

Caterina Balletti

PhD in Geodetic and Topographic Science, Associate Professor in Geomatics at the Università Iuav di Venezia. Scientific Director of the Cartographic Lab of Iuav University.

She is member of the PhD Board in Ancient Heritage Studies of Università Ca Foscari (Venice).

Active member of the ICA Commission on Digital Technologies in Cartographic Heritage, member of CIPA.

Member of the Scientific Committee of SIFET (Italian Society of Photogrammetry and topography) and of the council of AUTEc (Italian National Association of University Professors in Surveying and Mapping).

She participates in scientific committees and editorial boards of series and journals; she is reviewer for Italian and international journals.

She authored more than 100 scientific papers in peer review scientific journals and national and international proceedings

Researches

Main Research Interests are related to integrated topographic and photogrammetric surveying with modern Geomatics techniques, applications related to Cultural Heritage and territory (survey, representation, monitoring, data management, digital approaches for historical cartography, Geographic Information Systems).

Scientific responsibilities for international and national research projects:

- Associated Investigator for the Venice RU of the Project of Relevant National Interest (PRIN) 2015 "GAMHer. Geomatics Data Acquisition and management for landscape and built heritage in a European Perspective" (PI: Bitelli Gabriele, University of Bologna)

Responsibilities in National Research-Consultancy Contracts:

- 2014-2015 Agreement Università Iuav di Venezia-Istituto di Scienze Marine ISMAR- CNR:

"Digitalizzazione, catalogazione e georeferenziazione del patrimonio cartografico storico dell'Istituto di Scienze Marine ISMAR - CNR di Venezia"

- 2015 Agreement Università Iuav di Venezia- Regione Veneto- Sezione Pianificazione Territoriale Strategica e Cartografia "aggiornamento dei servizi Web per la consultazione e la distribuzione dei prodotti cartografici regionali relativi ai dati dell'Aerofototeca Regionale on-line.

- 2016-2019 Agreement Università Iuav di Venezia- CoopCulture "Individuazione di metodi e strumenti digitali finalizzati allo studio e all'analisi della storia della città di Venezia attraverso l'uso della cartografia storica".

Since 1999 she took part and contributed, as research fellow, to several national and international projects applied to Cultural Heritage (particularly to architecture and archaeology), cartography and digital tools for historical maps.

BIBLIOMETRIC INDEXES (SCOPUS) AND OVERALL SCIENTIFIC PRODUCTION

Documents: 35

Citations: 495

h-index: 12

Co-authors: 43

Author of 118 scientific publications:

International Journals: 17

National Journals: 13

International Proceedings: 51

National Proceedings: 19

Books/chapters of books: 15

Other: 3

Publications

1. Balletti, C., Guerra, F., Lorenzon, A. (2020). THE VENETIAN GALEA: From the WOODEN MODEL to the DIGITAL MODEL. *Int. Arch. Photogramm., Remote Sens. Spat. Inf. Sci. - ISPRS Arch.*, 43 (B2), pp. 1371-1379.
2. Balletti, C., Dabrowski, M., Guerra, F., Vernier, P. (2020). Digital reconstruction of a lost heritage: The San Geminiano's church in San Marco's Square in Venice. *IMEKO TC Int. Conf. Metrol. Archaeol. Cult. Herit.* pp. 304-310.
3. Balletti, C., Bertellini, B., Gottardi, C., Guerra, F. (2019). Geomatics techniques for the enhancement and preservation of cultural heritage. *ISPRS Ann. Photogramm. Remote Sens. Spat. Inf. Sci.*, 42 (2/W11), pp. 133-140.
4. Balletti, C., Ballarin, M. (2019). An application of integrated 3D technologies for replicas in cultural heritage. *ISPRS Int. J. Geo-Inf.*, 8 (6), art. no. 285.
5. Gottardi, C., Balletti, C., Florian, S., Guerra, F. (2019). Digital technologies for cultural heritage: 3D representation of complex wooden structures. *Lect. Notes Civ. Eng.*, 24, pp. 511-532.
6. Balletti, C., Ballarin, M., Faccio, P., Guerra, F., Saetta, A., Vernier, P. (2018). 3D survey and 3D modelling for seismic vulnerability assessment of historical masonry buildings. *Appl. Geo.*, 10 (4), pp. 473-484.
7. Balletti, C., Gottardi, C., Guerra, F., Livieratos, E. (2018). Revisiting sixteenth-century oval maps with a cartographic strain analysis. *Int. J. Cartography*, 4 (2), pp. 170-185.
8. Bitelli, G., Balletti, C., Brumana, R., Barazzetti, L., D'Urso, M.G., Rinaudo, F., Tucci, G. (2017). Metric documentation of cultural heritage: Research directions from the Italian gamher project. *Int. Arch. Photogramm., Remote Sens. Spat. Inf. Sci. - ISPRS Arch.*, 42 (2W5), pp. 83-90.
9. Balletti, C., Ballarin, M., Guerra, F. (2017). 3D printing: State of the art and future perspectives. *J. Cult. Heritage*, 26, pp. 172-182.
10. Balletti, C., Guerra, F. (2016), Historical maps for 3D digital city's history. *Cartographica*, 51 (3), pp. 115-126.
11. Balletti, C., Beltrame, C., Costa, E., Guerra, F., Vernier, P. (2016). 3D reconstruction of marble shipwreck cargoes based on underwater multi-image photogrammetry. *Digit. Appl. Archaeol. Cult. Herit.*, 3 (1), pp. 1-8.
12. Balletti, C., Ceregato, A., Gottardi, C., Rizzi, F., Vianello, A. (2016). 3D Digitization and Web Publishing of an ISMAR Cartographic Heritage: Historical Maps of Venice Lagoon. *E-PERIMETRON*, vol. 11, p. 47-56, ISSN: 1790-3769.
13. Balletti, C., Guerra, F. (2015). The survey of cultural heritage: a long story. *Rendiconti Lincei*, 26, pp. 115-125.
14. Ballarin, M., Balletti, C., Guerra, F. (2015). Action cameras and low-cost aerial vehicles in archaeology. *Proc SPIE Int Soc Opt Eng*, 9528, art. no. 952813.
15. Ballarin, M., Balletti, C., Gottardi, C. (2015). Automatic Systems for Digitizing Historical Maps. *E-PERIMETRON*, vol. 10, p. 21-29, ISSN: 1790-3769.
16. Balletti, C., Guerra, F., Tsioukas, V., Vernier, P. (2014). Calibration of action cameras for photogrammetric purposes. *Sensors*, 14 (9), pp. 17471-17490.