

CV of Carlo Doglioni

Born in Feltre (Italy), 1957

Liceo Classico (Feltre), 1975

Doctor in Geology at the University of Ferrara, 1981

Assistant at the University of Ferrara, 1981-1983

Post-Doc at the University of Basel (CH), 1983-1984

Researcher at the University of Ferrara, 1983-1992

Associate professor University of Bari 1992-1994

Full Professor University of Basilicata, 1994-1997

Full Professor of Geodynamics, Sapienza University – Roma, 1997-

President Istituto Nazionale di Geofisica e Vulcanologia, 2016-

Experiences:

1985 - Visiting researcher at the University of Oxford,

1988; 1992; 1994 - Visiting researcher at the Rice University in Houston,

2015 - Visiting researcher at Columbia University, Lamont-Doherty Lab, New York,

1995 - Scientific party ODP Leg 161 in the western Mediterranean

1999 – present Research Associate of CNR-IGAG,

Field researches besides Italy: in Morocco, Mexico, Iran, Tunisia, Bulgaria, Hungary, Greece, Turkey, Japan, California, El Salvador, Ecuador, Iceland

Supervisor of 14 PhD thesis

Services:

Member of the Tectonics Panel, Ocean Drilling Program, 1992-1994

Director of the Geodynamics Department at the University of Basilicata, 1994-1997

President of the CNR strategic project CROP – Crosta Profonda (CNR-AGIP-ENEL), 1999-

Member of the Italian Geological Committee, 2003-

Vice-President of the Italian Geological Society, 2003-2008

Editor-in-Chief of Terra Nova 2003-

Editor-in-Chief of Earth Science Reviews 2012-

Associate Editor of Tectonics 2004-2012

Associate Editor of the Brazilian Journal of Geology 2013-

Editorial board Journal Structural Geology, 1987-2007; Bull. Soc. Géol. de France, 2000-2005

Compte Rendu Ac. Sci. Bulgare, 2006-; Italian Journal of Geosciences, 2000-

Coordinator project-PI of Sismologia 1 of the Italian Civil Protection, 2008-2010

Chairman of the School in Geological Sciences (Sapienza University), 2009-2012

President of the Italian Geological Society, 2009-2014

Scientific Panel of the CNR-Dipartimento Terra e Ambiente, 2010-2014

Research Panel (Sapienza University), 2010-2011

Commission of the Accademia dei Lincei for Environment and the Natural Hazards 2010-

Commission of the Accademia dei Lincei for Scientific Research 2014-

Reviewer of ERC, ESF, MIUR-PRIN, CIVR, ANVUR, International Private and Public universities, foundations and institutions, etc.

Chairman Commissione Abilitazione Scientifica Nazionale Area 04/A2 - 2012-2014

International Atomic Energy Agency-IAEA expert

Member of the National Committee for International Union of Geological Sciences 2010-

Member of the CIRM, Ministry of Industry of Italy 2013-

Member of the Scuola Studi Avanzati Sapienza 2014-present

Member of the ANVUR-GEV 04 panel 2015-2016

Research activity:

- Asymmetry of orogens and foreland basins as a function of the subduction polarity
- Asymmetry of rift zones
- Evidences for the polarization of plate tectonics
- Westward drift of the lithosphere
- Seismicity versus Earth's rotation, lithostatic load and tectonic setting
- Mechanism of earthquakes
- Structure and geodynamic evolution of the Alps, Apennines and the Mediterranean
- Relationship between tectonics and sedimentation

Main achievements:

- Tectonic mainstream of plate motion
- Tectonic asymmetry of plate boundaries
- Earth's rotation role in driving plate tectonics
- New model on earthquake generation (graviquakes and elastoquakes)
- Atlas of the Italian deep crust (CNR-Agip-Enel)
- Mediterranean geodynamics

Fundings and research grants:

- PI of Euroepan Project, Miur-Prin (both national and local coordinator), ASI, CNR, Sapienza University, PI of several industrial contracts

Awards and academies:

- 1986 - Dal Piaz Award of the Italian Geological Society
- 1994 - Distinguished Lecturer of the AAPG, US tour
- 2004 - Spendiarov Award of the Russian Academy of Sciences, 32° IGC
- 2005 - Distinguished Lecturer of the AAPG, Europe tour
- 2005 - Member of the Academia Europaea
- 2006 - Member of the Istituto Lombardo di Scienze Lettere ed Arti
- 2007 - Member of the Istituto Veneto di Scienze Lettere ed Arti
- 2009 - Alfred Wegener Award, European Association of Geoscientists and Engineers
- 2009 - Member of the Accademia dei Lincei
- 2009 - Premio Sapienza Ricerca
- 2009 - Premio Bellunesi nel Mondo
- 2011 - Member of the Accademia Nazionale delle Scienze, detta dei XL
- 2013 - Premio SS Vittore e Corona, Feltre
- 2014 - Member of the European Academy of Sciences and Arts
- 2015 - Honorary Professor of Chinese Geosciences University, Beijing
- 2016 - Member of the Accademia delle Scienze di Torino
- 2016 - 100 Eccellenze Italiane
- 2018 - Robert R. Berg AAPG Award for Outstanding Research
- 2018 - School of Advanced Studies Award UniCam Università di Camerino

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Listed in the Top Italian Scientists (1 out of 5 italians in Solid Earth Sciences)

<http://scholar.google.com/citations?user=LBFxf2IAAAAJ&hl=en>

Google Scholar: H factor 56, Citations 11000

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Peer reviewed Publications

2018

- Liberatore, D., Doglioni, C., Al Shawa, O., Atzori, S., Sorrentino, L. 2018. Effects of coseismic ground vertical motion on masonry constructions damage during the 2016 Amatrice-Norcia (Central Italy) earthquakes. *Soil Dynamics and Earthquake Engineering*, in press.
- Bignami C., Valerio E., Carminati E., Doglioni C., Tizzani P. 2018. Volume unbalance on the 2016 Amatrice - Norcia (central Italy) seismic sequence and insights on normal fault earthquake mechanism. Submitted.
- Trippetta, F., Petricca, P., Billi, A., Collettini, C., Cuffaro, M., Scrocca, D., Ventura, G., Morgante, A., Chiaravalli, F., Doglioni, C., 2018. From faults to earthquakes in Italy. Submitted.
- Ficini, E., Cuffaro, M. and Doglioni C. 2018. Asymmetric Dynamics at Subduction Zones Derived from Plate Kinematic Constraints. Submitted.
- Valerio, E., Tizzani, P., Carminati, E., Doglioni, C., Pepe, S., Petricca, P., De Luca, C., Bignami, C., Solaro, G., Castaldo, R., De Novellis, V. and Lanari, R. 2018. Ground Deformation and Source Geometry of the 30 October 2016 Mw 6.5 Norcia Earthquake (Central Italy) Investigated Through Seismological Data, DInSAR Measurements, and Numerical Modelling. *Remote Sensing*, 10, 1901, doi:10.3390/rs10121901
- Petricca, P., Carminati, E., Doglioni, C. and Riguzzi, F., 2018. Brittle-ductile transition depth versus convergence rate: impact on seismicity. *Physics of the Earth and Planetary Interior*, doi.org/10.1016/j.pepi.2018.09.002
- Barberio M.D., Gori F., Barbieri M., Billi A., Devoti R., Doglioni C., Petitta M., Riguzzi F., Rusi S. 2018. Diurnal and semidiurnal cyclicality of Radon (²²²Rn) in groundwater, Giardino Spring, central Apennines, Italy, *Water*, 10, 1276; doi:10.3390/w10091276
- Cuffaro M. and Doglioni C. 2018. On the increasing size of the orogens moving from the Alps to the Himalayas in the frame of the net rotation of the lithosphere. *Gondwana Research*, 62, 2–13 doi.org/10.1016/j.gr.2017.09.008
- Smeraglia L., Bernasconi S.M., Berra F., Billi A., Boschi C., Caracausi A., Carminati E., Castorina F., Doglioni C., Italiano F., Rizzo A.L., Uysal T., Zhao X-J. 2018. Crustal-scale fluid circulation and co-seismic shallow comb-veining along the longest normal fault of the central Apennines, Italy. *Earth Planet. Sci. Lett.*, 498, 152-168, <https://doi.org/10.1016/j.epsl.2018.06.013>.
- Livani M., Scrocca D., Arecco P., Doglioni C., 2018. Structural and stratigraphic control on salient and recess development along a thrust belt front: the Northern Apennines (Po Plain, Italy). *Journal of Geophysical Research, Solid Earth*, 123, doi.org/10.1002/2017JB015235
- Carcatera A. and Doglioni C. 2018. The westward drift of the lithosphere: a tidal ratchet? *Geoscience Frontiers*, 9, 403-414 <https://doi.org/10.1016/j.gsf.2017.11.009>
- Doglioni, C., 2018. A classification of induced seismicity. *Geoscience Frontiers*, 9, 1903-1909, <https://doi.org/10.1016/j.gsf.2017.11.015>
- Petitta M., Mastrorillo L., Preziosi E., Banzato F., Barberio M.D., Billi A., Cambi C., De Luca G., Di Carlo P., Di Curzio D., Di Salvo C., Nanni T., Palpacelli S., Rusi S., Saroli M., Tallini M., Tazioli A., Valigi D., Vivalda P., Doglioni C., 2018. Water table and discharge changes associated with the 2016-2017 seismic sequence in central Italy: hydrogeological data and conceptual model for fractured carbonate aquifers. *Hydrogeology Journal*, <https://doi.org/10.1007/s10040-017-1717-7>

2017

- Moro, M., Saroli, M., Stramondo, S., Bignami, C., Albano, M., Falcucci, E., Gori, S., Doglioni, C., Polcari, M., Tallini, M., Macerola, L., Novali, F., Costantini, M., Malvarosa, F. and Wegmüller, U., 2017. New insights into earthquake precursors from InSAR. *Scientific Reports*, 7, 12035, doi:10.1038/s41598-017-12058-3
- Doglioni, C., 2017. Different types of induced seismicity. *Geingegneria Ambientale e Mineraria*, Anno LIV, n. 3, 65-68.
- Doglioni, C. and Riguzzi F., 2017. The space geodesy revolution for plate tectonics and earthquake studies. *Rend. Fis. Acc. Lincei*, DOI 10.1007/s12210-017-0639-6
- Barberio, M.D., Barbieri, M., Billi, A., Doglioni, C., Petitta, M., 2017. Hydrogeochemical changes before and during the 2016 Amatrice-Norcia seismic sequence (central Italy). *Scientific Reports*, 7, 11735, doi:10.1038/s41598-017-11990-8
- Valerio, E. Tizzani, P., Carminati, E., Doglioni C., 2017. Longer aftershocks duration in extensional tectonic settings. *Scientific Reports*, 7, 16403 doi:10.1038/s41598-017-14550-2.
- Cheloni, D., V. De Novellis, A. Antonioli, M. Anzidei, S. Atzori, A. Avallone, C. Bignami, M. Bonano, S. Calcaterra, R. Castaldo, F. Casu, G. Cecere, N. D'Agostino, C. De Luca, R. Devoti, D. Di Bucci, A. Esposito, A. Galvani, P. Gambino, R. Giuliani, R. Lanari, M. Manunta, M. Manzo, M. Mattone, A. Pepe, S. Pepe, G. Pezzo, G. Pietrantonio, F. Riguzzi, S. Salvi, G. Selvaggi, V. Sepe, E. Serpelloni, G. Solaro, S. Stramondo, P. Tizzani, C. Tolomei, E. Trasatti, E. Valerio, I. Zinno, C. Doglioni, 2017. Geodetic model of the 2016 Central Italy earthquake sequence inferred from InSAR and GPS data. *Geophysical Research Letters*, 44, 6778–6787, doi:10.1002/2017GL073580.
- Smeraglia, L., Billi, A., Carminati, E., Cavallo, A., & Doglioni, C. 2017. Field-to nano-scale evidence for weakening mechanisms along the fault of the 2016 Amatrice and Norcia earthquakes, Italy. *Tectonophysics*, v. 712–713, pp. 156-169, doi.org/10.1016/j.tecto.2017.05.014
- Ficini E., Dal Zilio L, Doglioni C. and Gerya T. 2017. Horizontal mantle flow controls subduction dynamics. *Scientific Reports*, 7, 7550, DOI:10.1038/s41598-017-06551-y
- Chalot-Prat F., Doglioni C., Falloon T., 2017. Westward migration of oceanic ridges and related asymmetric upper mantle differentiation. *Lithos*, 268–271, 163–173, <http://dx.doi.org/10.1016/j.lithos.2016.10.036>
- Conti A., Bigi S., Cuffaro M., Doglioni C., Scrocca D., Muccini F., Cocchi L., Ligi M., Bortoluzzi G. 2017. Transfer zones in an oblique back-arc basin setting: Insights from the Latium-Campania segmented margin (Tyrrhenian Sea). 36, 1, 78–107.
- Motaghi K., Shabanian E., Tatar M., Cuffaro M., Doglioni C., 2017. The South Zagros Suture Zone in Teleseismic Images. *Tectonophysics*, 694, 292–301, <http://dx.doi.org/10.1016/j.tecto.2016.11.012>

2016

- Smeraglia L., Aldega L., Billi A., Carminati E., Doglioni C., 2016. Phyllosilicate injection along extensional carbonate-hosted faults and implications for co-seismic slip propagation: case studies from the central Apennines, Italy. *Journal of Structural Geology*, 93, 29–50, <http://dx.doi.org/10.1016/j.jsg.2016.10.003>
- Doglioni, C., 2016. Plate Tectonics, earthquakes and seismic hazard. *Atti Accademia Nazionale dei Lincei, Proceedings*.

- Muluneh A.A., Kidane, T., Cuffaro, M. & Doglioni, C. 2016. Torque exerted on the side of crustal blocks controls the kinematics of Ethiopian Rift. *Journal of African Earth Sciences*, 116, 1-8, <http://dx.doi.org/10.1016/j.jafrearsci.2015.12.004>
- Doglioni C., Pignatti J. & Coleman M. 2016. Why did life develop on the surface of the Earth in the Cambrian? *Geoscience Frontiers*, 7, 865-873, <http://dx.doi.org/10.1016/j.gsf.2016.02.001>.
- Smeraglia, L., Berra, F., Billi, A., Boschi, C., Carminati, E., Doglioni, C., 2016. Origin and role of fluids involved in the seismic cycle of extensional faults in carbonate rocks. *Earth and Planetary Science Letters*, 450, 292-305, <http://dx.doi.org/10.1016/j.epsl.2016.06.042>
- Cuffaro M., Martorelli E., Bosman A., Conti A., Bigi S., Muccini F., Cocchi L., Ligi M., Bortoluzzi G., Scrocca D., Canese S.P., Chiocci F.L., Conte A.M., Doglioni C., Perinelli C., 2016. The Ventotene Volcanic Ridge: a newly explored complex in the central Tyrrhenian Sea (Italy). *Bulletin of Volcanology*, 78, 86, 10.1007/s00445-016-1081-9
- Amoroso S. Bernardini F., Blumetti A.M., Civico R., Doglioni C., Galadini F., Galli P., Graziani L., Guerrieri L., Messina P., Michetti A.M., Potenza F., Pucci S., Roberts G., Serva L., Smedile A., Smeraglia L., Tertulliani A., Tironi G., Fabio Villani F., Vittori E., 2016. Quaternary geology and Paleoseismology in the Fucino and L'Aquila basins. *Geological Field Trips*, 8, 1.2, DOI: 10.3301/GFT.2016.02

2015

- Bigi S. Beaubien S., Ciotoli G., D'Ambrogi C., Doglioni C., Ferrante V., Lombardi S., Milli S., Orlando L., Ruggiero L., Tartarello C., Sacco P. 2015. Mantle-derived CO₂ migration along active faults within an extensional basin margin (Fiumicino, Rome, Italy). *Tectonophysics*, 637, 137-149, <http://dx.doi.org/10.1016/j.tecto.2014.10.001>
- Cardello G.L and Doglioni C., 2015. From Mesozoic rifting to the Apennines orogeny: The Gran Sasso range (Italy). *Gondwana Research*, 27, 1307–1334, <http://dx.doi.org/10.1016/j.gr.2014.09.009>
- Doglioni C., Carminati E., Crespi M., Cuffaro M., Penati M., Riguzzi F., 2015. Tectonically asymmetric Earth: From net rotation to polarized westward drift of the lithosphere. *Geoscience Frontiers*, 6, 3, 401 – 418, <http://dx.doi.org/10.1016/j.gsf.2014.02.001>
- Doglioni C., Barba S., Carminati E. Riguzzi F., 2015. Fault on-off versus strain rate and earthquakes energy. *Geoscience Frontiers* 6, 265-276, doi: <http://dx.doi.org/10.1016/j.gsf.2013.12.007>
- Doglioni C., and Anderson D.L., (2015) Top driven asymmetric mantle convection. In *The Interdisciplinary Earth: A volume in honor of Don L. Anderson*. Geological Society of America Special Paper 514, American Geophysical Union Special Publication 71, doi:10.1130/2015.2514(05).
- Doglioni C. and Panza G.F. (2015) Polarized plate tectonics. *Advances in Geophysics*, 56, 3, 1-167, <http://dx.doi.org/10.1016/bs.agph.2014.12.001>
- Doglioni C., Carminati E., Petricca P., Riguzzi F. (2015) Normal fault earthquakes or graviquakes. *Scientific Reports*, 5, 12110 doi:10.1038/srep12110.
- Foulger, G. R., G. F. Panza, I. M. Artemieva, I. D. Bastow, F. Cammarano, C. Doglioni, J. R. Evans, W. B. Hamilton, B. R. Julian, M. Lustrino, H. Thybo, and T. B. Yanovskaya (2015) What lies deep in the mantle below? *Eos*, 96, 25 August doi:10.1029/2015EO034319.
- Motaghi, K., Tatar, M., Priestley, K., Romanelli, F., Doglioni, C. and Panza, G.F.,

2015. The deep structure of the Iranian Plateau. *Gondwana Research*, <http://dx.doi.org/10.1016/j.gr.2014.04.009>
- Petricca P., Barba S., Carminati E., Doglioni C., Riguzzi F. (2015) Graviquakes in Italy. *Tectonophysics*, 656, 202–214, doi:10.1016/j.tecto.2015.07.001
- Sottili G.L., Palladino D., Cuffaro M., Doglioni C. (2015) Earth's rotation variability triggers explosive eruptions in subduction zones. *Earth Planets Space*, 67:208 DOI 10.1186/s40623-015-0375-z
- 2014**
- Deng, Y., Panza, G.F., Zhang, Z., Romanelli, F., Ma, T., Doglioni, C., Wang, P., Zhang, X. and Teng, J., 2014. Transition from continental collision to tectonic escape? A geophysical perspective on lateral expansion of the northern Tibetan Plateau. *Earth, Planets and Space*, 66, 10, doi:10.1186/1880-5981-66-10
- Doglioni C. 2014. Asymmetric Earth: mechanisms of plate tectonics and earthquakes. *Rendiconti - Accademia Nazionale delle Scienze detta dei XL - Memorie di Scienze Fisiche e Naturali*, pp. 9–27, ISBN 987-88-548-7171-7, DOI 10.4399/97888548717171
- Doglioni C., Barba S., Carminati E. Riguzzi F., 2014. Fault on-off versus coseismic fluids reaction. *Geoscience Frontiers*, v. 5, issue 6, pp. 767 – 780, doi.org/10.1016/j.gsf.2013.08.004
- Mulneh A.A., Cuffaro M., Doglioni C., 2014. Left-lateral transtension along the Ethiopian Rift and constrains on the mantle–reference plate motions. *Tectonophysics*, DOI: 10.1016/j.tecto.2014.05.036
- 2013**
- Riguzzi F., Crespi M., Devoti R., Doglioni C., Pietrantonio G., Pisani A.R., 2013. Strain rate relaxation of normal and thrust faults in Italy. *Geophysical Journal International*. doi: 10.1093/gji/ggt304
- 2012**
- Bigi S., Lenci F., Scrocca D., Doglioni C., Carminati E. (2012): Apennines. In: Roberts D. & Bally A.W. (eds), *Principles of Phanerozoic Regional Geology*, 14.6.10.
- Carminati E., Doglioni C. 2012. Alps Vs. Apennines: The paradigm of a tectonically asymmetric Earth. *Earth Science Rev.*, 112, 67-96, doi:10.1016/j.earscirev.2012.02.004.
- Carminati E., Doglioni C., Gelabert B., Panza G., Raykova R.B., Roca E., Sabat F. & Scrocca D. (2012): Evolution of the Western Mediterranean. In: Roberts D. & Bally A.W. (eds), *Regional Geology and Tectonics: Phanerozoic Passive Margins, Cratonic Basins and Global Tectonic Maps*, chapter 12, 437-470.
- Carminati, E., Lustrino M., Doglioni, C., 2012. Geodynamic evolution of the central and western Mediterranean: Tectonics vs. igneous petrology constraints, *Tectonophysics*, 579, 173–192, doi:10.1016/j.tecto.2012.01.026
- Riguzzi, F. Crespi, M., Devoti, R., Doglioni, C. Pietrantonio G. and Pisani, A.R., 2012. Geodetic strain rate and earthquake size: New clues for seismic hazard studies. *Physics of the Earth and Planetary Interiors* 206-207, 67–75.
- Scrocca D., Carminati E., Doglioni C. & Procaccianti D. (2012): Tyrrhenian Sea. In: Roberts D. & Bally A.W. (eds), *Regional Geology and Tectonics: Phanerozoic Passive Margins, Cratonic Basins and Global Tectonic Maps*, chapter 13, 473-485.
- Varga, P., Krumm, F. Riguzzi, F., Doglioni, C., Süle, B., Wang, K., Panza, G.F. 2012. Global pattern of earthquakes and seismic energy distributions: Insights for the mechanisms of plate tectonics, *Tectonophysics*, 530-531, 80-86, 10.1016/j.tecto.2011.10.014.

Varga, P., Krumm, F.W., Doglioni, C., Grafarend, E.W., Panza, G., Riguzzi, F., Schreider, A.A., Sneeuw, N., 2012. Did a change in tectonic regime occur between the Phanerozoic and earlier Epochs? *Rend. Fis. Acc. Lincei* (2012) 23:139–148, DOI 10.1007/s12210-012-0172-6

Zanchetta, S., Garzanti, E., Doglioni, C., Zanchi, A. 2012. The Alps in the Cretaceous: a doubly vergent pre-collisional orogen. *Terra Nova*, doi: 10.1111/j.1365-3121.2012.01071.x

Doglioni C., Ligi M., Scrocca D., Bigi S., Bortoluzzi G., Carminati E, Cuffaro M., D’Orlando F., Forleo V., Muccini F., Riguzzi F., 2012. The tectonic puzzle of the Messina area (Southern Italy): Insights from new seismic reflection data. *Scientific Reports, Nature*, 2, 970; DOI:10.1038/srep00970

2011

Cuffaro M., Riguzzi F., Scrocca D. & Doglioni C. (2011) Coexisting tectonic settings: the example of the southern Tyrrhenian Sea. *Int. J. Earth Sci. (Geol Rundsch)*, DOI 10.1007/s00531-010-0625-z

Doglioni, C., Barba, S., Carminati, E. & Riguzzi, F. 2011. Role of the brittle-ductile transition on fault activation. *Phys. Earth Planet. Int.*, 184, 160–171.

Doglioni C., Ismail-Zadeh A., Panza G., Riguzzi F., 2011. Lithosphere-asthenosphere viscosity contrast and decoupling. *Physics of the Earth and Planetary Interiors*, 189, 1-8.

Plastino W., Panza G.F., Doglioni C., Frezzotti M.L., Peccerillo A., De Felice P., Bella F., Povinec P.P., Nisi S., Ioannucci L., Aprili P., Balata M., Cozzella M.L., Laubenstein M., 2011. Uranium groundwater anomalies and active normal faulting. *J Radioanal Nucl Chem*, 288, 101–107.

2010

Agostini S., Doglioni C., Innocenti F., Manetti P. & Tonarini S. (2010): On the geodynamics of the Aegean rift. *Tectonophysics*, 488, 7-21.

Brandmayr E., Raykova R., Zuri M., Romanelli F., Doglioni C., Panza G.F., 2010. The lithosphere in Italy: structure and seismicity. In: (Eds.) Marco Beltrando, Angelo Peccerillo, Massimo Mattei, Sandro Conticelli, and Carlo Doglioni, *The Geology of Italy: tectonics and life along plate margins*, Journal of the Virtual Explorer, Electronic Edition, ISSN 1441-8142, v. 36, paper 1. doi:10.3809/jvirtex.2010.00224

Carminati E., Cavazza D., Scrocca D., Fantoni R., Scotti P., and Doglioni C., 2010. Thermal and tectonic evolution of the Southern Alps (northern Italy) rifting: Coupled organic matter maturity analysis and thermokinematic modeling. *Americ. Ass. Petrol. Geol. Bull.*, 94/3, 369–397, doi:10.1306/08240909069.

Carminati E. and Doglioni C. 2010. North Atlantic geoid high, volcanism and glaciations. *Geophys. Res. Lett.*, 37, L03302, doi:10.1029/2009GL041663.

Carminati, E., Lustrino, M., Cuffaro, M. and Doglioni, C. 2010. Tectonics, magmatism and geodynamics of Italy: What we know and what we imagine. In: (Eds.) Marco Beltrando, Angelo Peccerillo, Massimo Mattei, Sandro Conticelli, and Carlo Doglioni, *The Geology of Italy: tectonics and life along plate margins*, Journal of the Virtual Explorer, Electronic Edition, ISSN 1441-8142, volume 36, paper 9, doi:10.3809/jvirtex.2010.00226

Carminati E., Scrocca D., Doglioni C. 2010. Compaction-induced stress variations with depth in an active anticline: Northern Apennines, Italy. *J. Geophys. Res.* 115, B02401, doi:10.1029/2009JB006395.

Cuffaro M., Riguzzi F., Scrocca D., Antonioli F., Carminati E., Livani M., Doglioni C. 2010. On the geodynamics of the northern Adriatic plate. *Rend. Fis. Acc. Lincei*, 21 (Suppl 1): S253–S279 DOI 10.1007/s12210-010-0098-9.

- D'Ambrogi C., Scrocca D., Pantaloni M., Valeri V., Doglioni C. 2010. Exploring Italian geological data in 3D. In: (Eds.) Marco Beltrando, Angelo Peccerillo, Massimo Mattei, Sandro Conticelli, and Carlo Doglioni, *The Geology of Italy: tectonics and life along plate margins*, Journal of the Virtual Explorer, Electronic Edition, ISSN 1441-8142, volume 36, paper 24, doi:10.3809/jvirtex.2010.00256
- Innocenti F., Agostini S., Doglioni C., Manetti P., Tonarini S. 2010. Geodynamic evolution of the Aegean: constraints from the Plio-Pleistocene volcanism of the Volos-Evia area. *J. Geol. Soc.*, vol. 167, 475-489, ISSN: 0016-7649
- Panza G. Doglioni C. & Levshin A. (2010): Asymmetric ocean basins. *Geology*, 38, 1, p. 59–62, doi: 10.1130/G30570.1.
- Plastino W., Povinec P.P., De Luca G., Doglioni C., Nisi S., Ioannucci L., Balata M., Laubenstein M., Bella F., Coccia E., 2010. Uranium groundwater anomalies and L'Aquila earthquake, 6th April 2009 (Italy). *J. Environ. Radioact.*, 101, 45–50, doi:10.1016/j.jenvrad.2009.08.009.
- Riguzzi F., Panza G., Varga P. & Doglioni C. (2010): Can Earth's rotation and tidal despinning drive plate tectonics? *Tectonophysics*, 484, 60–73, doi:10.1016/j.tecto.2009.06.012.
- 2009**
- Carminati E., Cuffaro M., Doglioni C., 2009. Cenozoic uplift of Europe. *Tectonics*, 28, TC4016, doi:10.1029/2009TC002472.
- Doglioni C., Tonarini S. & Innocenti F. (2009): Mantle wedge asymmetries and geochemical signatures along W- and E-NE-directed subduction zones. *Lithos*, 113, 179-189, doi:10.1016/j.lithos.2009.01.012.
- 2008**
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