

Francesco Bencardino

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Short curriculum vitae

Position: Assistant Professor in Structural Engineering (Since 2005).

Academic Degree (University of Calabria)

Doctoral degree in Computational Mechanics.

Master's Degree in Civil Engineering, Structural Area.

Education and training in research field (University of Calabria)

- Post-Doctoral scholarship in "Engineering of Materials and of Structures", research topic: "Numerical modeling of no-linear behavior of materials and structures".
- Research fellow in Structural Engineering Area (SSD-ICAR/09), research topic: "Open issues in the use of innovative materials in civil engineering".
- Research Associate, research topics: "Use of innovative materials in civil engineering"; "strengthening, repair and maintenance of structures and infrastructures by using innovative materials".
- Regional scholarship, Structural Area, Calabria Region Government, research topic: "FRC in civil engineering".

Teaching experience (University of Calabria)

Teacher of the following courses:

Since 2019 and currently: Design of structures in seismic zone.

Since 2013 and currently: Structural rehabilitation of masonry, timber and concrete constructions.

Since 2010 and currently: Design of structures.

2005-2013: "Laboratory of structural design".

2005-2010: "Structural analysis and design 2".

2004-2007: "Structural rehabilitation".

Research Group – Team leader

Research lines:

"Innovative materials (FRP and FRCM) for strengthening and repair of existing structures" – from 2014 up today;

"EDILCEL: The use of cellulose-based industrial non-hazardous waste in the building materials - The use of deink paper sludge as mortar filler, a sustainable end-of-life reuse" – from 2017 up today.

Scientific and Technical affiliations

- *Board Member* of Doctoral School "Civil Engineering and Industrial" – Since 2018.
- *Board Member* of Doctoral School "Science and Engineering of Environmental, Construction and Energy" – from 2013 to 2017.
- *Board Member* of Doctoral School "Engineering of materials and of structures" – from 2005 to 2012.
- *Member* of the International Task Group T3.4 Selection and implementation of interventions, *fib* Commission and Task Group: COM3 Existing concrete structures – Since June 2016.
- *Team Leader* of the Task Group – *fib*-compendium on protection, repair and strengthening of concrete structures, MC2020; Section: 3.1.6 "Textile-Reinforced Concrete Overlay"/"Externally Applied Textile Reinforced Systems" – Since 2017.
- *Member of Task Group*, Technical Document 209/2012 – Advisory committee on technical recommendations for construction (October 2011 – July 2012)
- *Editor Special Issue* "Fibers and Techniques for Upgrading of Concrete and Masonry Constructions", (20/10/2016 – 30/04/2017), *Fibers* — Open Access Journal (ISSN 2079-6439; CODEN: FIBECU), MDPI.

- *Editorial Board Member* of "Fibers - Open Access Journal", Fibers (ISSN 2079-6439; CODEN: FIBECU) is an international open access journal published quarterly online by MDPI, Website: <http://www.mdpi.com/journal/fibers>
- *Editorial Board Member* of "Journal of Civil Engineering and Architecture", ISSN: 1934-7359 (Print); 1934-7367 (Online), Website: <http://www.davidpublisher.org/Home/Journal/JCEA>, published across the United States by David Publishing Company, New York, NY, USA.
- *Membership* of the "ACI Italy Chapter", American Concrete Institute Italy Chapter – Since September 2016.
- *Membership* of "IA-FraMCoS", Intern. Assoc. of Fracture Mechanics for Concrete and Concrete Structures – Since March 2013.
- *Membership* of "AICAP" – Since January 2017.
- *Membership* of AIMAT (Associazione Italiana di Ingegneria dei Materiali) – from July 2016 to July 2019.
- *Reviewer* of scientific articles for several International Journals.
- *Chair* of the board of examiners.
- *Professional Engineers*, Cosenza, Italy.

PhD Supervisor

- Doctoral thesis – The structural use of fiber reinforced concrete: theoretical modelling and experimental investigation, November 2007, Doctoral School "Engineering of materials and of structures", XX Cycle, University of Calabria.
- Doctoral thesis – Verso la definizione della vulnerabilità urbana dei nuclei consolidati: un approccio metodologico per la sua indicizzazione, Aprile 2019, Doctoral School "Science and Engineering of Environmental, Construction and Energy (SIACE)", XXXI Cycle, University of Calabria.
- Doctoral thesis – Reinforced concrete beams strengthened in flexure with innovative system and technique: experimental investigation and theoretical modeling, January 2017, Doctoral School "Science and Engineering of Environmental, Construction and Energy (SIACE)", XXIX Cycle, University of Calabria.

Scientific Publications

Scientific Journals: 40; Conference proceedings: 30; Book: 1; Book Chapters: 2.

Speaker to relevant International Conferences

- "International Conference Composites in Constructions, CCC2001", Porto, Portugal, 10-12 October, 2001.
- "International Conference Composites in Constructions, CCC 2003", Rende, Cosenza, Italy, Sept. 16-19, 2003.
- "ICF XI Post-Conference-Symposium", Venice, Italy, March 29, 2005.
- "6th International Conference on Fracture Mechanics of Concrete and Concrete Structures, FraMCoS-6", Catania, Italy, 17-22 June, 2007.
- "8th International Symposium on Fiber-Reinforced Polymer Reinforcement for Concrete Structures, FRPRCS-8", Patras, Greece, July 16-18, 2007.
- "Joint IABSE – fib Conference, Codes in Structural Engineering, Developments and Needs for International Practice", Dubrovnik, Croatia, May 3-5, 2010.
- "34th IABSE Symposium on Large Structures and Infrastructures for Environmentally Constrained and Urbanised Areas", Venice, Italy, 22-24 September, 2010.
- "Analytical Models and New Concepts in Concrete and Masonry Structures, AMCM 2011", Kraków, Poland, June 13-15, 2011.
- "6th Intern. Conference on FRP Composites in Civil Engineering, CICE 2012", Rome, Italy, 13-15 June, 2012.
- "International Workshop Multi-Scale Modeling and Characterization of Innovative Materials and Structures, MIMS13", Cetara, Salerno, Italy, May 1-5, 2013.
- "18th International Conference on Composite Structures, ICCS 18", Lisbon, Portugal, 15-18 June, 2015.
- "9th International Conference on Fracture Mechanics of Concrete and Concrete Structures, FraMCoS-9", Berkeley, CA, USA, 29 May - 1 June, 2016.
- "4th Workshop on The New Boundaries of Structural Concrete", Anacapri, Italy, Sept. 29th-October 1st, 2016.
- "International Workshop on Multiscale Innovative Materials and Structures, MIMS16", Cetara, Salerno, Italy, October 28-30, 2016.
- "fib Symposium - High Tech Concrete: Where Technology and Engineering Meet", Maastricht, The Netherlands, June 12-14, 2017.

- “2nd International Workshop on Durability and Sustainability of Concrete Structures”, ACI Italy Chapter, Izmilovo Congress Center, Moscow, 6-7 June, 2018.
- “MuRiCo 6 – 2019, International Conference, Mechanics of Masonry Structures Strengthened with Composite Materials”, Bologna, Italy, 26-28 June 2019.

Scopus Parameters (January 2020)

Documents by author: 37; Total citations: 911; h-index: 16.

Areas/Fields of expertise

Civil engineering, Structural engineering, Materials Engineering.

Research interests

- Composite materials with short/long fibers: behavior of materials and structures.
- FRC and HPC in civil engineering (composite materials with short fibers): behavior of materials and structures.
- Experimental investigation, structural analysis and modeling of members/structures externally reinforced with innovative materials: rehabilitation, strengthening and seismic retrofitting.
- Strength, ductility and performance of RC members externally strengthened with innovative materials (FRP/FRCM/SRG/SRP).
- EDILCEL: Cellulose-based industrial non-hazardous waste in the building materials - The use of deink paper sludge as mortar filler, a sustainable end-of-life reuse.

RC: Reinforced Concrete; HPC: High Performance Concrete; FRC: Fiber Reinforced Concrete;

FRP: Fibre Reinforced Polymer; FRCM: Fabric Reinforced Cementitious Matrix;

SRG: Steel Reinforced Grout; SRP: Steel Reinforced Polymer.

SELECTED LIST OF PUBLICATIONS

Francesco Bencardino

Department of Civil Engineering

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Rende, Cosenza, Italy

SCOPUS

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Documents: 37

Citations: 911 (up today) by 734 documents

h-index: 16

Articles – International Journals

1. BENCARDINO F, NISTICÒ M, VERRE S (2020). Experimental Investigation and Numerical Analysis of Bond Behavior in SRG-Strengthened Masonry Prisms Using UHTSS and Stainless-Steel Fibers. *FIBERS* 2020, 8(2), 8; doi.org/10.3390/fib8020008.
2. BENCARDINO F, CECCHI A, FRANCESCCHI M, NISTICÒ M, OMBRES L, VERRE S (2019). Structural Behavior of Small-Scale Masonry Panel with Fiber Reinforced Mortar under Compressive Load. *KEY ENGINEERING MATERIALS*, vol. 817, August 2019, p. 472-477.
3. BENCARDINO F, NISTICÒ M, OMBRES L, VERRE S (2019). Mechanical behavior and failure modes of two different steel-FRCM systems on masonry substrate: Experimental investigation. *KEY ENGINEERING MATERIALS*, vol. 817, August 2019, p. 466-471.
4. CARMO R.N.F, VALENÇA J, BENCARDINO F, CRISTOFARO S, CHIERA D (2019). Assessment of plastic rotation and applied load in reinforced concrete, steel and timber beams using image-based analysis. *ENGINEERING STRUCTURES*, vol. 198, November 2019, Article 109519. doi.org/10.1016/j.engstruct.2019. 109519.

5. BENCARDINO F, CARLONI C, CONDELLO A, FOCACCI F, NAPOLI A, REALFONZO R (2018). Flexural behaviour of RC members strengthened with FRCM: State-of-the-art and predictive formulas. *COMPOSITES PART B: ENGINEERING*, vol. 148, September 2018, p. 132-148.
6. BENCARDINO F, CONDELLO A, CASTIGLIONE F (2017). An innovative solution for the structural consolidation of RC modern cultural heritage. *INTERNATIONAL JOURNAL OF ARCHITECTURAL HERITAGE*, Vol. 11, Issue 6, 18 August 2017, P. 829-842.
7. BENCARDINO F, CONDELLO A, ASHOUR A.F (2017). Single-lap shear bond tests on Steel Reinforced Geopolymeric Matrix-concrete joints. *COMPOSITES PART B: ENGINEERING*, vol. 110, p. 62-71, doi: 10.1016/j.compositesb.2016.11.005.
8. BENCARDINO F, CONDELLO A (2016). Innovative solution to retrofit RC members: Inhibiting-Repairing-Strengthening (IRS). *CONSTRUCTION AND BUILDING MATERIALS*, vol. 117, p. 171-181, doi: 10.1016/j.conbuildmat.2016.05.053
9. BENCARDINO F, CONDELLO A (2016). Eco-friendly external strengthening system for existing reinforced concrete beams . *COMPOSITES PART B: ENGINEERING*, vol. 93, p. 163-173, doi: 10.1016/j.compositesb. 2016.03.022
10. BENCARDINO F, CONDELLO A, OMBRES L (2016). Numerical and analytical modeling of concrete beams with steel, FRP and hybrid FRP-steel reinforcements. *COMPOSITE STRUCTURES*, vol. 140, p. 53-65, ISSN: 0263-8223, doi: 10.1016/j.compstruct.2015.12.045
11. RAZAQPUR A.G, BENCARDINO F, RIZZUTI L, SPADEA G (2015). FRP Reinforced/Prestressed Concrete Members: a Torsional Design Model. *COMPOSITES. PART B, ENGINEERING*, vol. 79, p. 144-155, ISSN: 1359-8368, doi: 10.1016/j.compositesb.2015.04.034
12. SPADEA G, BENCARDINO F, SORRENTI F, SWAMY R.N (2015). Structural effectiveness of FRP materials in strengthening RC beams. *ENGINEERING STRUCTURES*, vol. 99, p. 631-641, ISSN: 0141-0296, doi: 10.1016/j.engstruct.2015.05.021
13. BENCARDINO F, CONDELLO A (2015). Reliability and adaptability of the analytical models proposed for the FRP systems to the Steel Reinforced Polymer and Steel Reinforced Grout strengthening systems. *COMPOSITES. PART B, ENGINEERING*, vol. 76, p. 249-259, ISSN: 1359-8368, doi: 1016/j.compositesb.2015.02.029
14. BENCARDINO F, CONDELLO A (2015). SRG/SRP–concrete bond–slip laws for externally strengthened RC beams. *COMPOSITE STRUCTURES*, vol. 132, p. 804-815, ISSN: 0263-8223, doi: 10.1016/j.compstruct.2015.06.068
15. BENCARDINO F, CONDELLO A (2014). Experimental study and numerical investigation of behavior of RC beams strengthened with steel reinforced grout. *COMPUTERS AND CONCRETE*, vol. 14, p. 711-725, ISSN: 1598-8198, doi: 10.12989/cac.2014.14.6.711
16. BENCARDINO F, CONDELLO A (2014). Structural behaviour of RC beams externally strengthened in flexure with SRG and SRP systems. *INTERNATIONAL JOURNAL OF STRUCTURAL ENGINEERING*, vol. 5, p. 346-368, ISSN: 1758-7328, doi: 10.1504/IJSTRUCTE.2014.065928
17. BENCARDINO F, SPADEA G (2014). FE modeling of RC beams externally strengthened with innovative materials. *MECHANICS RESEARCH COMMUNICATION*, vol. 58, pp. 88-96, ISSN: 0093-6413, doi: 10.1016/j.mechrescom.2014.02.006.
18. RIZZUTI L, BENCARDINO F (2014). Effects of Fibre Volume Fraction on the Compressive and Flexural Experimental Behaviour of SFRC. *CONTEMPORARY ENGINEERING SCIENCES*, vol. 7, p. 379-390, ISSN: 1313-6569, doi: <http://dx.doi.org/10.12988/ces.2014.4218>
19. BENCARDINO F, RIZZUTI L, SPADEA G, SWAMY R.N (2013). Implications of test methodology on post-cracking and fracture behaviour of Steel Fibre Reinforced Concrete. *COMPOSITES. PART B, ENGINEERING*, vol. 46, p. 31-38, ISSN: 1359-8368, doi: 10.1016/j.compositesb.2012.10.016
20. BENCARDINO F (2013). Mechanical parameters and post-cracking behaviour of HPFRC according to three-point and four-point bending test. *ADVANCES IN CIVIL ENGINEERING*, ID 179712, ISSN: 1687-8086, doi: <http://dx.doi.org/10.1155/2013/179712>
21. BENCARDINO F, RIZZUTI L, SPADEA G, SWAMY R.N (2010). Experimental evaluation of fiber reinforced concrete fracture properties. *COMPOSITES. PART B, ENGINEERING*, vol. 41, p. 17-24, ISSN: 1359-8368, doi:

22. BENCARDINO F, RIZZUTI L, SPADEA G, SWAMY R.N (2008). Stress-strain behavior of steel fiber reinforced concrete in compression. *JOURNAL OF MATERIALS IN CIVIL ENGINEERING*, vol. 20, p. 255-263, ISSN: 0899-1561, doi: 10.1061/(ASCE)0899-1561(2008)20:3(255)
23. BENCARDINO F, RIZZUTI L, SPADEA G (2008). Three-versus four-point bending tests: an experimental investigation on Steel Fiber-Reinforced Concrete. *STUDIES AND RESEARCHES*, vol. 28, p. 133-155, ISSN: 1121-6069
24. BENCARDINO F, SPADEA G, SWAMY R. N (2007). The problem of shear in RC beams strengthened with CFRP laminates. *CONSTRUCTION AND BUILDING MATERIALS*, vol. 21, p. 1997-2006, ISSN: 0950-0618, doi: 10.1016/j.conbuildmat.2006.05.056
25. BENCARDINO F, COLOTTI V, SPADEA G, SWAMY R.N (2006). Holistic design of RC beams and slabs strengthened with externally bonded FRP laminates. *CEMENT & CONCRETE COMPOSITES*, vol. 28, p. 832-844, ISSN: 0958-9465
26. BENCARDINO F, COLOTTI V, SPADEA G, SWAMY R.N (2005). Shear behavior of reinforced concrete beams strengthened in flexure with bonded carbon fibre reinforced polymers laminates. *CANADIAN JOURNAL OF CIVIL ENGINEERING*, vol. 32, p. 812-824, ISSN: 0315-1468, doi: 10.1139/L05-027
27. BENCARDINO F (2004). Numerical Analysis and Experimental Comparisons of RC Beams Externally Strengthened by CFRP. *INDUSTRIA ITALIANA DEL CEMENTO*, vol. 794, p. 60-82, ISSN: 0019-7637
28. BENCARDINO F, SPADEA G, SWAMY R.N (2002). Strength and Ductility of Reinforced Concrete Beams Externally Reinforced with Carbon Fiber Fabric. *ACI STRUCTURAL JOURNAL*, vol. 99, p. 163-171, ISSN: 0889-3241
29. SPADEA G, SWAMY R.N, BENCARDINO F (2001). Strength and Ductility of RC Beams Repaired with Bonded CFRP Laminates. *JOURNAL OF BRIDGE ENGINEERING*, vol. 6, p. 349-355, ISSN: 1084-0702, doi: 10.1061/(ASCE)1084-0702(2001)6:5(349)
30. SPADEA G, BENCARDINO F, SWAMY R.N (2000). Optimizing the Performance Characteristics of Beams Strengthened with Bonded CFRP Laminates. *MATERIALS AND STRUCTURES*, vol. 33, p. 119-126, ISSN: 1359-5997, doi: 10.1007/BF02484166
31. SPADEA G, SWAMY R.N, BENCARDINO F (1998). Structural behavior of composite RC beams with externally bonded CFRP. *JOURNAL OF COMPOSITES FOR CONSTRUCTION*, vol. 2, p. 132-137, ISSN: 1090-0268
32. SPADEA G, BENCARDINO F (1997). Behavior of Fibre Reinforced Concrete beams under cyclic loading. *JOURNAL OF STRUCTURAL ENGINEERING-ASCE*, vol. 123, p. 660-668, ISSN: 0733-9445, doi: 10.1061/(ASCE)0733-9445(1997)123:5(660)

Articles – International Conferences

1. BENCARDINO F, NISTICO' M (2018). Predictive strain debonding in RC beams externally strengthened with S-FRCM. *ACI Special Publication, Issue SP 326, 2018. "2nd International Workshop on Durability and Sustainability of Concrete Structures, DSCS 2018"*, Moscow; Russian Federation, 6-7 June, 2018, Code 142064
2. BENCARDINO F, CONDELLO A (2017). Effectiveness of S-FRCM strengthening system applied with two different techniques. "fib Symposium - High Tech Concrete: Where Technology and Engineering Meet", Maastricht, Netherlands, 12-14 June 2017, Code 128482
3. BENCARDINO F, CONDELLO A (2016). RC beams externally strengthened with sustainable material and technique (IRS-SRGM): numerical and experimental results. "**International Workshop on Multiscale Innovative Materials and Structures**" (MIMS16), **October 28-30, 2016**, Cetara (Salerno), Italy.
4. BENCARDINO F, CONDELLO A (2016). Geopolymer-based system to retrofit RC beams with novel Inhibiting-Repairing-Strengthening (IRS) technique. In: Bilotta A, Magliulo G, Nigro E, Realfonzo R, Riva P.. *The New Boundaries of Structural Concrete*. p. 279-288, Galazzano:IMREADY, ISBN: 978-88-98720-14-9, Anacapri, Italy, September 29th - October 1st, 2016

5. BENCARDINO F, CASTIGLIONE F (2016). Materiali e tecniche tradizionali e innovative per la conservazione e la sicurezza strutturale dei nuclei antichi. In: (a cura di): Prof. Giuseppe Frega, *Tecniche per la difesa dall'inquinamento*. Vol. I, p. 491-503, EdiBios, ISBN: 978-88-97181-47-7, Guardia Piemontese (CS), 15-18 Giugno 2016
6. BENCARDINO F, CONDELLO A (2016). Structural performances of RC beams strengthened with steel reinforced geopolimeric matrix. In: Saouma, J. Bolander and E. Landis (Eds). *FraMCoS-9*. Berkeley, CA, USA, 29 May - 1 June 2016, doi: 10.21012/FC9.246
7. BENCARDINO F, CONDELLO A, SPADEA G, (2015). "Theoretical and numerical analysis of RC beams externally strengthened with SRG and SRP systems", 18th International Conference on Composite Structures, 15-18 June, Lisbon, Portugal.
8. BENCARDINO F, SPADEA G (2013). FE modeling of RC beams externally strengthened with innovative materials. In: *International Workshop Multi-scale modeling and characterization of innovative materials and structures*. Cetara, Amalfi Coast, Salerno, May 1-5
9. RAZAQPUR A.G, RIZZUTI L, SPADEA G, BENCARDINO F (2012). Behaviour of FRP-PC members subjected to combined torsion, shear and bending. In: *FRP Composites in Civil Engineering, CICE 2012*, Roma, 13-15 June, Code 115513.
10. RAZAQPUR A.G, RIZZUTI L, BENCARDINO F, SPADEA G. (2011). FRP-PC Members: Evaluation of Torsional Capacity. In: *Advanced Composites in Construction 2011, ACIC 2011*, vol. I, p. 319-328, Chesterfield:NetComposites Limited, University of Warwick, 6-8 September 2011, Code 93875.
11. BENCARDINO F, SPADEA G (2011). Strain debonding and design in retrofitting RC structures according to different guidelines. In: *AMCM 2011, Analytical Models and New Concepts in Concrete and Masonry Structures*. vol. I, ISBN: 978-83-7242-603-1
12. BENCARDINO F, RIZZUTI L (2010). Assessment of in-place concrete strength according to the major standards. In: *IABSE, 34th International Symposium on Bridge and Structural Engineering: Large Structures and Infrastructures for Environmentally Constrained and Urbanised Areas*, vol. 1, Zurich:IABSE-AIPC-IVBH, ISBN: 978-3-85748-122-2, Venice, Italy, 22-24 September, doi: <http://dx.doi.org/10.2749/222137810796063517> , Code 111904.
13. BENCARDINO F, RIZZUTI L, SPADEA G (2010). Comportamento sperimentale post-fessurativo di SFRC secondo Rilem TC 162-DTF e UNI 11039. In: *Atti del 10° Convegno Nazionale AIMAT*. Capo Vaticano, Ricadi (VV), 5-8 Settembre, vol. 1, p. 61-64, RENDE:Centro Editoriale e Librario Univ. della Calabria, ISBN: 978-88-7458-114-6
14. BENCARDINO F, RIZZUTI L (2010). RC Beams Externally Strengthened with FRP Materials: Safety Factor Assessment using Different Guidelines. In: *Codes in Structural Engineering: Developments and Needs for International Practice*. Cavtat, Dubrovnik-Neretva County, Croatia, 3-5 May, vol. II, p. 1239-1246, ISBN: 978-953-7621-07-0
15. BENCARDINO F, RAZAQPUR A, RIZZUTI L, SPADEA G (2010). Shear Behavior Assessment of RC Beams Externally Strengthened with FRP Systems According to Different Guidelines. In: *Atti del convegno "AIAS 2010"*. Maratea, 7-10 Settembre, vol. 1, CASTROLIBERO (CS): NUOVA BIOS
16. BENCARDINO F, OMBRES L (2010). Structural Performance of RC Beams Strengthened by SRG and FRCM System. In: *IABSE, 34th International Symposium on Bridge and Structural Engineering: Large Structures and Infrastructures for Environmentally Constrained and Urbanised Areas*, vol. 1, Zurich:IABSE-AIPC-IVBH, ISBN: 978-3-85748-122-2, Venice, Italy, 22-24 September, doi: <http://dx.doi.org/10.2749/222137810796025474> , Code 111904.
17. BENCARDINO F, RIZZUTI L, SPADEA G, SWAMY R. N (2009). FRC materials: some issues from the experimental behaviour in compression and flexure. In: *FIBRE CONCRETE 2009*. vol. 1, p. 33-41, CTU IN PRAGUE:Alena Kohoutková, ISBN: 978-80-01-04381-3, Prague, 17-18 September
18. BENCARDINO F, RIZZUTI L, SPADEA G (2007). Experimental tests v/s theoretical modeling for FRC in compression. In: *High-performance concrete, brick-masonry and environmental aspects*, 6th International Conference on Fracture Mechanics of Concrete and Concrete Structures, FraMCoS-6, p. 1473-1480, ISBN: 978-0-415-44617-4, Catania, Italy, 17-22 June 2007 , Code 75473.
19. BENCARDINO F, RIZZUTI L, SPADEA G (2007). Strengthening/Retrofitting of an RC structure with bonded CFRP laminates: reliability evaluation using different guidelines. In: *8th International Symposium on Fiber-Reinforced Polymer Reinforcement for Concrete Structures*. Patras, Greece, 16-18 July 2007, ISBN: 978-960-89691-0-0
20. BENCARDINO F, COLOTTI V, SPADEA G, SWAMY R.N (2005). Are RC Beams Strengthened for flexure safe in shear?. In: *Sustainability of Knowledge*. Alexandria, Egypt, 20-23 May, 2005, ALEXANDRIA: Egyptian Society of

Engineers

21. COLOTTI V., BENCARDINO F, SPADEA G., SWAMY R.N. (2005). Holistic Design of Strengthening RC Beams and Slabs. In: CCC2005, Lyon, France. 11-13 July, vol. 1, p. 195-202
22. BENCARDINO F, RIZZUTI L., SPADEA G. (2005). Theoretical Load Carrying Capacity of Eccentrically Loaded SFRC Sections. In: ICF XI Post Symposium, Venice, Italy. 29 March, p. 51-56
23. BENCARDINO F, SPADEA G, SWAMY R.N (2004). RC Beams Strengthened with CFRP Laminates Subjected to Shear Loading Regime. In: Proceedings of the First International Conference on Innovative Materials and Technologies for Construction and Restoration. Lecce, Italy, 6-9 June, vol. 2, p. 205-220, NAPOLI:Liguori, ISBN: 88-207-3678-0
24. BENCARDINO F, SPADEA G, SWAMY R.N (2003). The Role of Shear in RC Beams Strengthened with CFRP Laminates. In: Composites in Constructions. RENDE (CS), 16-19 September, p. 409-414, COSENZA:Editore Bios, ISBN: 88-7740-358-6
25. BENCARDINO F, COLOTTI V, SPADEA G, TOTARO N (2002). Axial Load-Flexural Moment Interaction in RC Columns with Bonded FRP Materials. In: From the Past to the Future. ASWAN, 17-20 December, ASWAN:The Egyptian Society of Engineers
26. COLOTTI V, BENCARDINO F, SPADEA G, SWAMY R.N (2002). Shear Capacity of Reinforced Concrete Beams Strengthened with Web-Bonded Plates. In: From the Past to the Future. ASWAN, 17-20 December, ASWAN:The Egyptian Society of Engineers
27. BENCARDINO F, COLOTTI V, SPADEA G, SWAMY R.N (2001). Failure Analysis of RC Beams with Bonded FRP Laminates. In: Composites in Constructions. vol. 1, p. 505-510, LISSE:A. A. Balkema, ISBN: 90-2651-858-7, Porto - Portugal, 10-12 October
28. SPADEA G, BENCARDINO F, COLOTTI V, TOTARO N (2001). Rinforzo Esterno di elementi in C.A. mediante compositi in Fibre di Carbonio. In: La sicurezza delle strutture in calcestruzzo armato sotto azioni sismiche con riferimento ai criteri progettuali di resistenza al collasso e di limitazione del danno dell'Eurocodice 8. Roma, 14 Dicembre, vol. 1, p. 115-124
29. SPADEA G., BENCARDINO F, SWAMY R.N., MUKHOPADHYAYA P. (2000). Design Against Premature Debonding and Brittle Behavior: The Key to Structural Integrity with FRP Bonded Structural Strengthening. In: Proceedings of the 3rd International Conference on Advanced Composite Materials in Bridges and Structures. vol. 1, p. 569-576, ISBN: 0-7709-0447-5, 15-18 August
30. COLOTTI V., BENCARDINO F, SPADEA G., TOTARO N. (2000). Rinforzo esterno di strutture in c.a. con l'impiego di compositi in fibre di carbonio: elementi strutturali inflessi. In: II Conferenza Plenaria. 15 Dicembre, vol. 1, p. 141-146
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