



**Curriculum Vitae**  
**Dr. de Franco**  
**Roberto**



*"Contraria non contradictoria, complementaria sunt"*

**Personal information**

Surname / First name	<b>de Franco Roberto</b>
Address	C/o Istituto di Geologia Ambientale e Geoingegneria, via Mario Bianco 9, 20131, Milano, Italy
Telephone	+39-02.28311439
Fax	+39-02.28311442
E-mail	<a href="mailto:roberto.defranco@cnr.it">roberto.defranco@cnr.it</a>
Nationality	Italian

**Work experience & Responsibilities**

Dates-position held-employer Experiences	<p>Jun 2019 / present - Research Director, Senior Geophysicist - Istituto di Geologia Ambientale e Geoingegneria (IGAG-CNR).</p> <p>2006 / may 2019 - Research Director, Senior Geophysicist - Istituto per la Dinamica dei Processi Ambientali of Italian National Research Council (IDPA-CNR).</p> <p>1999 / 2001; 2006 / present – Contract professor, Teaching course in Geophysical Prospecting -University of Milano Bicocca, Milan Italy.</p> <p>1999 / 2005- First Researcher, Senior Geophysicist - Istituto di Ricerca sul Rischio Sismico of CNR.</p> <p>1988 feb / 1998 – Researcher, Junior Geophysicist - Istituto di Ricerca sul Rischio Sismico of CNR.</p> <p>1987 Sep/1988 Jan – High School Full Professor, teaching Physics and Laboratory – Italian Ministry of Education, Universities and Research.</p> <p>1984 May/ 1986 May – Geophysics and Geotechnics Consultant - Centro Studi Geotecnici e di Ingegneria, Lecce, Italy.</p>
Responsibilities	<p>Jun 2019 / present - Responsible of Milan Headquarters of Istituto di Geologia Ambientale e Geoingegneria (IGAG-CNR).</p> <p>2018 Nov / 2019 May - Director of the Istituto Dinamica Processi Ambientali – CNR.</p> <p>2015 / present - Member of Center for Seismic Microzonation and its Applications – CNR.</p> <p>2016 / present - Associate Editor of Geophysical Prospecting</p> <p>2016 /2018 - Expert Member of the Coordination Committee of the Territorial Operative Unit of the Umbria Region, Government Commissioner for Central Italy 2016 Earthquake</p> <p>2012 / 2018 - Responsible of Milan Headquarter of the Istituto Dinamica Processi Ambientali – CNR.</p> <p>2001 / 2018 - Member Scientific Committee of the Istituto Dinamica Processi Ambientali – CNR.</p> <p>2012 / 2013; 2015 / 2016 - Expert GEV04 for Evaluation of Research Quality of National Agency for the Evaluation of Universities and Research Institutes (ANVUR).</p> <p>2007 / 2016 – Italian National Representative Member of IAG-IUGGI.</p> <p>2010; 2012; 2017 - Member of Recruitment Committees for CNR National Competition Notices: 364.88; 364.4; 367.26; 315.3 PR.</p> <p>1998 / 2013 - Responsible of the Applied Geophysics Group of Istituto Dinamica Processi Ambientali (former Istituto di Ricerca per il Rischio Sismico).</p> <p>1998 / 2002 - Responsible of the Crustal Geophysical Section of the National Group of Solid Earth – CNR.</p> <p>1992 / 2000 - Member Scientific Committee of Istituto di Ricerca sul Rischio sismico – CNR.</p>

## Education and training

Dates	1977 Nov - 1984 Mar
Title of qualification awarded	Laurea in Physics
Principal subjects covered	2-D and 3-D Inversion methods of seismic refraction data
Organisation	University of Salento (Lecce Italy)
Level in national classification	110/110
Dates	1986 Jun - 1987 Jul
Title of qualification awarded	Italian National Research Council grant winner
Principal subjects covered	Synthetic seismograms application to wide-angle refraction/reflection crustal seismic data
Organisation	Istituto per la Geofisica della Litosfera - CNR, Milan, Italy

## Personal skills and competencies

Research topics and Skills	<p>Geophysical reconstructions of crustal and sub-crustal structures: <i>Italian Peninsula, Alpine &amp; Apennine chains; Tyrrhenian Basin; Pery-Tyrrhenian &amp; Adriatic margins, Costa Rica Pacific margin, Angolan margin, Seismogenetic structures of the Friuli and Apennine areas.</i></p> <p>Geophysical studies of Volcanic Complexes and Geothermal Fields: <i>Vulsini, Mt. Vesuvius, Phlegrean Fields, Tendaho, Aluto, Los Humeros, Larderello.</i></p> <p>Applied geophysics and Time-lapse geophysics: <i>Seismic Microzonation, Seismic liquefaction, Landslide structures, Geothermic exploration &amp; Geothermal social acceptance, Reservoir characterization for CO2 and Oil&amp;Gas storage, High resolution seismic studies of Quaternary basins, Salt-water intrusion, Hydro-geophysics for the industrial site remediation, Support to design of civil infrastructures and roads.</i></p> <p>Theoretical development and implementation of Processing and Inversion &amp; imaging techniques of geophysical data.</p> <p>Geophysical data acquisition planning, Geophysical measurement protocols, Design &amp; optimization of geophysical hardware.</p>
Computer skills	Dedicated Software Development in MATLAB, FORTRAN. Operating systems MS-Windows, LINUX; Software knowledge & use for geophysical data processing and inversion (seismic, seismology, gravimetry, georadar and geoelectrics).
Associations	Associate Member of European Association of Geoscientists and Engineers (EAGE). Associate Member of Society of Exploration Geophysicists (SEG).
Organisational Activity	<p>Responsibility, management and coordination of geophysical experiments at small and large spatial scales (40 experiments since 1988).</p> <p>Responsible and/or coordinator and management of research units, working groups (31 since 1988).</p> <p>Responsible &amp; Manager of external research contracts (54 contracts since 1988).</p>
Formation activity	<p>Tutor &amp; Cotutor of: 9 PhD thesis; 56 Laurea MS thesis in Geology   Physics   Informatics; 8 University stages in Geotechnology and Engineering.</p> <p>Formation courses in Geophysical Prospecting for Seismic Microzonation organized by Regional Geology Professional Orders: Lombardia, Umbria, Marche, Emilia-Romagna.</p>
Other Activities	<p>Third Mission in geoscience: Public Engagement and Dissemination.</p> <p>Expert and geophysical consultant of public administrations and private companies.</p> <p>Referee and assessment of scientific projects for Italian National Research Council and Ministry of the French Scientific Research.</p> <p>Convener and Chairman of sessions in national and international meetings</p> <p>Referee of national and international journals. Awarded "Top Reviewer 2008" for "Tectonophysics"</p>
Mother tongue	Italian
Other languages	English B2, French C2 Speaking & Writing CEF level
Artistic skills	Painting, Sculpture
Driving licence	Driving licence B

## Web Sites & Information

---

National Research Council People	<a href="http://www.cnr.it/peoplepublic/peoplepublic/index/schedaeng/u/roberto.defranco">http://www.cnr.it/peoplepublic/peoplepublic/index/schedaeng/u/roberto.defranco</a>
Google Scholar	<a href="https://scholar.google.it/citations?user=jlwPdCoAAAAJ&amp;hl=">https://scholar.google.it/citations?user=jlwPdCoAAAAJ&amp;hl=</a>
Scopus	<a href="https://www.scopus.com/authid/detail.uri?authorId=7003915674">https://www.scopus.com/authid/detail.uri?authorId=7003915674</a>
Publons - Web of Science	<a href="https://publons.com/researcher/1748507/roberto-de-franco/">https://publons.com/researcher/1748507/roberto-de-franco/</a>
Mendeley	<a href="https://www.mendeley.com/profiles/roberto-de-franco/?hl">https://www.mendeley.com/profiles/roberto-de-franco/?hl</a>
ResearchGate	<a href="https://www.researchgate.net/profile/Roberto_De_Franco2">https://www.researchgate.net/profile/Roberto_De_Franco2</a>
Orcid	<a href="http://orcid.org/0000-0002-7037-2833">http://orcid.org/0000-0002-7037-2833</a>
LinkedIn	<a href="pub/roberto-de-franco/65/80a/741">pub/roberto-de-franco/65/80a/741</a>
<i>Personal Site</i>	<a href="https://sites.google.com/view/robertodefranco/home-page">https://sites.google.com/view/robertodefranco/home-page</a>

---

**ANNEX 1 MAIN PROJECTS**

	Date	Project
1.	1986-1988	<b>European Geo Traverse '86 and CROP 88 line Alpi-Occidentali</b> – Refraction and wide angle seismic reflection data acquisition and processing in support of CROP project
2.	1987-1990	<b>ENERGETIC PROJECT sub project Geothermal Energy</b> - Seismic refraction and tomographic study of Bolsena Lake and Amiata Mt.
3.	1991-1992	<b>BTP-CNR Project</b> - Seismic refraction / wide angle reflection experiment in the North-western Italy Piemontese Tertiary Basin
4.	1991-1993	<b>Benevento Seismic Risk (European Project ENV4C-0103-I(A))</b> - Seismic refraction and local seismic site effect experiment.
5.	1993-1995	<b>CROPO3 Italian Deep Seismic Reflection Project</b> - Seismic refraction-wide angle reflection experiments in support of NVR CROP Line
6.	1993	<b>Metropolitana Milanese S.p.A Project</b> - Control of grouted tunnels through seismic tomography.
7.	1994-1997	<b>CROP-MARE II and LISA Project</b> - Wide angle reflection/Refraction Sea-Land experiments in Central Apennines, South Italy and Ligurian sea.
8.	1998-2000	<b>TOMOVES (European Project ENV4-CT98-0698)</b> - Internal Structure of Mt. Vesuvius through high definition seismic Tomography
9.	1992-1996	<b>Toscana Region / CNR project</b> - Seismic and seismological acquisition for the assessment of local seismic response in the Serchio Basin and Garfagnana (Toscana, Italy)
10.	1997-1998	<b>GNDT Umbria Marche Microzonation project</b> - Umbria Marche Site Effect Evaluation in the area of September 1997 earthquake
11.	1998-1999	<b>Umbria Marche Microzonation GNDT Project</b> - Fabriano Down-Hole Accelerometric Experiment
12.	1998-1999	<b>Umbria Region microzonation project</b> - Foligno Microzonation - Seismological network acquisition and processing
13.	1991-2002	<b>DSS-ONLINE GNDT project</b> - Italian Deep Seismic Sounding on line database since 1968
14.	1996-2001	<b>Italian Cultural Heritage Project</b> - Standardisation of Geophysical Methods in the Archaeological Research: Olonium (LC) and Lonato BS) sites
15.	1998-2000	<b>INTAS</b> - Digitalization of optical seismic data of the Deep Seismic Sounding profiles in CSI and Ukraine
16.	2000-2002	<b>GNV - Phlegrean Field Project: SERAPIS Seismic Project</b>
17.	2000-2002	<b>GNDT Project</b> - Probable earthquakes in Italy between 2000 and 2030: the definition of priority actions to reduce seismic risk
18.	2000-2002	<b>GNDT Project</b> - Development and comparison of methodologies for the assessment of seismic hazard in seismogenic areas: application of Central and Southern Apennines
19.	2001-2004	<b>SESAME Project (European Project EVG1-CT-2000-00026)</b> - Site EffectS assessment using AMBient Excitations
20.	2000	<b>ALTA VALLE TIBERINA (microzoning project joined Umbria Region)</b> - Progetto per la realizzazione di una zonazione territoriale della pericolosità sismica locale nell'area campione della Alta Valle Tiberina
21.	2000	<b>CARG Research project of the Lombardia Region</b> - High resolution seismic reflection for the study of the quaternary evolution of the Valtellina
22.	2001-2004	<b>CARG Research project of the Lombardia Region</b> - Seismic and seismological acquisition in the Clusone Basin and Valseriana
23.	2004-2007	<b>CORILA Project</b> - Groundwater flux in the Venice Lagoon system: Salt-intrusion characterisation with Geoelectrical Tomography.
24.	2006	<b>CARG Research project of the Umbria region</b> – High resolution Geophysical surveys for the construction of the geological sheet Foligno (PG)
25.	2007-2008	<b>Fondo Ambiente Italiano/CNR/University of Milan Project</b> - Hydro-geophysical and Hydro-geological characterization of the Azurro Lake (Northern Italy)
26.	2008-2009	<b>Research project of the Umbria region INOGS / CNR</b> - Geophysical studies in support of seismic Microzonation of Perugia city
27.	2007-2009	<b>PRIN Project</b> - Control, protection and management of the groundwater resources - the contribution of innovative geophysical methods.
28.	2009	<b>Italian Civil Protection Department / CNR Project</b> - High resolution seismic reflection and seismological study of Pettino fault in the Aquila area
29.	2010	<b>MEDOC European Project</b> – CSIC (ES) / CNR (IT) / IFM-GEOMAR (DE). Acquisition of Multichannel Seismic Reflection data and OBS-Land Deep refraction / Wide Angle seismic reflection data in the Thyrrenian sea.
30.	2012-2013	<b>Research project of the Umbria region - INOGS / CNR</b> - Geophysical studies in support of seismic Microzonation of Umbertide town
31.	2012-2013	<b>Solvay-Environ/IDPA-CNR) project</b> - Treatment of CHROMIUM VI in the unsaturated zone coupled with Time-Lapse Geophysics
32.	2010-2014	<b>VIGOR</b> - Geothermal resources in the convergence Regions. Italian project of the Italian Economic Development Ministry
33.	2013-2014	<b>UNICEF PCA/NWZ/2013/4271 research agreement CNR-IDPA and NGO Terre Solidarity</b> - Geophysical groundwater exploration in West e Est Borama area Somaliland
34.	2012-2014	<b>ATLAS POI energy project</b> - Geothermal Resources in Southern Italy
35.	2015-2016	<b>Research project of Lombardy Region</b> - Definition and mapping of the seismic bedrock in the eastern sector of the Lombard plain territory
36.	2015-2017	<b>CHIANTI European Project</b> – CSIC (ES) / CNR (IT) / IFM-GEOMAR (DE). Acquisition of Multichannel Seismic Reflection data and OBS-Land Deep refraction / Wide Angle seismic reflection data along the the transect (Ionian sea- Marsili basin) crossing the Calabrian arc
37.	2015-2017	<b>ICEIDA 23066-1301NDF Ethiopia/1/2 industrial project</b> , coo-partnership Electroconsult/IDPA-CNR - Geothermal exploration in Tendaho-Alalobeda and Aluto-Langano Ethiopia - Microseismic monitoring
38.	2014-2017	<b>IMAGE (European Project Grant Agreement Number 608553)</b> - Integrated Methods for Advanced Geothermal Exploration: seismic modelling
39.	2016-2018	<b>Microzonation studies in the area of 2016 Central Italy earthquake</b> - Agreement of CentroMS e Commissario straordinario del Governo per la ricostruzione sisma 2016: I e II phases. Geophysical acquisitions and Local Seismic Response assessment
40.	2018-2019	<b>UNICEF PO 43248251 research agreement CNR-IDPA and NGO Terre Solidarity</b> - Baidoa water plan - Ground water research: Processing and interpretation of seismic reflection data in the Baidoa area - Somaliland.
41.	2018-2019	<b>LOBSTER Ligurian Ocean Bottom Seismology and Tectonics Research</b> - (coo-partnership GEOMAR-Kiel, IPGP-Paris, ISTerre-Grenoble, GeoAzur-Nice). Sea-Land wide angle seismic data acquisition end processing
42.	2020-2024	<b>CARG Project – Geological Map of Italy 1: 50,000 ISPRA-Lombardia Region:</b> Realization of geological sheet Brescia 121
43.	2022-2023	<b>PRIN Project - Mapping seismic site effects at regional and national scale</b>

**ANNEX 2 SELECTED PUBLICATIONS**

1. Biella G., de Franco R., Lozej A., Amato A., 1987 - Is there a shallow body of lower crust under the Vulsinian Volcanic Complex? *Periodico di Mineralogia*, 56, pp 303-318.
2. Amato A., de Franco R., Malagnini L., 1990 - Local Source Tomography: Application to Italian Areas. *Terranova* 2,6,596-607; <http://dx.doi.org/10.1111/j.1365-3121.1990.tb00125.x>.
3. Biella G., Corsi A., de Franco R., Ponziani F., 1991 - Digitalizzazione del Profilo Corsica-Ancona e profili adiacenti: primi risultati. Riunione CROP-03, Perugia, 25-27 luglio, 1991. Monografia CROP-03 *Rivista Studi Geologici Camerti*, 1991/1, 65-70.
4. Rovelli A., Malagnini L., Selvaggi G., Di Bona M., Biella G., de Franco R., 1991 - Can explosion recordings be used to predict local variation of ground motion during the earthquakes? *Proceedings V Conference on Soil Dynamics and Earthquake Engineering*, Karlsruhe, Sept., 23-26, 1991, Ed. IBF, Elsevier.
5. Amato A., Biella G., de Franco R., 1991 - Velocity structure of the Vulsinian Volcanic Complex (Latium Italy) from seismic refraction measurements and 3-D inversion of travel times. *J. Geophys. Res.*, 96, B1,517-535; <http://dx.doi.org/10.1029/90JB00830>.
6. Bressan G., de Franco R., Gentile F., 1992 - Seismotectonic study of the Friuli (Italy) area based on tomographic inversion and geophysical data. *Tectonophysics*, V.207,N.3/4,383-400; [https://doi.org/10.1016/0040-1951\(92\)90397-O](https://doi.org/10.1016/0040-1951(92)90397-O).
7. Augliera P., Biella G., Cattaneo M., de Franco R., Demartin M., Solarino S., 1992. - Seismic acquisition systems: Comparison between different technique. *Proceedings of the European Center for geodynamics and seismology meeting "local and national seismic networks: on line data processing with microcomputer facilities"*, 18-20, nov., Luxemburg, 15-24.
8. Malagnini L., Rovelli A., Di Bona M., Selvaggi G., Biella G., de Franco R., 1992. - Large amplification of ground motion on Pliocene sediments: a comparison between explosion and earthquake data. *Seism. Res. Letters*, v.63, N. 1.
9. Rovelli A., Malagnini L., Biella G., de Franco R., Di Bona M., Selvaggi G., 1992. - Evidence of ground motion during an explosion experiment: a comparison with earthquake recordings. *Proceedings of the International Symposium of the effects of surface geology on seismic motion*, ESG, Odawara, 25-27, march 1992, Japan, pp. 317-322.
10. Bressan G., de Franco R., Gentile F., 1992 - Active faulting and seismogenic aspects of the Friuli area. *Studi Geologici Camerti*, Vol., Spec. 1992/2, CROP 1-1A, 89-98.
11. Biella G., de Franco R., Demartin M., Minelli G., Barchi M., Piali G., 1993. - Profilo Perugia-Frontone: Analisi integrata di dati geologici e geofisici. *Boll. Soc. Geol. It.*, 112 (1993) pp. 31-42; ISSN 2038-1719.
12. Musacchio G., de Franco R., Cassinis R., Gosso G., 1993 - Reinterpretation of a wide angle reflection "Fan" across the Central Alps. *Journal of Appl. Geophys.*, 30,43-53; [https://doi.org/10.1016/0926-9851\(93\)90017-S](https://doi.org/10.1016/0926-9851(93)90017-S)
13. Amato A., Biella G., Chiesa S., de Franco R., Malagnini L., Minelli G., Ponziani F., Vezzoli L., 1994 - Tuscania-Pienza seismic refraction profile, geophysical model and geological interpretation. *Mem. Descr. Carta Geol. D'Italia*, XLIX, 22-36.
14. Musacchio G., de Franco R., 1994. - Interpretation of a unified acoustic image in the Alpine collision zone: the contribution of shear wave modelling and of wide-angle reflectivity patterns. Proceedings of Symposium CROP-Alpi Centrali, Sondrio 20-22 oct. 1993. *Quaderni di Geodinamica Alpina e Quaternaria* (1994), 2, 187-195.
15. Biella G., de Franco R., Demartin M., Barzaghi R., Sanso' F., Sguerso D., 1994 - Geophysical Interpretation of a high resolution seismic refraction profile in the Northern Apennines. *Terranova*, 6, 45-53; <http://dx.doi.org/10.1111/j.1365-3121.1994.tb00632.x>
16. Ponziani F., de Franco R., Minelli G., Biella G., Federico C., Piali G., 1994 - Caratteristiche della crosta dell'Appennino settentrionale in base alla revisione dati dei profili N-C-S della campagna DSS 1978. *Studi Geologici Camerti*, Volume Speciale 1994/1, 151-162.
17. Colombo D., Gitis V., de Franco R., 1994 - Application of pattern recognition techniques to the long term earthquake prediction in Central Costa Rica. *Proceedings of 9th International Seminar on Earthquake Prognostic*, San José, sept. 19-23, Costa Rica.
18. Malagnini L., Herrmann R.B., Biella G., de Franco R., 1995 - Rayleigh waves in Quaternary alluvium from explosive Sources: Determination of shear-wave velocity and Q structure. *Bull. Soc. Seism. Am.*, 85, 3, 900-922; ISSN: 0037-1106
19. Iannaccone G., Improta L., Biella G., Castellano M., Deschamps A., de Franco R., Malagnini L., Mirabile L., Romeo R., Zollo A., 1995 - A study of local site effects in the Benevento town (southern Italy) by the analysis of seismic records of explosions. *Annali di Geofisica*, v. XXXVIII, N.3-4, 411-427; <http://dx.doi.org/10.4401/ag-4103>
20. Malagnini L., Tricarico P., Herrmann R.B., Opice S., Biella G., de Franco R., 1995 - Explosion, earthquake and ambient noise recording in a pliocene sediment-filled valley inference on seismic response properties by reference and non-reference-site techniques. *Bull. Soc. Seism. Am.*, 86, 3, 670-682; ISSN: 0037-1106.
21. Ponziani F., de Franco R., Minelli G., Biella G., Piali G., 1995 - Crustal shortening and duplication of the moho in the Northern Apennines: a view from seismic refraction data. *Tectonophysics*, 252, 1-4, 391-418; [https://doi.org/10.1016/0040-1951\(95\)00093-3](https://doi.org/10.1016/0040-1951(95)00093-3).
22. de Franco R., Cavagna B., 1995 - Verifica del consolidamento di gallerie mediante tomografia sismica, Control of grouted tunnels through seismic tomography. *Gallerie e Grandi Opere Sotterranee*, v.47, 38-50; ISSN 0393-1641.
23. Barzaghi R., Zucca F., De Franco R., 1995 - Integrated inverse gravity modelling; a numerical experiment. *Bull. Int. Ass. Geod.*, 1-1995, IV, 73-78.
24. Zollo A., Gasparini P., Virieux J., Le Meur H., De Natale G., Biella G., Boschi E., Capuano P., de Franco R., Dell'Aversana P., De Matteis R., Guerra I., Iannaccone G., Mirabile L., Vilardo G., 1996 - Seismic evidence for a low-velocity Zone in the upper crust beneath Mount Vesuvius, *Science*, 274, 592-594; <http://dx.doi.org/10.1126/science.274.5287.592>
25. Zollo A., Gasparini P., Biella G., de Franco R., Buonocore B., Mirabile L., De Natale G., Milano G., Pingue F., Vilardo G., Bruno P.P., De Matteis R., Le Meur H., Iannaccone G., Deschamps A., Virieux J., Nardi A., Frepoli A., Hundtad I., Guerra I., 1996 - 2D seismic tomography of Somma-Vesuvius: description of the experiment and preliminary results. *Annali di Geofisica*, XXXIX,3,471-486; <http://dx.doi.org/10.4401/ag-3983>
26. Biella G., Polino R., de Franco R., Rossi P.M., Clari P., Corsi A., Gelati R., 1997 - The crustal structure of the western Po Plain: reconstruction from integrated geological and seismic data., *Terranova*, 9, 1, 28-32; <http://dx.doi.org/10.1046/j.1365-3121.1997.d01-5.x>.
27. de Franco R., Biella G., Boniolo G., Corsi A., Demartin M., Maistrello M. & Morrone A., 1997 - Ivrea seismic array: study of continental crust and upper mantle, *Geophys. J. Int.*, 128, 3, 723-736; <https://doi.org/10.1111/j.1365-246X.1997.tb05332.x>.
28. Colombo D., Gitis V., de Franco R., 1997 - Application of pattern recognition techniques to long-term earthquake prediction in central Costa Rica., *Engineering Geology*, 48, 7-18; [https://doi.org/10.1016/S0013-7952\(97\)81911-4](https://doi.org/10.1016/S0013-7952(97)81911-4).
29. Colombo D., Cimini G.B., de Franco R., 1997. - Three-dimensional velocity structure of the upper mantle beneath Costa Rica from a teleseismic tomography study. *Geophys. J. Int.*, 131, 189-208; <https://doi.org/10.1111/j.1365-246X.1997.tb01216.x>.
30. Malagnini L., Herrmann R. B., Mercuri A., Opice S., Biella G. & de Franco R., 1997 - Shear-Wave velocity structure of sediments from the inversion of explosion-induced Rayleigh wave: Comparison with cross-hole measurements, *Bull. Seism. Soc. Am.*, 87, 6, 1413-1421; ISSN: 0037-1106.
31. Tomoves Group (R. de Franco participant), 1998 - Looking Inside Mt. Vesuvius. *EOS*, 79, 19, 229-232; <http://dx.doi.org/10.1029/98EO00165>.
32. de Franco R., Ponziani F., Biella G., Boniolo G., Caielli G., Corsi A., Maistrello M., Morrone A., 1998 - DSS-WAR experiment in support of the CROP-03 project, *Mem. Soc. Geol. It.*, V. LII, 67-90.
33. Gualteri L., de Franco R., Mazzotti A., 1998 - A velocity model along the CROP-03 profile derived from expanding spread experiments, *Mem. Soc. Geol. It.*, V. LII, 139-152.

34. Ponziani F., de Franco R., Biella G., 1998 - Geophysical reinterpretation of 1974 and 1978 DSS experiments along CROP-03 profile, *Mem. Soc. Geol. It.*, V. LII, 193-204.
35. Gualteri L., de Franco R., Biella G., 1998 - Crustal structure in the Northern Tyrrhenian Sea: a contribution from air gun record on land, *Mem. Soc. Geol. It.*, V. LII, 215-224.
36. Tento A., Franceschina G.L., de Franco R., 1998 - Experimental site effect evaluation in Nocera Umbra area (Italy), *Proceedings of 2<sup>nd</sup> Int. Symp. On "The site effects of Surface Geology Seismic Motion - Recent Progress and New Horizon on ESG Study"*, Dec. 1-3, 1998, Yokohama, Japan, p 559-566.
37. Zollo A., Gasparini P., Virieux J., Biella G., Boschi E., Capuano P., de Franco R., Dell'Aversana P., de Natale G., Iannaccone G., Guerra I., Le Meur H., Mirabile L. - 1998, An Image of Mt. Vesuvius obtained by 2D seismic Tomography, *J. Volcanol. Geotherm. Res.*, 82, 161-173; [http://dx.doi.org/10.1016/S0377-0273\(97\)00063-2](http://dx.doi.org/10.1016/S0377-0273(97)00063-2)
38. Iannaccone G., Improta L., Capuano P., Zollo A., Biella G., de Franco R., Deschamps A., Cocco M., Mirabile L., Romeo R. - 1998, A P-Wave velocity model of the upper crust of the Sannio region (Southern Apennines, Italy), *Annali di Geofisica*, 41, 4, 567-582; <http://dx.doi.org/10.4401/ag-3803>
39. Arslan E., Biella G., Boniolo G., Caporusso D., de Franco R., Lozej A., Veronese L. - 1999, Geophysical investigations of the Olonium Roman site (Northern Como Lake), *Journ. Appl. Geophysics*, 41, 2-3, 169-188; [http://dx.doi.org/10.1016/S0926-9851\(98\)00041-X](http://dx.doi.org/10.1016/S0926-9851(98)00041-X)
40. Crespellani T., de Franco R., Marcellini A., Maugeri M., 1999 - A Down Hole experiment and geotechnical investigations at Fabriano, Italy. *Proceedings of the II Int. Conference on Earthquake Geotechnical Engineering*, ed. P. Seco e Pinto, Balkema, 771-778; ISBN 90-5809-0302.
41. de Franco R., Caielli G., Luzio D., Petronio L., Bruno P.P., Gruppo SEA-LAND, 2000 - Acquisition and processing procedure of the SEA-LAND wide-angle reflection/refraction data, *Boll. Soc. Geol. It.*, 109, 149-158; Print ISSN 2038-1719.
42. de Franco R., Biella G., Caielli G., Mauffret A., Contrucci I., Nercessian A., 2000 - Interpretation of wide angle reflection refraction data in the Tuscan-Latium Peri-Tyrrhenian area, *Boll. Soc. Geol. It.*, 109, 171-188; Print ISSN 2038-1719.
43. Gentile G.F., Bressan G., Burlini L., de Franco R., 2000 - Three-dimensional Vp and Vp/Vs models of the upper crust in the Friuli area (northeastern Italy), *Geophys. J. Int.*, 141, 457-478; DOI: <https://doi.org/10.1046/j.1365-246x.2000.00095.x>
44. Tondi R., de Franco R., Barzaghi R., 2000. - Sequential Integrated Inversion of refraction and wide angle reflection traveltimes and gravity data for two-dimensional velocity structures. *Geophys. J. Int.*, 141, 679-698; <https://doi.org/10.1046/j.1365-246x.2000.00104.x>
45. Tento A., de Franco R., Franceschina G. & Pagani M., 2001 - Site amplification from earthquake data in Fabriano, Central Italy. *Riv. It. Geotecnica*, XXXV, 2, 131-145; ISSN 0557-1405.
46. Biella G., Boavida J., Peliganga J., de Franco R., De Luca L. and Luzio D., 2001 - Processing and interpretation of wide angle seismic data acquired along the northern angolan continental margin Gold Open Access. 7th SAGA Biennial Technical Meeting and Exhibition: Session 14: Oil Industry Case Studies 1, 09 October 2001
47. de Franco R., Musacchio G., 2001 - Polarization filter with Singular Value Decomposition *Geophysics*, v. 66, No. 3, 932-938. <https://doi.org/10.1190/1.1444983>
48. de Franco R., 2001 - Interval velocity and thickness estimate from wide-angle reflection data. *Geophysical Prospecting*, v. 49, No. 4, 395-404. <https://doi.org/10.1046/j.1365-2478.2001.00265.x>
49. Boavida J., Giancarlo B., de Franco R., Luzio D., Lozej A., Zaiango Group, and "Terra-Mar Group": The northern Angolan margin imaged by wide angle seismic data. *Proceedings 21st Annual GCSSEPM Foundation*, December 2-5, 2001, Houston, Texas, 389-406. <https://doi.org/10.5724/gcs.01.21.0389>
50. Boavida J. Morais E., Catanha M., Caholo I., Baptista C., Biella G., Boniolo G., Cattaneo M., Corsi A., de Franco R., Lozej A., Pasta M., Mendes-Victor L., Matias L., Sibuet J.C., Geli L., Houzé H., Contriucci I., Moulin M., 2001. - First insight into the deep structure of the Northern Angolan continental margin by refraction/wide angle reflection seismic data. *Africa Geoscience Review*, 8, 12, 49-56.
51. Sleiko D., a cura di Morelli C., Bernabini M., Biella G., Casentino P., de Franco R., De Natale G., Marson I., Mazzotti A., Monelli F., Neri G., Ranieri G., Albarello D., Amato A., Ruscetti M., Vesnaver A., 2001 - Metodi e prospettive per una maggiore conoscenza della crosta terrestre, *Ricerca & Futuro*, 19, pp.5.
52. de Franco R., Caielli G., Corsi A., Ponziani F., 2002 - Valutazione degli effetti di sito da dati sismologici in alcuni centri dell'Alta Valtiberina Umbra. *Ingegneria Sismica*, XIX, 1, 57-65. ISSN: 0393-1420.
53. Pergalani F., de Franco R., Compagnoni M., Caielli G., 2002 - Valutazione degli effetti di sito tramite analisi numeriche e sperimentali nell'abitato di Città di Castello: analisi, confronti, e utilizzo dei risultati. *Ingegneria Sismica*, XIX, 1/2002, 66-78. ISSN: 0393-1420.
54. Carozzo M.T., de Franco R., De Luca L., Luzio D., Primiceri R., Quarta T. & Vitale M., - 2002. Wavelet correlation filter for wide-angle seismic data. *Geophysical Prospecting*, v. 50, 547-564. <https://doi.org/10.1046/j.1365-2478.2002.00337.x>
55. Caielli G., Capizzi P., Corsi A., de Franco R., Luzio D., De Luca L., Vitale M., 2003 -Wide-angle Sea-Land connections as an integration of the CROP MARE II project -Connessione mare-terra realizzate dal gruppo Sea-Land come integrazione del progetto CROP MARE II. *Mem. Descr. Carta Geol. d'It.* LXII (2003), pp. 55-74.
56. Tondi R., de Franco R. and Biella G., 2003 - Deep and shallow solid earth structures reconstructed with sequential integrated inversion (SII) of seismic and gravity data. *Space Science Reviews*, 108, 115-130. <https://doi.org/10.1023/A:102619030>
57. Tondi R. and de Franco R., 2003. Three-dimensional modeling of Mount Vesuvius with sequential integrated inversion. *J. Geophys. Res.*, 108, 2256-2268. <https://doi.org/10.1029/2001JB001578>
58. de Franco R., Tondi R., Caielli C., Biella G., Corsi A., 2003 - 2-D Seismic modelling and 2-D seismo-gravity sequential integrated inversion along Tomoves profiles. In *The internal Structure of Mt. Vesuvius-A seismic tomography investigation*, Capuano P., Gasparini P., Zollo A., Virieux J., Casale R., Yeroyanni M. eds., Liguori, 105-116. ISBN: 9788820735036.
59. Caielli G., de Franco R., Tondi R., Barzaghi R., Biagi L., Biella G., 2003 - Deep Structure in the Vesuvius Area (Italy). in *The internal Structure of Mt. Vesuvius-A seismic tomography investigation*, Capuano P., Gasparini P., Zollo A., Virieux J., Casale R., Yeroyanni M. eds., Liguori, 329-336. ISBN: 9788820735036.
60. Zollo A., Judenherc S., Auger E., D'Auria L., Virieux J., Capuano C., Chiarabba C. de Franco R., Makris J., Michelini A. and Musacchio G., 2003 - Evidence for the buried rim of Campi Flegrei caldera from 3-d active seismic imaging. *Geophys. Res. Letters*, 30, 19, 10,1-4. <https://doi.org/10.1029/2003GL018173>
61. Bordoni P., Cultrera G., Margheriti L., Augliera P., Caielli G., Cattaneo M., de Franco R., Michelini A., Spallarossa D., 2003 - A microseismic study in a low seismicity area: the 2001 site-response experiment in the Città di Castello basin (Italy). *Annals of Geophysics*, 46, 6, 1345-1360. <https://doi.org/10.4401/ag-3478>
62. de Franco R., Berra F., Biella G., Boniolo G., Caielli G., Corsi A., Forcella F., Lazzati F., Lozej A., Morrone A., Tondi R., 2004 - Late Neogene-Quaternary evolution of the intermontane Clusone Basin (Southern Alps, Italy): integration of seismic and geological data. *Journal Quaternary Science*, 19, 4, 409-421. <https://doi.org/10.1002/jqs.845>
63. de Franco R., Bressan G. and Gentile F., 2004 - Elastic moduli and seismogenic aspects of the Friuli upper crust. *Boll. Geof. Teor. Appl.*, 45, 1-2, 71-87. [http://www3.ogs.trieste.it/bgta/pdf/bgta45.1.2\\_BRESSAN.pdf](http://www3.ogs.trieste.it/bgta/pdf/bgta45.1.2_BRESSAN.pdf)
64. Lozej A., Biella G., Boschetti M., Brivio A., Casiraghi A., de Franco R., Veronese L., 2004 - Olonium (Gera Lario) nei Pian di Spagna: Dal centro Gallo-romano all'abbandono del sito: Area di studio ed inquadramento geografico. *Rivista Archeologica dell'Antica Provincia di Como*, XVIII, 1, 47-104.
65. De Luca L., de Franco R., Biella G., Corsi A. and Tondi R., 2004 - An analysis of the first-arrival times picked on the DSS and wide-angle seismic section recorded in Italy since 1968. *Annals of Geophysics*, 47, 6, 1699-1711. <http://hdl.handle.net/2122/863>

66. Tondi R., de Franco R., 2005 - Seismic travel times inversion for 3-D structures regularized with Sobolev norms. *Inverse Problems*, **21**, 525-546. <http://dx.doi.org/10.1088/0266-5611/21/2/007>
67. de Franco R., 2005 - Multi-Refractor imaging with stacked refraction convolution section. *Geophysical Prospecting*, **53**, 335-348. <http://dx.doi.org/10.1111/j.1365-2478.2005.00478.x>
68. Capuano P., Zollo A., Auger E., Caielli G., Chiarabba C., Convertito V., D'Auria L., de Franco R., Emolo A., Judenherc S., Lovisa L., Makris J., Michelini A., Moretti M., Priolo E., Russo G., Virieux J., 2006 - Campi Flegrei active seismic experiments waveforms compilation. In *Geophysical Exploration of the Campi Flegrei (Southern Italy) Caldera' Interiors: Data, Methods and Results*, A. Zollo, P. Capuano, M. Corciulo eds. Doppiavoce, Napoli, 79-87. ISBN-10: 88-89972-04-1 ISBN-13: 978-88-89972-04-5
69. de Franco R., Caielli G., Tondi R., 2006 - 2-D P velocity models and development of refraction data imaging techniques. In *Geophysical Exploration of the Campi Flegrei (Southern Italy) Caldera' Interiors: Data, Methods and Results*, A. Zollo, P. Capuano, M. Corciulo eds. Doppiavoce, Napoli, 100-105. ISBN-10: 88-89972-04-1 ISBN-13: 978-88-89972-04-5
70. de Franco R., Tondi R., Vanorio T., Virieux J., 2006 - Joint 3D Seismo-Gravity Inversion (theoretical development). In *Geophysical Exploration of the Campi Flegrei (Southern Italy) Caldera' Interiors: Data, Methods and Results*, A. Zollo, P. Capuano, M. Corciulo eds. Doppiavoce, Napoli, 107-112. ISBN-10: 88-89972-04-1 ISBN-13: 978-88-89972-04-5
71. Tondi R., de Franco R., 2006, Accurate assessment of 3-D crustal velocity and density parameters: application to Vesuvius data sets. *Physics Earth Planetary Interiors*, **159**, 183-201. <https://doi.org/10.1016/j.pepi.2006.07.001>
72. Pergalani F., de Franco R., Compagnoni M., Caielli G., 2006 - Evaluation of site effects using numerical and experimental analyses in Citta' di Castello (Italy). *Soil Dynamics and Earthquake Engineering*, **26** (2006) 941-951. <https://doi.org/10.1016/j.soildyn.2006.02.003>
73. de Franco R., Biella G., Corsi A., Morrone A., Boniolo G., ALozej A., Saracco G., Chiozzotto B., Giada M., Barbetta M., Bassan V., Bisaglia V., Abba T., Mazzucato A, Claude C., Conchetto E., Gasparetto-Stori G., Mayer A., Rizzetto F., Tosi L., Teatini P., 2007 - Monitoraggio del cuneo salino mediante elettro-tomografia tempo variante: test site Casetta (Chioggia, Italia). In *Scientific Research and Safeguarding of Venice, CORILA Research Programme 2004.-2006*, volume 5, 207-216.
74. Biella G., de Franco R., Marsella E., Caielli G., 2007 - Deep Structures in southern Italy. Evidences from the Gargano-Pantelleria seismic refraction experiment (1971). *Boll. Soc. Geol. It., Vol. Spec. 7*, 163-175. ISBN: 1722-2818
75. de Franco R., Biella G., Tosi L., Teatini P., Rorai C., 2007 - Seasonal Oscillation in saltwater intrusion at the Venice lagoon boundary detected by time-lapse ERT. Proceedings of TIAC-SIACODE 2007, Almeria, 15-19, oct., 2007, In *Coastal Aquifer: Challenges and Solutions, Pulido-Bosch A., Lopez- Geta J.A., Ramos Gonzalez G. eds., Istituto Geologico y Minero de Espana*, **1**, 275-283. ISBN: 978-84-7840-712-5
76. Haghshenas E., Bard P.Y., Theodulidis N., Atakan K., Cara F., Cornou C., Cultrera G., Di Giulio G., Dimitriu P., Fäh D., de Franco R., Marcellini A., Pagani M., Rovelli A., Savvaidis A., Tento A., Vidal S., Zacharopoulos S., 2008 - Empirical evaluation of microtremor H/V spectral ratio. *Bull Earthquake Eng*, **6**, 75-108, <http://dx.doi.org/10.1007/s10518-007-9058-x>
77. Crespellani T., de Franco R., Marcellini A.,Maugeri, M., 2008 - A Down-Hole Experiment and Geotechnical Investigations at Fabriano, Italy. In *Terremoto e Ricarca ed. Crespellani T., Firenze University Press*, 1-8. ID: 230852, <http://dx.doi.org/10.1400/107015>
78. de Franco R., Biella G., Caielli G., Berra F., Guglielmin M., Lozej A., Piccin A., Sciunnach D., 2009 - Overview of high resolution seismic prospecting in pre-Alpine and Alpine basins, *Quaternary International*, **65-75**, <http://dx.doi.org/10.1016/j.quaint.2009.02.011>
79. de Franco R., Biella G., Tosi L., Teatini P., Lozej, A., Chiozzotto, B., Giada, M., Rizzetto, F., Claude, C., Mayer, A., Bassan, V., Gasparetto-Stori, G., 2009. Monitoring the saltwater intrusion by time lapse electrical resistivity tomography: The Chioggia test site (Venice Lagoon, Italy). *J. Appl. Geophys.* **69**, 117-130. <http://dx.doi.org/10.1016/j.jappgeo.2009.08.004>
80. Lozej A., Roffia E., de Franco R., Biella G., 2009 - Fornaci di età romana e medievale a Lonato. La vocazione artigianale di un'area. *FOLD&R: 166. www.fastionline.org/docs/FOLDER-it-2009-166.pdf*
81. Teatini P., Tosi L., Viezzoli A., de Franco R., Biella G., Tang C., 2010. - Driving the modeling of saltwater intrusion at the Venice coastland (Italy) by ground-based, water-, and air-borne geophysical investigations. Proceeding, EWRI, 2010, Providence, Rhode Island, may 16-20, 2010. [https://doi.org/10.1061/41114\(371\)125](https://doi.org/10.1061/41114(371)125)
82. de Franco R., 2011. - Refractor velocity analysis: a signal processing procedure. *Geophysical Prospecting*, <http://dx.doi.org/10.1111/j.1365-2478.2010.00931.x>
83. De Franco R., Caielli G., Biella G., Berra F., 2010 - Nota sull'acquisizione di una linea sismica ad alta risoluzione nell'area urbana di Milano: l'esperimento in Bosco in Città, *ISPRA - NOTE ILLUSTRATIVE CARTA GEOLOGICA D'ITALIA 1:50.000 foglio 118 MILANO*, a cura di V. Francani, A. Piccin, F. Berra, D. Battaglia, P. Gattinoni, I. Rigamonti, S.Rosselli, 178-185.
84. Caielli G., de Franco R. et al., 2011. - Echi sismici nella valle di San Lucano. Atti Convegno "L'armonia fra uomo e natura nelle valli Dolomitiche Aldighieri B. e Testa B. eds, Aracne editrice, 113-130. ISBN 978-88-548-4171-0. DOI: [10.4399/9788854841716](https://doi.org/10.4399/9788854841716)
85. Priolo E., de Franco R. Gruppi di lavoro OGS-IDPA, 2011 - Campagne sismometriche nell'area urbana di Perugia, in La microzonazione sismica della città di Perugia, A. Boscherini e A. Motti eds., *report POR-FESR-2007/13, Regione dell'Umbria*, ottobre 2011, 31-41.
86. Priolo E., de Franco R., Vuan A., Romanelli M., Barnaba C., Caielli G., Corsi A., Morrone A., Laurenzano G., Tento A., Sughan M., 2011 - Stima della risposta di sito per la microzonazione sismica della città di Perugia. In *Progetto STESSA: Tecniche Semplificate per la Stima dell'Amplificazione Sismica. Avanzamenti teorici e casi pratici*, M. Mucciarelli eds., 141-160, Editrice Aracne, ISBN: 978-88-548-4495-7.
87. Bressan G., Gentile G.F., Tondi R., de Franco R., Urban S., 2012 - Sequential Integrated Inversion of tomographic images and gravity data: an application to the Friuli area (north-eastern Italy). *Boll. Geof. Teor. Appl.*, **53**, 2, 191-212. ISSN: 00066729. <http://dx.doi.org/10.4430/bgta0059>
88. Scardia G., de Franco R., Muttoni G., Rogledi S., Caielli G., Carcano C., Sciunnach D., and Piccin A., 2012 - Stratigraphic evidence of a Mid-Pleistocene climate-driven flexural uplift in the Alps, *Tectonics*, <http://dx.doi.org/10.1029/2012TC003108>
89. Tallini M., Cavuoto G., Del monaco F., Di Fiore V., Mancini M., Caielli G., Cavinato GP., de franco R., Pelosi N., Rapolla A., 2012 - Seismic surveys integrated with geological data for in-depth investigation of Mt. Pettino active Fault area (Western L'Aquila Basin). *Ital. J. Geosci. (Boll. Soc. Geol. It.)*, **131**, 3 (2012), 389-402, <http://dx.doi.org/10.3301/IJG.2012.10>
90. Testa B., Aldighieri B., Bertini A., Blendinger W., Caielli G., de Franco R., Giordano D., Kustatscher E., 2013. - Geomorphodiversity of the San Lucano Valley (Belluno Dolomites, Italy): a Well-Preserved Heritage. *Geoheritage*, <http://dx.doi.org/10.1007/s12371-013-0079-3>
91. Pellizzone A., Allansdottir A., de Franco R., Muttoni G., Manzella A., 2013 - Assessment of social acceptance of geothermal Energy exploitation in Southern Italy, *Extended abstract, European Geothermal Congress*, Pisa 3-7 June 2013, 6pp.
92. Moeller S., Grevemeyer I., Ranero C.R., Berndt C., Klaeschen D., Sallares V., Zitellini N., de Franco R., 2013 - Early stage rifting of the northern Tyrrhenian Sea Basin: Results from a combined wide-angle and multichannel seismic study. *Geochemistry, Geophysics, Geosystems*, <http://dx.doi.org/10.1002/ggge.20180>
93. Inversi B., Scrocca D., Montegrossi G., Livani M., Petracchini L., Brandano M., Brillì M., Giustini F., Recanati R., Gola G., Polemio M., Romi A., de Franco R., Caielli G., Testa B., 2013 - 3D geological modelling of a fractured carbonate reservoir for the study of medium enthalpy geothermal resource in the Southern Apennines (Campania Region, Italy). *Extended abstract, European Geothermal Congress 2013* Pisa, Italy, 3-7 June 2013



94. Montanari D., Bertini G., Botteghi S., Caielli G., Caiozzi F., Catalano R., de Franco R., Doveri M., Gianelli G., Gola G., Manzella A., Minissale A., Montegrossi G., Monteleone S., Norini G., Tranchida G., Trumpy E., 2013 - Medium enthalpy geothermal systems in carbonate reservoirs, the Western Sicily example. **Extended abstract, European Geothermal Congress 2013** Pisa, Italy, 3-7 June 2013.
95. Rizzo E., Iovine G., Muto F., Pizzino L., Caputi A., Romano G., Balasco M., Giampaolo V., Votta M., Terranova O., Greco R., Iaquina P., Soleri S., Quattrocchi F., Mele G., Caielli G., Aldighieri B., de Franco R., Manzella A., 2013 - Terme Caronte geothermal area (Lamezia Terme-Calabria, Italy): preliminary results. **Extended abstract, European Geothermal Congress 2013** Pisa, Italy, 3-7 June 2013.
96. Zuffianò L.E., Palladino G., Santalòia F., Polemio M., Liotta D., Limoni P.P., Parise M., Pepe M., Casarano D., Rizzo E., Minissale A., de Franco R., 2013 - Geothermal resource in a foreland environment: the Santa Cesarea Terme thermal springs (Southern Italy). **Extended abstract, European Geothermal Congress 2013** Pisa, Italy, 3-7 June 2013.
97. Prada, M., Sallares, V., Ranero, C.R., Vendrell, M.G., Grevemeyer, I., Zitellini, N., de Franco, R., 2013 - Seismic structure of the Central Tyrrhenian basin: geophysical constraints on the nature of the main crustal domains. *Journal of Geophysical Research: Solid Earth*, <http://dx.doi.org/10.1002/2013JB010527>.
98. Brunetti E., Trezzi A., Caielli G., de Franco R., Villa A., Osella D., Di Carlo C., Matz P., 2013 - TREATMENT OF CHROMIUM VI IN THE UNSATURATED ZONE COUPLED WITH GEOPHYSICAL. **Proceedings REMTECH2013**, Ferrara 18-20, sept. 2013, pp 4.
99. Priolo E., de Franco R., Barnaba C., Boniolo G., Caielli G., Corsi A., Laurenzano G., Morrone A., Ragazzo P., Romanelli M., Tento A., 2014 - Stima della risposta sismica di sito da dati sismometrici. In La microzonazione sismica dell'area di Umbertide, A. Motti eds., **report POR-FESR-2007/13, Regione dell'Umbria**, febbraio 2014, 37-44, ISBN: 978-8-896-27719-5.
100. Priolo E., de Franco R., Barnaba C., Boniolo G., Corsi A., Laurenzano G., Morrone A., Ragazzo P., Romanelli M., Tento A., Pergalani F., Compagnoni M., 2014 - Spettri di risposta e Norme Tecniche per le Costruzioni. In La microzonazione sismica dell'area di Umbertide, A. Motti eds., **report POR-FESR-2007/13, Regione dell'Umbria**, febbraio 2014, 69-78, ISBN: 978-8-896-27719-5.
101. S. Moeller, I. Grevemeyer, C.R. Ranero, C. Berndt, D. Klaeschen, V. Sallares, N. Zitellini, R. Franco, 2014 - Crustal thinning in the northern Tyrrhenian Rift: Insights from multichannel and wide-angle seismic data across the basin, *Journal of Geophysical Research: Solid Earth* 02/2014; <http://dx.doi.org/10.1002/2013JB010431>.
102. Brunetti E., Trezzi A., Caielli G., De Franco R., Villa A., Osella D., Musso D., Di Carlo C., Matz P., 2014 - An innovative technique for the in situ treatment of hexavalent chromium within unsaturated soils. **Proceedings of FLOWPATH2014-IAH meeting**, 18-20 Jun 2014 – Viterbo (Italy, extended abstract, 12-13.
103. Cattaneo L., Giudici M., de Franco R., Mele M., Vassena C., 2014 - CHARACTERIZATION OF SUBSURFACE THROUGH JOINT HYDROGEOLOGICAL AND HYDROGEOLOGICAL MODELS. **Proceedings of FLOWPATH2014-IAH meeting**, 18-20 Jun 2014 – Viterbo (Italy, extended abstract, 130-131.
104. Crosta G. B., Castellanza R., de Franco R., Villa A., Frigerio G., Caielli G., 2015. Earth Pyramids: Precarious Structures Surviving Recurrent Perturbations. In *Engineering Geology for Society and Territory – Vol. 8, chp. 7*. Eds. G. Lollino, D. Giordan, C. Marunteanu, B. Christaras, I. Yoshinori, C. Margottini 2015, pp 59-63. ISBN: 978-3-319-09407-6 (Print) 978-3-319-09408-3 (Online). <http://dx.doi.org/10.1007/978-3-319-09408-3>.
105. Cattaneo L., Giudici M., de Franco R., Mele M., Vassena C., 2014 - CHARACTERIZATION OF SUBSURFACE THROUGH JOINT HYDROGEOLOGICAL AND HYDROGEOLOGICAL MODELS. **Proceedings of FLOWPATH2014-IAH meeting**, 18-20 Jun 2014 – Viterbo (Italy, extended abstract, 130-131.
106. Gruppo di lavoro VIGOR (R. de Franco partecipant), 2014 – La valutazione del potenziale geotermico. In **VIGOR: sviluppo geotermico nelle regioni di convergenza A. Manzella and E. Brugnoli**. Report progetto VIGOR, Intesa operativa tra MISE-DGNRE POI Energie Rinnovabili e Risparmio Energetico 2007-2013. Edizioni CNR –IGG Area di Ricerca di Pisa, ISBN: 9788879580113, 1-56.
107. de Franco R., Pellizzone A., Manzella A., Muttoni G. and Allansdottir A., 2014 – VIGOR: Accettabilità sociale della geotermia. Il caso di Termini Imerese. In **VIGOR: sviluppo geotermico nelle regioni di convergenza A. Manzella and E. Brugnoli**. Report progetto VIGOR, Intesa operativa tra MISE-DGNRE POI Energie Rinnovabili e Risparmio Energetico 2007-2013. Edizioni CNR –IGG Area di Ricerca di Pisa, ISBN: 9788879580113, 141-159.
108. Beretta G.P., Caielli G., Carcano C., De Franco R., Gelati R., Miletta S., Premoli Silva I., Rogledi S., Rovida A., Strini A., Stucchi M., Tremolada F., Vezzoli G., 2014 - Note illustrative della Carta Geologica D'Italia Foglio 096 Seregno. **Fogli della Carta Geologica d'Italia 1:50000: Foglio 096 Seregno, a cura di Bini A., Sciunnach D., Bersezio R., Scardia G., Tomasi F. ISPRA – Servizio Geologico D'Italia**, pp 190. [http://www.isprambiente.gov.it/Media/carg/note\\_illustrative/96\\_Seregno.pdf](http://www.isprambiente.gov.it/Media/carg/note_illustrative/96_Seregno.pdf).
109. Pellizzone A., Allansdottir A., de Franco R., Muttoni G., Manzella A., 2015 - Exploring public engagement with geothermal energy in southern Italy: A case study, *Energy Policy*, 85, 1-11, <http://dx.doi.org/10.1016/j.enpol.2015.05.002>
110. Norini G., Gropelli G., Sulpizio R., Carrasco-Núñez G., Dávila-Harris P., Pelliccioli C., Zucca F., de Franco R., 2015 - Structural analysis and thermal remote sensing of the Los Humeros Volcanic Complex: Implications for volcano structure and geothermal exploration. *Journal of Volcanology and Geothermal Research*, 301, 221 –237. <http://dx.doi.org/10.1016/j.jvolgeores.2015.05.014>
111. Prada M., Sallares V., Ranero C.R., Vendrell M.G., Grevemeyer I., Zitellini N., de Franco R., 2015 - The complex 3-D transition from continental crust to backarc magmatism and exhumed mantle in the Central Tyrrhenian basin. *Geophysical Journal International*, 203, 1, 63-78. <http://dx.doi.org/10.1093/gji/ggv271>
112. de Franco R., Caielli G., Morrone A., Petrucci B., 2015 – Imaging and Tomographic Interpretations of Seismic Refraction Data for Near Surface Basement Assessment in Somaliland. Paper **Proceedings of Near Surface Geoscience 2015**-21st European Meeting of Environmental and Engineering Geophysics, Torino, 6-10/09/201. <http://dx.doi.org/10.3997/2214-4609.201413758>
113. de Franco R., Caielli G., Villa A., Agliardi F., Franchino F., 2016 - Ground-penetrating radar refraction imaging with stacked refraction convolution section method, *Geophysics* 81 (5), H33-H45; <http://dx.doi.org/10.1190/geo2015-0475.1>
114. Pellizzone A., Allansdottir A., De Franco R., Muttoni G., Manzella A., 2017 - Geothermal energy and the public: A case study on deliberative citizens' engagement in central Italy, *Energy Policy* 101, 561-570; <http://dx.doi.org/10.1016/j.enpol.2016.11.013>
115. Gola G., Bertini G., Bonini M., Botteghi S., Brogi A., De Franco R., Dini A., Donato A., Gianelli G., Liotta D., Manzella A., Montanari D., Montegrossi G., Petracchini L., Ruggieri G., Santilano A., Scrocca D., Trumpy E., 2017 - Data integration and conceptual modelling of the Larderello geothermal area, Italy *Energy Procedia*, 125, 300-309, <http://dx.doi.org/10.1016/j.egypro.2017.08.201>.
116. Mirabella F., Bucci F., Santangelo M., Cardinali M., Caielli G., De Franco R., Guzzetti F., Barchi M.R., 2018 - Alluvial fan shifts and stream captures driven by extensional tectonics in central Italy. *Journal of the Geological Society*, <https://doi.org/10.1144/jgs2017-138>
117. Prada M., Sallares V., Ranero C.R., Vendrell M.G., Grevemeyer I., Zitellini N., de Franco R., 2018 - Spatial variations of magmatic crustal accretion during the opening of the Tyrrhenian back-arc from wide-angle seismic velocity models and seismic reflection images, *Basin Research*; <http://dx.doi.org/10.1111/bre.12211>
118. De Franco R., 2018 - RRI la coltivazione dei campi della conoscenza e dell'innovazione. In Scienziati in affanno? **Ricerca e Innovazione Responsabili (RRI) in teoria e nelle pratiche**; eds Alba L'Astorina e Monica Di Fiore, 137-140, Editore Cnr Edizioni. <http://doi.irea.cnr.it/scienziati-in-affanno-ricerca-e-innovazione-responsabili-rri-in-teoria-e-nelle-pratiche/>.
119. de Franco R., Caielli G., Mollica R., Norini G., Aghib F.S., Di Capua A., Boniolo G., Corsi A., Piccin A., Facciorusso J., Martelli L., 2019 - Geophysical characterization of liquefaction-prone areas: The Quistello test site, central Po Plain, Northern Italy, *Soil Dynamics and Earthquake Engineering*, 116, 130-144. <https://doi.org/10.1016/j.soildyn.2018.10.001>



120. de Franco R., Petracchini L., Scrocca D., Caielli G., Montegrossi G., Santilano A., Manzella A., 2019 - Synthetic Seismic Reflection Modelling in a Supercritical Geothermal System: An Image of the K-Horizon in the Larderello Field (Italy). *Geofluids* 2019(3):1-21. <http://dx.doi.org/10.1155/2019/8492453>
121. de Franco R., Petracchini L., Scrocca D., Caielli G., Montegrossi G., Santilano A., Manzella A., 2019 - SYNTHETIC SEISMIC REFLECTION MODELLING IN THE SUPERCRITICAL GEOTHERMAL SYSTEM OF THE LARDERELLO FIELD (ITALY). Contribution in Proceeding of European Geothermal Congress 2019 Den Haag, The Netherlands, 11-14 June 2019, pp. 9.
122. Pacor F., Felicetta C., Di Giulio G., Lanzano G., Luzi L., Milana G., Cultrera G., Cara F., Famiani D., Hailemikael S., Gaudiosi I., Moscatelli M., Spallarossa D., De Franco R., Gallipoli M.R., Pergalani F., 2019 - Site amplifications in the epicentral area of the 2016, M 6, Amatrice earthquake (Italy). *Earthquake Geotechnical Engineering for Protection and Development of Environment and Constructions: Proceedings of the 7th International Conference on Earthquake Geotechnical Engineering – Silvestri & Moraci (Eds), (ICEGE 2019), June 17-20, 2019, Rome, Italy. ISBN 978-0-367-14328-2*
123. Cara F., Cultrera G., Riccio G., Amoroso S., Bordoni P., Bucci A., D'Alema E., D'Amico M., Cantore L., Carannante S., Cogliano R., Di Giulio G., Di Naccio D., Famiani D., Felicetta C., Fodarella A., Franceschina G., Lanzano G., Lovati S., Luzi L., Mascandola C., Massa M., Mercuri A., Milana G., Pacor F., Piccarreda D., Pischiutta M., Pucillo S., Puglia R., Vassallo M., Boniolo G., Caielli G., Corsi A., de Franco R., Tento A., Bongiovanni G., Hailemikael S., Martini G., Paciello A., Peloso A., Poggi F., Verrubbi V., Gallipoli M. R., Stabile T. A., Mancini M., 2019 - Temporary dense seismic network during the 2016 Central Italy seismic emergency for microzonation studies. *Nature Scientific Data*, (2019) 6:182. <https://doi.org/10.1038/s41597-019-0188-1>
124. Caielli G., de Franco R., Di Fiore V., Albarello D., Catalano S., Pergalani F., Cavuoto G., Cercato M., Compagnoni M., Facciorusso J., Famiani D., Ferri F., Imposa S., Martini G., Paciello A., Paolucci E., Passeri F., Piscitelli S., Puzilli L. M., Vassallo M., 2020. Extensive surface geophysical prospecting for seismic microzonation. *Bulletin of Earthquake Engineering*, <https://doi.org/10.1007/s10518-020-00866-4>
125. Mollica R., de Franco R., Caielli G., Boniolo G., Crosta GB., Motti A., Villa A., Castellanza R., 2020. Micro electrical resistivity tomography for seismic liquefaction study. *Journal of Applied Geophysics*, <https://doi.org/10.1016/j.jappgeo.2020.104124>
126. Di Fiore V., Albarello D., Cavuoto G., de Franco R., Pelosi N., Punzo M., Tarallo D., 2020. Downhole seismic wave velocity uncertainty evaluation by theoretical simulation and experimental data acquired during the seismic microzonation of Central Italy. *Soil Dynamic Earthquake Engineering*, 138, 106319, <https://doi.org/10.1016/j.soildyn.2020.106319>
127. Prada M., Ranero C.R., Sallares V., Grevenmeyer I., de Franco R., Gervasi A., Zitellini N., 2020. The structure of Mediterranean arcs: New insights from the Calabrian Arc subduction system. *Earth and Planetary Science Letters*, 548, 116480, <https://doi.org/10.1016/j.epsl.2020.116480>
128. Norini G., Aghib F.S., Di Capua A., Facciorusso J., Castaldini D., Marchetti M., Cavallin A., Pini R., Ravazzi C., Zuluaga M.C., Aldighieri B., Furlanetto G., Testa B., de Franco R., Caielli G., Gropelli G., Boniolo G., Corsi A., Baraldi F., Piccin A., 2021; Assessment of liquefaction potential in the central Po plain from integrated geomorphological, stratigraphic and geotechnical analysis, *Engineering Geology*. <https://doi.org/10.1016/j.enggeo.2021.105997>
129. Tomassi A., Trippetta F., de Franco R., Ruggieri R., 2022. From petrophysical properties to forward-seismic modeling of facies heterogeneity in the carbonate realm (Majella Massif, central Italy). *Journal of Petroleum Science and Engineering*, 2022, <https://doi.org/10.1016/j.petrol.2022.110242>