

ALESSANDRO CROCE CVs



Alessandro Croce in a nutshell

Alessandro Croce holds a Ph.D. in Aerospace Engineering from the Politecnico di Milano in Italy in 2004, became assistant professor in 2011 and is now Associate Professor of Flight Mechanics at the Department of Aerospace Science and Technology of the PoliMI.

Prof. Croce works in the area of multibody-aeroelastic modelling and simulation of wind turbines and rotorcraft systems, rotorcraft flight mechanics, optimal control theory and its applications.

His areas of expertise also include wind turbine design, multidisciplinary optimization of rotor systems, wind turbine active and passive load alleviations and wind tunnel testing. On these topics he has co-authored about 100 publications in peer-reviewed international journal papers, book chapters and conference proceedings.

He is coordinating the POLI-Wind Laboratory (i.e. the wind energy laboratory within the Aerospace Department) and is representative of Politecnico di Milano within the European Academy of Wind Energy (EAWE).

He has also worked for ten years as consultant for Italian and European wind energy companies.

EARNED DEGREES AND EMPLOYMENT

- Since October 2015: Associate professor, Department of Aerospace Engineering, Politecnico di Milano, Italy.
- January 2011-September 2015: Assistant professor, Department of Aerospace Engineering, Politecnico di Milano, Italy.
- April 2004-December 2010: Post-doctoral researcher, Department of Aerospace Engineering, Politecnico di Milano, project named "Helicopters – Development of Advanced Methods for the Integrated Simulation of Rotorcraft Vehicles".
- January 2001-April 2004 Ph.D. in Aerospace Engineering, Politecnico di Milano, thesis title "Trajectory Optimization of Multibody Systems with Applications to the Maneuvering Flight of Rotorcraft Vehicles".
- September 1993-July 2000 Laurea (cum laude) in Aerospace Engineering, Politecnico di Milano.

RESEARCH ACTIVITIES

Interests and areas of expertise

- Wind energy, wind turbine design, aero-servo-hydro-elasticity and active/passive control of wind turbines, wind tunnel testing.
- Flexible multibody dynamics, with particular emphasis on the modeling of rotary wing vehicles and wind turbines.
- Flight mechanics and aeroelasticity of rotorcraft vehicles.

Publications

- 35 publications in peer-reviewed international journals and book chapters;
- 63 publications in conference proceedings;
- 9 conference abstracts and posters;
- 9 scientific reports.

Bibliometric indicators from SCOPUS (26 March 2018): H-index 13 in 55 documents with 468 total citations by 365 documents.

Visiting Appointments

- 2003, Visiting Student at the Daniel Guggenheim School of Aerospace Engineering, Georgia Institute of Technology, Atlanta, GA, USA;
- Summer 2002, Visiting Student at the Lawrence Livermore National Laboratory, University of California at Berkeley.

Contracts supervised

- 2018, Seawind Ocean Technology B.V., rotor blade design and certification;
- 2016-2019, H2020 EU project CL-Windcon: wind tunnel testing of closed loop wind farm controllers;
- 2014-2016, TUM-Forwind: wind tunnel testing within CompactWind project of wind farm controllers;
- 2014-2015, TUM-SHI: wind tunnel testing of wind farm controllers;
- 2014-2015, Ventus: 60kW wind turbine blade design with innovative materials;
- 2011-2012, K4A: helicopter blade design for a light Italian helicopter;
- 2005-2006, Politecnico ed Innovazione: vertical axis wind turbine preliminary design.

Contracts co-supervised and/or involved

- 2013-2017, European AVATAR project: rotor design with integrated active and passive loads control and alleviation for 10-20MW Wind Turbines.
- 2012-2017, European INNWind project: lightweight structural design, integrated active and passive loads control and alleviation, wind tunnel testing of IPC/BTC rotor, wind-wave tank testing for 10-20MW Wind Turbines.
- 2012, GE Global Research: Design Optimization of an Advanced Rotors with Lift Increasing Technology;
- 2010-2014, Leitwind and Ministero dello Sviluppo Economico, Bando Industria 2015: multidisciplinary design techniques and application to multi-MW machines for on-shore and off-shore applications with a tandem generator configuration;
- 2009-2011, Kangwon National University: design of model-based collective and individual blade pitch control laws for horizontal axis wind turbines
- 2008-2009, Terom Wind Energy: wind turbine design and aero-elastic response;
- 2008-2010, Trevi Energy: wind turbine on-shore and off-shore design and control system design;
- 2007-2009, Leitwind: control system design and porting on a real time Pc104 system;
- 2007-2010, Tozzi Nord, wind turbine aero-elastic response and control design;
- 2006-2007, Leitwind: advanced control techniques for wind turbine generators;
- 2004-2006, Leitner: aeroelastic modeling of wind turbines using multibody finite element procedures.

Other

- Chairman of the Science of Making Torque from Wind (TORQUE) 2018, Milano, 20-22 June 2018
- Member of the Scientific Committee of the Conferences:
 - Wind Energy Science Conference (WESC) 2017, Lyngby, Denmark, 26-29 June
 - The Science of Making Torque from Wind (TORQUE) 2016, Munich, Germany, 5-7 October
 - 20th International Conference on Composite Materials (ICCM20) 2015, Copenhagen, Denmark, 19-24 July
- Representative of Politecnico di Milano within the European Academy of Wind Energy (EAWE).
- Reviewer for international journals and conferences:
 - Wind Energy (Wiley);
 - Energies (MDPI);
 - Multibody Systems Dynamics (Springer);
 - ASME Journal of Computational and Nonlinear Dynamics;
 - IEEE Control Systems Society & American Automatic Control Council;
 - AIAA The American Institute of Aeronautics and Astronautics;

TEACHING APPOINTMENTS

- Since 2018, professor of the course named "Dinamica del Volo Atmosferico" (i.e. *Flight Dynamics*), degree (Master of Science) in Aeronautical Engineering, Politecnico di Milano.
- Since 2012, professor of the course named "Progetto di Generatori Eolici" (i.e. *Design of Wind Turbines*), degree (Master of Science) in Aeronautical Engineering, Politecnico di Milano.
- Since 2014, professor of the course named "Fondamenti di Meccanica del Volo Atmosferico" (i.e. *Atmospheric Flight Mechanics, Performance and Static Stability*), degree (Bachelor of Science) in Aerospace Engineering, Politecnico di Milano.
- Since 2010, contract professor charged of the course named "Impianti Eolici" (i.e. *Wind Turbines*), Università degli Studi di Pavia.
- 2001-2012, professor of the course named "Fondamenti di Meccanica del Volo Atmosferico e Spaziale" (i.e. *Flight Mechanics, Performance and Static Stability*), degree (Bachelor of Science) in Aerospace Engineering, Politecnico di Milano.
- 2005-2008, contract professor charged of the course named "Meccanica del Volo" (i.e. *Flight Mechanics, Performance and Static Stability*), degree (Bachelor of Science) in Aerospace Engineering, Politecnico di Milano.

- 2011-2014, teaching assistant in the course named "Dinamica del Volo Atmosferico" (i.e. *Flight Mechanics, Stability and Control*), degree (Master of Science) in Aeronautical Engineering, Politecnico di Milano.
- 2004-2010, teaching assistant in the course named "Meccanica del Volo II" (i.e. *Flight Mechanics, Stability and Control*), degree (Master of Science) in Aeronautical Engineering, Politecnico di Milano.
- 2002-2009, teaching assistant in the course named "Meccanica del Volo" (i.e. *Flight Mechanics, Performance and Static Stability*), degree (Bachelor of Science) in Aerospace Engineering, Politecnico di Milano.

LIST of PUBLICATIONS

Alessandro CROCE

January 2019

Publications in peer-reviewed international journals (43)

43. P. Bortolotti, C.L. Bottasso, A. Croce, L. Sartori, “*Integration of multiple passive load mitigation technologies by automated design optimization — The case study of a medium-size onshore wind turbine*”, Wind Energy, Vol.22, N.1, p.65-79, 2019, DOI: 10.1002/we.2270 (2019).
42. R. Riva, M. Spinelli, L. Sartori, S. Cacciola, A. Croce, “*Stability analysis of wind turbines with bend-twist coupled blades*”, The Science of Making Torque from Wind (TORQUE 2018), Journal of Physics: Conference Series 1037 (2018) 062014 doi:10.1088/1742-6596/1037/2/062014, (2018)
41. R. Riva, S. Cacciola, A. Croce, “*High-resolution periodic mode shapes identification for wind turbines*”, The Science of Making Torque from Wind (TORQUE 2018), Journal of Physics: Conference Series 1037 (2018) 062002 doi:10.1088/1742-6596/1037/2/062002, (2018)
40. M. Civati, L. Sartori and A. Croce, “*Design of a two-bladed 10 MW rotor with teetering hub*”, The Science of Making Torque from Wind (TORQUE 2018), Journal of Physics: Conference Series 1037 (2018) 042007 doi:10.1088/1742-6596/1037/2/042007, (2018)
39. P. Bortolotti, C.R. Sucameli, A. Croce and C.L. Bottasso, “*Integrated design optimization of wind turbines with noise emission constraints*”, The Science of Making Torque from Wind (TORQUE 2018), Journal of Physics: Conference Series 1037 (2018) 042005 doi:10.1088/1742-6596/1037/2/042005, (2018)
38. L. Sartori, F. Bellini, A. Croce, C.L. Bottasso, “*Preliminary design and optimization of a 20MW reference wind turbine*”, The Science of Making Torque from Wind (TORQUE 2018), Journal of Physics: Conference Series 1037 (2018) 042003 doi:10.1088/1742-6596/1037/2/042003, (2018)
37. S. Cacciola, C.E.D. Riboldi, A. Croce, “*Monitoring rotor aerodynamic and mass imbalances through a self-balancing control*”, The Science of Making Torque from Wind (TORQUE 2018), Journal of Physics: Conference Series 1037 (2018) 032041 doi:10.1088/1742-6596/1037/2/032041, (2018)
36. C.R. Sucameli, P. Bortolotti, A. Croce and C.L. Bottasso, “*Comparison of some wind turbine noise emission models coupled to BEM aerodynamics*”, The Science of Making Torque from Wind (TORQUE 2018), Journal of Physics: Conference Series 1037 (2018) 022038 doi:10.1088/1742-6596/1037/2/022038, (2018)
35. J.G. Schepers, K. Boorsma, N. Sørensen, Voutsinas, G. Sieros, H. Rahimi, H. Heisselmann, E. Jost, T. Lutz, T. Maeder, A. Gonzalez, C. Ferreiral B. Stoevesandt, G. Barakos, N. Lampropoulos, A. Croce, J.

- Madsen, "Final results from the EU project AVATAR: Aerodynamic modelling of 10 MW wind turbines", The Science of Making Torque from Wind (TORQUE 2018), Journal of Physics: Conference Series 1037 (2018) 022013 doi:10.1088/1742-6596/1037/2/022013, (2018)
34. P. Montinari, F. Gualdoni, A. Croce, C.L. Bottasso, "Ultimate and fatigue load mitigation by an inertial-driven passive flap, using a geometrically exact multibody formulation", Journal of Wind Engineering and Industrial Aerodynamics, Vol. 175, p.169-178, 2018, doi.org/10.1016/j.jweia.2018.01.038 (2018)
 33. J. Wang, S. Foley, E.M. Nanos, T. Yu, F. Campagnolo, C.L. Bottasso, A. Zanotti, A. Croce, "Numerical and Experimental Study of Wake Redirection Techniques in a Boundary Layer Wind Tunnel", Wake Conference 2017, 30 May - 1 June 2017, Visby, Sweden, Journal of Physics: Conference Series, Vol. 854, N. 1, 2017, 012048 (11 pages) (2016), 10.1088/1742-6596/854/1/012048 (2017)
 32. G. Campanardi, D. Grassi, A. Zanotti, E. M. Nanos, F. Campagnolo; A. Croce, C.L. Bottasso "Stereo Particle Image Velocimetry Set up for Measurements in the Wake of Scaled Wind Turbines", XXIV A.I.V.E.LA. Annual Meeting, Journal of Physics: Conference Series, Vol. 882, 2017, 012003 (2017) 10.1088/1742-6596/882/1/012003 (2017)
 31. C.L. Bottasso, A. Croce, F. Gualdoni, P. Montinari, C.E.D. Riboldi, "Articulated blade tip devices for load alleviation on wind turbines", Wind Energy Science, 2016, p. 297-310, doi:10.5194/wes12972016 (2016)
 30. P. Bortolotti, C.L. Bottasso, A. Croce: "Combined preliminary–detailed design of wind turbines", Wind Energ. Sci., 1, 71-88, doi:10.5194/wes-1-71-2016, (2016).
 29. M.F. van Dooren, M. Kühn, V. Petrović, C.L. Bottasso, F. Campagnolo, M. Söholm, N. Angelou, T. Mikkelsen, A. Croce, A. Zasso, "Demonstration of synchronised scanning Lidar measurements of 2D velocity fields in a boundary-layer wind tunnel", The Science of Making Torque from Wind (TORQUE 2016), Journal of Physics: Conference Series 753 (2016) 072032 doi:10.1088/1742-6596/753/7/072032, (2016)
 28. A. Croce, F. Gualdoni, P. Montinari, C.E.D. Riboldi, C.L. Bottasso, "Inertial and aerodynamic tuning of passive devices for load alleviation on wind turbines", The Science of Making Torque from Wind (TORQUE 2016), Journal of Physics: Conference Series 753 (2016) 102005 doi:10.1088/1742-6596/753/10/102005, (2016)
 27. C.L. Bottasso, P. Bortolotti, A. Croce, F. Gualdoni, "Integrated Aero-Structural Optimization of Wind Turbine Rotors", Multibody System Dynamics, Vol. 38, p. 317-344, ISSN: 1384-5640, DOI 10.1007/s11044-015-9488-1 (2016).
 26. L. Sartori, A. Croce, P. Bortolotti, C.L. Bottasso, "Integration of prebend optimization in a holistic wind turbine design tool", The Science of Making Torque from Wind (TORQUE 2016), Journal of Physics: Conference Series 753 (2016) 062006 doi:10.1088/1742-6596/753/6/062006, (2016)
 25. J.G. Schepers, O. Ceyhan, K. Boorsma, A. Gonzalez, X. Munduate, O. Pires, N. Sørensen, C. Ferreira, G. Sieros, J. Madsen, S. Voutsinas, T. Lutz, G. Barakos, S. Colonia, H. HeiBelmann, F. Meng, A. Croce, "Latest results from the EU project AVATAR: Aerodynamic modelling of 10 MW wind

- turbines*”, The Science of Making Torque from Wind (TORQUE 2016), Journal of Physics: Conference Series 753 (2016) 022017 doi:10.1088/1742-6596/753/2/022017, (2016)
24. A. Croce, L. Sartori, M. S. Lunghini, L. Clozza, P. Bortolotti, C.L. Bottasso, “Lightweight rotor design by optimal spar cap offset”, The Science of Making Torque from Wind (TORQUE 2016), Journal of Physics: Conference Series 753 (2016) 062003 doi:10.1088/1742-6596/753/6/062003, (2016)
 23. C.L. Bottasso, A. Croce, F. Gualdoni, P. Montinari, “Load Mitigation in Wind Turbines by a Passive Aeroelastic Device”, Journal of Wind Engineering & Industrial Aerodynamics, 148, 2016, p. 57–69, DOI 10.1016/j.jweia.2015.11.001, (2016).
 22. M. Stettner, M.J. Reijerkerk, A. Lünenschloß, V. Riziotis, A. Croce, L. Sartori, R. Riva, J.M. Peeringa, “Stall-Induced Vibrations of the AVATAR Rotor Blade”, The Science of Making Torque from Wind (TORQUE 2016), Journal of Physics: Conference Series 753 (2016) 042019 doi:10.1088/1742-6596/753/4/042019, (2016)
 21. F. Campagnolo, V. Petrović, J. Schreiber, E.M. Nanos, A. Croce, C. L. Bottasso, “Wind tunnel testing of a closed-loop wake deflection controller for wind farm power maximization”, The Science of Making Torque from Wind (TORQUE 2016), Journal of Physics: Conference Series 753 (2016) 032006 doi:10.1088/1742-6596/753/3/032006, (2016)
 20. Bottasso C.L., Croce A., Riboldi C.E.D., Salvetti M., “Cyclic Pitch Control for the Reduction of Ultimate Loads on Wind Turbines”, Journal of Physics: Conference Series, Vol. 524, 2014, 012063 (10 pages), ISSN:1742-6588 (The Science of Making Torque from Wind 2014 (TORQUE 2014)), doi:10.1088/1742-6596/524/1/012063
 19. Bottasso C.L., Croce A., Sartori L., Grasso F., “Free-Form Design of Rotor Blades”, Journal of Physics: Conference Series, Vol. 524, 2014, 012041 (10 pages), ISSN:1742-6588 (The Science of Making Torque from Wind 2014 (TORQUE 2014)), doi:10.1088/1742-6596/524/1/012041
 18. Bottasso C.L., Croce A., Riboldi C.E.D., “Optimal Shutdown Management”, Journal of Physics: Conference Series, Vol. 524, 2014, 012050 (10 pages), ISSN:1742-6588 (The Science of Making Torque from Wind 2014 (TORQUE 2014)), doi:10.1088/1742-6596/524/1/012050
 17. Bottasso C.L., Campagnolo F., Croce A., Dilli S., Gualdoni F., Nielsen M.B., “Structural optimization of wind turbine rotor blades by multi-level sectional/multibody/3DFEM analysis”, *Multibody System Dynamics*, Vol. 32, N. 1, 2014, p. 87-116, doi:10.1007/s11044-013-9394-3 (2014).
 16. Bottasso C.L., Cacciola S., Croce A., “Estimation of blade structural properties from experimental data”, *Wind Energy*, Vol.16, N.4, p.501-518, 2013, DOI: 10.1002/we.1497 (2013).
 15. Bottasso C.L., Croce A., Riboldi C.E.D., Nam Y., “Multi-Layer Control Architecture for the Reduction of Deterministic and Non-Deterministic Loads on Wind Turbines”, *Renewable Energy*, Vol. 51, March 2013, p. 159-169, 2013, DOI:10.1016/j.renene.2012.08.079 (2013).
 14. Bottasso C.L., Campagnolo F., Croce A., Tibaldi C., “Optimization-based study of bend–twist coupled rotor blades for passive and integrated passive/active load alleviation”, *Wind Energy*, Vol. 16, N.8, p1149-1166, 2013. DOI: 10.1002/we.1543 (2013).

13. Bottasso C.L., Cacciola S, Croce A., Dozio L., "Load Reduction in Lead–Lag Dampers by Speed-Scheduled Aperture and Modulated Control of a Bypass Valve", *Journal of the America Helicopter Society*, Vol. 57, N.2, p. 16-28, April 2012, DOI: 10.4050/JAHS.57.022005 (2012).
12. Bottasso C.L., Campagnolo F., Croce A., "Multi-Disciplinary Constrained Optimization of Wind Turbines", *Multibody System Dynamics*, Vol. 27, N. 1, p. 21-53, 2012, ISSN: 1384-5640, doi: 10.1007/s11044-011-9271-x (2012).
11. Bottasso C.L., Croce A., Nam Y., Riboldi C.E.D., "Power Curve Tracking in the Presence of a Tip Speed Constraint", *Renewable Energy*, Vol. 40, p. 1-12, 2012, doi:10.1016/j.renene.2011.07.045, ISSN: 0960-1481 (2012).
10. Bottasso C.L., Croce A., Nicastro R., Savini B., Riviello L., "Adaptive Reference-Augmented Predictive Control, with Application to the Reflexive Control of Unmanned Rotorcraft Vehicles", *Automatic Control in Aerospace*, Vol. 1, p.1-14, ISSN 1974-5168, N. 2 (2008).
9. C.L. Bottasso, A. Croce, B. Savini, "Performance Comparison of Control Schemes for Variable-Speed Wind Turbines", *The Science of Making Torque from Wind: TWIND 2007*, Journal of Physics: Conference Series, vol. 75, p. 012079-1-9, SSN: 1742-6588, doi: 10.1088/1742-6596/75/1/012079 (2007).
8. Bottasso C.L., Prilutsky B.I., Croce A., Imberti E., Sartirana S., "A Numerical Procedure for Inferring from Experimental Data the Optimization Cost Functions using a Multibody Model of the Neuro-musculoskeletal System", *Multibody Systems Dynamics*, Vol. 16, N. 2, p. 123-154, 2006, ISSN: 1384-5640 (2006).
7. Bottasso C.L., Chang C., Croce A., Leonello D., Riviello L., "Adaptive planning and tracking of trajectories for the simulation of maneuvers with multibody models", *Computer Methods in Applied Mechanics and Engineering*, Vol. 195, N. 50-51, p. 7052-7072, 2006, ISSN: 0045-7825 (2006).
6. Bottasso C.L., Croce A., Savini B., Sirchi W., Trainelli L., "Aero-servo-elastic Modeling and Control of Wind Turbines Using Finite Element Multibody Procedures", *Multibody System Dynamics*, Vol. 16, N. 3, p. 291-308, 2006, ISSN: 1384-5640 (2006).
5. Borri M., Trainelli L., Croce A. , "The Embedded Projection Method: A General Index Reduction Procedure for Constrained System Dynamics", *Computer Methods in Applied Mechanics and Engineering*, Vol. 195, N. 50-51, p. 6974-6992, 2006, ISSN: 0045-7825 (2006).
4. Bottasso C.L., Croce A., Leonello D., Riviello L., "Optimization of Critical Trajectories for Rotorcraft Vehicles", *Journal of the American Helicopter Society*, Vol. 50, N. 2, p. 165-177, 2005, ISSN: 0002-8711 (2005).
3. Bottasso C.L., Croce A., Leonello D., Riviello L., "Rotorcraft Trajectory Optimization with Realizability Considerations", *Journal of Aerospace Engineering*, Vol. 18, N. 3, p. 146-155, 2005, ISSN: 0893-1321 (2005).
2. Bottasso C.L., Croce A., Ghezzi L., Faure P., "On the Solution of Inverse Dynamics and Trajectory Problems for Multibody Systems", *Multibody System Dynamics*, Vol. 11, N.1, p. 1-22, 2004, ISSN: 1384-5640 (2004).

1. Bottasso C.L., Croce A., "Optimal Control of Multibody Systems Using an Energy Preserving Direct Transcription Method", *Multibody System Dynamics*, Vol. 12, N.1, p. 17-45, 2004, ISSN: 1384-5640 (2004).

Publications in book chapters (1)

1. A. Zasso, P. Schito, C.L. Bottasso, A. Croce, "Aero-Servo-Elastic Design of Wind Turbines: Numerical and Wind Tunnel Modeling Contribution", in: *Environmental Wind Engineering and Design of Wind Energy Structures*, CISM International Centre for Mechanical Sciences, Vol. 531, Charalambos Baniotopoulos, Claudio Borri, Theodore Stathopoulos (Eds.), Springer, Berlin, 2011, ISBN: 9783709109526, p. 97-190 (2011).

Publications conference proceedings (63)

2017 (3)

63. A. Croce, L. Sartori, C.L. Bottasso, P. Bortolotti, "Lightweight Rotor Design of Multi-Megawatt Wind Turbines", 2nd International Conference on Lightweight Design of Materials and Engineering Structures, LIMAS 2017, 13-14 November 2017, London, UK (2017)
62. M. Amoozgar, A. Croce, C.E.D. Riboldi, L. Trainelli, "Basic Aeroelastic Stability Studies of Hingeless Rotor Blades in Hover Using Geometrically Exact Beam and Finite-State Inflow", 43rd European Rotorcraft Forum (ERF 2017), Milano, Italy, 12-15 Sept. 2017, p. 1-8 (2017)
61. S. Cacciola, C.E.D. Riboldi, A. Croce, "A New Decentralized Pitch Control Scheme for Wind Turbines", 20th World Congress of the International Federation of Automatic Control (IFAC 2017), Toulouse, France, 9-14 July 2017, p. 9908-9913, 10.1016/j.ifacol.2017.08.1627 (2017)

2016 (1)

60. F. Campagnolo, V. Petrović, C.L. Bottasso, A. Croce, "Wind Tunnel Testing of Wake Control Strategies", 2016 American Control Conference, Boston, MA, USA, 6-8 July 2016, 2016

2015 (6)

59. A. Croce, C.L. Bottasso, "*Wind tunnel testing of blade with active & passive control systems*", IRP Wind Conference, Amsterdam, 28-29 September 2015.
58. L. Trainelli, A. Croce, C. E. Riboldi, R. Possamai, "*Trimming a High-Fidelity Multibody Helicopter Model for Performance and Control Analysis*", 41st European Rotorcraft Forum, Munich, Germany, 1-4 September 2015, p1-12.
57. Denja Lekou · K. Bacharoudis · A. B. Farinas · K. Branner · A. Croce · T. P. Philippidis · G. de Winkel · P. Berring, "A critical evaluation of structural analysis tools used for the design of large composite wind turbine rotor blades under ultimate and cycle loading", 20th International Conference on Composite Materials (ICCM20), Copenhagen, Denmark, 19-24 July 2015, 2015
56. C.L. Bottasso, A. Croce, F. Gualdoni, P. Montinari, "*A New Concept to Mitigate Loads for Wind Turbines Based on a Passive Flap*", 2015 American Control Conference, Chicago, IL, USA, 1 July-3 July 2015, 2015.
55. Bottasso C.L., Croce A., Sartori L., "*Free-Form Design of Low Induction Rotors*", 33rd Wind Energy Symposium - AIAA SciTech 2015, 2015, ISBN: 9781624103445, p. 1-8, AIAA 2015-0488 [33rd Wind Energy Symposium - AIAA SciTech 2015, Kissimmee, FL, USA, 5-9 Jan. 2015], doi:10.2514/6.2015-0488, 2015.
54. J. G. Schepers , O. Ceyhan , F. J. Savenije, M. Stettner, H. J. Kooijman, T. Chaviarapolous, G. Sieros, C. Ferreira, N. Sørensen, M. Wächter, B. Stoevesandt, T. Lutz, A. Gonzalez, G. Barakos, A. Voutsinas, A. Croce, J. Madsen, "*AVATAR: AdVanced Aerodynamic Tools for lArge Rotors*", 33rd Wind Energy Symposium - AIAA SciTech 2015, 2015, ISBN: 9781624103445, p. 1-20, AIAA 2015-0497 [33rd Wind Energy Symposium - AIAA SciTech 2015, Kissimmee, FL, USA, 5-9 Jan. 2015], DOI: 10.2514/6.2015-0497, 2015.

2014 (3)

53. Croce A., Possamai R., Trainelli L., "*Dynamic Properties of Some Gimbal and Teetering Two-Blade Helicopter Rotor Heads*", 40th European Rotorcraft Forum, Royal Aeronautical Society, Southampton, UK, 2-5 Sept 2014, ISBN: 1 85768 311 0, p. 1-10, 2014.
52. Croce A., Possamai R., Savorani A., Trainelli L., "*Modelling and Characterization of a Novel Gimbal Two-Blade Helicopter Rotor*" ", 40th European Rotorcraft Forum, Royal Aeronautical Society, Southampton, UK, 2-5 Sept 2014, ISBN: 1 85768 311 0, p. 1-9, 2014.
51. Bottasso C.L., Campagnolo F., Croce A., Tibaldi C., "*Fatigue Damage Mitigation by the Integration of Active and Passive Load Control Techniques on Wind Turbines*", in: Wind Energy - Impact of Turbulence, M. Hoelling, J. Peinke and S. Ivanell (Eds.), Springer, Berlin, 2014, ISBN: 9783642546952, p. 3-8 [EUROMECH Colloquium 528 - Wind Energy and the Impact of Turbulence on the Conversion Process, Oldenburg, Germany, 22-24 Feb. 2012], doi:10.1007/978-3-642-54696-9_1, 2014.

2013 (2)

50. Bottasso C.L., Campagnolo F., Croce A., *"Towards the wind tunnel testing of wind farm controllers"*, 1st ACROSS Workshop on Cooperative Control Methods, Zagreb, Croatia, 26 September 2013.
49. Sartori L., Grasso F., Bottasso C.L., Croce A., *"Integration of Airfoil Design During the Design of New Blades"*, International Conference on Aerodynamics of Offshore Wind Energy Systems and Wakes (ICOWES2013), Lyngby, Denmark, 17-19 June 2013, p. 327-334.

2012 (1)

48. C.L. Bottasso, F. Campagnolo, A. Croce, C. Tibaldi, *"Fatigue Damage Mitigation by the Integration of Active and Passive Load Control Techniques"*, EUROMECH Colloquium 528 - Wind Energy and the Impact of Turbulence on the Conversion Process, Oldenburg, Germany, 22-24 Feb. 2012, p. 1-6.

2011 (5)

47. C.L. Bottasso, F. Campagnolo, A. Croce., L. Maffenini, *"Development of a Wind Tunnel Model for Supporting Research on Aero-Servo-Elasticity and Control of Wind Turbines"*, 13th International Conference on Wind Engineering (ICWE13), Amsterdam, the Netherlands, 10-15 July 2011, p. 1-8, 2011, ISBN: 9781907132339.
46. C.L. Bottasso, S. Cacciola, A. Croce, *"Identification of the Structural Properties of Beam Models, with Application to Wind Turbine Aero-Elasticity"*, Multibody Dynamics 2011 - ECCOMAS Thematic Conference. Brussels, Belgium, 4-7 July 2011, p. 1-20, 2011.
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