

Curriculum Vitae

Claudio Faccenna

Place and Date of Birth: Roma (Italy) 29, January, 1965.
Nationality: Italian
Status: married, two sons
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Personal website: <https://sites.google.com/view/claudiofaccenna>

Education and Employment

2021-present Head of Section Lithosphere Dynamics at GFZ Potsdam
2011-present Full Professor at Dept. of Sciences, University Roma TRE.
2019-2021 John F. and Carolyn C. Bookout Endowed Chair in Structural Geology, Jackson School of Geoscience, University of Texas at Austin.
2001-2010 Associate Professor at Dept. of Geological Science, Università Roma TRE.
1995-2000 Researcher at Department of Geological Science, Università of Roma TRE.
1997-1998 Visiting scholar at Harvard University, Cambridge (USA).
1993-1995 Post-doc at Université Paris VI and at Geosciences Rennes-Université di Rennes I.
1989-1993 PhD at Department of Earth Science, University of Rome “La Sapienza”.
1984-1988 Graduated at Department of Earth Science, University of Rome “La Sapienza”.

Scientific Interest

Topics: crustal deformation, orogenic belt uplift and exhumation process, dynamic topography, subduction tectonic and morphological evolution of convergent margin, trench migration and back-arc deformation, mantle convection, volcanism and fluid circulation in the crust.

Tools: Structural geology and geomorphology, experimental / numerical geodynamic modelling, paleomagnetism, seismic lines interpretation.

Field sites: Tethyan belt: Mediterranean to the Middle East (Morocco, Spain, Italy, Greece, Turkey, Iran), Himalaya (Pakistan), Andes (Argentina, Chile, Colombia), Antarctica.

Laboratory: I set up (1996) the Laboratory of Experimental Tectonics (*LET*) at Roma TRE. *LET* is composed by a team of about 15 fellows (3 permanent) and is producing on average ~20 ISI papers per year on geodynamics, tectonics and volcanology.

Visiting Professorships

2018 Visiting professor Université de Aix-Marseille III CEREGE
2016 Visiting Humboldt professor Helmholtz Zentrum GFZ Potsdam (Germany)
2015 Visiting Humboldt professor Helmholtz Zentrum GFZ Potsdam (Germany)
2015 Visiting professor Earthquake Research Institute-University Tokyo (Japan)
2014 Visiting professor Université Paris VI (France)
2014 Visiting professor Université Orleans (France)
2013 Visiting professor University Southern California (USA)
2012 Visiting professor Université Grenoble (France)
2009 Visiting professor University Southern California (USA)
2008 Visiting professor Université de Aix-Marseille III (France)
2007 Visiting professor Université de Montpellier II (France)
2008 Visiting professor Université de Rennes I (France)
2004 Visiting professor Université de Aix-Marseille III (France)

- 2000** Visiting professor Université de Paris VI (France)
1997 Visiting scholar Dept. Earth Planetary Sciences, Harvard University, Cambridge (USA)
1996 Visiting Researcher at Université de Cergy-Pontoise (France)

Honours, Academia membership, Awards

- 2019** Francis Birch Lecture Award, Tectonophysics section, American Geophysical Union.
2017 Fellow of the American Geophysical Union.
2015 Humboldt Research Award from Alexandre von Humboldt Foundation.
2014 Stephan Muller medal European Geoscience Union, Division Tectonics-Structural Geology
2013 Prix Viquésnel 2013 Société Géologique de France.
2010 Galileo Galilei International Medal for Earth Science;
2008 Member of the Academia Europaea.

I have been included in the short list (three candidates) as:

- President of the Institute National for Geophysics and Volcanology (INGV) Italy (2016)
- Director of the Geophysics Section of the Dublin School of Advanced Science (DIAS) (2014).

I received the Qualification de Professeur des Universities section 36 Terre Solide (France). 2015.

Service

- 2021-present** Member Scientific Prospective Committee, Université Sciences Sorbonne, Paris;
2019-2021 Member Scientific Advisory Council, GFZ Potsdam;
2018-2022 Member Scientific Advisory Board, Center Earth Evolution Dynamics, Univ Oslo;
2015-2019 Member Governing Board Institute National Geophys. Volcanology (INGV) Italy;
2016-2019 Member of the Academic Senate of the University of Roma TRE;
2013-2019 Coordinator of PhD Earth Science School at Roma TRE;
2011-2017 Member ERC Grant Advisory Panel Pe10;
2011-2015 Member of the Scientific Board of Institute Geophysics Volcanology, (INGV) Italy;
2014-2016 Delegate of the President of the University of Roma TRE for the scientific activity;
2008-2013 Member of the Scientific Library Panel of Roma TRE;
2008-2013 Coordinator of PhD Doctoral School at Roma TRE for Geodynamics;
2000-2008 Coordinator Erasmus Project at Geological Science Dept. Roma TRE;
1999-2001 Secretary Tectonic Session at the European Geophysical Society;
1996-2018 Responsible Laboratory of Experimental Tectonics (*LET*);

Editorial Service

- 2018- present** Editor in chief of *G-Cubed Geophysics, Geochemistry, Geosystem* (AGU);
2014- 2017 Editor of *Tectonics* (EGU, AGU);
2014- 2016 Editor of *Module Earth Systems Environmental Sciences Geophysics* (Elsevier)
2009-2015 Associate Editor of *Italian Journal of Geosciences*;
2008-2014 Associate Editor of *Tectonics*;

Editorial Board:

- 2016-2020** *Helyon*
2016-2020 *Journal of Geodynamic*
2016-2020 *Global and Planetary Change*
2011-2020 *Sociedad Geológica Espana-Geogaceta*
2008-2020 *Lithosphere*
2004-2020 *Geodinamica Acta*

Co-Editor of Sp. Tectonophysics Volume (2008) “TOPOEUROPE” with S. Cloetingh and H. Thybo.

Scientific production

252 papers (223 on ISI Web of Science, 29 National Journal papers, 3 Geological Maps; including 4 papers published on *Nature*).

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ISI Web of Science:., citations, paper;

Google Scholar: 81, citations

Funding	Main Research Project as Main PI or Local PI, last 10 years
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Projects: I coordinated several National and some International Research Project and initiatives. The more recent and prestigious one, is TOPOMOD, an ITN project funded by EC, where as main PI, I coordinate 7 European high ranked European Institutions.

** indicates main PI; * indicates local PI; title, funding agency and approx. budget in k€.

**2022-2024 : Deformation and Topography of Adria plate (Prin, It.Ministry)	~100 k€
**2019-2022 : Deformation and Topography on Middle-East (Prin, It.Ministry)	~500 k€
**2017-2020: Tethys Subduction system. Statoil	~250 k€
*ECC 2016-2019: SUBITOP “Topography subduction zone”. Marie Curie-ITN Network	~400 k€
**2006-2017: “Heat flow and topography on backarc region”. Statoil	~130k€
**2012-2014: “Travertine porosity”. Statoil	~130k€
**2003-2016: “Travertine origin and evolution”. Different sources	~750k€
*PNRA. 2014-2016: Topography of Antarctica.	~14 k€
*PRIN - 2011-2014: “Topography of Calabrian Arc”. MIUR (It. Research Ministry)	~80 k€
**Ita-Israel 2011-2013: The Disconnection of the Mediterranean Basin from the Mesopotamian Basin and its relations to dynamic topography	~20 k€
**ECC 2011-2015: TOPOMOD "Tectonics/topography". Marie Curie-ITN Network	~3250 k€
*ECC 2009-2011: CRYSTAL2PLATE “Plate tectonics”. Marie Curie-ITN Network	~230 k€
*ESF 2008-2011: TOPOMED. Eurocore TOPO-EUROPE "Calabria Arc". PI: R. Wortel	~30 k€
*ESF 2008-2011: VAMP. Eurocore TOPO-EUROPE "Anatolia Uplift". Main PI: M. Strecker	-
*DPC 2008-2010: “Active faulting in Calabria”. Main PI: S. Barba. Dept. Civil Protection	~20 k€
*CNR-CNRS joint project 2008-2009: “Seismicity on Convergent margin”. CNR	~10 k€
**PRIN - 2006-2008: “Evolution of the Calabrian Arc”. MIUR (It. Research Ministry)	~100 k€
*Univ. Roma TRE-Univ. Munich Joint Project 2007-2008: “Modelling subduction”. MIUR	~15k€
*CNRS 2004-2006: “Modelling subduction”. Main PI: S. Lallemand. CNRS (France)	~15 k€
* Univ. Roma TRE-Univ. Aix-en-Provence 2002-2004: “Modelling subduction”. MIUR.	~10 k€
*INGV-DPC 2005-2007: “The Phlegrean Field”. Main PI: P. Papale. It. Dept. Civil Protection	~46 k€
*PRIN 2002-2004: “The Campanian Volcanism”. Main PI: A. Sbrana. MIUR	~50 k€
*GNDT 2001-2004 :“Seismic hazard Sicily”. Main PI: ML. Beranzoli. Dept. Civil Protection	~150 k€
*GNV 2001-2004: "Structure of Phlegrean Fields". Main PI: G. Orsi. Dept. Civil Protection	~41k€
*PRIN 2000-2002: “Extensional Process in Calabria”. Main PI: M. Grasso. MIUR.	~50 k€

PhD Thesis

I dedicated a major effort for mentoring students, serving as Coordinator of Roma TRE PhD School for 6 years (2012-2018) and leading an ITN Marie Curie Project, for 15 young fellows.

I was tutor or co-tutor of 26 PhD students: 11 have a position in Academia, 8 are presently on post-docs.

I am presently tutoring 3 PhD students.

*permanent position in Academia; ** post-doc

- 1*- Federico Rossetti (1996-1999). Apennines metamorphism and deformation. (co-tutor F. Funiciello); Univ. “La Sapienza”, Roma. Present position: Full Prof. Univ. Roma TRE.
- 2*- Francesca Funiciello (1999-2002) Modelling subduction in the Mediterranean (co-tutor with D. Giardini and K. Regenauer-Lieb), ETHZ Zurich. Present position: Associate Prof Univ. Roma TRE.
- 3*- Vincent Regard (2000-2003) Subduction and active faulting in the Zagros-Makran (Iran), (co-tutor with O. Bellier), Univ. Aix-Marseille III. Present position: Prof. Toulouse Univ.
- 4*- Gianluca Vignaroli (2003-2006) Structural and metamorphic evolution of the Voltri Massif (co-tutor with R. Funiciello, F. Rossetti). Present position: Associate Prof Univ. Bologna.
- 5- Erika Di Giuseppe (2004-2008) Dynamics of subduction and implications for plate kinematics (co-tutor with D. Giardini and J. Van Hunen) ETHZ Zurich. Present position: other.
- 6*- Liliana Minelli (2005-2009) Compression along the Ionian margin. PhD Univ. Roma TRE. Present position: INGV, Roma.
- 7*- Valerio Olivetti (2005-2009) Uplift and erosion of the Calabrian arc. PhD Geophysics, Univ. Bologna. Present position: Researcher Padova University
- 8*-Marco Maffione (2005-2009) Tectonic and kinematics of curved mountain belt: example from the Andes and the Alps. Present position: Lecturer Univ. Birmingham
- 9*- Benjamin Guillame (2006-2010) Subduction windows in the Andes (co-tutor with J. Martinod, Univ. Toulouse). Present position: Maître de Conférence at Univ. Rennes I.
- 10*- Michele Punzo (2006-2010) Deformation and volcanism in Campania (co-tutor with Pier Paolo Bruno, INGV Napoli). PhD in Geodynamics, Univ. Roma TRE. Present position: Tecnologo CNR
- 11-Luigi De Filippis (2008-2012) Origin of Mediterranean travertine. PhD Geodynamics, Univ. Roma TRE. Present position: school teacher
- 12**-Valentina Magni (2008-2012) Subduction modelling. PhD in Geophysics, Univ. Bologna (co-tutor with F. Funiciello). Present position: post-doc. Oslo Univ.
- 13*- Fabio Corbi (2008-2012) Modelling earthquake. PhD in geodynamics, Univ. Roma TRE (co-tutor with F. Funiciello). Present position: Researcher CNR.
- 14**-Flora Bajolet (2009-2013) Dynamic Topography. PhD in Geodyn., Univ. Roma TRE. Present position: BRGM Orlean.
- 15*-Giovanny Jimenez (2010-2013). The Eastern Cordillera (Colombia). Prof. Univ. Bucaramanga.
- 16-Valentina Nicole Scotti (2010-2013). Uplift of the Iberia chain. PhD Univ. Roma TRE. Present position: geologist professional.
- 17-Giulio Speranza (2010-2013) Rheology of Messinian salt. PhD Univ. Roma TRE. Present position: photographer.
- 18**-Andrea Sembroni (2011-2014). Uplift of Ethiopia. PhD Univ. Roma TRE. Present position: post-doc Roma TRE.
- 19**-Riccardo Asti (2012-2015). Extension on western Turkey. PhD Univ. Roma TRE. Post-doc Univ. Rennes
- 20**-Agnes Kyrali (2013-2016). Slab-slab interaction. Co-supervisor. Main supervisor Francesca Funiciello. PhD Univ. Roma TRE. Post-doc Oslo
- 21**-Gaia Siravo (2014-2017). Exhumation and uplift of the Eastern Cordillera (Colombia). Co-supervisor Giuditta Fellin. PhD Roma TRE. Post doc INGV
- 22**-Riccardo Lanari (2015-2019). Exhumation and uplift of the Atlas (Morocco). Co-supervisor Giuditta Fellin. PhD Roma TRE. Post-doc Roma TRE-CEREGE.
- 23-Malvina San Jose (2016-2020). Exhumation and uplift of the Apennines. ITN SubiTop.
- 24**-Arthur Briaud (2016-2020). Topography of subduction zone. ITN SubiTop. Co-supervisor, Supervisor Francesca Funiciello. Post-doc
- 25**-Riccardo Reitano (2017-2020). Modelling tectonic and erosion. PhD RomaTRE. Post-doc
- 26**-Romano Clementucci (2018-2021). Uplift and erosion of Atlas in Morocco. Co-supervisor, main supervisor Paolo Ballato. PhD RomaTRE.

Ongoing PhD

- 27-Ethan Conrad (2019-2024). The northern Caribbean shear zone. PhD UT at Austin.
 28-Edward Clennet (2020-2025). Force along subduction collision boundary. Co-supervisor, supervisor Thorsten Becker. PhD UT at Austin.
 29-Chiara Bazzucchi (2021-2024) Active tectonics along Adria margin.
 30-Francesca Rossetti (2021-2024) Tectonics of the Adria margin. Co-supervisor, supervisor Paolo Ballato. PhD RomaTRE.
 31-Sara Emili (2022-2025) Geothermal Research in Tivoli. PhD RomaTRE.

Teaching.

Courses: Tectonics, Geodynamics, Geophysics, Geology I, Geology II (plate tectonics), Structural Geology, Experimental tectonics, marine Tectonics.

I supervised several master-degree students at University of Roma La Sapienza and at University of Roma TRE. I also gave courses for PhD students, at University of Roma TRE, Naples, Milan and at the Netherland School of Sedimentary Geology at University of Colombia.

I participated to several national and international PhD commissions.

Invited lectures and seminars (last years)

2023 – (3) Workshop in Chile, Rwanda,

2022 – (3) GFZ Potsdam, ETH Zürich, Sorbonne Paris.

2021 – (5) Caltech; Rice University; Roma - Sapienza PhD; Istanbul Key note at Med meeting; Imperial College.

2020 – (2) CNR Italy. GFZ Potsdam. Several other invited talks cancelled

2019 – (7) 2 invited talk at Austin; Invited talk at Oxford University; two BENTOR lecture Jerusalem; BIRCH lecture at AGU; Lektion Magistralis at the Italian Geophysical Meeting;

2018 – (9) 2 Invited talk at Aix –Marseille University; Invited talk at Montpellier University; Invited talk at Academy of Science Beijing ; 2 Invited talk at Austin University; Webminar for Tectonic and Structural Geology group: Invited talk at the Hutton school, University of Edinburgh; University of Berlin;

2017 – (7) 2 Invited talk at Utrecht Univ.; Invited talk at Paris Univ.; Invited talk at IFP Paris; Invited talk at Corse and Canarie meeting organized by CEED; Northwestern University Xi'an (China); Invited talk Granada University;

2016 – (7) Invited talk at EGU; Invited talk at Istanbul Technical University (Istanbul, Turkey); Invited talk at AGU; Seminar at University of Potsdam; Seminar at GFZ Potsdam; General Seminar at Aix Marseille; General Seminar at IPGP Paris.

2015 - (11) Invited talk at AGU -Seminar at Université de Marrakech - Invited talk at Ecole Doctorale des les Houces (France) -Invited talk at Int. meeting mantle lithosphere modelling-Invited talk at Alpine meeting-2 Invited talk at EGU - Seminar at Earthquake Research Institute, Tokyo- Seminar at Istanbul University (Istanbul, Turkey)-, Seminar at Istanbul Technical University (Istanbul, Turkey); - Seminar at INGV Pisa –

2014 – (9) Invited talk at EGU Stephan Muller medal- Invited talk at University of Orleans-Invited talk at University of Paris VI- Invited talk at DIAS Dublin – 2 Invited talk at Italian Geological Meeting, Milan- Invited talk at ESA meeting, Barcelona -

2013 (6) – Invited talk EGU meeting, April - Invited talk at CIDER meeting Berkeley, July - Invited talk at Scripps La Jolla, August– Invited talk at EPOS meeting Erice, September -Invited talk at MEDMEET meeting Berlin, November - – Invited talk at Lith. –Asthenosphere system meeting, College de France Paris, November.

2012 (7) -Invited talk AGU fall meeting - Invited talk at TOPOEUROPE 2020 meeting, Istanbul,

September 2012. -Invited talk at Società Geologica Italiana, Cosenza September 2012 - Invited talk at TOPOEUROPE young Meeting, Utrecht University, dal titolo: “European prospective for young students”, September 2012. - Invited talk at "Tettonica del Mediterraneo", Potenza, May 2012 - Key note speaker at Korseberg meeting, Oslo, May 2012 - Key note speaker at Mediterranean symposium, Utrecht University (The Netherlands), 28 February 2012.

2011 (8) Invited talk at Workshop AlpsArray, ETH Zurich - Key note talk TopoEurope meeting, Davos - 2 Invited talks Intern. meeting “Fragile Earth”, Munich- Key note talk at FIST meeting, Torino - Invited lecture at "Mountain building" CIDER school, Berkeley - Invited lecture at Univ. de Grenoble.

2010 (7) Key note speaker - Reunion Sciences de la Terre Bordeaux - Invited talk at AGU fall meeting- Invited lecture at Università Milano Bicocca - Invited talk at workshop on the “Mediterranean Geodynamic”, Erice- Key note talk at European Seismological Conf, Montpellier - Invited lecture INGV, Bologna - Invited talk at Workshop “Geodynamics of Tethys” Vrije Univ. Berlin - Invited lecture at PGP University Oslo.

2009 (8) Invited lecture at Vrije University, Berlin - Invited lecture at Durham University, Durham- Key note talk at Academia Europae meeting, Napoli - Invited talk, Int. TOPOEurope Workshop, Heidelberg- Invited lecture Univ. South California, Los Angeles- Invited lecture Univ. Montpellier - Invited lecture at Total, Pau - Invited lecture Università Palermo.

2008 (3) Invited lecture at Univ. Aix-Marseille (CEREGE) - Invited lecture at ETHZ Zurich- Goldsmith Lecture at NGU (Norwegian Geological Union), Trondheim.

2007 (6) Key Union Lecture at Int. Union Geophys. Geodesy (IUGG) meeting, Perugia - Invited lecture at International Workshop “Carpathian - Pannonian System”, Lake Balaton (Budapest) - Invited lecture at Univ. di Chieti- 2 Invited talk at EGU meeting (Wien) - Invited lecture Ecole Doctorale Université Paris VI.

Organization of International Conference

I regularly co-chaired sessions at International conference (EGU and AGU); I have been Secretary of the Tectonics session at European Geophysical Society (1999 to 2001). I participated to the Scientific or Organizing Committee of International Workshop and meetings.

Scientific Committee:

2011-2017 Alpine Workshop International Meetings

2010 GeoMod2010- International Workshop, Lisbon

2008 GeoMod2008 - International Workshop, Firenze

2007 Subco – Subduction Conference. International Meeting. Montpellier 2007

2004 GeoMod2004 – International Workshop, Zurich

2003 RST. Rheology deformation and tectonics – International Workshop, Rennes.

Organizing and Scientific Committee:

2019 Ada Lovelance International meeting on Modelling

2015 organizer of the 12th International TOPO-EUROPE Workshop, Antibes.

2014 September, organizer of the 11th International TOPO-EUROPE Workshop, Barcelona.

2013 October, Main promoter and organizer of the 10th International TOPO-EUROPE Workshop Ceresa di Pontignano. Siena

2007 May, Main promoter and organizer of the 3rd International TOPO-EUROPE Workshop Accademia dei Lincei. Roma

2000-2012 Convener and organizers of several sessions at EGS/EGU meetings. I chaired and co-chaired Mediterranean-Himalayan session at EGU (2008-2012)

Field work

I carried out and lead field-work in Mediterranean-Middle East (Turkey, Libya, Morocco, Greece,

Spain, Italy), Iran (2010, 2011, 2013, 2014) and Himalaya (Pakistan: 1990,1991), Andes (Colombia: 2010, 2011, 2014, 2015; Argentina: 2008, 2009), Caribbean (2020), Antarctica (2002).

Top cited papers (<i>ISI citation</i>)
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Jolivet L. and **Faccenna C.** (2000) Mediterranean extension and the Africa-Eurasia collision. *Tectonics*, 19, 6, 1095-1106.

Faccenna C., Piromallo C., Crespo Blanc A., Jolivet, L., and Rossetti F. (2004) Lateral slab deformation and the origin of the arcs of the western Mediterranean, *Tectonics*, 23, TC1012.

Faccenna C., Becker T.W., Lucente F.P., Jolivet L., and Rossetti F. (2001) History of subduction and back-arc extension in the Central Mediterranean, *Geophysical Journal International*, 145, 1-21.

Jolivet L., **Faccenna C.** et al. (1998) Mid-crustal shear zones in postorogenic extension: Example from the Northern Tyrrhenian Sea. *Journal Geophysical Research*, 103, 12213-12160.

Publication list

2023

- 1 Clementucci R., Ballato P., Siame L.L., Faccenna C., Racano S., Torreti G., Lanari R., Leanni, L., Guillou V. (2023) Transient response to changes in uplift rates in the northern Atlas-Meseta system (Morocco), *Geomorphology*, 436, 108765, ISSN 0169-555X,
- 2 Lanari, R., Boutoux, A., Faccenna, C., Herman, F., Willett, S. D., & Ballato, P. (2023). Cenozoic exhumation in the Mediterranean and the Middle East. *Earth-Science Reviews*, 104328.
- 3 Lanari, R., Faccenna, C., Natali, C., Şengül Uluocak, E., Fellin, M. G., Becker, T. W., et al. (2023). The Atlas of Morocco: A plume-assisted orogeny. *Geochemistry, Geophysics, Geosystems*, 24, e2022GC010843. <https://doi.org/10.1029/2022GC010843>
- 4 Clementucci, R., Ballato, P., Siame, L., Fox, M., Lanari, R., Sembroni, A., et al. (2023). Surface uplift and topographic rejuvenation of a tectonically inactive range: Insights from the Anti-Atlas and the Siroua Massif (Morocco). *Tectonics*, 42, e2022TC007383.
- 5 Lanari, R., Reitano, R., Faccenna, C., Agostinetti, N. P., & Ballato, P. (2023). Surface and crustal response to deep subduction dynamics: Insights from the Apennines, Italy. *Tectonics*, 42, e2022TC007461. <https://doi.org/10.1029/2022TC007461>

2022

- 6 Agius, M. R., Magrini, F., Diaferia, G., Kästle, E. D., Cammarano, F., Faccenna, C., ... & van der Meijde, M. (2022). Shear-Velocity Structure and Dynamics Beneath the Sicily Channel and Surrounding Regions of the Central Mediterranean Inferred From Seismic Surface Waves. *Geochemistry, Geophysics, Geosystems*, 23(10), e2022GC010394.
- 7 Erdős, Z., Huisman, R. S., & Faccenna, C. (2022). Wide versus narrow back-arc rifting: Control of subduction velocity and convective back-arc thinning. *Tectonics*, 41, e2021TC007086. <https://doi.org/10.1029/2021TC007086>
- 8 Behr, W. M., Holt, A. F., Becker, T. W., & Faccenna, C. (2022). The effects of plate interface rheology on subduction kinematics and dynamics. *Geophysical Journal International*, 230(2), 796-812.
- 9 Lanari, R., R. Reitano, E. Giachetta, F. J. Pazzaglia, R. Clementucci, C. Faccenna, and M. G. Fellin. Is the Anti-Atlas of Morocco still uplifting? *Journal of African Earth Sciences* (2022): 104481.
- 10 Corradino, M., Balazs, A., Faccenna, C., & Pepe, F. (2022). Arc and forearc rifting in the Tyrrhenian subduction system. *Scientific reports*, 12(1), 1-13.
- 11 Fellin, Maria Giuditta, Malwina San Jose, Claudio Faccenna, Sean D. Willett, Domenico Cosentino, Riccardo Lanari, Loraine Gourbet, and Colin Maden. "Transition from slab roll-back to slab break-off in the central Apennines, Italy: Constraints from the stratigraphic and thermochronologic record." *Bulletin* 134, no. 7-8 (2022): 1916-1930.
- 12 Balázs, A., Faccenna, C., Gerya, T., Ueda, K., & Funicello, F. (2022). The dynamics of forearc–back-arc basin subsidence numerical models and observations from Mediterranean subduction zones. *Tectonics*, e2021TC007078.
- 13 Clementucci, R., Ballato, P., Siame, L.L., Faccenna, C., Yaaqoub, A., Essaifi, A., Leanni, L. and Guillou, V., 2022. Lithological control on topographic relief evolution in a slow tectonic setting (Anti-Atlas, Morocco). *Earth and Planetary Science Letters*, 596, p.117788.

- 14 Reitano, R., Faccenna, C., Funiciello, F., Corbi, F., Sternai, P., Willett, S.D., Sembroni, A. and Lanari, R., 2022. Sediment recycling and the evolution of analog orogenic wedges. *Tectonics*, 41(2), p.e2021TC006951.

2021

- 15 Filippelli, G., Beal, L., Rajaram, H., AghaKouchak, A., Balikhin, M.A., Destouni, G., East, A., Faccenna, C., Florindo, F., Frost, C. and Griffies, S., 2021. Geoscientists, who have documented the rapid and accelerating climate crisis for decades, are now pleading for immediate collective action. *Geophysical Research Letters*, 48(21).
- 16 Brizzi, S., Becker, T. W., Faccenna, C., Behr, W., van Zelst, I., Dal Zilio, L., & van Dinther, Y. (2021). The role of sediment accretion and buoyancy on subduction dynamics and geometry. *Geophysical Research Letters*, 48, e2021GL096266.
- 17 Sternai P, Muller VA, Jolivet L, Garzanti E, Corti G, Pasquero C, Sembroni A, Faccenna C. Effects of asthenospheric flow and orographic precipitation on continental rifting. *Tectonophysics*. 2021, 229120.
- 18 Király, Á., Funiciello, F., Capitanio, F. A., & Faccenna, C. (2021). Dynamic interactions between subduction zones. *Global and Planetary Change*, 103501.
- 19 Boutoux, A., Briaud, A., Faccenna, C., Ballato, P., Rossetti, F., & Blanc, E. (2021). Slab folding and surface deformation of the Iran mobile belt. *Tectonics*, 40, e2020TC006300. <https://doi.org/10.1029/2020TC006300>
- 20 Sembroni, A., Molin, P., & Faccenna, C. (2021). Drainage system organization after mantle plume impingement: The case of the Horn of Africa. *Earth-Science Reviews*, 103582.
- 21 Faccenna, C., Becker, T. W., Holt, A. F., & Brun, J. P. (2021). Mountain building, mantle convection, and supercontinents: Holmes (1931) revisited. *Earth and Planetary Science Letters*, 564, 116905.
- 22 Guillaume, B., Funiciello, F., & Faccenna, C. (2021). Interplays between mantle flow and slab pull at subduction zones in 3D. *Journal of Geophysical Research: Solid Earth*, e2020JB021574.
- 23 Lanari, R., Faccenna C., Benedetti L., Sembroni A., Bellier O., Menichelli I., Primerano P. (2021). Formation and persistence of extensional internally drained basins: The case of the Fucino basin (Central Apennines, Italy) - *Tectonics*, 2021.
- 24 Balázs, A., Faccenna, C., Ueda, K., Funiciello, F., Boutoux, A., Blanc, E. J., & Gerya, T. (2021). Oblique subduction and mantle flow control on upper plate deformation: 3D geodynamic modeling. *Earth and Planetary Science Letters*, 569, 117056.
- 25 Siravo, G., Molin, P., Sembroni, A., Fellin, M. G., & Faccenna, C. (2021). Tectonically driven drainage reorganization in the Eastern Cordillera, Colombia. *Geomorphology*, 389,107847.
- 26 Erdős, Z., Huisman, R. S., Faccenna, C., & Wolf, S. G. (2021). The Role of Subduction Interface and Upper Plate Strength on Back-Arc Extension: Application to Mediterranean Back-Arc Basins. *Tectonics*, 40(8), e2021TC006795. 0257

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