Curriculum

Nome Name:	CORRADO
Cognome Surname:	CHISARI

ORCID:	0000-0002-1638-8017
Scopus Author ID:	56025889800
WOS Author ID:	n.d.
Sito WEB WEB site:	https://www.architettura.unicampania.it/dipartimento/docenti?MATRICOLA=067192

POSIZIONE PROFESSIONALE ATTUALE / CURRENT PROFESSIONAL POSITION:

Posizione attuale Current position:	In Servizio
Qualifica Qualification:	Ricercatore a t.d. - t.pieno (art. 24 c.3-b L. 240/10)
Ateneo/Ente/Azienda University/Institution/Company:	Università degli Studi della Campania "Luigi Vanvitelli"
Nazione Ateneo/Ente/Azienda University/Institution/Company Country:	ITA
Anno inizio Start Year:	2022
Anno fine End Year:	2025

PRECEDENTI ESPERIENZE LAVORATIVE (ULTIMI 10 ANNI) / PREVIOUS WORK EXPERIENCE (LAST 10 YEARS):

LINGUE / LANGUAGES:

Lingua Language:	Inglese
Scrittura Writing:	C2
Comunicazione Comunication:	C2

Lingua Language:	Italiano
Scrittura Writing:	madrelingua
Comunicazione Comunication:	madrelingua

AREA/SETTORE SCIENTIFICO-DISCIPLINARE / AREA/SECTOR SCIENTIFIC-DISCIPLINARY

Area scientifico-disciplinare Area scientific-disciplinary:	Ingegneria civile e Architettura
Area scientifico-disciplinare codice Area scientific-disciplinary code:	08
Settore scientifico-disciplinare codice Sector scientific-disciplinary code:	-Tecnica delle costruzioni
Settore scientifico-disciplinare codice Sector scientific-disciplinary code:	-CEAR-07/A

DESCRIZIONE DEI PRINCIPALI RISULTATI SCIENTIFICI CONSEGUITI NEGLI ULTIMI 10 ANNI (CON ANNESSO ELENCO DI MASSIMO 10 PUBBLICAZIONI) / DESCRIPTION OF THE MAIN SCIENTIFIC RESULTS ACHIEVED IN THE LAST 10 YEARS (WITH ATTACHED LIST OF MAXIMUM 10 PUBLICATIONS):

Descrizione Description:	*- Utilizzo di algoritmi genetici per l'identificazione strutturale statica e dinamica - Definizione di un setup di prova innovativo con martinetti piatti accoppiato ad analisi inversa per l'identificazione di modelli per strutture in muratura - Progetto ottimale di Tuned Mass Dampers anche considerando l'interazione terreno-struttura - Calibrazione ed analisi inversa di modelli numerici per giunti in acciaio - Simulazione numerica di emissioni acustiche nel calcestruzzo - Identificazione dinamica di strutture storiche - Metodi innovativi di modellazione numerica per strutture in muratura (macroscala, mesoscala, ibridi, multiscala)*

PUBBLICAZIONI / PUBLICATIONS:

Anno della pubblicazione Year of publication:	2025
Citazione Citation:	Chisari, Corrado, Zizi, Mattia, De Matteis, Gianfranco (2025). Dynamic model identification of the medieval bell tower of Casertavecchia (Italy). ENGINEERING FAILURE ANALYSIS, vol. 167, ISSN: 1350-6307, doi: 10.1016/j.engfailanal.2024.109055

Anno della pubblicazione Year of publication:	2015
Citazione Citation:	CHISARI, CORRADO, Macorini, L, AMADIO, CLAUDIO, Izzuddin, BA (2015). An inverse analysis procedure for material parameter identification of mortar joints in unreinforced masonry. COMPUTERS & STRUCTURES, vol. 155, p. 97-105, ISSN: 0045-7949, doi: 10.1016/j.compstruc.2015.02.008

Anno della pubblicazione Year of publication:	2015
Citazione Citation:	CHISARI, CORRADO, BEDON, CHIARA, AMADIO, CLAUDIO (2015). Dynamic and static identification of base-isolated bridges using Genetic Algorithms. ENGINEERING STRUCTURES, vol. 102, p. 80-92, ISSN: 0141-0296, doi: 10.1016/j.engstruct.2015.07.043

Anno della pubblicazione Year of publication:	2017
Citazione Citation:	Chisari, Corrado, Francavilla, Antonella B., Latour, Massimo, Piluso, Vincenzo, Rizzano, Gianvittorio, Amadio, Claudio (2017). Critical issues in parameter calibration of cyclic models for steel members. ENGINEERING STRUCTURES, vol. 132, p. 123-138, ISSN: 0141-0296, doi: 10.1016/j.engstruct.2016.11.030

Anno della pubblicazione Year of publication:	2018
Citazione Citation:	Chisari, Corrado, Macorini, Lorenzo, Amadio, Claudio, Izzuddin, Bassam A. (2018). Identification of mesoscale model parameters for brick-masonry. INTERNATIONAL JOURNAL OF SOLIDS AND STRUCTURES, vol. 146, p. 224-240, ISSN: 0020-7683, doi: 10.1016/j.ijsolstr.2018.04.003

Anno della pubblicazione Year of publication:	2020
Citazione Citation:	Chisari C., Guarnaccia C., Rizzano G. (2020). Numerical simulation of acoustic emission activity in reinforced concrete structures by means of finite element modelling at the macroscale. STRUCTURAL HEALTH MONITORING, vol. 19, p. 537-551, ISSN: 1475-9217, doi: 10.1177/1475921719856833

Anno della pubblicazione	2022

Year of publication:	
Citazione Citation:	Gorini D. N., Chisari C. (2022). Impact of soil-structure interaction on the effectiveness of Tuned Mass Dampers. EARTHQUAKE ENGINEERING & STRUCTURAL DYNAMICS, vol. 51, p. 1501-1521, ISSN: 0098-8847, doi: 10.1002/eqe.3625

Anno della pubblicazione Year of publication:	2022
Citazione Citation:	Panto B., Chisari C., Macorini L., Izzuddin B. A. (2022). A hybrid macro-modelling strategy with multi-objective calibration for accurate simulation of multi-ring masonry arches and bridges. COMPUTERS & STRUCTURES, vol. 265, ISSN: 0045-7949, doi: 10.1016/j.compstruc.2022.106769

Anno della pubblicazione Year of publication:	2024
Citazione Citation:	Zizi, Mattia, Chisari, Corrado, De Matteis, Gianfranco (2024). Effects of pre-existing damage on vertical load-bearing capacity of masonry arch bridges. ENGINEERING STRUCTURES, vol. 300, ISSN: 0141-0296, doi: 10.1016/j.engstruct.2023.117205

Anno della pubblicazione Year of publication:	2023
Citazione Citation:	Chisari, Corrado, Macorini, Lorenzo, Izzuddin, Bassam A. (2023). An anisotropic plastic-damage model for 3D nonlinear simulation of masonry structures. INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN ENGINEERING, p. 1-27, ISSN: 0029-5981, doi: 10.1002/nme.7162

DESCRIZIONE DEI PRINCIPALI PROGETTI DI RICERCA E PREMI CONSEGUITI NEGLI ULTIMI 10 ANNI (CON ANNESSO ELENCO DI MASSIMO 10 RISULTATI, INCLUDENDO, A TITOLO DI ESEMPIO, PRINCIPAL INVESTIGATOR O COORDINATORE LOCALE DI PROGETTI DI RICERCA COMPETITIVI NAZIONALI O INTERNAZIONALI, SIGNIFICATIVI PREMI CONSEGUITI PER LA PROPRIA ATTIVITÀ DI RICERCA)/ DESCRIPTION OF THE MAIN RESEARCH PROJECTS AND AWARDS AWARDED IN THE LAST 10 YEARS (WITH ATTACHED LIST OF MAXIMUM 10 ACHIEVEMENTS, INCLUDING, FOR EXAMPLE, PRINCIPAL INVESTIGATOR OR LOCAL COORDINATOR OF NATIONAL OR INTERNATIONAL COMPETITIVE RESEARCH PROJECTS, SIGNIFICANT AWARDS AWARDED FOR YOUR RESEARCH ACTIVITY):

Descrizione Description:	

Descrizione Description:	2024 CRA CCH 2023 project “WRENCH - Whispers of Time: Heritage as Narratives of Climate-Change”, internationally organised by Belmont Forum/JPI Cultural Heritage/JPI climate and nationally funded by the Italian Ministry of University and Research, global requested budget 1.073 M€ (854 k€ funding), local budget € 380 k€ (252 k€ funding), Duration 36 months, Role Local PI WRENCH aims to address the effects of climate change on tangible and intangible heritage while widening the mainstream understanding of heritage to include storytelling, narratives, and ephemeral legacies. Even more than ruination, abandonment, or major disruption, it is when it becomes mute, unable to tell any story that heritage is lost forever. WRENCH envisions heritage as both something at risk and something able to tell a story about the risk we are all running. Interpreting heritage as a key ingredient of community identities, WRENCH proposes to shift from a user-driven approach to a living heritage approach, that is, from a consumerist idea of heritage (something to be used by clients) to a citizens' idea of heritage (something to inhabit, cocreate, and shape). WRENCH has the twofold goal of (a) developing a transdisciplinary methodology involving environmental sciences, engineering, and humanities to investigate the impact of climate change on tangible and intangible heritage; (b) employing heritage as storytelling tools to enhance awareness of climate change.

Descrizione Description:	2023 ISCRA – type C project “OptTMD - HPC-aided optimisation of Tuned Mass Dampers as seismic protection for buildings: from artificial intelligence-based analysis to a novel design criterion”, for use of computing resources at CINECA, Budget 10,000 core-hours on CINECA HPC, Duration 9 months, Role PI The objective of the OptTMD project consists of identifying optimal performances of Tuned Mass Dampers (TMDs) in a large variety of soil-building systems for devising an integrated design criterion for this seismic resistant solution.

Descrizione Description:	2022 Project for young researchers “STARES - Shape and sTructure in mAsonry staiRcasES in Naples. Criteria for the definition of knowledge models for safeguard and local tradition enhancement.”, funded by University of Campania “Luigi Vanvitelli” D.R. n. 509/2022, Budget € 27,444.89, Duration 8 months, role co-PI Abstract: STARES will investigate masonry staircases using inter-disciplinary state-of-art criteria, techniques, and tools for the preparation of knowledge models useful for critical analysis, recovery, and enhancement of the asset. The most recent European provisions on cultural heritage enhancement are giving main importance to (i) the safeguarding of the places identity values, (ii) the recovery of local traditions and, (iii) the virtualization of contexts and inclusive use. Within this context, STARES will focus on the masonry staircases of the Neapolitan 18th century located in residential palaces and based on renowned models

	designed by the architect Fernando Sanfelice: a built heritage of immense architectural and cultural value, which also contains a construction tradition to be known and recovered to safeguard it. Nowadays, natural and anthropic actions, degradation phenomena, denaturalization of the original design (for example, by insertion of additional stiff elements such as elevators inside the wells or on the façade) and, above all, the insufficient awareness of the original construction technique, constitute worrying factors that contribute to the risk of losing this architectural and constructive heritage. It is thus imperative to increase knowledge of these assets, aiming at designing suitable protection actions and enhance their access by the community, which is the objective of STARES project.

Descrizione Description:	2020 Project V:ALERE for assistant professors “ARCH - Advanced Retrofitting for Curved Historical structures”, funded by University of Campania “Luigi Vanvitelli” D.R. n. 475 del 09/07/2020, Budget €21,100.00, Duration 6 months, extended to 15 months, role PI Abstract: The ARCH project will explore a novel method for seismic retrofitting of arches and vaults in masonry structures through the use of innovative fibre-reinforced mortar with high ductility (ductile mortar). Italian historical heritage is in danger as an effect of the high seismicity of the national territory. In particular, masonry structures have proved very vulnerable during past earthquakes, with arches and vaults, which have a fundamental role in bearing the vertical loads of floors and roofs, often representing the weakest elements under seismic actions. The ARCH project will investigate the adoption of innovative ductile mortar with the twofold aim of (i) increasing the bearing capacity of the structure, and (ii) maintaining the compatibility of the retrofitting strategy with the old materials present, overcoming the drawbacks of currently used techniques. Appropriate experimental activities for the characterisation of the proposed system will be performed together with advanced numerical modelling and development of simplified closed-form expressions, leading to a comprehensive methodology for the design and application of ductile mortar.

Descrizione Description:	2020 ISCRA – type C project “BELLS - Bell tower seismic EvaLuation by means of Large-scale Simulations”, for use of computing resources at CINECA, Budget 200,000 core-hours on CINECA HPC, duration 9 months, Role PI The objectives of the BELLS project are (i) to create an extensive dataset for the formulation of predictive models for large-scale analysis of masonry bell towers at territorial scale, and (ii) to perform probabilistic analysis to evaluate fragility curves for specific structures.

Descrizione Description:	2017 Marie Skłodowska-Curie Individual Fellowship H2020-MSCA-IF-2016 with project “MultiCAMS - Multi-level Model Calibration for the Assessment of Historical Masonry Structures”, Project no. 744400, mark 96.2%. Website: https://cordis.europa.eu/project/id/744400, Budget €183,454.80, duration 24 months, Role

	Fellow Abstract: The MultiCAMS project will develop an advanced computational strategy including numerical modelling and innovative model calibration for realistic assessment of historical unreinforced masonry structures. In Europe a large number of old masonry buildings and monuments, which are still in use, are located in high seismic risk areas, thus they need to be assessed and, if necessary, strengthened considering current safety requirements. The proposed assessment approach is based on the use of nonlinear models with different levels of sophistication including detailed mesoscale models where masonry units and mortar joints are modelled separately, homogeneous FE models assuming masonry as a continuum material, and efficient macroscale models where entire structural parts (i.e. piers, spandrels) are represented by appropriate macro-elements. In this respect, I will develop a novel numerical description with macro-elements for efficient and practical dynamic analysis of masonry structures accounting for the interaction between nonlinear in-plane and out-of-plane behaviour and allowing for geometric and material nonlinearities. An innovative model calibration strategy utilising inverse analysis techniques will then be developed to capitalise on the efficiency of the novel simplified mechanical model and the accuracy of existing detailed mesoscale descriptions whose material properties can be obtained in simple and non-invasive in-situ physical tests. The main outcome of MultiCAMS will be a comprehensive and accurate methodology for the seismic assessment of historical masonry buildings, which represents an urgent need to safeguard human lives in many European urban areas, as confirmed by recent catastrophic events.

Descrizione Description:	2016 Geophysiscs Association 'Licio Cernobori' (AGLC) Research Award 2016, associated to the 35° Convegno del Gruppo Nazionale di Geofisica della Terra Solida GNGTS- Lecce, 22-24 novembre 2016, for the work of title “Optimal design of FRP retrofitting for seismic resistant RC frames”. Motivation: “The work presents an optimisation procedure for seismic retrofitting of reinforced concrete structure by means of fibre-reinforced polymers. The seismic retrofitting technique described proposes, by means of Genetic Algorithms, a set of equivalent solutions which minimise cost and improve structural ductility. The case study is well represented by a building which does not fulfil Eurocode 8 prescriptions. The work is well presented and of undeniable methodological-applicative interest. The results obtained support the use of design procedures for RC structures.”

DESCRIZIONE DEI PRINCIPALI RISULTATI CONSEGUITI NEGLI ULTIMI 10 ANNI IN TERMINI DI SVILUPPO DI RETI E RELAZIONI SCIENTIFICHE NAZIONALI E INTERNAZIONALI (CON ANNESSO ELENCO DI MASSIMO 5 RISULTATI, INCLUDENDO, A TITOLO DI ESEMPIO, PARTECIPAZIONE O ORGANIZZAZIONE DI CONVEGNI NAZIONALI E INTERNAZIONALI; CONTRIBUTI A CONSORZI DI RICERCA) / DESCRIPTION OF THE MAIN RESULTS ACHIEVED IN

THE LAST 10 YEARS IN TERMS OF DEVELOPMENT OF NATIONAL AND INTERNATIONAL SCIENTIFIC NETWORKS AND RELATIONS (WITH ATTACHED LIST OF MAXIMUM 5 RESULTS, INCLUDING, FOR EXAMPLE, PARTICIPATION OR ORGANIZATION OF NATIONAL AND INTERNATIONAL CONFERENCES; CONTRIBUTIONS TO RESEARCH CONSORTIA):

Descrizione Description:	

DESCRIZIONE DEI PRINCIPALI RISULTATI CONSEGUITI NEGLI ULTIMI 10 ANNI IN TERMINI DI SUPPORTO ALLA COMUNITÀ SCIENTIFICA (CON ANNESSO ELENCO DI MASSIMO 5 RISULTATI, INCLUDENDO, A TITOLO DI ESEMPIO, RESPONSABILITÀ DI DIREZIONE DI COMITATI EDITORIALI; INCARICHI DI VALUTAZIONE DELLA RICERCA PRESSO ISTITUZIONI NAZIONALI O INTERNAZIONALI; RESPONSABILITÀ ISTITUZIONALI ALL'INTERNO DELL'ISTITUZIONE DI APPARTENENZA O DI ALTRE ISTITUZIONI) / DESCRIPTION OF THE MAIN RESULTS ACHIEVED IN THE LAST 10 YEARS IN TERMS OF SUPPORT TO THE SCIENTIFIC COMMUNITY (WITH ATTACHED LIST OF MAXIMUM 5 RESULTS, INCLUDING, FOR EXAMPLE, MANAGEMENT RESPONSIBILITIES OF EDITORIAL COMMITTEES; RESEARCH EVALUATION ROLES AT NATIONAL OR INTERNATIONAL INSTITUTIONS; INSTITUTIONAL RESPONSIBILITIES WITHIN THE INSTITUTION OF AFFILIATION OR OTHER INSTITUTIONS):

Descrizione Description:	

Descrizione Description:	2025 Member of the Early Career Editorial Board of Computers and Structures (Elsevier)

Descrizione Description:	2025 Member of the Early Career Editorial Board of Engineering Structures (Elsevier)

Descrizione Description:	2020 Expert for evaluation for H2020-MSCA-IF-2020 (Marie Skłodowska-Curie Action – Individual Fellowships), contract number CT-EX2020D380941-101

Descrizione Description:	2018 – to date Member of the Conference Editorial Board for: The 18th World Conference on Earthquake Engineering (18WCEE), Milano

	(Italy); The 14th International Conference on Computational Structures Technology (CST2022), Montpellier (France); 2nd Conference on Sustainability in Architecture, Planning and Design (Beyond All Limits 2022), Caserta (Italy); The 16th International Conference on Civil, Structural & Environmental Engineering Computing (Civil-Comp 2019), Riva del Garda (Italy); 9th International Conference on Computational Methods (ICCM2018), Rome (Italy)

Descrizione Description:	2014 – to date Reviewer for: Computers and Structures (Elsevier); Composites Part B (Elsevier); Journal of Structural Engineering (ASCE); Engineering Structures (Elsevier); Civil Engineering (Faculty of Civil Engineering of the Budapest University of Technology and Economics); Structural Engineering and Mechanics, An International Journal (Techno Press); Advances in Civil Engineering (Hindawi Publishing Corporation); Earthquake Engineering and Engineering Vibration (Springer); Engineering and Computational Mechanics (ICE); International Journal of Structural Glass and Advanced Materials Research (Science Publication); Frontiers in Built Environment, section Earthquake Engineering (Frontiers); Applied Mathematical Modelling (Elsevier); Communications in Applied and Industrial Mathematics (De Gruyter); Structures (Elsevier); Iranian Journal of Science and Technology - Transactions of Civil Engineering (Springer Nature); Bulletin of Geophysics and Oceanography (EBSCO Publishing Inc.); Applied Sciences (MDPI); International Journal of Environmental Research and Public Health (MDPI); Actuators (MDPI); Fire (MDPI); Buildings (MDPI); Materials (MDPI); Coatings (MDPI); Additive Manufacturing (Elsevier); Results in Engineering (Elsevier).

DESCRIZIONE DEI PRINCIPALI RISULTATI CONSEGUITI NEGLI ULTIMI 10 ANNI IN TERMINI VALORIZZAZIONE DELLE CONOSCENZE (CON ANNESSO ELENCO DI MASSIMO 3 RISULTATI, RELATIVI ALLA PARTECIPAZIONE DEL CANDIDATO ALLE ATTIVITÀ DI VALORIZZAZIONE DELLE CONOSCENZE) / DESCRIPTION OF THE MAIN RESULTS ACHIEVED IN THE LAST 10 YEARS IN TERMS OF KNOWLEDGE VALORIZATION (WITH ATTACHED LIST OF MAXIMUM 3 RESULTS, RELATING TO THE CANDIDATE'S PARTICIPATION IN KNOWLEDGE VALORIZATION ACTIVITIES):

Descrizione Description:	

Informazioni aggiornate alla data di candidatura 21-05-2025

CORRADO CHISARI

Il presente curriculum costituisce allegato e parte integrante dell'incarico sottoscritto