Europass Curriculum Vitae

Personal information

First name / Surname	**Gianluca Rossi**
Office address	1, via Duranti, 06127, PERUGIA, ITALY Dep.t of Engineering – University of Perugia
Telephones	Office +39 075 5853744
Fax	+39 075 5853745
E-mail	gianluca.rossi@unipg.it
Nationality	Italian
Date of birth	17/09/1963
Gender	Male

Work experience

Dates	June 2008 onwards
Occupation or position held	**Full Professor of Mechanical and Thermal Measurement and Testing at Dep.t of Engineering University of Perugia** Since June 2014, as representative of the Department of Engineering, **President** of Non-profit Association TUCEP – Tiber Umbria Comett Education Programme, European research centre and training provider. **Coordinator** of the Mechanical engineering courses of the University of Perugia from November 2010 to November 2014.
Main activities and responsibilities	Research group management; teaching in Mechanical Engineering, Testing and Measurement Techniques courses; scientific responsible for Additive Manufacturing – 3D printing VET courses organised by Tucep; Tutor for graduate and PhD students; responsible for research contracts with industries, national and international research institutions; referee, reviewer, evaluator for European publications and projects.
Name and address of employer	University of Perugia 1, P.zza Università – PERUGIA, ITALY
Type of business or sector	R&D, Higher education, training

Dates	Jan 2011 – July 2013
Occupation or position held	**Visiting professor at Dep.t of Turbomachinery** **Von Karman Institute**
Main activities and responsibilities	Researcher under Marie Curie Action, EU funded, within the BTTMON project aimed at developing new magnetoresistive sensors and a measurement system for turbomachinery blade vibration monitoring by blade tip timing techniques.
Name and address of employer	Von Karman Institute 72, Ch. De Waterloo – RHODE SAINT GENESE, BELGIUM

Type of business or sector	R&D, Education
Dates	Nov 1998 – June 2008
Occupation or position held	**Associate Professor of Measurement and Testing at Dep.t of Industrial Engineering – University of Perugia**
Main activities and responsibilities	Research group management; teaching in Mechanical Engineering and Measurement Science courses; teaching non contact measurement techniques of stress and strain by digital image correlation and thermoelasticity, thermography, fluid field analysis; Tutor of graduate and PhD students; responsible for research contracts with industries, national and international research institutions; referee, reviewer, evaluator of European publications and projects.
Name and address of employer	University of Perugia 1, P.zza Università – PERUGIA, ITALY
Type of business or sector	R&D, Higher Education
Dates	Mar 1993 – Nov 1998
Occupation or position held	**Research Assistant at Dep.t of Mechanics – University of Ancona**
Main activities and responsibilities	Research activity on laser vibration measurements by non contact techniques; tutor of graduate students; research collaboration with industries, national and international institutions.
Name and address of employer	University of Ancona, 1, P.zza Roma – ANCONA, ITALY
Type of business or sector	R&D, Higher Education

Education and training

Dates	Academic year 1988/99-1992/93
Title of qualification awarded	**PhD in Measurement Science – Italian Ministry of University and Research**
Principal subjects/occupational skills covered	Research activity in cooperation with industries (Nuovo Pignone – Firenze, actually GE Oil&Gas) aimed at developing a new system for non contact blade vibration measurements by optical fiber sensors. Recently also by magnetoresistive high speed proximity sensors.
Name and type of organisation providing education and training	University of Ancona P.zza Roma, 1 – ANCONA, ITALY University of Padova 2, Via 8 Febbraio 1848 – PADOVA, ITALY
Level in national or international classification	PhD

Dates	Academic year 1982/83-1987/88
Title of qualification awarded	**Degree in Mechanical Engineering (cum laude)**
Principal subjects/occupational skills covered	Development of systems for non contact blade vibration measurements.
Name and type of organisation providing education and training	Dep.t of Mechanics University of Ancona P.zza Roma, 1 – ANCONA, ITALY
Level in national or international classification	Master level Degree in Mechanical Engineering

Personal skills and competences

Mother tongue: **Italian**

Other language(s): **English, French**

Self-assessment

	UNDERSTANDING		SPEAKING		WRITING
ENGLISH	Listening	Reading	Spoken interaction	Spoken production	
	B2	B2	B2	B2	B2
FRENCH					
	A2	A2	A2	A2	A2

Services for the society	Evaluator of research proposals submitted to the European Commission under the 5°-6°-7° Framework Programmes - Standard Measurements and Testing. In 2009-10, Evaluator of research proposals submitted to Regione Piemonte (Italy) with reference to Mechatronic district (54 M€ of budget). Since 2012 till now evaluator of all years EU EMPIR programs project founding in the field of metrological research in Europe. Reviewer for several scientific journals, such as "Journal of Optoelectronics and Advanced Materials", "Strain", "Measurement Science and Technologies". Member of conferences scientific committees and of different organizations. In 1998, founder of the "Latin-American Organization of Artificial Organs and Biomaterials" (SLABO), whose seat is in Belo Horizonte in Brasil. Since 1994, member of the organizing committee and chairman of the "International conference on Vibration Measurements by Laser Techniques" (the conference takes places every two years since 1994 in Ancona- Italy).
Research career	Gianluca Rossi is the author of more than 120 scientific publications, of which more than 22 are published on international journals. He started his research career in 1988, at the Department of Mechanics of University of Ancona (IT). From November 1992 till October 1998 he worked at the University of Ancona (now Università Politecnica delle Marche) in quality of Technical Assistant. In November 1998 he was appointed Associate Professor at the University of Perugia - Faculty of Engineering. In June 2008 he became Full Professor at Unviersity of Perugia. Since 1998 Gianluca Rossi established and managed a research group of Mechanical Measurements at University of Perugia - Department of Engineering, composed by assistant professor, Doctorate holders and Post Doctorate researchers. The main research themes developed by Gianluca Rossi and the research group in t about 15 years of activity were: • The development and application of optical fiber and Bragg cell (FBG) sensors to mechanical measurements in the framework of researches financed by the Ministry of University and by companies as FM Elettromeccanica, Umbra Cuscinetti etc. • The development of measurement and testing techniques for the study of vibrations and noise of ball screws for aeronautical applications and for kitchen hoods in co-operation with the companies Umbra Cuscinetti SpA in Foligno (PG) and Best SpA in Fabriano (AN). •The application of measurement techniques based on active thermography and optical fiber deformation sensors (FBG) for monitoring and diagnostics of civil structures (bridges, historical buildings, etc). • The development of measurement methods in the biomedical sector, in particular with matrix of capacitive film sensors for the analysis of loads on prototypes components of cardiac pumps, for the study of vibrations transmitted by the human body, for the study of ergonomic tool handles (EU project VIBTOOL, Azienda Umbra Cuscinetti in Perugia – IT and Tecnobiomedica in Rome - IT) • The study by means of thermoelasticity of cardiac valve prosthesis in cooperation with the Istituto Superiore di Sanità (Health Institution) in Rome. • The development of measurement and testing techniques based on thermoelasticity for the study and optimisation of motorcycle frames (in co-operation with many Italian companies like Benelli in Pesaro, Aprilia in Noale – Padova); of earth moving machines (in cooperation with Carraro SpA in Campodarsego – Padova); car frames (in cooperation with Ferrari SpA in Maranello - Modena); of plastic tanks (in cooperation with Askoll in Torino); of car component among which radiators, cooling fans (in cooperation with Rosati Fratelli in Leinì – Torino). • The development of new measurement techniques applications based on high resolution thermography for the study of the interaction between a flux and an object in the wind gallery (in cooperation with FIAT Auto , Ferrari SpA, Pininfarina and Aprilia. • The development of new measurement techniques applications based on thermoelasticity for the study of stress fields on rotating objects. • The development of new optical (by DIC) and thermographic (by TSA) measurement systems for non contact measurements of stress and strain field on rotating blades of fan and wind turbines. • The development and application of new measurement and testing techniques based on dynamic mechanical analysis for complex material characterization • The development of non contact blade vibration measurement systems on turbomachine for monitoring purposes by the blade tip timing techniques. • The development of new non contact and multi-dimensional proximity magnetoresistive sensors for turbomachine monitoring, machine process control, etc.

• Applications of additive manufacturing and 3D printing measurement and scanning techniques to develop and optimize new mechanical components and also applications in medical field.

Since 1998 up today Gianluca Rossi has been the Research Unit Coordinator of four projects financed by the European Union in the framework of V° and VI° Framework Programme, concerning measurement techniques based on Thermoelasticity, on capacitive sensor matrix, on laser vibrometry (acronyms VIB-TOOL, LAVINYA, CAMALEON, EULASNET).

Technical skills and competences

Expert in developing of measurement systems for research and industry, expert in additive manufacturing and 3D printing/ 3D measurement for the development of new mechanical components/production techniques and medical applications.
Expert in analysing and solving noise and vibration issues. Expert in vibration testing, fatigue testing.
Experienced in prototype experimental development of machine components for manufacturing, aeronautical and automotive industries.
Experienced in developing quality control system, mainly based on non contact automatic measurement systems, for industrial needs.
Expert in thermograpic, optical, optical fiber and laser vibration measurement techniques.
Expert in experimental mechanic and material testing by conventional and new dynamic analysis measurement and testing techniques, non contact stress and strain measurement techniques by thermoelasticity and digital image correlation.

ADDITIONAL INFORMATION

PUBLICATIONS

Italian national conferences

CN1) Una metodologia per la misura delle deformazioni di organi di macchine in moto alterno con sensori stazionari senza contatto. G. L. Rossi, N. Paone, E.P. Tomasini, atti del XVII Convegno Nazionale AIAS, Ancona, 12-16 Settembre 1989.
CN2) La misura senza contatto delle vibrazioni di pale di turbomacchine: Caratteristiche del misurando in rapporto alla tecnica di misura. L. Andrenelli, G. L. Rossi, N. Paone, E.P. Tomasini, atti del XVIII Convegno Nazionale AIAS, Amalfi 12-16/09/90.
CN3) Caratterizzazione del comportamento dinamico di un robot cartesiano, G. L. Rossi, C. Santolini, E. P. Tomasini, atti del II Convegno Progetto Finalizzato Robotica, Milano, 27-28/5/1991.
CN4) Sintesi di un modello dinamico agli elementi finiti per la misura in esercizio delle sollecitazioni su pale di un turbocompressore assiale. G. L. Rossi, C. Santolini, G. Santucci, atti del XX Convegno Nazionale AIAS, Palermo 25-28 Settembre 1991.
CN5) Caratterizzazione sperimentale di tecniche di misura ottiche per lo studio di flussi bifase, G. L. Rossi, E. P. Tomasini, presentato e discusso al 47° Convegno nazionale ATI, Parma 16-18/09/92 e Quaderno del Dipartimento di Meccanica dell' Università di Ancona, Novembre 1992.
CN6) Realizzazione di un anemometro laser Doppler a basso costo a fibra ottica, N. Paone, G. L. Rossi, E. P. Tomasini, atti del convegno ATI MIS-MAC, Perugia 23/10/92.
CN7) Sviluppo e caratterizzazione di un sensore a fibre ottiche per misure senza contatto su organi rotanti di turbomacchine, N. Paone, G. L. Rossi, E. P. Tomasini, atti del convegno ATI MIS-MAC, Perugia 23/10/92.
CN8) Confronti tra misure di velocità in un getto bifase aria-acqua con sensori a fibra ottica doppi e tecnica LDA, O. Massi, G. L. Rossi, atti del I Convegno Nazionale AIVELA, Capri, 4-7 Maggio 1993.
CN9) Calibrazione dinamica di un sensore di prossimità ultraveloce a fibra ottica, O. Massi, N. Paone, G. L. Rossi, E. P. Tomasini, atti del primo Convegno Nazionale di Misure Meccaniche, Villasimius 10-11/06/1993.
CN10) Sviluppo di sensori senza contatto per misure di velocità di bolle in flussi bifase, O. Massi, G. L. Rossi, E. P. Tomasini, atti del 48° Convegno Nazionale ATI, Taormina 27-30/09/93.
CN11) Tecniche di misura per la caratterizzazione di getti bifase aria-acqua, L. Lorenzi, G. L. Rossi, E. P. Tomasini, atti del 48° Convegno Nazionale ATI, Taormina 27-30/09/93.
CN12) Taratura di un sistema senza contatto per la misura di vibrazioni di pale di turbomacchine in esercizio, P. Nava, G. L. Rossi, atti del III Congresso Nazionale di Misure Meccaniche e Termiche, Ancona 30 Giugno- 2 Luglio 1997, pp 234-243.
CN13) Sulla misura delle vibrazioni di una superficie con un vibrometro laser: analisi degli effetti della velocità tangenziale, P. Castellini, G. L. Rossi, atti del III Congresso Nazionale di Misure Meccaniche e Termiche, Ancona 30 Giugno- 2 Luglio 1997, pp 280-290.

CN14) Sviluppo ed applicazione di un metodo per la misura indiretta della potenza acustica emessa da cinghie dentate, R. Di Sante, G. Ferri, G.M. Revel, G. L. Rossi, IV Congresso nazionale di misure meccaniche e termiche, L'Aquila, 5-7/07/1999.
CN15) Misura della pressione di contatto in una pompa biomedicale con sensori a film, R. Marsili, N. Paone, G. L. Rossi, IV Congresso nazionale di misure meccaniche e termiche, L'Aquila, 5-7/07/1999.
CN16) New measurement procedure of hand-arm vibration from the Doptest research project, P. Christ, A. Cristalli, R. Deboli, G. Di Giulio, M. Geuder, G. Miccoli, N. Paone, G. L. Rossi, Convegno ICA – Roma 2-7/09/01
CN17) Development of a load cell based on fiber Bragg grating sensors, G. L. Rossi, P. Maggiorana, C. Rondini, V Convegno di Misure meccaniche e termiche, Abano Terme (PD), 17-19 sett. 2002
CN18) Analisi della vibrazione e della rumorosità di viti a ricircolo di sfere, I. Lori, G. L. Rossi, 2° Workshop suo Problemi delle vibrazioni nelle strutture civili e nelle costruzioni meccaniche, Perugia 10-11 Giugno 2004.
CN19) Misure di campi di sollecitazione su componenti dello sterzo di una macchina movimento terra mediante tecniche termoelastiche senza contatto, S. Geremia, R. Marsili, , J. Pirisinu, G. L. Rossi, atti de XII Convegno Nazionale A.I.VE.LA – Isituto Motori CNR - Napoli 11-12 Nov 2004
CN20) Misure di stress senza contatto su pale di rotori di ventole in plastica e confronti con modelli FEM, R. Marsili, A. Di Renzo, G.L. Rossi, G. Rosati, atti del XII Convegno Nazionale A.I.Ve.La – Isituto Motori CNR - Napoli 11-12 Nov 2004
CN21) Comparison between stress pattern analysis by FEM and stress measurement by thermoelasticity on mechanical heart valve, J. Pirisinu , G.L. Rossi, atti del III WORKSHOP BIOFLUMEN, "Biological Fluid Mechanics Network", Istituto Superiore di Sanità, Roma, 15 Novembre 2004
CN22) Studio di una metodologia per la stima dell'incertezza del posizionamento di teste a due assi di rotazione per macchine utensili, I. Lori, R. Marsili, J. Pirisinu, G.L. Rossi, Atti del IV Congresso "Metrologia & Qualità" (Febbraio 2005)
CN23) Studio delle cause di incertezza nelle misure con la termoelasticità su componenti meccanici, G. L. Rossi, R. Marsili, J. Pirisinu, M. Moretti, atti del VI Congresso Nazionale di Misure Meccaniche e Termiche, Desenzano sul Garda, 12-14 Sett 2005
CN24) Qualitative fluidodynamic analysis of wing profile by thermographic techniques, A Salviuolo, M. Malerba, G. L. Rossi, Convegno AiVeLa, Roma, nov 2006
CN25) Studio dei modi di vibrare di pale di ventole con vibrometria laser a scansione e termoelasticità, A. Di Renzo, M. Marsili, M. Martarelli, M. Moretti, G. Rosati, G. L. Rossi, XXXV Convegno nazionale AIAS, Ancona 13-16 Settembre 2006.
CN26) Metodologie di attuazione della direttiva MID applicata ai contatori dell'acqua: indagine sperimentale, F. Angrilli, S. Debei, F. Crenna, G.M. Revel, M. Rossi, E. P. Tomasini, M. Gasparetto, G. Lanfranchi, B. Saggin, G. L. Rossi, A. Di Renzo, IV congresso Metrologia e Qualità, Marzo 2007, Torino.
CN27) Fatica Nel Dominio Della Frequenza - Approccio Sperimentale Mediante Termoelasticità, C. Braccesi, F. Cianetti, M. Moretti, G.L. Rossi, XXXIX Convegno Nazionale Aias, 7-10 Settembre 2010, Maratea, ISBN: 978-88-6093-074-3.
CN28) Misure senza contatto mediante termoelasticità per lo studio della evoluzione di cricche su materiali compositi- M.Becchetti1, R.Marsili1, G.L. Rossi- Forlì 1-2 Dicembre 2011- XIX Convegno Nazionale AIVELA

CN29) La fotomodellazione per la salvaguardia e la conservazione dei Beni Culturali.. In 17th CIRIAF National Congress Sustainable Development, Human Health and Environmental Protection - ISBN:9788860747839, Bianconi, Fabio; Catalucci, Sofia; Filippucci, Marco; Rossi, Gianluca, 2017.

International Conferences

CI1) Dynamic charaterization of proximity sensors applied to the monitoring of vibration of moving components of machines, G. L. Rossi, N. Paone, E.P. Tomasini; presentato e discusso al convegno Sensor And Their Application, Canterbury 25-27/09/89, e Quaderno del Dipartimento di Meccanica dell' Università di Ancona, Settembre 1989.
CI2) Flow rate measurement by integration of experimental velocity profiles: theoretical and experimental considerations about its uncertainty, N. Paone, G. L. Rossi; presentato e discusso al Fifth International Symposium on Application of Laser Techniques to Fluid Mechanics, Lisbona, 9-12/07/90 e Quaderno del Dipartimento di Meccanica dell' Università di Ancona, Luglio 1990.
CI3) Fiber-Optic ice sensors for refrigerators, N. Paone, G. L. Rossi. Presentato e discusso al congresso ICOSE-Engineering and Applications of Fiber Optic Sensors, The Hague, Netherlands, Marzo '91 e pubblicato su SPIE Book vol. 1511 "Fiber optic sensors: engineering and applications" pp. 129-139. Washington, USA.

CI4) Non-Intrusive measurement of blade tip vibration in turbomachines, L. Andrenelli, N. Paone, G. L. Rossi, E. P. Tomasini. Congresso ASME Turbo Expo '91, Orlando, (USA) 6-9 giugno 1991, ASME Paper 91-GT-301, New York, USA.
CI5) Critical evaluation of the hotwire measurement uncertainty during the rotating stall test, P. Diodati, G. L. Rossi, atti della conferenza internazionale ASME ESDA Conference, Istambul, 29/06-03/07/92; ASME Book n. G0685A, 1992, New York, USA.
CI6) Comparison of laser-Doppler velocimetry, hotwire anemometry and particle image velocimetry for the investigation of a turbulent jet, P. Diodati, N. Paone, G. L. Rossi, E. P. Tomasini, presentato al V International EALA ASME Conference on Laser Anemometry: Advances and Applications, 23-27/08/93, Koningshof, The Netherlands; e pubblicato su SPIE Book n. 2052, Washington, USA.
CI7) Vibration measurements of human body by laser scanning vibrometer, N. Pedrazzo, G. L. Rossi, C. Santolini, E. P. Tomasini, atti della International IMAC - SEM Conference 1994, Honolulu, Jan. 31- Feb. 3, 1994, Ed. by SEM, Bethel, Connecticut, USA.
CI8) A new optical fiber probe for simultaneous measurements of moving surface tangential velocity and its normal displacements, O. Massi, G. L. Rossi, E. P. Tomasini, atti del convegno internazionale OPTO 94, Lipsia, Germania, 16-20/05/94.
CI9) Vibration measurements of loudspeaker diaphragms by a laser scanning vibrometer, G. L. Rossi, E. P. Tomasini, atti della International IMAC - SEM Conference, Nashville, 13-16 Febbraio 1995, Ed. by SEM, Bethel, Connecticut, USA.
CI10) Development of measurement and processing techniques based on laser vibrometers and neural networks for quality control of loudspeakers, G. M. Revel, G. L. Rossi, P. Campolucci, F. Piazza, atti del convegno internazionale XIV IMAC- SEM, Dearborn , Feb. 12-15, 1996, Ed. by SEM, Bethel, Connecticut, USA.
CI11) No-contact measurement technique application to hand transmitted vibrations evaluation, R. Deboli, G. Miccoli, G.L. Rossi, atti del convegno internazionale XIV IMAC -SEM, Dearborn 12-15/02/1996, Ed. by SEM, Bethel, Connecticut, USA.
CI12) Comparison between velocity measurements by LDV techniques and double fiber optic sensors in two phase jets, M. Gasparetti, G.L. Rossi, A. Campi, R. Onori, atti dell' 8th International Symposium on Application of Laser Techniques to Fluid Mechanics, 8-11 Luglio 1996, Lisbona, Portogallo.
CI13) Defect classification in loudspeakers production using laser vibrometers and neural networks, G.M. Revel, G. L. Rossi, E.P. Tomasini, 3rd MOVIC (Third International Conference on Motion and Vibration Control), 1-6 Sept. 1996, Chiba, Japan.
CI14) The measurement of contact and grip force as reference for human hand transmitted vibration evaluation by laser scanning vibrometers, R. Marsili, G.L. Rossi, 2nd International Conference on Vibration Measurements by Laser Technique, Ancona, Sept., 1996, SPIE Book 2868, Washington, USA.
CI15) Acoustical characterization of vibrating structures by non contact measurement techniques: application to loudspeaker diaphragm, G. M. Revel, G.L. Rossi, E. P. Tomasini, 15th IMAC Conference, Orlando, Florida, USA, 3-6/02/97, Ed. by SEM, Bethel, Connecticut, USA.
CI16) A. Massacesi, N. Paone, G. L. Rossi , E. P. Tomasini, “Uncertainty and compatibility analysis of acoustic power determination by intensity and pressure measurement techniques”, proceedings of the 14th Brazilian Congress of Mechanical Engineering, Bauru SP, Brasile, Dec. 1997.
CI17) Experimental tuning of resonance frequencies of a turbine blade by a laser scanning vibrometer, G.L. Rossi, C. Santolini, E. P. Tomasini, P. Nava, M. Pinzauti, proceedings of the 16th IMAC Conference, Santa Barbara, CA, USA, 2-5/02/98, Ed. by SEM, Bethel, Connecticut, USA.
CI18) A method for the indirect measurement of acoustic power emitted by syncronous belts, R. Di Sante, G. Ferri, G. M. Revel, G. L. Rossi, IMAC XVII conference proceedings, 8-11/2/1999, Kissimmee, Florida, Ed. by SEM, Bethel, Connecticut, USA.
CI19) Application of laser vibrometers for dynamic characterization of ropeways components, P. Evangelisti, M. Rinaldi, G.L. Rossi, C. Santolini, E. P. Tomasini, VIII OITAF Int. Congress, S. Francisco, USA, 23-37/05/1999.
CI20) Hand-arm vibration measurements by laser vibrometry and capacitive sensor matrices, R. Deboli, G. Di Giulio, J. Mariani, G. Miccoli, N. Paone, G. L. Rossi, proceedings of the INTERNOISE International Confernce, 27-31/8/2000 Nice, France, Ed SFA, Paris.
CI21) A refined BE technique for modelling radiation and scattering from vibrating structures: experimental validation of BEM results obtained using laser Doppler vibrometry, R. Bernetti, R. Di Sante, A. Ambrosini, G. L. Rossi, proceedings of the INTERNOISE International Confernce, 27-31/8/2000 Nice, France, Ed SFA, Paris.
CI22) Vibro-acoustic design of covers for belt drives”, Di Sante, C. Santolini, G. L. Rossi, S. Lolli, D. Guyon, proceedings of the IMAC XIX Conference, R. February 5-8, 2001, Kissimmee, Florida, USA. Ed. by SEM, Bethel, Connecticut, USA.
CI23) Vibration measurements on an ultrasonic transducer by a laser Doppler vibrometer: Comparison between velocity and displacement measurements, P.S. Evangelisti, R. Marsili, G. L. Rossi, proceedings

of the IMAC XIX Conference, February 5-8, 2001, Kissimmee, Florida, USA. Ed. by SEM, Bethel, Connecticut, USA.

CI24) Measurement methods for the improvment of hand-arm vibration testing: polymeric capacitive matrices and laser vibrometry applied to an hydraulic breaker, G. Di Giulio, N. Paone, G. L. Rossi, G. Miccoli, P. Christ, M. Geuder, A. Cristalli, R. Deboli, M. Valentino, V. Rapisarda, proceedings of the 9th International Conference on Hand-Arm Vibration, 5-8 June 2001, Nancy – France

CI25) The thermoelasticity principle in stresses distribution measurements on automotive parts, N. Borgarelli, G. Brustenga, R. Marsili, G.L. Rossi, conference proceedings of 2nd International Conference on Advanced Measurement Techniques and Sensory System for Automotive Applications, 13-15 Sept. 2001, Ancona, Italy

CI26) No contact torque measurements, P. Maggiorana, R. Marsili, C. Rondini, G.L. Rossi, conference proceedings of 2nd International Conference on Advanced Measurement Techniques and Sensory System for Automotive Applications, 13-15 Sept. 2001, Ancona, Italy

CI27) Definition of FBG sensor photoelasticity coefficient by laser Doppler vibrometry, B. Marchetti, R. Montanini, C. Rondini, P. Maggiorana, G. L. Rossi, proceedings of the V International Conference on Vibration Measurements by Laser Technique, Ancona, 19-21/06/2002, SPIE Book 4827, Washington, USA.

CI28) Pressure distribution measurement over chain saw handles by the application of a new capacitive matrix, R. Deboli, P. Maggiorana, G. Miccoli, G. L. Rossi, proceedings of the Ninth International Congress on Sound and Vibration, Orlando, USA, 8-11 Luglio 2002.

CI29) Characterization of professional knifes by thermoelasticity, R. Marsili, C. Rondini, G. L. Rossi, CD proceedings of International conference ATEM, Nagoja, Japan, September 2003

CI30) Measurement and modelling techniques to approach the problem of noise reduction of domestic range hood, P. Maggiorana, G. L. Rossi, N. Morettini, F. Marinelli, U. Morgante, CD proceedings of International conference Euronoise, Napoli, Giugno 2003.

CI31) Measurements of stress pattern on roll bearing supports by thermoelasticity, G. Brustenga, R. Marsili, J. Pirisinu, G. L. Rossi, CD proceedings of the SEM Spring Conference 2-4 june, 2003, Charlotte, USA.

CI32) Boundary layer inspection in subsonic flows by high sensitrive infrared thermography, P. Maggiorana, M. Malerba, G. L. Rossi, CD proceedings of the SEM Spring Conference 2-4 june, 2003, Charlotte, USA.

CI33) High Resolution Infrared Thermography for Airfoils Boundary Layer Inspection in Passive Mode, U. Desideri, A. Giovannozzi, P. Maggiorana, G. L. Rossi, ASME - IGTI Turbo Expo, 14-17 Giu 2004, Vienna, Austria.

CI34) Laser vibrometry and stress measurement by thermoelasticity on mechanical heart valve, C. Rondini, G.L. Rossi, L. Scalise, proceedings of the VI International Conference on Vibration Measurements by Laser Technique, Ancona, 22-25/06/2004, SPIE Book 5503, Washington, USA.

CI35) Measurements of stress pattern on differential gear by thermoelasticity, S. Geremia, R. Marsili, M. Moretti, J. Pirisinu, G. L. Rossi, CD proceedings of ICEM 12 – 12th International Conference on Experimental Mechanics, 29 Aug. – 2 Sep, 2004, Politecnico di Bari, Italy

CI36) Measurements of stress pattern on carbon fiber specimen by thermoelasticity, J. Pirisinu, G. L. Rossi, R. Marsili, CD proceedings of ICEM 12 – 12th International Conference on Experimental Mechanics, 29 Aug. – 2 Sep, 2004, Politecnico di Bari, Italy

CI37) Measurements of stress pattern on high performance car frames by thermoelasticity, G. Brustenga, R. Marsili, C. Rondini, G. L. Rossi, F. Salvarani, CD proceedings of ICEM 12 – 12th International Conference on Experimental Mechanics, 29 Aug. – 2 Sep, 2004, Politecnico di Bari, Italy

CI38) Thermoelasticity For The Evaluation Of Fatigue Behaviour Of 6061/Al2O3/20p Metal Matrix Composite Sheets Joined By FSW, P. Cavaliere, G.L. Rossi, R. Di Sante, M. Moretti, conference proceedings of First World Conference on Corrosion in the Military, 6-8 june 2005, Sorrento, Italy.

CI39) A new measurement and testing procedure based on thermoelasticity for motorcycle frame prototype development, R. Marsili, M. Moretti, J. Pirisinu, G. L. Rossi, Int Conf of BSSM, Sowthampton, sept. 2005.

CI40) Measurement on rotating mechanical component by thermoelasticity, G. Brustenga, R. Marsili, M. Moretti, J. Pirisinu, G. L. Rossi, Int Conf of BSSM, Sowthampton, sept. 2005.

CI41) Simultaneous application of scanning laser vibrometry and thermoelasticity for measurement of stress-strain fields on mechanical components, A. Di Renzo, M. Marsili, M. Martarelli, M. Moretti, G. Rosati, G. L. Rossi, VII International conference on Vibration Measurement by Laser Techniques, Ancona, Italy, 19-22 june 2006, SPIE vol 6345.

CI42) An approach for numerical validation of aereodynamic effects through thermography, M. Malerba, M. Argento, A. Salviuolo, G. L. Rossi, VI ASME/WSEAS International Conference on Fluid Mechanics and Aerodynamics, Athens, 25-27 Aug. 2007, Greece.

CI43) Thermoelastic Modal Stress Analysis, R. Marsili, M. Moretti, G. L. Rossi, IMAC XXVI, Orlando 2-7 feb 2008
CI44) Non contact measurements of stress fields on rotating mechanical components by thermoelasticity, A. Di Renzo, R. Marsili, G. L. Rossi, IMAC XXVI, Orlando 2-7 feb 2008
CI45) An innovative method to measure stress distribution of a wind turbine model by thermoelasticity, A. Salviuolo, F. Castellani, M. Malerba, R. Marsili, EWEC Int. Conference, Brussels, 1-4 April 2008.
CI46) Fiber Bragg grating strain sensors for in situ analysis and monitoring of fiber-reinforced historical civil structures, G. L. Rossi, E. Speranzini, VIII International conference on Vibration Measurement by Laser Techniques, Ancona, Italy, 17-20 june 2008.
CI47) Operational modal analysis by thermoelasticity, R. Flori, R. Marsili, G. L. Rossi, International Operational Modal Analysis Conference – IOMAC 09, Ancona Italy, Sep. 2009.
CI48) Measurement of stress and strain by a thermocamera, M. Becchetti, R. Flori, R. Marsili, G. L. Rossi, SEM Annual Conference & Exposition on Experimental and Applied Mechanics, June 1– 4, 2009, Albuquerque, New Mexico, U.S.A.
CI49) Stress and strain measurements by image correlation and thermoelasticity, M. Becchetti, R. Flori, R. Marsili, G. L. Rossi, SEM Annual Conference & Exposition on Experimental and Applied Mechanics, June 1– 4, 2009, Albuquerque, New Mexico, U.S.A.
CI50) Testing of the EXPERT Thermal Protection System Junction in a Plasma Wind Tunnel, Panerai, F., Chazot, O., Tagliaferri, E., and Rossi, G., 16th AIAA/DLR/DGLR International Space Planes and Hypersonics Systems and Technology Conference, AIAA 2009-7243, Bremen, Germany, October 2009.
CI51) Sviluppo di una metodologia per l'individuazione di perdite su serbatoi basata su tecniche di visualizzazione nel campo dell'infrarosso, M. Becchetti1, R. Marsili, M. Moretti1, G. L. Rossi, XVII Convegno AIVELA, Ancona 26- 27 nov 2009.
CI52) Comparison between digital image correlation and thermoelasticity for strain field analysis, M. Becchetti, R. Marsili, M. Moretti, R. Flori, 9th International Conference on Vibration Measurements by Laser and Noncontact Techniques, Ancona, Italy 22- 25 June, 2010.
CI53) Ultrasound lock-in thermography as a quantitative technique for quality control assessment of cast iron turbine components, R. Montanini, G.L. Rossi, F. Freni, QUIRT International Conference, Quebec, Canada, 27-30 July, 2010.
C I54) M. Becchetti, R. Marsili, G.L. Rossi (2011). Misure senza contatto mediante termoelasticità per lo studio della evoluzione di cricche su materiali compositi. Atti XIX Convegno AIVELA In:XIX Convegno AIVELA. 1- 2 dicembre 2011, Bertinoro (Forlì-Cesena),
CI55) Moretti M., Rossi G. L., Speranzini E. (2011). STRUCTURAL INTEGRITY DETECTION OF HISTORICAL STRUCTURES BY DYNAMIC DIGITAL IMAGE CORRELATION. International Conference on Experimental Vibration Analysis for Civile Engineering Structures - EVACES 2011 Starrylink Editrice, Brescia, Italy: 539- 545, vol.II, 3-5 ottobre 2011, Varenna, Italy,
C I56) Roberto Marsili, Gianluca Rossi, Jean-Francois Brouckaert (2012). Development and experimental characterization of a new non contact sensor for blade tip timing. 10th International Conference on Vibration Measurements by Laser and Noncontact Techniques - AIVELA 61- 68, vol.1457, In:10th International Conference on Vibration Measurements by Laser and Noncontact Techniques - AIVELA. JUN 27-29, 2012 , Ancona, ITALY,
CI57) G.L.Rossi,J.F.Brouckaert: Design of blade tip timing measurements systems based on uncertainty analysis. 58th International Instrumentation Symposium In:58th International Instrumentation Symposium. 4/6 may 2012, San Diego, USA
CI58) J. F. Brouckaert, R. Marsili, R. Tomassini, G. Rossi, Proposal of a new calibration techniques of non contact blade vibration measuring systems, Proceedings for the Joint Conference: MFPT 2013 and ISA's, 2013.
CI59) R. Tomassini, G. Rossi, J. F. Brouckaert, On the development of a magnetoresistive sensor for blade tip timing and blade tip clearance measurement systems, In:12th International Conference on Vibration Measurements by Laser and Noncontact Techniques - AIVELA. JUN 24-27, 2014 , Ancona, ITALY
CI60) S. Baglioni, C. Braccesi, F. Cianetti, P. Conti, G. Rossi, OPTIMIZED DESIGN OF STRUCTURAL COMPONENTS REALIZED THROUGH ADDITIVE MANUFACTURING, Proceedings of the IMECE 2015 International Mechanical Engineering Congress & Exposition, IMECE2015, November 13-19, 2015, Houston, Texas, USA
CI61) Leonardi Leonardo, Piro Federica, Pannaioli Valentina, Bellezza Enrico, Marsili Roberto, Angeli Giovanni, Bucci Andrea, Moretti Michele, Rossi Gianluca (2015). Additive manufacturing and advanced testing techniques applied to bone reconstructive sciences in animals and humans.. In: Easy Chair SISVET 2015. SISVET ANNUAL MEETING SELECTED ABSTRACTS, SISVET, Perugia, 15-17 giugno 2015.

CI62) C. Braccesi, M. Moretti, F. Cianetti, G. Rossi, Random load fatigue. Experimental approach through thermoelasticity, 3rd International conference on material and component performace under variable amplitude loadings, 2015 – Proceedia Engineering
CI63) Advanced and non contact measurement and testing of materials of additive manifactured components. pp.63-63. In BIT's 4th annual world congress of advanced materials, Gianluca Rossi, 2015

CI64) Additive manufacturing and advanced testing techniques applied to bone reconstructive sciences in animals and humans.. In Easy Chair SISVET 2015. In SISVET ANNUAL MEETING SELECTED ABSTRACTS vol. 69, Leonardi, Leonardo; Piro, Federica; Pannaioli, Valentina; Bellezza, Enrico; Marsili, Roberto; 2015.

CI65) G. Rossi, R. Tomasini, Noncontact vibration measurements using magnetoresistive sensing elements, 12th International A.I.VE.LA. Conference on Vibration Measurements by Laser and Noncontact Techniques: Advances and Applications; Ancona; Italy; 29 June 2016 - 1 July 2016, AIP Pocedings - Volume 1740, 28 June 2016.

CI66) bone tissue engineering and 3-d printing and reconstruction of skeletal damages for animals and humans. In European Biotechnology Congress, Leonardi, Leonardo; Piro, Federica; Bellezza, Enrico; Marsili, Roberto; Mechelli, Luca; Pannaioli, 2016.

CI67) Thermoelastic stress studies on tridimensional (3D-Printing) prosthetic canine pelvic bone model.. pp.114-114. In ACVP and ASVCP Concurrent Annual Meeting , Leonardo, Leonardi; Piro, Federica; Bellezza, Enrico; Marsili, Roberto; Mechelli, Luca; Cibeca, 2016.

CI68) Noncontact vibration measurements using magnetoresistive sensing elements. In XII international conference on vibration meaurements by laser and non contact techniques - ISBN:978-0-7354-1397-9, Rossi, Gianluca; Tomassini, Roberto, 2016.

CI69) A calibration technique for non contact measurement systems of jet engine blades vibration during operation. In 4th IEEE International Workshop on Metrology for AeroSpace, PADUA, ITALY | JUNE 21 - 23, 2017- ISBN:978-1-5090-4233-3, Rossi, Gianluca; Tomassini, Roberto, Marsili, Roberto; 2017.

International journals
RI1) Large bandwith reflection fiber optic sensors for turbomachinery rotor blade diagnostics, L Andrenelli, N. Paone, G. L. Rossi, presentato al congresso EUROSENSOR V, Roma, 30 Settembre - 2 Ottobre 1991, e pubblicato sulla rivista internazionale Sensors and Actuators A, vol 32 (1992) pp. 539-542, Ed. Elsevier Sequoia, Lausanne, Svizzera.
RI2) Design and experimental characterization of a non intrusive measurement system of rotating blade vibrations, P. Nava, N. Paone, G. L. Rossi, E. P. Tomasini, presentato al convegno ASME Turbo Expo 1993, e pubblicato sulla rivista internazionale Journal of Engineering for Gas Turbines and Power, Transactions of the ASME, july 94, vol 116, pp 657-662, Ed. ASME, New York, USA.
RI3) Application of triangulation laser sensor for the dynamic measurement of tire crushing, R. Marsili, C. F. Piccioni, G. L. Rossi, rivista internazionale "Laser in Engineering", Vol. 4, pp 157-166, 1995, Ed. OPA, Amsterdam.
RI4) Hand-arm vibration measurement by a laser scanning vibrometer, G. L. Rossi, E. P. Tomasini, rivista internazionale "Measurement", n.16, pp 113-124, 1995, Ed. Elsevier Science, Amsterdam, Olanda.
RI5) Error analysis based development of a bubble velocity measurement chain, G.L. Rossi, "Flow Measurements and Instrumentation" Journal, vol. 7, n. 1, pp 39-47, march 1996. Ed Elsevier Science, Amsterdam, Olanda.
RI6) A new intensity modulation based fiber optic probe for bubble shape detection, velocity and diameter measurements, G. L. Rossi, "Review of Scientific Instruments" Journal, 67 (7), pp 2541-2544, july, 1996. Ed American Institute of Physics, Argonne, IL, USA.
RI7) Dynamic characterization of temperature sensors by laser excitation, P. Castellini, G. L. Rossi, "Review of Scientific Instruments" Journal, 67 (7), pp 2595-2601, july, 1996. Ed American Institute of Physics, Argonne, IL, USA.
RI8) The application of a laser scanning vibrometer for dynamic characterization of large impellers, G.L. Rossi, C. Santolini, C. Giachi, S. Generosi, Measurement Journal, pp 33-41, n.24, 1998. Ed Elsevier Science, Amsterdam, Olanda.

RI9) Sound power estimation by laser Doppler vibration measurement techniques, G. M. Revel, G. L. Rossi, Journal of shock and Vibration, pp 297-305, n. 5 (1998). IOS press, Amsterdam, Olanda.
RI10) Human hand transmitted vibration measurements on a pedestian controlled tractor operators by a laser scanning vibrometer, R. Deboli, G. Miccoli, G.L. Rossi, Ergonomics Journal, vol 42, n.6, pp 880-888, 1999. Ed Taylor & Francis Ltd, London, UK.
RI11) Vibration measurements of tools inside fluids by laser Doppler techniques: uncertainty analysis, R. Marsili, L. Pizzoni, G. L. Rossi, Measurement Journal, n 27, 2000, pp 111-120. Ed Elsevier Science, Amsterdam, Olanda.
RI12) Measurement techniques for the acoustic analysis of syncronous belts, R. Di Sante, G. M. Revel, G. L. Rossi, Measurement Science and Technology journal, n 11 (2000) pp 1463-1472, IOP Publishing Ltd, UK.
RI13) A new approach to the measurements of transverse vibration and acoustic radiation of automotive belts using laser Doppler vibrometry and acoustic intensity techniques, R. Di Sante, G. L. Rossi, Measurement Science and Technology journal, n. 12 (2001) pp 525-533
RI14) Comparison between accelerometer and laser vibrometer to measure traffic excited vibrations on bridges, G.L. Rossi, R. Marsili, V. Gusella, M. Gioffrè, Journal of Shock and Vibration, n.9, 2002, pp 11-18, IOS press – Amsterdam
RI15) A New Method for the Experimental Assessment of Finger Haemodynamic Effects Induced by a Hydraulic Breaker in Operative Conditions , M. Valentino, V. Rapisarda, L. Scalise, N. Paone, C. Fenga, L. Santarelli, G.L. Rossi, *Journal of Occup Health 2004; vol 46:pp 253–259*
RI16) A new measurement and testing procedure based on thermoelasticity for motorcycle frame prototype development. R. Marsili, M. Moretti, J. Pirisinu, G. L. Rossi., Applied Mechanics and Materials, ISBN 0-87849-987-3, ISSN 1660-9336, Vols 3-4, August 2005, pp 337-342.
RI17) Measurement on rotating mechanical component by termoelasticity . G. Brustenga, G. L. Rossi, J. Pirisinu, M. Moretti, R. Marsili, Applied Mechanics and Materials, ISBN 0-87849-987-3, ISSN 1660-9336, Vols 3-4, August 2005, pp 411-416.
RI18) Characterization of of professional knifes by thermoelasticity. R. Marsili, G. L. Rossi, Ingegneria Alimentare International, Ed Ecod sas, S. Vittore Olona - MI, October 2005, pp 52-55.
RI19) Thermoelastic analysis of crack propagation in AA6082 friction stir welded joints, R. Di Sante, P. Cavaliere, G. L. Rossi, A. Squillace, Material Science Forum Vols 561-565 (2007), pp 2221-2224, TTP Switzerland.
RI20) Thermoelasticity for the evaluation of fatigue behavior of 7005/Al2O3/10p metal matrix composite sheets joined by FSW, P. Cavaliere, G. L. Rossi, R. Di Sante, M. Moretti, International Journal of Fatigue, n. 30 (2008) 198-206
RI21) A boundary layer inspection on a wing profile trough high resolution thermography and numerical methods, M. Malerba, M. Argento, S. Salviuolo, G. L. Rossi, WSEAS Transactions on fluid mechanics, Jan. 2008.
RI22) Quantitative evaluation of hidden defects in cast iron components using ultrasound activated lock-in vibrothermography-R. Montanini, F. Freni, and G. L. Rossi- Review of Scientific Instruments- n 83, 2012
RI23) Constant stress field measurements through thermoelasticity, A. Garinei, M. Becchetti, E. Pucci, G. Rossi, Journal of thermal stresses, 36:7, 3013
RI24) A novel method for the design of prostheses based on thermoelastic stress analysis and finite element analysis, F.Cannella, A. Garinei, MP D' Imperio, G. Rossi, Journal of mechanics in medicine and biology, vol 14, n. 5, 2014
RI25) Magnetic nondestructive testing of rotor blade tips, E. Cardelli, A. Faba, R. Marsili, G. Rossi, R. Tomassini, Journal of Applied Phisics, 117, 17A705, 2015.
RI26) On the development of a magnetoresistive sensor for blade tip timing and blade tip clearance measurement systems. DOI:10.1063/1.4964858. In REVIEW OF SCIENTIFIC INSTRUMENTS - ISSN:0034-6748 vol. 87, Tomassini, R.; Rossi, G.; Brouckaert, J. F. 2016.
RI27) Causes of uncertainty in thermoelasticity measurements of structural elements. DOI:10.12989/sss.2017.20.5.539. pp.538-548. In SMART STRUCTURES AND SYSTEMS - ISSN:1738-1584 vol. Vol. 20, (No. 5), Marsili, Roberto; Rossi, Gianluca; Speranzini, Emanuela, 2017.
RI28) Damping heat coefficient – Theoretical and experimental research on a vibrating beam. DOI:http://doi.org/10.1016/j.jsv.2017.04.023. pp.13-21. In JOURNAL OF SOUND AND VIBRATION - ISSN:0022-460X vol. 400, Mihalec, Marko; Javh, Jaka; Cianetti, Filippo; Moretti, Michele; Rossi, Gianluca; Slavič, Janko, 2017.
RI29) Magnetic sensors for motion measurement of avionic ballscrews. DOI:10.1063/1.4975047. pp.056639. In AIP ADVANCES - ISSN:2158-3226 vol. 7 (5), Cardelli, E.; Cibeca, M.; Faba, A.; Marsili, R.; Pompei, M.; Rossi, G., 2017.

RI30) Image Analysis Technique for Material Behavior Evaluation in Civil Structures. DOI:10.3390/ma10070770. pp.770. In MATERIALS - ISSN:1996-1944 vol. 10 (7), Speranzini, Emanuela; Marsili, Roberto; Moretti, Michele; Rossi, Gianluca, 2017.
RI31) Dental caries, parents educational level, family income and dental service attendance among children in Italy, CIANETTI, Stefano, LOMBARDO, Guido, LUPATELLI, ELEONORA, ROSSI, Gianluca, ABRAHA, WOLDEKIDAN IOSIEF, PAGANO, STEFANO, EUROPEAN JOURNAL OF PAEDIATRIC DENTISTRY, 2017

National (Italian) journals

RN1) Il laser in montagna: nuove tecniche di misura, P.S. Evangelisti, G.L. Rossi, E.P. Tomasini, rivista "Quota Neve", n. 102 novembre-dicembre 1999, Ed. Quota Neve s.r.l., Milano.
RN2) Misure laser nei controlli strutturali, R. Marsili, P. Maggiorana, G.L. Rossi, Rivista nazionale "L' Ingegnere Umbro", Ed Ordine degli Ingegneri della Provincia di Perugia, n. 9, anno X, Sett 2001.
RN3) Misura di campi di tensioni mediante termoelasticità: applicazioni industriali, R. Flori, R. Marsili, G. L. Rossi Rivista Tuttomisure, anno XI, n. 2, 2009.

Books

L1) Misure Meccaniche e Termiche, Gianluca Rossi, Ed. Carocci - Roma, Nov 2010, ISBN 978-88-430-5361-2.

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Prof. Ing Gianluca Rossi