

Dichiarazione sostitutiva di certificazioni

(Art. 46, D.P.R. 28 dicembre 2000 n. 445)

Dichiarazione sostitutiva dell'atto di notorietà

(da sottoscrivere davanti all'impiegato addetto o da presentare o spedire con la fotocopia di un documento di identità)

(Art. 47, D.P.R. 28 dicembre 2000 n. 445)

Estremi del bando di selezione	bando n. 38/2024 – titolo Misurazione e modellizzazione delle proprietà termiche (conduttività e diffusività termica) delle rocce in situ per valutare la fattibilità di una pompa di calore geotermica
Informazioni aggiornate al	01/11/2024

Nome e Cognome	Luca Piroddi
Luogo di nascita	
Data di nascita	

Si raccomanda di indicare con precisione tutti gli elementi valutabili ai sensi del bando di selezione (aggiungere o togliere righe secondo necessità).

Esperienza professionale

Periodo	Ente	Principali attività e responsabilità
03/12/2012 – 02/12/2014	Università di Cagliari, DICAAR	Assegno di ricerca: “Metodi di diagnosi non-invasiva per il monitoraggio dello stato di degrado dei monumenti”; SSD: GEO/11..
07/03/2016 – 06/03/2020	Università di Cagliari, DICAAR	Ricercatore a Tempo Determinato (tipo A), tempo definito; SSD: GEO/11.
08/06/2020-31/03/2021	Università di Cagliari, DICAAR	Borsa di Ricerca in Fotogrammetria da drone..
05/2022-05/2023	University of Malta, Department of Geosciences.	Research Support Officer III (postdoc) su progetto i-waveNET; geofisica e telerilevamento.
08/2023-07/2024	University of Malta, Department of Geosciences.	Research Support Officer III (postdoc) su progetto DEMUWA; geofisica e telerilevamento.

Istruzione, formazione (es. titoli di studio, certificazioni professionali/linguistiche/informatiche)

Data	Titolo / Principali tematiche	Ente
03/06/2003	Diploma di Laurea in Ingegneria Edile, votazione di 110/110 e Lode con tesi dal titolo “Prospettive di fruizione delle aree demaniali di Capo Bellavista, Arbatax”	Università degli Studi di Cagliari
08/02/2011	Dottore di Ricerca in Ingegneria del Territorio, con tesi dal titolo “Sistemi di telerilevamento termico per il monitoraggio e la prevenzione dei rischi naturali: il caso sismico”, SSD: GEO/11	Scuola di Dottorato in Ingegneria Civile ed Architettura dell'Università degli Studi di Cagliari

Pubblicazioni / Convegni

- L. PIRODDI**, "Sistemi di telerilevamento termico per il monitoraggio e la prevenzione dei rischi naturali: il caso sismico", tesi di dottorato in Ingegneria del Territorio, Università degli Studi di Cagliari, Febbraio 2011; SSD: GEO/11 Geofisica Applicata; <http://veprints.unica.it/550/>; **(SINGLE AUTHOR)**;

- 2 G. RANIERI, **L. PIRODDI**, “Methods for the identification of areas for geothermal use”, Cagliari, international workshop Future MAC09, Cagliari, 08-13 March 2009; “Suitable planning: landscape, environment, energy. The Cagliari Metropolitan Area case study”, Gangemi editor, June 2009 ISBN: 978-88-492-1944-9; pp. 122-135;
- 3 **L. PIRODDI**, R. RICCIU, (2024). “Towards the dynamic characterization of near-surface lithology in Northern Sahara region by satellite thermography (first results)”, in 17h Quantitative Infrared Thermography Conference (QIRT 2024), 1-5 Luglio 2024, Zagreb (Croatia), 2 pages. (**CORRESPONDING AUTHOR**)
- 4 **L. PIRODDI**, G. RANIERI, (2012). “Night thermal gradient: a new potential tool for earthquake precursors studies. An application to the seismic area of L’Aquila (central Italy).”, IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing – JSTARS; February 2012, Volume: 5 Issue:1 pp. 307 - 312; ISSN: 1939-1404; DOI 10.1109/JSTARS.2011.2177962; (IF 2.874) (**CORRESPONDING AUTHOR**);
- 5 **L. PIRODDI**, G. RANIERI, F.T. FREUND, A. TROGU, (2014). “Geology, tectonics and topography underlined by L’Aquila earthquake TIR precursors”, Geophysical Journal International, (June, 2014) 197 (3): 1532-1536; ISSN: 1365-246X, doi: 10.1093/gji/ggu123 (IF 2.560) (**CORRESPONDING AUTHOR**);
- 6 **L. PIRODDI**, (2018). "TIR Anomaly as Earthquake Precursor", Natural Hazards: Earthquakes, Volcanoes and Landslides, edited by Ramesh Singh and Darius Bartlett, CRC Press, Taylor & Francis group, pages 139-150, (March 2018) (**INVITED, SINGLE AUTHOR**); ISBN: 978-1-13-805443-1 (Hardback);
- 7 **L. PIRODDI**, “From high temporal resolution to synthetically enhanced radiometric resolution: insights from Night Thermal Gradient results”, European Physical Journal – Special Topics, 230(1), 111-132 (F. Freund, Y. Kamer, G. Ouillon, J. Scoville D. Sornette editors), (**INVITED, SINGLE AUTHOR**); (IF 1.947) ISSN: 1951-6355 (Print Edition), ISSN: 1951-6401 (Electronic Edition); <https://doi.org/10.1140/epjst/e2020-000247-x>
- 8 C. PIGA, **L. PIRODDI**, E. POMPIANU, G. RANIERI, S. STOCCO, A. TROGU, (2014). “Integrated terrestrial geophysical and low altitude remote sensing methods for archaeology: a case history in a Punic site in Villamar, Italy”, Remote Sensing, 2014; 6(11):10986-11012; ISSN: 2072-4292 (IF 3.180) doi:10.3390/rs61110986 (**CORRESPONDING AUTHOR**);
- 9 A. TROGU, G. RANIERI, S.V. CALCINA, **L. PIRODDI**, (2014). “The ancient Roman aqueduct of Karales (Cagliari, Sardinia - Italy): applicability of geophysics methods to find the underground remains”, Archaeological Prospection, July/September 2014; Volume 21, Issue 3, pages 157–168, ISSN: 10990763, DOI: 10.1002/arp.1471; (IF 1.917);
- 10 **L. PIRODDI**, S.V. CALCINA, A. TROGU, G. RANIERI, (2020). “Automated Resistivity Profiling (ARP) to explore wide archaeological areas: the prehistoric site of Mont'e Prama, Sardinia, Italy”, Remote Sensing, 2020, 12(3), 461; (IF 4.118) ISSN: 2072-4292; <https://doi.org/10.3390/rs12030461> (**CORRESPONDING AUTHOR**)
- 11 A. WIEWEL, L.B. CONYERS, **L. PIRODDI**, N. PAPADOPOULOS, “An Experimental Use of Ground-Penetrating Radar to Identify Human Footprints”, ArcheoSciences, 2021, 45(1), pp. 143-146. (IF 0.3) ISSN: 1960-1360 (Print Edition), 2104-3728 (Electronic Edition); <https://doi.org/10.4000/archeosciences.9144>
- 12 **L. PIRODDI**, M. RASSU, “Application of GPR prospection to unveil historical stratification inside monumental buildings: the case of San Leonardo de Siete Fuentes in Santu Lussurgiu, Sardinia, Italy” MDPI Land, 2023, 12(3), 590 20 pages (IF 3.905) (**INVITED, CORRESPONDING AUTHOR**)
- 13 **L. PIRODDI**, N. ABU-ZEID, S.V. CALCINA, P. CAPIZZI, L. CAPOZZOLI, I. CATAPANO, M. COZZOLINO, S. D’AMICO, R. LASAPONARA, D. TAPETE, “A review on imaging cultural heritage at different scales: Part I, the micro-scale (manufacts)” MDPI Remote Sensing, 2023, 15(10), 2586 29 pages (IF 5.349) (**INVITED, CORRESPONDING AUTHOR**) <https://doi.org/10.3390/rs15102586>
- 14 N. MONTALDO, R. CORONA, M. CURRELI, S. SIRIGU, **L. PIRODDI**, R. OREN, “Rock water as a key resource for patchy ecosystems on shallow soils: Digging deep tree clumbs subsidize surrounding surficial grasses”, Earth's Future, 2021, 9(2), e2020EF001870, 24 pages (IF 5.78) ISSN: 2328-4277 (Electronic Edition); <https://doi.org/10.1029/2020EF001870>
- 15 R. PFEIFFER, G. VALENTINO, S. D’AMICO, **L. PIRODDI**, L. GALONE, S. CALLEJA, R. A. FARRUGIA, E. COLICA, “Use of UAVs and deep learning for beach litter monitoring” MDPI Electronics 2023, 12(1), 198; 17 pages (IF 2.690) <https://doi.org/10.3390/electronics12010198> (**INVITED, CORRESPONDING AUTHOR**)
- 16 S.V. CALCINA, **L. PIRODDI**, G. RANIERI, (2013). “Fast dynamic control of damaged historical buildings: a new useful approach for Structural Health Monitoring after an earthquake”, ISRN Civil Engineering, vol. 2013, Article ID 527604, 6 pages, 2013. ISSN: 2090-5114, (SCOPUS INDEXED); DOI:10.1155/2013/527604 (**CORRESPONDING AUTHOR**);
- 17 M. MARCHISIO, **L. PIRODDI**, G. RANIERI, S.V. CALCINA, P. FARINA, (2014). “Comparison of natural

and artificial forcing to study the dynamic behaviour of bell towers in low wind context by means of ground based radar interferometry: the case of the Leaning Tower in Pisa”, Journal of Geophysics and Engineering, 2014; 11 (055004); ISSN: 1742-2140 (IF 0.778) doi:10.1088/1742-2132/11/5/055004 (**CORRESPONDING AUTHOR**);

- 18 S.V. CALCINA, L. ELTRUDIS, **L. PIRODDI**, G. RANIERI, (2014). “Ambient Vibration Tests of an arch dam with different reservoir water levels: experimental results and comparison with finite element modelling”, The Scientific World Journal, Volume 2014 (2014), Article ID 692709, 12 pages, ISSN: 2356-6140 (Print) 1537-744X (Online) (SCOPUS INDEXED, IF-2013: 1.219) <http://dx.doi.org/10.1155/2014/692709>;
- 19 S.V. CALCINA, **L. PIRODDI**, G. RANIERI, A. TROGU, (2015). “Terrestrial remote sensing and microtremor measurements for the study of the vibrations of a rock mass with large underground cavities”, ROL – Rendiconti Online della Società Geologica Italiana, 2015, Volume 35/2015, pages: 46-49 (SCOPUS INDEXED, Thomson Reuters ESCI INDEXED) doi: 10.3301/ROL.2015.60
- 20 S.V. CALCINA, **L. PIRODDI**, G. RANIERI, (2016). “Non-destructive evaluation of the dynamic behaviour of historic bell towers integrating contact and remote sensing measurements”, Nondestructive Testing and Evaluation, published online 12 Jan 2016; ISSN: 1058-9759 (Print), 1477-2671 (Online); (IF 0.804) <http://dx.doi.org/10.1080/10589759.2015.1121264>;
- 21 **L. PIRODDI**, S.V. CALCINA, (2020). “Integrated vibration analysis for historical dome structures: a complementary approach based on conventional geophysical methods and remote sensing techniques” in 20th International Conference on Computational Science and its Applications (ICCSA 2020), Cagliari, 1-4 July 2020, pages 928-943. (SCOPUS INDEXED (**CORRESPONDING AUTHOR**) https://doi.org/10.1007/978-3-030-58820-5_67 .
- 22 **L. PIRODDI**, S.V. CALCINA, A. TROGU, G. VIGNOLI, (2020). “Towards the definition of a low-cost toolbox for qualitative inspection of painted historical vaults by means of modified DSLR cameras, open source programs and signal processing techniques” in 20th International Conference on Computational Science and its Applications (ICCSA 2020), Cagliari, 1-4 July 2020, pages 971-991. (SCOPUS INDEXED) (**CORRESPONDING AUTHOR**) https://doi.org/10.1007/978-3-030-58820-5_70 .
- 23 **L. PIRODDI**, S.V. CALCINA, D.R. FIORINO, S. GRILLO, A. TROGU, G. VIGNOLI, (2020). “Geophysical and remote sensing techniques for evaluating historical stratigraphy and assessing the conservation status of defensive structures heritage: preliminary results from the military buildings at San Filippo bastion, Cagliari, Italy” in 20th International Conference on Computational Science and its Applications (ICCSA 2020), Cagliari, 1-4 July 2020, pages 944-959. (SCOPUS INDEXED) (**CORRESPONDING AUTHOR**) https://doi.org/10.1007/978-3-030-58820-5_68 .
- 24 **L. PIRODDI**, I. CATAPANO, E. COLICA, S. D’AMICO, L. GALONE, G. GARGIULO, S. SFARRA, (2022) “The Pulcinella diagnostic project: introduction to the study of the performances of close-range diagnostics targeted to a wooden physical twin of a Carnival historical mask”, in 22nd International Conference on Computational Science and Its Applications (ICCSA 2022), Malaga (Spain), 4-7 July 2022, pp. 519-533, Springer, Cham (SCOPUS INDEXED) (**CORRESPONDING AUTHOR**) https://doi.org/10.1007/978-3-031-10592-0_37
- 25 **L. PIRODDI**, A. GAUCI, R. KALFOUNI, M.R., AGIUS, D. MELFI, A.M. BORZÌ, A. CANNATA, F. CANNAVO’, V. MINIO, A. ORASI, S. ARONICA, G. CIRAULO, S. D’AMICO, (2023) “Exploring the Signature of the Apollo Mediane in the Central Mediterranean Sea Through Multi-source Data Analysis: Satellites, Radar HF, Marine Buoys, and Seismic Data in October 2021”. In: Gervasi, O., et al. Computational Science and Its Applications – ICCSA 2023 Workshops. ICCSA 2023. Lecture Notes in Computer Science, vol 14111 (pp. 611-623).. Springer Nature, Cham Switzerland, at 23rd International Conference on Computational Science and Its Applications 3-6 July 2023, Athens (Greece) (SCOPUS INDEXED) (**CORRESPONDING AUTHOR**) https://doi.org/10.1007/978-3-031-37126-4_39
- 26 **L. PIRODDI**, S.V. CALCINA, M. COZZOLINO, G.P. DEIDDA, A. TROGU, R. CARBONI, E. CRUCCAS, M. GIUMAN, G. RANIERI, (2024). “Medium- to high-resolution integrated geophysical surveys to reconstruct an archaeological settlement: new perspectives from the ancient town of Nora, southwestern Sardinia (Italy).Preliminary results”, in Gervasi, O., Murgante, B., Garau, C., Taniar, D., C. Rocha, A.M.A., Faginas Lago, M.N. (eds) Computational Science and Its Applications – ICCSA 2024 Workshops. ICCSA 2024. Lecture Notes in Computer Science, vol 14824. pp. 335-350, Springer, Cham. 24th International Conference on Computational Science and Its Applications (ICCSA 2024), Hanoi (Vietnam), 1-4 July 2024, (SCOPUS INDEXED) (**CORRESPONDING AUTHOR**); https://doi.org/10.1007/978-3-031-65332-2_22
- 27 **L. PIRODDI**, G. RANIERI, M. MANCONI, C. PIGA, G.P. DEIDDA, F. LODDO, H. BELGHAZAL, “Synergical Use of Passive and Active Methods to Reconstruct the Subsoil in Urban Areas”, Dublin, 15th

European Meeting of Environmental and Engineering Geophysics – 7-9 settembre 2009; ISBN 978-90-73781-72-6;(SCOPUS INDEXED) **(CORRESPONDING AUTHOR)** [doi:10.3997/2214-4609.20147075](https://doi.org/10.3997/2214-4609.20147075)

- 28 **L. PIRODDI**, S.V. CALCINA, S. ERRIU, A. TROGU, G. RANIERI, (2021) “Integrated active and passive geophysical methods to explore underground soils in urban scenarios: the case of “Stampace alto” in Cagliari (Italy)”. In 2021 21st International Conference on Computational Science and Its Applications (ICCSA), Cagliari, 13-16 September 2021 (pp. 234-241). IEEE. (SCOPUS INDEXED). **(CORRESPONDING AUTHOR)**; DOI: [10.1109/ICCSA54496.2021.00040](https://doi.org/10.1109/ICCSA54496.2021.00040)
- 29 G. RANIERI, A. TROGU, L.M. NOLI, A.M. SITZIA, S.V. CALCINA, **L. PIRODDI**, F. LODDO, (2015). “Method and system for activating and controlling a water-repelling process in walls, European Patent (EP 3 040 490 B1)

Altre attività scientifiche

Partecipazione a Comitati Scientifici, Organizzatori, Editoriali di riviste scientifiche e convegni

Ulteriori informazioni pertinenti

Luogo, data e firma
Cagliari, 23/11/2024

Luca Piroddi