

PERSONAL INFORMATION

Luigi Berardi



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Sex M | Date of birth 05/05/1979 | Nationality Italian

CURRENT POSITION

Full Professor of "Hydrology, Hydraulic and Marine Constructions"

SSD: CEAR-01/B (già ICAR/02)

GSD: 08/CEAR-01

University "G. d'Annunzio" of Chieti-Pescara, Italy.

WORK EXPERIENCE

- 2018 - 2021 **Associate Professor of "Hydrology, Hydraulic and Marine Constructions"**
University "G. d'Annunzio" of Chieti-Pescara (Italy)
Engineering and Geology Department (INGEO)
42, Viale Pindaro, 65127, Pescara (Italy)
- 2015 - 2018 **Researcher (Italian Law n. 240, 30.12.2010, art. 24, c. 3,(a))**
Politecnico di Bari, Italy
Civil Engineering and Architecture Dept.
Research Project "Methodologies and tools for the sustainable management of urban water distribution networks in the Mediterranean area" funded by the "Future in Research" program – Apulian Region (Italy)
- 2010 - 2014 **Research Fellow**
Politecnico di Bari, Italy
Civil Engineering and Architecture Dept.
Research Project: "Water leakage reduction and rehabilitation of aqueducts: study of a system for analysis and decision support"

EDUCATION AND TRAINING

- 1998 - 2004 **Master Degree in "Civil and Environmental Engineering"**
Politecnico di Bari, Bari, Italia
▪ Date of degree 28.04.2004, degree mark 110/110 cum laude
- 2006 - 2009 **PhD in Civil and Environmental Engineering Science**
Politecnico di Bari, Bari, Italy
- 2005 - 2006 **Visiting Researcher at Centre for Water Systems**
School of Engineering, Mathematic and Computing, University of Exeter, United Kingdom.
- 2005 **Research grant (12 months) at the Centre for Water Systems**
School of Engineering, Mathematic and Computing, University of Exeter, United Kingdom.
Research project: "Development of a decision support system for water networks management based on a multi-objective evolutionary modelling technique"

TEACHING ACTIVITIES

- 2018 - **Hydraulics**
Water network infrastructures
Design of water infrastructures
University "G. d'Annunzio" of Chieti-Pescara (Italy)
- 2020 - 2022 **Hydrology of Planets**
University "G. d'Annunzio" of Chieti-Pescara (Italy)
- 2009 - 2018 **"Complements of Hydraulic Constructions", "Hydraulic constructions", "Water systems management"**
Teaching contract
Politecnico di Bari, Italy
- 2013 **Teaching at II level university master for "Experts in integrated and sustainable water-energy cycle in urban drainage systems"**
Università della Calabria, Italy

ACADEMIC RESPONSABILITIES

- 2022 - **Coordinator of the Doctorate Programme in "Engineering Science"**
University "G. d'Annunzio" of Chieti-Pescara (Italy)
- 2019 - 2021 **Responsible of Student orientation activities for Engineering courses**
University "G. d'Annunzio" of Chieti-Pescara (Italy)
Engineering and Geology Department
- 2020 - 2022 **Member of Department Board**
University "G. d'Annunzio" of Chieti-Pescara (Italy)
Engineering and Geology Department

SCIENTIFIC RESERACH AND RESERACH TRANSFER

Main research fields

- Analysis and management of water distribution networks (WDNs)
- Advanced steady-state hydraulic modelling to support WDNs management
 - Analysis and management of water losses
 - Development of performance indicators for water distribution networks
 - Strategies for planning and operating pressure control devices
 - Optimal planning of pipeline maintenance and rehabilitation
 - Development of metrics for WDN topological segmentation and optimal design of district metering areas (DMA)
 - Optimal pumping scheduling and control
 - Analysis of WDN vulnerability

Use of bi-dimensional (full 2D) modelling tools for the analysis of hydraulic hazard

Hydroinformatics,

- Development and application of *Data-Modelling* techniques in civil engineering, especially for the management of water distribution and wastewater networks (*Multi-objective Evolutionary Polynomial Regression; Multi-objective Artificial Neural Networks*)

Research transfer

Co-funder in 2019 e member Board of Directors of INFORMHYDRO s.r.l., a spin-off company of University "G. d'Annunzio" of Chieti Pescara, innovative start-up whose purpose is to promote the technology transfer through the development of integrated and customized software tools in data science and decision support for water systems in civil engineering.

Training and update of users on the following software:

WDN analysis

- *WDNetXL-WDNetGIS: integrated system for the analysis, planning and management of water distribution networks (WDN). Suite of functions deployed as “add-in functions” di Microsoft Office – Excel, plug-in di ARCGIS® e QGIS entailing “just –in-time” transfer of the latest technical-scientific research achievements for professionals, researchers and students.*

Hydroinformatics and Data analysis-modelling

- *EPR MOGA-XL: hybrid “data-modelling” strategy to get symbolic formulation for models starting from input-output system data. Tool deployed as add-in in Microsoft Office – Excel environment, used in civil, hydraulic and environmental engineering.*
- *ANN MOGA-XL: tool for the automatic building of multi-objective Artificial Neural Networks (ANNs) for data modelling. Tool deployed as add-in in Microsoft Office – Excel environment, used in civil, hydraulic and environmental engineering.*

RESEARCH AND
TECHNOLOGY TRANSFER
PROJECTS

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- 2026 "Water for Growing Cities" MUR - JOINT ACTIONS AND PROGRAMMES IN THE FRAMEWORK OF THE MEMORANDUM OF UNDERSTANDING ON COOPERATION IN FIELDS OF SCIENCE, TECHNOLOGY AND INNOVATION 2025-2027 BETWEEN ITALY – UZBEKISTAN.
 - Role: Responsible of local research unit.
 - 2025 "MIADIGITACQUE: Modellizzazione Idraulica Avanzata e servizi idrici DIGITali per la Gestione predittiva degli ACQUEdotti." PIANO NAZIONALE RIPRESA E RESILIENZA (PNRR) MISSIONE 4, "ISTRUZIONE E RICERCA" - COMPONENTE 2, "DALLA RICERCA ALL'IMPRESA" - LINEA DI INVESTIMENTO 1.3, FINANZIATO DALL'UNIONE EUROPEA – NEXTGENERATIONEU", PROGETTO "Multi-Risk sciEnce for resilienT commUnities undeR a changiNg climate – RETURN" PE00000005, CUP E13C22001860001
 - Role: Investigator
 - 2024-2025 "MULTI-TWIN: Intelligenza artificiale a supporto di analisi MULTI-rischio mediante digital-TWIN" – PNRR Centri Nazionali
 - Role: Investigator
 - 2024-2025 "INTERCONNECTING: Dati, Analisi e modelli digitali Immersivi per la conservazione sostenibile del patrimonio costruito: valutazione del rischio e strategie proattive"
 - Role: Investigator
 - 2023-2025 "GENESIS: GEStioNE del rischio SISmico per la valorizzazione turistica dei centri storici del Mezzogiorno" PON Ricerca e Innovazione 2014–2020. PROGETTI DI RICERCA INDUSTRIALE E SVILUPPO SPERIMENTALE.
 - Role: Investigator
 - 2021 "GLORIA - Gaining knowLedge of Overtopping RIsk for urbanized coastal Areas" - Spanish Plan for Scientific and Technical Research and Innovation 2017-2020 – Total project budget: 170.973,00 € - Code: PID2020-115030RJ-I00
 - Role: Foreign expert supporting the PI
 - 2021 "Energidrica: energy efficiency in water networks management" – Progetti di ricerca industriale e lo Sviluppo sperimentale nelle 12 aree di specializzazione individuate nel PNR 2015-2020, di cui al D.D. del 13 luglio 2017 n. 1735, PON and FSC funds
 - Role: Investigator
 - 2019 "SUSTaiNable WATER supply networks in Mediterranean touristic areas (SunWater)." – Interreg Grecia-Italia – European Union
 - Role: Contractor

- 2015 – 2018 “Methodologies and tools for the sustainable management of urban water distribution networks in the Medi-terranean area” – funded by the “Future in Research” program – Apulian Region (Italy).
- Role: Principal Investigator
- 2015 – 2017 “Efficient, effective, economic water demand management in the growing Oslo city – E3WDM”, number 245652. Project Owner: City of Oslo Water and Sewerage Works, Regional Research Fund (Norway).
- Role: Contractor
- 2014 – 2016 “Innovation in Water Infrastructure - New Generation - InnoWatING”, number: 234975. Project Owner: City of Oslo Water and Sewerage Works, Research Council of Norway.
- Role: Contractor
- 2014 “Tools and procedures for an advanced and sustainable management of water distribution systems” – Scientific Research Programs of Relevant National Interest - PRIN2012 (Prot. 20127PKJ4X_003) - Italian Ministry of University and Research.
- Role: Investigator
- 2014 “Advanced analysis tools for the management of water losses in urban aqueducts” - Scientific Research Programs of Relevant National Interest - PRIN2012 (Prot. 201252RZ2Y_002) - Italian Ministry of University and Research.
- Role: Investigator
- 2012 “Innovative tools for water distribution network simulation and analysis” - Scientific Research Programs of Relevant National Interest - PRIN2008 (Prot. 20084AX2MF_002) - Italian Ministry of University and Research.
- Role: Investigator
- 2009 “Integrative Systems and the Boundary Problem – ISBP” - European Union’s Framework Programme 6 - New and Emerging Science and Technology (NEST) Pathfinder initiative, NEST-2005-Path-CUL (Contract 043199), n. 043199/STREP/2007
- Role: Contractor
- 2006 “Multi-objective evolutionary optimization and data-driven techniques for water system management” – Internationalization of the Italian University system: “Interlink” – MIUR (Prot. I104CHLB4D) – MIUR (Prot. I104CHLB4D) .
- Role: Investigator
- 2006 “Optimization of information-intensive processes: applications to the ICT and environment sectors” (PE106) – Apulian Region, Explorative Projects
- Role: Investigator
- 2005 - 2008 Collaboration on the following projects at “Centre for Water Systems”- Department of Engineering, Computer Science and Mathematics - University of Exeter, UK:
- UKWIR: guide research on “Modelling Performance Indicators for Sewer systems using Evolutionary Computing” in collaborazione con Ewan Group Ltd.
 - Anglian Water (UK): “Performance modelling of wastewater assets using EPR”.
 - Anglian Water (UK): “Performance modelling of clean water assets using EPR”.
 - Wessex Water (UK): “Performance modelling of wastewater assets using EPR”.
 - RPS (UK): “Natural leakage rate modelling using EPR”.

INTERNAZIONAL ACTIVITIES

Involvement in editorial boards

- Since 2024 - Editor of “Digital Water: Knowledge Application & Hydroinformatics” – Taylor and Francis, ISSN: 2837-5807
- Since 2019 Member of Editorial Board “Journal of Hydroinformatics” IAHR-IWA-IAHS, ISSN: 1464-7141
- From 2015 to 2021 Editor of “Water Supply” (former “Water Science and Technology: Water Supply”)(ISSN Print: 1606-9749, EISSN 1607-0798) – IWA Publishing – from 2015 to 2021.
- Member of Editorial Board “environments” journal – MDPI (ISSN 2076-3298) from 2012.
- Guest Editor “Journal of Water Resources Planning and Management” - ASCE – ISSN (print): 0733-9496 - ISSN (online): 1943-5452 -Special Issue "The Battle of Background Leakage Assessment for Water Networks" (2014-2015) Vol.142 (5)
- Guest Editor “environments” journal (ISSN 2076-3298) - Special Issue "Data-Modelling Applications in Water System Management" (2015-2016) (www.mdpi.com/journal/environments/special_issues/Data-Modelling-Applications)
- Editor of “16th Water Distribution System Analysis Conference, WDSA2014 - Urban Water Hydroinformatics and Strategic Planning” Procedia Engineering, Vol. 89, Pages 1-1594 (2014), Ed.: Giustolisi O., Brunone B., Laucelli D., Berardi L. and Campisano A.
- Editor of “12th International Conference on Computing and Control for the Water Industry, CCWI2013” Procedia Engineering, Vol. 70, Pages 1-1772 (2014), Ed.: Brunone B., Giustolisi O., Ferrante M., Laucelli D., Meniconi S., Berardi L. and Campisano A.
- Guest Editor of “Hydrology” Special Issue "Advancements in Data-Driven Modeling and Data-Mining techniques in Hydrology", MDPI, (ISSN 2306-5338) (2014-2015) Vol. 2(3)
- Guest Editor of “Journal of Water Supply: Research and Technology – Aqua” - IWA Publishing - (2014-2015) Vol. 64 (5)
- Topical Editor of “Drinking Water Engineering and Science” – Copernicus Publications - ISSN: 1996-9457 – eISSN: 1996-9465 (2014) Vol. 7(1).

Awards and acknowledgements

- Since 2024 - Member of the Leadership Team del IAHR/IWA Joint Committee on Hydroinformatics
- Invited Speaker of seminar “Advancements in Water Distribution Network analysis for Asset Management” organized by Institution of Civil Engineering of Dubai and Heriot-Watt University, (online) 26 April 2022.
- Invited Speaker at international conference 2018 EENVIRO Conference on “Sustainable Solutions for Energy and Environment”, Cluj-Napoca (Romania), 9-13 Ottobre 2018.
- Outstanding Reviewer of ASCE Journal of Water Resources planning and Management – Year 2017
- Outstanding Reviewer 2012 of “Journal of Hydroinformatics”, IAHR-IWA-IAHS, ISSN: 1464-7141.
- Best presentation award – Fifth seminar “La diagnosi e la gestione dei sistemi idrici” [“Water systems diagnosis and management”] Rome, 16-17 June 2011.
- Mentioned among the 10 most accessed papers of Journal of Hydroinformatics from 2009 to 2011. “Development of pipe deterioration models for Water Distribution Systems using EPR.” di Berardi, L., Kapelan, Z., Giustolisi, O., Savic, D.A., (2008). Journal of Hydroinformatics, IWA-IAHR, UK, 10(2), 113 – 126

Involvement in the scientific community

- 2024-2027 – Member of the Local Organizing Committee for the 42nd IAHR World Congress 2027, scheduled to take place in Bari from 20 June to 2 July 2027.
- 2025 – Member of the international committee for the PhD examination at the University of Auckland, Australia
- 2025 – Member of the international committee for the PhD examination at the University of Exeter, United Kingdom
- 2021 - Member of the international committee for PhD degree at “Politecnico di Bari” – Dept of Civil Engineering and Architecture, Bari, Italy.
- Since 2019 – Evaluator of project proposals for the Estonian Research Council.
- 2018-2021 - Member of the international committee for PhD degree at “Universidad de los Andes” – Facultad de Ingenieria, Colombia.
- 2017 - International Opponent of PhD dissertation of Markus Sunela – PhD Thesis: “Real-Time control optimization of water distribution system with storage”, Tallin University of Technology, Faculty of Civil Engineering, Department of Mechanics.
- 2017 - Invitation for Erasmus Mobility for Teaching at “Power Engineering Faculty”, University Politehnica of Bucharest (UPB) (Romania), as Lecturer of “Water Quality Modelling in Distribution Networks”, MSc degree in Environmental Problems in Power Engineering.

- 2016 – Guest lecturer at “Norwegian University of Science and Technology”, Trondheim (Norvegia), “Institute of Water and Environment”, as Lecturer for courses in “Water system specialization” e “Urban Water Systems”, 4° e 5° year of MsC in Civil Engineering, on “advanced hydraulic modelling and leakage management in water distribution networks”.
- Member of the International Scientific Committee – 13th World Congress of the European Water Resources Association (EWRA), Palermo, Italy, June 24-28, 2025 (web: <https://ewra2025.ewra.net/>)
- Member of the International Scientific Committee – 15th International Conference on Hydroinformatics (HIC2024), Beijing, China, May 27-30, 2024 (web: <https://hic2024.scimeeting.cn/>)
- Member of the International Scientific Committee – 4th Joint International Conference in Computing and Control for Water Industry (CCWI) / Water Distribution System Analysis (WDSA) 2024, Ferrara, Italy, July 1-5, 2024 (web: <https://wdsa-ccwi2024.it/>)
- Member of the International Scientific Committee – 3rd Joint International Conference in Computing and Control for Water Industry (CCWI) / Water Distribution System Analysis (WDSA) 2022, Valencia, Spain, July 18-22, 2022 (web: <https://wdsa-ccwi2022.upv.es/about/#committees>)
- Member of the “14th International Conference on Hydroinformatics – HIC 2022”, Bucherest, Romania, 4-8 July 2022 – (web: <https://hic2022.utcb.ro/#committees>)
- Member of National Organizing and Programme Committee della “13th International Conference on Hydroinformatics – HIC 2018”, Palermo, Italia, 1-6 July 2018 – (web: <https://www.hic2018.org/conference/#committee>)
- Member of International Advisory Scientific Committee, 1st International WDSA/CCWI Joint Conference – WDSA/CCWI 2018”, Kingston, Ontario, Canada, 23-25 July 2018 – (web: <http://www.queensu.ca/wdsa-ccwi2018/about/committees>)
- Chairman “15th International Conference on Computing and Control for the Water Industry – CCWI 2017”, Sheffield (United Kingdom), 5-7 September 2017 – (web: www.sheffield.ac.uk/polopoly_fs/1.726381!/file/CCWIProgramme.pdf)
- Chairman “18th International Conference on Water Distribution System Analysis – WDSA 2016, Cartagena de Indias (Colombia), 24-28 July 2016 - (web: https://wdsa2016.uniandes.edu.co/images/documentos/WDSA2016_Full_Program.pdf)
- Member International Scientific Committee and Chairman “13th International Conference on Computing and Control for the Water Industry – CCWI 2015”, Leicester (United Kingdom), 2-4 September 2015 - (web: www.water-system.org/ccwi2015/ccwi2015.water-system.org/public/conferences/1/schedConfs/1/program-en_US.pdf)
- Member of Organizing Committee and Technical Program Committee “16th International Conference on Water Distribution System Analysis – WDSA 2014”, Bari, 14-17 July 2014 – (web: www.water-system.org/wdsa2014/index1344.html?q=content/organizing-and-technical-committee)
- Member Organizing Committee and Technical Program Committee “12th International Conference on Computing and Control for the Water Industry – CCWI 2013”, Perugia, 2-4 September 2013 - (web: www.water-system.org/ccwi2013/index1344.html?q=content/organizing-and-technical-committee)
- Member Scientific Committee of sixth seminar “Efficiency and Energy Saving of Water Systems” Trento, 8-9 July 2015 (web: <http://webmagazine.unitn.it/evento/dicam/3023/efficienza-e-risparmio-energetico-dei-sistemi-idrici>).
- Member Scientific Committee of the fifth seminar “The diagnosis and management of water systems” Rome, 16-17 June, 2011.
- Chairman at “5th International Perspective on Water Resources & the Environment Conference - IPWE 2012” 4-7 January, 2012, Marrakech, Morocco.

PERSONAL SKILLS

Organisational and managerial skills

- 2022 -: Coordinator of the Doctorate Programme in “Engineering Science”, University “G. d’Annunzio” of Chieti-Pescara (Italy)
- 2019 – : Board of Directors INFORMHYDRO s.r.l.
- 2019 – : Responsible of Student orientation activities for Engineering courses, Engineering and Geology Department, University “G. d’Annunzio” Chieti Pescara
- 2020 – : Member of Department board., Engineering and Geology Department, University “G. d’Annunzio” Chieti Pescara

BIBLIOMETRIC INDICATORS AND SCIENTIFIC PRODUCTION

- ORCI iDi orcid.org/0000-0002-6252-2467
- GOOGLE SCHOLAR CITATIONS (June 2026)
 - H-index = 29
 - Number of Citations = 3037
- SCOPUS (June 2026)
 - H-index = 25
 - Number of Citations = 2009
- ISI WEB OF SCIENCE (June 2026)
 - H-index = 23
 - Number of Citations = 1576

| International journal papers | Number of papers |
|---|------------------|
| <i>Journal of Hydroinformatics (IAHR-IWA-IAHS)</i> | 14 |
| <i>Journal of Water Resources Planning and Management (ASCE)</i> | 7 |
| <i>Journal of Hydraulic Engineering (ASCE)</i> | 4 |
| <i>Environmental Modelling & Software (Elsevier)</i> | 2 |
| <i>International Journal of River Basin Management</i> | 1 |
| <i>Urban Water Journal (Taylor & Francis)</i> | 3 |
| <i>Water Science and Technology (IWA)</i> | 2 |
| <i>Proceeding of ICE - Water Management Journal (ICE)</i> | 1 |
| <i>Advances in Engineering Software (Elsevier)</i> | 1 |
| <i>Biochemical Engineering Journal (Elsevier) - ISSN: 1369-703X</i> | 1 |
| <i>Geomorphology</i> | 1 |
| <i>Sustainability</i> | 1 |
| <i>Water Resources Research (AGU – Wiley) - ISSN: 1944-7973</i> | 4 |
| <i>Water Resources Management</i> | 1 |
| <i>Water Research (Elsevier)</i> | 1 |
| <i>Digital Water - Knowledge Application & Hydroinformatics</i> | 2 |
| Total | 46 |
| Editorials/Introductions in intl. journals (special issues) | 5 |
| Books and International Conference proceedings | 75 |
| National Journals, Books and Conference proceedings | 14 |

PUBLICATIONS (01/2023)

International journals

| Dettagli | DOI |
|--|-------------------------------|
| 1 Berardi, L. , Laucelli, D. B., Simone, A., Giustolisi, O. (2026) Accounting for seasonality in district metering areas design and leakage management in water distribution networks. <i>Urban Water Journal</i> , | 10.1080/1573062X.2026.2642277 |
| 2 Altomare, C., Berardi, L. , Ripani, S., & Gironella, X. (2025). Evaluating coastal safety using individual wave overtopping volumes: insights from evolutionary polynomial regression. <i>Digital Water</i> , 3(1), 1–29. https://doi.org/10.1080/28375807.2025.2531945 | 10.1080/28375807.2025.2531945 |
| 3 Berardi, L. , Laucelli, D. B., Ripani, S., Piazza, S., & Freni, G. (2025). Using water loss performance indicators to support regulation and planning in real water distribution systems. <i>Digital Water - Knowledge Application & Hydroinformatics</i> , 3(1), 1–20. | 10.1080/28375807.2025.2504342 |
| 4 Rizvi, S.A.H., Rustum, R., Berardi, L. , Wright, G., Arthur, S., Laucelli, D. (2025) Studying the Effects of Private Water Storage Tanks on Pump Scheduling Optimization and Leakage Control. <i>Sustainability</i> , 17, 1825. | 10.3390/su17051825 |

- 5 Giustolisi O., Mazzolani G., **Berardi L.**, Laucelli D., (2024) From advanced hydraulic modelling to performance indicator for the efficiency of investments in leakage management of pressurized water systems. *Water Research* 258(1), 121765 [10.1016/j.watres.2024.121765](https://doi.org/10.1016/j.watres.2024.121765)
- 6 Laucelli D.B., Enriquez L.V., Ariza A.D. Ciliberti F.C., **Berardi L.**, Giustolisi O. (2023) A digital water strategy based on the digital water service concept to support asset management in a real system. *Journal of Hydroinformatics* 25 (5): pp. 2004–2016 [10.2166/hydro.2023.313](https://doi.org/10.2166/hydro.2023.313)
- 7 Ciliberti, F.G., **Berardi, L.**, Laucelli, D.B., Ariza A.D., Enriquez, L.V., Giustolisi, O. (2023) From digital twin paradigm to digital water services *Journal of Hydroinformatics*, 25(6), pp. 2444–24459 [10.2166/hydro.2023.237](https://doi.org/10.2166/hydro.2023.237)
- 8 Giustolisi O., Ciliberti F., **Berardi L.**, Laucelli D., (2023) Leakage Management Influence on Water Age of Water Distribution Networks. *Water Resources Research*, 59, e2021WR031919 [10.1029/2021WR031919](https://doi.org/10.1029/2021WR031919)
- 9 Giustolisi O., Ciliberti F., **Berardi L.**, Laucelli D., (2022) A Novel Approach to Analyze the Isolation Valve System Based on the Complex Network Theory. *Water Resources Research*, 58(4), e2021WR031304. [10.1029/2021WR031304](https://doi.org/10.1029/2021WR031304)
- 10 **Berardi L.**, Laucelli D., Ciliberti F., Bruaset S., Raspat G., Selseth I., Ugarelli R., Giustolisi O. (2022) Reliability analysis of complex water distribution systems: the role of the network connectivity and tanks. *Journal of Hydroinformatics*, IWA-IAHR, UK, 24 (1): 128–142 [10.2166/hydro.2021.140](https://doi.org/10.2166/hydro.2021.140)
- 11 Diao K., **Berardi L.**, Laucelli D. B., Ulanicki B., Giustolisi O. (2022). Topological and hydraulic metrics-based search space reduction for optimal re-sizing of water distribution networks. *Journal of Hydroinformatics*, 24(3): 610-621 [10.2166/HYDRO.2022.158](https://doi.org/10.2166/HYDRO.2022.158)
- 12 Rizvi S.; Rustum R.; Giustolisi O.; Wright G.; Arthur S.; **Berardi L.** (2021) Effects of Orifice diameter and Retention Time of Local Tanks on the Reliability and Carbon Footprint of Water Distribution Networks. *Journal of Water Resources Planning and Management*, ASCE, 147(11) [10.1061/\(ASCE\)WR.1943-5452.0001468](https://doi.org/10.1061/(ASCE)WR.1943-5452.0001468)
- 13 **Berardi, L.**, Giustolisi, O. (2021) Calibration of Design Models for Leakage Management of Water Distribution Networks. *Water Resources Management* 35(8), 2537–2551. [10.1007/s11269-021-02847-x](https://doi.org/10.1007/s11269-021-02847-x)
- 14 Montes C., Vanegas, S., Kapelan Z., **Berardi L.**, Saldarriaga J. (2020) Non-deposition self-cleansing models for large sewer pipes. *Water Sci Technol* 81 (3),606–621. [10.2166/wst.2020.154](https://doi.org/10.2166/wst.2020.154)
- 15 Montes C., **Berardi L.**, Kapelan Z., Saldarriaga J. (2020) Predicting bedload sediment transport of non-cohesive material in sewer pipes using evolutionary polynomial regression – multi-objective genetic algorithm strategy, *Urban Water Journal*, 17(2), 154-162 [10.1080/1573062X.2020.1748210](https://doi.org/10.1080/1573062X.2020.1748210)
- 16 Simone A., Ciliberti F.G., Laucelli D.B., **Berardi L.**, Giustolisi O. (2020) Edge betweenness for water distribution networks domain analysis. *Journal of Hydroinformatics*, IWA-IAHR, UK, 22 (1): 121–131 [10.2166/hydro.2019.030](https://doi.org/10.2166/hydro.2019.030)
- 17 Laucelli D. B., **Berardi L.**, Simone A., Giustolisi O., (2019) Towards serious gaming for water distribution networks sizing: A teaching experiment *Journal of Hydroinformatics*, IWA-IAHR, UK, 21 (2): 207-222 [10.2166/hydro.2018.038](https://doi.org/10.2166/hydro.2018.038)
- 18 **Berardi L.**, Simone A., Laucelli D. B., Ugarelli R. M., Giustolisi O., (2018) Relevance of hydraulic modelling in planning and operating real-time pressure control: case of Oppegård municipality *Journal of Hydroinformatics*, IWA-IAHR, UK, 20 (3): 535–550 [10.2166/hydro.2017.052](https://doi.org/10.2166/hydro.2017.052)
- 19 Giustolisi O., Ugarelli R.M, **Berardi L.**, Laucelli D.B., Simone A., (2017) “Strategies for the Electric Regulation of Pressure Control Valves”, *Journal of Hydroinformatics*, IWA-IAHR, UK, 19 (5), 621-639 [10.2166/hydro.2017.101](https://doi.org/10.2166/hydro.2017.101)
- 20 Bruno D. E., Barca E., Goncalves R. M., de Araujo Queiroz H. A., **Berardi L.**, Passarella G. (2017) “Linear and evolutionary polynomial regression models to forecast coastal dynamics: Comparison and reliability assessment”, *Geomorphology*, Elsevier, 300 (2018) 128–140 [10.1016/j.geomorph.2017.10.012](https://doi.org/10.1016/j.geomorph.2017.10.012)
- 21 Laucelli D., Simone A., **Berardi L.**, Giustolisi O. (2017) “Optimal Design of District Metering Areas for the Reduction of Leakages”. *Journal of Water Resources Planning and Management*, ASCE, 143(6), 04017017-1-12 [10.1061/\(ASCE\)WR.1943-5452.0000768](https://doi.org/10.1061/(ASCE)WR.1943-5452.0000768)
- 22 Mazzolani G., **Berardi L.**, Laucelli, D., Simone A., Martino R. Giustolisi O. [10.1061/\(ASCE\)WR.1943-5452.0000768](https://doi.org/10.1061/(ASCE)WR.1943-5452.0000768)

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