

Publication list of Kamil Ustaszewski (May 2023)**Articles in peer-reviewed journals**

In preparation:

Cionoiu, S., Handy, M.R., **Ustaszewski, K.**: Comparison of the fault-parallel flow and fault-bend folding algorithms. *Journal of Structural Geology*, in preparation.

Prince, E., Tsukamoto, S., Grützner C., Vrabec M., **Ustaszewski, K.**: Quaternary seismicity in the Eastern Alps: Dating earthquakes along the Eastern Periadriatic Fault System via trapped charge methods on fault gouges. *Earth, Planets and Space*, in preparation.

Richter, M., Pollok, K., **Ustaszewski, K.**: Tectonometamorphic evolution of a subducting plate interface at the base of the Mirdita Ophiolite (Bajram Curri, northeastern Albania). *Swiss Journal of Geosciences*, in preparation.

Schmitz, B., Hueck, M., Wemmer, K., Onuzi, K., Biermanns, P., Reicherter, K., **Ustaszewski, K.**: Kinematics and age of the orogen-perpendicular Shkoder-Peja Normal Fault in North Albania constrained from Raman spectroscopy and K-Ar fault-gouge dating. *EPSL*, in preparation.

Ustaszewski, K., Zhang, Y., Suppe, J., Wu, Y.-M.: Improved constraints on the configuration of the Eurasian passive margin from crustal-scale balanced cross sections across the Taiwan fold-and-thrust belt. *Tectonics*, in preparation.

In review, in revision, pending acceptance or accepted:

Balling, P., Tomljenović, B., Herak, M., **Ustaszewski, K.** (2023): Inversion of passive margin faults in the Velebit Mountain of the external Dinarides fold-and-thrust-belt and implications for seismotectonics. *Swiss J. Geosci.*, revised manuscript pending acceptance.

Diercks, M., Grützner, C., Welte, J. & **Ustaszewski, K.** (2023): Challenges and limits of Remote Sensing of Active Tectonics in the slowly deforming Karst landscape of W Slovenia and NE Italy. *Geomorphology*, revised manuscript pending acceptance. <http://dx.doi.org/10.2139/ssrn.4350086>

Published (in inverse chronological order):

Thieme, M., Jähne-Klingberg, F., Fügenschuh, B., Malz, A., Linnemann, U., **Ustaszewski, K.** (2023): The Late Mesozoic to Paleogene cooling history of the Thuringian Forest basement high and its southern periphery (central Germany) revealed by combined fission-track and U-Pb LA-ICP-MS dating, *ZDGG*, [doi: 10.1127/zdgg/2023/0321](https://doi.org/10.1127/zdgg/2023/0321).

Zhang, Y., He, D., **Ustaszewski, K.**, Zhao, L., Ji, Z., and Wang, Z. (2023): 台湾中央山脉东部变质作用及热演化：玉里缝合带的俯冲折返作用 [Thermal evolution of the metamorphism in the eastern Taiwan Central Range: Implications for Yuli Belt exhumation]. *Chinese Journal of Geology*, 58, 289-304, [doi: 10.12017/dzjx.2023.020](https://doi.org/10.12017/dzjx.2023.020).

Diercks, M., Grützner, C., Vrabec, M., & **Ustaszewski, K.** (2022): Addendum to Diercks et al., 2021: A model for the formation of the Pradol (Pradolino) dry valley in W Slovenia and NE Italy. *Geologija*, 65(1), 93-99. [doi:10.5474/geologija.2022.006](https://doi.org/10.5474/geologija.2022.006).

Biermanns, P., Schmitz, B., Mechernich, S., Weismüller, C., Onuzi, K., **Ustaszewski, K.**, Reicherter, K. (2022): Aegean-style extensional deformation in the contractional southern Dinarides: incipient normal fault scarps in Montenegro. *Solid Earth* 13, 957-974, doi: [10.5194/se-13-957-2022](https://doi.org/10.5194/se-13-957-2022).

- Grützner, C., Aschenbrenner, S., Jamšek Rupnik, P., Reicherter, K., Saifelislam, N., Vičič, B., Vrabec, M., Welte, J., & **Ustaszewski, K.** (2021): Holocene surface-rupturing earthquakes on the Dinaric Fault System, western Slovenia. *Solid Earth*, 12, 2211–2234, <https://doi.org/10.5194/se-12-2211-2021>.
- Zebari, M., Preusser, F., Grützner, C., Navabpour, P., **Ustaszewski, K.** (2021): Late Pleistocene-Holocene Slip Rates in the Northwestern Zagros Mountains Derived from Luminescence Dating of River Terraces and Structural Modeling. *Tectonics*, 40, e2020TC006565, doi: [10.1029/2020TC006565](https://doi.org/10.1029/2020TC006565).
- Balling, P., Tomljenović, B., Schmid, S.M., **Ustaszewski, K.** (2021): Contrasting along-strike deformation styles in the external Dinarides: implications for the tectonic evolution of its Paleogene flexural foreland basin system. *Global and Planetary Change*, 205, 103587, [10.1016/j.gloplacha.2021.103587](https://doi.org/10.1016/j.gloplacha.2021.103587).
- Diercks, M., Grützner, C., Vrabec, M., **Ustaszewski, K.** (2021): A model for the formation of the Pradol (Pradolino) dry valley in W Slovenia and NE Italy, *Geologija*, 64/1, 21-33, doi: [10.5474/geologija.2021.002](https://doi.org/10.5474/geologija.2021.002).
- Löwe, G., Schneider, S., Sperner, B., Balling, P., Pfänder, J., **Ustaszewski, K.** (2021): Torn between two plates: exhumation of the Cer Massif (internal Dinarides) as a far-field effect of Carpathian slab rollback inferred from $^{40}\text{Ar}/^{39}\text{Ar}$ dating and cross section balancing. *Tectonics*, 40, e2021TC006699, doi: [10.1029/2021TC006699](https://doi.org/10.1029/2021TC006699).
- Le Breton, E., Brune, S., **Ustaszewski, K.**, Zahirovic, S., Seton, M., & Müller, R. D. (2021): Kinematics and extent of the Piemonte-Liguria Basin – implications for subduction processes in the Alps: *Solid Earth*, 12, 885-913, doi: [10.5194/se-12-885-2021](https://doi.org/10.5194/se-12-885-2021).
- Balling, P., Grützner, C., Tomljenović, B., Spakman, W., **Ustaszewski, K.** (2021): Post-collisional mantle delamination in the Dinarides implied from staircases of Oligo-Miocene uplifted marine terraces. *Scientific Reports*, 11, doi: [10.1038/s41598-021-81561-5](https://doi.org/10.1038/s41598-021-81561-5).
- Zebari, M., Balling, P., Grützner, C., Navabpour, P., Witte, J., & **Ustaszewski, K.** (2020). Structural style of the NW Zagros Mountains and the role of basement thrusting for its Mountain Front Flexure, Kurdistan Region of Iraq. *Journal of Structural Geology*, 141, 104206, doi: [10.1016/j.jsg.2020.104206](https://doi.org/10.1016/j.jsg.2020.104206).
- Schmitz, B., Biermanns, P., Hinsch, R., Đaković, M., Onuzi, K., Reicherter, K., & **Ustaszewski, K.** (2020). Ongoing shortening in the Dinarides fold-and-thrust belt: A new structural model of the 1979 (Mw 7.1) Montenegro earthquake epicentral region. *Journal of Structural Geology*, 141, 104192, doi: [10.1016/j.jsg.2020.104192](https://doi.org/10.1016/j.jsg.2020.104192).
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- Schmid, S.M., Fügenschuh, B., Georgiev, N., Kounov A., Matenco, L., Nievergelt, P., Oberhänsli, R., Pleuger, J., Schefer, S., Schuster, R., Tomljenović, B., **Ustaszewski, K.**, van Hinsbergen, D. (2020): Tectonic units of the Alpine collision zone between Eastern Alps and western Turkey, *Gondwana Research*, 78, 308-374, doi: doi.org/10.1016/j.gr.2019.07.005.
- Handy, M.R., Giese, J., Pleuger, J., Schmid, S.M., Spakman, W., Onuzi, K., **Ustaszewski, K.** (2019): Coupled Crust-Mantle Response to Slab Tearing, Bending, and Rollback Along the Dinaride-Hellenide Orogen, *Tectonics*, 38, 2803-2828, doi: doi.org/10.1029/2019TC005524.

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- Ustaszewski, K.**, Schmid, S.M. (2007): Latest Pliocene to recent thick-skinned tectonics at the Upper Rhine Graben - Jura Mountains junction. [Swiss Journal of Geosciences, 100, 293-312.](#)
- Cloetingh, S., Ziegler, P.A., Cornu, T., **Ustaszewski, K.**, Schmid, S.M., Dèzes, P., Hinsch, R., Decker, K., Lopes Cardozo, G., Granet, M., Bertrand, G., Behrmann, J., Michon, L., Pagnier, H., Rozsa, S., Heck, B., Kahle, H.G., Winter, T., Dewez, T., Tesauero, M. (2006): Neotectonics and intraplate continental topography of the northern Alpine Foreland. [Earth-Science Reviews, 74, 127-196.](#)
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Non-peer-reviewed articles (in inverse chronological order)

- Dichtl, M., Grützner, C. & **Ustaszewski, K.** (2023): Genese des Schlangengipses im Thüringer Zechstein. [Beitr. Geol. Thür., N.F. 28, 47-90.](#)
- Ebell, H., Grützner, C. & **Ustaszewski, K.** (2023): Genese der Faltung und der Fasergipse des Salinarröts am Ostrand der Thüringer Mulde. [Beitr. Geol. Thür., N.F. 28, 91-125.](#)
- Zinke, C., Navabpour, P., **Ustaszewski, K.**, 2015. Analyse des Bruchflächeninventars in Grundgebirgs- und Rotliegendeaufschlüssen am Nordrand des Thüringer Waldes bei Ilmenau/Thüringen) hinsichtlich ihrer Versagenstendenz im rezenten Spannungsfeld. [Beiträge zur Geologie von Thüringen, N.F., 22, 137 – 152.](#)
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- Ustaszewski, K.**, Schmid, S.M., 2007. Neotectonic activity in the Upper Rhine Graben - Jura Mountains junction (North-Western Switzerland and adjacent France). [Bulletin für Angewandte Geologie, 12 \(1\), 3-19.](#)

Supplemental datasets

- Zhang, Y. & **Ustaszewski, K.** (2023): Thermal evolution of the metamorphism in the eastern Taiwan Central Range: implications for Yuli Belt exhumation [Supplementary data set]. Zenodo. [doi: 10.5281/zenodo.7545914](https://doi.org/10.5281/zenodo.7545914).
- Zebari, M., Preusser, F., Grützner, C., Navabpour, P. and **Ustaszewski, K.** (2021): Luminescence Dating of River Terraces along the banks of the Greater Zab River in the Northwestern Zagros Mountains in Kurdistan Region of Iraq. PANGAEA, <https://doi.pangaea.de/10.1594/PANGAEA.933900>.
- Löwe, G., Schneider, S., Sperner, B., Balling, P., Pfänder, J. A., & **Ustaszewski, K.** (2021): Supplementary material to: "Torn between two plates: exhumation of the Cer Massif (internal Dinarides) as a far-field effect of Carpathian slab rollback inferred from $^{40}\text{Ar}/^{39}\text{Ar}$ dating and cross section balancing", doi: dx.doi.org/10.5281/zenodo.4678734.
- Grützner, C., Aschenbrenner, S., Krämer, A., Reicherter, K., Saifelislam, N., **Ustaszewski, K.**, Viscolani, A., Welte, J. (2020). Geophysical survey (GPR, ERT, magnetic) on active faults in Slovenia and Italy. PANGAEA, <https://doi.org/10.1594/PANGAEA.922902>.

Technical reports

- Hesse, G., Richling, S., Schaub, A., Will, J., Eckardt, S., **Ustaszewski, K.**, Kasch, N., Siegburg, M., and Thieme, M., 2015, OPTIRISS - Geothermisches Verbundprojekt Thüringen-Sachsen zur Entwicklung einer risikominimierten petrothermalen Explorations- und Erschließungsmethode für geeignete mitteldeutsche Kristallingesteine (Projektteil Thüringen), Abschlussbericht, JENA-GEOS Ingenieurbüro GmbH, 106 pp.

Book articles

- Ustaszewski, K.**, Schumacher, M.E., Schmid, S.M. and Nieuwland, D.A., 2005. Fault reactivation in brittle-viscous wrench systems - dynamically scaled analogue models and application to the Rhine-Bresse Transfer Zone. In: S. Cloetingh and T. Cornu (Editors), Neotectonics and Quaternary Fault reactivation in Europe's Intraplate Lithosphere. Elsevier, pp. 280, ISBN: 0-08-044687-6.

Monographies

- Ustaszewski, K.**, 2004. Reactivation of pre-existing crustal discontinuities: the southern Upper Rhine Graben and the northern Jura Mountains - a natural laboratory. [PhD Thesis, University of Basel, Basel, 162 pp.](#)
- Ustaszewski, K.**, 2000. Stratigraphische und strukturgeologische Untersuchungen am Ostrand der Engadiner Dolomiten (Ortler Gruppe, Südtirol). MSc thesis, University of Innsbruck, Innsbruck, 102 pp.