

# Curriculum Vitae

## Prof. Filippo Berto



Name: **Filippo BERTO**

Place and –date of birth: **Vicenza (ITALY)-12-02-1978**

Nationality: **Italian**

### 1. Contact Information

**Address:** Department of Industrial and Mechanical Engineering, Norwegian University of Science and Technology, Richard Birkelands vei 2b, 7491, Trondheim, Norway

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[http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1460-2695](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1460-2695)

### 2. Education

#### **Ph.D., Materials Science and Mechanical Engineering.**

University of Firenze, Italy. February 2007

*“Design of Structural Materials against multiaxial fatigue loading in presence of severe geometrical discontinuities”*. Advisors: Prof. P. Lazzarin (University of Padua)

#### **M.S., Mechanical Engineering (5yrs)**

*magna cum laude*, University of Padua, March 2003

*“Three-dimensional effects in finite plate thickness plates”*. Advisors: Prof. P. Lazzarin (University of Padua) Prof. A. Kotousov (University of Adelaide) and Prof. C.H. Wang (University of Melbourne, RMIT)

### 3. Professional Experience

#### **Regius Full Professor and Chair of Mechanics and Materials**

NTNU (Norway) - Norwegian University of Science and Technology, Trondheim (January 2016 to present). **Top research program of NTNU**, one of the 3 positions available in all the faculties of NTNU from 1996 to 2020, awarded by Arald V, the King of Norway.

#### **Chair of Mechanics and Materials Laboratory (Fracture and Fatigue Testing)**

NTNU (Norway) - Norwegian University of Science and Technology, Trondheim (January 2016 to present).

#### **Researcher and Consultant**

Cimolai Technology, Padua, Italy, (January 2013 to present)

#### **Associate Professor of Machine Design and Mechanics and Materials**

University of Padua (Italy) (September 2014 to December 2015).

#### **Assistant Professor of Machine Design and Mechanics and Materials.**

University of Padua (Italy) (September 2006 to August 2014).

#### **Researcher and Consultant**

Officine Meccaniche Zanetti, Vicenza, Italy, (January 2003 to present)

### 4. Honorary Appointments as Renowned Full Professor

**Honorary Adjunct Full Professorship** Hong Kong Polytechnic University, since December 2016 to present

**Honorary Adjunct Full Professorship** Aalto University, School of Engineering, since September 2016 to present.

**Honorary Adjunct Full Professorship** Politechnika Bialostocka, Department of Mechanics and Applied Computer Science, Bialystok, Poland, since January 2016 to present

### 5. Other honorary positions

**Adjunct Chair of Mechanics of Materials**, Kyoto University, since July 2016.

**Adjunct Chair of Mechanics of Materials** at the Democritus University of Thrace, since June 2016

**Adjunct Chair of Mechanics of Materials**, Ritsumeikan University, Department of Mechanical Engineering, since January 2014.

### 6. Visiting Appointments as Full Professor

- University of Oxford and Trinity college (June-July 2009)
- University of Adelaide, Australia (December 2010)
- Ritsumeikan University, Kyoto Japan (June 2011)
- School of Mechanical Engineering, East China University of Science and Technology, Shanghai, China (July 2011)
- Imperial College, London (August 2011)
- Kijushu University, Japan (January 2012)
- Georgia Tech, US, as Visiting Professor (June 2012)
- Northwestern University, US (July 2012)
- Brown University, US (August 2012)

- Cornell University, US (September 2012)
- Harvard University, US (January 2013)
- Stanford University, US (February 2013)
- Berkeley University, US (March 2013)
- University of Toledo, Spain (June 2013)
- University of Sheffield, UK (July 2013)
- University of Manchester, UK (August 2013)
- The Hong Kong Polytechnic University – PolyU, China (January 2014)
- Aalto University, Finland as Adjunct Professor (June-August 2014)
- Politechnika Bialostocka, Department of Mechanics and Applied Computer Science, Bialystok, Poland (January 2015)
- East China University of Science and Technology 130 Meilong Rd. Shanghai 200237 (June-August 2015)
- Aalto University, Finland as adjunct Professor (January 2016)
- Hong Kong University (July 2016)
- Supsi Technical University (September 2016)
- Virginia Tech, US (planned for January 2017)
- Chinese Academy of science (planned for December 2017)

## **7. Courses taken to industries and research centers**

- Fraunhofer LBF
- NASA and Alphastar
- CERN
- Max Planck Institute
- Kobe Material Testing Laboratory
- State Key
- Laboratory of Nonlinear Mechanics (LNM), Institute of Mechanics, Chinese Academy of Sciences

## **8. Research Grants and Financed Projects**

2004-2006, Prin 2004, Criteria for the fatigue assessment of notched components under multiaxial loadings (100 KE), Participant.

2004-2007, Industrial project financed by Officine Meccaniche Zanetti, High temperature fatigue and creep of advanced materials for hot rolling applications (200 kE). Principal Investigator.

2006, Ex 60% 2006, Relationship between the J-integral and the local strain energy density under elastic and elasto plastic conditions (20 KE). Principal Investigator.

2007, Ex 60% 2007, Some useful expressions for the evaluation of local energy parameters in shaft weakened by sharp and blunt notches, (20 KE). Principal Investigator.

2007-2010. Project FIT in cooperation with Omera and other industrial partners. Structural analysis of the fatigue behavior of welded joints for industrial applications (200 kE). Co-responsible with Prof. P. Lazzarin

2008 Ex 60% 2008, Investigation of the stress field and application of a criterion based on the stress intensity factors for lap welded and bonded joints for aerospace applications (30 KE). Principal Investigator.

2008-2010, Industrial project financed by Officine Meccaniche Zanetti, High temperature fatigue behavior and creep of Ti alloys (140 kE). Principal Investigator.

2009 Ex 60% 2009 Lap and spot welded joints: application of a local criterion based on local energy for the fatigue assessment (20 kE). Principal Investigator.

2009 Prin 2009, Static and low cycle fatigue behaviour of structural components in presence of localized and large plasticity (100 kE). Principal Investigator.

2010 Ex 60% 2010 Fatigue strength of thin welded structures (20 kE). Principal Investigator.

2010-2012. Progetto di ateneo 2010 Tensile and torsion static and low cycle fatigue behaviour of structural components in presence of localized and diffuse plasticity (60 kE) Principal Investigator.

2011 Ex 60% Theoretical and numerical analyses of stress intensity factors of plates weakened by micro-notches of different shape under mode II loading (15 kE). Principal Investigator.

2011-2013, Industrial project financed by Officine Meccaniche Zanetti, High temperature fatigue behavior and creep of Inconel (130 kE). Principal Investigator.

2012-2014 Industrial project financed by Cimolai, Advanced criteria for the automatic design of large structures (150 kE). Principal Investigator.

2012-2014 POR Project in cooperation with Omera and other industrial partners (2012-2014) Analytical and experimental study of welded structures by means of the local strain energy density (200 kE). Principal Investigator.

Ex 60% 2012 Tensile and torsion low cycle fatigue of structural steels for ship building applications (23 kE). Principal Investigator.

Ex 60% 2013 Static tests at high temperature on zinc alloys and polypropylene (60 kE). Principal Investigator.

2013-2015. Industrial project financed by VDP, Microstructural characterization of cast iron used to produce high-thickness components (220 kE). Principal Investigator.

2014-2016, Industrial project financed by Officine Meccaniche Zanetti, High temperature fatigue behavior and creep of advanced materials for highly stressed turbine blades (120 kE). Principal Investigator.

2014-2016 Industrial project financed by Ferrari and Chesini, Microstructural analysis and fatigue behaviour of AISI 304 and Ti6Al4V used in high pressure common rail systems (250 kE). Principal Investigator.

2015. Industrial project financed by Cimolai Technology. A rapid method for the fatigue assessment of welded joints used in the Panama gate (120 KE). Principal Investigator.

2015. Industrial project financed by Officine Meccaniche Zanetti. A rapid method for the fatigue assessment of mechanical parts used in the MOSE project (110 KE). Principal Investigator.

2015-2016. ATI project in cooperation with Omera, Effects of TIG dressing on the fatigue behaviour of advanced welded joints (300 kE).

2015. Red Española de Fractura en Entallas (Spanish Network of Fracture in presence of Notches), Principal Investigator with Sergio Cicero and Luca Susmel (200 kE)

2016. Industrial project financed by Officine Meccaniche Zanetti. Fatigue behaviour at high temperature of structural steels with different surface treatments (50 kE). Principal Investigator.

2015-2017 Industrial project financed by Cimolai, Advanced local criteria for assessing the fatigue behavior of long bridges: an aerodynamic approach (150 kE). Principal Investigator.

2015-2017. EU Grant Hydrogen-induced degradation of offshore steels in ageing infrastructure. Participant. (500 kE)

2016-2018 EU H2020 FoF 2015 - 10 Manufacturing of custom made parts for personalized products. Next Generation Bionics and Smart Prosthetics. Participant (500 kE)

2016-2019. Industrial project financed by Zincherie Valbrenta. Effect of hot-dip-galvanization on the fatigue strength at different scale levels from nano to macro (160 kE). Principal Investigator.

2016-2018 NTNU Grant for Infrastructure. Mechanical Behavior Lab (5000 kE). Principal Investigator.

2017-2018 Research Council of Norway, Micro and Nano Characterization of additive Manufacturing Components, Frinatek proposal (1800 KE). Principal Investigator.

2017-2021 Chair of ESFRI for Additive Manufacturing (12 partners, 160 ME in 5 years). Principal Investigator, under evaluation.

2017-2019 *H2020-NMBP-2016-2017* Welding additively-manufactured stainless steel to conventional steel for offshore marine infrastructures: fabrication and design of joints ANTELOPE, Additively maNufactured sTeel wELded tO tyPical stEel (1 ME) under evaluation.

## 9. Honors and Awards

### NTNU

**January 2017** [http://www.topitalianscientists.org/TIS\\_HTML/Top\\_Italian\\_Scientists\\_Engineering.htm](http://www.topitalianscientists.org/TIS_HTML/Top_Italian_Scientists_Engineering.htm)

**December 2016.** Among the top Italian scientist with Umberto Veronesi and Umberto Eco

**December 2016.** Honorary host at Nobel prize ceremony

**December 2016.** Among the ten most relevant scientist in the world in the field 'Mechanics'

**December 2016.** NTNU Best teacher award for the course 'Fatigue Design'.

**December 2016.** Top cited scientist NTNU

**November 2016.** Most quoted paper in the triennium 2014-2016 of Material Science Engineering R (Impact Factor 24)

**November 2016.** Advvisor of the best master student 2015 in Mechanical Engineering, National Ucimu Award, Italy.

**November 2016.** Supervisor of the best PhD Student in 2015, University of Padua.

**November 2016.** Award as one of the ten most influential researchers (most quoted) released by Thompson Reuter and Isi Web of Knowledge.

**November 2016.** Nomination for the best communicator at NTNU (KOM award)

**November 2016.** Recognition for the memorandum of understanding between NTNU and Hong Kong Polyt. University.

**October 2016.** Funding recognition for the new laboratory at the department of industrial and mechanical engineering.

**October 2016.** Recognition for the memorandum of understanding between NTNU and Aalto University

**September 2016.** Recognition for the memorandum of understanding between NTNU and Southampton University

**August 2016.** JSPS Supervisor of the Postdoctoral Fellowship Program for Overseas Researchers (Standard), Japan Society for the Promotion of Science (JSPS) (10 applications financed among 1230).

**August 2016.** Invitation by the Royal Society in the evaluation Committee for evaluation of foreign Members (award received by Queen Elizabeth II Alexandra Mary)

**June 2016.** Top papers award in the journal Fatigue and Fracture of Engineering Materials and Structures

- Top Paper Award for the top-cited paper published in 2012. The title of the paper is "Induced out-of-plane mode at the tip of blunt lateral notches and holes under in-plane shear loading". Filippo is the main author of the paper together with colleagues P. Lazzarin, A. Kotousov and L. P. Pook. The paper is published in "Fatigue & Fracture of Engineering Materials & Structures", Vol. 35, Issue 6.
- Top Paper Award for one of the top-cited papers published in 2013. The title of the paper is "Brittle failure of inclined key-hole notches in isostatic graphite under in-plane mixed mode loading". Filippo is the main author together with colleagues P. Lazzarin and M. R. Ayatollahi.

The paper is published in "Fatigue & Fracture of Engineering Materials & Structures", Vol. 36, Issue 9.

- The Most Cited Paper Award for his paper being among the most cited papers published in 2013. The title of the paper is "Three-dimensional effects in finite thickness plates weakened by rounded notches and holes under in-plane shear". Filippo is the main author of the paper together with colleague C. Marangon. The paper is published in "Fatigue & Fracture of Engineering Materials & Structures", Vol. 36, Issue 11.

### **University of Padua**

**January 2017** ANSYS Marelli competition award (Nicola Pornaro)

**June 2015.** ANSYS Hall of Fame Competition

**December 2014.** Nomination for the Rodney Hill Prize in Solid Mechanics (younger nominated scientist)

**December 2014.** Best teacher of CCS award a.y. 2013/14 received as best teacher of the year for the course 'Advanced Mechanics of Materials'.

**November 2014.** Elsevier Best Reviewer Award 2014

**December 2013.** Best teacher of CCS award a.y. 2012/13 received as best teacher of the year for the course 'Advanced Mechanics of Materials'.

**November 2013.** Elsevier Best Reviewer Award 2013

**September 2013.** Capocaccia prize 2013 at AIAS conference held in Salerno (12 September 2013). Best paper for researchers under 35 years.

**September 2012.** Sih golden medal, junior prize at the conference Mesomechanics 2012, held in Budapest in September 2012. Best paper for researchers under 35 years.

**December 2012.** Best teacher of CCS award a.y. 2011/12 received as best teacher of the year for the course 'Advanced Mechanics of Materials'.

### **Honours and distinctions proving the international reputation**

**2016.** Invited by Franky So, editor in chief of Materials Science Engineering R: Reports (Impact Factor 24.6, 5-years Impact Factor 18.974) to write a review paper for 2018.

**2016.** Editorial board of 18th International Colloquium on Mechanical Fatigue of Metals on 5-7 September 2016.

**2016.** Technical committee of the 4th International Conference on Applied Mechanics, Mechatronics and Intelligent System (AMMIS2016) will be held in Beijing, China.

**2016.** Editorial board of 11th International Conference on Multiaxial Fatigue and Fracture to be held in Seville (1 - 3 June, 2016).

**2016.** Editorial board of X-Mech 2016 (February, 2016 in Iran University of Science and Technology).

**2016.** Plenary speaker at the conference 'Develop New Path of Smartness', the 2nd Annual World Congress of Smart Materials-2016 (WCSM-2016) will be held during March 4-6, 2016 in Singapore Focus 702: Mechanical Properties of Smart Materials

**2016.** Invited as plenary speaker for the EMN Meeting on Ceramics 2016, which will be held from January 25 to 28, 2016 at the Eaton Hotel, Hong Kong, China.

**2016.** Member of the Scientific Committee of the 6th EASN International Conference on Innovation in the European Aeronautics Research, which will be held on October 18 – 21, 2016 in Porto, Portugal.

**2016.** Editorial board of Third International Conference on Experimental Solid Mechanics, X-Mech

**2016.** Editorial board of the 18th International Colloquium on Mechanical Fatigue of Metals on 5-7 September 2016 in Gijón (Asturias, Spain).

**2015.** Invited as plenary speaker to the 4th International Conference and Exhibition on Materials Science and Engineering (14-15 September 2015, Florida)

**2014.** Invited by Franky So, editor in chief of Materials Science Engineering R: Reports (Impact Factor 24.6, 5-years Impact Factor 18.974) to write a review paper.

**2014.** Editorial board of Second International Conference on Experimental Solid Mechanics, X-Mech

**2014.** Editorial board of "Second International Conference on Experimental Solid Mechanics, X-Mech2014"

**2014.** Editorial board of ACAM 8, The 8th Australasian Congress on Applied Mechanics (ACAM 8)

**2014.** Editorial board of ICAF 2014 2nd International Conference on Airworthiness and Fatigue.

**2013.** Editorial board of ACAM 7, The 7th Australasian Congress on Applied Mechanics

**2013.** Wanlin Guo to present recent research findings in the session Mixed Mode and Constraint Effects (Session 32) at ICF13, 'given his recent impressive contributions in the fracture mechanics area'.

**2013.** Editorial board of 3rd International Conference of Engineering Against Failure (ICEAF III)

**2013.** Invited to the The 2nd joint International Journal of Fatigue and Fatigue & Fracture of Engineering Materials & Structures Workshop on Characterisation of Crack-tip Fields was held in Malaga (Spain) from 15 to 17 April 2013.

**2012.** Chairman of the session dealing with application of strain energy density at Mesomechanics 2012, The 14th Congress on Mesomechanics

**2012.** Chairman of two sessions at the conference Mesomechanics 2011, The 13th Congress on Mesomechanics.

**2012.** Editorial board of Mesomechanics 2012, The 14th Congress on Mesomechanics.

**2011.** Editorial board of Mesomechanics 2011, The 13th Congress on Mesomechanics.

**2011.** Invited to the The 1st joint International Journal of Fatigue and Fatigue & Fracture of Engineering Materials & Structures Workshop on Characterisation of Crack-tip Fields was held in Forni di Sopra (Italy) in January 2011.

**2010.** Chairman of the scale-effect session at the conference Mesomechanics 2010 held in Taipei.

**2009.** Chairman of the fatigue session at the ICF 12 Conference (Int. Conference on Fracture) held in Ottawa, Canada

## **10. Teaching Experience**

### **NTNU**

#### **2016-2017**

Lecturer of the course Fatigue Design, Machine Design and Fracture Mechanics at NTNU, Trondheim Norway. Lecturer of the course Advanced Mechanics of Materials (PhD course) Design of Additively Manufacturing Components (PhD course) Non-linear problems (PhD course)

### **University of Padua**

#### **2015-2016**

Lecturer of the course 'Advanced machine design' (1st year, Master degree in Mechatronic Engineering, University of Padua).

Lecturer of the course 'Advanced Mechanics of Materials' as aggregate professor (2nd year, Master degree in Mechanical Engineering, University of Padua).

Lecturer of the course 'machine design' (3rd year, degree in Management Engineering, University of Padua).

#### **2014-2015**

16 hours of lessons of Machine Design (3rd year, Management Engineering, University of Padua).

16 hours of lessons of Machine Design (3rd year, Mechanical Engineering, University of Padua).

8 hours of laboratory exercises for the students attending the same courses.

24 hours of lessons for the course Mechanics of Materials (1st year of the master in Mechanical Engineering, University of Padua).

Lecturer of the course 'Advanced machine design' (1st year, Master degree in Mechatronic Engineering, University of Padua).

Lecturer of the course 'Advanced Mechanics of Materials' as aggregate professor (2nd year, Master degree in Mechanical Engineering, University of Padua).

#### **2013-2014**

16 hours of lessons of Machine Design (3rd year, Management Engineering, University of Padua).

16 hours of lessons of Machine Design (3rd year, Mechanical Engineering, University of Padua).

8 hours of laboratory exercises for the students attending the same courses.

24 hours of lessons for the course Mechanics of Materials (1st year of the master in Mechanical Engineering, University of Padua).

Lecturer of the course 'Advanced machine design' (1st year, Master degree in Mechatronic Engineering, University of Padua).

Lecturer of the course 'Advanced Mechanics of Materials' as aggregate professor (2nd year, Master degree in Mechanical Engineering, University of Padua).

**2012-2013**

16 hours of lessons of Machine Design (3rd year, Management Engineering, University of Padua).

16 hours of lessons of Machine Design (3rd year, Mechanical Engineering, University of Padua).

8 hours of laboratory exercises for the students attending the same courses.

24 hours of lessons for the course Mechanics of Materials (1st year of the master in Mechanical Engineering, University of Padua).

Lecturer of the course 'Advanced machine design' (1st year, Master degree in Mechatronic Engineering, University of Padua).

Lecturer of the course 'Advanced Mechanics of Materials' as aggregate professor (2nd year, Master degree in Mechanical Engineering, University of Padua).

**2011-2012**

16 hours of lessons of Machine Design (3rd year, Management Engineering, University of Padua).

16 hours of lessons of Machine Design (3rd year, Mechanical Engineering, University of Padua).

8 hours of laboratory exercises for the students attending the same courses.

24 hours of lessons for the course Mechanics of Materials (1st year of the master in Mechanical Engineering, University of Padua).

Lecturer of the course 'Advanced machine design' (1st year, Master degree in Mechatronic Engineering, University of Padua).

Lecturer of the course 'Advanced Mechanics of Materials' as aggregate professor (2nd year, Master degree in Mechanical Engineering, University of Padua).

**2010-2011**

16 hours of lessons of Machine Design (3rd year, Management Engineering, University of Padua).

16 hours of lessons of Machine Design (3rd year, Mechanical Engineering, University of Padua).

8 hours of laboratory exercises for the students attending the same courses.

24 hours of lessons for the course Mechanics of Materials (1st year of the master in Mechanical Engineering, University of Padua).

Lecturer of the course 'Advanced machine design' (1st year, Master degree in Mechatronic Engineering, University of Padua).

Lecturer of the course 'Advanced Mechanics of Materials' as aggregate professor (2nd year, Master degree in Mechanical Engineering, University of Padua).

**2009-2010**

16 hours of lessons of Machine Design (3rd year, Management Engineering, University of Padua).

16 hours of lessons of Machine Design (3rd year, Mechanical Engineering, University of Padua).

8 hours of laboratory exercises for the students attending the same courses.

24 hours of lessons for the course Damage mechanics and Mechanics of Materials (2nd year of the master in Mechanical Engineering, University of Padua).

24 hours of lessons for the course Mechanics of Materials and Fracture Mechanics (1st year of the master in Mechanical Engineering, University of Padua).

Lecturer of the course 'Advanced machine design' (1st year, Master degree in Mechatronic Engineering, University of Padua).

Lecturer of the course 'Advanced Mechanics of Materials' as aggregate professor (2nd year, Master degree in Mechanical Engineering, University of Padua).

**2008-2009**

16 hours of lessons of Machine Design (3rd year, Management Engineering, University of Padua).

16 hours of lessons of Machine Design (3rd year, Mechanical Engineering, University of Padua).

8 hours of laboratory exercises for the students attending the same courses.

24 hours of lessons for the course Damage mechanics and Mechanics of Materials (5th year Mechanical Engineering, University of Padua).

Lecturer of the course 'Advanced Mechanics of Materials' as aggregate professor (1st year, Master degree in Mechatronic Engineering, University of Padua, the course includes application of Fracture and Notch Mechanics).

**2007-2008**

16 hours of lessons of Machine Design (3rd year, Management Engineering, University of Padua).

16 hours of lessons of Machine Design (3rd year, Mechanical Engineering, University of Padua).

8 hours of laboratory exercises for the students attending the same courses.



24 hours of lessons for the course Damage mechanics and Mechanics of Materials (5th year Mechanical Engineering, University of Padua).

Lecturer of the course 'structural design' as aggregate professor (3rd year, Mechanical Engineering, University of Padua).

#### **2006-2007**

16 hours of lessons of Machine Design (3rd year, Management Engineering, University of Padua).

16 hours of lessons of Machine Design (3rd year, Mechanical Engineering, University of Padua).

8 hours of laboratory exercises for the students attending the same courses.

24 hours of lessons for the course Damage mechanics and Mechanics of Materials (5th year Mechanical Engineering, University of Padua).

#### **2005-2006**

16 hours of lessons of Machine Design (3rd year, Management Engineering, University of Padua).

16 hours of lessons of Machine Design (3rd year, Mechanical Engineering, University of Padua).

8 hours of laboratory exercises for the students attending the same courses.

24 hours of lessons for the course Damage mechanics and Mechanics of Materials (5th year Mechanical Engineering, University of Padua, the course includes Fracture Mechanics and Mechanics of Solids).

#### **2004-2005**

16 hours of lessons of Machine Design (3rd year, Management Engineering, University of Padua).

16 hours of lessons of Machine Design (3rd year, Mechanical Engineering, University of Padua).

8 hours of laboratory exercises for the students attending the same courses.

#### **2003-2004**

8 hours of exercises of ANSYS for the course 'reliability and design of machine design' (5th year, Management Engineering, University of Padua).

### **11. Editor**

#### **Fatigue and Fracture of Engineering Materials and Structures**

**Since 2012** Assistant Editor

**Since September 2014** ad interim Editor

**Since January 2015** Editor of the journal (youngest editor in the history of the journal).

**June 2015** Editor in chief of FFEMS in substitution of Prof. Hong

**October 2015.** Editor in chief of FFEMS in substitution of Prof. Hong

**November 2016.** Confirmation as Editor from 2017 to 2022.

**Since January 2016.** Editor in Chief of International Frontier Science Letters

### **12. Editorial Board Membership**

**Since February 2017** Honorary member of Scientific journal **Journal of Nanoscience and Nanotechnology Applications**

**Since February 2017** Honorary member of Scientific journal "Technology audit and production reserves" (<http://journals.uran.ua/tarp>)

**Since January 2017** Honorary member of Research & Reports on Metals

**Since January 2017** Honorary member of the scientific board for International Symposium on Mechanics of Materials and Structures as well as for Acta Mechanica et Automatica

**Since January 2017** member of Fracture and Structural Integrity

**Since January 2017** Honorary Editorial Board Member of Metals

**Since January 2017** Honorary Editorial Board Member of Coatings

**Since January 2017** Editorial Board Member of International Journal of Metallurgical & Materials Engineering

**Since January 2017** Honorary Editorial Board Member Material Science Research India

**Since January 2016** Editorial Board Member Journal of Testing and Evaluation

**Since January 2016** Editorial Board Member of Nanotechnology

**Since January 2016** Editorial Board Member International Journal of Metallurgical & Materials Engineering

**Since November 2015** Editorial Board Member of Materials and Design (Edited by Elsevier, IF=4.0)

**Since November 2015** Editorial Board Member of International Journal of Fatigue (Edited by Elsevier, IF=3.5)

**Since October 2015** Subject Editor of Theoretical and Applied Fracture Mechanics (Edited by Elsevier)

**Since October 2015** Editorial Board Member of International Journal of Research in Advanced Engineering and Technology

**Since September 2015** Editorial Board Member of Research Journal of Modeling and Simulation

**Since August 2015** Editorial Board Member of Journal of Advanced Material Sciences

**Since September 2015** Editorial Board Member of Journal of Mechanics & Industry Research

**Since June 2015** Editorial Board Member of Advances in Mechanical Engineering

**Since June 2015** Editorial Board Member of Material Science Engineering A (Edited by Elsevier)

**Since January 2015** Editorial Board Member of Strength of Materials (Edited by Springer)

**Since December 2014** Editorial Board Member of American Journal of Engineering and Applied Sciences

**Since October 2014** Editorial Board Member of Theoretical and Applied Fracture Mechanics (Edited by Elsevier)

**Since April 2014** Editorial Board Member of International Journal of Materials Science and Applications.

**Since March 2014** Editorial Board Member of Research Journal of Modeling and Simulation

**Since March 2014** Editorial Board Member of Journal of Mechanics & Industry Research.

**Since January 2014** Associate Editor of 'International Journal of Engineering and Technology Research (IJEATR)

**Since December 2013** Editorial Board Member of German Journal of Mechanical Engineering Research (GJMER)

**Since December 2013** Editorial Board Member of German Journal of Advanced Civil Engineering Research (GJACER)

**Since December 2013** Editorial Board Member of German Journal of Materials Engineering (GJME)

**Since December 2013** Editorial Board of Journal of Materials Science & Surface Engineering (JMSSE)

**Since October 2013** Editorial board of Scientific Journal of Mechanic Engineering

**Since April 2013** Editorial Board Member of ISRN Civil Engineering

**Since March 2013** he is in the Editorial Board of 'International Journal of Design Engineering Research

**Since March 2013** he is in the Editorial Board Member of World Journal of Mechanical Engineering Science

**Since 1 February 2013** he is in the Editorial Board of World Journal of Advanced Mechanical Engineering Research

**Since 1 January 2013** Editorial Board Member of Materials Science and Engineering Progress  
 Since December 2013 he is in the editorial board of 'International Journal of Mechanic Systems Engineering

**Since 30 December 2012** Editorial Board Member of Engineering Solid Mechanics (ESM)

**Since 1 December 2012** Editorial Board Member of Advances in Materials

**Since October 2012** Editorial Board Member of the journal Physical Mesomechanics edited by Springer.

**Since 11 September 2012** Editorial Board Member of Journal of Surface Engineered Materials and Advanced Technology '

**Since 1 January 2012** Editorial Board Member of The scientific world journal: mechanical engineering

**Since 1 January of 2012** Editorial Board Member of Conference Papers in Materials Science

### 13. Guest Editors

**2017** Guest Editor of a special issue entitled 'Selected papers from IGF conference' in Fatigue and Fracture of Engineering Materials and Structures.

**2017** Guest Editor of a special issue entitled 'Mixed Mode Fatigue Crack Growth & Probabilistic Fatigue Approaches' in Journal of Strain Analysis for Engineering Design.

**2017** Guest Editor of a special issue entitled 'Energy density: Mechanics of solids (EDMS) volume 3' in Theoretical and Applied Fracture Mechanics.

**2017.** Guest Editor of a special issue entitled mixed mode loading at all scale levels in Theoretical and Applied Fracture Mechanics.

**2017.** Guest Editor of the special issue 'Mesomechanics and multiscale approaches, volume 2' Physical Mesomechanics

**2017.** Guest Editor of the special issue entitled XVIII International Colloquium mechanical fatigue of metals in Fatigue and Fracture of Engineering Materials and Structures.

**2017.** Guest Editor of the special issue entitled Advances on Fatigue and Failure of Aeronautical Materials and Structures in Fatigue and Fracture of Engineering Materials and Structures.

**2017.** Guest Editor of the special issue entitled Fatigue of Welds in International Journal of Fatigue.

**2017.** Guest Editor of the special issue entitled Challenging in hybrid additive manufacturing in Materials and Design.

**2016** Guest Editor of a special issue entitled 'Notch Mechanics' in Theoretical and Applied Fracture Mechanics.

**2016.** Guest Editor a special issue in International Journal of Fatigue. The special issue contains selected papers from the conference Crack Path 2015, held in Ferrara in September 2015.

**2016.** Guest Editor the special issue entitled Fracture & Fatigue of Engineering Materials (together with Prof. Zhang) in the journal Advanced Engineering Materials

**2015.** Guest Editor of the virtual issue entitled Local approaches for fracture and fatigue assessment of notched components pulished in Fatigue and Fracture of Engineering Materials and Structures.

**2015.** Guest Editor of the special issue 'Mesomechanics and multiscale approaches' Physical Mesomechanics

**2015.** Guest Editor for a volume in Strengh of Materials

**2015-2016** Leading Guest Editor of a special issue entitled 'Engineering failure analysis: theoretical development and applications' in Theoretical and Applied Fracture Mechanics.

**2014-2015** Guest Editor of a special issue entitled 'Energy density: Mechanics of solids (EDMS Volume 2)' in Theoretical and Applied Fracture Mechanics.

**2014** Lead Guest Editor a special issue in the journal 'Letters in Applied NanoBioScience'. The special issue is entitled 'Crack initiation and propagation at nano and mesoscopic levels: theory and applications'.

**2013-2014** Guest Editor of a special issue entitled 'Energy density: Mechanics of solids (EDMS)' in Theoretical and Applied Fracture Mechanics.

**2013-2014** Lead Guest Editor of a special issue entitled 'Brittle or Quasi-Brittle Fracture of Engineering Materials: Recent Developments and New Challenges' in Advances in Materials Science and Engineering.

**2013-2014** Lead Guest Editor a special issue entitled 'Surface Physics' in Journal of Modern Physics (JMP)

**2013-2014** Guest Editor of the special issue entitled Special Issue: 3rd International Conference of Engineering Against Failure (ICEAF III) in Fatigue and Fracture of Engineering Materials and Structures.

#### **14. Reviewer**

I work as reviewer for the following international Journals

1. Materials and Design (10 reviews)
2. International Journal of Fatigue (10 reviews)
3. Fatigue and Fracture of Engineering Materials and Structures (301 reviews)
4. Engineering Fracture Mechanics (34 reviews)
5. Materials Science and Engineering A (25 reviews)
6. Scientia Iranica (2 reviews)
7. Structural Engineering and Mechanics (3 reviews)
8. Composite Structures (2 reviews)
9. Nuclear Engineering and Design (2 reviews)
10. Theoretical Applied Fracture Mechanics (23 reviews)
11. Journal of Strain Analysis for Engineering Design (9 reviews)
12. International Journal of Fracture (6 reviews)
13. International Journal of Solids and Structures (11 reviews)
14. Structural Durability & Health Monitoring (2 reviews)
15. Conference Papers in Science (<http://www.hindawi.com/journals/cpis>) (21 reviews)
16. International Journal of Mechanical Sciences (2 reviews)

17. Materials Science and Engineering R (1 review)
18. Materials Performance and Characterization (1 review)
19. Meccanica (Springer) (2 reviews)
20. Strength of Materials (Springer) (4 reviews)
21. Journal of Mechanical Engineering Science (2 reviews)
22. Carbon (2 reviews)
23. Construction & Building Materials (1 review)
24. The Scientific World Journal (41 reviews)
25. Polymer Testing (2 reviews)
26. Journal of Civil Engineering and Construction Technology (2 reviews)
27. Advances in Materials Science and Engineering (2 reviews)
28. International Journal of Damage Mechanics (3 reviews)
29. Finite Elements in Analysis and Design (3 reviews)
30. European Journal of Mechanics A/Solids (8 reviews)
31. Intl. Journal of Pressure Vessels and Piping, (4 reviews)
32. Intl. Journal of Rock Mechanics and Mining Science (2 reviews)
33. Computational Materials Science (1 review)
34. ASME-Journal of Applied Mechanics, (2 reviews)
35. ASCE-Journal of Engineering Mechanics (2 reviews)
36. Mechanics of Advanced Materials and Structures (2 reviews)
37. Journal of Testing Evaluation (3 reviews)
38. Journal of Civil Engineering and Architecture, USA (2 reviews)
39. International Journal of Rock Mechanics and Mining Sciences (2 reviews)
40. Procedia Engineering (5 reviews)
41. Journal of Failure Analysis and Prevention (1 review)
42. Experimental Mechanics (2 reviews)
43. Engineering Solid Mechanics (1 review)
44. Acta Mechanica (2 reviews)
45. Acta Metallurgica (2 reviews)
46. Nature (6 reviews)
47. Computers and Concrete, An International Journal (1 review)
48. Journal of Materials: Design and Applications (1 review)
49. Engineering Failure Analysis (4 reviews)
50. Journal of Engineering Manufacture (1 review)
51. Ocean Engineering (2 reviews)
52. American Journal of Engineering and Applied Sciences (24 reviews)
53. Journal of Engineering Mathematics ( 2 reviews)
53. Journal of Engineering Manufacture (1 review)
54. Fratturà ed integrità strutturale (3 review)
55. Geophysical Research Letter (1 review)
56. Nature Materials (1 review)
57. Acta Materialia (3 reviews)
58. Acta Biomaterialia (2 reviews)
59. Physica D (2 reviews)
60. The Journal of Physics D (3 reviews)
61. Nanotechnology (1 review)
62. Smart Materials and Structures (4 reviews)
63. Material Research Society (2 reviews)
64. Springer books (3 reviews)
65. Horizon 2020 reviewers

## 15. Memberships

**01/2017 Member of** Science Research Association

**01/2017** Reviewer for the austrian ministry of research

**11/2016** Advisory board member of the Norwegian Delegation (with Minister of Education and Research Torbjørn Røe Isaksen) in the ESFRI Roadmap identifying the new Research Infrastructures (RI) of pan-European interest corresponding to the long term needs of the European research communities

**11/2016** Chair of the advisory board of ESIS TC committee on Fatigue and Fracture of Additive Manufactured Materials at all scale levels.  
**10/2016** Honorary member of UTMIS - The Swedish Fatigue Network  
**08/2016** Royal Society Evaluation Committee for Foreign Members (assignment received by Queen Elizabeth II Alexandra Mary as Regius Professor)  
**08/2016** ASME International Honorary Member as Regius Professor  
**07/2016** ASTM International Honorary Member as Regius Professor  
**01/2016** ASTM, voting member of E08-Committee Fatigue and Fracture  
**01/2011** Consultant of the Chinese Academy of Science and reviewer for international projects  
**01/2010** ESIS TC10 member - Environmentally Assisted Cracking  
**10/2009** Member and consultant of Italy's Intelligence System for the Security of the Republic with missions in different countries  
**06/2009** Member of the international society of mesomechanics  
**01/2008** Member of the Italian Group on welded and bonded connections AIAS TC Committee  
**01/2007** European Council reviewer  
**01/2004** ESIS International Member

## **16. Professional activity**

Patent of hot-rolls for High temperature in cooperation with Officine Meccaniche Zanetti  
Consultant for Mose di Venezia in collaboration with Officine Meccaniche Zanetti (2011-2015).  
Consultant of Cimolai for the design of the Panama gates (2014-2016)  
Consultant of Cimolai for the design of the biggest telescope in the world (2016-2023)  
Consultant of Cimolai for the fatigue Design of the cover of Roland Garros (2016-2019)

## **17. Academic Services**

### **NTNU**

**November 2016.** Delegate of the rector (for research) for the memorandum of understanding signed between NTNU and Hong Kong Polyt.  
**November 2016.** Delegate of the rector (for research) for the memorandum of understanding signed between NTNU and Southampton University.  
**October 2016.** Delegate of the rector (for research) for the memorandum of understanding between NTNU and Aalto University.  
**August 2016.** Tutor for the master students of the courses Fracture Mechanics and Fatigue Design (with A. Vinogradov).  
**February 2016.** Advisory board member of Gemini center.  
**Since January 2016.** Responsible of the Mechanics of Materials Lab  
**January 2016.** Delegate of the director (for research) for the memorandum of understanding signed between Sintef and the Department of Mechanical and Industrial Engineering, NTNU.

### **University of Padua**

**2013-2015,** Vice-president of Mechanical Engineering  
**2015** Scientific committee of University of Padua.  
**2015** VQR committee for the quality of teaching and research, ME, University of Padua.  
**2012** Commission for the state exam in ME.  
**2011-2014** Responsible for the scheduling of the courses that PhD students of ME have to follow.  
**2010-2015.** Responsible in charge who approves the student activities (study plan) at the University of Padova, Department of Management and Engineering for the master degree in Mechanical Engineering  
**2008-2014** Panel of professors evaluating the study plan of the student at the master degree of Mechatronic Engineering.  
**2009-2014** Secretary of the President of the of the master course in Mechanical Engineering  
**2007-2014** Responsible for the approval of 'Erasmus' and 'Time' applications at the Department of Management and Engineering.  
**Fall, since 2008 to 2014,** Qualifying exam committee Advanced Mechanics of Materials  
**Fall, since 2008 to 2014,** Qualifying exam committee, Advanced Machine Design  
**2008-2014** Tutor for Mechatronic students (bachelor school)  
**2009- 2013,** Graduate Admission Committee: Master of mechanical Engineering  
**2007, 2008,** Graduate Admission Committee: Bachelor of mechanical Engineering  
**2007, 2008,** Graduate Admission Committee: Bachelor of mechatronic Engineering

**2006-2014** Member of the panel of professors supervising the activities of the PhD students as well as of the PhD School of Engineering of the University of Padua  
**Since 2006** Master thesis co-advisor, Mechanical Engineering of more than 100 students (see Appendix)

#### **Ph.D. Dissertation Committees:**

Omar Fergani-Mechanical Engineering (2017)  
Richard Louks-Mechanical Engineering (2016)  
Alberto Campagnolo- Mechanics of Materials, (2015)  
Pasquale Gallo- Mechanics of Materials, (2015)  
Christian Marangon – Mechanics of Materials (2013)  
Reza Afshar Hosseinabadi – Mechanics of Materials, (2012)

#### **18. Selected Plenary Lectures**

**2017.** 'Fracture and fatigue at nano scale', Fatigue 2017, Cambridge, UK.  
**2016.** 'Brittle behaviour of carbon materials and graphite', X-Mech 2016, Teheran, Iran.  
**2016.** 'Creep of micro-notches', ESIS meeting, Catania, Italy  
**2015.** 'Environmental effects at micro and nano scale' ESIS meeting, Salamanca, Spain.  
**2015.** 'A review of the research work made by Prof. Paolo Lazzarin', Crack Paths 2015, Ferrara, Italy  
**2015.** 'Materials and Design of Advanced materials', 4<sup>th</sup> International Conference and Exhibition on Materials Science and Engineering, Florida, USA.  
**2014.** 'Advanced local approaches based on the strain energy density', ICEAF IV, Skiathos, Greece  
**2014.** 'Multiscale approach and transitional functions', Second Int conference on aircraft and fatigue failure, Patras, Greece.  
**2013.** 'Advanced computational Fatigue Analysis', The 5th PragTic Meeting, Brno, Czech Republic.  
**2013.** 'Strain energy based methods for the assessment of aircraft materials', Int conference on aircraft and fatigue failure, Beijing, China.  
**2012** 'On Coupled Fracture Modes and Three-Dimensional Fracture Mechanics', Crack Paths 2012, Gaeta, Italy.  
**2012** 'Engineering education for the application of strain energy density on defects and notches', Mesomechanics 2012, Budapest Hungary.  
**2011.** 'Higher order terms in fatigue and fracture problems', First Int J Fatigue & FFEMS workshop on crack tip stress field characterization, Forni di Sopra, Italy.  
**2009.** 'Physical Mesomechanics and challenges for the new century', Mesomechanics 2009, Oxford, Trinity College, UK.  
**2007** 'Static failure of U-notches under mixed mode loading' at the seminarios internacionales de ciencia de materiales Madrid, Spain.

#### **19. Organized Conferences and Proceedings**

**2018** Chair of the conference Crack Paths 2018 that will be held in Verona, Italy  
**2017** co-chair with Prof. John Yates of the conference fatigue 2017, Cambridge, UK  
**2016** 4th International Conference on Applied Mechanics, Mechatronics and Intelligent System (AMMIS2016) that will be held in Beijing, China.  
**2015** 4rd International Conference of Engineering Against Failure (ICEAF IV) Skiatos, Greece  
**2015** with Prof. A. Fatemi - University of Toledo, USA, D. F. Socie - University of Illinois, USA and L. Susmel - University of Sheffield, UK the workshop entitled: Challenges in Multiaxial Fatigue. The workshop will be held in Urbino from 22 to 24 April 2015.  
**2013** 3rd International Conference of Engineering Against Failure (ICEAF III) island of Kos, Greece.  
**2012** National conference AIAS (41st edition), Vicenza, Italy.  
**2012** 14th conference on Mesomechanics, Budapest, Hungary.  
**2012** AIAS group 'Welded joints' held in Vicenza, Italy.  
**2011** 13th conference on Mesomechanics Vicenza, Italy.  
**2009** Crack Paths 2009 held in Vicenza, Italy  
**2008** AIAS group (Welded and bonded joints) held in Vicenza, Italy.

#### **20. PhD Students Supervised or Co-Supervised**

- Ehsan Barati, 2009-2011, Graphite and Carbon Materials at all scale levels, University of Teheran.
- Steven Harding, 2009-2011, Three-dimensional effects in plates weakened by cracks and notches, University of Adelaide.
- Reza Afshar Hosseinabadi, 2011-2013, Periodic notches in advanced materials, University of Padua.
- Christian Marangon, 2011-2013, Cyclic plasticity in presence of geometrical discontinuities, University of Padua.
- Hadi Salavati Poor, 2012-2014, Functionally graded materials, Univ. of Teheran.
- Fabio Pegorin, 2012-2013, Z-pinned composites as emerging materials, RMIT Melbourne.
- Michele Pettinà, 2012-2015, Multiscale predictive modelling of ultra-high temperature structural ceramics (FEM, Continuum Damage Modelling, Abaqus, FORTRAN, Python), Imperial College.
- Alberto Campagnolo, 2013-2015, Advanced approaches for sharp V-notches at all scale levels.
- Pasquale Gallo, 2013-2015, High temperature fatigue of metalling materials employed for hot-rolling applications.
- Marco Colussi, 2015-2017, Brittle failure of magnetostrictive materials under quasi-static and fatigue loading, University of Padua.
- Thomas Borsato, 2015-2017, Defects and porosities in cast iron: influence on the fatigue strength at all scale levels, University of Padua.
- Alberto Lorenzon, 2017-2020, Aerodynamic of bridges and related fatigue problems, University of Padua.
- Javid Razavi, 2017-2020, Hybrid additive manufacturing components and tribological properties, NTNU.
- Steffen Sunde, 2016-2019, Micro fretting fatigue at elevated temperature, NTNU.
- Petter Ostbi, 2016-2019, Rainpower turbine vibration and related fatigue problems, NTNU.
- Mahdi Meybodi, 2017-2020, Fracture behaviour of nano-reinforced polymers and rubber materials, University of Teheran.
- Song Wei, 2016-2019, Hybrid micro-welding of aluminum and steel, State Key Laboratory of Advanced Welding and Joining School of Materials Science and Engineering Harbin Institute of Technology

## **21. Current active collaborations with prestigious universities and research centers**

- Prof. Dieter Radaj, Technical University of Braunschweig, Germany
- Prof. Manuel Elices, Universidad Politecnica de Madrid, Spain
- Prof. David Cendon, Universidad Politecnica de Madrid, Spain
- Dr. Javier Gómez, Universidad Politecnica de Madrid, Spain
- Prof. John Yates, University of Sheffield, United Kingdom
- Prof. Chun Hui Wang, Department of Defence DSTO, Air Vehicles Division, Sydney, Australia
- Prof. Yuri Matvienko, Russian Science Academy, Moscow, Russia.
- Prof. Gorge Gogotsi, Director of the Pisarenko Institute for Problems of Strength, National Academy of Sciences of Ukraine, Kiev
- Prof. Andrei Kotousov, University of Adelaide School of mechanical engineering
- Prof. Michael Swain, University of Sidney
- Prof. George Sih, Emeritus Professor of Mechanics Lehigh University, USA
- Prof. Fernand Ellyin, The University of British Columbia, Vancouver, Canada
- Prof. Ayatollahi, Professor and Director Fatigue and Fracture Research Laboratory School of Mechanical Engineering, Iran University of Science and Technology, Tehran, Iran
- Prof. Les Pook, 21 Woodside Road, Sevenoaks TN13 3HF, UK
- Prof. Neil James, Faculty of Science and Technology, University of Plymouth, UK
- Prof. Cristopher, University of Plymouth, UK
- Prof. V. Panin, Professor, Academician of Russian Academy of Sciences, advisor of Russian Academy of Sciences, Tomsk, Russia
- Prof. Tamas Fakete, Academy of Hungarian science, Budapest Hungary
- Prof. S. Panin, Tomsk, Russia

- Prof. L. Panin, Tomsk, Russia
- Prof. A. Panin, Tomsk, Russia
- Prof. M. Sakane, Ritsumeikan University
- Prof. T. Itoh, Ritsumeikan University
- Dr. T. Morishita, Ritsumeikan University
- Prof. A. Korsunsky, University of Oxford
- Prof. A. Vinogradov, NTNU, Norway
- Prof. Z. Zhang, NTNU, Norway
- Prof. O. Hoppersta, NTNU, Norway
- Prof. P. Park, Zachry Department of Civil Engineering, Texas A&M University, US.
- Prof. K. Tanaka, Department of Mechanical Engineering, Meijo University, Nagoya, Japan
- Prof. T. Kitamura, University of Kyoto, Japan
- Prof. Luca Susmel, University of Sheffield, UK
- Prof. A. Barnoush, NTNU, Norway
- Prof. Sergio Cicero, Universidad de Cantabria, Spain
- Prof. Youshi Hong, Chinese Academy of Science, Beijing, China
- Prof. Yukitaka Murakami, Kyushu University, Japan
- Prof. Fumio Narita, Tohoku University, Japan
- Prof. H. Remes, Aalto University, Finland
- Prof. Romanoff, Aalto University, Finland
- Prof. G. Marquis, Aalto University, Finland
- Dr. Jacopo Tirillo, La Sapienza, Roma, Italy
- Prof. Dario Croccolo, University of Bologna
- Prof. Andrea Carpinteri, University of Parma
- Prof. Dominique Leguillon, Universite Pierre et Marie Curie, France
- Prof. Gregory Glinka, University of Waterloo, Canada
- Prof. Keke Tang, Tongji University, Shanghai
- Prof. X.S. Tang, Changsha University of Science and Technology, School of Civil Engineering and Architecture, Changsha, China
- Prof. T. Welo, NTNU, Norway
- Dr. O. Fergani, NTNU, Norway
- Prof. Rajagopal, Texas A and M University, College Station, US.
- Prof. Sciammarella, Cesar A. Illinois Institute of Technology, Chicago, US.
- Prof. Sciammarella Federico Illinois Institute of Technology, Chicago, US
- Prof. L. Lamberti, Politecnico di Bari, Italy
- Prof. Emmanuel Gdoutos, University of Thrace, Greece

## 22. Main Research Activities

It is a very difficult task to summarise the work made in many years of intense activity and to give a coherent overview of all research projects developed in a very long period of life. It is worth mentioning that from the beginning of my career I have dedicated all my efforts and endeavours to the research activity with continuous and daily passion. These feelings have been transmitted also to the students and PhD I have supervised. Independent of the obtained results I am conscious to have worked at the best of my capabilities and I would like to continue my work at ETH putting all my energies in the research and teaching activity. Many different topics have been faced during the research activity, some of them with a continuous industrial collaboration and economic support.

I am actually Chair of Mechanics and Materials at the department of Mechanical Engineering at the Norwegian University of Science and Technology, where I have built the Mechanical Design Laboratory obtained a financial support by the Research Council of Norway. Since 1 January 2016 I have been appointed Renowned Chair in the Top Research Program (these positions have been released only 3 times in the all the history of NTNU since 1996, considering all the faculties, and assigned directly by the King Arald of Norway. My main research is devoted to developing improved understanding of integrity and reliability of engineered and natural structures and systems, from high-performance metallic alloys to polycrystalline ceramics to natural hard tissue, such as human dental enamel. My expertise concerns structure and properties across the scales, and the advanced methods of materials characterisation and modelling. I have been one of the major contributor to the



development of advanced method for local advanced approaches for the fatigue of fracture assessment of materials weakened by defects and geometrical discontinuities. I have devised several novel engineering methods suitable for designing notched, cracked and welded components against static, dynamic and fatigue loading. The work done in the above research areas has led to about 400 scientific papers in the period 2004-2016. To date I have published more than 230 technical articles in international peer-reviewed scientific journals. My research has attracted significant interest from the international scientific community, this being proven by a Google Scholar H-index of 41 with  $\approx 5.0k$  citations in total. I am a member of the Editorial Boards of International Journal of Fatigue, Materials and Design, Materials Science and Engineering A, Fatigue & Fracture of Engineering Materials & Structures, Physical mesomechanics, Strength of Materials. I am editor of Fatigue & Fracture of Engineering Materials & Structures (Wiley). I give regular keynote and plenary lectures at major international conferences on engineering and materials, microanalysis and nanotechnology. I maintain extensive international links, through past and current visiting appointments at University of Oxford and Trinity college, Waterloo University, University of Adelaide, Ritsumeikan University, Kyoto University, East China University of Science and Technology, Imperial College, Kjushu University, Georgia Tech, ParisTech, Auburn University, Northwestern University, Brown University, Cornell University, Harvard University, Yale University, Berkeley University, University of Toledo, University of Manchester, Zhejiang University of Technology China, Massachusetts institute of technology, The Hong Kong Polytechnic University – PolyU, Politechnika Bialostocka, East China University of Science and Technology, Aalto University, Hong Kong University, Northern Illinois University Virginia Tech, Chinese Academy of science, Ecole Polytechnique de Louvain, Purdue University, Siberian academy of science, Hong Kong Politechnical University, University of Arkansas, Monash University, Tohoku University, Southampton University, Sheffield University, The University of Texas, Tongji University - Shanghai, Iran University of Science and Technology.

As stated above since 2003, I have been working on different aspects of the structural integrity discipline, by mainly focusing attention on problems related to the static and fatigue assessment of engineering materials and components. In particular, I have attempted to devise engineering methods suitable for designing components (experiencing different kinds of stress concentration phenomena) against fatigue as well as against static failures at all scale levels.

My areas of expertise can be briefly summarised as follows: fracture and notch mechanics, asymptotic methods, local approaches for advanced design in presence of complex loadings and fracture and fatigue behaviour of advanced innovative materials at all scale levels.

A list of the recent topics developed can be find below:

- Fracture behaviour of additive manufacturing components
- Fracture and Fatigue of hybrid and functional materials for biomedical and aerospace applications
- Fatigue behaviour of light structures for aerospace applications
- Fracture behaviour of lattice structure materials
- Enviromental effects on fracture and fatigue at nano, micro and macro level
- Cellular materials
- Crushable Materials
- Smart materials for robotgamis
- Bio-materials
- Nano-indentation of 3d printed components
- Design of light wind turbines with advanced materials
- Creep under different constraint conditions
- Fatigue of artic materials
- Fatigue of offshore structures
- Metallic Fiber-Reinforced Adhesively Bonded Lap Joints
- Wave propagation and attenuation inregular, irregular, and functionally graded cellular materials.
- Mechanical behaviour of granular materials
- Micro and hybrid welding techniques
- Dynamic testing of additively manufacturing components weakened by cracks and internal pores.
- Tribological properties of additive manufacturing materials
- Aircraft design against fatigue and corrosion fatigue
- Fatigue of advanced materials at elevete temperature for hot rolling applications

- Hot-dip galvanized steels: fatigue behaviour and microstructure characterization
- Notch Mechanics from nano to macro scale.
- Analytical and numerical models for multiscale modeling
- Fracture assessment of functionally grade materials with crack divider or crack arrester configuration
- Design against high-cycle fatigue
- Welded and bonded joints
- Large structures and size effects
- Sandwich structures
- Damage and Fracture in Nuclear Fission and Fusion Materials
- Fatigue of bridges subjected to fatigue loading, wind and fire
- Bolted joints for civil structures
- Non destructive methods for detecting cracks or defects
- Local approaches based on strain energy density
- Mechanical properties of engineering materials
- Design against fatigue under multiaxial fatigue loading
- Design against uniaxial/multiaxial fatigue in the presence of stress concentration phenomena
- Material cracking behaviour under uniaxial/multiaxial fatigue loading
- Fracture Mechanics (under both static and fatigue loading)
- Uniaxial/multiaxial fatigue assessment of welded components
- Static assessment and cracking behaviour of brittle and ductile notched materials
- Dentistry materials
- Three-dimensional effects in cracked and notched plates
- Meso-mechanical theoretical models
- Microscopy and failure analysis techniques
- Metals and steels used in marine industry
- Design of ship shafts
- Contact mechanics
- Fretting Fatigue
- Fracture mechanics and notches
- Asymptotic methods
- Notched tensile tests at varying temperature, strain rate and stress triaxiality
- Fracture of ice
- Full-scale testing

## Appendix 1. Supervised master students

Tezze Marcello	Calcolo con il metodo degli elementi finiti dell'effetto di intaglio in una piastra con intagli centrali
Marchiotto Zeno	Analisi della distribuzione delle tensioni in una piastra con intaglio centrale a V
Broglio Matteo	Analisi elasto-plastica dei campi di tensione all'apice di un intaglio
Gecchele Graziano	Programma per le verifiche a fatica delle unioni saldate secondo normativa vigente
Barban Genj Antonio	Distribuzioni di tensioni in recipienti cilindrici in regime elastico ed elasto-plastico soggetti a pressione
Bernardelle Cristina	Software per il calcolo delle tensioni su una struttura reticolare piana con metodo matriciale
Brandellero Fabio	Analisi agli elementi finiti di una barra cilindrica indebolita da un intaglio a V circonferenziale soggetta a flessione
Buso Michele	Analisi agli elementi finiti (piani e tridimensionali) di una piastra indebolita da intagli a U laterali simmetrici e soggetta a flessione
Miotto Ferruccio	Analisi agli elementi finiti di una barra cilindrica indebolita da un intaglio a V circonferenziale soggetta a torsione
Ponza Marco	Analisi agli elementi finiti (piane e tridimensionali) di un albero con spallamento soggetto a flessione
Antoniazzi Marco	Analisi agli elementi finiti di un albero con spallamento soggetto a torsione
Chiasera Irene	Analisi dell'effetto di un foro assiale sul fattore teorico di concentrazione delle tensioni di un albero con spallamento soggetto a tensione
Palermo Vincenzo Maria	Analisi agli elementi finiti (piane e tridimensionali) di una barra cilindrica indebolita da un intaglio a U circonferenziale soggetta a torsione
Ruggeri Alice	Analisi agli elementi finiti di una barra cilindrica indebolita da un intaglio circonferenziale a U e soggetta a trazione
Tita Elvira	Analisi agli elementi finiti (piane e tridimensionali) di un albero con spallamento soggetto a trazione (Peterson fig. 72)

Cometti Andrea	Problematiche relative alla progettazione a fatica delle unioni saldate
Faedo Marco	Software per il calcolo delle tensioni elastiche ed elasto-plastiche in un recipiente cilindrico soggetto a pressione interna ed esterna
Bonifaci Pierluigi	Comportamento a fatica oligociclica di componenti strutturali
Bonaldo Davide	Analisi della frattura in componenti criccati
Beltrame Marco	Relazioni tra tensione locale e tensione strutturale per la valutazione degli stati di tensione al piede dei cordoni di saldatura
Bassan Fabio	Un criterio basato sull'energia in un volume finito per prevedere il comportamento statico e a fatica dei componenti con intagli acuti a V
Medkour Marouan	Analisi degli elementi finiti di una piastra circolare con un foro eccentrico e soggetto a pressione esterna
Stella Gino	Double cantilever beam specimen: calcolo del fattore di intensificazione delle tensioni mediante analisi agli elementi finiti
Benetti Diego	Analisi agli elementi finiti di una piastra con fori disposti su una maglia rettangolare soggetta a trazione
Borin Federico	Analisi agli elementi finiti di una piastra indebolita da due intagli semicircolari sullo stesso lato della piastra stessa e soggetta a trazione
Bortolameazzi Davide	Analisi agli elementi finiti di una piastra con foro circolare centrato e in prossimità del bordo della piastra soggetto a pressione interna
Cazzola Alessandro	Analisi agli elementi finiti di una piastra indebolita da intagli semicircolari in presenza di cricche che propagando dall'apice dell'intaglio e soggetta a tensione uniforme
Ciman Claudia	Analisi agli elementi finiti di una piastra con intaglio polilobato soggetta a trazione
Dal Martello Elena	Analisi agli elementi finiti di una piastra con due fori circolari di diametro diverso e soggetta a trazione
Dal Negro Michela	Analisi agli elementi finiti di una barra cilindrica indebolita da un intaglio circonferenziale ad "U" e soggetta a torsione
Fortin Martina	Single edge cracked three point bending specimen (3PB). Calcolo del fattore di intensificazione delle tensioni mediante analisi degli elementi finiti
Fragiacomo Marco	Analisi degli elementi finiti di una flangia perforata e soggetta a pressione interna
Guidorzi Sara	Analisi agli elementi finiti di una barra con cricca circonferenziale soggetta a trazione
Marogna Emanuele	Analisi F.E.M. dei fattori di concentrazione delle tensioni per una piastra con una schiera infinita di intagli circolari
Meneghin Alberto	Analisi agli elementi finiti di una piastra indebolita da intagli semicircolari in presenza di cricche che propagando dall'apice dell'intaglio e soggetta a forze concentrate
Piccini Alberto	Progettazione di componenti strutturali soggetti a fatica secondo lo standard FKM
Rosa Rossella	Analisi degli elementi finiti di una piastra con scanalatura rettangolare raccordata soggetta a trazione
Toffaloni Davide	Arc bend-chord support specimen. Calcolo del fattore di intensificazione delle tensioni mediante analisi agli elementi finiti
Vedolin Marilinda	Analisi degli elementi finiti di una piastra con foro eccentrico e soggetta a trazione
Zonato Andrea	Analisi agli elementi finiti di una piastra con spallamenti laterali
Pavone Marco Hemer	Analisi agli elementi finiti di una piastra con cricca laterale soggetta a trazione
Pezzini Riccardo	Analisi agli elementi finiti del fattore di intensificazione delle tensioni per una piastra con intaglio laterale a V
Pierobon Anna	Progettazione a fatica in presenza di sollecitazioni multiassiali
Pozza Stefano	Analisi agli elementi finiti di una piastra indebolita da un intaglio a U e soggetta a forze concentrate
Schiavon Veronica	Single edge cracked bending specimen: three point bending. Calcolo del fattore di intensificazione delle tensioni mediante analisi agli elementi finiti
Zompetti Lino	Analisi agli elementi finiti di una piastra circolare con foro circolare e quattro o sei fori disposti attorno al precedente
Canton Giulia	Distribuzioni di tensione e fattore teorico di concentrazione delle tensioni per alberi soggetti a torsione e indeboliti da un intaglio circonferenziale a V
Belluzzo Riccardo	Distribuzioni di tensione e fattore teorico di concentrazione delle tensioni per alberi soggetti a torsione e indeboliti da un intaglio circonferenziale a V
Bolzonello Denis	Distribuzioni di tensione e fattore teorico di concentrazione delle tensioni per alberi soggetti a torsione e indeboliti da un intaglio circonferenziale a V
Bresolin Paolo	Distribuzioni di tensione e fattore teorico di concentrazione delle tensioni per alberi soggetti a torsione e indeboliti da un intaglio circonferenziale a V: il caso $2\alpha$ uguale a 60 gradi, a su RHO da 2 a 25, D su D uguale a 1.11
Chiucchi Matteo	Distribuzioni di tensione e fattore teorico di concentrazione delle tensioni per alberi soggetti a torsione e indeboliti da un intaglio circonferenziale a V
Da Soghe Matteo	Distribuzioni di tensione e fattore teorico di concentrazione delle tensioni per alberi soggetti a torsione e indeboliti da un intaglio circonferenziale a V
De Franceschi Matteo	Distribuzioni di tensione e fattore teorico di concentrazione delle tensioni per alberi soggetti a torsione e indeboliti da un intaglio circonferenziale a V
Disarò Alessio	Distribuzioni di tensione e fattore teorico di concentrazione delle tensioni per alberi soggetti a torsione e indeboliti da un intaglio circonferenziale a V
Donatello Davide	Distribuzioni di tensione e fattore teorico di concentrazione delle tensioni per alberi soggetti a

	torsione e indeboliti da un intaglio circonferenziale a V
Favarato Alessandro	Definizione di tensione strutturale e implementazione numerica per l'analisi di fatica dei giunti saldati
Frison Angela	Distribuzioni di tensione e fattore teorico di concentrazione delle tensioni per alberi soggetti a torsione e indeboliti da un intaglio circonferenziale a V
Gobbo Deborah	Distribuzioni di tensione e fattore teorico di concentrazione delle tensioni per alberi soggetti a torsione e indeboliti da un intaglio circonferenziale a V
Godi Alessandro	Distribuzioni di tensione e fattore teorico di concentrazione delle tensioni per alberi soggetti a torsione e indeboliti da un intaglio circonferenziale a V
Palumbo Simone	Distribuzioni di tensione e fattore teorico di concentrazione delle tensioni per alberi soggetti a torsione e indeboliti da un intaglio circonferenziale a V
Peretto Andrea	Distribuzioni di tensione e fattore teorico di concentrazione delle tensioni per alberi soggetti a torsione e indeboliti da un intaglio circonferenziale a V
Perin Elisa	Distribuzioni di tensione e fattore teorico di concentrazione delle tensioni per alberi soggetti a torsione e indeboliti da un intaglio circonferenziale a V
Pozzan Filippo	Distribuzioni di tensione e fattore teorico di concentrazione delle tensioni per alberi soggetti a torsione e indeboliti da un intaglio circonferenziale a V
Storti Anna	Distribuzioni di tensione e fattore teorico di concentrazione delle tensioni per alberi soggetti a torsione e indeboliti da un intaglio circonferenziale a V
Casanova Borca Gabriele	Distribuzioni: di tensione e fattore teorico di concentrazione delle tensioni per alberi soggetti a torsione e indeboliti da un intaglio circonferenziale a V
Mondin Alessandro	Distribuzioni: di tensione e fattore teorico di concentrazione delle tensioni per alberi soggetti a torsione e indeboliti da un intaglio circonferenziale a V
Schiavotto Riccardo	Distribuzioni: di tensione e fattore teorico di concentrazione delle tensioni per alberi soggetti a torsione e indeboliti da un intaglio circonferenziale a V
Stella Giulia	Distribuzioni: di tensione e fattore teorico di concentrazione delle tensioni per alberi soggetti a torsione e indeboliti da un intaglio circonferenziale a V
Marangon Andrea	Distribuzioni: di tensione e fattore teorico di concentrazione delle tensioni per alberi soggetti a torsione e indeboliti da un intaglio circonferenziale a V
Maria Enrica La vista	Analisi teorica e numerica dei campi di tensione in componenti intagliati
Marangon Christian	Analisi numeriche di piastre criccate e intagliate tridimensionali
Michele Zappalorto	Studio degli effetti di intaglio indotti da cordoni di saldatura in strutture complesse
Andrea Bresolin	Comportamento a fatica di unioni saldate
Silvia Guerra	Criteri di resistenza per componenti interessati da elevati effetti di concentrazione delle tensioni e soggetti a fatica multiassiale
Michele Canale	Fatica multiassiale di provini intagliati in 39NiCrMo3
Marco Brentel	Valutazione del parametro J-integral in campo lineare-elastico ed elasto-plastico per componenti criccati ed intagliati
Fabio Perozeni	Densità di energia di deformazione all'apice di intagli sollecitati ciclicamente in regime elasto-plastico
Marco Lunardon	Fattori di intensificazione delle tensioni di modo I e modo II in giunti saldati di diversa geometria
Nicola Favero	Revisione critica di criteri energetici per stimare la resistenza a fatica multiassiale
Manuel dalla Motta	Prototipazione virtuale ed analisi parametrica di nodi di una struttura roller coast per parco di divertimento
Chiara Longhin	Notch sensitivity in steel
Moro Lorenzo	Equazioni di Kullmer relative alla trazione
Manuele Folco	Equazioni di Kullmer relative alla torsione
Alberto Solani	Test a torsione su provini intagliati assialsimmetrici in grafie isostatica
Simone Gavioli	Test a modo misto su piastre in grafite con intagli a U soggette a modo misto I+II
Paolo Zulian	Test a modo misto su piastre in grafite con intagli di tipo key-hole soggette a modo misto I+II
Fabio Pegorin	Effetti tridimensionali e modi accoppiati in intagli e cricche
Alberto Savegnago	Calcolo dei fattori di intensificazione generalizzati delle tensioni a modo II per diverse geometrie dell'intaglio
Freschi Luigi	Test a torsione su provini intagliati assialsimmetrici in PMMA
Fioretto Giulio	Test a torsione su provini intagliati assialsimmetrici in PMMA a basse temperature
Zanetti Simone	Metodo del raggio fittizio applicato a provini intagliati soggetti a modo II
Caliendo Ezio	Analisi tridimensionali di piastre soggette a modo II
Pornaro Nicola	Analisi tensionale di rulli per laminazione a caldo
Serradura Alberto	Analisi termica e pensionale di rulli per laminazione a caldo
Federico Coin	Prove a temperatura ambiente e ad alta temperatura su provini in acciaio strutturale per rulli di laminazione a caldo: aspetti teorici e sperimentali
Spinello Simone	Metodo del raggio fittizio applicato a provini intagliati soggetti a modo misto
Pierantoni Marco	Criterio elasto-plastico per la determinazione delle tensioni in prossimità di un intaglio soggetto a carico multiassiale

Marsetti Matteo	Effetti tridimensionali in campo elasto-plastico
Mauro Falzi	Analisi tridimensionali di giunti saldati per punto
Lazzarotto Andrea	Studio teorico di intagli singoli e periodici mediante diversi approcci energetici locali
Garzotto Denis	Intagli periodici tridimensionali: analisi dei campi di tensione
Andriolo Lorenzo	Energia di deformazione locale come parametro previsionale per la resistenza statica di diversi materiali soggetti a modo misto
Bisinella Marco	Analisi numeriche per la determinazione dell'effetto di scielding in piastre soggette a carichi ciclici: il modello CIP
Savegnago Abramo	RI-analisi di dati tratti dalla letteratura relativi a provini intagliati soggetti a torsione
Basso Paolo	Verifica di un mulino a barre per la macinazione di materiali inerti
Pilastro Andrea	Studio del fenomeno di tecnocorrosione mediante analisi numerica e sperimentale, su ottoni utilizzati per raccorderia
Pettinà Michele	Virtual testing of notch materials made of structural steels
Faccin Paolo	Analisi strutturale di un albero eccentrico per pressa meccanica OMER A
Matteo Marchi	Sviluppo e ottimizzazione di una sospensione automobilistica di formula 1
Massimo Barbisan	Analisi di giunti saldati a singolo punto e multi-punto
Mattia Zavagnin	Test statici in compressione su provini intagliati in grafite
Sedda Sebastiano	Componenti in grafite indeboliti da intagli di diversa forma e soggetti a sollecitazioni statiche
Stocco Marco	Analisi degli elementi finiti di accoppiamenti forzati cilindrici
Serradura Alessandro	Analisi dei campi di tensione singolari in componenti strutturali bidimensionali e tridimensionali di interesse industriale
Andrioli Lorenzo	Energia di deformazione locale come parametro previsionale per la resistenza statica di diversi materiali soggetti a modo misto
Pornaro Nicola	Modellazione numerica e analisi dei campi tensionali in componenti intagliati di interesse strutturale
Basso Paolo	Verifica di un mulino a barre per la macinazione di materiali inerti
Freschi Luigi	Analisi teorica, numerica e sperimentale di provini intagliati in PMMA soggetti a rischi torsionali
Zanetti Simone	Metodo del raggio fittizio applicato a intagli a V soggetti a modo 2
Marchi Matteo	Analisi strutturale agli elementi finiti della sospensione posteriore di un'auto da competizione
Zulian Paolo	Componenti intagliati soggetti a modo misto: risultati sperimentali e previsioni teoriche
Zavagnin Mattia	Analisi teorico sperimentali di provini intagliati soggetti a compressione e modo misto
Gavioli Simone	Cedimenti fragili di provini in grafite indeboliti da intagli a U e soggetti a diverse condizioni di Modo 1 e 11
Lazzarotto Andrea	Studio teorico di intagli singoli e periodici mediante diversi approcci energetici locali
Pettinà Michele	Virtual testing for fracture toughness crack growth and fatigue life data estimation of metallic components
Coin Federico	Prove a temperatura ambiente e ad alta temperatura su provini in acciaio strutturale per rulli di laminazione a caldo: aspetti teorici e sperimentali
Garzotto Denis	Effetti tridimensionali in componenti con intagli periodici
Spinello Simone	Approcci locali nella progettazione di componenti soggetti ad elevati fattori di concentrazione delle tensioni
Sedda Sebastiano	Componenti in grafite indeboliti da intagli di diversa forma e soggetti a sollecitazioni statiche
Stocco Marco	Analisi degli elementi finiti di accoppiamenti forzati cilindrici
Marcon Marco	Prove statiche a torsione su provini intagliati in ghisa grigia: sperimentazione e sviluppo teorico
Scattolin Mattia	Progettazione e verifica di componenti di un nuovo supporto per videocamere
De Stefani Enrico	Onde di Lamb in piastre soggette a variazioni di temperature e carichi assiali
Savegnago Alessio Abramo	Analisi dei campi di tensione in componenti intagliati soggetti a creep
Borsato Thomas	Analisi teoriche e sperimentali di provini intagliati soggetti a carichi statici e a modo misto
Scortini Oscar	Analisi numeriche e teoriche di provini intagliati soggetti a modo I+III: applicazione del raggio fittizio
Fanciulli Andrea	Analisi Sperimentale e Numerica degli Effetti Tridimensionali associati a Cricche e Intagli a V non raccordati
Laurenti Andrea	Analisi dell'effetto della zincatura a caldo sulla resistenza a fatica dell'acciaio strutturale.
Bettanin Cristian	Progettazione a fatica di giunzioni saldate di interesse industriale mediante approcci locali
Dinoi Piergiorgio	Effetti tridimensionali in componenti intagliati soggetti a carichi termotecnici
Faccio Filippo	Caratterizzazione meccanica di un acciaio balistico in presenza di intaglio
Pasqualini Luca	Approcci locali per la previsione della resistenza a fatica ad alta temperatura di componenti intagliati
Bernardini Marco	Analisi degli effetti tridimensionali in componenti sollecitati soggetti a effetto di intaglio a V. La densità di energia di deformazione, un'unica grandezza per la valutazione dello stato di

	sollecitazione nel materiale e per la stima della vita a fatica di giunti saldati
Caoduro Marco	Caratterizzazione statica ed a fatica dei materiali metallici con i quali viene realizzato il componente forchetta di una sella
Graziotto Paolo	Applicazione del metodo SED per materiali plastici a base poliuretanica intagliati
Baccini Giacomo	Il comportamento elastico di miscele granulari vetro-gomma: analisi numerica e confronto con esperimenti
Costanzo Michele	Giunti saldati in acciaio: stima numerica del comportamento a fatica, mediante la densità di energia di deformazione e test sperimentale
Piccotin Alberto	Approcci locali per la previsione del cedimento statico di schiume strutturali caratterizzate da diverse densità
Poli Mattia	Caratterizzazione statica ed a fatica di tubazioni per common rail: un confronto fra diversi materiali
Tognon Massimo	Approcci locali e calcolo della T Stress mediante l'utilizzo di mesh rade
Bressan Stefano	Fatica a basso numero di cicli di componenti intagliati in presenza di sollecitazioni non proporzionali
Brutti Michele	Studio numerico di sistemi di giunzione strutturale in componenti cinematici
Luari Eulon	Analisi di sensività della distribuzione chiodata sulla chiglia della nave vasa
Meneghello Stefano	Influenza di variabili geometriche sul comportamento a fatica di giunti saldati testa a testa
Pierobon Lorenzo	Determinazione delle classi di resistenza di dettagli strutturali con approcci locali e prove sperimentali a fatica
De Franceschi Andrea	A comparison between recent fracture criteria for mixed mode loading
Fontana Simone	Analisi numeriche del telaio di un ciclomotore e prototipo
Grotto Marco	Infrangimento da idrogeno: test micromeccanici
Scaramuzza Piero	Analisi numeriche e teoriche di componenti intagliati soggetti a carichi multiassiali: previsione della resistenza a fatica mediante l'energia locale di deformazione
Tieppo Steven	Indagine parametrica del comportamento a fatica di giunti saldati in acciaio ed estensione del criterio SED a leghe magnetostrittive
Savegnago Alberto Efrem	Analisi dei campi di tensione in componenti piani e tridimensionali soggetti a prevalente modo II
Solani Alberto	Componenti intagliati in grafite sollecitati a modo 3: prove sperimentali e previsioni teoriche

## Appendix 2. Co-authors in ISI scientific papers

co-authors	number of papers co-authored
Lazzarin, Paolo	105
Campagnolo, Alberto	37
Kotousov, Andrei	19
Zappalorto, Michele	19
Ayatollahi, Majid R.	18
Elices, Manuel	15
Gallo, Pasquale	13
Pook, Les Philip	12
Radaj, Dieter	12
Afshar, Reza	11
Torabi, Ali R.	10
Alizadeh, Yoness O.	9
Gómez, F. Javier Atero	8
Marangon, Christian	8
Meneghetti, Giovanni	7
Atzori, Bruno	6
Ferro, Paolo	6
Salavati, Hadi	6
Barati, Ehsan	5
Cendon, D. A.	4
Lazzarin, Paolo	4
Livieri, Paolo	4
Harding, Steven	3
He, Zhuang	3
Pegorin, Fabio	3
Rashidi Moghaddam, M.	3
Borsato, Thomas	2
Carpinteri, Andrea	2
Fanciulli, Andrea	2
Fortese, Giovanni	2
Razavi, Seyed Mohammad Javad	2

Ronchei, Camilla	2
Sanchis-Lozano, Miguel Ángel	2
Scorza, Daniela	2
Sih, George	2
Tang, K. K.	2
Tovo, Roberto	2
Abdi, Frank	1
Abolghasemzadeh, Mohammad	1
Aghazadeh, Jamshid M.	1
Akbardoost, J.	1
Aliha, Mohammad Reza Mohammad	1
Amini, Ahmad J.	1
Bayat, Mehdi	1
Branco, Ricardo	1
Carollo, Carlo	1
Chebat, F.	1
Chen, R. J S	1
Cincera, M.	1
Colussi, Marco	1
Cova, Matteo	1
Croccolo, Dario	1
Cuppini, R.	1
Dehghany, Mohammad	1
Domenech, J. L.	1
Farahmand, Bahram	1
Filippi, Stefano	1
Glinka, Grzegorz	1
Glinka, Grzegorz	1
Gogotsi, George A.	1
Gómez, Javier Patricio	1
He, Z.	1
Heydari-Meybodi, Mahdi	1
James, M. N.	1
James, Neil M.	1
Kazemi, Ali	1
Kitamura, Takayuki	1
Lamberti, Luciano	1
Leguillon, Dominique	1
Maggiolini, Enrico	1
Marcon, M.	1
Matvienko, Yu G.	1
Mirsayar, Mir Milad	1
Mori, Kotaro	1
Mutignani, Francesco	1
Narita, Fumio	1
Nguyen, Giang D.	1
Oshkour, Azim Ataollahi Taollahi	1
Osman, Noor Azuan Abu	1
Panin, Sergey V.	1
Pantelakis, Spiros G.	1
Park, Philip	1
Pettinà, Michele	1
Pour, H. S. S.	1
Quaresimin, Marino	1
Rajagopal, Kumbakonam Ramamani	1
Saboori, Behnam	1
Samareh Salavati Pour, Hadi	1
Santini, M.	1
Sciammarella, Cesar A.	1
Sornsuwan, Tanapon	1
Sumigawa, Takashi	1

Swain, Michael Vincent	1
Taghizadeh, K.	1
Tisalvi, Marco	1
Torabf, A. R.	1
Tserpes, Konstantinos I.	1
Vantadori, Sabrina	1
Vantadorib, Sabrina	1
Wang, Chun H.	1
Welo, Torgeir	1
Wu, H.	1
Wu, Hao	1
Yates, John R.	1

## Reviews

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