

GEOSED NEWSLETTER

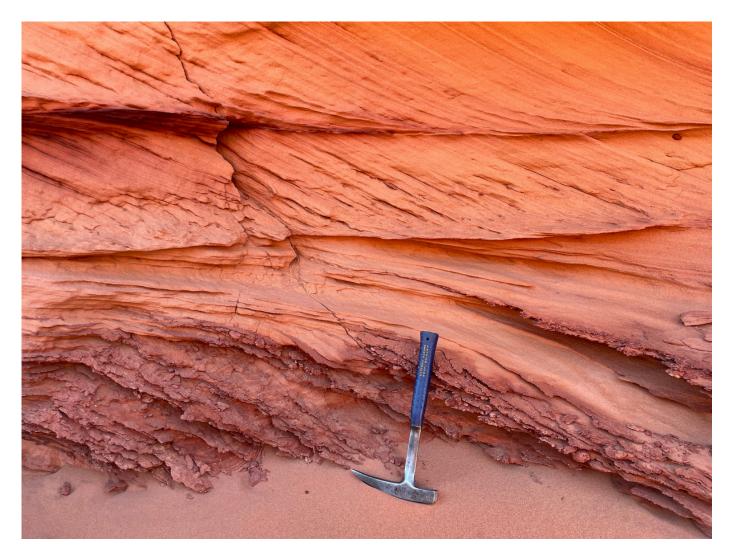


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Opening letter

Dear GeoSed members and sympathisers, I am glad to send you the GeoSed Newsletter of 2025!

As you already know since it is the third edition, the Newsletter is our tool to share, in a simple and informal way, the ongoing projects and the most recent research of GeoSed members who accept to participate.







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As usual, we must say that it does not offer an exhaustive picture of all the sedimentological and stratigraphic researches going on in Italy, but it surely portrays an active and diverse community involved in different projects, from curiosity-driven to applied research, from highly very specific to multidisciplinary. In this number, we congratulate Marianna Cicala as winner of the Best Fieldtrip guide.

Furthermore, we invite you all to the several Congresses that will be held in Italy and Europe in 2025 and that will focus completely, or partly, on sedimentological and stratigraphical themes.

Waiting to see you all in the next meetings, I invite you to enjoy the newsletter!

Best

Irene Cornacchia on behalf of the GeoSed Committee

This number has been edited by Irene Cornacchia.

Cover photo: Fluvial cross bedding in the Cenomanian succession of South-eastern Morocco. Photo by Anna Breda.







GeoSed Awards Winners

Winner for the best Fieldtrip Guide

Marianna Cicala has been awarded for the Best Fieldtrip guide entitled "From the Apulia Foreland to the Bradanic Trough: A one-day geological field trip "jumping" from Cretaceous to Pleistocene in the Murge area (Puglia, southern Italy)".



News and upcoming events

Congresses and Workshops

- The XVI GeoSed Meeting will be held in Rende (CS), from 10 to 13 June, 2025. <u>Deadline for abstract submission: April 11, 2025.</u>
- The next **AIQUA Meeting** "Storie quaternarie e territori in evoluzione" will be held in Perugia, 26-27 Maggio 2025, Università degli Studi di Perugia. <u>Deadline for abstract submission: April 16 2025.</u>
- The **38th International Meeting of Sedimentology** (IAS) will be held in Huelva (Spain), from 26 ot 28 June, 2025.
- The **12th International Cretaceous Symposium** will be held in Leibniz University of Hannover (Germany) from August 31 to September 5. <u>Deadline for abstract submission:</u> <u>April 29 2025.</u>
- The next joint SIMP-SGI Congress will be held in Padova, from 16 to 18 September, 2025.
 Deadline for abstract submission May 5, 2025.

Open calls for young members

- Is still open the call for "Best publication of young researchers". <u>Deadline to partecipate is May 10, 2025</u>. For further information click on the following link:
 https://www.socgeol.it/N6528/premio-migliore-pubblicazione-giovani-ricercatori-bando-di-concorso-anno-2025.html
- **"60 seconds to Earth (science)"** is still open for PhD students who want to tell their research trhough a 60 seconds-long video that will be shared on our social media. The winner will attend the XVI Geosed Meeting for free. For further information check our social media or contact Luigi Bruno at luigi.bruno@unimore.it. <u>Deadline for sending a video: April 1, 2025.</u>







Sabrina Amodio (Department of Science and Technology, the Parthenope University of Naples). Research group: GEAC -GEologia degli Ambienti Costieri website: http://dist.altervista.org/geac/index.html

- Stratigraphy, sedimentology and biofacies of shallow-marine carbonates, Jurassic and Cretaceous, southern Apennines.
- Geological mapping of Meso-Cenozoic platform-to slope carbonate deposits for the CARG Project.
- Quaternary stratigraphy and sedimentology of alluvial-coastal plains. Sedimentary dynamics and controlling factors on their stratigraphic architecture. Geo-indicators of the past SL. Landscape reconstructions.

Anna Breda (Department of Geosciences - University of Padova)

• Sedimentology and sequence stratigraphy of clastic and mixed carbonate-siliciclastic sedimentary successions of continental to shallow-marine environments. My studies are strongly based on field work supported by geochemical and petrographic analysis and aim to reconstruct paleoenvironments and their evolution with time, and to understand how climate changes and local tectonics interact driving sedimentary patterns and influencing environmental conditions and related ecosystems.

Bruno Campo (Department of Biological, Geological, and Environmental Sciences - BiGeA, University of Bologna)

Research Group: Sequence stratigraphy and Paleoecology of the Quaternary Record Website: https://bigea.unibo.it/en/research/research-groups/sequence-stratigraphy-and-paleoecology-of-the-quaternary-record

High-resolution stratigraphic reconstructions of clastic Quaternary successions through a
multi-proxy approach based on sedimentological, palaeontological, geotechnical, geophysical
and petrophysical data. Modern sequence stratigraphic concepts are used for their
interpretation. Investigations are carried out from river catchments via coastal plain and shelf
sectors, for sediment routing systems evaluation, identification and 3D reconstruction of
potential aquifers stored in the sub seafloor.

Enrico Capezzuoli (Earth Sciences Department – University of Florence)

- Study of continental carbonate deposits derived from mineral waters (travertine, tufa, sinter...) and their relationship with tectonics, climate and geothermal energy.
- Stratigraphic/sedimentological characterization of the Palaeozoic basement of the Northern Apennines: implications in the orogenic architecture and correlation with coeval deposits in Italy and abroad.

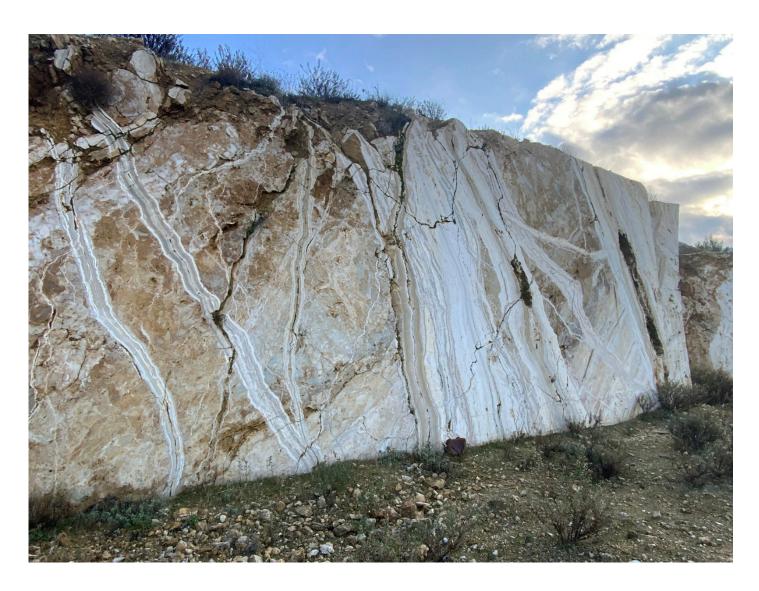






Paola Cipollari, Domenico Cosentino, Anas Abbassi, Federico Artegiani, Selma Sari, Simone Racano (Department of Sciences, Roma Tre University)

- Study of Neogene successions of the Mediterranean area.
- Analysis of syn-tectonic sedimentary basins related to the Apennine orogeny.
- Messinian salinity crisis in the Mediterranean area.
- Geological mapping.
- Calcareous nannofossil biostratigraphy.



Network of calcite veins in travertines near Alaşehir (TK). Photo by Enrico Capezzuoli







Irene Cornacchia (Consiglio Nazionale delle Ricerche)

- Facies and microfacies studies on Cenozoic Tethyan shallow-water carbonates.
- Carbon and oxygen isotope stratigraphy for paleoclimatic studies and carbon cycle perturbations identification during the Cenozoic.
- Study of the Sr and Nd isotope systematics across the Miocene, Central Mediterranean carbonate records for paleoceanographic reconstructions.

Emilia Le Pera (Department of Biology, Ecology and Earth Sciences DiBEST - University of Calabria)

 Ancient sandstone and modern sand petrology: provenance, weathering efficacy, source rock lithotypes and sand generation index, transport and depositional environment controls on composition/texture of siliciclastic sand(stones). Main field study areas are Italy, Spain, Portugal, California, India, Brazil, Switzerland, Norway, Cape Verde archipelago (Atlantic Ocean), Aeolian archipelago (Tyrrhenian Sea), Azores Islands, Canary Islands.

Alessandro Mancini (Università degli Studi di Roma La Sapienza)

- Geological mapping of the Cretaceous carbonate platform deposits of the Ausoni Mts. (CARG Sheet 414_Terracina).
- Facies analysis and reconstruction of the depositional geometries.
- Study of continental carbonates deposits. Geochemistry, facies analysis and stratigraphic reconstruction.
- Study of the relationships between continental calcium carbonate precipitation, geogenic
- CO2 emissions in subaerial setting and volcanic activity.

Marco Mancini (Consiglio Nazionale delle Ricerche)

 Physical stratigraphy and sedimentology of terrigenous and mixed carbonate-siliciclastic alluvial, coastal and lacustrine depositional systems: their mapping and implications on natural risks' assessment and palaeo-environmental reconstructions.

Ivan Martini (Department of Physical, Earth and Environmental Science, University of Siena) Team: Allegra Burgassi, Tommaso Luzzetti (PhDs)

- Ancient and present deltaic systems (depositional processes, lateral facies variations, stratigraphic architectures, auto- and allo-cyclic controlling factors).
- Coastal dynamics and beach erosion processes.
- Cave clastic sedimentation.







Luca Martire, Anna d'Atri, Carlo Bertok (Department of Earth Sciences, University of Turin)

- Petrographic, geochemical and geochronologic study of fossil hydrothermal systems associated to sulfide, fluorite and barite mineralizations in the Triassic carbonate successions of two mining districts in the Southalpine Domain (Pian dei Resinelli, Lecco; Gorno, Bergamo).
- Stratigraphic, petrographic and geochemical study of diagenetic processes (dolomitization, silicization) associated to hydrothermal circulation in Mesozoic extensional settings in the Briançonnais and Pre-Piemontese Domains of the Ligurian Alps.
- Petrography of sedimentary rocks applied to cultural heritage artifacts made of stone materials.

Veronica Rossi (Department of Biological, Geological and Environmental Sciences, University of Bologna)

Research Group: Sequence stratigraphy and Paleoecology of the Quaternary Record Website: https://bigea.unibo.it/en/research/research-groups/sequence-stratigraphy-and-paleoecology-of-the-quaternary-record

- Depositional dynamics and environmental changes in the coastal-shelf segment during the Quaternary: bio-sedimentary patterns and controlling factors.
- Multiple paleovalley systems: stratigraphic architecture and forcing factors.
- Holocene flood record within terrestrial and marine archives.

"Sedimentary Basin Evolution" Research Group – DiBEST's Group Rocco Dominici, Adriano Guido, Francesco Muto, Francesco Perri. (Department of Biology, Ecology and Earth Sciences DiBEST - University of Calabria)

- Sedimentology, architectural and paleoenvironmental analysis of ancient and modern sedimentary successions and quantitative approaches to the sediment routing systems.
- Stratigraphic, tectonic, sedimentological, petrographical, geochemical, paleontological, and thermal analysis applied to reconstructions of tectono-stratigraphic, thermal and burial history of sedimentary basins.
- Geobiological processes and biomineral precipitation in fossil and recent marine to terrestrial systems as new tool for environmental monitoring and innovative bio-materials.





SedStrat - Group

Simonetta Cirilli (1), Roberto Rettori (1), Amalia Spina (1), Giulia Margaritelli (1), Margarida Vilas Boas (1, 2), Marco Urbani (1), Haidra Saleh (1), Nilya Bengul (1)

(1: Dipartimento di Fisica e Geologia, Università degli Studi di Perugia, Italia. 2: CIMA, Centre of Marine and Environmental Research/ARNET, University of Algarve, Faro, Portugal)

- (Paleo)climate changes in the geological record (Paleozoic, early Mesozoic, Lower Cretaceous, Quaternary).
- A multi-proxy approach to decode the paleoclimatic and paleoenvironmental shifts across the Paleozoic-Triassic and Triassic Jurassic transition
- Sedimentological and structural characterization of potential carbonate reservoirs for Hydrogen and Carbon Capture Storage.

Research field areas include Apennines, Southern Alps, Portugal, Spain, Morocco, Tunisia, Algeria, Libya, Turkey, Iran, USA, China.



Panoramic photo of the left orographic side of the Gesso Valley, above Valdieri (visible in the foreground).

The overturned syncline is composed of the Mesozoic carbonate succession of the Provençal Domain and the overlying succession of the Avanfossa Alpina Domain (Upper Eocene-Lower Oligocene), visible at the core of the fold.

This sector is part of the area covered by the CARG Sheet 226-Cuneo, whose realization began in December 2024.

Photo by Carlo Bertok







Luca Zurli & Gianluca Cornamusini (Department of Physical, Earth, and Environmental Sciences - University of Siena)

- Basin analysis of Permian to Jurassic fluvial sequences of the south Gondwana margin (Antarctica and Tasmania).
- Provenance studies of Cenozoic glacial sediment in the Ross Sea region (Antarctica).



Breccia with hydrothermally dolomitized clasts (light yellow), sphalerite cement (brown), and pore-filling calcite spar (light to dark grey). Carnian, Bergamo Prealps.

Photo by Luca Martire





Ongoing and submitted projects

- AMUSED: A MUltidisciplinary Study of past global climatE changes from continental and marine archives in the MeDiterranean region INGV Project. Partecipant: Giulia Margaritelli
- CARG project, sheet 195 Novi Ligure. Carlo Bertok, Anna d'Atri, Luca Martire
- CARG project, sheets Cuneo-Colle di Tenda, 226-243. Carlo Bertok, Anna d'Atri, Luca Martire
- CARG Foglio "Roccastrada" PI: Gianluca Cornamusini; Member:
 Ivan Martini
- CARG Project Sheet 364-Bracciano. Roma3 Group
- CARG Project Sheet 390-Frosinone. Roma3 Group
- CARG project, Sheet: n.392 Castel di Sangro. Sabrina Amodio with UniParthenope-UniMolise groups.
- CARG project, Sheet: n.404 Isernia. Sabrina Amodio with UniParthenope-UniMolise groups.
- CARG Project Sheet 414 Terracina. Marco Mancini
- CARG project, Sheet: n.418 Piedimonte Matese. Sabrina Amodio with UniParthenope group
- CARG Project, SHEETS: Bisignano 551, Catanzaro 575, Lamezia Terme 574, Villa San Giovanni 588. Sedimentary Basin Evolution' Research Group DiBEST's Group
- CNR DTA.AD003.316 Terraced systems and incised valleys: stratigraphic reconstructions and implications on geohazards. PI: Marco Mancini
- CO2 sequestration through the carbonation of old and new construction materials: a perfectly circular path. Cassa di Risparmio Foundation Perugia. Partecipant: Simonetta Cirilli
- COST Action CA21112: "Offshore freshened groundwater: An unconventional water resource in coastal regions? (OFF-SOURCE)" member of WG1 and WG2. Partecipant: Bruno Campo
- ERC Synergy "Last Neanderthals" PI: Francesco Berna; Member:
- FISR Italian Ministry of Research and University, project FISR2019_04543 CRESCIBLUREEF. Sedimentary Basin Evolution' Research Group - DiBEST's Group





Ongoing and submitted projects

- HEHS: High-Efficiency Hydrogen Storage ID: RSH2B_000052, PNRR project. Partecipant: Simonetta Cirilli
- MODEL-PROSAM: 2D analysis and modeling of geo-marine natural disaster-prone areas and quantification of coastal erosion of the littoral zones of the southern provinces of Moroccan Sahara. Roma3 Group
- Next Generation EU Tech4You "Technologies for climate change adaptation and quality of life improvement - Tech4You", Project PP2.3.1 "Development of tools and applications for integrated marine communities and substrates monitoring". Sedimentary Basin Evolution' Research Group - DiBEST's Group
- NFSC Cina 2022. Geological-environmental event footprint in the Jiuzhaigou-Huanglong travertine on the eastern margin of the Qinghai-Tibet Plateau. Enrico Capezzuoli
- OAEs in Peri-Tethyan shallow water carbonate systems. Roma3 Group
- PNRA19_00120: The response of the sedimentary system through Permian to Jurassic abrupt climatic and provenance changes in Northern Victoria Land. Luca Zurli & Gianluca Cornamusini
- PRIN 2022 PNRR: "CLimate forcing On Adriatic SEa deoxygenation: A multi-archive Reconstruction of Sapropel S1 (CLOSER)" member of the RU3. Partecipant: Bruno Campo
- PRIN 2022: DEEP PAST: DEtailing the Palaeogeography of Southern PAlaeoeurope by means of biosTratigraphic correlation and basin development in the Palaeozoic to early Mesozoic time-frame: case histories from the Italian record. Enrico Capezzuoli
- PRIN_2022ZSMRXJ funded by EU-Next-Generation GAIA project-Geomorphological and hydrogeological vulnerability of Italian coastal areas in response to sea level rise and marine extreme events P.I. Giuseppe Mastronuzzi, participants: Sabrina Amodio with UniParthenope group.
- PRIN2022 "PPT_IMPACT Climatic impact on terrestrial and marine realms of the eastern Mediterranean at the Plio-Pleistocene transition" PI: Ivan Martini





Ongoing and submitted projects

- PRIN 2022: "Refining the sequence stratigraphic model through high-resolution onshore-offshore correlation (ON/OFF): The late Quaternary succession of the Po-Adriatic system" responsible for WP1: Bruno Campo
- **PRIN 2022: TEAMS TE**rrestrial **A**nd **M**arginal **S**ystem in a hot world **(TEAMS).** The continental and marginal-marine Cenomanian environments of the Southern Morocco between climate extreme and regional tectonics (ongoing). **Anna Breda**
- RESPIRE Research Educational and Storytelling Project in Italian Remote Ecosystem). Founded by the National Geographic Society.
 PI: Martina Capriotti; Member: Ivan Martini
- Sedimentological and geochemical study of methanogenic carbonate deposits. Alessandro Mancini
- Stratigraphic-structural analysis of the Plio-Quaternary intermontane basins of the Central Apennines. Roma3 Group
- Structural Stratigraphic Study of the Mesorif Range (Morocco).

 Roma3 Group
- WP 5.2 (2024): InterDrought Solutions: An Interdisciplinary Approach to Sustainable Water Management and Drought Mitigation; Strategic University Project: WP. 5.2. Partecipants: Simonetta Cirilli, Roberto Rettori, Giulia Margaritelli



- Amodio S., Barattolo F. Parente M. (2024). The Jurassic-Cretaceous transition in the Apennine Carbonate Platform: first attempt to calibrate the shallow- and deep-marine bioevents. Rend. OnLine, Soc. Geol. It., 63, 96-105. https://doi.org/10.3301/ROL.2024.37
- Azizi R., Barhoumi A., Mancini A. (2024). New insight on the structural architecture of northern Tunisia with a multidisciplinary approach: Association of Miocene piggy-back basin and active Plio-quaternary out-of-sequence thrusts. Marine and Petroleum Geology, 160, 1-19.
- Balestrieri M.L., Olivetti V., Chew D., Zurli L., Zattin M., Drakou, F., Cornamusini G., Perotti M. (2024). Recurrent E W oscillations of the ice flow confluence of the East and West Antarctic ice sheets in the central Ross Sea, Antarctica, from the Middle Miocene to the present day. Palaeogeography, Palaeoclimatology, Palaeoecology, 633, 111885 https://doi.org/10.1016/j.palaeo.2023.111885
- Baucon A., Breda A., Neto de Carvalho C., Piazza M., Briguglio A. (2023). Life in a Gilbert-type delta: ichnoassociations of the Ventimiglia palaeovalley and their sequence stratigraphic significance (Pliocene, NW Italy). Palaeogeography, Palaeoclimatology, Palaeoecology, 627, 111718. doi: 10.1016/j.palaeo.2023.111718
- Brenna A., Martini I., Menapace L., Surian N., Ventra D., Ghinassi M. (2024). Imbrication fabric as a diagnostic feature for the genetic classification of gravels deposited by fluid-gravity versus sediment-gravity subaerial flows. Earth Surface, Processes and Landforms. https://doi.org/10.1002/esp.5986
- Brogi A., Regoli R., Spina A., Capezzuoli E., Zucchi, M., Lucci F., Caggianelli A., Ventruti G., Sorci A., Aldinucci M., Cirilli S. (2024). The Permian succession of the Montagnola Senese ridge (Middle Tuscan Ridge, Italy): a perspective for late Palaeozoic magmatism and continentali-sation in the western Tethys. International Geology Review, 64, 897-926.



- Bruno L., Demurtas L., Magri D., Michelangeli F., Rittenour T., Hong W., Rossi V., Vaiani S.C., Vecchi A., Amorosi A. (2024). Sedimentary response of the Po Basin to Mid-Late Pleistocene glacio-eustatic oscillations. Quaternary Science Reviews 344, 109005. https://doi.org/10.1016/j.quascirev.2024.109005
- Buratti N., De Luca R., Garuti L., Sorci A., Spina A., Clayton, G. (2024).
 Thermal maturity evaluation on mildly artificially oxidised sporomorphs: A comprehensive calibration of palynomorph darkness index (PDI) with vitrinite reflectance. Marine and Petroleum Geology, 162, 106672.
- Cacciari M., Amorosi A., Marchesini M., Marvelli S., **Rossi V.** (2024). From the Roman Empire to the present: Two millennia of pollen-based environmental changes and climate-human interactions in the Po Delta area (NE Italy). The Holocene 34(9), 1225-1241. https://doi.org/10.1177/09596836241254487
- Campo B., Bruno L., Amorosi, A. (2023). Sedimentary facies characterization through CPTU profiles: An effective tool for subsurface investigation of modern alluvial and coastal plains. Sedimentology, https://doi.org/10.1111/sed.13079.
- Campo B., Pellegrini C., Sammartino I., Trincardi F., Amorosi, A. (2024). New perspectives on offshore groundwater exploration through integrated sequence-stratigraphy and source-to-sink analysis: Insights from the late Quaternary succession of the western Central Adriatic system, Italy. Earth-Science Reviews, p.104880. https://doi.org/10.1016/j.earscirev.2024.104880
- Chauduri A., Schonig J., **Le Pera E.**, Von Eynatten H., Chauhan G., Lunsdorf N.K. (2023). Provenance changes revealed by a multi-proxy approach to sandstone analysis and its implications on paleogeography: Mesozoic Kutch Basin, India. Sedimentary Geology 452. doi: 10.1016/j.sedgeo.2023.106411.



- Cipollari P., Abbassi A., Cosentino D. (2024) "il Casone-Monte delle Fate" olistostrome in the middle Eocene of the Eastern External Ligurian Unit (Monti della Tolfa, northern Latium, Italy): new constraints on the geodynamic evolution of the northern Apennines. Italian Journal of Geosciences 143(1), 155-172.
- Coletti G., Bosio G., Collareta A., Bialik O. M., Regattieri E.,
 Cornacchia I., Insacco G., Buckeridge J. (2024). Barnacle-rich facies as a tool for palaeoenvironmental reconstructions. Palaeogeography,
 Palaeoclimatology, Palaeoecology, 634, 111914.
- Corradini C., Corriga M. G., Pondrelli M., **Spina A.**, Suttner T. J. (2024). The "Lochkovian-Pragian Event" re-assessed: New data from the low latitude shelf of peri-Gondwana. Palaeogeography, Palaeoclimatology, Palaeoecology, 656, 112580.
- Corrado G., Amodio S., Aucelli P.P.C., Gioia D., Pappone G., Schiattarella M. (2025). Reconstructing active tectonics from land-sea correlations based on cross-interpretation of core and seismic data for the Tyrrhenian coastal segment in southern Italy. Earth Surface Processes and Landforms, 50 (1), e6049. Available from: https://doi.org/10.1002/esp.6049
- Di Bella L., Pierdomenico M., Conte A. M., Cornacchia I., Ruspandini T., Spatola D., Beaubien S. E., Bigi S., Conti A., Gaglianone G., Ingrassia M., Chiocci, F. L., Casalbore D. (2024). The influence of shallow-water methane emissions on foraminiferal assemblages: The case of Scoglio d'Affrica (Northern Tyrrhenian Sea, Mediterranean Sea). Marine and Petroleum Geology, 170, 107130.
- Di Salvo C., Ciotoli G., **Mancini M.**, Nisio S., Stigliano F. (2024). Analysis of Geological Multi-Hazards in an Urban District. Geosciences, 14(2), 27. https://doi.org/10.3390/geosciences14020027
- Falcucci A., Arrighi S., Spagnolo V., Rossini M., Higgins O., Muttillo B., Martini I., Crezzini J., Boschin F., Ronchitelli A., Moroni A. (2024). A pre-Campanian Ignimbrite techno-cultural shift in the Aurignacian sequence of Grotta di Castelcivita, southern Italy. Scientific Reports, 14:12783, https://doi.org/10.1038/s41598-024-59896-6



- Gaci N., Sami L., Boutaleb A., Kechiched R., Martire L., Barale L., Meddane S., Bakelli A. (2024) Barite-bearing "septarian concretions" (Upper Cretaceous – Paleocene) from the Biban area (north Algeria). Jour.African.Earth Sci., 215.
 - https://doi.org/10.1016/j.jafrearsci.2024.105280.
- Giallini S., Sirianni P., Pagliaroli A., Pizzi A., Mancini M., Kaiser A., Bourguignon S., Bruce Z., Hill M., Wotherspoon, Moscatelli M. (2024). Reconstruction of a subsoil model for local seismic response evaluation through experimental and numerical methods: The case of the Wellington CBD, New Zealand. Engineering Geology, 330, 107413 https://doi.org/10.1016/j.enggeo.2024.107413
- **Guido A.**, Calcagnile M., Talà A., Tredici S.M., Belmonte, G., Alifano P., (2024). Microbial consortium involved in ferromanganese and francolite biomineralization in an anchialine environment (Zinzulùsa Cave, Castro, Italy). Science of The Total Environment, 936, 173423.
- Higham T., Frouin M., Douka K., Ronchitelli A., Boscato P., Benazzi S., Crezzini J., Spagnolo V., McCarty M., Marciani G., Falcucci A., Rossini M., Arrighi S., Dominici C., Devièse T., Schwenninger J.L., Martini I., Moroni A., Boschin F. (2024). Chronometric data and stratigraphic evidence support discontinuity between Neanderthals and early Homo sapiens in the Italian Peninsula. Nature Communication 15, 8016 https://doi.org/10.1038/s41467-024-51546-9
- Kairouani H., Abbassi A., Zaghloul M.N., El Mourabet M., Micheletti F., Fornelli A., Mongelli G., Critelli S. (2024). The Jurassic climate change in the northwest Gondwana (External Rif, Morocco): Evidence from geochemistry and implication for paleoclimate evolution. Marine and Petroleum Geology, 163, 106762.
- Le Pera E., Morrone C., Arribas J., Arribas M.E., Ancochea E., Huertas M.J. (2021): Petrography and provenance of beach sands from volcanic oceanic islands: Cabo Verde, Atlantic Ocean. Journal of Sedimentary Research, 91, 92-115.



- Le Pera E., Tangari A.C., Marinangeli L., Morrone C., Riber L., Ando' S. (2023) Provenance of Modern Sands from Baja California Rivers (Mexico): Petrographic Constraints from Light and Heavy Minerals. Journal of Sedimentary Research, 93, 617–641.
- Luo L., Capezzuoli E., Rogerson M., Vaselli O., Wen H., Lu Z. (2022).
 Precipitation of carbonate minerals in travertine-depositing hot springs: Driving forces, microenvironments, and mechanisms.
 Sedimentary Geology, 438, 2022, 106023.
 https://doi.org/10.1016/j.sedgeo.2022.106207
- Luo L., Wen H., **Capezzuoli E.**, Kele S., Vaselli O., Lu Z., Xu X., Huang H., Du L., Brogi A. (2024). Geochemical (δ13C, δ18O, 87Sr/86Sr, REEs) characterization of travertine in Tengchong, China: Insights into travertine origin and reservoir conditions. Sedimentary Geology, 473, 106759. doi: 10.1016/j.sedgeo.2024.106759.
- Mancini A., Cornacchia I., Lamal J., Capezzuoli E., Swennen R., Brandano M. (2024). Using stable isotopes in deciphering climate changes from travertine deposits: the case of the Lapis Tiburtinus succession (Acque Albule Basin, Tivoli, Central Italy). Front. Earth Sci. 12:1355693, 1-16. doi: 10.3389/feart.2024.1355693
- Mancini A., Capezzuoli E. (2024). Travertine depositional systems of Central Italy: Rapolano Terme and the Acque Albule Basin. An overview of geometries and lithofacies associations of the depositional setting. Geol. F. Trips Maps, Vol.16 No. 1.3 (2024), 35 pp., 13 figs. https://doi.org/10.3301/GFT.2024.03)2024.106915
- O'Donnell A. E., Muirhead D. K., Brasier A. T., Capezzuoli E. (2024). Searching for Life in Hot Spring Carbonate Systems: Investigating Raman Spectra of Carotenoid-Bearing Organic Carbonaceous Inclusions from Travertines of Italy. Astrobiology. 163-176. http://doi.org/10.1089/ast.2023.0017



- Perotti M., **Zurli L.**, Licht K., **Cornamusini** G. (2024). Petrographic signature of gravel fraction from late Quaternary glacigenic sediments in the Ross Sea (Antarctica): implications for source terranes and Neogene glacial reconstructions. Sedimentary Geology, 472, 106742. https://doi.org/10.1016/j.sedgeo.2024.106742
- Perri F., Guido A., Cipriani M., Cianflone G., Dominici R. (2024). Geochemical and mineralogical proxies from the Messinian mudrocks (Catanzaro Basin, southern Italy): paleoweathering and paleoclimate evolution during the onset of the Messinian salinity Crisis. Marine and Petroleum Geology, 163, 106703.
- Racano S., Van Der Beek P., Schildgen T., Faccenna C., Buleo Tebar V.,
 Cosentino D. (2024) Tectonic driving mechanism of Quaternary rock-uplift and topographic evolution in the northern-central Apennines from linear inversion of the drainage system. Geochemistry, Geophysics, Geosystems 25(7), e2024GC011592
- Rossi V., Sammartino I., Pellegrini C., Barbieri G., Teodoro C., Trincardi F., Amorosi A. (2024). Coupling palaeobiology and geochemistry from the Holocene of the southern Adriatic Sea (Gulf of Manfredonia, Italy): Shelf facies patterns and eutrophication trends. Palaeogeography, Palaeoclimatology, Palaeoecology 639, 112055. https://doi.org/10.1016/j.palaeo.2024.112055
- Storta E., Barale L., Borghi A., d'Atri A., Dino G., Gambino F., Martire L., Perotti L., Piana F., Acquarone A., Sassone P., Senesi M., Mallen L., Morelli M., Gabriele N. (2024). The DataBase of the ornamental stones of Piemonte (NW Italy) hosted on a WebGIS service. Geoheritage, 16, 1-19.
- Summino L., Domenighini G., Giorno M., Barale L., **Bertok C.**, **Martire L.**, Fiori N., Schivo E., Piana F. (2024). Geology of the Arera-Vedra Valley mining area (Gorno district, Orobic Alps, Italy), Jour. Maps, 20, https://doi.org/10.1080/17445647.2024.2422545.



- Tentori D., Mancini M., Stigliano F., Milli S., Simionato M., Livani M., Moscatelli M. (2025). Integrating Sequence Stratigraphy and Geostatistical Methods for 3D Lithofacies Modelling of the Tiber Alluvial Plain, Rome, Italy. Basin Research, https://doi.org/10.1111/bre.70024
- Vilas-Boas M., Pereira Z., **Cirilli S.**, Fernandes P. (2024) New Insights on the Upper Tri-assic Silves Group in Algarve Basin, Portugal: Palynological, Paleophytogeography and Paleocli-matology Advances. Portugal: Palynological, Paleophytogeography and Paleoclimatology Ad-vances. Geobios, 86 (49-64).
- Zurli L., Liberato G.P., Perotti M., Woo J., Lee M.J., Cornamusini G. (2024). A multiproxy detrital study from Permian-Triassic fluvial sequences of Victoria Land (Antarctica): implications for the Gondwanan basin evolution. Palaeogeography, Palaeoclimatology, Palaeoecology, 641, 112113 https://doi.org/10.1016/j.palaeo.2024.112113

Reading suggestions

• Frank Schätzing, Il quinto giorno, TEA.

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