

INFORMAZIONI PERSONALI



Luigi Berardi

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Sesso M | Data di nascita 05/05/1979 | Nazionalità Italiana

POSIZIONE RICOPERTA
DAL 2021

Professore Ordinario in Costruzioni Idrauliche e Marittime e Idrologia
SSD: CEAR-01/B (già ICAR/02)
GSD: 08/CEAR-01
Università degli Studi "G. d'Annunzio" di Chieti Pescara.

ESPERIENZA
PROFESSIONALE

-
- 2018 - 2021 **Professore Associato in Costruzioni Idrauliche e Marittime e Idrologia**
(SSD: ICAR/02)
Università "G. d'Annunzio" di Chieti-Pescara (Italia)
Dipartimento di Ingegneria e Geologia (INGEO)
42, Viale Pindaro, 65127, Pescara (Italia)
- 2015 - 2018 **Ricercatore a Tempo Determinato ai sensi della Legge 240 del 30 dicembre 2010, art. 24, c. 3, lett. (a) (SSD: ICAR/02)**
Politecnico di Bari,
Dipartimento di Ingegneria Civile e Architettura
Progetto di ricerca "Metodologie e strumenti per la gestione sostenibile di acquedotti urbani in area mediterranea"
- 2010 - 2014 **Assegnista di Ricerca (SSD: ICAR/02)**
Politecnico di Bari,
Dipartimento di Ingegneria Civile e Architettura
Progetto di ricerca: "Riduzione delle perdite idriche e riabilitazione delle reti di acquedotto: studio di un sistema di analisi e supporto alla decisione"

ISTRUZIONE E FORMAZIONE

-
- 1998 - 2004 **Laurea (quinquennale) in Ingegneria per l'Ambiente e il Territorio**
Politecnico di Bari, Bari, Italia
▪ Tesi discussa il 28.04.2004 con votazione 110/110 *cum laude*
- 2006 - 2009 **Dottorato di Ricerca in Scienze dell'Ingegneria Civile e Ambientale**
Politecnico di Bari, Bari, Italia
- 2005 - 2006 **Visiting Researcher presso il Centre for Water Systems,**
School of Engineering, Mathematic and Computing,
University of Exeter (United Kingdom)
- 2005 **Vincitore di una borsa di studio di perfezionamento all'estero**
Progetto di ricerca: "Sviluppo di un sistema di supporto alle decisioni nella gestione delle reti idrauliche basata su una tecnica di modellazione evolutiva multi-obiettivo"

ATTIVITA' DIDATTICA

- 2018 - oggi **Idraulica**
Infrastrutture Idrauliche a rete
Progettazione di Opere Idrauliche
Università "G. d'Annunzio" di Chieti-Pescara (Italia)
- 2020 - 2022 **Hydrology of Planets**
Università "G. d'Annunzio" di Chieti-Pescara (Italia)
- 2009 - 2018 **"Complementi di Costruzioni Idrauliche", "Costruzioni Idrauliche" e "Gestione dei Sistemi Idraulici"**
Docente a contratto e attività di supporto alla didattica
Politecnico di Bari, Italia
- 2013 **Docente master di II livello "Experts in integrated and sustainable water-energy cycle in urban drainage systems"**
Università della Calabria, Italia

RESPONSABILITA'
ACCADEMICHE

- 2022 - oggi **Coordinatore del Dottorato di Ricerca in "Engineering Science"**
Università "G. d'Annunzio" di Chieti-Pescara (Italia)
Dipartimento di Ingegneria e Geologia
- 2019 - 2021 **Responsabile per le attività di Orientamento per i Corsi di Ingegneria**
Università "G. d'Annunzio" di Chieti-Pescara (Italia)
Dipartimento di Ingegneria e Geologia
- 2020 - 2021 **Membro della Giunta del Dipartimento INGEO**
Università "G. d'Annunzio" di Chieti-Pescara (Italia)
Dipartimento di Ingegneria e Geologia

RICERCA TECNICO-
SCIENTIFICA E
TRASFERIMENTO
TECNOLOGICO

Principali ambiti di ricerca

Analisi e gestione delle reti di distribuzione idrica

- Modellazione idraulica avanzata di reti idriche in pressione per la gestione
- Gestione delle perdite idriche
- Sviluppo di indicatori di performance per la gestione delle reti di distribuzione
- Sviluppo di strategie di controllo di dispositivi per la regolazione di pressione
- Pianificazione di interventi di manutenzione e riabilitazione
- Sviluppo di metriche per la segmentazione delle reti acquedottistiche
- Pianificazione ottima della distrettualizzazione e dei sistemi di monitoraggio
- Gestione operativa dei pompaggi
- Analisi di scenari di vulnerabilità meccanica

Applicazione di modelli bidimensionali (full-2D) per lo studio di fenomeni di rainfall-runoff
Hydroinformatics,

- *Sviluppo e distribuzione di tecniche di data-modelling per l'ingegneria civile e la gestione di reti*

idriche (Multi-objective Evolutionary Polynomial Regression; Multi-objective Artificial Neural Networks)

Trasferimento tecnologico

Co-fondatore nel Settembre 2019 e membro del Consiglio di Amministrazione della società INFORMHYDRO s.r.l., SPIN-OFF dell'Università degli Studi "G. d'Annunzio" di Chieti Pescara, start-up innovativa nata per promuovere il trasferimento di tecnologia attraverso lo sviluppo di strumenti software integrati e personalizzati nell'area della scienza dei dati e il supporto decisionale per i sistemi idrici nell'ingegneria civile.

Collaborazione con la società IDEA-RT s.r.l., SPIN-OFF del Politecnico di Bari, nell'ambito di progetti e collaborazioni tecnico-scientifiche a livello nazionale e internazionale.

Dal 2010 – Attività di aggiornamento e training degli utenti sui seguenti strumenti software:

Analisi delle reti di distribuzione idrica:

- *WDNetXL-GIS: sistema per analisi, pianificazione e gestione integrata di reti di distribuzione idrica (WDN). Suite di funzioni distribuite come add-in di MS-Excel® e plug-in di ARCGIS® e QGIS per il trasferimento "just-in-time" dei più recenti avanzamenti della ricerca tecnico-scientifica di settore a professionisti, ricercatori e studenti.*

Hydroinformatics and Data analysis-modelling

- *ANN MOGA-XL: strumento per la costruzione automatica multi-obiettivo di Reti Neurali Artificiali (ANNs) per data-modelling. Strumento distribuito come funzione di MS-Excel® ed utilizzata in applicazioni di ingegneria civile, idraulica e ambientale.*
- *EPR MOGA-XL: strategia ibrida di "data-modelling" per la costruzione di espressioni simboliche di modelli a partire dai dati. Strumento distribuito come add-in di MS-Excel® ed utilizzata in applicazioni di ingegneria civile, idraulica e ambientale.*

PROGETTI DI RICERCA E
TRASFERIMENTO
TECNOLOGICO

-
- 2025 "MIADIGITACQUE: Modellizzazione Idraulica Avanzata e servizi idrici DIGITali per la Gestione predittiva degli ACQUEdotti." PIANO NAZIONALE RIPRESA E RESILIENZA, 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
 - Ruolo: Partecipante
 - 2024-2025 "MULTI-TWIN: Intelligenza artificiale a supporto di analisi MULTI-rischio mediante digital-TWIN" – PNRR Centri Nazionali
 - Ruolo: Partecipante
 - 2024-2025 "INTERCONNECTING: Dati, Analisi e modelli digitali Immersivi per la conservazione sostenibile del patrimonio costruito: valutazione del rischio e strategie proattive"
 - Ruolo: Participant
 - 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.
 - Ruolo: Partecipante
 - 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
 - Ruolo: Esperto straniero a supporto del 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
- Ruolo: Partecipante
- 2019 “SUSTAINABLE WATER supply networks in Mediterranean touristic areas - SUNWATER”, Interreg V-A Greece Italy Programme 2014-2020
- Ruolo: Contractor
- 2015 – 2018 “Metodologie e strumenti per la gestione sostenibile di acquedotti urbani in area mediterranea” – “Programma regionale a sostegno della specializzazione intelligente e della sostenibilità sociale e ambientale” – Intervento – “Future in Research” – Regione Puglia.
- Ruolo: Responsabile scientifico
- 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).
- Ruolo: 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.
- Ruolo: Contractor
- 2014 “Strumenti e procedure per la gestione avanzata e sostenibile dei sistemi di distribuzione idrica” - Programmi di Ricerca Scientifica di Rilevante Interesse Nazionale – PRIN2012 (Prot. 20127PKJ4X_003) - MIUR.
- Ruolo: Partecipante
- 2014 “Strumenti avanzati di analisi per la gestione delle perdite idriche negli acquedotti urbani” - Programmi di Ricerca Scientifica di Rilevante Interesse Nazionale – PRIN2012 (Prot. 201252RZ2Y_002) - MIUR.
- Ruolo: Partecipante
- 2012 “Strumenti innovativi per la simulazione e l'analisi delle reti idrauliche” - Programmi di Ricerca Scientifica di Rilevante Interesse Nazionale – PRIN2008 (Prot. 20084AX2MF_002) – MIUR.
- Ruolo: Partecipante.
- 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
- Ruolo: Contractor
- 2006 “Multi-objective evolutionary optimization and data-driven techniques for water system management” – Programmi per l'incentivazione del processo di internazionalizzazione del sistema universitario: “Interlink” – MIUR (Prot. II04CHLB4D) .
- Ruolo: Partecipante
- 2006 “Ottimizzazione dei processi information-intensive: applicazioni ai settori ICT e ambiente” (PE106) – Regione Puglia, Progetti Esplorativi
- Ruolo: Partecipante
- 2005 - 2008 Collaborazione a progetti di ricerca svolti dal “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".

RICONOSCIMENTI INTERNAZIONALI

Partecipazione a comitati editoriali

- Dal 2024 - Editor di "Digital Water: Knowledge Application & Hydroinformatics" – Taylor and Francis, ISSN: 2837-5807
- Dal 2019 - Membro dell' Editorial Board del "Journal of Hydroinformatics" IAHR-IWA-IAHS, ISSN: 1464-7141
- Dal 2015 al 2021 - Editor di "Water Supply" (già "Water Science and Technology: Water Supply")(ISSN Print: 1606-9749, EISSN 1607-0798) – IWA Publishing .
- Membro dell' Editorial Board di "environments" journal – MDPI, ISSN 2076-3298.
- Guest Editor per la rivista "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 per "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 di "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 di "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 per la rivista "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 per la rivista "Journal of Water Supply: Research and Technology – Aqua" - IWA Publishing - (2014-2015) Vol. 64 (5)
- Topical Editor per la rivista "Drinking Water Engineering and Science" – Copernicus Publications - ISSN: 1996-9457 – eISSN: 1996-9465 (2014) Vol. 7(1).

Riconoscimenti e premi

- Dal 2024 – Membro del Leadership Team del IAHR/IWA Joint Committee on Hydroinformatics
- Invited Speaker al seminario "Advancements in Water Distribution Network analysis for Asset Management" organizzato da Institution of Civil Engineering of Dubai and Heriot-Watt University, (online) 26 April 2022.
- Invited Speaker alla conferenza internazionale 2018 EENVIRO Conference on "Sustainable Solutions for Energy and Environment", Cluj-Napoca (Romania), 9-13 Ottobre 2018.
- Outstanding Reviewer per ASCE Journal of Water Resources planning and Management – Year 2017
- Outstanding Reviewer per l'anno 2012 per il "Journal of Hydroinformatics", IAHR-IWA-IAHS, ISSN: 1464-7141.
- Premio per la migliore presentazione - Quinto seminario "La diagnosi e la gestione dei sistemi idrici" Roma, 16-17 Giugno 2011.
- Menzionato tra i 10 articoli più letti del Journal of Hydroinformatics nel 2009 e nel 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

Coinvolgimento nella comunità scientifica

- 2024-2027 – Membro del Comitato Organizzatore Locale del 42nd World Congress IAHR 2027 in programma a Bari dal 20 Giugno al 2 Luglio 2027.
- 2025 - Membro della commissione internazionale per l'esame di Dottorato di Ricerca presso University of Auckland, Australia
- 2025 - Membro della commissione internazionale per l'esame di Dottorato di Ricerca presso University of Exeter, United Kingdom
- 2021 - Membro della commissione internazionale per l'esame di Dottorato di Ricerca presso il

Politecnico di Bari, Dipartimento di Ingegneria Civile e Architettura, Bari.

- Dal 2019 – Valutatore di progetti di ricerca per Estonian Research Council.
- 2018-2021 - Membro della commissione internazionale per l'esame di Dottorato di Ricerca della Universidad de los Andes, Facultad de Ingenieria, per il candidato Carlos Daniel Montes.
- 2017 - International Opponent per: PhD Thesis: Markus Sunela - "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 presso "Power Engineering Faculty" della "University Polithenica of Bucharest" (UPB) (Romania), in qualità di docente nel modulo Water Quality Modelling in Distribution Networks, nell'ambito del corso di laurea magistrale Environmental Problems in Power Engineering.
- 2016 – Guest lecturer presso la "Norwegian University of Science and Technology", Trondheim (Norvegia), "Institute of Water and Environment", corsi "Water system specialization" e "Urban Water Systems", 4° e 5° anno Ingegneria Civile, su "advanced hydraulic modelling and leakage management in water distribution networks".
- Membro del Comitato Scientifico Internazionale – 4th Joint International Conference in Computing and Control for Water Industry (CCWI) / Water Distribution System Analysis (WDSA) 2024, Ferrara, Italia, 1–5 luglio 2024 (web: <https://wdsa-ccwi2024.it/>)
- Membro del Comitato Scientifico Internazionale – 15th International Conference on Hydroinformatics (HIC2024), Pechino, Cina, 27–30 maggio 2024 (web: <https://hic2024.scimeeting.cn/>)
- Membro del Comitato Scientifico Internazionale – 13th World Congress of the European Water Resources Association (EWRA), Palermo, Italia, 24–28 giugno 2025 (web: <https://ewra2025.ewra.net/>)
- Membro dell' 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.
- Membro dell'International Scientific Committee e moderatore della "14th International Conference on Hydroinformatics (HIC 2022)", Bucarest (Romania), July 4-8, 2022.
- Membro dell' International Scientific Committee 2nd Joint International Conference in Computing and Control for Water Industry (CCWI) / Water Distribution System Analysis (WDSA), 1-4 Sept 2020 in Beijing, China – (web: <http://www.cwi-wdsa2020.com/committees.html>)
- Membro del National Organizing and Programme Committee della "13th International Conference on Hydroinformatics – HIC 2018", Palermo, Italia, 1-6 Luglio 2018 – (web: <https://www.hic2018.org/conference/#committee>)
- Membro dell' International Advisory Scientific Committee della "1st International WDSA/CCWI Joint Conference – WDSA/CCWI 2018", Kingston, Ontario, Canada, 23-25 Luglio 2018 – (web: <http://www.queensu.ca/wdsa-ccwi2018/about/committees>)
- Moderatore alla "15th International Conference on Computing and Control for the Water Industry – CCWI 2017", Sheffield (United Kingdom), 5-7 Settembre 2017 – (web: www.sheffield.ac.uk/polopoly_fs/1.7263811/file/CCWIProgramme.pdf)
- Moderatore alla "18th International Conference on Water Distribution System Analysis – WDSA 2016, Cartagena de Indias (Colombia), 24-28 Luglio 2016 - (web: https://wdsa2016.uniandes.edu.co/images/documentos/WDSA2016_Full_Program.pdf)
- Membro del Comitato Scientifico Internazionale e Moderatore della "13th International Conference on Computing and Control for the Water Industry – CCWI 2015", Leicester (United Kingdom), 2-4 Settembre 2015 - (web: www.water-system.org/ccwi2015/ccwi2015.water-system.org/public/conferences/1/schedConfs/1/program-en_US.pdf)
- Membro del Comitato Organizzatore e Technical Program Committee della "16th International Conference on Water Distribution System Analysis – WDSA 2014", Bari, 14-17 Luglio 2014 – (web: www.water-system.org/wdsa2014/index1344.html?q=content/organizing-and-technical-committee)
- Membro del Comitato Organizzatore e Technical Program Committee della "12th International Conference on Computing and Control for the Water Industry – CCWI 2013", Perugia, 2-4 Settembre 2013 - (web: www.water-system.org/ccwi2013/index1344.html?q=content/organizing-and-technical-committee)
- Membro del Comitato Scientifico del Sesto seminario "Efficienza e Risparmio Energetico dei Sistemi Idrici" Trento, 8-9 Luglio 2015 (web: <http://webmagazine.unitn.it/evento/dicam/3023/efficienza-e-risparmio-energetico-dei-sistemi-idrici>).
- Membro del Comitato Scientifico del Quinto seminario "La diagnosi e la gestione dei sistemi idrici" Roma, 16-17 Giugno 2011.
- Moderatore al "5th International Perspective on Water Resources & the Environment Conference - IPWE 2012" 4-7 Gennaio, 2012, Marrakech, Morocco.

COMPETENZE PERSONALI

Competenze organizzative e gestionali

- 2022 –: Coordinatore Dottorato di Ricerca in “Engineering Science” – Università degli Studi “G. d’Annunzio”
- 2019 –: Consiglio di Amministrazione di INFORMHYDRO s.r.l.
- 2019 - 2021 : Responsabile attività di Orientamento, Placement e Disabilità per Dipartimento di Ingegneria e Geologia - Università degli Studi “G. d’Annunzio”.
- 2020 - : Membro della Giunta del Dipartimento di Ingegneria e Geologia - Università degli Studi “G. d’Annunzio”.

INDICATORI BIBLIOMETRICI E PRODUZIONE SCIENTIFICA

ORCID
SCOPUS-ID

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13906997500

GOOGLE SCHOLAR
CITATIONS
(June 2025)

- H-index = 28
- Number of Citations = 2748

SCOPUS
(June 2025)

- H-index = 24
- Number of Citations = 1819

ISI WEB OF SCIENCE
(June 2025)

- H-index = 22
- Number of Citations = 1422

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

PUBBLICAZIONI

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. <i>Water Research</i> 258(1), 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. <i>Journal of Hydroinformatics</i> 25 (5): pp. 2004–2016	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 <i>Journal of Hydroinformatics</i> , 25(6), pp. 2444–24459	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)
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- 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)
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