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SCIENTIFIC INTEREST

Topics: (i) tectonic evolution and exhumation processes in orogenic belts; relationships between tectonics and erosion in active orogens and detrital fluxes in adjoining sedimentary basins; (ii) sediment provenance, transport, storage, burial and reworking; (iii) methodological approaches to detrital geo/thermochronological analyses

Tools: Field geology (sedimentology, stratigraphy, structural geology); geologic interpretation of seismic data sets; detrital geochronology and thermochronology

Field sites: Orogenic belts of the Western Mediterranean, North Africa, East Asia and Pacific

Laboratory: Fission-track analysis

PROFESSIONAL EXPERIENCE

since 2021 **Director of the PhD Course in Chemical, Geological and Environmental Sciences,**
University of Milano-Bicocca

since 2018 **Associate professor,** *University of Milano-Bicocca*
Italian national scientific qualification **ASN 2012 and ASN 2016 as full professor** (valid until 16-11-2024)

2007-2018 **Researcher,** *University of Milano-Bicocca*

2002-2006 **Researcher for geological mapping projects** (*ex art. 23*), *CNR-IGG Torino*

1999-2001 **Professional geologist**

EDUCATION

2004 **PhD in Earth Sciences,** *CNR-IGG – University of Torino*

1997 **MSc in Geological Sciences,** *University of Torino (cum laude)*

PUBLICATIONS

- 57 international publications (chiefly published as first/corresponding author on high impact factor journals)
- 7 chapters (peer reviewed) in scientific books
- 10 geological maps or explanatory notes published by Geological Surveys of Italy, France, and Morocco;
- 130 contributions in scientific meetings;
- 22 invited presentations or seminars (Italy, France, Germany, China, USA)

Editor of the book: Malusà MG, Fitzgerald PG (eds) *Fission-Track Thermochronology and Its Application to Geology*.
Springer Textbooks in Earth Sciences, Geography and Environment, 393 p., doi:10.1007/978-3-319-89421-8

FIELD WORK

Western Alps (1995-2010); Scotland (1995); High-Atlas and Anti-Atlas (2004-2006); Southalpine retroforeland basin (2008-2010); Corsica (since 2006); Northern Apennines (since 2010); Tertiary Piedmont basin (since 2011); Dabie Shan (2016, 2018); Tian Shan (2019)

ORGANIZATION OF SCIENTIFIC MEETINGS

- Scientific Committee:* 14th Alpine Workshop (EGU series), Sion 4th-6th Sept 2019
 12th Alpine Workshop (EGU series), Montgenèvre - Briançon 13th-19th Sept 2015
 10th Workshop on Alpine Geological Studies "CorseAlp 2011" 10th-16th Apr 2011
- Organizing Committee:* 81st Geological Society of Italy Summer Meeting, Torino, 10th-12th Sept 2002
- Conference Field Trips:* 4th CIFALPS Workshop, Genova and Valle d'Aosta, 14th-15th Oct 2016
 14th Int. Conf. Thermochronology, Chamonix, to be held the 5th-7th Sept 2014
 81st Summer Meeting of the Geological Society of Italy, 6th-9th Sept 2002

Conference sessions convened:

- EGU General Assembly 2021: session TS7.8, *to be held online, April 2021*
- EGU General Assembly 2020: session TS7.6/GD7/SM4, online, 7th May 2020
- EGU General Assembly 2019: session TS7.9/GD6.7/SM1.22, Vienna, 11th April 2019
- EGU General Assembly 2018: session TS7.12/GD8.6/SM 4.13, Vienna, 11th April 2018
- EGU General Assembly 2017: session TS7.7/SM6.13, Vienna, 25th April 2017
- SGI National Conference 2016: session S6, Napoli, 9th Sept 2016
- SGI-SIMP National Conference 2014: session S31, Milano, 12th Sept 2014
- AGU Fall Meeting 2012: session T42C/T43E, San Francisco, CA, 6th Dec 2013
- Geol Soc Italy National Conference 2012: session TS1.5, Arcavacata di Rende (CS), 18th-20th Sept 2012
- EGU General Assembly 2010: session TS4.5/GM5.6, Vienna, 6th May 2010

ORGANIZATION OF INTERNATIONAL ADVANCED SCHOOLS

- Short course "Detrital geochronology and thermochronology", organizers: Villa IM & Malusà MG (*online, Jan-Feb 2021*)
- Short course "Quantitative detrital thermochronology", organizers: Malusà MG & Zattin M, 12th International Conference on Fluvial Sedimentology (*to be held July 2021, Riva del Garda, Italy*)

OTHER SYNERGISTIC ACTIVITIES

- Scientific director in international mapping projects (Carte Géologique du Maroc au 1/50.000, 2004-2007)
- Member of the AlpArray initiative Science Council (since 2018)

OTHER EDITORIAL APPOINTMENTS

- Guest Associate Editor of *Tectonics* and *G-Cubed* (since 2019)
- Guest co-editor of the Geosciences Special Issue: Balestrieri ML, Malusà MG, Olivetti V (eds) *Application of Thermochronology to Sedimentary Basins* (in progress)

RECENT PROJECTS FUNDED

- 2014-2015 DFG Proposal WI 3874/3-1: "Patterns of erosion in the Western Alps and quantification of sediment reworking in the associated Po River foreland basin" (*P.I., H Wittmann-Oelze; co-P.I., MG Malusà*).
- late 2008-2011 ESF Topo-Europe Eurocores Project: "Coupled climatic/tectonic forcing of European topography revealed through thermochronometry - Thermo-Europe". *Associated partner in Individual Project 1 (P.I., ML Balestrieri)*.

TEACHING, MENTORING AND TRAINING

- Courses held at University of Milano-Bicocca (>1500 hours teaching since 2005):
 - since 2005 - Field geology and mapping (including interpretation of geological maps) - B.Sc. level
 - since 2006 - Field training (application of field geology techniques in orogenic areas) - B.Sc. level
 - 2008 - 2014 Geology of sedimentary basins, seismic stratigraphy - M.Sc. level
 - 2008 - 2014 Advanced stratigraphy and regional geology - M.Sc. level
- Advisor (or co-advisor) for 4 PhD theses, 11 MSc theses, and 46 BSc theses (*2 in progress*)
- 15 students trained in the fission-track lab of Milano-Bicocca University (including students from China)
- External examiner for PhD theses

Selected publications in international peer-reviewed scientific journals

[*denotes corresponding author]

1. **Malusà M.G.***, Guillot S., Zhao L., Paul A., Solarino S., Dumont T., Schwartz S., Aubert C., Baccheschi P., Eva E., Lu Y., Lyu C., Pondrelli S., Salimbeni S., Sun W., Yuan H. (2021) The Deep Structure of the Alps based on the CIFALPS Seismic Experiment: A Synthesis. *Geochemistry, Geophysics, Geosystems*, 22, 1-42, e2020GC009466, doi: 10.1029/2020GC009466
2. **Malusà M.G.***, Fitzgerald P.G. (2020) The geologic interpretation of the detrital thermochronology record within a stratigraphic framework, with examples from the European Alps, Taiwan and the Himalayas. *Earth-Sci Rev.* 201, 103074, doi: 10.1016/j.earscirev.2019.103074
3. Eva E., **Malusà M.G.***, Solarino S. (2020) Seismotectonics at the Transition Between Opposite-Dipping Slabs (Western Alpine Region). *Tectonics* 39(9), e2020TC006086, doi: 10.1029/2020TC006086
4. Resentini A., **Malusà M.G.***, Garzanti E. (2020) Ongoing exhumation of the Taiwan orogenic wedge revealed by detrital apatite thermochronology: The impact of effective mineral fertility and zero-track grains. *Earth Planet. Sci. Lett.* 544, 116374, doi: 10.1016/j.epsl.2020.116374
5. Resentini A., **Malusà M.G.***, Garzanti E. (2020) Reply to Comment on Resentini et al., 2020: “Ongoing exhumation of the Taiwan orogenic wedge revealed by detrital apatite thermochronology: The impact of effective mineral fertility and zero-track grains”. *Earth Planet. Sci. Lett.* 550, 116557, doi: 10.1016/j.epsl.2020.116557
6. Resentini A.*, Andò S., Garzanti E., **Malusà M.G.**, Pastore G., Vermeesch P., Chanvry E., Dall'Asta M. (2020) Zircon as a provenance tracer: Coupling Raman spectroscopy and UPb geochronology in source-to-sink studies. *Chem. Geol.* 555, 119828, doi: 10.1016/j.chemgeo.2020.119828
7. Zhao L.*, **Malusà M.G.***, Yuan H.*, Paul A., Guillot S., Lu Y., Stehly L., Solarino S., Eva E., Lu G., Bodin T., CIFALPS Group, AlpArray Working Group (2020) Evidence for a serpentized plate interface favouring continental subduction. *Nat. Commun.* 11(1), 1-8, doi: 10.1038/s41467-020-15904-7
8. Zhao L.*, **Malusà M.G.***, Yuan H.*, Paul A., Guillot S., Lu Y., Stehly L., Solarino S., Eva E., Lu G., Bodin T., CIFALPS Group, AlpArray Working Group (2020) Author Correction: Evidence for a serpentized plate interface favouring continental subduction. *Nat. Commun.* 11(1), 1-8, doi: 10.1038/s41467-020-17767-4
9. Ellero A., **Malusà M.G.**, Ottria G.*, Ouanaimi H., Froitzheim N. (2020) Transpressional structuring of the High Atlas belt, Morocco. *J. Struct. Geol.*, 104021, doi: 10.1016/j.jsg.2020.104021
10. Asti R.*, Faccenna C., Rossetti F., **Malusà M.G.**, Gliozzi E., Faranda C., Lirer F., Cosentino D. (2019) The Gediz supradetachment system (SW Turkey): magmatism, tectonics, and sedimentation during crustal extension. *Tectonics* 38(4), 1414-1440, doi: 10.1029/2018TC005181
11. Sun W.*, Zhao L., **Malusà M.G.***, Guillot S., Fu, L.Y. (2019) 3-D Pn tomography reveals continental subduction at the boundaries of the Adriatic microplate in the absence of a precursor oceanic slab. *Earth Planet. Sci. Lett.* 510, 131-141, doi: 10.1016/j.epsl.2019.01.012
12. Ji W.Q.*, **Malusà M.G.***, Tiepolo M., Langone A., Zhao L., Wu F.Y. (2019) Synchronous Periadriatic magmatism in the Western and Central Alps in the absence of slab breakoff. *Terra Nova* 31(2), 120-128, doi: 10.1111/ter.12377
13. Liao J.*, **Malusà M.G.***, Zhao L., Baldwin S.L., Fitzgerald P.G., Gerya T. (2018) Divergent plate motion drives rapid exhumation of (ultra)high pressure rocks. *Earth Planet. Sci. Lett.* 491, 67-80, doi: 10.1016/j.epsl.2018.03.024
14. **Malusà M.G.***, Frezzotti M.L.*, Ferrando S., Brandmayr E., Romanelli F., Panza G.F. (2018) Active carbon sequestration in the Alpine mantle wedge and implications for long-term climate trends. *Scientific Reports* 8:4740, doi:10.1038/s41598-018-22877-7.
15. Salimbeni S.*, **Malusà M.G.***, Zhao L., Guillot S., Pondrelli S., Margheriti L., Paul A., Solarino S., Aubert C., Dumont T., Schwartz S., Wang Q., Xu X., Zheng T., Zhu R. (2018) Active and fossil mantle flows in the western Alpine region unravelled by seismic anisotropy analysis and high-resolution P wave tomography. *Tectonophysics* 731-732, 35-47, doi: 10.1016/j.tecto.2018.03.002

16. Liao J.*, Gerya T., **Malusà M.G.** (2018) 3D modeling of crustal shortening influenced by along-strike lithological changes: Implications for continental collision in the Western and Central Alps. *Tectonophysics* 746, 425–438, doi: 10.1016/j.tecto.2018.01.031
17. Solarino S., **Malusà M.G.***, Eva E., Guillot S., Paul A., Schwartz S., Zhao L., Aubert C., Dumont T., Pondrelli S., Salimbeni S., Wang Q., Xu X., Zheng T., Zhu R. (2018) Mantle wedge exhumation beneath the Dora-Maira (U)HP dome unravelled by local earthquake tomography (Western Alps). *Lithos* 296–299, 623–636, doi: 10.1016/j.lithos.2017.11.035
18. Garzanti E., Radeff G.*, **Malusà M.G.** (2018) Slab breakoff: A critical appraisal of a geological theory as applied in space and time. *Earth-Sci Rev.* 177, 303–319, doi: 10.1016/j.earscirev.2017.11.012
19. Asti R.*, **Malusà M.G.**, Faccenna C. (2018) Supradetachment basin evolution unravelled by detrital apatite fission track analysis: the Gediz Graben (Menderes Massif, Western Turkey). *Basin Res.* 30, 502–521, doi: 10.1111/bre.12262
20. Bergomi M.A., Dal Piaz G.V., **Malusà M.G.***, Monopoli B., Tunesi A. (2017) The Grand St Bernard-Briançonnais nappe system and the Paleozoic inheritance of the Western Alps unraveled by zircon U-Pb dating. *Tectonics* 36, 2950–2972, doi: 10.1002/2017TC004621
21. **Malusà M.G.***, Wang J.*, Garzanti E., Liu Z.C., Villa I.M., Wittmann H. (2017) Trace-element and Nd-isotope systematics in detrital apatite of the Po river catchment: Implications for provenance discrimination and the lag-time approach to detrital thermochronology. *Lithos* 290–291, 48–59, doi: 10.1016/j.lithos.2017.08.006
22. Zhao L.*, Xu X., **Malusà M.G.** (2017) Seismic probing of continental subduction zones. *J. Asian Earth Sci.* 145, 37–45, doi: 10.1016/j.jseaes.2017.05.026
23. Lyu C., Pedersen H.A., Paul A., Zhao L., Solarino S., and CIFALPS Working Group (2017) Shear wave velocities in the upper mantle of the Western Alps: new constraints using array analysis of seismic surface waves. *Geophys. J. Int.* 210, 321–331, doi: 10.1093/gji/ggx166
24. **Malusà M.G.***, Zhao L., Eva E., Solarino S., Paul A., Guillot S., Schwartz S., Dumont T., Aubert C., Salimbeni S., Pondrelli S., Wang Q., Zhu R. (2017) Earthquakes in the Western Alpine mantle wedge. *Gondwana Res.* 44, 89–95, doi: 10.1016/j.gr.2016.11.012
25. Zhao L.*, Paul A., **Malusà M.G.***, Xu X., Zheng T., Solarino S., Guillot S., Schwartz S., Dumont T., Salimbeni S., Aubert C., Pondrelli S., Wang Q., Zhu R. (2016) Continuity of the Alpine slab unraveled by high-resolution *P* wave tomography. *J. Geophys. Res. Solid Earth* 121, 8720–8737, doi:10.1002/2016JB013310
26. Anfinson O.A.*, **Malusà M.G.***, Ottria G., Dafov L.N., Stockli D.F. (2016) Tracking coarse-grained gravity flows by LASS-ICP-MS depth-profiling of detrital zircon (Aveto Formation, Adriatic foredeep, Italy). *Marine Petrol. Geol.* 77, 1163–1176, doi: 10.1016/j.marpetgeo.2016.07.014
27. Wittmann H.*, **Malusà M.G.**, Resentini A., Garzanti E., Niedermann S. (2016) The cosmogenic record of mountain erosion transmitted across a foreland basin: source-to-sink analysis of *in situ* ¹⁰Be, ²⁶Al and ²¹Ne in sediment of the Po river catchment. *Earth Planet. Sci. Lett.* 452, 258–271, doi: 10.1016/j.epsl.2016.07.017
28. **Malusà M.G.***, Anfinson O.A., Dafov L.N., Stockli D.F. (2016) Tracking Adriatic indentation beneath the Alps by detrital zircon U-Pb geochronology: Implications for the Oligocene–Miocene dynamics of the Adriatic microplate. *Geology* 44, 155–158, doi: 10.1130/G37407.1
29. **Malusà M.G.**, Resentini A.*, Garzanti E. (2016) Hydraulic sorting and mineral fertility bias in detrital geochronology. *Gondwana Res.* 31, 1–19, doi:10.1016/j.gr.2015.09.002
30. **Malusà M.G.***, Danišik M., Kuhlemann J. (2016) Tracking the Adriatic-slab travel beneath the Tethyan margin of Corsica-Sardinia by low-temperature thermochronometry. *Gondwana Res.* 31, 135–149, doi:10.1016/j.gr.2014.12.011
31. Zanchetta S.*, **Malusà M.G.**, Zanchi A. (2015) Precollisional development and Cenozoic evolution of the Southalpine retrobelt (European Alps). *Lithosphere* 7, 662–681, doi: 10.1130/L466.1
32. Eva E., **Malusà M.G.***, Solarino S. (2015) A seismotectonic picture of the inner southern Western Alps based on the analysis of anomalously deep earthquakes. *Tectonophysics* 661, 190–199, doi: 10.1016/j.tecto.2015.08.040

33. Zhao L.*, Paul A., Guillot S., Solarino S., **Malusà M.G.**, Zheng T., Aubert C., Salimbeni S., Dumont T., Schwartz S., Zhu R., Wang Q. (2015) First seismic evidence for continental subduction beneath the Western Alps. *Geology* 43, 815–818, doi: 10.1130/G36833.1
34. **Malusà M.G.***, Faccenna C., Baldwin S.L., Fitzgerald P.G., Rossetti F., Balestrieri M.L., Danišák M., Ellero A., Ottria G., Piromallo C. (2015) Contrasting styles of (U)HP rock exhumation along the Cenozoic Adria-Europe plate boundary (Western Alps, Calabria, Corsica). *Geochem. Geophys. Geosyst.* 16(6), 1786-1824, doi: 10.1002/2015GC005767.
35. **Malusà M.G.***, Carter A., Limoncelli M., Villa I.M., Garzanti E. (2013) Bias in detrital zircon geochronology and thermochronometry. *Chem. Geol.* 359, 90-107, doi: 10.1016/j.chemgeo.2013.09.016
36. Resentini A.*, **Malusà M.G.**, Garzanti E. (2013) MinSORTING: An Excel® worksheet for modelling mineral grain-size distribution in sediments, with application to detrital geochronology and provenance studies. *Computers Geosci.* 59, 90-97, doi: 10.1016/j.cageo.2013.05.015
37. Agliardi F.*, Crosta G.B., Frattini P., **Malusà M.G.** (2013) Giant non-catastrophic landslides and the long-term exhumation of the European Alps. *Earth Planet. Sci. Lett.* 365, 263-274, doi: 10.1016/j.epsl.2013.01.030
38. **Malusà M.G.***, Balestrieri M.L. (2012) Burial and exhumation across the Alps-Apennines junction zone constrained by fission-track analysis on modern river sands. *Terra Nova* 24, 221-226, doi:10.1111/j.1365-3121.2011.01057.x
39. Resentini A., **Malusà M.G.*** (2012) Sediment budgets by detrital apatite fission track dating (Rivers Dora Baltea and Arc, Western Alps). In: *Rasbury E.T. et al. (eds.), "Mineralogical and Geochemical Approaches to Provenance"*, *Geol. Soc. Am. Spec. Paper* 487, 125-140, doi:10.1130/2012.2487(08)
40. Garzanti E., Resentini A.*, Vezzoli G., Andò S., **Malusà M.G.**, Padoan M. (2012) Forward compositional modelling of Alpine orogenic sediment. *Sediment. Geol.* 280, 149-164, doi.org/10.1016/j.sedgeo.2012.03.012
41. **Malusà M.G.***, Garzanti E. (2012) Actualistic snapshot of the early Oligocene Alps: the Alps-Apennines knot disentangled. *Terra Nova* 24, 1-6, doi: 10.1111/j.1365-3121.2011.01030.x
42. **Malusà M.G.***, Faccenna C., Garzanti E., Polino R. (2011) Divergence in subduction zones and exhumation of high pressure rocks (Eocene Western Alps). *Earth Planet. Sci. Lett.* 310, 21-32, doi:10.1016/j.epsl.2011.08.002
43. **Malusà M.G.***, Villa I.M., Vezzoli G., Garzanti E. (2011) Detrital geochronology of unroofing magmatic complexes and the slow erosion of Oligocene volcanoes in the Alps. *Earth Planet. Sci. Lett.* 301, 324-336, doi: 10.1016/j.epsl.2010.11.019
44. D'Adda P.*, Zanchi A., Bergomi M., Berra F., **Malusà M.G.**, Tunesi A., Zanchetta S. (2011) Polyphase thrusting and dyke emplacement in the central Southern Alps (Northern Italy). *Int. J. Earth Sci.* 100, 1095-1113, doi: 10.1007/s00531-010-0586-2
45. Garzanti E., Resentini A.*, Vezzoli G., Andò S., **Malusà M.G.**, Padoan M., Paparella P. (2010) Detrital fingerprints of fossil continental-subduction zones (axial belt provenance, European Alps). *J. Geol.* 118, 341-362, doi: 10.1086/652720
46. Cerrina Feroni A., Ellero A., **Malusà M.G.**, Musumeci G., Ottria G.*, Polino R., Leoni L. (2010) Transpressional tectonics and nappe stacking along the Southern Variscan Front of Morocco. *Int. J. Earth Sci.* 99, 1111-1122, doi: 10.1007/s00531-009-0449-x
47. Molli G.*, Crispini L., **Malusà M.G.**, Mosca P., Piana F., Federico L. (2010) Geology of the Western Alps - Northern Apennine junction area: a regional review - In: *Beltrando M. et al. (eds.), "The Geology of Italy: tectonics and life along plate margins"*. *Journal of the Virtual Explorer, Electronic Edition, ISSN 1441-8142*, vol. 36, paper 10, doi: 10.3809/jvirtex.2010.00215
48. **Malusà M.G.***, Polino R., Zattin M. (2009) Strain partitioning in the axial NW Alps since the Oligocene. *Tectonics* 28, TC3005, 1–26, doi:10.1029/2008TC002370
49. **Malusà M.G.***, Zattin M., Andò S., Garzanti E., Vezzoli G. (2009) Focused erosion in the Alps constrained by fission-track ages on detrital apatites - In: *Lisker F., et al. (eds.), "Thermochronological*

methods: from palaeotemperature constraints to landscape evolution models”, *Geol. Soc. London Spec. Publ.* 324, 141-152, doi:10.1144/SP324.11.

50. Garzanti E., **Malusà M.G.*** (2008) The Oligocene Alps: Domal unroofing and drainage development during early orogenic growth. *Earth Planet. Sci. Lett.* 268, 487-500, doi:10.1016/j.epsl.2008.01.039.
51. **Malusà M.G.***, Polino R., Cerrina Feroni A., Ellero A., Ottria G., Baidder L., Musumeci G. (2007) Post-Variscan tectonics in eastern Anti-Atlas (Morocco). *Terra Nova* 19, 481-489, doi: 10.1111/j.1365-3121.2007.00775.x.
52. **Malusà M.G.***, Philippot P., Zattin M., Martin S. (2006) Late stages of exhumation constrained by structural, fluid inclusion and fission track analyses (Sesia-Lanzo unit, Western European Alps). *Earth Planet. Sci. Lett.* 243, 565-580, doi:10.1016/j.epsl.2005.12.030
53. **Malusà M.G.***, Vezzoli G. (2006) Interplay between erosion and tectonics in the Western Alps. *Terra Nova* 18, 104-108, doi:10.1111/j.1365-3121.2006.00669.x.
54. **Malusà M.G.***, Polino R., Zattin M., Bigazzi G., Martin S., Piana F. (2005) Miocene to Present differential exhumation in the Western Alps: Insights from fission track thermochronology. *Tectonics* 24, TC3004, 1-23, doi:10.1029/2004TC001782
55. **Malusà M.G.***, Polino R., Martin S. (2005) The Gran San Bernardo nappe in the Aosta Valley (Western Alps): a composite stack of distinct continental crust units. *Bull. Soc. Géol. France* 176, 417-431
56. **Malusà M.G.***, Zattin M., Andò S., Garzanti E., Vezzoli G. (2005) Detrital apatite fission-track ages from the Po sands: Implications for the erosional pattern of the orogenic source areas. *GeoActa* 4, 57-65
57. **Malusà M.G.***, Mosca P., Borghi A., Dela Pierre F., Polino R. (2002) Approccio multidisciplinare per la ricostruzione dell'assetto tettono-stratigrafico e dell'evoluzione metamorfico-strutturale di un settore di catena orogenica: l'esempio dell'Alta Valle di Susa (Alpi occidentali). *Mem. Soc. Geol. It.* 57, 249-257.

Chapters in Books (peer-reviewed) [* denotes corresponding author]

- **Malusà M.G.***, Garzanti E. (2019) The Sedimentology of Detrital Thermochronology. In: Malusà MG, Fitzgerald PG (eds) *Fission-Track Thermochronology and Its Application to Geology*. Springer Textbooks in Earth Sciences, Geography and Environment, Chapter 7, p. 123-143, doi: 10.1007/978-3-319-89421-8_7
- **Malusà M.G.***, Fitzgerald P.G. (2019) From Cooling to Exhumation: Setting the Reference Frame for the Interpretation of Thermochronologic Data. In: Malusà MG, Fitzgerald PG (eds) *Fission-Track Thermochronology and Its Application to Geology*. Springer Textbooks in Earth Sciences, Geography and Environment, Chapter 8, p. 147-164, doi: 10.1007/978-3-319-89421-8_8
- Fitzgerald P.G.* , **Malusà M.G.** (2019) Concept of the Exhumed Partial Annealing (Retention) Zone and Age-Elevation Profiles in Thermochronology. In: Malusà MG, Fitzgerald PG (eds) *Fission-Track Thermochronology and Its Application to Geology*. Springer Textbooks in Earth Sciences, Geography and Environment, Chapter 9, p. 165-189, doi: 10.1007/978-3-319-89421-8_9
- **Malusà M.G.***, Fitzgerald P.G. (2019) Application of Thermochronology to Geologic Problems: Bedrock and Detrital Approaches. In: Malusà MG, Fitzgerald PG (eds) *Fission-Track Thermochronology and Its Application to Geology*. Springer Textbooks in Earth Sciences, Geography and Environment, Chapter 10, p. 191-209, doi: 10.1007/978-3-319-89421-8_10
- Baldwin S.L.* , Fitzgerald P.G., **Malusà M.G.** (2019) Crustal exhumation of plutonic and metamorphic rocks: constraints from fission-track thermochronology. In: Malusà MG, Fitzgerald PG (eds) *Fission-Track Thermochronology and Its Application to Geology*. Springer Textbooks in Earth Sciences, Geography and Environment, Chapter 13, p. 235-257, doi: 10.1007/978-3-319-89421-8_13
- **Malusà M.G.** (2019) A Guide for Interpreting Complex Detrital Age Patterns in Stratigraphic Sequences. In: Malusà MG, Fitzgerald PG (eds) *Fission-Track Thermochronology and Its Application to Geology*. Springer Textbooks in Earth Sciences, Geography and Environment, Chapter 16, p. 279-293, doi: 10.1007/978-3-319-89421-8_16
- Fitzgerald P.G.* , **Malusà M.G.**, Muñoz J.A. (2019) Detrital Thermochronology Using Conglomerates and Cobbles. In: Malusà MG, Fitzgerald PG (eds) *Fission-Track Thermochronology and Its Application to Geology*. Springer Textbooks in Earth Sciences, Geography and Environment, Chapter 17, p. 295-314, doi: 10.1007/978-3-319-89421-8_17