Anna GIACOMINI's Full curriculum vitae

Professor
Director, Research Centre of Geotechnical Science in Engineering
College of Engineering, Science and Environment, University of Newcastle, Callaghan, NSW 2308

QUALIFICATIONS

1999/2003	PhD. Civil Eng.	University of Parma, Italy.
1997/1999	MSc Civil Eng.	University of Parma, Italy.
1993/1997	B.E. Civil Eng.	University of Parma, Italy.

EMPLOYMENT

2020/current	Professor	School of Engineering, The University of Newcastle.
2017/ 2019	Associate Professor	School of Engineering, The University of Newcastle.
2011/ 2016	Research Academic (Senior lecturer level)	School of Engineering, The University of Newcastle.
2007/ 2011	Research Associate (Lecturer level)	School of Engineering, The University of Newcastle.
2005/2007	Casual Academic	School of Engineering, The University of Newcastle
2004/ 2006	Lecturer	School of Engineering, University of Parma, Italy.
2002/ 2006	Research Associate	School of Engineering, University of Parma, Italy.
1999/ 2006	Civil Engineer	Gennari & Oddi, Castagneti Engeneering, Parma, Italy.
1999/ 2003	PhD Candidate	School of Engineering, University of Parma, Italy.

DESCRIPTION OF MY ROLE

Since May 2019, along with my full-time research and teaching academic role, I am the ***Director of the Research Centre of Geotechnical Science in Engineering*** in the University of Newcastle. In this role I lead a team of 15 researchers of various academic levels. Between 2017 and 2020 I was ***Higher Degree Research (HDR) Director for the School of Engineering of the Faculty of Engineering,*** managing HDR matters for over 150 students. Since July 2024 I have been Acting ***Deputy Head of School for Research*** training for the School of Engineering. Between 2021 and 2023 I was the ***Deputy President of the Academic Senate for Research*** at the University of Newcastle. Since 2021 I am Member of ***Australian Research Council (ARC) College of Experts.***

Since 2017, with a team of 6 female academics, I co-founded ***HunterWiSE*** educational intervention that is inspiring a new generation of females in STEM and promoting more female STEM enrolments – particularly in engineering. The project received over $900k from regional and national industry (partners include Glencore, Muswellbrook Shire Council, Transport for NSW, Quarrymining & Construction Equipment Pty Ltd, HunterWater, BHP, Sanitarium, Bradken, GHD, Port of Newcastle, Orica, Impervium Solutions, Ramboll).

AWARDS

2024 Excellence in Mentoring Award, University of Newcastle
2024 Australian Geomechanics Society **Davis Memorial Lecture**
2023 Elected **ATSE Fellow** from the Australian Academy of Technology and Engineering
2022 **NSW Premier's Prizes for Science & Engineering,** Excellence in Engineering or Information & Comm. Technology
2022 Excellent Regional Contributions Award, Intern. Association for Computer Methods and Advances in Geomechanics
2019 **John Booker Medal, Australian Academy of Science**
2019 Equity, Diversity and Inclusion Excellence Award for HunterWise project, University of Newcastle.
2019 **Best Practice Industry Engagement Award**, Newcastle Institute for Energy and Resources (NIER).
2018 Vice-Chancellor's Award for **Excellence in Research Supervision**, University of Newcastle
2018 Pro Vice-Chancellor's Award for **Excellence in Research Supervision**, University of Newcastle
2017 Gender Equity Award, Faculty of Engineering and Built Environment.
2015 Elsevier Outstanding reviewer for *International Journal of Rock Mechanics and Mining Science*
2014 Excellent paper award, *Int. Association for Computer methods and Advances in Geomechanics (IACMAG)*
2013 Pro Vice-Chancellor's Award for **Excellence in Research Performance**, University of Newcastle.

INVITED KEYNOTES AND SPEAKER ADDRESSES (most recent significant invitations)

Invited plenary/keynote addresses

2025 Keynote, iCGMGE2025, Sydney, Australia.
2024 Keynote, ARMA 58th US Rock Mechanics / Geomechanics Symposium, Golden, Colorado, USA
2024 Invited Lecture, ICGSM 2024, Internation Course on Geotechnical and Structural Monitoring, Colorado, USA
2024 Invited Lecture, ICTG2024, 5th International Conference in Transportation Geotechnics, Sydney, Australia
2024 Theme lecture, 5th ICTG-Sydney, Sydney, Australia
2023 Keynote, ANZ Geomechanics 2023, Australia (fully funded)
2022 Keynote, ISGSR 2022, Australia
2021 Plenary keynote ACCM2021, The Fifth Australasian Conference on Computational Mechanics, Sydney, Australia.
2020 Keynote at Geosummit 2020, online event organised by Geobrugg, Switzerland.

2019 Keynote at International SiDRR Conference, Beijing, China, 11-12 May (fully funded)
2018 Keynote at Engineers Australia tour (3 keynotes: Brisbane, Sydney, Melbourne) (fully funded).
2018 Plenary lecture at RSS 2018, Rock Slope Stability Conference 2018, France, Nov. 2018 (fully funded).
2017 Keynote at Badong International Geohazards Symposium, China, 24-28 August 2017 (fully funded).

Recent Invited Lectures/talks

2023 University of Newcastle Graduation Occasional Address, December 2023.
2023 RocScience International, Canada – in collaboration with Dr. Jean Hutchinson
2022 Special presentation, National Workshop on Transportation Geomechanics and Ground Improvement, UTS, Sydney
2022 Seminar, UNSW School of Engineering, Sydney
2021 Pells Sullivan and Meynink, Sydney Seminar.
2021 AGS Newcastle Chapter Geotechnical Series, Newcastle.
2021 AGS Sydney Chapter Geotechnical Series, Sydney.
2021 Australian Geomechanics Society (AGS) Women in Engineering Panel Contribution, Sydney.
2020 Seminar at Geotechnical Webinar Series, UTS Sydney
2019 Seminar, School of Civil Engineering, Southwest Jiaotong University (SWJTU)
2017 AUSTMINE Women in STEM – METS career pathway program, NIER, 9 August 2017
2017–20 BOHOGS (Qld, NSW) – Bowen Basin & Hunter Valley Open Cut Geotechnical Society- 3 separate presentations
2016 Seminar to IRSTEA Grenoble (France), 18th of June, 2016.
2016 Lecture in GEAM Workshop "Rock surfaces surveying methods for the monitoring and the design of protection methods", Chiavenna (Italy), 20th of May, 2016.
2015 Technical talk to MMAA (Mine Manager Association of Australia), 13th November 2015, Moranbah, QLD.
2015 Seminar to Group BBGG & ACARP Meeting, Rockempton, 12th September 2015, QLD.
2014 Lecture to Mining & Engineering 2014, 8th October, Newcastle, Australia.
2014 Lecture to Hunter Innovation Forum 2014, 15th May 2014, Newcastle, Australia.
2013 Lecture Bowen Basin Geologists' Group BBGG & ACARP Meeting, CQU McKay, QL, Australia on "Energy Adsorption Capacity of Muck Piles and Their Status as Engineered Hard Barriers"
2013 Seminar at the Department of Civil, environmental, land management engineering and architecture – DICATeA of Parma (Italy) on "Advanced methods for rockfall analysis".
2013 Seminar at the Applied Geology Department of the University of Milan (Italy) on "Rockfall in open cut mines: Hunter Valley extractive basin"
2012 Workshop for the "Ground Control & Hazard Management in Open Cut Mines MINING IQ 2012", QLD.
2011 Technical talk for the Longwall Conference 2011, NSW.
2011 Technical talk for the Bowen Basin Underground Geotechnical Committee, Emerald, QL, 17 August, 2011.
2011 Technical talk for the Bowen Basin Geologists` Group BBGG & ACARP Meeting CQU Rockhampton, 2011.
2011 Technical talk for the EAGCG (Eastern Australia Ground Control Group) Workshop: Cutting Edge Technologies in Rock Mechanics 2011
2008 Seminar for the Australian Geomechanics Society, newcastle Chapter, Australia.
2003 Lecture at the Department of Civil and Environmental Engineering Section of Geotechnics, Geology and Engineering Geology, Technical University of Bari (Italy)

GRANTS

To date, I have secured over **AUD $9M** of funding, including 4 ARC-Discovery, 1 ARC-Linkage, 12 ACARPs ($2.75M), and 1 Priority Research Centre for Geotechnical Science & Engineering ($1.9M, 2016-2021). In 2024 I was successful as Partner Investigator (PI) in a ***Horizon Europe Marie Skłodowska-Curie Actions Staff Exchanges program*** (project MONUGEO) of 1.65M Euros (**AUD 2.7M**), an international and multidisciplinary consortium of European and international partners.

Year	Role	Source and scheme	AUD
2024	Lead CI	ARC, Discovery 24 DP240100341 (**Giacomini**,Thoeni,Blackmore,Huang,Hutchinson)	423,133
2024	Lead CI	Ridetherisk, European Commission, European Union	17,746
2024	CI	ACARP 2023 (Buzzi, **Giacomini**, Pineda)	405,500
2023	CI	ACARP 2022 (Thoeni, **Giacomini**, Moscato)	249,660
2022	Lead CI	Glencore HDR Scholarship (**Giacomini**, Buzzi, Pineda, Thoeni, Huang, Kouretzis)	350,000
2022	Lead CI	ACARP 2021 (**Giacomini**, Kouretzis, Crumpton)	197,350
2022	CI	ARC, Discovery Project 21 DP220103381 (Huang, **Giacomini**, Lyamin)	457,427
2021	Lead CI	ACARP 2020 (**Giacomini**, Thoeni, Huang)	92,580
2021	CI	Banpu Energy Australia Pty Ltd (Fityus, Thoeni, **Giacomini**, Buzzi)	615,000
2021	Lead CI	ARC, Discovery Project 21 DP210101122 (**Giacomini**, Thoeni, Roncella, Griffiths)	385,000
2021	CI	Glencore Scoping Study Wollombi Mine (Buzzi, Fiyus,**Giacomini**,Jeffery,Pineda,Thoeni)	18,000
2020	CI	ACARP 2019 (Theoni, **Giacomini,** Roncella)	210,720
2020	Lead CI	ACARP 2019 (**Giacomini**, Kouretzis, Crumpton)	203,820
2019	CI	Bloomfield Colleries Pty Ltd (Fityus Hancock, **Giacomini**, Buzzi)	50,000
2019	Lead CI	Glencore - Advanced Rock Mechanics Training Facility (**Giacomini**, Buzzi, Fityus)	75,000

2019	Sole CI	Vice-Chancellor's Award for Supervisor of the Year (uoN)	10,000
2019	CI	Numerical Modelling of long wall mining stability (Strata2 Pty) (Kouretzis, **Giacomini**)	12,000
2018	CI	METSO Australia Ltd (Williams, **Giacomini**, o'Shea, Guo, Krull)	80,000
2018	Lead CI	ACARP 2017 (**Giacomini** Elmouttie Buzzi Fityus)	273,000
2017-22	CI/Lead	HunterWiSE: Hunter Women in STEM and Entrepreneurship (**Giacomini** and 6 others)	900,000
2017	PI	OverWorld project - University of Parma Italy (Roncella, & **Giacomini**)	17,900
2016-21	CI, Dir.	Geotechnical Science & Engineering Priority Research Centre (CGCE)	1,990,000
2016	Lead CI	ARC, Linkage Project LP160100370 (**Giacomini,** Fityus, Sloan, Roncella, Booth)	274,972
2016	CI	ARC, Discovery Project DP160103140 (Buzzi, Carter, **Giacomini**, Fityus, Hungr)	460,000
2016	CI	ACARP 2015 (Rubin, **Giacomini**, Kelly)	302,000
2016-19	Lead CI	Geobrugg GA, Industry Research funding (**Giacomini,** Buzzi)	93,120
2016-21	CI	Pells Sullivan Meynink Industry Research funding (Buzzi, **Giacomini)**	200,000
2016	Sole CI	International Research Visiting Fellowship (IRVF) University of Newcastle	7,110
2015	CI	ACARP 2014 (Thoeni, **Giacomini)**	124,780
2014	Lead CI	ACARP 2013 (**Giacomini,** Thoeni)	259,590
2010-12	Lead CI	Seedsman Geotechnics, Industry Research funding (**Giacomini**, Buzzi)	62,272
2012	Lead CI	ACARP 2011 (**Giacomini** & Thoeni)	257,935
2010	Sole CI	ACARP 2009	210, 880
2009	Sole CI	Industry Support ARC Linkage project LP0989965	200,000
2008-14	Sole CI	The University of Newcastle Grants	13,400

POST DOC, HDR AND MASTER STUDENTS' SUPERVISION

Since 2011, I have brought to completion 10 PhDs (including the ***2019 D.H. Trollope Medal – Dr Casagrande, and the 2020 NSW Research Award from Australian Geomechanics Society and 2022 D.H. Trollope Medal – Dr Guccione***), more than 34 honours and 35 international Master Students (2008-2020) from the Universities of Milan, Parma and Bologna (Italy), the University of Grenoble and INSA Research Institute in Lyon (France).

I have been the primary supervisor of 9 Postdoctoral fellows (Thoeni, Ferrari, Santise, Nader, Bruno, Pahkzad, and Guccione, Senanayake, Crumpton). Dr Thoeni is now Associate Professor at the University of Newcastle. Dr Ferrari was awarded the "***Ivo Ricchetti 2016 prize"*** by the Italian Geology Society in recognition of her outstanding work conducted under my supervision; in 2017 she won the PhD-I-talents ENI award with ENI SpA, the biggest Italian oil and gas multinational. Dr Guccione was the ***only successful ARC Early Career industry Fellow in 2023*** at the University of Newcastle. Three of my postgraduates now hold A/Prof and Lecturer positions at UoN and the Universities of Bologna and Parma. A former HDR graduate was awarded a 2019 Marie Curie Fellowship (European Commission), and the other two are senior geologist and geomechanics specialists at internationally recognised engineering firms (Pells Sullivan Meynink, Australia; ENI SpA, Italy; Leica Geosystem, Switzerland).

I am currently supervising 4 post-doctoral researchers (including a co-supervision of a 2023 Marie Curie Fellow from Politecnico of Turin) and 5 PhD students.

TEACHING AND LEARNING

2022- to date	Course Coordinator and Lecturer for CIVL1200 'Earth Science' at University of Newcastle
2018- to date	Course Coordinator and Lecturer for CIVL4230 and CIVL6230 at University of Newcastle – Rock Mechanics & Rock Engineering
2018-20	Lecturer for ENGG15000 at UON (140 students – civil engineering) – Introduction to Engineering
2017- to date	CIVL 4640 (7-8 Honours Students supervision per year)
2017-19 2024-25	Lecturer "Coal Mining Geomechanics Course" (3-day course post graduate and industry course).
2016	Guest Lectures at University of Parma & University of Bologna in Geotechnics Course
2013	Massive Open Online Course (MOOC), on *Mining Engineering* for Open2study (over 19,526 students)
2012	Course Coordinator and Presenter "Civil Engineering and Mining Rock Mechanics Course" at UON. Postgraduate and professional course (40 participants)
2000-08	Lectures, tutorials and practical classes of Geomechanics I, Geomechanics II and Geotechnical and Geoenvironmental Engineering, Undergraduate Civil Engineering Program, University of Newcastle
2000–06	Lectures, tutorials and practical classes in Rock Mechanics, Geotechnics, Slope Stability and Geotechnics for territory defence, Parma University, Engineering and Architecture Faculty (Italy)

OTHER PROFESSIONAL ACTIVITIES

- ***Professional committees and advisory roles***

National:
- Member of the ***ARC College of Experts (2021–24***);
- Member of the *Steering Committee* of the ***AGS2007 Landslide Risk Management Guidelines Update***.
- Member AGS, Australian Geomechanics Society.
- Member ISRM (International Society of Rock Mechanics)

International:
- *Scientific Advisory Board* Member, Association Georesources and Environment, GEAM, Italy (2021);
- *Doctorate Advisory Board* Invited member Earth Science, University of Torino (Italy) (since 2017);
- *Civil Engineering International Advisory Board* Invited member, University of Bologna (Italy) (since 2016);
- Qualified Associate Professor by the *Italian Ministry of Education* (ID 55515) (2012)
- Qualified by the *French Ministry of Education and Research* (Nr 05260150837) in the teaching corps "Maître de conferences" for the section "60 – Mécanique, génie mécanique, génie civil (2009)

Internal UoN:
- ***Director***, Research Centre of Geotechnical Science in Engineering in the College of Engineering, Science and Environment (CESE) since 2019;
- ***Deputy President of Academic Senate for Research*** at UoN (2021-2023)
- Appointed, ***University of Newcastle Promotions Committee*** – Levels D&E (2024)
- Nominated Member, **CESE *Research Committee*** (2024-);
- Invited Member, **CESE *Research Advisory Team*** (2024-);
- Invited Member ***University Research Committee*** *(2020-2023)*
- Elected Member, CESE *Board* (2021–23); Elected Member Academic Senate (UON) (2021–23);
- Invited Member of *Research Leadership Committee NIER Centre for Resources* (since 2019);
- *Theme Leader*, Human Element of Workplace Operations Research Group (HEWORG), NIER Centre for Resources Health and Safety (2017-2022);
- Invited member, *Advisory Board* of the Priority Research Centre for Geotechnical and Materials Modelling, UON (2012).
- Between 2016 and 2018 I played an active role in the ***SAGE Athena SWAN Working Party*** at UoN, contributing to UoN's winning of the Bronze Award (2018), and since 2021 I have been actively contributing to the award of 5 Cygnets (Awarded by 2023) and the Silver Award accreditation (submitted 2024).
- Member of FEBE Promotion Committee (2017)
- Member of FEBE Special Studies Program (SSP) Committee (2017)
- STEMM Strategy Project Member – The University of Newcastle, Australia (2016)
- Member of FEBE Gender Equity Group (2015-2018)
- FEBE International Faculty Committee UoN (2014-2015)
- Member of the Faculty of Engineering Research Faculty Committee UoN (2014)
- Member for the selection committee for the FEBE Faculty Postgraduate Research Prize (2013).

- ***Competitive Research Grant & Positions Assessor***

National:
ARC, Discovery Projects, Linkage Projects, DECRAs & Fellowships (since 2014);

International:
- *European Commission* Expert, REA-MSCA-H2020 panel (Assessor and Rapporteur) (since 2018 to present);
- International Assessor, BRIDGE, Swiss National Science Foundation (SNSF) & Swiss Innovation Agency Innosuisse (2023)
- Board Assessor (Examiner), Academic Research Certification, University Grenoble Alpes (FR) (2020);
- International Expert Assessor, Adjunct Professor selection procedure, KTH Sweden (2021);
- International Assessor, Chilean National Research Commission (since 2017);
- International Assessor, Associate Professor selection procedure, Politecnico of Torino (IT) (2017);
- International Assessor, National Science Centre Polish Executive Government Agency (since 2016);
- International Assessor, Italian Ministry of University and Research (MIUR) (since 2012).

PhD/MTs Assessor:
- I have assessed PhD theses from Queensland University (2017); National Institute of Technology, Rourkela, India (2018); University of Sydney (2019); Queen's University, CA (2023)

- ***Editorial board roles, guest editing***

Editorial Board member of international journals (upon invitation):

- *2025: Associate Editor, International Journal of Rock Mechanics and Mining Science, Elsevier,* IF=7.2;
- *2024: Associate Editor, ASCE International Journal of Geomechanics, ASCE,* IF= 3.7;
- *2023: International Journal of Rock Mechanics and Mining Science, Elsevier,* IF=7.2;
- *2014: Computers and Geotechnics, Elsevier,* IF=4.9;
- *2019: Proceedings of the ICE – Geotechnical Engineering,* IF=1.3;
- *2018: Rock Mechanics and Rock Engineering, Springer,* IF=6.7;
- *2017-2018: Canadian Geotechnical Journal,* IF=3.7;
- *2020: Associate Editor, Remote Sensing "Engineering Remote Sensing",* IF=4.8.

Guest editorial roles:

- Special Issue "Rockfall Protection and Mitigation", *Geoscience* (2023);
- Special Issue "Rock slope hazard, vulnerability and risk modelling using remotely sensed data and data-driven techniques", *Remote Sensing* (2023-2024).

- I regularly ***review*** for over 10 leading international journals, including *Nature Communications*, *Canadian Geotechnical Journal*, *Rock Mechanics and Rock Engineering*, the *International Journal of Rock Mechanics and Mining Sciences*, E*ngineering Geology*, and *Computer and Geotechnics*.
- In 2017, I was *invited to review* the Fifth Edition of the book "***Rock Slope Engineering: Civil Applications***" (by Duncan C. Wyllie) by Engineering & Environmental Sciences' Editor, CRC Press & Routledge, Taylor & Francis Group.

- *I **serve** on **technical and scientific advisory committee's and chair sessions for international conferences**:*

- AGS Hunter Valley and northern NSW Symposium 2024 (Chair Sessions, 2024);
- World Landslide Forum 2023 Florence, Italy (Chair Sessions, 2023);
- ISGR22-8th International Symposium of Geotechnical Safety & Risk, Australia (Org.Committee & Chair Session, 2022);
- EUROCK-ISRM International Symposium, Turin, Italy (Scientific Committee & Chair Session, 2021);
- IACMAG-International, Turin, Italy (Scientific Committee, 2020);
- AGCC2018, Adelaide, Australia (Co-organiser of the sub-theme "Geohazards, risk and mitigation", 2018);
- FLAC/DEM2011 Melbourne, Australia (Technical Committee Member, 2011).

- ***Outreach and community invited talks/panels**:*

- Panel Speaker, International Women's Day Event, AMPCONTROL, Australia (2023);
- ABC radio interview IWiED (International Women in Engineering Day) (2023);
- "Engineering Redefined" Panel, NSW Region Chapter & Engineers Australia (2021);
- AGS Sydney Chapter, Women in Engineering Debate Night (postponed to 2022);
- Academic Mentoring Program Facilitator, Research Advantage, UON (2021);
- Engineers Australia "Be Employed – How to apply and get that dream job" event (2020);
- AUSTMINE Women in STEM – METS career pathway program, NIER (UON) (2017).

PUBLICATIONS

Refereed Journal Articles

1. Zhang Y, Huang J, **Giacomini A**, Xie J, Lu J, 'Robust Calibration of Shaft and Base Resistance Factors for Piles Based on Multiobjective Optimization, *Journal of Geotechnical and Geoenvironmental Engineering*, 151
2. Guccione DE, Turvey E, Roncella R, Thoeni K, **Giacomini A** (2024) Proficient Calibration Methodologies for Fixed Photogrammetric Monitoring Systems, *Remote Sensing*, 14, 2024
3. Butcher C, Buzzi O, **Giacomini A**, Bertuzzi R, Griffiths DV, Fityus S (2024). Shear Strength of a Large Limestone Discontinuity: In Situ Pull Test and Prediction, *Rock Mechanics and Rock Engineering,* 58, 2203-2222.
4. Lane C, Saronga N, Fowell R, Berretta R, Blackmore K, Momenzadeh L, et al. (2024) Does targeted recruitment turn the dial for gender equity? A qualitative study at an Australian University, *Higher Education Quarterly*, 78 934-956
5. Senanayake, I. P., Hartmann, P., **Giacomini, A**., Huang, J., & Thoeni, K. (2024). Prediction of rockfall hazard in open pit mines using a regression based machine learning model. *International Journal of Rock Mechanics and Mining Sciences*, 177, 105727.
6. Zhang, Y., Huang, J., Xie, J., **Giacomini, A**., & Zeng, C. (2024). Updating reliability of pile groups with load tests considering spatially variable soils. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 18 750-764.
7. Marchelli, M., Peila, D., & **Giacomini, A**. (2023). Rockfall in open pit mines: management of the pit geometry and protection measures design. *International Journal of Rock Mechanics and Mining Sciences*, 170. doi:10.1016/j.ijrmms.2023.105551

8. Jeffery, M., Huang, J., Fityus, S., **Giacomini, A**., & Buzzi, O. (2023). A Large-Scale Application of the Stochastic Approach for Estimating the Shear Strength of Natural Rock Discontinuities. *Rock Mechanics and Rock Engineering*, 56(8), 6061-6078.
9. Zhang, Y., Huang, J., & **Giacomini, A**. (2023). Bayesian updating on resistance factors of H-Piles with axial load tests. *Computers and Geotechnics*, 159.
10. Guccione, D. E., **Giacomini, A**., Thoeni, K., Fityus, S., & Buzzi, O. (2023). On the Dynamic Fragmentation of Rock-Like Spheres: Insights into Fragment Distribution and Energy Partition. *Rock Mechanics and Rock Engineering*, 56(2), 847-873.
11. Liu, Q., Liu, X., Li, J., Yuan, S., He, P., **Giacomini, A**., & Buzzi, O. (2023). Dynamic behavior of new anchor cable ribbed rockfall retaining walls on rock shed: Rockfall impact. Proceedings of the Institution of Civil Engineers: *Geotechnical Engineering*.
12. Prieto-Rodriguez, E., Sincock, K., Berretta, R., Blackmore, K., Todd, J., Wanless, E., **Giacomini, A**. (2022). Investigating the Impact of an Outreach Intervention on Girls' STEM Identity Formation. *International Journal of Gender, Science and Technology*, *14*(2), 183-206.
13. Guccione D. E., **Giacomini** A., Thoeni, K., Fityus S., Buzzi, O., (2022) On the Dynamic Fragmentation of Rock-Like Spheres: Insights into Fragment Distribution and Energy Partition. *Rock Mechanics and Rock Engineering*,
14. Jeffery, M., Crumpton, M., Fityus, S.G., Huang, J., **Giacomini**, A. and Buzzi., O. (2022). A Shear Device with Controlled Boundary Conditions for Very Large Nonplanar Rock Discontinuities. *Geotechnical Testing Journal*; 45(4):1-28.
15. Bruno, N., Roncella, R., Diotri., F., Thoeni, K., **Giacomini, A**., (2022) Influence of Block Geometry Configuration on Multi-Image Dense Matching, *Remote Sensing*, 14 (2022)
16. Guccione, D. E., Buzzi, O., Thoeni, K., **Giacomini** A., Fityus S. (2022). Practical Considerations for the application of a survival probability model for rockfall. *Australian Geomechanics Journal* 57(2).
17. James C.L., **Giacomini A**. , Kay-Lambkin, F., Rubin, M., Kelly, B. (2022) Mental health and the resources sector: findings from a research program to promote effective mental health solutions, *The APPEA Journal*, 62(2): S282-S286
18. Prieto-Rodriguez E, Sincock K, Berretta R, Todd J, Johnson S, Blackmore K, Wanless E, **Giacomini** A. al., (2022) A study of factors affecting women lived experiences in STEM, *Humanities and Social Sciences Communications*, 9
19. Guccione, D. E., Buzzi, O., Thoeni, K., Fityus, S., & **Giacomini**, A. (2021). An experimental setup to study the fragmentation of rocks upon impact, *Rock Mechanics and Rock Engineering,* 5:4201–4223.
20. Mousakhani, M., Thoeni, K., Fityus, S., **Giacomini. A.** (2021) A novel and robust contact detection algorithm for arbitrarily shaped blocks, *Computer & Geotechnics,*140, Dec. 2021, 104430
21. Bruno, N., **Giacomini**, A., Roncella, R., Thoeni. K. (2021). Influence of illumination changes on image-based 3D surface reconstruction, *ISPRS - International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, *XLIII-B2-2021 701-708*.
22. Guccione, D. E., Buzzi, O., Thoeni, K., Fityus, S., & **Giacomini**, A. (2021). Predicting the fragmentation survival probability of brittle spheres upon impact from statistical distribution of material properties. *International Journal of Rock Mechanics and Mining Sciences*, *142*.
23. Jeffery, M., Huang, J., Fityus, S., **Giacomini**, A., & Buzzi, O. (2021). A rigorous multiscale random field approach to generate large scale rough rock surfaces. *International Journal of Rock Mechanics and Mining Sciences*, *142*.
24. Roncella, R., Bruno, N., Diotri, F., Thoeni, K., & **Giacomini**, A. (2021). Photogrammetric digital surface model reconstruction in extreme low-light environments. *Remote Sensing*, *13*(7).
25. **Giacomini**, A., Thoeni, K., Santise, M., Diotri, F., Booth, S., Fityus, S., & Roncella, R. (2020). Temporal-Spatial Frequency Rockfall Data from Open-Pit Highwalls Using a Low-Cost Monitoring System. *Remote Sensing*, *12*(15), 24 pages.
26. Tahmasbi, S., **Giacomini**, A., Wendeler, C., & Buzzi, O. (2020). Towards a novel and efficient method to determine the failure energy of rockfall chain-link meshes. *Computers and Geotechnics*, *119*.
27. Ye, Y., Thoeni, K., Zeng, Y., Buzzi, O., & **Giacomini**, A. (2020). Numerical Investigation of the Fragmentation Process in Marble Spheres Upon Dynamic Impact. *Rock Mechanics and Rock Engineering*, *53*, 1287-1304.
28. Rubin, J., **Giacomini**, A., Allen, R., Turner, R., & Kelly, B. (2020). Identifying safety culture and safety climate variables that predict reported risk-taking among Australian coal miners: An exploratory longitudinal study. *Safety Science*, *123*, 9 pages.
29. Guccione, D. E., Thoeni, K., **Giacomini**, A., Buzzi, O., & Fityus, S. (2020). Efficient Multi-View 3D Tracking Of Arbitrary Rock Fragments Upon Impact. *ISPRS - International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, *XLIII-B2-2020*, 589-596.
30. Bruno, N., Thoeni, K., Diotri, F., Santise, M., Roncella, R., & **Giacomini**, A. (2020). A Comparison of Low-Cost Cameras Applied to Fixed Multi-Image Monitoring Systems. *ISPRS - International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, *XLIII-B2-2020*, 1033-1040.
31. Tahmasbi, S., **Giacomini**, A., Wendeler, C., & Buzzi, O. (2019). On the Computational Efficiency of the Hybrid Approach in Numerical Simulation of Rockall Flexible Chain-Link Mesh. *Rock Mechanics and Rock Engineering*, *52*(10), 3849-3866.
32. Thoeni, K., Servin, M., Sloan, S. W., & **Giacomini**, A. (2019). Designing waste rock barriers by advanced numerical modelling. *Journal of Rock Mechanics and Geotechnical Engineering*, *11*(3), 659-675.
33. Ye, Y., Zeng, Y., Thoeni, K., & **Giacomini**, A. (2019). An Experimental and Theoretical Study of the Normal Coefficient of Restitution for Marble Spheres. *Rock Mechanics and Rock Engineering*, *52*(6), 1705-1722.
34. Ye, Y., Thoeni, K., Yawu, Z., Buzzi, O., & **Giacomini**, A. (2019). A novel 3D clumped particle method to simulate the complex mechanical behavior of rock. *Int.J.Rock Mech.& Mining Sci.*.

35. Rubin, J., Paolini, S., Subasic, E., & **Giacomini**, A. (2019). A confirmatory study of the relations between workplace sexism, sense of belonging, mental health, and job satisfaction in male-dominated industries. *J. of Applied Social Psychology*, *49*, 267.
36. Thoeni, K., Santise, M., Guccione, D. E., Fityus, S., Roncella, R., & **Giacomini**, A. (2018). Use of low-cost terrestrial and aerial imaging sensors for geotechnical applications. *Australian Geomechanics Journal*, *53*(3), 101-122.
37. Santise, M., Thoeni, K., Roncella, R., Diotri, F., & **Giacomini**, A. (2018). Analysis of low-light and night-time stereo-pair images for photogrammetric reconstruction. *ISPRS Inter. Arch. Photogr. Remote Sensing and Spatial Inf. Sci.42*(2):1015-22.
38. Mentani, A., Govoni, L., **Giacomini**, A., Gottardi, G., & Buzzi, O. (2018). An Equivalent Continuum Approach to Efficiently Model the Response of Steel Wire Meshes to Rockfall Impacts. *Rock Mechanics and Rock Engineering*, *51*, 2825-2838.
39. Casagrande, D., Buzzi, O., **Giacomini**, A., Lambert, C., & Fenton, G. (2018). A New Stochastic Approach to Predict Peak and Residual Shear Strength of Natural Rock Discontinuities. *Rock Mechanics and Rock Engineering*, *51*(1), 69-99.
40. Effeindzourou, A., Thoeni, K., **Giacomini**, A., & Wendeler, C. (2017). Efficient discrete modelling of composite structures for rockfall protection. *Computers and Geotechnics*, *87*, 99-114.
41. Effeindzourou, A., **Giacomini**, A., Thoeni, K., & Sloan, S. W. (2017). Numerical Investigation of Rockfall Impacts on Muckpiles for Underground Portals. *Rock Mechanics and Rock Engineering*, *50*(6), 1569-1583.
42. Rubin, M., Subasic, E., **Giacomini**, A., & Paolini, S. (2017). An exploratory study of the relations between women miners' gender-based workplace issues and their mental health and job satisfaction. *J. of Applied Social Psychology*, *47*(7), 400-411.
43. Salmi, E. F., Nazem, M., & Giacomini, A. (2017). A Numerical Investigation of Sinkhole Subsidence Development over Shallow Excavations in Tectonised Weak Rocks: Dolaei Tunnel's Excavation Case. *Geotech.& Geol.Eng.35*(4):1685-1716.
44. Ferrari, F., **Giacomini**, A., Thoeni, K., & Lambert, C. (2017). Qualitative Evolving Rockfall Hazard Assessment for Highwalls. *International Journal of Rock Mechanics and Minings Sciences*, *98*, 88-101.
45. Santise, M., Thoeni, K., Roncella, R., Sloan, S. W., & **Giacomini**, A. (2017). Preliminary tests of a new low-cost photogrammetric system. *ISPRS – Inter. Arch. Photogr., Remote Sensing and Spatial Inf. Sci.*, *XLII-2/W8*, 229-236.
46. Thoeni, K., Guccione, D. E., Santise, M., **Giacomini**, A., Roncella, R., & Forlani, G. (2016). The potential of low-cost RPAs for multi-view reconstruction of sub-vertical rock faces. *ISPRS - International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, *XLI-B5*, 909-916.
47. Thoeni, K., Effeindzourou, A., Chareyre, B., & **Giacomini**, A. (2016). Discrete modelling of soil-inclusion problems. *Applied Mechanics and Materials*, *846*, 397-402.
48. Ferrari, F., **Giacomini**, A., & Thoeni, K. (2016). Qualitative Rockfall Hazard Assessment: A Comprehensive Review of Current Practices. Rock Mechanics and Rock Engineering, 49(7), 2865-2922.
49. Ferrari, F., Thoeni, K., **Giacomini**, A., & Lambert, C. (2016). A rapid approach to estimate the rockfall energies and distances at the base of rock cliffs. *Georisk: assessment and management of risk for engineered systems and geohazards*, 10(3), 179-199.
50. Mentani, A., **Giacomini**, A., Buzzi, O., Govoni, L., Gottardi, G., & Fityus, S. (2016). Numerical Modelling of a Low-Energy Rockfall Barrier: New Insight into the Bullet Effect. *Rock Mechanics and Rock Engineering*, 49(4), 1247-1262.
51. Effeindzourou, M., Chareyre, B., Thoeni, K., **Giacomini**, A., & Kneib, F. (2016). Modelling of deformable structures in the general framework of the discrete element method. *Geotextiles and Geomembranes*, 44(2), 143-156.
52. Buzzi, O., Leonarduzzi, E., Krummenacher, B., Volkwein, A., & **Giacomini**, A. (2015). Performance of High Strength Rock Fall Meshes: Effect of Block Size and Mesh Geometry. Rock Mechanics and Rock Engineering, 48(3), 1221-1231.
53. **Giacomini**, A., & Thoeni, K. (2015). Full-scale experimental testing of dump-point safety berms in surface mining. *Canadian Geotechnical Journal*, 52(11), 1791-1810.
54. Dall'Asta, E., Thoeni, K., Santise, M., Forlani, G., **Giacomini**, A., & Roncella, R. (2015). Network Design and Quality Checks in Automatic Orientation of Close-Range Photogrammetric Blocks. *Sensors*, 15(4), 7985-8008.
55. Buzzi, O., Sieffert, Y., Mendes, J., Liu, X., **Giacomini**, A., & Seedsman, R. (2014). Strength of an Australian Coal Under Low Confinement. *Rock Mechanics and Rock Engineering*, 47(6), 2265-2270.
56. Dall'Asta, E., Perini, L., Thoeni, K., Roncella, R., & **Giacomini**, A. (2014). METRIC COMPARISON OF AUTOMATIC ORIENTATION TECHNIQUES. Bollettino SIFET, 1-14.
57. Thoeni, K., **Giacomini**, A., Lambert, C., Sloan, S. W., & Carter, J. P. (2014). A 3D discrete element modelling approach for rockfall analysis with drapery systems. *International Journal of Rock Mechanics and Mining Sciences*, 68, 107-119.
58. Fityus, S. G., **Giacomini**, A., & Buzzi, O. (2013). The significance of geology for the morphology of potentially unstable rocks. *Engineering Geology*, 162, 43-52.
59. Buzzi, O., Spadari, M., **Giacomini**, A., Fityus, S., & Sloan, S. W. (2013). Experimental testing of rockfall barriers designed for the low range of impact energy. *Rock Mechanics and Rock Engineering*, 46(4), 701-712.
60. Spadari, M., Kardani, M., De Carteret, R., **Giacomini**, A., Buzzi, O., Fityus, S., & Sloan, S. W. (2013). Statistical evaluation of rockfall energy ranges for different geological settings of New South Wales, Australia. *Engineering Geology*, 158, 57-65.
61. Hambleton, J. P., Buzzi, O., Giacomini, A., Spadari, M., & Sloan, S. W. (2013). Perforation of flexible rockfall barriers by normal block impact. *Rock Mechanics and Rock Engineering*, 46(3), 515-526.
62. Thoeni, K., Lambert, C., **Giacomini**, A., & Sloan, S. W. (2013). Discrete modelling of hexagonal wire meshes with a stochastically distorted contact model. *Computers and Geotechnics*, 49, 158-169.
63. Lambert, C., Thoeni, K., **Giacomini**, A., Casagrande, D., & Sloan, S. W. (2012). Rockfall hazard analysis from discrete fracture network modelling with finite persistence discontinuities. *Rock Mechanics and Rock Engineering*, 45(5), 871-884.

64. Spadari, M., **Giacomini**, A., Buzzi, O. P., & Hambleton, J. P. (2012). Prediction of the bullet effect for rockfall barriers: A scaling approach. Rock Mechanics and Rock Engineering, 45(2), 131-144.
65. Buzzi, O. P., **Giacomini**, A., & Spadari, M. (2012). Laboratory investigation on high values of restitution coefficients. *Rock Mechanics and Rock Engineering*, 45(1), 35-43.
66. Spadari, M., **Giacomini**, A., Buzzi, O. P., Fityus, S. G., & Giani, G. P. (2012). In situ rockfall testing in New South Wales, Australia. *International Journal of Rock Mechanics and Mining Sciences*, 49(-), 84-93.
67. **Giacomini**, A., Thoeni, K., Lambert, C., Booth, S., & Sloan, S. W. (2012). Experimental study on rockfall drapery systems for open pit highwalls. *International Journal of Rock Mechanics and Mining Sciences*, 56(-), 171-181.
68. Buzzi, O. P., **Giacomini**, A., & Fityus, S. G. (2011). Towards a dimensionless description of soil swelling behaviour. *Geotechnique*, 61(3), 271-277.
69. Lambert, C., Buzzi, O. P., & **Giacomini**, A. (2010). Influence of calcium leaching on the mechanical behavior of a rock-mortar interface: A DEM analysis. *Computers and Geotechnics*, 37(3), 258-266.
70. **Giacomini**, A., Buzzi, O. P., Renard, B., & Giani, G. P. (2009). Experimental studies on fragmentation of rock falls on impact with rock surfaces. *International Journal of Rock Mechanics and Mining Sciences*, 46(4), 708-715.
71. **Giacomini**, A., Buzzi, O., Ferrero, A. M., Migliazza, M., & Giani, G. P. (2008). Numerical study of flow anisotropy within a single natural rock. *International Journal of Rock Mechanics and Mining Sciences*, 45(1), 47-58.
72. Buzzi, O. P., Pedroso, D. M., & **Giacomini**, A. (2008). Caveats on the implementation of the generalized material point method. *Computer Modeling in Engineering & Sciences*, 31(2), 85-106.
73. Giani, G. P., **Giacomini**, A., Migliazza, M., & Segalini, A. (2004). Experimental and theoretical studies to improve rock fall analysis and protection work design. *Rock Mechanics and Rock Engineering*, 37(5), 369-389.

Book Chapters

74. Fityus, S., **Giacomini, A**., & Thoeni, K. (2015). The Influence of Shape on the Inherent Rolling Potential of Loose Rocks. In Lollino G, Giordan D, Crosta GB, Corominas J, Azzam R, Wasowski J, & Sciarra N (Eds.), *Engineering Geology for Society and Territory - Volume 2* (Vol. 2, pp. 2045-2048). Heidelberg: Springer.
75. Thoeni, K., **Giacomini, A**., Lambert, C., & Sloan, S. (2015). Rockfall trajectory analysis with drapery systems. In G. Lollino, D. Giordan, G. B. Crosta, J. Corominas, R. Azzam, J. Wasowski, & N. Sciarra (Eds.), *Engineering Geology for Society and Territory: Landslide Processes* (Vol. Vol. 2, pp. 2007-2011). Heidelberg: Springer.
76. Giani, G. P., **Giacomini, A**., Migliazza, M., & Segalini, A. (2005). Metodologia progettuale per la scelta e il dimensionamento di opere di difesa da caduta di massi. In *GEAM – Studi e interventi su fenomeni di caduta massi* (Vol. 114, pp. 7). Torino: GEAM

Fully Refereed Conference Proceedings (+4 conference proceeding by the end of 2024)

77. Watman, A., Guccione, D. E., Bahootoroody, F., Thoeni, K., & Giacomini, A. (2023). Rockfall instability analysis of coastal cliffs: A case study along Susan Gilmore Beach (Newcastle, NSW). In *Proceedings of the 14th Australia and New Zealand Conference on Geomechanics, Cairns 2023 (ANZ2023)*. Cairns: Australian Geomechanics Society.
78. Guccione, D. E., Watman, A., Thoeni, K., Buzzi, O., & **Giacomini**, A. (2023). Coastal Cliffs Rockfall Analyses And Mitigation Measures Assessment Using Rocfall3: A Case Study Along Shortland Esplanade In Newcastle, NSW (Australia). In R. E. Hammah, S. Javankhoshdel, T. Yacoub, A. Azami, & A. McQuillan (Eds.), *Proceedings of the Rocscience International Conference (RIC 2023)* (pp. 827-834). Toronto: Atlantic Press, a part of Springer Nature.
79. Bahootoroody, F., Guccione, D., Thoeni, K., Griffiths, V., & **Giacomini**, A. (2023). A copula based statistical learning model to study the impact of rainfall on rockfall volume. In V. Tofani, & N. Casagli (Eds.), *Landslide Science for Sustainable Development: Proceedings of the 6th World Landslide Forum. Florence Italy, 14-17 November 2023. Abstract book*. Florence, Italy: OIC.
80. Guccione, D. E., **Giacomini**, A., Fityus, S., Thoeni, K., & Buzzi, O. (2022). Experimental study on the energy partition between sphere fragments upon dynamic impact. In *20th International Conference on Soil Mechanics and Geotechnical Engineering 2022* (pp. 2427-2431). Sydney, Australia: Australian Geomechanics Society.
81. Senanayake, I., Hartmann, P., Thoeni, K., Watman, A., & **Giacomini**, A. (2022). The Impact of Slope Roughness on the Uncertainty in Probabilistic Rockfall Modelling. In *8th International Symposium for Geotechnical Safety & Risk (ISGSR 2022)* (pp. 719-724). Newcastle, Australia: Research Publishing Services, Singapore.
82. Buzzi, O., Guccione, D. E., Thoeni, K., Fityus, S., & **Giacomini**, A. (2021). Effect of sample size on the prediction of survival probability of brittle spheres. In *5th RSS Rock Slope Stability Symposium*. Chambéry, France: Chutes de Blocs Risques Rocheux Ouvrages de Protection.
83. Butcher, C., Fityus, S., **Giacomini**, A., Thoeni, K., Guccione, D., & Buzzi, O. (2021). The effect of impact angle and bond strength on fragmentation in laminated materials. In *IOP Conference Series: Earth and Environmental Science* (pp. 1-6). Turin, Italy: IOP Conference Series: Earth and Environmental Science.
84. Guccione, D. E., Buzzi, O., Thoeni, K., Fityus, S., Butcher, C., & **Giacomini**, A. (2021). Sensitivity analysis of a new model to predict the survival probability of artificial rock blocks upon dynamic impact. In *EUROCK 2021 Mechanics and Rock Engineering, from Theory to Practice* (pp. 1-8). Turin, Italy: IOP Conference Series: Earth and Environmental Science.
85. Jeffery, M., Huang, J., Fityus, S., **Giacomini**, A., & Buzzi, O. (2021). Effect of sampling interval on the output statistics of large 3D discontinuity surfaces generated by a multiscale random field model. In A. M. Ferrero, C. Scavia, N. Moraci, M. R. Migliazza, D. Boldini, & C. Soccodato (Eds.), *Proceedings of the EUROCK 2021 Conference on Rock Mechanics and Rock Engineering* Vol. 833 (pp. 012045). Bristol, UK: IOP Publishing.

86. Nader, F., Thoeni, K., **Giacomini**, A., Fityus, S., & Buzzi, O. (2021). Numerical Investigation of the Strength Variability of Rock Using DEM. In M. Barla, A. Di Donna, & D. Sterpi (Eds.), *Challenges and Innovations in Geomechanics Proceedings of the 16th International Conference of IACMAG* Vol. 125 (pp. 895-902). Cham, Switzerland: Springer.
87. Jeffery, M., Fityus, S., Delahunty, J., & **Giacomini**, A. (2020). Experimental study of the shear behaviour of a rough discontinuity infilled by different minerals. In S. A. B. Da Fontoura, R. J. Rocca, & J. F. P. Mendoza (Eds.), *Rock Mechanics for Natural Resources and Infrastructure Development- Proceedings of the 14th International Congress on Rock Mechanics and Rock Engineering, ISRM 2019* (pp. 2097-2104). Leiden, The Netherlands: CRC Press.
88. Ye, Y., Thoeni, K., Zeng, Y. W., Buzzi, O., & **Giacomini**, A. (2020). A simple and efficient 3D clumped particle strategy to model brittle rocks. In S. A. B. da Fontoura, R. J. Rocca, & J. F. P. Mendoza (Eds.), *Rock Mechanics for Natural Resources and Infrastructure Development- Proceedings of the 14th International Congress on Rock Mechanics and Rock Engineering, ISRM 2019* (pp. 2934-2941). Leiden, Netherlands: CRC Press.
89. Tahmasbi, S., **Giacomini**, A., Bucher, R., & Buzzi, O. (2020). A new approach to simulate the dynamic response of high-tensile chain-link drapery systems. In P. Dight (Ed.), *Proceedings of the 2020 International Symposium on Slope Stability in Open Pit Mining and Civil Engineering* (pp. 813-822). Perth, WA: Australian Centre for Geomechanics.
90. de Oliveira, C., O'Shea, J., Guo, J., **Giacomini**, A., & Williams, K. (2019). Investigation of impingement angle influence on impact wear of different chute liners by employing a novel impact wear tester. In *13th International Conference on Bulk Materials Storage, Handling and Transportation ICBMH 2019* (pp. 10 pages). Barton, ACT: Institution of Engineers, Australia.
91. Guccione, D. E., Fityus, S., Gregg, N., **Giacomini**, A., & Buzzi, O. (2019). Experimental study on influence of impact angle on fragmentation of brittle blocks upon dynamic impact.. In H. E. Acosta-Martinez, & B. M. Lehane (Eds.), *Proceedings of the 13th Australia New Zealand Conference on Geomechanics* (pp. 835-838). Sydney, Australia: Australian Geomechanics Society.
92. Guccione, D. E., Thoeni, K., Buzzi, O., Fityus, S., & **Giacomini**, A. (2019). Development of an apparatus to track rock fragment trajectory in 3D. In *Rock Mechanics for Natural Resources and Infrastructure Development - Full Papers: Proceedings of the 14th International Congress on Rock Mechanics and Rock Engineering (ISRM 2019)* (pp. 1622-1629). Leiden, Switzerland: CRC Press.
93. Ye, Y., Thoeni, K., Zeng, Y. W., Buzzi, O., & **Giacomini**, A. (2019). A novel 3D clumped particle strategy to simulate the complex mechanical behavior of brittle rocks. In S. A. B. da Fontoura, R. J. Rocca, & J. F. P. Mendoza (Eds.), *Rock Mechanics for Natural Resources and Infrastructure Development - Full Papers: Proceedings of the 14th International Congress on Rock Mechanics and Rock Engineering (ISRM 2019)* (pp. 2934-2941). Leiden, Switzerland: CRC Press.
94. **Giacomini**, A., Thoeni, K., Santise, M., Fityus, S., Sloan, S. W., & Roncella, R. (2019). A low-cost terrestrial photogrammetric system for rockfall monitoring and hazard assessment in open-pit mines. In S. A. B. da Fontoura, R. J. Rocca, & J. P. Mendoza (Eds.), *Rock Mechanics for Natural Resources and Infrastructure Development - Full Papers: Proceedings of the 14th International Congress on Rock Mechanics and Rock Engineering (ISRM 2019)* (pp. 1524-1531). Leiden, Netherlands: CRC Press.
95. **Giacomini**, A., Thoeni, K., Ferrari, F., & Lambert, C. (2018). Rockfall in Mining: mitigation measures design and hazard assessment. In *International Symposium Rock Slope Stability* (pp. 8-10). Chambery, France: C2ROP.
96. **Giacomini**, A., McCallum, R., Thoeni, K., Santise, M., Roncella, R., & Fityus, S. (2018). Monitoring of unstable rock volumes for rockfall hazard assessment. In *AGCC2018*. Adelaide, Australia: Australian Geoscience Council.
97. Jeffery, M., Lapastoure Gritchou, L., **Giacomini**, A., Griffiths, V., & Buzzi, O. (2018). Comparison of different approaches to predict the shear Strength of large rock discontinuities. In *EUROCK - Geomechanics and Geodynamics of Rock Masses* Vol. 1 (pp. 639-646). Saint-Petersburg , Russia: ISRM.
98. Tahmasbi, S., **Giacomini**, A., Wendeler, C., & Buzzi, O. (2018). 3D finite element modelling of chain-link drapery system. In *EUROCK 2018 - Geomechanics and Geodynamics of Rock Masses* Vol. 1 (pp. 917-922). Saint-Petersburg, Russia: ISRM.
99. Tahmasbi, S., **Giacomini**, A., Wendeler, C., & Buzzi, O. (2018). 3D finite element modelling of chain-link drapery system. In V. Litvinenko (Ed.), *GEOMECHANICS AND GEODYNAMICS OF ROCK MASSES* (pp. 447-451). RUSSIA, Saint Petersburg: CRC PRESS-BALKEMA.
100. Thoeni, K., Servin, M., & **Giacomini**, A. (2017). Using Non-Smooth Multi-Domain dynamics to improve the safety on haul roads in surface mining. In *5th International Conference on Particle-Based Methods - Fundamentals and Applications, PARTICLES 2017* (pp. 600-611). Barcelona, Spain: International Center for Numerical Methods in Engineering (CIMNE).
101. Tahmasbi, S., **Giacomini**, A., Buzzi, O., & Wendeler, C. (2017). Preliminary 3D modeling of chain-link TECCO mesh for rockfall protection. In *Rocexs 2017: 6th Interdisciplinary Workshop on Rockfall Protection* (pp. 1-4). Barcelona: Rocexs: Rockfall Expert Network.
102. Mentani, A., Govoni, L., **Giacomini**, A., Buzzi, O., & Gottardi, G. (2017). Calibration of an equivalent shell model for a chain-link mesh. In *Rocexs 2017: 6th Interdisciplinary Workshop on Rockfall Protection* (pp. 1-4). Barcelona: Rocexs: Rockfall Expert Network.
103. Casagrande, D., Buzzi, O., & **Giacomini**, A. (2017). A study of the scale effect influencing the shear strength of a large natural discontinuity. In *GeoOttawa 2017* (pp. 1-8). Richmond, BC: Canadian Geotechnical Society.
104. Buzzi, O., Casagrande, D., **Giacomini**, A., Lambert, C., & Fenton, G. (2017). A new approach to avoid the scale effect when predicting the shear strength of large in situ discontinuity. In *GeoOttawa 2017* (pp. 1-8). Richmond, BC: Canadian Geotechnical Society.
105. Lambert, C., McMorran, T., **Giacomini**, A., & Thoeni, K. (2017). A design approach to residual rockfall hazard of drapery systems: example from Clifton Hill, Sumner. In G. J. Alexander, & C. Y. Chin (Eds.), *Proceedings of the 20th NZGS Geotechnical Symposium*. Wellington, NZ: New Zealand Geotechnical Society.

106. Guccione, D. E., Thoeni, K., Santise, M., **Giacomini**, A., Roncella, R., & Forlani, F. (2016). The potential of low-cost RPAS for multi-view reconstruction of rock cliffs. In *Geophysical Research Abstracts* Vol. 18 (pp. 5277). Goettingen, DE: Copernicus GmbH.
107. Lambert, C., Ferrari, F., Thoeni, K., & **Giacomini**, A. (2016). Rockfall mitigation measures and design scenarios at the base of highwalls. In P. Dight (Ed.), *APSSIM 2016. Proceedings of the First Asia Pacific Slope Stability in Mining Conference* (pp. 421-434). Perth, Australia: Australian Centre for Geomechanics, ACG.
108. Thoeni, K., Ferrari, F., **Giacomini**, A., & Lambert, C. (2016). Qualitative assessment of the rockfall hazard at the base of highwalls. In *International Conference on Geo-mechanics, Geo-energy and Geo-resource*. Melbourne, AU: IC3G.
109. Thoeni, K., & **Giacomini**, A. (2016). Discrete modelling of drapery systems. In *Geophysical Research Abstracts* Vol. 18 (pp. 5257). Goettingen, DE: Copernicus GmbH.
110. Mentani, A., **Giacomini**, A., Buzzi, O., Govoni, L., Gottardi, G., & Fityus, S. (2016). Developing effective rockfall protection barriers for low energy impacts. In *Geophysical Research Abstracts* Vol. 18 (pp. 14358). Goettingen, DE: Copernicus GmbH.
111. Ferrari, F., **Giacomini**, A., Thoeni, K., & Lambert, C. (2016). Assessment of rockfall hazard in open-pit coal mines: practical application. In *Rock Slope Stability Symposium 2016* (pp. 159-160). Geneva, Switzerland: ecorisQ.
112. **Giacomini**, A., Ferrari, F., Thoeni, K., & Lambert, C. (2016). A new rapid method for rockfall energies and distances estimation. In *Geophysical Research Abstracts* Vol. 18 (pp. 5323). Gottingen, DE: Copernicus GmbH.
113. Thoeni, K., Renton, C., & **Giacomini**, A. (2016). A multirotor platform for mapping and inspecting sub-vertical rock faces. In *Geophysical Research Abstracts* Vol. 18 (pp. 5264). Goettingen, DE: Copernicus GmbH.
114. Seedsman, R., Thoeni, K., & **Giacomini**, A. (2015). Management of the rockfall hazard at the base of a highwall. In J. W. Beeston (Ed.), *Bowen Basin Symposium 2015: Bowen Basin and Beyond* (pp. 413-418). Hornsby, N.S.W.: Geological Society of Australia Coal Geology Group.
115. Thoeni, K., Fityus, S. G., **Giacomini**, A., & Vaha, J. (2015). Discrete modelling of a tilt box test for granular materials. In *Computer Methods and Recent Advances in Geomechanics - Proceedings of the 14th Int. Conference of International Association for Computer Methods and Recent Advances in Geomechanics, IACMAG 2014* (pp. 1557-1562). Boca Raton, FL: CRC Press.
116. Thoeni, K., & **Giacomini**, A. (2015). Determining the Energy absorption capacity of safety berms in surface mining. In J. W. Beeston (Ed.), *Bowen Basin Symposium 2015: Bowen Basin and Beyond* (pp. 489-496). Hornsby, N.S.W.: Geological Society of Australia Coal Geology Group.
117. Fathi Salmi, E., Nazem, M., & **Giacomini**, A. (2015). A practical method to control the formation of Sinkhole subsidence - The dolaei road tunnel case study. In *13th ISRM International Congress of Rock Mechanics* Vol. 2015- MAY (pp. 1-12).
118. Ferrari, F., **Giacomini**, A., Thoeni, K., & Lambert, C. (2015). A new rockfall hazard methodology for open-pit coal mines. In J. W. Beeston (Ed.), *Bowen Basin Symposium 2015: Bowen Basin and Beyond* (pp. 355-362). Hornsby, N.S.W.: Geological Society of Australia Coal Geology Group.
119. Effeindzourou, A., Thoeni, K., Chareyre, B., & **Giacomini**, A. (2015). A general method for modelling deformable structures in DEM. In *Particle-Based Methods IV: Fundamentals and Applications* (pp. 744-754). Barcelona, Spain: International Center for Numerical Methods in Engineering (CIMNE
120. Effeindzourou, A., Thoeni, K., **Giacomini**, A., & Sloan, S. W. (2015). A discrete model for rock impacts on muckpiles. In *Computer Methods and Recent Advances in Geomechanics - Proceedings of the 14th Int. Conference of International Association for Computer Methods and Recent Advances in Geomechanics, IACMAG 2014* (pp. 1083-1088).
121. Fityus, S., **Giacomini**, A., & Thoeni, K. (2014). The influence of shape on the inherent rolling potential of loose rocks. In *Proceedings of XII International Association of Engineering Geology Congress* (pp. 2045-2048). Torino: IAEG.
122. Thoeni, K., **Giacomini**, A., Murtagh, R., & Kniest, E. (2014). A comparison of multi-view 3D reconstruction of a rock wall using several cameras and a laser scanner. In *ISPRS: International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences* Vol. XL-5 (pp. 573-580). Hannover, Germany: ISPRS.
123. Thoeni, K., **Giacomini**, A., & Seedsman, R. (2014). Rockfall analysis for highwalls with drapery systems. In *RocExs 2014* (pp. 1). Lecco: RocExs 2014.
124. Thoeni, K., **Giacomini**, A., Lambert, C., & Sloan, S. W. (2013). Numerical investigation on the performance of a rockfall drapery system. In *Particle-Based Methods III: Fundamentals and Applications - Proceedings of the 3rd International Conference on Particle-based MethodsFundamentals and Applications, Particles 2013* (pp. 288-297).
125. Fathi Salmi, E., Nazem, M., & **Giacomini**, A. (2013). Analytical and numerical studies on the mechanism of mining subsidence. In *Computational Geomechanics, COMGEO III - Proceedings of the 3nd International Symposium on Computational Geomechanics* (pp. 726-737).
126. Thoeni, K., Lambert, C., **Giacomini**, A., Sloan, S. W., & Carter, J. P. (2013). An integrated approach for rockfall analysis with drapery systems. In *Slope Stability 2013* (pp. 1149-1159). Perth: Australian Centre for Geomechanics.
127. Hambleton, J. P., Buzzi, O. P., **Giacomini**, A., Spadari, M., & Sloan, S. W. (2012). Perforation of rockfall protection barriers by normal block impact. In A. Bobet, R. Ewy, M. Gadde, J. Labuz, L. Pyrak-Nolte, A. Tutuncu, & E. Westman (Eds.), *46th US Rock Mechanics / Geomechanics Symposium 2012* Vol. 2 (pp. 1413-1419). Red Hook, NY: American Rock Mechanics Symposium.
128. Thoeni, K., **Giacomini**, A., Lambert, C., & Sloan, S. W. (2012). Numerical and experimental investigation of a rockfall drapery system. In *Geophysical Research Abstracts* Vol. 14 (pp. 1567). Goettingen, DE: Copernicus GmbH.
129. Thoeni, K., Irschara, A., & **Giacomini**, A. (2012). Efficient photogrammetric reconstruction of highwalls in open pit coal mines. In *16th Australasian Remote Sensing and Photogrammetry Conference Proceedings* Vol. - (pp. 85-90). Melbourne, Victoria: International Society for Photogrammetry and Remote Sensing.

130. Spadari, M., De Carteret, R. S., Fityus, S. G., **Giacomini**, A., & Buzzi, O. P. (2012). Design parameters for rockfall protection barriers in the rocks of the Narrabeen Group. In G. Narsilio, A. Arulrajah, & J. Kodikara (Eds.), *11th Australian New Zealand Conference on Geomechanics Conference Proceedings* Vol. - (pp. 173-178). Melbourne, Australia: ANZ Geomechanics Conference.
131. Buzzi, O. P., **Giacomini**, A., Spadari, M., & Fityus, S. G. (2011). Numerical modeling of a rock fall mesh perforation upon impact. In N. Khalili, & M. Oeser (Eds.), *Computer Methods for Geomechanics: Frontiers and New Applications, Volume 2* Vol. 2 (pp. 1141-1146). Sydney, Australia: Centre for Infrastructure Engineering and Safety.
132. Thoeni, K., **Giacomini**, A., Sloan, S. W., Lambert, C., & Casagrande, D. (2011). Numerical analysis of rockfall hazard in open pit coal mines. In N. Khalili, & M. Oeser (Eds.), *Computer Methods for Geomechanics: Frontiers and New Applications. Volume 2* Vol. 2 (pp. 1151-1156). Sydney, Australia: Centre for Infrastructure Engineering and Safety.
133. **Giacomini**, A., Thoeni, K., Kniest, H. T., & Lambert, C. (2011). In situ experiments of rockfall in an open pit coal mine. In E. Eberhardt, & D. Stead (Eds.), *Proceedings, Slope Stability 2011: International Symposium on Rock Slope Stability in Open Pit Mining and Civil Engineering* (pp. 1-11). Vancouver, BC: Canadian Rock Mechanics Association.
134. Thoeni, K., Lambert, C., **Giacomini**, A., & Sloan, S. W. (2011). Discrete modelling of a rockfall protective system. In E. Onate, & D. R. J. Owen (Eds.), *Proceedings of the II International Conference on Particle -Based Methods Fundamentals and Applications: Particles 2011* (pp. 1-9). Barcelona: International Center for Numerical Methods in Engineering.
135. Thoeni, K., Lambert, C., **Giacomini**, A., & Sloan, S. W. (2011). Discrete modelling of a rockfall protective system. In *Particle-Based Methods II - Fundamentals and Applications* (pp. 24-32).
136. Fityus, S. G., Spadari, M., **Giacomini**, A., & Buzzi, O. P. (2010). The characteristics of rock fragments in the basalts of eastern Australia. In *Proceedings of the 11th International Association of Engineering Geology Congress* (pp. 2899-2907). Auckland, New Zeeland: New Zealand Technical Society.
137. **Giacomini**, A., Spadari, M., Buzzi, O. P., Fityus, S. G., & Giani, G. P. (2010). Rockfall motion characteristics on natural slopes of eastern Australia. In J. Zhao, V. Labiouse, J. P. Dudt, & J. F. Mathier (Eds.), *Rock Mechanics in Civil and Environmental Engineering* (pp. 621-624). Boca Raton, FL: CRC Press.
138. Lisjak, A., Spadari, M., **Giacomini**, A., & Graselli, G. (2010). Rock fall numerical modelling using a combined finite-discrete element approach. In *RSS2010: Symposium Rock Slope Stability* Vol. - (pp. 1-10). Paris: RSS2010.
139. **Giacomini**, A., Spadari, M., Fityus, S. G., & Buzzi, O. P. (2010). Experimental study on the rockfall motion characteristics in the basalts of eastern Australia. In *Proceedings of the 11th International Association of Engineering Geology Congress* (pp. 2937-2945). Auckland, New Zeeland: New Zealand Technical Society.
140. Lambert, C., Buzzi, O. P., & **Giacomini**, A. (2009). DEM study of the mechanical behavior of a leached interface upon shearing. In M. Diederichs, & G. Grasselli (Eds.), *Rock Engineering in Difficult Conditions: 3rd Canada-US Rock Mechanics Symposium & 20th Canadian Rock Mechanics Symposium: Abstracts* Vol. - (pp. 79-80). Toronto, ONT: ROCKENG09.
141. Buzzi, O., **Giacomini**, A., & Fityus, S. (2008). A dimensionless model for soil swelling behaviour. In *IACMAG*. Goa, India.
142. **Giacomini**, A., Giani, G. P., & Migliazza, M. (2008). Quasi-Static and dynamic response of energy dissipators for rockfall protection. In Y. Potvin, J. Carter, A. Dyskin, & R. Jeffrey (Eds.), *Proceedings of SHIRMS 2008 :1st Southern Hemisphere International Rock Mechanics Symposium 2008* Vol. 1 (pp. 471-480). Nedlands, WA: Australian Centre for Geomechanics.
143. Lambert, C., Buzzi, O. P., & **Giacomini**, A. (2008). Modelling the mechanical behaviour of leached interface. In B. A. Schrefler, & U. Perego (Eds.), *WCCM8, ECCOMAS 2008* (pp. 1-2). Barcelona, Spain: CIMNE.
144. **Giacomini**, A., Buzzi, O., & Krabbenhoft, K. (2008). Modelling the asperity degradation of a sheared rock joint using FEM.. In *8th World Congress on Computational Mechanics*. Venice, Italy.
145. **Giacomini**, A., Buzzi, O. P., & Krabbenhoft, K. (2008). Modelling the asperity degradation of a sheared rock joint using FEM. In B. A. Schrefler, & U. Perego (Eds.), *WCCM8, ECCOMAS 2008* (pp. 1-2). Barcelona, Spain: CIMNE.
146. Buzzi, O. P., **Giacomini**, A., & Fityus, S. G. (2008). A dimensionless model for soil swelling behaviour. In *Proceedings of the 12th International Conference of International Association for Computer Methods and Advances in Geomechanics (IACMAG)* Vol. - (pp. 638-644). Mumbai, India: IACMAG.
147. **Giacomini**, A., Giani, G. P., & Mari, F. (2007). A study on the behaviour of a railway embankment: In-situ monitoring and numerical analysis. In *Proceedings of the 10th International Symposium on Numerical Models in Geomechanics NUMOG 10 - Numerical Models in Geomechanics NUMOG 10* (pp. 595-601).
148. **Giacomini**, A., Mari, F., & Giani, G. P. (2007). Study on the behaviour of a new railway embankment: experimental monitoring data and numerical 2d analysis. In *International Symposium on Numerical Models in Geomechanics*. Rhodes, Greece.
149. **Giacomini**, A., Ferrero, A. M., & Giani, G. P. (2005). Study on the rock discontinuity shear resistance by experimental test and numerical 3D analysis. In *11th International Conference of IACMAG*. Torino Italy.
150. Giani, G. P., **Giacomini**, A., Migliazza, M., & Segalini, A. (2005). Metodologia progettuale per la scelta e il dimensionamento di opere di difesa da caduta di massi. In - Vol. -. -: Associazione Georisorse e Ambiente.
151. **Giacomini**, A., Ferrero, A. M., & Giani, G. P. (2004). Studi sperimentali e modelli numerici per la previsione della resistenza a taglio di discontinuit naturali in roccia. In *IARG 2004 - Incontro Annuale dei Ricercatori di Geotecnica*. Trento.
152. Ferrero, A. M., **Giacomini**, A., & Giani, G. P. (2004). Analisi dei tipi di intervento in relazione alle caratteristiche dei fenomeni franosi: il caso di Campione del Garda. In - Vol. - (pp. 45-65). -.
153. Giani, G. P., **Giacomini**, A., Migliazza, M., Segalini, A., & Tagliavini, S. (2002). Rock Fall in situ observations, Analysis and protection works. In *International Symposium on Landslide Risk Mitigation and Protection of cultural and natural heritage* (pp. 85-96). Kyoto University, Kyoto, Japan.

154. **Giacomini**, A., Iori, I., & Royer-Carfagni, G. (2001). Comportamento meccanico di pannelli in marmo costituenti il rivestimento di un importante edificio storico. In *IARG 2001, Incontro Annuale dei Ricercatori di Geotecnica*. Milano.
155. **Giacomini**, A., Iori, I., & Royer-Carfagni, G. (2001). A micro-mechanical model for the granular decohesion of marble. In *Eurock 2001 Conference*. Espoo, Finland.
156. Giani, G. P., **Giacomini**, A., Migliazza, M., & Segalini, A. (2000). Validazione di modelli previsionali del moto di caduta massi in frane di crollo. In *Congress on Opere di difesa da caduta massi GEAM* (pp. 5-12). Siusi (BZ).
157. **Giacomini**, A., Giani, G. P., Migliazza, M., & Segalini, A. (2000). Confronto tra prove quasi statiche e dinamiche di assorbimento di energia di strutture di protezione. In *Unknown Conference* (pp. 81-88).
158. **Giacomini**, A., Giani, G. P., & Migliazza, M. (2000). Analisi dei fenomeni di crollo verificatisi in cave di marmo delle Alpi Apuane per la determinazione dei parametri geomeccanici da impiegare per la progettazione della coltivazione. In *Congress on Le cave di pietre ornamentali GEAM* (pp. 145-150). Torino Italy.

Reports (peer reviewed and published)

159. **Giacomini, A**., Thoeni, K., Hartmann, P., Senanayake, I., & Huang, J. (2023). *Feasibility Study to Use Machine Learning for Rockfall Analysis: Stage 1* (C33040). ACARP.
160. Crumpton, M., Kouretzis, G., & **Giacomini, A**. (2023). *User Friendly Computer Program for Modelling Fracture Induced Instabilities in Underground Mining Environments* (C34012). ACARP.
161. Thoeni, K., Guccione, D., **Giacomini, A**., & Roncella, R. (2023). *Low-cost terrestrial stereo-pair photogrammetric monitoring system for highly hazardous areas* (C29050). ACARP.
162. Rubin, M., Allen, R., Giacomini, A., & Kelly, B. (2022). *Reducing Risk-Taking Among Australian Miners* (C25026). ACARP.
163. **Giacomini**, **A**., Kouretzis, G., & Crumpton, M. (2022). *Modelling the onset of fracture-induced instabilities for underground mining operations* (C29008). ACARP.
164. **Giacomini**, **A**., Buzzi, O., Fityus, S., Elmouttie, M., Hodgkinson, J., & Dean, P. (2021). *Predicting the Impact of Complex Joint Structures on Mine Operations* (C27011). ACARP.
165. Thoeni, K., & **Giacomini, A**. (2017). *Energy Absorption Capacity of Muck Piles and their Status as Engineered Hard Barriers Stage Two* (C21032).
166. **Giacomini**, **A**., Ferrari, F., Thoeni, K., & Lambert, C. (2016). *Rockfall Hazard Matrix for Risk Reduction in Mine Sites* (C23026). ACARP.
167. Allemand, J., Elmouttie, M., **Giacomini, A**., & Thoeni, K. (2016). Recommendations on the use of Terrestrial Laser Scanning and 3D Photogrammetry for mine highwall stability analysis (CSIRO Report EP162646 TRIM P2016/5).
168. Thoeni, K., & Giacomini, A. (2014). Energy Absorption Capacity of Muck Piles and their Status as Engineered Hard Barriers (C21032). Brisbane, QLD: ACARP.
169. Spadari, M., **Giacomini, A**., Buzzi, O., & Fityus, S. (2013). Barriers for Cost Effective Rockfall Hazard Mitigation (LP0989965). Australia.
170. **Giacomini**, A., Lambert, C., & Thoeni, K. (2012). *Improved Management of the Rock Fall Hazard at the Base of the Highwalls* (C19026). Brisbane, Australia.