CURRICULUM VITAE di:

Nominativo	Alessandro Zona

Posizione accademica

Macrosettore:	08/B Ingegneria Strutturale e Geotecnica
Settore Concorsuale:	08/B3 Tecnica delle Costruzioni
Settore Scientifico Disciplinare:	ICAR/09 Tecnica delle Costruzioni
Qualifica:	Professore Associato
Anzianità nel ruolo:	4 anni e 7 mesi
Sede Universitaria:	Università degli Studi di Camerino
Struttura di afferenza (dipartimento o altro)	Scuola di Architettura e Design

Posizioni ricoperte precedentemente nel medesimo ateneo o in altri

Periodo	**Fascia**	**Ateneo**
2005-2014	Ricercatore Universitario	Università degli Studi di Camerino

Pubblicazioni Scientifiche

n. progr.	anno	Descrizione pubblicazione
1	**2002**	Dall'Asta A., Zona A. **Non-linear analysis of composite beams by a displacement approach.** *Computers and Structures* 2002, 80(27-30):2217-2228. DOI: 10.1016/S0045-7949(02)00268-7
2	**2004**	Dall'Asta A., Zona A. **Three-field mixed formulation for the non-linear analysis of composite beams with deformable shear connection.** *Finite Elements in Analysis and Design* 2004, 40(4):425-448. DOI: 10.1016/S0168-874X(03)00071-4
3	**2004**	Dall'Asta A., Zona A. **Slip locking in finite elements for composite beams with deformable shear connection.** *Finite Elements in Analysis and Design* 2004, 40(13-14):1907-1930. DOI: 10.1016/j.finel.2004.01.007

4	**2004**	Dall'Asta A., Zona A. **Comparison and validation of displacement and mixed elements for the non-linear analysis of continuous composite beams.** *Computers and Structures* 2004, 82(23-26):2117-2130. DOI: 10.1016/j.compstruc.2004.04.009
5	**2005**	Dall'Asta A., Zona A. **Finite element model for externally prestressed composite beams with deformable connection.** *Journal of Structural Engineering* 2005, 131(5):706-714. DOI: 10.1061/(ASCE)0733-9445(2005)131:5(706)
6	**2005**	Zona A., Barbato M., Conte J.P. **Finite element response sensitivity analysis of steel-concrete composite beams with deformable shear connection.** *Journal of Engineering Mechanics* 2005, 131(11):1126-1139. DOI: 10.1061/(ASCE)0733-9399(2005)131:11(1126)
7	**2006**	Dall'Asta A., Ragni L., Zona A. **Steel-concrete composite beams prestressed by external tendons: effects of material and geometric nonlinearities.** *International Journal of Advanced Steel Construction* 2006, 2(1):53-70.
8	**2006**	Zona A., Barbato M., Conte J.P. **Finite element response sensitivity analysis of continuous steel-concrete composite girders.** *Steel and Composite Structures* 2006, 6(3):183-202. DOI: 10.12989/scs.2006.6.3.183
9	**2007**	Barbato M., Zona A., Conte J.P. **Finite element response sensitivity analysis using three-field mixed formulation: general theory and application to frame structures.** *International Journal for Numerical Methods in Engineering* 2007, 69(1):114-161. DOI: 10.1002/nme.1759
10	**2007**	Dall'Asta A., Ragni L., Zona A. **Analytical model for geometric and material nonlinear analysis of externally prestressed beams.** *Journal of Engineering Mechanics* 2007, 133(1):117-121. DOI: 10.1061/(ASCE)0733-9399(2007)133:1(117)
11	**2007**	Dall'Asta A., Ragni L., Zona A**. Simplified method for failure analysis of concrete beams prestressed with external tendons.** *Journal of Structural Engineering* 2007, 133(1):121-131. DOI: 10.1061/(ASCE)0733-9445(2007)133:1(121)
12	**2007**	Ranzi G., Zona A. **A steel-concrete composite beam model with partial interaction including the shear deformability of the steel component.** *Engineering Structures* 2007, 29(11):3026-3041. DOI: 10.1016/j.engstruct.2007.02.007
13	**2008**	Zona A., Barbato M., Conte J.P. **Nonlinear seismic response analysis of steel-concrete composite frames.** *Journal of Structural Engineering* 2008, 134(6):986-997. DOI: 10.1061/(ASCE)0733-9445(2008)134:6(986)
14	**2008**	Zona A., Ragni L., Dall'Asta A. **Finite element formulation for geometric and material nonlinear analysis of beams prestressed with external slipping tendons.** *Finite Elements in Analysis and Design* 2008, 44(15):910-919. DOI: 10.1016/j.finel.2008.06.005
15	**2009**	Zona A., Ragni L., Dall'Asta A. **Simplified method for the analysis of externally prestressed steel-concrete composite beams.** *Journal of Constructional Steel Research* 2009, 65(2):308-313. DOI: 10.1016/j.jcsr.2008.07.015
16	**2010**	Ranzi G., Dall'Asta A., Ragni L., Zona A. **A geometric nonlinear model for composite beams with partial interaction.** *Engineering Structures* 2010, 32(5):1384-1396. DOI: 10.1016/j.engstruct.2010.01.017
17	**2010**	Zona A., Barbato M., Dall'Asta A., Dezi L. **Probabilistic analysis for design assessment of continuous steel-concrete composite girders.** *Journal of Constructional Steel Research*, 2010, 66(7):897-905. DOI: 10.1016/j.jcsr.2010.01.015
18	**2011**	Ragni L., Zona A., Dall'Asta A. **Analytical expressions for preliminary design of dissipative bracing systems in steel frames.** *Journal of Constructional Steel Research* 2011, 67(1):102-113. DOI: 10.1016/j.jcsr.2010.07.006
19	**2011**	Zona A., Ranzi G. **Finite element models for nonlinear analysis of steel-concrete composite beams with partial interaction in combined bending and shear.** *Finite Elements in Analysis and Design* 2011, 47(2):98-118. DOI: 10.1016/j.finel.2010.09.006

20	**2012**	Zona A. Dall'Asta A. **Elastoplastic model for steel buckling-restrained braces.** *Journal of Constructional Steel Research* 2012, 68(1):118-125. DOI: 10.1016/j.jcsr.2011.07.017
21	**2012**	Zona A., Ragni L., Dall'Asta A. **Sensitivity-based study of the influence of brace over-strength distributions on the seismic response of steel frames with BRBs.** *Engineering Structures* 2012, 37(1):179-192. DOI: 10.1016/j.engstruct.2011.12.026
22	**2012**	Tahmasebinia F., Ranzi G., Zona A. **Beam tests of composite steel-concrete members: a three-dimensional finite element model.** *International Journal of Steel Structures* 2012, 12(1):37-45. DOI: 10.1007/s13296-012-1004-3
23	**2012**	Tahmasebinia F., Ranzi G., Zona A. **A probabilistic three-dimensional finite element study on simply-supported composite floor beams.** *Australian Journal of Structural Engineering* 2012, 12(3):251-262. DOI: 10.7158/S11-107.2012.12.3
24	**2012**	Zona A., Barbato M., Fragiacomo M. **Finite element model updating and probabilistic analysis of timber-concrete composite beams.** *Journal of Structural Engineering* 2012, 138(7):899-910. DOI: 10.1061/(ASCE)ST.1943-541X.0000509
25	**2013**	Tahmasebinia F., Ranzi G., Zona A. **Probabilistic three-dimensional finite element study on composite beams with steel trapezoidal decking.** *Journal of Constructional Steel Research* 2013, 80(1):394-411. DOI: 10.1016/j.jcsr.2012.10.003
26	**2014**	Barbato M., Zona A., Conte J.P. **Probabilistic nonlinear response analysis of steel-concrete composite beams.** *Journal of Structural Engineering* 2014, 140(1):04013034. DOI: 10.1061/(ASCE)ST.1943-541X.0000803
27	**2014**	Gu Q., Zona A., Peng Y., Dall'Asta A. **Effect of buckling-restrained brace model parameters on seismic structural response.** *Journal of Constructional Steel Research* 2014, 98(1):100-113. DOI: 10.1016/j.jcsr.2014.02.009
28	**2014**	Zona A., Ranzi G. **Shear connection slip demand in composite steel-concrete beams with solid slabs.** *Journal of Constructional Steel Research* 2014, 102(1):266-281. DOI: 10.1016/j.jcsr.2014.07.018
29	**2016**	Zona A., Degeé H., Leoni G., Dall'Asta A. **Ductile design of innovative steel and concrete hybrid coupled walls.** *Journal of Constructional Steel Research* 2016, 117(1):204-213. DOI: 10.1016/j.jcsr.2015.10.017
30	**2016**	Dall'Asta A., Ragni L., Zona A., Nardini L., Salvatore W. **Design and experimental analysis of an externally prestressed steel and concrete footbridge equipped with vibration mitigation devices.** *Journal of Bridge Engineering* 2016, 21(8):C5015001. DOI: 10.1061/(ASCE)BE.1943-5592.0000842
31	**2017**	Zona A., Leoni G., Dall'Asta A. **Influence of shear connection distributions on the behavior of continuous steel-concrete composite beams.** *The Open Civil Engineering Journal* 2017, 11(Suppl-1, M7) 384-395. DOI: 10.2174/1874149501711010384
32	**2017**	Dall'Asta A., Leoni G., Morelli F., Salvatore W., Zona A. **An innovative seismic-resistant steel frame with reinforced concrete infill walls.** *Engineering Structures* 2017, 141(1):144-158. DOI: 10.1016/j.engstruct.2017.03.019
33	**2018**	Zona A., Tassotti L., Leoni G., Dall'Asta A. **Nonlinear seismic response analysis of an innovative steel and concrete hybrid coupled wall system.** *Journal of Structural Engineering* 2018, 144(7):04018082. DOI: 10.1061/(ASCE)ST.1943-541X.0002080
34	**2018**	Das R., Zona A., Vandoren B., Degeé H. **Optimizing the coupling ratio in the seismic design of HCW systems with shear dissipative links.** *Journal of Constructional Steel Research* 2018, 147(1):393-407. DOI: 10.1016/j.jcsr.2018.04.026
35	**2018**	Scozzese F., Terracciano G., Zona A., Della Corte G., Dall'Asta A., Landolfo R. **Analysis of seismic non-structural damage in single-storey industrial steel buildings.** *Soil Dynamics and Earthquake Engineering* 2018, 114(1):505-519. DOI: 10.1016/j.soildyn.2018.07.047

36	**2018**	Franchin P., Ragni L., Rota M., Zona A. **Modelling uncertainties of Italian code-conforming structures for the purpose of seismic response analysis.** *Journal of Earthquake Engineering* 2018, 22(S2):28-53. DOI: 10.1080/13632469.2018.1527262
37	**2018**	Scozzese F., Terracciano G., Zona A., Della Corte G., Dall'Asta A., Landolfo R. **Modelling and seismic response analysis of Italian code-conforming single-storey steel buildings.** *Journal of Earthquake Engineering* 2018, 22(S2):168-197. DOI: 10.1080/13632469.2018.1528913
38	**2019**	Dall'Asta A., Leoni G., Meschini A., Petrucci E., Zona A. **Integrated approach for seismic vulnerability analysis of historic massive defensive structures.** *Journal of Cultural Heritage* 2019, 35(1):86-98. DOI: 10.1016/j.culher.2018.07.004

Titoli [1]

Awards and achievements

- 2018 Outstanding Contribution in Reviewing, Journal of Constructional Steel Research, Elsevier;
- Recipient of the FFARB 2017 for Associate Professors (grant for fundamental research);
- Full score (100%) in the VQR-ANVUR 2011-2014 Italian National Evaluation of the quality of the research products (2017);
- 2017 Outstanding Contribution in Reviewing, Engineering Structures, Elsevier;
- 2017 Outstanding Contribution in Reviewing, Construction and Building Materials, Elsevier;
- Italian National Scientific Qualification, with unanimous consensus of the commission, to the role of Full Professor of Structural Engineering (March 2017);
- Nomination for the 2015 Best Associate Editor Award from the American Society of Civil Engineers;
- 2014 Outstanding Contribution in Reviewing, Engineering Structures, Elsevier;
- Italian National Scientific Qualification, with unanimous consensus of the commission, to the role of Associate Professor of Structural Engineering (December 2013);
- Full score (100%) in the VQR-ANVUR 2004-2010 Italian National Evaluation of the quality of the research products (2013);
- Recipient of the one-off incentive for research, teaching and institutional activities at the University of Camerino for the year 2012, according to art. 29 clause 19 of L. 240/2010;
- First Rank in the Elsevier TOP25 ScienceDirect Hottest Papers for the most downloaded paper during year 2012 published in the journal Finite Elements in Analysis and Design "Finite element models for nonlinear analysis of steel-concrete composite beams with partial interaction in combined bending and shear" 2011, 47(2):98-118 (11900 downloads according to Elsevier);
- 2009 Moisseiff Award from the American Society of Civil Engineers (ASCE) for the paper published in the ASCE Journal of Structural Engineering "Nonlinear seismic response analysis of steel-concrete composite frames" 2008, 134(6):986-997;
- 2002 Young Researchers Award from the University of Ancona for the results achieved during his doctoral studies;
- 2000 Riccardo Lombardi Award in Civil Engineering for the results achieved in his Graduation (Laurea) Thesis.

Main research grants

- (EU) European research projects selected for funding based on calls that involved competitive peer review:

- (EU3) European Commission RFCS (2014-2015) “STEEL-EARTH: Steel-based applications in earthquake-prone areas” (Scientific person in charge of the UNICAM research unit).
- (EU2) European Commission RFCS (2010-2013) “INNOHYCO: Innovative Hybrid and Composite Steel-Concrete Structural Solution in Seismic Areas” (project coordination and UNICAM research unit);
- (EU1) European Commission RFCS (2007-2010) “PRECASTEEL: Prefabricated Steel Structures for Low-Rise Building in Seismic Areas” (component of the UNICAM research unit);
- (IT) Italian research projects selected for funding based on calls that involved competitive peer review:
- (IT3) Italian Ministry of University and Research PRIN 2008 “Effects of non-synchronism on seismic bridge response including local site amplification” (component of the UNICAM research unit).
- (IT2) Italian Ministry of University and Research PRIN 2002 “Advanced design and system performance control of steel-concrete composite frames in earthquake-prone areas” (component of the UNIAN research unit);
- (IT1) Italian Ministry of University and Research PRIN 1997 “Safety of high performance concrete structures” (beneficiary of a research contract);
- (ITNC) Italian research projects not based on competitive selection:
- (ITNC3) RELUIS-RINTC National Research Project 2015-2018 (Italian University Network of Seismic Engineering Laboratories and Italian Civil Protection Agency), “A joint ReLUIS-EUCENTRE research project to assess the (implicit) seismic risk of code conforming structures in Italy”, (component of the UNICAM research unit for steel structures).
- (ITNC2) RELUIS 2 National Research Project 2010-2013 (Italian University Network of Seismic Engineering Laboratories and Italian Civil Protection Agency), “Manual for the design of dissipative devices: existing RC buildings with high-damping rubber devices and buckling-restrained braces”, (component of the UNICAM research unit);
- (ITNC1) RELUIS National Research Project 2005-2008 (Italian University Network of Seismic Engineering Laboratories and Italian Civil Protection Agency), “Control of the dynamic response of existing reinforced concrete frames by means of high-damping rubber devices and buckling-restrained braces” (component of the UNICAM research unit).

Editorial activities

- Associate Editor, ASCE Journal of Bridge Engineering (from October 2010 to present), directly supporting the Editor in Chief in handling the review process, assigning reviewers and making final decisions acceptance or rejection (119 manuscripts handled up to date);
- Co-Editor with Professors Alan O’Connor (Trinity College Dublin, Ireland) and Kent Harries (University of Pittsburgh, USA) of the ASCE Journal of Bridge Engineering December 2013 special section “Eurocodes and their implications for bridge design”;
- Member of the Editorial Board, The Scientific World Journal (from 2013 to 2016);
- Member of the Editorial Board, Mathematical Problems in Engineering (from 2014 to 2015);
- Member of the Editorial Board, ISRN Civil Engineering (from 2012 to 2014);
- Reviewer for many international journals and conferences (163 manuscripts reviewed up to date, four certificates of outstanding contribution in reviewing up to date).

Institutional duties

- Rector delegate for the restoration and reconstruction of the university structures and infrastructures damaged after the 2016 Central Italy earthquakes (from November 2017 to present);
- Elected representative of the associate professors of the University of Camerino in the Governance Assembly (from November 2017 for a five-year office);

- Member designated in the Library Commission of the School of Architecture and Design, University of Camerino (from January 2012 to present);
- Member designated in the Teacher-Student Commission of the School of Architecture and Design, University of Camerino (from January 2012 to present).

Professional services

- Scientific Director of the Laboratory of Structural Monitoring and Diagnostics, School of Architecture and Design, University of Camerino (from 2014 to present);
- Scientific Responsible of university consulting services involving monitoring and safety assessment of buildings and bridges;
- Volunteer for damage evaluation of existing buildings after the L'Aquila 2009 and Central Italy 2016 earthquakes (Italian Civil Protection Agency).

Teaching activities

- Undergraduate classes at the School of Architecture and Design: "Design of reinforced concrete structures and steel structures" since 2005 and "Strength of Materials and Structural Forms in Industrial Design" since 2014;
- Graduate class at the School of Architecture and Design: "Structural problems of heritage buildings" since 2010;
- Graduate class at the Master Europroject, University of Rome La Sapienza; "Design of Steel Structures to Eurocode 3 and Eurocode 8", since 2015;
- Member of the Collegium of the Doctoral course in Architecture, Design and Urban Planning, University of Camerino, since 2017;
- Member of the Collegium of the Doctoral course in Structural and Infrastructural Engineering, Marche Polytechnic University (from 2006 to 2013);
- Invited seminars at University of California at San Diego (USA), Marche Polytechnic University (Italy), The University of Sydney (Australia), EUCENTRE (Italy);
- Teacher in professional courses organized by Fondazione Promozione Acciaio involving the seismic design of steel structures.

data

06/05/2019

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