci.esa.int/Permafrost>

Post Doctoral Scholarship for the project **Analysis of geomorphologic processes in the alpine zone of the Romanian Carpathians** in the frame of POSDRU/159/1.5/S/133391 project, 2014-2015;

Member

Neglected ice: rock glaciers and cave ice archives of past and present hydrological and climatic processes, International Atomic Energy Agency, 2024-2028.

Climate-and tectonics-related surface processes in the Southern Carpathians and Northern Balkan Mountains. A geochronological approach at different timescales, PNRR (EUs Recovery and Resilience Plan for Romania), 2023-2026.

Development of complex Geocronological and Geophysical laboratories for saving Archaeological heritage and solving environmental problems–EnviArch, Hungary – Romania Cross-border Cooperation Projects (HURO), European Regional Development Funds, 2012-2015.

Research of past, present and future lower Maros /Mures river in relation with climatic change and sustainable human management, Hungary – Romania Cross-border Cooperation Projects (HURO), European Regional Development Funds, 2011-2012.

Creation of the database and thematic maps for the ski areas in the Southern Carpathians, Exploratory Research Projects, National Council for Scientific Research in Higher Education (CNSIS), 2009-2011.

Methods for digital terrain analysis and automatic classification of the relief in the mountain area based on digital terrain models and remote-sensed data, Exploratory Research Projects, CNSIS Romania, 2009-2011.

Complex method for the building of the digital geomorphological map of Romania using GIS/Remote sensing techniques, CNMP-Partnerships, CNSIS Romania, 2008-2011.

The impact of climatic changes upon the Holocen and present dynamics of the alpine environment from the Romanian Carpathians. Implications in the risk management and landscape's management, CEEX Grant MEDALP, CNSIS Romania, 2006-2008.

HONOURS AND AWARDS

- *Simion Mehedinți 2019 Award* by Romanian Academy for the PhD thesis;
- *Eminent Young Researcher 2014* by Orizonturi Universitare Association, Romanian Academy of Science and Timisoara City Council
- *George Vâlsan Award* by Romanian Association of Geomorphologists for the best article in 2014

MEMBERSHIPS

- Association of Romanian Geomorphologists
- International Permafrost Association
- European Geosciences Union

REVIEWER

Geomorphology, Science of the Total Environment, Remote Sensing, Frontiers in Earth Sciences, Water, Journal of Applied Geophysics, Geografiska Annaler, Quaternary International, Geosciences, The Cryosphere, Catena, Cold Regions Science and Technology, International Soil and Water Conservation, Geobalcanica, Quaternary Geochronology, Permafrost and Periglacial Processes, Scientific Reports, Revista de Geomorfologie etc.

OTHER KEY ACADEMIC MERITS

- Head of the Geophysical Laboratory (WUT);
- Coordinator of the Research Group GeomorphoTM; <https://geomorphotm.uvt.ro/>
- Coordinator of the Geoarchaeology Laboratory in the Institute for Advanced Environmental Research (WUT)
- Member in the board of the CGACI Research Centre (WUT);
- Leadership experience in research projects: Supervisor of three Post Doc students and 2 PhD students in two different research projects;
- Member in the Faculty and Department Councils

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