



ROMA TRE
UNIVERSITÀ DEGLI STUDI

Claudio Faccenna
Dipartimento Scienze
L.S.L. Murialdo 1, 00146
faccenna@uniroma3.it

Curriculum Vitae

Personal: Claudio Faccenna

Place and Date of Birth: Roma (Italy) 29, January, 1965.

Nationality: Italian

Contact: email: faccenna@uniroma3.it, phone: +39-0657338029, fax +39-0657338029

Web site : <http://host.uniroma3.it/docenti/faccenna/Home.html>

Education and Employment

2011-present Full Professor at Dept. of Geological Sciences, Università Roma TRE.

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: subduction, mantle convection, tectonic of convergent margin, trench migration and back-arc deformation, orogens, high-pressure metamorphism, volcanism and fluid circulation in the crust.
Tools: Structural geology, analogue and numerical modelling, paleomagnetism, seismic lines interpretation.

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

Laboratory: I set up (1996) and I am actually leading the Laboratory of Experimental Tectonics (*LET*) at Roma TRE. *LET* is composed by a team of about 20 fellows (4 permanent) and is producing around on average 15 ISI papers per year on geodynamics, tectonics and volcanology.

Visiting Professorships

2014 Visiting professor Université Paris VI

2014 Visiting professor Université Orleans

2013 Visiting professor University Southern California.

2012 Visiting professor Université Grenoble.

2009 Visiting professor University Southern California.

2008 Visiting professor Université de Aix-Marseille III

2007 Visiting professor Université de Montpellier II.

2008 Visiting professor Université de Rennes I.

2004 Visiting professor Université de Aix-Marseille III.

2000 Visiting professor Department de Geotectonique -Université de Paris VI.

1997 Visiting scholar at the Dept. Earth and Planetary Sciences, Harvard University, Cambridge.

1996 Visiting Researcher at Département de Géologie Université de Cergy-Pontoise.

Honours, Academia membership, Awards

2014 Stephan Muller medal European Geoscience Un. Division Tectonics and Structural Geology

2013 Prix VIQUESNEL 2013 Société géologique de France.

2010 Galileo Galilei International Medal for Earth Science;

2008 Member of Academia Europaea.

I received several national and international grant for mobility and visiting professorships:

2009 CNR mobility award; **1997** NATO-CNR fellowship award at Harvard; **1994** Post-Doc French-Italian award.

Service

2014-present Editor in Chief of *Tectonics*

2013-present Coordinator of PhD School on Earth Science at Roma TRE;

2011-present ERC starting/consolidator grant Advisory Panel Pe10;

2011-present Member of the Scientific Council of the INGV, Italy;

2009-present Associate Editor of *Italian Journal of Geosciences*;

2008-2013 Associate Editor of *Tectonics*;

2008-2013 Member of the Roma TRE Scientific Panel for Scientific Library;

2008-2013 Coordinator of PhD Doctoral School at Roma TRE for Geodynamics;

2000-2008 Coordinator Erasmus Project at Geoplogical Science Dept. Roma TRE;

1999-2001 Secretary Tectonic Session at the European Geophysical Society;

1996-present Responsible Laboratory of Experimental Tectonics (*LET*);

Editorial Board:

2011-present *Geocaceta*

2008-present *Lithosphere*;

2004-present *Geodinamica Acta*,

Co-Editor of Sp. Tectonophysics Volume (2008) "TOPOEUROPE" with S. Cloetingh and H. Thybo. About 20 revision per years for main journals (*Science, Nature, Tectonics, JGR, EPSL, GRL, Tecton. etc.*)

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€.

*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	-
**2003-2010: "Travertine origin and evolution". Different sources	€450k€
*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 and leading an ITN Marie Curie Project, for 15 young fellows. I was tutor of 10 PhD students: three of them are already faculty whereas others are presently post-docs. I am presently tutoring 4 PhD students.

- 1- Federico Rossetti (1996-1999). Apennines metamorphism and deformation. (co-tutor F. Funicciello); Univ. "La Sapienza", Roma. Present position: Associate Prof. Univ. Roma TRE.
- 2- Francesca Funicciello (1999-2002) Modelling subduction in the Mediterranean (co-tutor with D. Giardini and K. Regenauer-Lieb), ETHZ Zurich. Present position: Researcher 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: Maitre de Conf. Toulouse Univ.
- 4- Gianluca Vignaroli (2003-2006) Structural and metamorphic evolution of the Voltri Massif (co-tutor with R. Funicciello, F. Rossetti). Present position: post-doc. Univ. Roma TRE.
- 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: post-doc. Paris-Orsay.
- 6- Liliana Minelli (2005-2009) Compression along the Ionian margin. PhD Univ. Roma TRE. Present position: post-doc. INGV, Roma.
- 7- Valerio Olivetti (2005-2009) Uplift and erosion of the Calabrian arc. PhD Geophysics, Univ. Bologna. Present position: post-doc. Univ. Roma TRE.
- 8- Benjamin Guillame (2006-2009) Subduction windows in the Andes (co-tutor with J. Martinod, Univ. Toulouse). Present position: post-doc. Univ. Nantes.
- 9- 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: coll. INGV.
- 10-Luigi De Filippis (2009-2012) Origin of Mediterranean travertine. PhD Geodynamics, Univ. Roma TRE.
- 11-Valentina Magni (2009-2012) Subduction modelling. PhD in Geophysics, Univ. Bologna (co-tutor with F. Funicciello). Present position: post-doc. Durham Univ..
- 12-Flora Bajolet (2010-2013) Dynamic Topography. PhD in Geodyn., Univ. Roma TRE.
- 13-Giovanny Jimenez (2010-2013). The Eastern Cordillera (Colombia). PhD Univ. Roma TRE.
- 14-Valentina Nicole Scotti (2010-2013). Uplift of the Iberia chain. PhD Univ. Roma TRE.

Ongoing PhD

- 15-Giulio Speranza (2010-2013) Rheology of Messinian salt (co-tutor D. Cosentino). PhD Univ. Roma TRE.
- 16-Andrea Sembroni (2011-2014). Uplift of Ethiopia. PhD Univ. Roma TRE.
- 17-Riccardo Asti (2012-2015). Extension on western Turkey. PhD Univ. Roma TRE.
- 18-Agi Kirali (2013-2016). Slab intercation. PhD Univ. Roma TRE

Teaching.

Courses: Tectonics, Geodynamics, Geology I, Geology II, Structural Geology, Geological survey. 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 and at the Netherland School of Sedimentary Geology. I participated to several national and international PhD commissions.

Invited lectures and seminars (last six years)

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 propsective for young students ”, September 2012. - Invited talk at "Tettonica del

Mediterraneo", Potenza, May 2012 - Key note speaker at KONSEBERG 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-chair 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 Alpine Workshop International Meeting- Corse

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:

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 field work in Mediterranean, in Colombia (2010, 2011), Argentina (2008, 2009), Libya (2000), Antarctica (2002), Iran (2010, 2011, 2013) and Pakistan (1990,1991).

Editorial

Production: 145 International peer review Journal papers (140 on ISI Web of Science, 29 National Journal papers, 3 Geological Maps. On average 6 ISI paper per year; 67 papers during the last 5 years.

ISI Web of Science: h index=37; m index (h /years since first paper year, 1994) = 1.89. Total 3800

citations; Average citation: 31.9 per item. Most of the paper are published on high impact factor journals, (including two papers recently published on *Nature* on 2010 and 2011). 26 as main Author, 52 with a PhD as main author.

Top 6 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.(257)
- 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.(216)
- 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. (177)
- 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. (161)
- Faccenna C.** et al. (1996) The dynamics of back-arc extensions: a laboratory approach to the opening of the Tyrrhenian sea. *Geophysical Journal International*, 126, 781-795. (136)
- Faccenna C.**, Funicello F., Giardini D., and Lucente P. (2001) Episodic Back-arc Extension during Restricted Mantle Convection in the Central Mediterranean. *Earth Plan. Sc. Let.*, 187, 105-116. (113)

Top relevant last 10 years publication
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- Faccenna C.**, Becker, T.W., Conrad, C.P. and Husson, L. (2013) [Mountain building and mantle dynamics](#). *Tectonics*, doi: 10.1002/tect.200, 32, 80–93
- Faccenna C.**, et al. (2011) Topography of the Calabria subduction zone (southern Italy): Clues for the origin of Mt. Etna, *Tectonics*, 30, TC1003, doi:10.1029/2010TC002694.
- Capitanio F.A., **Faccenna C.**, Zlotnik S., and Stegman D. R. (2011) Subduction dynamics and the origin of Andean orogeny and the Bolivian orocline, *Nature*, 480, 83-86.
- Faccenna C.**, and Becker T.W. (2010) Shaping mobile belt from small scale convection, *Nature*, 465, doi:10.1038/nature09064.
- Faccenna C.**, Becker T.W., Lallemand S., et al. (2010) Subduction-triggered magmatic pulses: A new class of plumes? *Earth and Planetary Sciences Letters*, 299, 54–68.
- Faccenna C.**, Di Giuseppe E., Funicello F. et al. (2009) [Control of seafloor aging on the migration of the Izu–Bonin–Mariana trench](#). *Earth and Planetary Sciences Letters*, 288, 3-4, 386-398.
- Faccenna C.**, Rossetti F., Becker T.W., Danesi S., and Morelli A. (2008) Recent extension driven by mantle upwelling beneath the Admiralty Mountains (East Antarctica), *Tectonics*, TC4015.
- Faccenna C.**, Heuret A., Funicello F., Lallemand S., and Becker T. W. (2007) Predicting trench and plate motion from the dynamics of a strong slab, *Earth and Planetary Science Letters*, 257, 29–36.
- Faccenna C.**, Bellier O., Martinod J., et al. (2006), Slab detachment beneath eastern Anatolia: A possible cause for the formation of the North Anatolian fault, *Earth Planet. Science Lett.*, 242, 85–97.
- 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.**, Jolivet L., Piromallo C., and Morelli A. (2003) Subduction and the depth of convection in the Mediterranean mantle, *J. Geophysical Research*, 108, doi:10.1029/2001JB001690 (B2),2099.

Publication list–

- 1 **Faccenna C.**, Florindo F., Funicello R. & Lombardi S. (1993). Tectonic setting and sinkholes features: case histories from western central Italy. In: "Neotectonics: recent advances", edito da Owen L.A., Stewart I. & Vita Finzi C., *Quaternary proceedings*, vol. 3, 47-57.
- 2 Sagnotti L., Mattei M., **Faccenna C.** & Funicello R. (1994). Paleomagnetic evidence for no tectonic rotation of the Central Italy Tyrrhenian margin since Upper Pliocene, *Geophysical*

- Research Letters*, vol. 21, 6, 481-484. AGU Whashington USA.
- 3 Sagnotti L., Faccenna C., Funiciello R. & Mattei M. (1994). Magnetic fabrics and structural setting of Plio-Pleistocene clayey units in an extensional regime: the Tyrrhenian margin of Central Italy. *Journal of Structural Geology*; 16, 1243-1257. Elsevier, Amsterdam.
 - 4 Faccenna C., Funiciello R., Bruni A., Mattei M. & Sagnotti L. (1994). Evolution of a transfer related basin: the Ardea basin (Latium, Central Italy). *Basin Research*, 5, 1-11.
 - 5 Faccenna C., Nalpas T., Brun J. P., Davy P. & Bosi V. (1995). The influence of pre-existing thrust planes on normal fault geometry: experimental modelling and geological examples. *Journal of Structural Geology*, 17, 8, 1139-1149.
 - 6 Faccenna C., Davy P., Brun J.P., Funiciello R., Giardini D., Mattei M. & Nalpas T. (1996). The dynamics of back-arc extensions: a laboratory approach to the opening of the Tyrrhenian sea. *Geophysical Journal International*, 126, 781-795.
 - 7 Mattei M., Kissel K., Sagnotti L., Funiciello R. & Faccenna C. (1996) -Lack of late Pliocene to Present rotation in the Northern Tyrrhenian region (Italy): a constrain on geodynamic evolution. In: "Paleomagnetism and tectonics of the Mediterranean region" edito da Morris A. & Tarling D.H., *Geol. Soc. Sp. Publication*, 105, 141-146
 - 8 Mattei M., Sagnotti L., Faccenna C. & Funiciello R. (1997) Magnetic fabric of weakly deformed clay sediments in the Italian peninsula: relationship with compressional and extensional tectonics. *Tectonophysics*, 271, 107-122.
 - 9 Faccenna C., Mattei M., Funiciello R. & Jolivet L. (1997) Styles of back-arc extension in the Central Mediterranean. *Terra Nova*, 9, 126-130.
 - 10 Jolivet L., Faccenna C., Goffe' B., Mattei M., Brunet C., Rossetti F., Cadet J.P., Funiciello R., Theye T., Storti F., D'agostino N. (1998) Mid-crustal shear zones in postorogenic extension: Example from the Northern Tyrrhenian Sea. *Journal Geophysical Research*, 103, 12213-12160.
 - 11 Corrado S., Di Bucci D., Naso G. and Faccenna C. (1998) The influence of paleogeography on thrust system geometries: an analogue modelling approach for the Abruzzi-Molise (Italy) case history. *Tectonophysics* , 296, 437-453.
 - 12 Rossetti F., Faccenna C., Brunet C. Funiciello R., Jolivet L., & Tecce F. (1999) Syn- versus post-orogenic extension at Giglio Island (Northern Tyrrhenian sea, Tuscany). *Tectonophysics*, 304, 1-4, 71-93.
 - 13 Rossetti F., Ranalli G. and Faccenna C. (1999) Rheological properties of paraffin as an anaalogue material for viscous crustal deformation. *Journal Structural Geology*, 21, 413-417.
 - 14 Faccenna C., Giardini D., Davy P., and Argentieri A. (1999) Initiation of subduction at Atlantic-type margin: insight from laboratory experiments. *Journal Geophysical Research*, 104, 2749-2766.
 - 15 Becker T., Faccenna C., Giardini D. and O'Connell R. (1999) The development of slabs in the upper mantle: insights from numerical and laboratory experiments. *Journal Geophysical Research.*, 104, 15207-15226.
 - 16 Acocella V., Salvini F., Funiciello R., and Faccenna C., (1999) The role of transfer structures on volcanic activity at Campi Flegrei (southern Italy). *Journal Volcanology and Geothermal Res.*, 91, 123-139.
 - 17 Acocella V., Faccenna C., Funiciello R., and Rossetti, F. (1999) Sand-box modelling of basement-controlled transfer zones in extensional domains. *Terra Nova*, 11, 149-156.
 - 18 Jolivet L., Faccenna C., d'Agostino N., Fournier M. and Worrall D. (1999) The Kinematics of back-arc Basins, examples from the Tyrrhenian, Aegean and Japan Seas. In Continental Tectonics; Mac Niocaill C., and Ryan, P. D. (eds), *Geological Society* , London, Spec. Pubbl, 164, 21-53.
 - 19 Rossetti F., Faccenna C., Acocella V., Funiciello R., & Salvini F. (2000) - Pluton emplacement in the Northern Tyrrhenian area (Italy): in Salt, shale and igneous diapirs in and around Europe, edited by Vendeville, B., Mart., Y and Vigneresse, J.-L., *Journal of the Geological Society of London*, Spec. Pubbl. 174, 55-77.
 - 20 Rossetti F., Faccenna C., G. Ranalli, F. Storti & R. Funiciello (2000) – Convergence rate-dependent growth of experimental viscous wedges, *Earth and Planetary Sciences Letters*, 178(3-

- 4), 367-372.
- 21 Jolivet L. and Faccenna C. (2000) Mediterranean extension and the Africa-Eurasia collision. *Tectonics*, 19, 6, 1095-1106.
- 22 Rossetti F., Faccenna C., Goffé B. Argentieri A., Funicciello, R., & Mattei, M. (2001) Alpine structural and metamorphic evolution of the Sila Piccola Massif: Insights for the tectonic evolution of the Calabrian Arc (Italy), *Tectonics*, 20, 112-133.
- 23 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.
- 24 Faccenna C., Funicciello F., Giardini, D., & Lucente P.(2001) Episodic Back-arc Extension during Restricted Mantle Convection in the Central Mediterranean. *Earth Planetary Sciences Letters*, Vol. 187, 1-2, 105-116.
- 25 Casas Sainz A.M. and Faccenna, C. (2001) - Tertiary compressional deformation of the Iberian plate. *Terra Nova*, 13, 281-288.
- 26 Storti, F. Marin, R. S., Faccenna, C., Sainz, Antonio Casas Sainz A., (2001) - Role of the backstop-to-cover thickness ratio on vergence partitioning in experimental thrust wedges. *Terra Nova*, 13, 413-417.
- 27 Rossetti F., Ranalli G., Faccenna C., Funicciello R. & Storti F. (2001) – Modeling the temperature-dependent strength in orogenic wedges: first results from a new thermomechanical apparatus. In: Koyi, H.A., and Mancktelow, N.S: (eds), *Tectonic modeling: A Volume in Honor of Hans Ramberg, Geological Society of America, Memoirs 193*, 267-274.
- 28 Rossetti F., C. Faccenna, L. Jolivet, R. Funicciello B. Goffé, F. Tecce, C. Brunet, & P. Monié and Vidal O. (2001) - Structural signature and exhumation P-T-t paths of the Gorgona blueschist sequence (Tuscan Archipelago, Italy). *Ophioliti*, 26, (2a), 175-186.
- 29 Rossetti, F., Faccenna, C., Ranalli, G. (2002) - The influence of backstop dip and convergence velocity in the growth of viscous doubly-vergent orogenic wedges: insights from thermomechanical laboratory experiments. *Journal Structural Geology*, 24, pp. 953-962
- 30 Soto, R., Casas, A.M., Storti, F., Faccenna, C. (2002) - Role of lateral thickness variations on the development of oblique structures at the Western end of the South Pyrenean Central Unit, *Tectonophysics*, 350, 215– 235
- 31 Faccenna C., Speranza F., D’Ajello Caracciolo F., Mattei M., Oggiano, G., (2002) - Extensional tectonics on Sardinia (Italy): insights into the arc–back-arc transitional regime, *Tectonophysics* 356 213– 232.
- 32 Soto, M, Storti, F. Casas, A.M., and Faccenna C., (2003) Influence of along strike pre-orogenic sedimentary tapering on the internal architecture of experimental thrust wedges, *Geological Magazine*, 149 (3), 253-246.
- 33 Faccenna, C., Jolivet, L., Piromallo, C. and Morelli, A. (2003) Subduction and the depth of convection in the Mediterranean mantle, *Journal Geophysical Research*, 108, (B2), 2099, doi: 10.1029/2001JB001690.
- 34 Funicciello, F., Faccenna, C., Giardini. D., and K. Regenauer-Lieb (2003) Dynamic of retreating slab: insight from laboratory experiments. *Journal Geophysical Research*, Vol. 108 No. B4, 10.1029/2001JB000896.
- 35 Regard V., C. Faccenna, J. Martinod, and O. Bellier, J.C. (2003) From subduction to collision: control of deep processes on the dynamic of convergent boundary. *Journal Geophysical Research*, Vol. 108 No. B4, doi: 10.1029/2002JB001943.
- 36 Jolivet, L., Faccenna, C., Goffe’ B., Burov, E., and Agard, P. (2003) Subduction tectonics and exhumation of high pressure metamorphic rocks in the Mediterranean orogens, *American Journal of Science*, 303, 353-409.
- 37 Bellahsen, N., Faccenna, C., Funicciello R., Daniel J.M. and Jolivet, L. (2003) Why did Africa separate from Africa? Insight from 3D laboratory experiments, *Earth and Planetary Science Letters*, 216, 365-381.
- 38 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,

- doi:10.1029/2002TC001488.
- 39 Piromallo C. and Faccenna C. (2004) How deep can we find the traces of Alpine subduction? *Geophysical Research Letters*, 31, L06605, doi:10.1029/2003GL019288.
- 40 Funicello, F., Faccenna, C. and Giardini, D. (2004) Role of lateral mantle flow in the evolution of subduction systems: insights from laboratory experiments. *Geophysical Journal International* 157 (3), 1393-1406. doi: 10.1111/j.1365-246X.2004.02313.x
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