

Allegato B

DAVIDE TONAZZI
Curriculum Vitae

Place ROME
 Date 30/06/2023

Part I – General Information

Full Name	Davide TONAZZI
Date of Birth	
Place of Birth	
Citizenship	Italian
Permanent Address	
Mobile Phone Number	
E-mail	
Spoken Languages	Italian, French, English

Part II – Education

Type	Year	Institution	Notes (Degree, Experience,...)
Summer School	2015	Politecnico di Milano	AIT (Associazione Italiana di Tribologia) Summer School: Surface engineering, viscoelastic materials, tires and contacts
PhD	2014	Sapienza University of Rome and INSA of Lyon (cotutela)	Joint PhD in “ <i>Meccanica Teorica ed Applicata</i> ” and “ <i>Genie Mecanique</i> ” between Sapienza University of Rome and INSA of Lyon
Post-graduate training	2013	INSA of Lyon	Training course on “Recherche et Développement en Tribologie”
University graduation	2011	Sapienza University of Rome	Master degree in Mechanical Engineering, 110/110 cum laude.
University graduation	2008	Sapienza University of Rome	Bachelor degree in Mechanical Engineering, 110/110 cum laude.

Part III – Appointments

IIIA – Academic Appointments

Start	End	Institution	Position
12/2020	present	Sapienza University of Rome	Assistant Professor- RTDa, SSD ING-IND/13, Meccanica Applicata alle Macchine
07/2021	12/2021	Sapienza University of Rome	Fixed-term research contract Title: <i>Measurement and analysis of contact-induced vibrations and related dynamic instability states in braking systems with and without lubrication.</i>
07/2019	06/2021	Sapienza University of Rome	Research Fellowship (Assegno di ricerca) Title: <i>Design, reproduction and analysis of measurements for the tribological response of friction materials under high oscillating stresses in the framework of the European Project H2020 “Audacity”.</i>
07/2018	06/2019	Sapienza University of Rome	Research Fellowship (Assegno di ricerca) Title: <i>Tactile perception and friction induced vibrations.</i>
07/2017	06/2018	Sapienza University of Rome	Research Fellowship (Assegno di ricerca) Title: <i>Numerical modelling of the frictional instability for automotive brake disc.</i>
07/2016	06/2017	Sapienza University of Rome	Research Fellowship (Assegno di ricerca) Title: <i>Study of instability scenarios due to the frictional contact: numerical and experimental analysis</i>
11/2015	10/2016	LaMCoS- INSA of Lyon	Fixed-term research engineer contract (Ingenieur de recherche) Title: <i>Numerical Analysis of high loaded oscillating ball-bearings.</i>
11/2014	10/2015	Sapienza University of Rome	Research Fellowship (Assegno di ricerca) Title: <i>Estimation of the contact stiffness by continuous numerical approach and experimental data</i>
2016	2020	Ministère de l'Enseignement Supérieur et de la Recherche Scientifique, France	Qualification aux fonctions de Maître de Conférences , section 60 (Abilitazione alle funzioni di Maître de Conférences).
2012	present	Ministero dell'Università e della Ricerca (MUR).	Qualification for the profession of engineer (abilitazione alla

2020	2031	Ministero dell'Università e della Ricerca (MUR).	professione di ingegnere industriale) National Scientific Qualification as “Professore di II fascia 09/A2 (Abilitazione Scientifica Nazionale)
03/2019	03/2021	DIMA-SAPIENZA University of Rome	Elected Member of the Department council as representative of the fellow researchers

IIIB – Other Appointments

Start	End	Institution	Position
07/2008	08/2008	INDIVEST-LT	Industrial Stage in the framework of the Bachelor thesis (2 months)

Part IV – Teaching experience

Year	Institution	Lecture/Course
2021/2022	SAPIENZA University of Rome	<i>Lab of Engineering Tribology</i> - 3 CFU 2nd year Master Degree in Mechanical Engineering
2021/2022	SAPIENZA University of Rome	<i>Fondamenti di Meccanica</i> – 3 of 9 CFU 2th year Bachelor Degree in Ingegneria dell'Energia Elettrica
2020/2021	SAPIENZA University of Rome	<i>Fondamenti di Meccanica</i> – 3 of 9 CFU 2th year Bachelor Degree in Ingegneria dell'Energia Elettrica
2020/2021	SAPIENZA University of Rome	<i>Lab of Engineering Tribology</i> - 3 CFU 2nd year Master Degree in Mechanical Engineering
2019/2020	SAPIENZA University of Rome	<i>Lab of Engineering Tribology</i> - 3 CFU 2nd year Master Degree in Mechanical Engineering
2018/2019	SAPIENZA University of Rome	<i>Lab of Engineering Tribology</i> - 3 CFU 2nd year Master Degree in Mechanical Engineering
2013-present	SAPIENZA University of Rome	<i>Supervisor/Co-Supervisor</i> for bachelor (4) and master (17) theses in Mechanical and Aerospace Engineering

Part V - Society memberships, Awards and Honors

Year	Academic Awards
2020	Abilitazione Scientifica Nazionale alle funzioni di Professore di II fascia nel settore concorsuale 09/A2 – Meccanica Applicata Alle Macchine
2016	Qualification aux fonctions de Maître de Conférences , section 60 (Abilitazione alle funzioni di Maître de Conférences).

Year	Editorial Positions
2021-present	Review Editor on the Editorial Board of Tribology , <i>Frontiers in Mechanical Engineering</i>
2016-present	Reviewer for the following international journal: <ul style="list-style-type: none"> • Journal of Sound and Vibration (Elsevier) • Mechanical System and Signal Processing (Elsevier) • Tribology International (Elsevier) • Wear (Elsevier) • Meccanica (Springer) • Lubricants (MDPI) • Mechanics & Industry (EDP Sciences) • Journal of Automobile Engineering (Sage) • Journal of Engineering Tribology (Sage) • Advances in Mechanical Engineering (Sage)

Year	Society Memberships
2015-present	Member of the AIT (Associazione Italiana di Tribologia) society.

Year	Member for PhD committee
14/12/2020	Invited Member of a PhD committee PhD student : Ilaria Ghezzi

Part VI - Funding Information [grants as PI-principal investigator or I-investigator]

Year	Title	Grant	Role
2022-present	Principal Investigator of the research project/contract on the “ <i>Study and definition of accelerated tests for a lock system (cabin + landing + coupling) of an elevator doors</i> ” between the DIMA-SAPIENZA University of Rome and OTIS elevator .		PI
2022-present	Investigator of research project on “ <i>tribological and dynamic analysis of aircraft brake C/C materials.</i> ”, between the DIMA- SAPIENZA University of Rome and SAFRAN LANDING SYSTEM		I
2019-2022	Investigator for SAPIENZA University of Rome in the EU project “AUDACITY” , in the framework of the call CLEANSKY2, Horizon 2020 .		I
2017-2019	Investigator of research projects on “ <i>the lubricated contact between seals and pistons</i> ”, between the DIMA- SAPIENZA University of Rome and BREMBO S.p.a.		I

2016-2020	Investigator of research projects “ <i>on the numerical and experimental brake squeal analysis</i> ”. Collaboration between the DIMA-SAPIENZA University of Rome and BREMBO S.p.a.		I
2015-2016	Investigator of research projects on “ <i>the numerical and experimental analysis of greased oscillating bearings and indentation analysis</i> ” between LaMCoS-INSA of Lyon and SKF Aerospace		I
2013-2014	Principal Investigator of the research project dedicated to young researcher (SAPIENZA University of Rome). Title of the project: “ <i>Studio dell'instabilità indotta dall'attrito nei sistemi in contatto strisciante: analisi numerica e sperimentale</i> ”		PI
2018-2019	Investigator of research project on “ <i>characterization of the frictional response for pad/disc brake system</i> ”. Collaboration between the DIMA-SAPIENZA University of Rome and FCA (Maserati) .		I

Part VII – Research Activities

The research activities reported below are developed within the framework of both fundamental and applied projects, with either public funding (Sapienza University of Rome, Europe HORIZON 2020) and collaborations with companies (OTIS Elevator, BREMBO, SAFRAN LANDYNG SYSTEMS, SKF AEROSPACE, SOMFY, MASERATI and CEDRAT TECHNOLOGIES) and academic partners (Université Grenoble Alpes, LaMCoS-INSA of Lyon, Hamburg University of Technology, Polytechnic University of Bari and Bordeaux University). In general, experimental tests are combined with modelling and simulations, in order to provide an overall analysis of the investigated issues.

Academic Collaboration

01/11/2011–present	Université Grenoble Alpes, ISTERre, Grenoble, France
<p>The research activity began during the PhD thesis with a collaboration with Prof. Laurent Baillet on the study of the <u><i>transient phenomena of dynamic systems with contact interface through numerical simulations with finite elements</i></u>. For this study a finite element code developed in Fortran software (Plast2D) dedicated to the solution of contact problems was used. The activity is still focused on the study of <u><i>local contact instabilities</i></u> and on the propagation of waves which are also at the origins of the earthquakes and seismic events in geophysics. This collaboration produced important scientific results published in international scientific journals, such as:</p> <ul style="list-style-type: none"> • Tonazzi, D.; Massi, F.; Culla, A.; Baillet, L.; Fregolent, A.; Berthier, Y.; “<i>Instability scenarios between elastic media under frictional contact</i>”, Mechanical Systems and Signal Processing”, 40,2,754-766, 2013. • Tonazzi, D.; Massi, F.; Baillet, L.; Culla, A.; Di Bartolomeo, M.; Berthier, Y.; “<i>Experimental and numerical analysis of frictional contact scenarios: from macro stick-slip to continuous sliding</i>”, Meccanica, 50, 3, 649-664, 2015. • Tonazzi, D.; Massi, F.; Baillet, L.; Brunetti, J.; Berthier, Y.; “<i>Interaction between contact behaviour and vibrational response for dry contact system</i>”, Mechanical Systems and Signal Processing, 110,110-121, 2018. • Tonazzi D.; Massi, F.; Salipante, M.; Baillet, L.; Berthier, Y.; “<i>Estimation of the normal contact stiffness for frictional interface in sticking and sliding conditions</i>”, Lubricants, 7 	

(7), 2019.

01/10/2011–present

**LaMCoS (Laboratoire de Mécanique des Contacts et des Structures)
INSA of Lyon, Lyon, France**

The research activity began in 2011 through the development of the doctoral thesis under the supervision of Prof. Yves Berthier. The research topics concerned the origin of **frictional instability phenomena (stick-slip, squeal and groan noise)** caused by the sliding contact between two bodies. This collaboration has led to the **development of a test bench** (TriboWave) designed and built at the LaMCoS laboratory and widely used for the reproduction of instabilities due to **sliding contact**. Moreover, the research activity then continued on issues relating to vibrations induced by friction, tribology and the **interaction between the contact dynamics and the vibratory response of the system**. The results obtained have been published in international scientific journals:

- Tonazzi, D.; Massi, F.; Culla, A.; Baillet, L.; Fregolent, A.; Berthier, Y.; “*Instability scenarios between elastic media under frictional contact*”, Mechanical Systems and Signal Processing”,40,2,754-766, 2013.
- Tonazzi, D.; Massi, F.; Baillet, L.; Culla, A.; Di Bartolomeo, M.; Berthier, Y.; “*Experimental and numerical analysis of frictional contact scenarios: from macro stick-slip to continuous sliding*”, Meccanica,50,3,649-664,2015.
- Di Bartolomeo, M.; Morelli, F.; Tonazzi, D.; Massi, F.; Berthier, Y.; “*Investigation of the role of contact-induced vibrations in tactile discrimination of textures*”, Mechanics & Industry,18,4,404, 2017.
- Tonazzi, D.; Massi, F.; Baillet, L.; Brunetti, J.; Berthier, Y.; “*Interaction between contact behaviour and vibrational response for dry contact system*”, Mechanical Systems and Signal Processing,110,,110-121, 2018.
- Tonazzi D.; Massi, F.; Salipante, M.; Baillet, L.; Berthier, Y.; “*Estimation of the normal contact stiffness for frictional interface in sticking and sliding conditions*”, Lubricants, 7 (7), 2019.
- Ghezzi I.; Tonazzi D.; Rovere M.; Le Coeur C.; Berthier Y.; Massi F.; “*Tribological investigation of a greased contact subjected to contact dynamic instability*”, Tribology International, Volume 143, March 2020.
- Ghezzi, I., Tonazzi, D., Rovere, M., Le Coeur, C., Berthier, Y., Massi, F., “*Frictional behaviour of a greased contact under low sliding velocity condition*”, Tribology International, 155, art. no. 106788, 2021.

01/11/2019–present

**Hamburg University of Technology, Hamburg, Germany
Polytechnic University of Bari, Bari, Italy**

The research activity began with the collaboration with Prof. Norbert Hoffmann (Hamburg University of Technology) and Prof. Antonio Papangelo (Polytechnic University of Bari) for the study of **non-linear phenomena in continuous systems with frictional interface**. The research approach is based on experimental and numerical techniques. For this purpose, a **new test bench and a finite element numerical model** have been developed for the **investigation of the "bi-stable" state** of mechanical systems with frictional interface. This collaboration produced important scientific results published in international journal and conference:

- Tonazzi, D., Passafiume, M., Papangelo, A., Hoffmann, N., Massi, “*Numerical and experimental analysis of the bi-stable state for frictional continuous system*”, Nonlinear Dynamics, 102 (3), pp. 1361-1374, 2020.
- Tonazzi D., Papangelo A., Hoffmann N. Massi F., “*Bi-stable response of a continuous system under dry contact*”, 7th World Tribology Congress, July 10-15, 2022, Lyon, France.

01/06/2012–present

Bordeaux University, France

The research activity began through a collaboration with Prof. Anissa Meziane focused on the experimental *estimation of material damping in a wide range of frequencies*, from kHz to MHz. This collaboration has led to a new combined approach based on classical techniques of *structural identification* and the techniques of acoustic analysis. The scientific results obtained from this collaboration were the subject of a recent article submitted to an international journal:

- D. Tonazzi, A. Meziane, A. Culla, C. Biateau, G. Pepe, F. Massi, “*Material damping estimation within low, medium and high frequency ranges*”, submitted to Mechanical Systems and Signal Processing (June 2023).

Industrial Collaboration

01/09/2021- present	OTIS Elevator, France
	Gien, France

Support for the definition of accelerated tests for an elevator door lock system (cabin + landing + coupling)

The research activity began with a first collaboration in 2021 concerning a study on the feasibility of carrying out accelerated tests for the qualification of the entire opening/closing door system of an elevator; such preliminary study led to useful and exploitable results setting the foundations for the current collaboration, the latter focused on the tribological analysis of a new range of elevator doors with the aim of defining a general methodology for the definition of accelerated tests, which can be applied to any new system.

01/11/2015- present	SKF AEROSPACE
	Valence, France

Analysis of high loaded oscillating ball-bearings

The research activity is carried out in collaboration with SKF-Aerospace and the LaMCoS laboratory of INSA in Lyon. The study focuses on the analysis of various degradation scenarios of rolling bearings subjected to high loads and characterized by oscillating motion. This collaboration led to important scientific results published in international journals:

- Tonazzi, D; Komba, E Houara; Massi, F; Le Jeune, G; Coudert, JB; Maheo, Y; Berthier, Y; “*Numerical analysis of contact stress and strain distributions for greased and ungreased high loaded oscillating bearings*”,Wear, 376,,1164-1175,2017.
- Ghezzi, I.; Komba, E. W H.; Tonazzi, D.; Bouscharain, N.; Le Jeune, G.; Coudert, J.-B.; Massi, F.; “*Damage evolution and contact surfaces analysis of high-loaded oscillating hybrid bearings*”,Wear,406,1-12,2018.
- Cavacece F, Frache, L., Tonazzi, D., Bouscharain, N., Philippon, D., Le Jeune, G., Maheo, Y., Massi, F. ; “*Roller bearing under high loaded oscillations: Life evolution and accommodation mechanisms*”; Tribology International, Volume 147, July 2020.

01/10/2017– 31/12/2020	Brembo S.p.A.
	Bergamo, Italy

Numerical modelling of contact instabilities in automotive brake discs and development of an experimental test rig

The research project focused on the modelling of complex braking systems. The numerical results were useful for the design, development and construction of a new test rig to analyse and characterize instability phenomena in automotive disc brakes. This collaboration has also produced important scientific results published in international journal and conference:

- Lazzari, A., Tonazzi, D., Conidi, G., Malmassari, C., Cerutti, A., Massi, F., “Experimental evaluation of brake pad material propensity to stick-slip and groan noise emission”, *Lubricants*, 6 (4), 2018.
- Tonazzi, D; Lazzari, A.; Conidi, G.; Malmassari, C.; Cerutti, A.; Massi, F.; “Experimental characterization of brake lining material for groan noise propensity”, EUROBRAKE, Dresden, Germany, 21-23 May 2019.

01/07/2016–present	SAFRAN LANDING SYSTEM
	Villeurbanne, France
	<p><i>Tribological and dynamic analysis of aircraft brake C/C materials.</i></p> <p>The research project was aimed to the investigation of the possible instability scenarios that can occur due to the sliding contact between carbon-carbon materials, of great interest in the aerospace field. Numerical activities have been carried out by using finite element model and lumped model as well. Experimental measurements on a dedicated tribometers is the basis of the research collaboration.</p>
01/03/2018– 31/12/2020	SOMFY
	Cluses, France
	<p><i>Tribological and vibro-acoustic behaviour of a spring brake system for tubular electric motors</i></p> <p>The research collaboration was part of an industrial PhD funded by the SOMFY company. The research was developed through numerical analyses using finite element models and lumped parameter models of the braking system under investigation. An extensive experimental activity on a dedicated tribometer as a function of various key parameters of the system led to study the tribological and vibroacoustic response of the spring brake giving possible solutions to the encountered industrial problems. The collaboration led to important results that have been published in international journal and conference:</p> <ul style="list-style-type: none"> • Ghezzi, I., Tonazzi, D., Rovere, M., Le Coeur, C., Pradel, G., Berthier, Y., Massi, F., “Examination of stick-slip scenario on lubricated spring-brake systems”, LAC-TC LACCEI, Montego-Bay, Jamaica, 2019. • Ghezzi I.; Tonazzi D.; Rovere M.; Le Coeur C.; Berthier Y.; Massi F.; “Tribological investigation of a greased contact subjected to contact dynamic instability”, <i>Tribology International</i>, Volume 143, March 2020. • Ghezzi, I., Tonazzi, D., Rovere, M., Le Coeur, C., Berthier, Y., Massi, F., “Frictional behaviour of a greased contact under low sliding velocity condition”, <i>Tribology International</i>, 155, art. no. 106788, 2021.
01/07/2019– 31/06/2021	CEDRAT TECHNOLOGIES
	Inovallée, France
	<p><i>Design, reproduction and analysis of measurements for the tribological response of friction materials under high oscillating stresses in the framework of the European Project H2020-Audacity</i></p> <p>The industrial collaboration began in 2019 thank to the European research project H2020- entitled AUDACITY. The collaboration was focused on the research and study of new composite materials capable of having a good response to friction and more generally a good tribological response when subjected to high oscillating stresses. For</p>

this study a new test bench was developed and dedicated to the measurement of the tribological response of the different analysed materials. The collaboration led to important results that have been published in international journal:

- Tonazzi, D., Betsch, E., Pages, A., Massi, F., “*Frictional Response of Reinforced Polymers under Quasistatic and Fast-Transient Dry Contact Conditions*”, (2023) *Lubricants*, 11 (5), art. no. 202.

Part VIII – Summary of Scientific Achievements

Product type	Number	Data Base	Start	End
Journal Papers [international]	16	Scopus	2013	2023
Conference Papers [international]	7	Scopus	2012	2019

Total Impact factor	54.624
Average Impact factor (13 Papers with IF)	4.201
Total Citations	339
Average Citations per Product	14.74
Hirsch (H) index	10
Normalized H index*	0.909

*H index divided by the academic seniority.

Part IX– Selected Publications

List of the publications selected for the evaluation.

	Year	Publication	Cts Scopus	IF WoS
1	2023	Tonazzi, D., Betsch, E., Pages, A., Massi, F., “Frictional Response of Reinforced Polymers under Quasistatic and Fast-Transient Dry Contact Conditions”, (2023) <i>Lubricants</i> , 11 (5), art. no. 202. DOI: 10.3390/lubricants11050202 DOCUMENT TYPE: Article, SOURCE: Scopus		3.500* (2022)
2	2022	Lazzari, A., Tonazzi, D., Brunetti, J., Saulot, A., & Massi, F.. “Contact instability identification by phase shift on C/C friction materials”. <i>Mechanical Systems and Signal Processing</i> , 171, DOI:10.1016/j.ymssp.2022.108902. DOCUMENT TYPE: Article, SOURCE: Scopus	6	8.400

3	2021	Ghezzi, I., Tonazzi, D., Rovere, M., Le Coeur, C., Berthier, Y., Massi, F., Frictional behaviour of a greased contact under low sliding velocity condition (2021) Tribology International, 155, art. no. 106788, DOI: 10.1016/j.triboint.2020.106788 DOCUMENT TYPE: Article, SOURCE: Scopus	3	5.620
4	2020	Tonazzi, D., Passafiume, M., Papangelo, A., Hoffmann, N., Massi, F., Numerical and experimental analysis of the bi-stable state for frictional continuous system, (2020) Nonlinear Dynamics, DOI: 10.1007/s11071-020-05983-y, DOCUMENT TYPE: Article, SOURCE: Scopus	7	5.022
5	2020	Cavacece, F., Frache, L., Tonazzi, D., Bouscharain, N., Philippon, D., Le Jeune, G., Maheo, Y., Massi, F., Roller bearing under high loaded oscillations: Life evolution and accommodation mechanisms, (2020) Tribology International, 147, art. no. 106278. DOI: 10.1016/j.triboint.2020.106278, DOCUMENT TYPE: Article, SOURCE: Scopus	9	4.872
6	2020	Ghezzi, I., Tonazzi, D., Rovere, M., Le Coeur, C., Berthier, Y., Massi, F., Tribological investigation of a greased contact subjected to contact dynamic instability, (2020) Tribology International, 143, art. no. 106085. DOI: 10.1016/j.triboint.2019.106085, DOCUMENT TYPE: Article, SOURCE: Scopus	7	4.872
7	2019	Lazzari, A., Tonazzi, D., Massi, F., Squeal propensity characterization of brake lining materials through friction noise measurements, (2019) Mechanical Systems and Signal Processing, 128, pp. 216-228, DOI: 10.1016/j.ymsp.2019.03.034, DOCUMENT TYPE: Article, SOURCE: Scopus	38	6.471
8	2018	Tonazzi, D., Massi, F., Baillet, L., Brunetti, J., Berthier, Y., Interaction between contact behaviour and vibrational response for dry contact system, (2018) Mechanical Systems and Signal Processing, 110, pp. 110-121, DOI: 10.1016/j.ymsp.2018.03.020, DOCUMENT TYPE: Article, SOURCE: Scopus	44	5.005
9	2018	Ghezzi, I., Houara Komba, E.W., Tonazzi, D., Bouscharain, N., Jeune, G.L., Coudert, J.-B., Massi, F., Damage evolution and contact surfaces analysis of high-loaded oscillating hybrid bearings, (2018) Wear, 406-407, pp. 1-12, DOI: 10.1016/j.wear.2018.03.016, DOCUMENT TYPE: Article, SOURCE: Scopus	20	2.950
10	2017	Tonazzi, D., Komba, E.H., Massi, F., Le Jeune, G., Coudert, J.B., Maheo, Y., Berthier, Y., Numerical analysis of contact stress and strain distributions for greased and ungreased high loaded oscillating bearings, (2017) Wear, 376-377, pp. 1164-1175, DOI: 10.1016/j.wear.2016.11.037, DOCUMENT TYPE: Article, SOURCE: Scopus	19	2.960
11	2015	Tonazzi, D., Massi, F., Baillet, L., Culla, A., Di Bartolomeo, M., Berthier, Y., Experimental and numerical analysis of frictional contact scenarios: from macro stick-slip to continuous sliding, (2015) Meccanica, 50 (3), pp. 649-664, DOI: 10.1007/s11012-014-0010-2, DOCUMENT TYPE: Article, SOURCE: Scopus	47	1.828
12	2013	Tonazzi, D., Massi, F., Culla, A., Baillet, L., Fregolent, A., Berthier, Y., Instability scenarios between elastic media under frictional contact, (2013) Mechanical Systems and Signal Processing, 40 (2), pp. 754-766, DOI: 10.1016/j.ymsp.2013.05.022, DOCUMENT TYPE: Article, SOURCE: Scopus	64	2.465

* The IF for publications in 2023 is not available yet. The IF in 2022 has been reported.

Complete list of publications

Journal papers reported in Scopus database

	Year	Publication	Cts Scopus	IF WoS
1	2023	Tonazzi, D., Betsch, E., Pages, A., Massi, F., “Frictional Response of Reinforced Polymers under Quasistatic and Fast-Transient Dry Contact Conditions”, (2023) <i>Lubricants</i> , 11 (5), art. no. 202. DOI: 10.3390/lubricants11050202		3.500* (2022)
2	2022	Lazzari, A., Tonazzi, D., Brunetti, J., Saulot, A., & Massi, F.. “Contact instability identification by phase shift on C/C friction materials”. <i>Mechanical Systems and Signal Processing</i> , 171, DOI:10.1016/j.ymssp.2022.108902. DOCUMENT TYPE: Article, SOURCE: Scopus	6	8.400
3	2021	Ghezzi, I., Tonazzi, D., Rovere, M., Le Coeur, C., Berthier, Y., Massi, F., Frictional behaviour of a greased contact under low sliding velocity condition (2021) <i>Tribology International</i> , 155, art. no. 106788, DOI: 10.1016/j.triboint.2020.106788 DOCUMENT TYPE: Article, SOURCE: Scopus	3	5.620
4	2020	Tonazzi, D., Passafiume, M., Papangelo, A., Hoffmann, N., Massi, F., Numerical and experimental analysis of the bi-stable state for frictional continuous system, (2020) <i>Nonlinear Dynamics</i> , DOI: 10.1007/s11071-020-05983-y, DOCUMENT TYPE: Article, SOURCE: Scopus	7	5.022
5	2020	Cavacece, F., Frache, L., Tonazzi, D., Bouscharain, N., Philippon, D., Le Jeune, G., Maheo, Y., Massi, F., Roller bearing under high loaded oscillations: Life evolution and accommodation mechanisms, (2020) <i>Tribology International</i> , 147, art. no. 106278. DOI: 10.1016/j.triboint.2020.106278, DOCUMENT TYPE: Article, SOURCE: Scopus	9	4.872
6	2020	Nouira, D., Tonazzi, D., Meziane, A., Baillet, L., Massi, F., Numerical and experimental analysis of nonlinear vibrational response due to pressure-dependent interface stiffness, (2020) <i>Lubricants</i> , 8 (7), art. no. 73, DOI: 10.3390/lubricants8070073, DOCUMENT TYPE: Article, SOURCE: Scopus	5	
7	2020	Ghezzi, I., Tonazzi, D., Rovere, M., Le Coeur, C., Berthier, Y., Massi, F., Tribological investigation of a greased contact subjected to contact dynamic instability, (2020) <i>Tribology International</i> , 143, art. no. 106085. DOI: 10.1016/j.triboint.2019.106085, DOCUMENT TYPE: Article, SOURCE: Scopus	7	4.872
8	2019	Lazzari, A., Tonazzi, D., Massi, F., Squeal propensity characterization of brake lining materials through friction noise measurements, (2019) <i>Mechanical Systems and Signal Processing</i> , 128, pp. 216-228, DOI: 10.1016/j.ymssp.2019.03.034, DOCUMENT TYPE: Article, SOURCE: Scopus	38	6.471
9	2019	Tonazzi, D., Massi, F., Salipante, M., Baillet, L., Berthier, Y., Estimation of the normal contact stiffness for frictional interface in sticking and sliding conditions, (2019) <i>Lubricants</i> , 7 (7), art. no. 56, DOI: 10.3390/lubricants7070056, DOCUMENT TYPE: Article, SOURCE: Scopus	16	
10	2018	Lazzari, A., Tonazzi, D., Conidi, G., Malmassari, C., Cerutti, A., Massi, F., Experimental evaluation of brake pad material propensity to stick-slip and groan noise emission, (2018) <i>Lubricants</i> , 6 (4), art. no. 107, DOI: 10.3390/lubricants6040107, DOCUMENT TYPE: Article, SOURCE: Scopus	16	

11	2018	Tonazzi, D., Massi, F., Baillet, L., Brunetti, J., Berthier, Y., Interaction between contact behaviour and vibrational response for dry contact system, (2018) Mechanical Systems and Signal Processing, 110, pp. 110-121, DOI: 10.1016/j.ymsp.2018.03.020, DOCUMENT TYPE: Article, SOURCE: Scopus	44	5.005
12	2018	Ghezzi, I., Houara Komba, E.W., Tonazzi, D., Bouscharain, N., Jeune, G.L., Coudert, J.-B., Massi, F., Damage evolution and contact surfaces analysis of high-loaded oscillating hybrid bearings, (2018) Wear, 406-407, pp. 1-12, DOI: 10.1016/j.wear.2018.03.016, DOCUMENT TYPE: Article, SOURCE: Scopus	20	2.950
13	2017	Di Bartolomeo, M., Morelli, F., Tonazzi, D., Massi, F., Berthier, Y., Investigation of the role of contact-induced vibrations in tactile discrimination of textures, (2017) Mechanics and Industry, 18 (4), art. no. 404, DOI: 10.1051/meca/2017027, DOCUMENT TYPE: Article, SOURCE: Scopus	10	0.659
14	2017	Tonazzi, D., Komba, E.H., Massi, F., Le Jeune, G., Coudert, J.B., Maheo, Y., Berthier, Y., Numerical analysis of contact stress and strain distributions for greased and ungreased high loaded oscillating bearings, (2017) Wear, 376-377, pp. 1164-1175, DOI: 10.1016/j.wear.2016.11.037, DOCUMENT TYPE: Article, SOURCE: Scopus	19	2.960
15	2015	Tonazzi, D., Massi, F., Baillet, L., Culla, A., Di Bartolomeo, M., Berthier, Y., Experimental and numerical analysis of frictional contact scenarios: from macro stick-slip to continuous sliding, (2015) Meccanica, 50 (3), pp. 649-664, DOI: 10.1007/s11012-014-0010-2, DOCUMENT TYPE: Article, SOURCE: Scopus	47	1.828
16	2013	Tonazzi, D., Massi, F., Culla, A., Baillet, L., Fregolent, A., Berthier, Y., Instability scenarios between elastic media under frictional contact, (2013) Mechanical Systems and Signal Processing, 40 (2), pp. 754-766, DOI: 10.1016/j.ymsp.2013.05.022, DOCUMENT TYPE: Article, SOURCE: Scopus	64	2.465

* The IF for publications in 2023 is not available yet. The IF in 2022 has been reported.

Conference papers reported in Scopus database

		Publication	Cts Scopus
17	2019	Tonazzi, D., Massi, F., Berthier, Y., Contact stiffness estimation for PMMA/STEEL contact pair, (2019) Proceedings of the LACCEI international Multi-conference for Engineering, Education and Technology, 2019-July, DOI: 10.18687/LACCEI2019.1.1.503, DOCUMENT TYPE: Conference Paper, SOURCE: Scopus	0
18	2019	Ghezzi, I., Tonazzi, D., Rovere, M., Le Coeur, C., Pradel, G., Berthier, Y., Massi, F., Examination of stick-slip scenario on lubricated spring-brake systems, (2019) Proceedings of the LACCEI international Multi-conference for Engineering, Education and Technology, 2019-July, DOI: 10.18687/LACCEI2019.1.1.484, DOCUMENT TYPE: Conference Paper, SOURCE: Scopus	1
19	2018	Tonazzi, D., Massi, F., Baillet, L., Salipante, M., Berthier, Y., Estimation of normal contact stiffness for different contact pairs: Experiments and numerical approach, (2018) Proceedings of ISMA 2018 - International Conference on Noise and Vibration Engineering and USD 2018 - International Conference on Uncertainty in Structural Dynamics, pp. 1851-1862, DOCUMENT TYPE: Conference Paper, SOURCE: Scopus	0

20	2016	Di Bartolomeo, M., Morelli, F., Tonazzi, D., Massi, F., Berthier, Y., On the role of friction induced vibrations in tactile perception, (2016) Proceedings of ISMA 2016 - International Conference on Noise and Vibration Engineering and USD2016 - International Conference on Uncertainty in Structural Dynamics, pp. 3099-3110, DOCUMENT TYPE: Conference Paper, SOURCE: Scopus	2
21	2014	Tonazzi, D., Massi, F., Baillet, L., Culla, A., Fregolent, A., Regis, E., Lambert, M., Experimental and numerical characterization of system response under dry frictional contact, (2014) Proceedings of ISMA 2014 - International Conference on Noise and Vibration Engineering and USD 2014 - International Conference on Uncertainty in Structural Dynamics, pp. 1931-1946, DOCUMENT TYPE: Conference Paper, SOURCE: Scopus	13
22	2013	Tonazzi, D., Massi, F., Culla, A., Fregolent, A., Berthier, Y., Role of damping on contact instability scenarios, (2013) 5th World Tribology Congress, WTC 2013, 1, pp. 755-758, DOCUMENT TYPE: Conference Paper, SOURCE: Scopus	11
23	2012	Culla, A., Tonazzi, D., Massi, F., Fregolent, A., Response surface model of a brake system to optimize structural modifications for squeal noise suppression, (2012) 41st International Congress and Exposition on Noise Control Engineering 2012, INTER-NOISE 2012, 2, pp. 932-943, DOCUMENT TYPE: Conference Paper, SOURCE: Scopus	1

Other international conference contributions not reported in Scopus

24. Tonazzi D., Massi F., “*Bi-stable response of a continuous system under dry contact*”, ECOTRIB, Bari, Italy, 21-23 June, 2023.
25. Tonazzi D., Delli Colli M., Massi F., “*Nonlinear behavior of stick-slip instability for a frictional continuous system*”, Fourth African Congress In Tribology, Yamoussoukro, Cote d’Ivoire, 24-27 April, 2023.
26. Tonazzi D., Papangelo A., Hoffmann N., Massi F., “*Bi-stable response of a continuous system under dry contact*”, 7th World Tribology Congress, July 10-15, Lyon, France, 2022.
27. Tonazzi, D; Lazzari, A.; Conidi, G.; Malmassari, C.; Cerutti, A.; Massi, F.; “*Experimental characterization of brake lining material for groan noise propensity*”, EUROBRAKE, Dresden, Germany, 21-23 May 2019.
28. Tonazzi D., Salipante M., Massi F., Berthier Y., “*Estimation of normal contact stiffness in sticking and sliding conditions for rough flat surface*”, EUROBRAKE, The Hague, Netherlands, 22-24 May 2018.
29. Tonazzi D., Houara Komba E., Massi F., Le Jeune G., Coudert J.B., Maheo Y., Berthier Y., “*Numerical analysis of contact stress and strain distributions for greased and ungreased high loaded oscillating bearings*”, Wear of Materials, California, USA, 26-30 March 2017.
30. Tonazzi D., Massi F., L. Baillet, Berthier Y. “*Frictional instabilities as synergy between contact behavior and vibrational response*”, Second African Congress In Tribology, Marrakesh, Morocco, 16-19 April, 2017.
31. Tonazzi D., Massi F., Berthier Y., Dufrenoy P., “*Estimation of contact stiffness for frictional composite materials*”, EUROBRAKE, Dresden, Germany, 2-4 May 2017.
32. Massi F., Tonazzi D., Berthier Y., “*Continuous approach for the experimental estimation of surface contact stiffness*”, 71st STLE Annual Meeting & Exhibition, Las Vegas, Nevada (USA), May 15-19, 2016.
33. Tonazzi D., Massi F., Berthier Y., “*Estimation of surface contact stiffness using experimental dynamic tests and continuous numerical approach*”, EUROBRAKE 2016, Milan, Italy, 13-15 June, 2016.
34. Massi F., Tonazzi D., Di Bartolomeo M., Baillet L., Berthier Y., “*Coupling between system and contact dynamics at the origin of frictional contact scenarios and instability maps*”, Friction Forum, Berlin, Germany, 22-23 June, 2015.

35. D. Tonazzi, F. Massi, L. Baillet, A. Culla, A. Fregolent, Y. Berthier, *The role of the interaction between local contact behavior and structural response in frictional contact instability*, ECOTRIB 2015, Lugano, Switzerland, 3-5 June 2015.
36. F. Massi, M. Di Bartolomeo, D. Tonazzi, L. Baillet, Y. Berthier, *Frictional Scenarios and Induced Vibrations*, EUROBRAKE 2015, Dresden, Germany, 4-6 May, 2015.
37. F. Massi, D. Tonazzi, M. Di Bartolomeo, L. Baillet, *On the friction induced vibrations and macroscopic frictional scenarios*, SAE Brake Colloquium & Exhibition - 32nd Annual, Burlingame (San Francisco), California, USA, October 5-8, 2014.
38. Tonazzi D., Massi F., Baillet L., Fregolent A., Berthier Y., “*Global dynamics and local contact behaviour during frictional instabilities: numerical modeling of dry friction and experimental validation*”, ACT, Marrakesh, Marocco, 27-30 April, 2014.

National conferences contributions not reported in Scopus

39. Tonazzi D., Di Bartolomeo M., Massi F., Baillet L., Fregolent A., Culla A., Regis E., «*Experimental observations of stick-slip instability: discussion and comparison with numerical results on wave and rupture propagation*, Congresso dell'Associazione Italiana di Meccanica Teorica e Applicata, AIMETA, Torino, Italy 17-20 Settember 2013.
40. Tonazzi D., Salipante M. Massi F., *Determination of normal contact stiffness in static and sliding conditions by experimental and finite element approach*, 6 ° Workshop AIT, Tribologia e Industria; Turin, Italy, 18-19 April 2018.
41. Tonazzi D., Lazzari A., Massi F., *A novel characterization method of brake lining materials to squeal noise propensity*, Congresso dell'Associazione Italiana di Meccanica Teorica e Applicata, AIMETA, Roma, Italy 15-19 Settember 2019.

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