Grigorios K. Tsinidis Assistant Professor Dept. of Civil Engineering, University of Thessaly



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1.Personal Information / Contact Information

Date of Birth 11th July 1984

Place of Birth Thessaloniki, Greece

Address Dept. of Civil Engineering, University of Thessaly, Pedion Areos, GR-

38334, Volos, Greece

Office Tel. +30 24210 7 4163

Email gtsinidis@uth.gr

Webpages SCOPUS ID: <u>55959529700</u>

ORCID ID: <u>0000-0001-6045-1039</u>

ResearchGate: <u>Grigorios Tsinidis</u>

Google Scholar: Grigorios Tsinidis

ResearcherID: B-2257-2018

Research project INFRARES: https://www.infrares.gr/

2.Education		
PhD in Civil Engineering		
Dept. of Civil Engineering, Aristotle University of Thessaloniki		
PhD thesis: On the seismic behaviour and design of tunnels		
MSc in Earthquake Engineering and Seismic Design of Structures		
Dept. of Civil Engineering, Aristotle University of Thessaloniki		
Mark: 8.66/10 (distinction)		
Diploma in Civil Engineering		
Dept. of Civil Engineering, Aristotle University of Thessaloniki		
Mark: $8.32/10$ (1^{st} class Hons, ranking: 1^{st} in class out of 180 students)		

3.Academic / Research Positions					
01/2022 -	Assistant Professor				
	Dept. of Civil Engineering, University of Thessaly, Greece. Assistant Professor in Computational Geotechnical Engineering & Soil-Structure Interaction				
2020 – 12/2021	Postdoctoral Research Associate				
	Department of Civil Engineering, Faculty of Engineering, Aristotle University of Thessaloniki. Principal Investigator of research project: <u>INFRARES</u> - Towards resilient transportation infrastructure in a multi-hazard environment				
11/2017 – 02/2019	Postdoctoral Research Associate				
	Vienna Consulting Engineers ZT GmbH, <u>VCE</u> , Austria, seconded by the School of Engineering of the University of Sannio, Italy, in the frame of research project H2020-MSCA-RISE: Experimental & Computational Hybrid Assessment of Natural Gas Pipelines Exposed to Seismic Risk				
09/2017 - 11/2017	Postdoctoral Research Associate				
	University of Sannio, School of Engineering, Benevento, Italy				
09/2016 - 08/2017	Postdoctoral Research Associate - IKY-Siemens Fellow				
	Research Unit of Soil Dynamics and Geotechnical Earthquake Engineering (SDGEE), AUTh, Greece. PI of project: Investigation of open issues of the seismic behavior of shallow tunnels in urban areas				
08/2015 - 09/2016	Postdoctoral Research Associate				
	Research Unit of Soil Dynamics and Geotechnical Earthquake Engineering (SDGEE), AUTh, Greece. Participation in research projects of the research unit (Section 5)				
01/2010 - 07/2015	Research Associate - Graduate Student Researcher				
	Research Unit of Soil Dynamics and Geotechnical Earthquake Engineering (SDGEE), AUTh, Greece. Participation in research projects of the research unit (Section 5)				

4. Research Interests / Examined Topics

- Computational geotechnical engineering
- Investigation of soil-structure interaction (SSI) by means of numerical studies and physical modelling of soil-structure systems (dynamic centrifuge testing and large-scale testing)
- Geotechnical earthquake engineering
- Design of underground structures & tunnels
- Response, design and vulnerability assessment of underground structures, bridges, and monumental assets under static and seismic loadings
- Seismic response and fragility assessment of natural gas pipelines
- Risk & resilience assessment of critical elements (i.e., bridges, tunnels) of roadway networks against multiple natural hazards

5. Research Experience

Principal Investigator in Research Projects

- <u>INFRARES</u> (2020-2023): INFRARES: Towards resilient transportation infrastructure in a multi-hazard environment. Funding: Hellenic Foundation for Research & Innovation (Ref: 927). Grant won: €197000
- IKY-SIEMENS (2016-2017): Investigation of open issues of the seismic behavior of shallow tunnels in urban areas. Research Grant / Scholarship for postdoctoral research, funded by Siemens and the State Scholarships Foundation of Greece. Grant won: €18000

Participation in research projects (as member of the research team)

- <u>EXCHANGE-RISK</u> (2015-2019) Experimental & Computational Hybrid Assessment of Natural Gas Pipelines Exposed to Seismic Risk. H2020-MSCA-RISE. Funding: EC-H2020 (Ref: 691213).
- <u>STREST</u> (2013-2016): Harmonized Approach to Stress Tests for Critical Infrastructures Against Natural Hazards. Funding: EC-FP7 (Ref: 603389).
- RARE (2013-2015): Development of Earthquake Rapid Response System for Metropolitan Motorways. Funding: General Secretariat for Research and Technology. GSRT, Greece
- <u>UPGRADE</u> (2012-2015): Contemporary Evaluation Methodology of Seismic Vulnerability and Upgrade of Port Facilities. Funding: Ministry of Education, Greece.
- <u>TUNNELSEIS</u> (2011-2012): Investigation of Several Aspects Affecting the Seismic Behaviour of Shallow Rectangular Underground Structures in Soft Soils. Funding: EC-FP7 (Ref: 227887).
- <u>DRESBUS II</u> (2011-2012): Investigation of the Seismic Behaviour of Shallow Rectangular Underground Structures in Soft Soils Using Centrifuge Experiments. Funding: EC-FP7 (Ref: 227887).
- <u>REAKT</u> (2011-2014): Strategies and Tools for Real Time Earthquake Risk Reduction. Funding: EC-FP7 (Ref: 282862).
- RRTT (2011-2013) Round Robin Numerical Test on Tunnels under Seismic Loading. Research task carried out under the auspice of the technical committees TC104, TC203, TC204 of ISSMGE.

- <u>NERA</u> (2010-2014): Network of European Research Infrastructures for Earthquake Risk Assessment and Mitigation. Funding: EC-FP7 (Ref: 262330).
- <u>PERPETUATE</u> (2010-2013): Performance-Based Approach to Earthquake Protection of Cultural Heritage in European and Mediterranean Countries. Funding: EC-FP7 (Ref: 244229).
- <u>SERIES</u> (2009-2013): Seismic Engineering Research Infrastructures for European Synergies. Funding: EC-FP7 (Ref: 227887).
- <u>SYNER-G</u> (2009-2012): Systemic Seismic Vulnerability and Risk Analysis for Buildings, Lifeline Networks, and Infrastructures Safety Gain. Funding: EC-FP7 (Ref: 244061).

6. Reviewing Responsibilities

International Scientific Journals

Reviewer of more than 110 submitted to 26 international scientific journals:

- Géotechnique, ICE Publishing
- Journal of Geotechnical and Geoenvironmental Engineering, ASCE
- Tunnelling and Underground Space Technology, Elsevier
- Computers and Geotechnics, Elsevier
- Canadian Geotechnical Journal, NCR research press
- Soils and Foundations, Japanese Geotechnical Society & Elsevier
- Geomechanics and Engineering, ASCE
- International Journal of Geomechanics, ASCE
- Bulletin of Engineering Geology and the Environment, Springer
- Geotechnical and Geological Engineering, Springer
- Underground Space, Elsevier
- International Journal for Numerical and Analytical Methods in Geomechanics, Wiley
- Engineering Structures, *Elsevier*
- Journal of Bridge Engineering, ASCE
- Earthquake Engineering & Structural Dynamics, Wiley
- Bulletin of Earthquake Engineering, Springer
- Soil Dynamics and Earthquake Engineering, Elsevier
- Journal of Earthquake Engineering, *Taylor & Francis*
- Earthquake Engineering and Engineering Vibration, Springer
- International Journal or Disaster Risk Reduction, Elsevier
- Sensors, MDPI
- Structures, Elsevier
- European Journal of Environmental and Civil Engineering, Taylor & Francis
- Journal of Testing and Evaluation, ASTM International
- Structural Engineering International. Journal of the International Association for Bridge and Structural Engineering (IABSE), *Taylor & Francis*
- Ingegneria Sismica International Journal of Earthquake Engineering, Patron editore

International Conferences

- 1st Mediterranean Young Geotechnical Engineers Conference, Turkey, Sep 2019
- 16th European Conference on Earthquake Engineering, Thessaloniki, Greece, Jun 2018
- 6th International Conference on Earthquake Geotechnical Engineering, Christchurch, New Zealand, Nov 2015

7.Research Grant Evaluator

Research Grant Reviewer/Evaluator for the following Authorities:

- Chilean National Commission for Scientific and Technological Research (CONICYT) 2017-2018
- Natural Sciences and Engineering Research Council of Canada (NSERC) 2021

8.Additional Scientific Activities

prEN 1998-5:2019

- 10/2017 to date: Support Prof. Kyriazis Pitilakis (AUTh) in drafting of chapter 11 and annexes H, I, J, K, L of the new version of Eurocode 8, part 5, 'Eurocode 8 Design of structures for earthquake resistance Part 5: Geotechnical aspects, Foundations, Retaining and Underground Structures', referring to the seismic design of tunnels and underground structures
- 04/2020: Support Prof. Kyriazis Pitilakis (AUTh) in drafting the sections of Background Document of prEN1998-5:2019, referring to the seismic design of tunnels and underground structures.

Member of the Scientific Committees of International Conferences

• 09/2019: Member of the Scientific Committee of the 1st Mediterranean Young Geotechnical Engineers Conference (MYGEC) organized under the auspices of Turkish Geotechnical Society and the International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE), held in Bodrum, Turkey in 23-24th Sep 2019

9. Distinctions, Fellowships, Travel grants and Recognition of Scientific Work

08/2021 (12/2021)

Included in the Stanford list 'Updated science-wide author databases of standardized citation indicators 2021', (Baas J, Boyack K, Ioannidis JPA (2021), August 2021 data-update for "Updated science-wide author databases of standardized citation indicators", Mendeley Data, V3, doi: 10.17632/btchxktzyw.3) with Researchers selected based on the top 100,000 by c-score (with and without self-citations) or a percentile rank of 2% or above – Among the 140 Fellows from the Aristotle University of Thessaloniki, Greece, listed: Press release (in Greek)

04/2019 - 09/2020

Self-authored publication, entitled: 'Response characteristics of rectangular tunnels in soft soil subjected to transversal ground shaking', ranked among the **most cited publications** published in Journal: Tunnelling and Underground Space Technology between 2017-2019

04/2020 – 09-2020	Publication, entitled: 'Effects of SSI and lining corrosion on the seismic vulnerability of shallow circular tunnels', ranked among the most cited publications published in Journal: Soil Dynamics and Earthquake Engineering between 2017-2019
09/2017 - 10/2017	Scholarship for a short postdoctoral project by the University of Sannio, Italy. Topic: Seismic vulnerability of steel gas pipelines
04/2017	Seal of Excellence by the European Commission for the MSCA project proposal <i>ReFoundBridges</i> , submitted within call H2020-MSCA-IF-2016, recognizing the proposal as a high-quality one
09/2016 - 08/2017	Research Grant / Scholarship for postdoctoral research, funded by Siemens and the State Scholarships Foundation of Greece. Topic: Seismic response of shallow tunnels in urban areas. Grant won: €18000
2012 - 2013	Excellence Scholarship by the Research Committee of the Aristotle University of Thessaloniki, Greece, for PhD studies
09/2012	Award by the Technical Chamber of Greece (TEE) for excellence in undergraduate studies (ranking $1^{\rm st}/180$ students)
2011 - 2012	Travel Grant within TUNNELSEIS project, covering the travel, accommodation, and subsistence costs for four visits to the University of Cambridge, UK (duration: two months in total)
11/2011	Travel Grant within DRESBUS II project, covering the travel and accommodation costs for a visit to the <i>Institut Français des Sciences et Technologies des Transports, de l'Aménagement et des Réseaux IFSTTAR</i> in Nantes, France (duration: one week)
2009 - 2010	Scholarship by the Bodossaki Public Benefit Foundation for PhD studies
11/2008	Award/Prize by the State Scholarships Foundation of Greece (IKY) for excellence in postgraduate studies
11/2007	Award by the alumni association of the School of Civil Engineering, AUTh, for excellence in undergraduate studies
11/2004, 11/2003	Awards by the State Scholarships Foundation of Greece (IKY) for excellence during first and second years of studies

02/2022 -	Department of Civil Engineering, University of Thessaly (Assistant Professor)		
	Undergraduate courses:		
	Computational Geotechnical Engineering		
2010 - 2016	Department of Civil Engineering, Aristotle University of Thessaloniki (Teaching Assistant) Undergraduate courses:		
	 Engineering Seismology and Soil Dynamics 		

Engineering Seismology and Soil Dynamics

Graduate courses:

Earthquake-resistant Design of Foundations, Retaining Walls and Earth Structures

(MSc program: Earthquake Engineering and Seismic Design of Structures)

2010 - 2016

Research theses advisor for 16 undergraduate, graduate and ERASMUS students of the Dept. of Civil Engineering of the Aristotle University of Thessaloniki

11.Invited Lectures

- 11/2020 Invited lecture in webinar entitled: *Modernes Erdbebeningenieurwesen: Gegenwart & Zukunft Modern Earthquake Engineering: Present & Future*, on Nov 19th, 2020. Event under the auspices of the Technical Chamber of Austria (Österreichischer Ingenieur- und Architekten- Verein) and companies FCP/VCE.
- 05/2017: Invited lectures in the framework of the MSc program: <u>Master Tunnelling</u> of Politechnico di Milano. Title: *Case studies examples on seismic design and vulnerability assessment of tunnels*
- 03/2012, 03/2014: Invited lectures in the framework of the <u>ATHENS</u> training programme. Title: *Principles for the seismic design and vulnerability assessment of metro tunnels*

12. Work & Consulting Experience

2019 - 2020 Civil Engineer/Consultant, Fritsch, Chiari & Partner ZT GmbH FCP / Vienna Consulting

Engineers ZT GmbH, <u>VCE</u> (Austria)

Involvement in studies of departments: CC Geotechnics & natural hazards (CC Geotechnik & Naturgefahren), CC Structural design (CC Hochbau Tragwerkplannung), CC Acoustics, dynamics, building physics, measurement & instrumentation (CC Akustik, Baudynamik, Bauphysik & Messtechnik), CC Structural monitoring (CC Baumonitoring)

2010 - 2017 Freelancer professional chartered Civil Engineer (Technical Chamber of Greece, TEE).

13. Professional Affiliations

- International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE), since 2014
- Hellenic Society of Soil Mechanics and Geotechnical Engineering (HSSMGE), since 2014
- Hellenic Society of Earthquake Engineering (ETAM), since 2011
- Professional Society of Engineers, Greece (TEE), since 2009

14.Laboratory & Field-testing Experience

- Core member of the research team of the project <u>TUNNELSEIS</u>. Actively participated in write-up of the research proposal, as well as the design and compilation of the three dynamic centrifuge tests on square tunnels in sand, carried out at the *University of Cambridge*. Performed all the post-processing of the experimental data and analyzed numerically representative test cases. Received a Travel/research grant to visit University of Cambridge and run the tests (total duration of stay: two months) (2011-2012)
- Core member of the research team of the transnational access project <u>DRESBUS II</u>. Actively participated in write-up of the research proposal, as well as the design of the eight dynamic centrifuge tests on square tunnels embedded in dry or saturated sand conducted at the geotechnical centrifuge facility of *Institut Français des Sciences et Technologie des Transports, de l'Amménagement et des Réseaux (IFSTTAR)*.

- Performed all the post-processing of the experimental data and analyzed numerically representative test cases. Received a Travel/research grant to visit IFSTTAR during December 2011 to discuss the design of the tests with Fellows from IFSTTAR (2011-2012)
- Involvement in the compilation and numerical analysis of free- and forced-vibration tests conducted on a real-scale SDOF structure (<u>EUROPROTEAS</u>), with outer dimensions 3 × 3 × 5 (m), at <u>EUROSEISTEST</u> test site, within the <u>SERIES</u> research project, aiming at the field investigation of soil-foundation-structure interaction effects (2010)

15. Scientific Publications

Dissertations – Post Doc Reports

- D4. Tsinidis G (2017) Investigation of open issues of the seismic behaviour of shallow tunnels in urban areas. Μεταδιδακτορική Εργασία. Post Doc final report. Research Unit of Soil Dynamic and Geotechnical Earthquake Engineering, School of Civil Engineering, Faculty of Engineering, AUTh
- D3. Tsinidis G (2015) On the Seismic behaviour and design of tunnels. PhD thesis. Research Unit of Soil Dynamic and Geotechnical Earthquake Engineering, School of Civil Engineering, Faculty of Engineering, AUTh
- D2. Tsinidis G (2008) Seismic design of immersed tunnels The Thessaloniki underwater artery. MSc thesis. Research Unit of Soil Dynamic and Geotechnical Earthquake Engineering, School of Civil Engineering, Faculty of Engineering, AUTh (in collaboration with Avgerinos Chalatis, Dipl.-Eng., MSc)
- D1. Tsinidis G (2007) Design of bridges with pre-fabricated beams based on the DIN Fachbericht standards. Diploma thesis. Laboratory of Reinforced Concrete and Masonry Structures, School of Civil Engineering, Faculty of Engineering, AUTh (in collaboration with Avgerinos Chalatis, Dipl.-Eng., MSc)

Articles in Peer-Reviewed Scientific Journal

- J21. Huang Z-K, Argyroudis S, Pitilakis K, Zhang D-M, **Tsinidis G** (2021) Fragility assessment of tunnels in soft soils using artificial neural networks. *Underground Space* (In press) (IF: 2.824) (<u>J21</u>)
- J20. Huang Z-K, Pitilakis K, Argyroudis S, **Tsinidis G**, Zhang D-M (2020) Selection of optimal intensity measures for fragility assessment of circular tunnels in soft soil deposits. *Soil Dynamics and Earthquake Engineering*, 145:106724 (5-year IF: 3.888) (J20)
- J19. **Tsinidis G**, De Silva F, Anastasopoulos I, Bilotta E, Bobet A, Hashash YMA, He C, Kampas G, Knappett J, Madabhushi G, Nikitas N, Pitilakis K, Silvestri F, Viggiani G, Fuentes R (2020) Seismic behavior of tunnels: From experiments to analysis. *Tunnelling and Underground Space Technology*, 99:103334 (5-year IF: 6.255) (J19)
- J18. Huang Z-K, Pitilakis K, **Tsinidis G**, Argyroudis S, Zhang D (2020) Seismic vulnerability of circular tunnels in soft soil deposits: The case of Shanghai metropolitan system. *Tunnelling and Underground Space Technology*, 98:103341 (5-year IF: 6.255) (J18)
- J17. **Tsinidis G**, Di Sarno L, Sextos A, Furtner P (2020) Optimal intensity measures for the structural assessment of buried steel natural gas pipelines due to seismically-induced axial compression at geotechnical discontinuities. *Soil Dynamics and Earthquake Engineering*, 137:106030 (5-year IF: 3.888) (J17)

- J16. **Tsinidis G**, Di Sarno L, Sextos A, Furtner P (2020) Seismic fragility of buried steel natural gas pipelines due to axial compression at geotechnical discontinuities. *Bulletin of Earthquake Engineering*, 18:837-906 (5-year IF: 3.773) (J16)
- J15. **Tsinidis G**, Di Sarno L, Sextos A, Furtner P (2019) A critical review on the vulnerability assessment of natural gas pipelines subjected to seismic wave propagation. Part 2: Pipe analysis aspects. *Tunnelling and Underground Space Technology*, 92:103056 (5-year IF: 6.255) (<u>J15</u>)
- J14. **Tsinidis G**, Di Sarno L, Sextos A, Furtner P (2019) Critical review on the vulnerability assessment of natural gas pipelines subjected to seismic wave propagation. Part 1: fragility relations and implemented seismic intensity measures. *Tunnelling and Underground Space Technology*, 86:279-296 (5-year IF: 6.255) (J14)
- J13. **Tsinidis G**, Papantou M, Mitoulis S (2019) Response of integral abutment bridges under a sequence of cyclic thermal loading and seismic shaking. *Earthquakes & Structures*, 16(1):11-28 (IF: 2.018) (<u>J13</u>)
- J12. **Tsinidis G** (2018) Response of urban single and twin circular tunnels subjected transversal ground seismic shaking. *Tunnelling and Underground Space Technology*, 76:177-193 (5-year IF: 6.255) (J12)
- J11. **Tsinidis G**, Pitilakis K (2017) Improved *R-F* relations for the transversal seismic analysis of rectangular tunnels. *Soil Dynamics and Earthquake Engineering*, 107:48-65 (5-year IF: 3.888) (J11)
- J10. Pitilakis K, **Tsinidis G**, Karafagka S (2017) Analysis of the seismic behavior of classical multi-drum and monolithic columns. *Bulletin of Earthquake Engineering*, 15(12): 5287-5307 (5-year IF: 3.773) (J10)
- J9. Argyroudis S, **Tsinidis G**, Gatti F, Pitilakis K (2017) Effects of SSI and lining corrosion on the seismic vulnerability of shallow circular tunnels. *Soil Dynamics and Earthquake Engineering*, 98:244-256 (5-year IF: 3.888) (J9)
- J8. **Tsinidis G** (2017) Response characteristics of rectangular tunnels in soft soil subjected to transversal ground shaking. *Tunnelling and Underground Space Technology*, 62:1-22 (5-year IF: 6.255) (J8)
- J7. **Tsinidis G**, Pitilakis K, Madabhushi G (2016) On the dynamic response of square tunnels in sand. *Engineering Structures*, 125:419-437 (5-year IF: 4.795) (J7)
- J6. **Tsinidis G**, Rovithis E, Pitilakis K, Chazelas J-L (2016) Seismic response of box-type tunnels in soft soil: Experimental and numerical investigation. *Tunnelling and Underground Space Technology*, 59:199-214 (5-year IF: 6.255) (J6)
- J5. **Tsinidis G**, Pitilakis K, Anagnostopoulos C (2016) Circular tunnels in sand: Dynamic response and efficiency of seismic analysis methods at extreme lining flexibilities. *Bulletin of Earthquake Engineering*, 14(10):2903-2929 (5-year IF: 3.773) (J5)
- J4. **Tsinidis G**, Heron C, Madabhushi G, Pitilakis K (2016) Calibration of strain gauged square tunnels for centrifuge testing. *Geotechnical and Geological Engineering*, 34(3):911-921 (SJR: 0.512) (J4)
- J3. **Tsinidis G**, Pitilakis K, Madabhushi G, Heron C (2015) Dynamic response of flexible square tunnels: Centrifuge testing and validation of existing design methodologies. *Géotechnique*, 65(5):401-417 (5-year IF: 5.967) (<u>J3</u>)
- J2. Pitilakis K, **Tsinidis G**, Leanza A, Maugeri M (2014) Seismic behaviour of circular tunnels accounting for above ground structures interaction effects. *Soil Dynamics and Earthquake Engineering*, 67:1-15 (5-year IF: 3.888) (J2)
- J1. **Tsinidis G**, Pitilakis K, Trikalioti AD (2014) Numerical simulation of round robin numerical test on tunnels using a simplified kinematic hardening model. *Acta Geotechnica*, 9(4):641-659 (5-year IF: 5.942) (<u>J1</u>)

* Impact Factors are updated based on relevant data for 2021-2022.

Book Chapters in Collective Volumes

- B6. **Tsinidis G**, Pitilakis K, Madabhushi G, Heron C (2015) Dynamic response of flexible square tunnels: Centrifuge testing and validation of existing design methodologies. In: Haigh S (Ed), *Geotechnical Earthquake Engineering*, ICE Publishing, pp: 71-87 (B6)
- B5. **Tsinidis G**, Heron C, Pitilakis K, Madabhushi G (2015) Centrifuge modelling of the dynamic behavior of square tunnels in sand. In: Taucer F, Apostolska R (Eds), *Experimental Research in Earthquake Engineering*. *Geotechnical and Geological Earthquake Engineering*, 35, Springer, Switzerland, pp: 509-523 (B5)
- B4. **Tsinidis G**, Rovithis E, Pitilakis K, Chazelas J.L. (2015) Dynamic response of shallow rectangular tunnels in sand by centrifuge testing. In: Taucer F, Apostolska R (Eds), *Experimental Research in Earthquake Engineering*. *Geotechnical and Geological Earthquake Engineering*, 35, Springer, Switzerland, pp: 493-507 (B4)
- B3. Pitilakis K, **Tsinidis G** (2014) Performance and seismic design of underground structures. In: Maugeri M, Soccodato C (Eds), *Earthquake Geotechnical Engineering Design. Geotechnical and Geological Earthquake Engineering*, 28, Springer, Switzerland, pp: 279-340 (<u>B3</u>)
- B2. **Tsinidis G**, Heron C, Pitilakis K, Madabhushi G (2014) Physical modeling for the evaluation of the seismic behavior of square tunnels. In: Ilki A, Fardis M. (Eds), *Seismic Evaluation and Rehabilitation of Structures, Geotechnical and Geological Earthquake Engineering*, 26, Springer International Publishing, Switzerland, pp: 389-406 (B2)
- B1. Pitilakis K, **Tsinidis G**, Chalatis A (2014) Shallow immersed rectangular tunnel in soft soils. In: ISO/TR 12930:2014 Seismic design examples based on ISO 23459. ISO, Switzerland (<u>B1</u>)

Papers in Peer-reviewed International Conference Proceedings

- C24. Karatzetzou A, Stefanidou S, Stefanidis S, **Tsinidis G**, Pitilakis D (2021) towards a unified seismic- flood-hazard model for risk assessment of roadway networks in Greece. 8th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN 2019), 27-30 Jun 2021, Athens, Greece
- C23. **Tsinidis G**, Di Sarno L, Sextos A, Furtner P (2019) A numerical methodology for the fragility assessment of buried steel pipelines subjected to axial compression strains induced by seismic wave propagation. 2nd

 International Conference on Natural Hazards & Infrastructure, 23-26 Jun 2019, Chania, Greece
- C22. Huang ZK, Zhang DM, Pitilakis K, **Tsinidis G**, Argyroudis S (2019) Seismic fragility curves of shallow tunnels in Shanghai. 2nd International Conference on Natural Hazards & Infrastructure, 23-26 Jun 2019, Chania, Greece
- C21. Lončarević D, **Tsinidis G**, Pitilakis D, Bilotta E, Silvestri F (2019) Numerical study of dynamic structure-soil-tunnel interaction for a case of the Thessaloniki Metro. *7th International Conference on Earthquake Geotechnical Engineering*, 17-20 Jun 2019, Roma, Italy
- C20. **Tsinidis G**, Di Sarno L, Sextos A, Psyrras N, Furtner P (2018) On the numerical simulation of the response of gas pipelines under compression. *9*th *International Conference on Advances in Steel Structures, ICASS'2018*, 5-7 Dec 2018, Hong Kong, China

- C19. **Tsinidis G**, Pitilakis K (2018) Towards the improvement of the R-F method for the seismic analysis of rectangular tunnels. *16th European Conference on Earthquake Engineering*, 18-21 Jun 2018, Thessaloniki, Greece
- C18. Karafagka S, **Tsinidis G**, Ntinoudi O, Pitilakis K (2018) Efficient intensity measures for the seismic assessment of free-standing columns and collonades. *16th European Conference on Earthquake Engineering*, 18-21 Jun 2018, Thessaloniki, Greece
- C17. Pitilakis K, **Tsinidis G** (2017) On the transversal seismic response and analysis of shallow rectangular and circular tunnels. 3rd International Conference on Performance Based Design in Earthquake Geotechnical Engineering, 16-19 Jul 2017, Vancouver, Canada
- C16. Pitilakis K, **Tsinidis G** (2016) Recent advances on the seismic behavior and design of tunnels. *Conference in Honour of Professor Michele Maugeri*, 1 Jul 2016, Catania, Italy
- C15. **Tsinidis G**, Pitilakis K, Mantikas G (2016) Deformation patterns of rectangular tunnels in soft soils subjected to ground shaking. *1st International Conference on Natural Hazards & Infrastructure*, 28-30 Jun 2016, Chania, Greece
- C14. **Tsinidis G**, Pitilakis K, Madabhushi G, Heron C (2015) On the seismic response of shallow rectangular tunnels in soft soils. *XVI European Conference on Soil Mechanics and Geotechnical Engineering*, 13-17 Sep 2015, Edinburg, UK
- C13. Garini E, **Tsinidis G**, *et al.* (2015) Nonlinear analyses of soil amplification in the M_{JMA} 8, 2003 Tokachi-Oki earthquake. *XVI European Conference on Soil Mechanics and Geotechnical Engineering*, 13-17 Sep 2015, Edinburg, UK
- C12. **Tsinidis G**, Rovithis E, Pitilakis K, Chazelas JL (2015) Seismic response of rectangular tunnels by centrifuge testing and numerical analysis. *SECED 2015 Conference: Earthquake Risk and Engineering towards a Resilient World*, 9-10 Jul 2015, Cambridge, UK
- C11. **Tsinidis G**, Pitilakis K, Anagnostopoulos C, Madabhushi G (2015) Seismic response and design of rectangular tunnels. *SECED 2015 Conference: Earthquake Risk and Engineering towards a Resilient World*, 9-10 Jul 2015, Cambridge, UK
- C10. **Tsinidis G**, Rovithis E, Pitilakis K, Chazelas JL (2014) Dynamic response of square tunnels: Centrifuge testing and validation of existing design methodologies. *2nd Eastern European Tunnelling Conference*, 28 Sep 1 Oct 2014, Athens, Greece
- C9. **Tsinidis G**, Pitilakis K, Leanza A, Maugeri M (2014) Seismic behavior of shallow tunnels accounting for the surface structures interaction effects. *2nd Eastern European Tunnelling Conference*, 28 Sep-1 Oct 2014, Athens, Greece
- C8. Argyroudis S, **Tsinidis G**, Gatti F, Pitilakis K (2014) Seismic fragility curves of shallow tunnels considering SSI and aging effects. 2nd Eastern European Tunnelling Conference, 28 Sep 1 Oct 2014, Athens, Greece
- C7. **Tsinidis G**, Rovithis E, Pitilakis K, Chazelas JL (2014) Dynamic centrifuge testing of rectangular tunnels in soft soils. *2nd European Conference on Earthquake Engineering and Seismology*, 24-29 Aug 2014, Istanbul, Turkey

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- C3. Pitilakis K, Trevlopoulos K, **Tsinidis G** (2011) Demand spectra for PBD in case of improved soils, existence of basements and shallow underground cavities. 4th Japan-Greece Workshop on Seismic Design of Foundations, Innovations in Seismic Protection and Protection of Cultural Heritage, 6-8 Oct 2011, Kobe, Japan
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- NC7. Karafagka S, Tsinidis G, Pikoula M, Pitilakis K. (2015) Numerical investigation of the response of a multidrum Ionic column at the Acropolis of Lindos under seismic and wind loads. 4th Hellenic Conference of Restoration, 26-28 Nov 2015, Thessaloniki, Greece
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- W11. **Tsinidis G**, Di Sarno L, Sextos A, Furtner P (2019) Vulnerability assessment of natural gas pipelines subjected to seismic wave propagation. *Exchange-RISK International Workshop: Resilience of pipeline networks to seismic hazards*, 17 Dec 2019, University of Bristol, Bristol, UK
- W10. **Tsinidis G**, Di Sarno L, Sextos A, Furtner P (2019) Seismic fragility of buried steel natural gas pipelines due to axial compression at geotechnical discontinuities. *Exchange-RISK International Workshop: Resilience of pipeline networks to seismic hazards*, 17 Dec 2019, University of Bristol, Bristol, UK
- W9. **Tsinidis G**, Di Sarno L (2018) Damage of natural gas pipelines under compression. *Exchange-RISK project Symposium*, 18 Jun 2018, Thessaloniki, Greece
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- W5. **Tsinidis G**, Heron C, Stringer M, Pitilakis K, Madabhushi G (2012) Seismic behaviour of underground rectangular structures in soft soil. *Workshop of the Hellenic Society of Earthquake Engineering (HSEE)*, 7 Dec 2012, Thessaloniki, Greece [in Greek]
- W4. **Tsinidis G**, Pitilakis K, Anastasiadis A (2012) Numerical simulation of RRTT with a combined linear equivalent elastoplastic approach. RRTT workshop within 2nd International Conference on Performance-Based Design in Earthquake Geotechnical Engineering, 30 May 2012, Taormina, Italy
- W3. **Tsinidis G**, Pitilakis D, Rovithis E, Kirtas E, Anastasiadis A, Pitilakis K (2012) Physical modelling for the evaluation of the seismic behavior of underground structures. *SERIES Workshop: Role of research infrastructures in seismic rehabilitation*, 8-9 Feb 2012, Istanbul, Turkey
- W2. Pitilakis D, Karatzetzou A, **Tsinidis G**, Pitilakis K (2011) Seismic vulnerability of monuments: An improvement of the seismic risk assessment methodologies for single structural heritage assets and for assets at a territorial scale. *Workshop on the protection of monuments under seismic actions*, 3-5 Nov 2011, Thessaloniki, Greece [in Greek]
- W1. Pitilakis K, Argyroudis S, **Tsinidis G** (2011) Seismic design and risk assessment of underground long structures. Workshop of MONICO Research Project, Fiber optics-based intelligent monitoring and assessment system for proactive maintenance and seismic disaster prevention in reinforced concrete tunnel linings, 18 Mar 2011, Athens, Greece

16.Performance Indices

Last Update: 4/2/2022.

Source	Citations (excluding self-citations and citations of Co-authors)	h-index
Scopus	883 (759)	16
Google Scholar	1050	18
Web of Science	602	13