Giovanni CAMANNI
CURRICULUM VITAE (updated to April 2026)

PERSONAL DATA

Name and surname: Giovanni Camanni
Date and place of birth: March 2nd, 1985, Torino (Italy)
Nationality: Italian

CURRENT POSITION AND CONTACT ADDRESS

Associate Professor in Structural Geology and Tectonics (since Nov 2024)
Department of Chemical and Geological Sciences
University of Modena and Reggio Emilia
Via Campi, 103
41125, Modena (Italy)
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PREVIOUS POSITIONS

Jun 2019 - Jun 2024:
Research Fellow (ricercatore a tempo determinato, RTD-A)
Dipartimento di Scienze della Terra, dell'Ambiente e delle Risorse (DiSTAR)
Università degli Studi di Napoli Federico II

Jun 2015 - Dec 2018:
Postdoctoral Research Fellow
Fault Analysis Group, School of Earth Sciences
University College Dublin (Ireland)
Resarch topic: *Quantification of 3D fault zone geometries and their incorporation in modelling practice*
Supervision: Dr. Conrad Childs, Prof. John Walsh, Prof. Tom Manzocchi

EDUCATION

Nov 2010 - Oct 2014:
PhD, Institute of Earth Sciences 'Jaume Almera', CSIC (Barcelona, Spain)/University of Barcelona (Spain)
October 20th, 2014: PhD Degree in Geology (grade Excellent with Honours)
Thesis title: *The structure of the south-central Taiwan thrust belt*
Supervision: Prof. Dennis Brown, Dr. Joaquina Alvarez-Marron

Aug 2008 - Oct 2010:
MSc, Geology, University of Torino (Italy)
October 6th, 2010: MSc Degree in Geology (grade 110/110 with Honours)
Thesis title: *Geological-structural analysis and 3D modelling of the Fontane Talc Mineralization (Germanasca Valley, Inner Western Alps)*

Sept 2004 - Mar 2008:
BSc, Geology, University of Torino (Italy)
March 26th, 2008: BSc Degree in Geology (grade 108/110)
Thesis title: *Structural analysis of the southern sector of the Lanzo Ultramafic Complex (Susa Valley, Inner Western Alps)*

PRIMARY SCIENTIFIC INTERESTS

- 2D and 3D structure and growth of faults
- Convergent margins; structure, kinematics and evolution of fold-and-thrust belts
- Divergent margins

- Propagation of earthquake ruptures on geometrically complex faults

CURRENT TEACHING ACTIVITIES

Structural Geology and Tectonics, BSc
Geological Mapping, BSc
Seismic sources and microzonation, MSc

ONGOING PARTICIPATION IN UNIVERSITY COMMITTEES

PhD Course in Models and Methods for Material and Environmental Sciences
University of Modena and Reggio Emilia
Web: https://www.m3es.unimore.it/site/home.html

ONGOING PARTICIPATION IN EDITORIAL BOARDS

Geology (Geological Society of America, GSA)
Web: https://www.geosociety.org/GSA/gsa/pubs/geology/edBoard_Geology.aspx

PRIZES

Journal of Structural Geology Best Paper of the Year Award 2024
Web: https://www.sciencedirect.com/journal/journal-of-structural-geology/about/awards/journal-of-structural-geology-best-paper-of-the-year-award-2024

RESEARCH UNIQUE IDENTIFIERS

Scopus (https://www.scopus.com/authid/detail.uri?authorId=55270119200)
Scopus iD: 55270119200
Web of Science (WOS) (https://www.webofscience.com/wos/author/record/AAL-6696-2020)
WOS iD: AAL-6696-2020
Orcid: (https://orcid.org/0000-0001-9690-2583)
Orcid iD: 0000-0001-9690-2583

LIST OF PUBLICATIONS

1. **Camanni, G**., Pandey, D. K., Ye, Q. (2026) - *Emerging knowledge on the evolution, structure and resource distribution of the northern South China Sea continental margin*. Journal of the Geological Society, London, vol. 183, doi: 10.1144/jgs2025-246

2. Scotto di Uccio, F. Muzellec, T., Scala, A., De Landro, G., **Camanni, G**., Carotenuto, F., Elia, L., Picozzi, M., Zollo, A., Strumia, C., Beroza, G. C., Festa G. (2026) - *Enhancing the resolution of microseismicity through dense array monitoring in complex extensional settings*. Scientific Reports, vol. 16, doi: 10.1038/s41598-026-35586-3

3. **Camanni, G**., Delogkos, E., Tavani, S., Piegari, E., Kösen, M. (2026) - *Asymmetric growth of strike-slip faults controlled by 3-D fault structure: Insights from the Mw 7.8 2023 Kahramanmaraş (Turkey) earthquake*. Geology, vol. 54 (3), pp. 215-219, doi: 10.1130/G53724.1

4. Sorrentino, A., Asadzadeh, S., **Camanni, G.**, Carotenuto, F., Chabrillat, S., Gleeson, A. G., Balassone, G., Mondillo, N. (2026) - *Hyperspectral remote sensing study of the structurally-controlled Zn mineralization in the Flinders Ranges, South Australia*. Mineralium Deposita, vol. 61, pp. 699–726, doi: 10.1007/s00126-025-01407-2

5. Long, W., Li, Z., Wang, Y., Almeida, R., **Camanni, G.,** Sun, C., Wang, W., Wu, C., Dai, X., Sun, W., Wu, X., Wu, L., Lin, J., Zhang, P. (2025) - *Role of Active Folding in Rupture Arrest of a Great Thrust Earthquake*. Geophysical Research Letters, doi: 10.1029/2025GL117527

6. Weert, A., **Camanni, G.**, Mercuri, M., Ogata, K., Vinci, F., Tavani, S. (2025) - *Displacement analysis of basin-scale reactivated normal faults: insights from the West Netherlands Basin*. Journal of Structural Geology, vol. 192, doi: 10.1016/j.jsg.2025.105356

7. Muzellec, T., De Landro, G., **Camanni, G.**, Adinolfi, G. M., and Zollo, A. (2025) - *The complex 4D multi-segmented rupture of the 2014 Mw 6.2 Northern Nagano Earthquake revealed by high-precision aftershock locations*. Tectonophysics, vol. 898, doi: 10.1016/j.tecto.2025.230641

8. Diamanti R., Vitale S., Russo G., Vitale E., and **Camanni, G**. (2025) - *Deformation mechanisms and geometries of superposed fault zones in dolostones.* Geological Society of America Bulletin, vol. 137 (5-6), doi: 10.1130/B37534.1

9. **Camanni, G**., De Landro, G., Mazzoli, S., Michele, M., Muzellec, T., Ascione, A., Schaff, D., P., Tarantino, S., Zollo, A. (2025) - *Remobilization of inverted normal faults drives active extension in the axial zone of the southern Apennines mountain belt (Italy)*. Journal of the Geological Society, vol. 182 (2), doi: 10.1144/jgs2024-184

10. Diamanti, R., Muhammad, A., **Camanni, G**., D'Antonio, M., Della Porta, G., Di Renzo, V., Graziano, S., F., Iannace, A., Kylander-Clark, A., Vitale, E., and Vitale, S (2025) - *Fault-controlled saddle dolomitization during the late Triassic Pangea breakup in the southern Adria domain (Southern Italy)*. Marine and Petroleum Geology, vol. 173, doi: 10.1016/j.marpetgeo.2024.107216

11. Piegari E., **Camanni, G**., Mercurio, M., and Marzocchi, W. (2024) - *Illuminating the Hierarchical Segmentation of Faults through an Unsupervised Learning Approach applied to clouds of earthquake hypocenters.* Earth and Space Science, vol. 11, doi: 10.1029/2023EA003267

12. Brown, D., **Camanni, G.**, Kuo-Chen, H., and Alvarez-Marron, J. (2024) - *A petrophysical study of the composition of Taiwan's middle and lower crust.* Tectonophysics, vol. 870, doi: 10.1016/j.tecto.2023.230160

13. **Camanni, G**., Freda, G., Delogkos, E., Nicol, A., and Childs, C. (2023) - *3D geometry and displacement transfer of an oblique relay zone on outcropping normal faults*. Journal of Structural Geology, vol. 177, doi: 10.1016/j.jsg.2023.105001

14. **Camanni, G**., Childs, C., Delogkos, E., Roche, V., Manzocchi, T., and Walsh, J. (2023) - *The role of antithetic faults in transferring displacement across contractional relay zones on normal faults*. Journal of Structural Geology, vol. 168, doi: 10.1016/j.jsg.2023.104827

15. Natale, J., **Camanni, G.**, Ferranti, L., Isaia, R., Sacchi, M., Spiess, V., Steinmann, L., and Vitale, S. (2022) - *Fault systems in the offshore sector of the Campi Flegrei caldera (southern Italy): Implications for nested caldera structure, resurgent dome, and volcano-tectonic evolution*. Journal of Structural Geology, vol. 163, doi: 10.1016/j.jsg.2022.104723

16. Diamanti, R., **Camanni, G.**, Natale, J., and Vitale, S. (2022) - *A gravitational origin for volcano-tectonic faults in the Campi Flegrei caldera (southern Italy) inferred from detailed field observations*. Journal of Structural Geology, vol. 161, doi: 10.1016/j.jsg.2022.104671

17. Brown, D., Alvarez-Marron, J., **Camanni, G.**, Biete, C., Kuo-Chen, H, and Wu, Y.-M. (2022) - *Structure of the south-central Taiwan fold-and-thrust belt: Testing the viability of the model.* Earth-Science Reviews, vol. 231, doi: 10.1016/j.earscirev.2022.104094

18. Ye, Q., Mei, L., Jiang,D., Xu, X., Delogkos, E., Zhang, L., and **Camanni, G.** (2022) - *3D Structure and Development of a Metamorphic Core Complex in the Northern South China Sea Rifted Margin.* Journal of Geophysical Research: Solid Earth, vol. 127 (2), doi: 10.1029/2021JB022595

19. **Camanni, G**., and Ye, Q. (2022) - *The significance of fault reactivation on the Wilson cycle undergone by the northern South China Sea area in the last 60 Myr*. Earth-Science Reviews, vol. 225, doi: 10.1016/j.earscirev.2021.103893

20. **Camanni, G**., Vinci, F., Tavani, S., Ferrandino, V., Mazzoli, S., Corradetti, A., Parente, M., and Iannace. A. (2021) - *Fracture density variations within a reservoir-scale normal fault zone: A case study from shallow-water carbonates of southern Italy*. Journal of Structural Geology, vol. 151, doi: 10.1016/j.jsg.2021.104432

21. Valente, E., Allocca, V., Riccardi, U., **Camanni, G.**, and Di Martire, D. (2021) - *Studying a Subsiding Urbanized Area from a Multidisciplinary Perspective: The Inner Sector of the Sarno Plain (Southern Apennines, Italy)*. Remote Sensing, vol. 13 (16), doi: 10.3390/rs13163323

22. Roche, V., **Camanni, G.**, Childs, C., Manzocchi, T., Walsh, J., Conneally, J., Saqab, M. M., and Delogkos, E. (2021) - *Variability in the three-dimensional geometry of segmented normal fault surfaces.* Earth-Science Reviews, vol. 216, doi: 10.1016/j.earscirev.2021.10352

23. Tavani, S., Granado, P., Corradetti, A., **Camanni, G.,** Vignaroli, G., Manatchal, G., Mazzoli, M., Munoz, J., A., and Parente, M. (2021) - *Rift inheritance controls the switch from thin- to thick-skinned thrusting and basal décollement re-localization at the subduction-to-collision transition*. Geological Society of America Bullettin, vol. 133 (9-10), pp. 2157-2170, doi: 10.1130/B35800.1

24. Delogkos, E., Manzocchi, T., Childs, C., **Camanni, G.**, and Roche, V. (2020) - *The 3D structure of a normal fault from multiple outcrop observations*, Journal of Structural Geology, vol. 136, doi: 10.1016/j.jsg.2020.104009

25. Tavani, S., **Camanni, G**., Nappo, M., Snidero, M., Ascione, A., Valente, E., Gharabeigli, G., Morsalnejad, D., and Mazzoli S. (2020) - *The Mountain Front Flexure in the Lurestan region of the Zagros belt: crustal architecture and role of structural inheritances*. Journal of Structural Geology, vol. 135, doi: 10.1016/j.jsg.2020.104022

26. Ye, Q., Mei, L., Shi, H., Du, J., Deng, P., Shu, Y., and **Camanni, G.** (2020) - *The influence of pre-existing basement faults on the Cenozoic structure and evolution of the proximal domain, northern South China Sea rifted margin.* Tectonics, vol. 39 (3), doi: 10.1029/2019TC005845

27. Roche, V., Childs, C., Madritsch, H., and **Camanni, G.** (2020) - *Layering and structural inheritance controls on fault zone structure in three dimensions: A case study from the northern Molasse Basin, Switzerland*. Journal of the Geological Society, London, vol. 177 (3), pp. 493-508, doi: 10.1144/jgs2019-052

28. **Camanni, G.**, Roche, V., Childs, C., Manzocchi, T., Walsh, J., Conneally, J., Saqab, M. M., and Delogkos, E. (2019) - *The three-dimensional geometry of relay zones within segmented normal faults.* Journal of Structural Geology, vol. 129, doi: 10.1016/j.jsg.2019.103895

29. **Camanni, G**. (2019) - *From competition to collaboration*. Science, vol. 363, pp. 422, doi: 10.1126/science.363.6425.422

30. Ye, Q., Mei, L., Shi, H., **Camanni, G**., Shu, Y., Wu, J., Yu, L., Deng, P., and Li, G. (2018) - *The Late Cretaceous tectonic evolution of the South China Sea area: An overview, and new perspectives from 3D seismic reflection data.* Earth-Science Reviews, vol. 187, pp. 186-204, doi: 10.1016/j.earscirev.2018.09.013

31. Ye, Q., Mei, L., Shi, H., Yu, S., **Camanni, G**., and Wu, J. (2018) - *A low-angle normal fault and basement structures within the Enping Sag, Pearl River Mouth Basin: insights into late Mesozoic to early Cenozoic tectonic evolution of the South China Sea area*. Tectonophysics, vol. 731-732, pp. 1-16, doi: 10.1016/j.tecto.2018.03.003

32. Brown, D., Alvarez-Marron, J., Biete, C., Kuo-Chen, H, **Camanni, G.**, and Ho, C.-W. (2017) - *How the structural architecture of the Eurasian continental margin affects the structure, seismicity, and topography of the south-central Taiwan fold and thrust belt.* Tectonics, vol. 36 (7), pp. 1275-1294, doi: 10.1002/2017TC004475

33. Cadoppi, P., **Camanni, G.,** Balestro, G., and Perrone, G. (2016) - *Geological map of the Fontane Talc Mineralization (Germanasca Valley, Italian Western Alps)*. Journal of Maps, vol. 12 (5), pp. 1170-1177, doi: 10.1080/17445647.2016.1142480. **Include carta geologica** "Geological map of the Fontane talc mineralization (Germanasca valley, Italian Western Alps)" a scala 1:5,000.

34. Camanni, G., Alvarez-Marron, J., Brown, D., Ayala, C., Wu, Y.-M., and Hsieh, H.-H. (2016) - *The deep structure of south-central Taiwan illuminated by seismic tomography and earthquake hypocentres data*. Tectonophysics, vol. 679, pp. 235-245, doi: 10.1016/j.tecto.2015.09.016

35. Alvarez-Marron, J., Brown, D., **Camanni, G.**, Wu, Y.-M., and Kuo-Chen, H. (2014) - *Structural complexities in a foreland thrust belt inherited from the shelf-slope transition: Insights from the Alishan area of Taiwan.* Tectonics, vol. 33 (7), pp. 1322-1339, doi: 10.1002/2014TC003584

36. **Camanni, G.**, Chen, C.-H., Brown, D., Alvarez-Marron, J., Wu, Y.-M., Chen, H.-A., Huang, H.-H., Chu, H.-T., Chen, M.-M., and Chang, C.-H. (2014) - *Basin inversion in central Taiwan and its importance for seismic hazard*. Geology, vol. 42 (2), pp. 147-150, doi: 10.1130/G35102.1

37. **Camanni, G.**, Brown, D., Alvarez-Marron, J., Wu, Y.-M., and Chen, H.-A. (2014) - *The Shuilikeng fault in the central Taiwan mountain belt*. Journal of the Geological Society, London, vol. 171 (1), pp. 117-130, doi: 10.1144/jgs2013-014

38. Brown, D., Alvarez-Marron, J., Schimmel, M., Wu, Y.-M., and **Camanni, G.** (2012) - *The structure and kinematics of the central Taiwan mountain belt derived from geological and seismicity data*. Tectonics, vol. 31 (5), doi: 10.1029/2012TC003156