

Gabriela Florescu, PhD

Born: 24 March 1985

Nationality: Romanian

WoS Researcher ID: [M-4031-2017](https://www.researchgate.net/profile/Gabriela_Florescu3)

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1. Education

30.07.2015 Doctor of Philosophy (Geography, concentration: Palaeolimnology), Stefan cel Mare University, Suceava, Romania. PhD Title: 'Palaeolimnological investigations in Northern Romanian Carpathians'.

2. Post-doc

09.2021 – present: Postdoctoral researcher (principal investigator (PI) in the research project PN-III-P1-1.1-TE-2019-1628), Ștefan cel Mare University, Suceava, Romania.

01.2019 – 01.2022: Postdoctoral researcher (principal investigator in the research project Junior GAČR 19-14271Y; 2019-2021), Charles University, Faculty of Science, Prague, Czech Republic.

09.2016 – 12.2018: Postdoctoral research assistant (DFG-2016 - FE-1096/4-1), Senckenberg Biodiversity and Climate Research Centre (BIK-F), Frankfurt am Main, Germany. PI – Dr. Angelica Feurdean.

09.2017 – 09.2018: Postdoctoral research assistant (PN-III-P4-IDPCE-2016-0711), Babeș-Bolyai University, Cluj-Napoca, Romania. PI – Prof. Ioan Tanțău.

09.2016 – 09.2017: Postdoctoral research assistant (PN-II-RU-TE-2014-4-2445), Babeș-Bolyai University, Cluj-Napoca, Romania. PI– Dr. Angelica Feurdean.

3. Scientific activity

Publications: https://www.researchgate.net/profile/Gabriela_Florescu3;

<https://scholar.google.com/citations?user=Sx9YcnAAAAAJ&hl=en>;

- 12 papers published in WoS journals (first two quartiles), of which 3 as lead author;
- 8 papers published in journals indexed in international databases;
- over 20 papers presented at international conferences and workshops (lead author);
- 5 invited talks (keynote and seminars) at research institutions abroad;
- A book - methodological guide (lead author), approaching a novel scientific field in Romania (palaeolimnology);
- A peer-reviewed book chapter (co-author) published in an international publishing house;
- Professional membership: COST FireLinks, PAGES Early Career Network, PAGES CarpClim Working Group, PAGES Global Palaeofire Working Group 2, Association of Romanian Geomorphologists.
- PI in 2 international and 1 national research projects; team member in 3 international and 5 national research projects.
- **WoS h Index: 10; Total citations** = 259 (WoS); 298 (Scopus); 349 (Research Gate), 405 (Google Scholar) – February 2022.
- **Reviewer** for The Holocene, Quaternary International, The International Journal for Wildland Fire, the Estonian Journal of Earth Sciences, Science of the Total Environment, Forests.
- **Project evaluator:** research proposals financed through the Romanian UEFISCDI and internal grant schemes for doctoral students funded by the Czech Ministry of Education.
- **Convener** and co-convener of scientific sessions at the international conferences Forum Carpathicum 2021 and IPC/IOPC 2021.

4. Research grants, mobility grants and scholarships

UEFISCDI-PN-III-P1-1.1-TE-2019-1628. *Mid-late Holocene flood events in south-eastern and central Romanian lowlands (HoLFloods)*, Ștefan cel Mare University in Suceava, Romania. PI (2021-2023; 431900 lei ~ 87000 eur).

Junior GAČR 19-14271Y. *Assessing spatio-temporal patterns and drivers of biomass burning in central European spruce-beech forests (BOBAFIRES)*, Charles University, Faculty of Science, Prague, Czech Republic. PI (2019-2021; 7.762.575 CZK ~306000 eur).

Internal grant for internationalization, Faculty of Science, Charles University (2020; 6000 eur = 162000 czk), for the project *Implementing sedimentary biomarker-based study at Charles University*, in collaboration with SBIK-F, Frankfurt am Main, Germany.

UEFISCDI - PN-III-P1-1.1-MC-2017-1074 mobility grant for the project *Testing molecular biomarkers for reconstructing temperature and aridity at low elevation in South-Eastern Romania over the last 7000 years* at the Senckenberg Biodiversity and Climate Research Center (BIK-F), Frankfurt am Main, Germany; contract no.1074/2017 (01-04.2018).

DBU (Deutsche Bundesstiftung Umwelt) grant for the project *Palaeoecological assessment of prehistoric and historical human impact in the high elevation areas of the Northern Carpathians, Romania* at the Senckenberg Biodiversity and Climate Research Centre (BIK-F), Frankfurt am Main, Germany; contract no. 30015/577 (PI; 08.2015 - 07.2016; 15000 eur);

STSM (short-term scientific mission) grant, funded by COST (ES0907 action INTIMATE– INTegrating Ice cores, MArine and TErestrial records), for the project *Assessing the vulnerability of high mountain habitats to Younger Dryas and Holocene climate changes, in two sites located in Rodna Mountains, Northern Romania*, at the Senckenberg Biodiversity and Climate Research Centre (BIK-F), Frankfurt am Main, Germany; 10 - 12. 2013 (2000 eur);

9 grants won by competition for participation to international summer schools, workshops and conferences, including: The 2nd An INTIMATE Example Research and Training School in paleoclimatology, Tusnad, Romania, 2014; European Geosciences Union Conference in Vienna, Austria 2015 and 2016; PAGES Central and Eastern Europe Palaeoscience Symposium: From Local to Global – Cluj-Napoca, Romania 2016; PAGES Central and Eastern Europe Palaeofire Workshop – Frankfurt am Main, Germany 2016; European Pollen Database - EPD Meeting and Training Workshops, Aix-en-Provence, France 2016; PAGES-YSM and OSM Workshops, Morillo de Tou and Zaragoza 2017, Biogeography of the Carpathians 2017, Cluj-Napoca, Romania.

5. Participation in research projects (selected)

DFG-2019-FE-1096/6: *Fire regimes in a warming world: the role of plant traits in the resilience to fire of Eurasian boreal forests*, (2019-2022); PI –A. Feurdean, Goethe University, Frankfurt am Main, Germany. Collaborator.

DFG-2016-FE-1096/4-1: *Fire as a key driver of long-term ecosystem structure, functioning and biodiversity in Central Europe*; PI - A. Feurdean, Senckenberg Biodiversity and Climate Research Centre (BIK-F), Frankfurt am Main, Germany. Project member (2016-2018).

PN-III-P4-IDPCE-2016-0711: *Understanding of the ecosystems functioning is impossible without considering the interactions between climate changes and anthropogenic factors*; PI - Ioan Tanțău; Babeș-Bolyai University, Cluj-Napoca, Romania. Project member (2017-2019).

PN-II-RU-TE-2014-4-2445: *Vegetation changes in a warmer world: using the past to manage the future*. PI - A. Feurdean, Babeș-Bolyai University, Cluj-Napoca, Romania. Project member (2015-2017).

PNII-RU-TE-2012-3-0386: *Climate Variability Recorded by Glacial Deposits and Sediments*; PI - M. Mîndrescu, Ștefan cel Mare University, Suceava, Romania. Project member (2013-2014).

PN-II-RU-TE-2011-3-0145: *Holocene tree line and timberline changes in northern Carpathians - a key approach for understanding the sensitivity of upper mountain environment*; PI - A. Feurdean, Emil Racoviță Institute of Speleology, Cluj-Napoca, Romania. Collaborator (2012-2014).

DFG-2011-FE-1096/2-1: *Altitudinal variation in the biotic response to recurrent climate fluctuations and human impact during the past 15,000 years in the Carpathian region*; PI - A. Feurdean, Senckenberg Biodiversity and Climate Research Centre (BIK-F), Frankfurt am Main, Germany. Collaborator (2012-2014).

List of publications

1. Research papers (WoS):

Feurdean, A., Grindean, R., **Florescu, G.**, Tanțău, I., Niedermeyer, E.M., Diaconu, A.C., Hutchinson, S.M., Nielsen, A.B., Sava, T., Panait, A. and Braun, M., 2021. The transformation of the forest steppe in the lower Danube Plain of southeastern Europe: 6000 years of vegetation and land use dynamics. *Biogeosciences*, 18(3), pp.1081-1103. <https://doi.org/10.5194/bg-18-1081-2021>

Feurdean, A., **Florescu, G.**, Tanțău, I., Vanni re, B., Diaconu, A.C., Pfeiffer, M., Warren, D., Hutchinson, S.M., Gorina, N., Gałka, M. and Kirpotin, S., 2020. Recent fire regime in the southern boreal forests of western Siberia is unprecedented in the last five millennia. *Quaternary Science Reviews*, 244, p.106495. <https://doi.org/10.1016/j.quascirev.2020.106495>

Feurdean, A., Vanni re, B., Finsinger, W., Warren, D., Connor, S. C., Forrest, M., Liakka, J., Panait, A., Werner, C., Andri , M., Bobek, P., Carter, V. A., Davis, B., Diaconu, A.-C., Dietze, E., Feeser, I., **Florescu, G.**, Gałka, M., Giesecke, T., Jahns, S., Jamrichov, E., Kajukał, K., Kaplan, J., Karpińska-Kołaczek, M., Kołaczek, P., Kuneš, P., Kupriyanov, D., Lamentowicz, M., Lemmen, C., Magyari, E. K., Marcisz, K., Marinova, E., Niamir, A., Novenko, E., Obremaska, M., Peđziszewska, A., Pfeiffer, M., Poska, A., R sch, M., Słowiński, M., Stan ikait , M., Szal, M., Święta-Musznicka, J., Tanțău, I., Theuerkauf, M., Tonkov, S., Valkó, O., Vassiljev, J., Veski, S., Vincze, I., Wacnik, A., Wiethold, J., and Hickler, T., 2020. *Fire hazard modulation by long-term dynamics in land cover and dominant forest type in Eastern and Central Europe*. *Biogeosciences*, 17 (4), 1213-1230. <https://doi.org/10.5194/bg-17-1213-2020>

Feurdean, A., Gałka, M., **Florescu, G.**, Diaconu, A.C., Tanțău, I., Kirpotin, S., Hutchinson, S.M. 2019. *2000 years of variability in hydroclimate and carbon accumulation in western Siberia and the relationship with large-scale atmospheric circulation: a multiproxy peat record*. *Quaternary Science Reviews*, 226, p. 105948. <https://doi.org/10.1016/j.quascirev.2019.105948>

Florescu, G., Brown, K.J., Carter, V.A., Kuneš, P., Veski, S. and Feurdean, A., 2019. *Holocene rapid climate changes and ice-rafting debris events reflected in high-resolution European charcoal records*. *Quaternary Science Reviews*, 222, p.105877. <https://www.sciencedirect.com/science/article/pii/S0277379119302215>

Florescu, G., Vanni re, B., Feurdean, A., 2018. *Exploring the influence of local controls on fire activity using multiple charcoal records from northern Romanian Carpathians*, *Quaternary International* 488 (2018) 41–57. PAGES Global Paleofire Working Group 2 Special Issue. <https://www.sciencedirect.com/science/article/pii/S1040618217305207>

Florescu, G., Hutchinson, S.M., Kern, Z., Mindrescu, M., Cristea, I.A., Mihil, D., Łokas, E. and Feurdean, A., 2017. *Last 1000years of environmental history in Southern Bucovina, Romania: A high resolution multi-proxy lacustrine archive*. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 473, pp.26-40. <https://www.sciencedirect.com/science/article/pii/S0031018216304369>

Feurdean, A., Veski, S., **Florescu, G.**, Vanni re, B., Pfeiffer, M., O'Hara, R.B., Stivrins, N., Amon, L., Heinsalu, A., Vassiljev, J. and Hickler, T., 2017. *Broadleaf deciduous forest counterbalanced the direct effect*

of climate on Holocene fire regime in hemiboreal/boreal region (NE Europe). *Quaternary Science Reviews*, 169, pp.378-390. <https://www.sciencedirect.com/science/article/pii/S0277379117301555>

Feurdean, A., **Florescu, G.**, Vanni re, B., Tan au, I., O'Hara, R.B., Pfeiffer, M., Hutchinson, S.M., Ga ka, M., Moskal-del Hoyo, M. and Hickler, T., 2017. *Fire has been an important driver of forest dynamics in the Carpathian Mountains during the Holocene*. *Forest Ecology and Management*, 389, pp.15-26. <https://www.sciencedirect.com/science/article/pii/S0378112716305205>

Haliuc, A., Hutchinson, S.M., **Florescu, G.**, Feurdean, A. 2016. *The role of fire in landscape dynamics: An example of two sediment records from the Rodna Mountains, northern Romanian Carpathians*. *Catena*, 137, 432-440. <https://www.sciencedirect.com/science/article/pii/S0341816215301430>

Feurdean, A., Ga ka, M., Kuske, E., Tan au, I., Lamentowicz, M., **Florescu, G.**, Liakka, J., Hutchinson, S.M., Mulch, A. and Hickler, T., 2015. *Last millennium hydro-climate variability in Central–Eastern Europe (northern Carpathians, Romania)*. *The Holocene*, 25(7), pp.1179-1192. <https://journals.sagepub.com/doi/abs/10.1177/0959683615580197>

M ndrescu, M., Cristea, A.I., Hutchinson, S.M., **Florescu, G.**, Feurdean, A., 2013. *Interdisciplinary investigations of the first reported laminated lacustrine sediments in Romania*, *Quaternary International*, 293, 219-230. <https://www.sciencedirect.com/science/article/pii/S1040618212031618>

2. Books/chapters

M ndrescu, M., **Florescu, G.**, Gr dinaru, I., Haliuc, A., 2017. Chapter 8. *Lakes, Lacustrine Sediments and Palaeoenvironmental Reconstructions*,  n R doane, M., Vespremeanu-Stroe, A. (Eds), *Landform dynamics and evolution in Romania*. Springer. ISBN 978-3-319-32587-3. https://link.springer.com/chapter/10.1007/978-3-319-32589-7_30

Florescu, G., M ndrescu, M., 2016. *Ghid practic de paleolimnologie (Practical Handbook for Palaeolimnology)*, 207 p. Editura Universit ţii  tefan cel Mare, Suceava. ISBN 978-973-666-469-4.

3. Research papers published in journals indexed in international databases (selected)

Florescu, G., Briciu, A.E. and Hutchinson, S.M., 2019. An assessment of in-channel alluvia (aits) in the Suceava River near Suceava city, NE Romania. *GEOREVIEW: Scientific Annals of Stefan cel Mare University of Suceava. Geography Series*, 29(1), pp.84-97. <http://georeview.ro/ojs/index.php/revista/article/viewFile/411/511>

Briciu, A.E., **Florescu, G.** and M ndrescu, M., 2019. Mineral magnetic properties of sediments in Dragomirna Reservoir, Suceava County, Romania. *GEOREVIEW: Scientific Annals of Stefan cel Mare University of Suceava. Geography Series*, 29(1), pp.98-108. <http://georeview.ro/ojs/index.php/revista/article/view/412>

Florescu, G., Hutchinson, S.M., M ndrescu, M., Braun, M., Feurdean, A., 2016. *Palaeoecological assessment of prehistoric and historic human impact in the high elevation areas of the Northern Carpathians, Romania*. *GEOREVIEW: Scientific Annals of Stefan cel Mare University of Suceava. Geography Series*, 26(2), pp.19-21. <http://georeview.ro/ojs/index.php/revista/article/view/302>

Florescu, G., Feurdean, A., Hutchinson, S.M., M ndrescu, M., Kern, Z., 2014. *1000 years of high resolution environmental change in the Eastern Carpathians, NE Romania: a multi-proxy approach*, Late Pleistocene and Holocene climatic variability in the Carpathian-Balkan region (CBW2014)-Special Issue, Stefan cel Mare University Press, pp. 44-47. <http://georeview.ro/ojs/index.php/revista/article/view/185>

Haliuc, A., Hutchinson, S.M., **Florescu, G.**, Feurdean, A., 2014. *The effect of past fire activity on soil erosional processes in two subalpine sediment records from Rodna Mountains, Northern Romanian Carpathians*, Late

Pleistocene and Holocene climatic variability in the Carpathian-Balkan region (CBW2014)-Special Issue, Stefan cel Mare University Press, pp. 65-66.

<http://georeview.ro/ojs/index.php/revista/article/view/219>

Mîndrescu, M., Cristea, I.A., **Florescu, G.**, 2010. *Water quality and ecology of the Iezer and Bolatau lakes*. Lakes reservoirs and ponds, 4(2), pp.119-130. <http://www.limnology.ro/Lakes/1/201004209.html>

4. Selected conference presentations

Florescu, G., Kuneš, P., Tinner, W., Heurich, M., Finsinger, W., Moravcová, A., Dreslerová, D., Kletetschka, G., Vondrak, D. and Carter, V., 2021, April. *Holocene spatio-temporal patterns of biomass burning in the Bohemian-Bavarian Forest Mountains (Central Europe)*. In EGU General Assembly Conference Abstracts (pp. EGU21-13342).

Florescu, G., *Holocene fire and relationship with climate, vegetation and humans in the Central and Eastern European mountains*. Simpozionului internațional Calitatea Mediului și Utilizarea Terenurilor. Ediția a XII-a, 17-19 May 2019, Suceava, Romania.

Florescu, G., Veski, S., Giesecke, T., Carter, V., Brown, K., Feurdean, A. *Response of fire activity to Holocene rapid climate changes, inferred from high-resolution European charcoal records*. 10th European Palaeobotany and Palynology Conference (EPPC), 12-17.08.2018, Dublin, Ireland.

Florescu, G., Hutchinson, S.M., Niedermeyer, E.M., Grindean, R., Tanțău, I., Feurdean, A., *A multi-proxy evaluation of past environmental dynamics in the lowlands of South-Eastern Romania, Central – Eastern Europe*. EGU General Assembly 2018, Vol. 20, Geophysical Research Abstracts, EGU2018-871, Vienna, Austria.

Florescu, G., Feurdean, A., *Holocene rapid climate changes reflected in NE and CE European charcoal records*. PAGES – OSM, 09.05 - 13.05.2017 Zaragoza, Spain.

Florescu, G., Hutchinson, S. M., Feurdean, A. *The effects of Holocene land use on habitat diversity and slope erosion in the subalpine landscapes of Northern Carpathians, Romania*. The Second Interdisciplinary Symposium Biogeography of the Carpathians, 28 – 30.09.2017, Cluj-Napoca, Romania.

Florescu, G., Hutchinson, S. M., Mîndrescu, M., Geantă, A., Tanțău, I., Feurdean, A. *An assessment of human impact in the subalpine areas of the Northern Carpathians, Romania, during prehistoric and historic times*. Forum Carpathicum, 28-30.09.2016. Bucharest, Romania.

Florescu, G., Tanțău, I., Geantă, A., Feurdean, A., *Heterogenous pattern in fire activity in a homogenous climate: test using Holocene charcoal records from Northern Romanian Carpathians*, European Pollen Database - EPD Meeting and Training Workshops, 1-3.06.2016, Aix-en-Provence, France.

Florescu, G., Hutchinson, S. M., Mîndrescu, M., Braun, M., Feurdean, A., *Palaeoecological assessment of prehistoric and historic human impact in the high elevation areas of the Northern Carpathians, Romania*, PAGES Central and Eastern Europe Paleoscience Symposium: From Local to Global, 23.05 - 26.05.2016, Cluj-Napoca, Romania.

Florescu, G., Feurdean, A., *Fire as a driver of ecosystem dynamics in Central and Eastern Europe throughout the Lateglacial and Holocene*. PAGES Central and Eastern Europe Paleoscience Symposium: From Local to Global, 23.05 - 26.05.2016, Cluj-Napoca, Romania.

Florescu, G., Feurdean, A., *Holocene fire activity in the Carpathian region: regional climate vs. local controls*, EGU General Assembly 2015, Vol. 17, Geophysical Research Abstracts, EGU2015-589, 2015, Vienna, Austria.

Florescu, G., Hutchinson, S. M., Mîndrescu, M., Kern, Z. *Last 1000 years of palaeo-environmental reconstruction via lake sediment analysis in the Eastern Carpathians, Northern Romania*, MARUM ECC 2014 - 5th Early Career Scientists Conference for Marine and Climate Research: ECC Natural and Social Aspects of the Earth System, 21-24.09.2014, Bremen, Germany.

5. Invited talks and seminars (selected)

Florescu, G. & Carter-Kraklow, V. *"Patterns and drivers of Holocene fire activity in the Bavarian-Bohemian National Forest"* (29.11.2021), Invited seminar at Karl Rudolph Seminar Series, Department of Botany, Faculty of Science, Charles University in Prague, Czechia.

Florescu, G. & Kunes, P. *Ecosystem Disturbance Dynamics* (27.10.2021). Invited practical teaching course in Quaternary Palaeoecology at the Department of Botany, Charles University in Prague, Czechia.

Florescu, G., *Using sedimentary charcoal as a fire proxy* (04.03.2019). Invited seminar at Karl Rudolph Seminar Series, Department of Botany, Faculty of Science, Charles University in Prague, Czechia.

Florescu, G., *Palaeoecological assessment of prehistoric and historic human impact in the high elevation areas of the Northern Carpathians, Romania*, 2016. Invited seminar at Senckenberg Biodiversity and Climate Research Center (SBIK-F), 06.06.2016, Frankfurt pe Main, Germania.

Florescu, G., Haliuc, A. *An attempt to construct the first Romanian palaeo-climatic and -environmental stratigraphy based on lacustrine and peat records*. Invited talk at the International Symposium Environmental Quality and Land Use, Edition X, 8-10.05.2015, Suceava, Romania.