RESEARCH INTERESTS

My research is in the broader area of geotechnical engineering and soil—structure interaction, with a focus on mitigation of natural hazards and enhancement of resilience. The cornerstone of my research philosophy lies in the combination of analytical with experimental methods, corroborated by field observation. It can be broadly categorized as follows:

1) Resilient Seismic Design and Preparedness

- <u>Innovative Seismic Protection Concepts:</u> FE modelling and dimensional analysis (<u>J35</u>, <u>J43</u>); rocking-isolated bridges and frames (<u>J28</u>, <u>J36</u>, <u>J39</u>, <u>J41</u>, <u>J50</u>, <u>J70</u>, <u>J74</u>); experimental studies (<u>J40</u>, <u>J44</u>, <u>J45</u>, <u>J56</u>, <u>J57</u>, <u>J61</u>, <u>J62</u>, <u>J63</u>, <u>J64</u>, <u>J75</u>, <u>J92</u>, <u>J93</u>); simplified methods (<u>J52</u>, <u>J53</u>, <u>J99</u>).
- Tunnels and Underground Structures: metro stations (J3, J94, J104); immersed tunnels (J9, J10); bored tunnels un soil (J78, J79, J90, J97); state-of-the-art review (J91).
- <u>Site effects and ground motion characterization:</u> 2D valley effects (<u>J27</u>, <u>J42</u>); case histories (<u>J86</u>, <u>J103</u>); near-fault effects (<u>J25</u>, <u>J33</u>, <u>J73</u>); combined IMs approach (<u>J85</u>).
- <u>Preservation of cultural heritage:</u> Shaking table testing of multi-drum columns and portal (<u>J55</u>, <u>J59</u>); historic masonry structures subjected to tectonic deformation (<u>J58</u>).
- Real-time earthquake crisis management: real time seismic damage assessment of motorway bridges (J67); efficient analysis methods accounting for key structural components and soil—structure interaction (J68, J72, J76); pilot application (J80).

2) Future-oriented infrastructure

- <u>Sustainable retrofit of bridge pilegroups:</u> new design philosophy allowing nonlinear foundation response (<u>J87</u>, <u>J102</u>), centrifuge modelling.
- <u>Bio-inspired self-drilling probe:</u> development of prototype, allowing autonomous subsurface movement for in-situ soil assessment in close proximity to existing structures.

3) Sustainable geotechnical construction

- <u>Improved design methods</u>: inclined piles and embedded foundations (<u>J13</u>, <u>J23</u>, <u>J46</u>, <u>J65</u>, <u>J81</u>). retaining structures (<u>J2</u>, <u>J4</u>); reinforced earth (<u>J30</u>)
- Foundations for renewable energy: Offshore Wind Turbine (OWT) foundations subjected to combined environmental and seismic loading, hybrid foundation concept (<u>J69</u>); guyed-support systems (J82); Jackets on suction caissons.
- Coping with climate change: Countermeasures for potentially unstable slopes, slope-stabilizing piles and pilegroups (J31, J38); interaction of foundation—structure systems with precarious slopes (J29); structures on degrading permafrost (J88).

4) Faulting and its effects on structures

- <u>Dip-slip faulting:</u> field studies (<u>J7</u>, <u>J8</u>, <u>J14</u>); constitutve model development and validation through class "A" predictions of centrifuge tests (<u>J5</u>, <u>J15</u>); shallow foundations (<u>J18</u>, <u>J20</u>); caisson and piled foundations (<u>J32</u>, <u>J37</u>, <u>J48</u>); buildings and pipelines (<u>J89</u>, <u>J101</u>); design methods for foundations (<u>J11</u>, <u>J12</u>, <u>J26</u>), bridges (<u>J17</u>), and tunnels (<u>J10</u>, <u>J24</u>).
- <u>Smart mitigation techniques:</u> soil bentonite wall (SBW) weak wall "barrier" (<u>J49</u>, <u>J71</u>); "smart" wall barrier with sacrificial members (<u>J77</u>).
- <u>Strike-slip faulting:</u> propagation and interaction with shallow foundations, combining numerical and centrifuge modelling (<u>J84</u>); improved MC–HS model; simplified design method for bridges (<u>J95</u>).

5) Hydromechanical processes, Liquefaction

- <u>Tsunami-loading of coastal infrastructure</u>: development of Miniaturized Tidal Generator MTG (J98); Tsunami effects on breakewaters; innovative mitigation techniues.
- <u>Scouring of bridge foundations:</u> MTG modelling of scour processs, 3D-scanning of the scour hole, and 3D-printing of mould, used to reproduce the scour hole in a centrfiuge model (J105).
- <u>Liquefaction</u>: <u>Structure–Soil–Structure Interaction</u>: Validation of numerical analysis tools against centrifuge model tests of structures on shallow foundations (<u>J100</u>); key modelling uncertainties and boundary effects (J106); seismic response of neighboring strucures and costefficient measures for liquefaction mitigation at the scale of clusters of buildings.

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Refereed Journal Publications

- J106. Kassas K., Adamidis O., Anastasopoulos I. (2021), "Shallow strip foundations subjected to earthquake-induced soil liquefaction: validation, modelling uncertainties, and boundary effects", Soil Dynamics and Earthquake Engineering (in print).
- J105. Ciancimino A., Jones L., Sakellariadis L., **Anastasopoulos I.**, Foti S. (2021). "Experimental assessment of the performance of a bridge pier subjected to flood induced Scour", *Géotechnique (in print)*.
- J104. Wu W., Ge S., Yuan Y., Ding W., **Anastasopoulos I.** (2021), "Seismic response of a cross interchange metro station in soft soil: Physical and numerical modeling", *Earthquake Engineering and Structural Dynamics* (J104).
- J103. Garini E., **Anastasopoulos I.**, Gazetas G., O'Riordan N., Kumar P., Ellison K., Ciruela-Ochoa F. (2020). "Discussion: Soil, basin and soil-building-soil interaction effects on motions of Mexico City during seven earthquakes", *Géotechnique* (J103).
- J102. Sakellariadis L., **Anastasopoulos I.**, Gazetas G. (2020). "Fukae Bridge Collapse (Kobe 1995) Revisited: New Insights", *Soils and Foundations*, 60:1450-1467 (J102).
- J101. Fadaee M., Hashemi K., Farzaneganpour F., **Anastasopoulos I.**, Gazetas G. (2020), "3–Storey building subjected to Reverse Faulting: Analysis and Experiments", *Soil Dynamics and Earthquake Engineering*, 138: 106297 (J101).
- J100. Kassas K., Adamidis O., Gerolymos N., **Anastasopoulos I.** (2020), "Numerical modelling of a structure with shallow strip foundation during earthquake-induced liquefaction", *Géotechnique* (J100).
- J99. Sieber M., Klar S., Vassiliou M.F., **Anastasopoulos I.** (2020). "Robustness of simplified analysis methods for rocking structures on compliant soil", *Earthquake Engineering and Structural Dynamics*, 49(14): 1388-1405 (J99).
- J98. Jones L., **Anastasopoulos I.** (2019). "Miniaturised Tsunami Generator to model Tsunami Interaction with Coastal Infrastructure", *Int. J. of Physical Modelling in Geotechnics* (<u>J98</u>).
- J97. Antoniou M., Nikitas N., **Anastasopoulos I.**, Fuentes R. (2020). "Scaling laws for shaking table testing of reinforced concrete tunnels accounting for post-cracking lining response", *Tunneling and Underground Space Technology*, 101: 103353 (J97).
- J96. Anastasopoulos P., Androutselis T., Md Tawfiq Sarwar, Ugur Eker, Sakellariadis L., Agalianos A., Anastasopoulos I. (2020). "Real-Time Seismic Damage Assessment of Various Bridge Types Using a Nonlinear Three-Stage Least Squares Approach", *Journal of Infrastructure Systems*, ASCE, 26(3): 04020019 (J96).
- J95. Agalianos A., Sieber M., **Anastasopoulos I.** (2020). "Cost-effective analysis technique for the design of bridges against strike-slip faulting", *Earthquake Engineering and Structural Dynamics* (J95).
- J94. Wu W., Ge S., Yuan Y., Ding W., Anastasopoulos I. (2020), "Seismic response of subway station in soft soil: Shaking table testing versus numerical analysis", *Tunneling and Underground Space Technology*, 100: 103389 (J94).
- J93. Gavras A.G., Kutter B.L., Hakhamaneshi M., Gajan S., Tsatsis A., Sharma K., Kohno T., Deng L., **Anastasopoulos I.**, and Gazetas G. (2020), "Database of rocking shallow foundation performance: Dynamic shaking", *Earthquake Spectra* (J93).
- J92. Hakhamaneshi M., Kutter B.L., Gavras A.G., Gajan S., Tsatsis A., Liu W., Sharma K., Pianese G., Kohno T., Deng L., Paolucci R., **Anastasopoulos I.**, and Gazetas G. (2020), "Database of Rocking Shallow Foundation Performance Slow Cyclic and Monotonic Loading", *Earthquake Spectra* (J92).
- J91. Tsinidis G., de Silva F., **Anastasopoulos I.**, Bilotta E., Bobet A., Hashash Y., He C., Kampas G., Knappett J., Madabhushi G., Nikitas N., Pitilakis K., Silvestri F., Viggiani G., Fuentes R. (2020), "Seismic behaviour of tunnels: from experiments to analysis", *Tunneling and Underground Space Technology*, 99: 10334 (J91).

- J90. Kampas G., Knappett J.A., Brown M.J., **Anastasopoulos I.**, Nikitas N., Fuentes, R. (2020) "Implications of volume loss on the seismic response of tunnels in coarse-grained soils", *Tunneling and Underground Space Technology*, 95: 103127 (J90).
- J89. Fadaee M., Farzaneganpour F., **Anastasopoulos I.** (2020), "Response of buried pipeline subjected to reverse faulting", *Soil Dynamics and Earthquake Engineering*, 132 (J89).
- J88. Loli M., Tsatsis A., Kourkoulis R. and **Anastasopoulos I.** (2020), "A simplified numerical method to simulate the thawing of frozen soil", Proceedings of the Institution of Civil Engineers Geotechnical Engineering (J88).
- J87. Sakellariadis L., Marin A., **Anastasopoulos I.** (2019), "Widening of existing motorway bridges: Pile group retrofit vs. nonlinear pile—soil response", *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 145(12): 04019107 (J87).
- J86. Garini E., **Anastasopoulos I.**, Gazetas G. (2019), "Soil, basin, and soil-building-soil interaction effects on motions of Mexico City during seven earthquakes", *Géotechnique* (J86).
- J85. Marin A., Truffer P.L., **Anastasopoulos I.** (2019). "Combined-intensity-measures matching approach for improved performance-based design of slopes", *Soil Dynamics and Earthquake Engineering* (J85).
- J84. Agalianos A., de Caudron de Coquereaumont O., **Anastasopoulos I.** (2019). "Rigid slab foundation subjected to strike—slip faulting: mechanisms and insights", *Géotechnique* (J84).
- J83. Adamidis O., Alber S., and **Anastasopoulos I.** (2019). "Assessment of Three-Dimensional Printing of Granular Media for Geotechnical Applications", *Geotechnical Testing Journal* (J83).
- J82. Antoniou M., Gelagoti F., **Anastasopoulos I.** (2019), "A compliant guyed system for deepsea installations of offshore wind turbines: Concept, design insights and dynamic performance", *Soil Dynamics and Earthquake Engineering*, 119: 235-252 (J82).
- J81. Taeseri D., Laue J., **Anastasopoulos I.** (2019), "Non-linear rocking stiffness of embedded foundations in sand", *Géotechnique*, 69(9): 767-782 (J81).
- J80. Kampas G., Knappett J.A., Brown M.J., **Anastasopoulos I.**, Nikitas N., Fuentes R. (2019), "The effect of tunnel lining modelling approaches on the seismic response of sprayed concrete tunnels in coarse-grained soils", *Soil Dynamics and Earthquake Engineering*, 117: 122–137 (J80).
- J79. **Anastasopoulos I.**, Jones L. (2019), "On the development of novel mitigation techniques against faulting–induced deformation: "Smart" barriers and sacrificial members", *Soil Dynamics and Earthquake Engineering*, 124: 297-306 (J79).
- J78. **Anastasopoulos I.**, Anastasopoulos P., Sakellariadis P., Agalianos A., Kourkoulis R., Gelagoti F., Gazetas G. (2018), "Development of RApid REsponse (RARE) System for Motorway Bridges: Overview and Pilot Application to Attiki Odos Motorway", *ISSMGE Int. Journal of Geoengineering Case Histories*, 4(4): 306 (J78).
- J77. Alonso-Rodriguez A., Nikitas N., Knappett J.:, Kampas G., **Anastasopoulos I.**, Fuentes R. (2018), "System Identification of Tunnel Response to Ground Motion Considering a Simplified Model", *Frontiers in Built Environment*, 4:39 (J77).
- J76. Sakellariadis L., Agalianos A., **Anastasopoulos I.** (2018), "Simplified method for real-time seismic damage assessment of motorway bridges: transverse direction accounting for abutment stoppers, *Earthquake Engineering and Structural Dynamics*, 47:1496–1521 (J76).
- J75. Taeseri D., Laue J., Martakis P., Chatzi E., **Anastasopoulos I.** (2018), "Static and dynamic rocking stiffness of shallow footings on sand: centrifuge modelling". *International Journal of Physical Modelling in Geotechnics*, 18(6): 315–339 (J75).
- J74. Agalianos A., Psychari A., Vassiliou M.F., Stojadinovic B., **Anastasopoulos I.** (2017), "Comparative Assessment of Two Rocking Isolation Techniques for a Motorway Overpass Bridge", *Frontiers in Built Environment*, 3:47 (<u>J74</u>).

- J73. Garini E., Gazetas G., **Anastasopoulos I.** (2017), "Evidence of significant forward rupture directivity aggravated by soil response in an M_w6 earthquake, and the effect on monuments", *Earthquake Engineering and Structural Dynamics*, 46(13): 2103–2120 (J73).
- J72. Agalianos A., Sakellariadis L., **Anastasopoulos I.** (2017), "Simplified method for the assessment of the seismic response of motorway bridges: longitudinal direction– accounting for abutment stoppers, *Bulletin of Earthquake Engineering*, 15(10): 4133–4162 (J72).
- J71. Fadaee M. Ezzatyazdi P., **Anastasopoulos I.**, Gazetas G. (2016), "Mitigation of reverse faulting deformation using a soil bentonite wall: Dimensional analysis, parametric study, design implications" *Soil Dynamics and Earthquake Engineering*, 89: 248–261 (J71).
- J70. Riahi Nouri A. **Anastasopoulos I.**, Vetr M.G., Kalantari A. (2016), "Efficiency of low-rise steel rocking frames founded on conventional and rocking foundations", *Soil Dynamics and Earthquake Engineering*, 84: 190–203 (<u>J70</u>).
- J69. **Anastasopoulos I.**, Theofilou M. (2016), "Hybrid foundation for offshore wind turbines: environmental and seismic loading", *Soil Dynamics and Earthquake Engineering*, 80: 192–209 (J69).
- J68. **Anastasopoulos I.**, Sakellariadis L., Agalianos A. (2015), "Seismic analysis of motorway bridges accounting for key structural components and nonlinear soil–structure interaction", *Soil Dynamics and Earthquake Engineering*, 78: 127–141 (J68).
- J67. **Anastasopoulos I.**, Anastasopoulos P.Ch., Agalianos A., Sakellariadis L. (2015), "Simple method for real-time seismic damage assessment of bridges", *Soil Dynamics and Earthquake Engineering*, 78: 201–212 (J67).
- J66. Agalianos A., Sakellariadis L. **Anastasopoulos I.**, Gazetas G. (2015), "Simplified method for seismic analysis of motorway bridges", *International Journal of Bridge Engineering*, 3(1): 49-54 (J66).
- J65. Ntritsos N., **Anastasopoulos I.**, Gazetas G. (2015), "Static and Cyclic Undrained Response of Square Embedded Foundations", *Géotechnique*, 65(10): 805–823 (J65).
- J64. Tsatsis A., **Anastasopoulos I.** (2015), "Performance of rocking systems on shallow improved sand: Shaking table testing", *Frontiers in Built Environment* (<u>J64</u>).
- J63. Loli M., Knappett J.A., **Anastasopoulos I.**, Brown M.J. (2015), "Use of Ricker motions as an alternative to pushover testing", *International Journal of Physical Modelling in Geotechnics*, ICE (<u>J63</u>).
- J62. Kokkali P., Abdoun T., **Anastasopoulos I.** (2015), "Centrifuge modeling of rocking foundations on improved soil", *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE (J62).
- J61. **Anastasopoulos I.**, Drosos V., Antonaki N. (2015), "Three-storey building retrofit: rocking isolation versus conventional design", *Earthquake Engineering and Structural Dynamics*, 44(8): 1235–1254 (J61).
- J60. Gazetas G., Zarzouras O., Drosos V., **Anastasopoulos I.** (2015), "Bridge-Pier Caisson Foundations subjected to Normal and Thrust Faulting: Physical Experiments versus Numerical Analysis", *Meccanica*, 50(2): 341–354 (J60).
- J59. Drosos V., **Anastasopoulos I.** (2015), "Experimental Investigation of the Seismic Response of Classical Temple Columns", *Bulletin of Earthquake Engineering*, 13(1): 299–310 (J59).
- J58. Loli M., **Anastasopoulos I.**, Gazetas G. (2015), "Nonlinear Analysis of Earthquake Fault Rupture Interaction with Historic Masonry Buildings", *Bulletin of Earthquake Engineering*, 13(1): 83–95 (J58).
- J57. Kokkali P., **Anastasopoulos I.**, Abdoun T., Gazetas G. (2014), "Static and Cyclic Rocking on Sand: Centrifuge versus Reduced-Scale 1-g Experiments", *Géotechnique*, 64(11): 865–880 (J57).
- J56. Loli M., Knappett J.A., Brown M.J., **Anastasopoulos I.**, Gazetas G. (2014), "Centrifuge modeling of rocking-isolated inelastic RC bridge piers", *Earthquake Engineering and Structural Dynamics*, 43(15): 2341–2359 (J56).

- J55. Drosos V., **Anastasopoulos I.** (2014), "Shaking table testing of multidrum columns and portals", *Earthquake Engineering and Structural Dynamics, Earthquake Engineering & Structural Dynamics*, 43(11): 1703–1723 (J55).
- J54. Gazetas G., **Anastasopoulos I.**, Garini E. (2014), "Geotechnical Design with Apparent Seismic Safety Factors well-bellow 1", *Soil Dynamics and Earthquake Engineering*, 57: 37–45 (J54).
- J53. Adamidis O., Gazetas G., **Anastasopoulos I.**, Ch. Argyrou (2014), "Equivalent–linear stiffness and damping in rocking of circular and strip foundations", *Bulletin of Earthquake Engineering*, 12(3): 1177–1200 (J53).
- J52. **Anastasopoulos I.**, Kontoroupi Th. (2014), "SDOF System Rocking on Inelastic Soil: Development of Simplified Nonlinear Analysis Method", *Soil Dynamics and Earthquake Engineering*, 56: 28–43 (J52).
- J51. **Anastasopoulos I.** (2013), "Forensic analysis of 5-storey building damaged during nearby construction", *Engineering Failure Analysis*, 34: 252–267 (J51).
- J50. **Anastasopoulos I.**, Gelagoti F., Spyridaki A., Sideri Tz., Gazetas G. (2013), "Seismic Rocking Isolation of Asymmetric Frame on Spread Footings", *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 140(1): 133–151 (J50).
- J49. Fadaee M., **Anastasopoulos I.**, Gazetas G., Jafari M.K., Kamalian M. (2013), "Soil Bentonite Wall Protects Foundation from Thrust Faulting: Analyses and Experiment", *Earthquake Engineering and Engineering Vibration*, 12(3): 473-486 (J49).
- J48. **Anastasopoulos I.**, Kourkoulis R., Gazetas G., Tsatsis A. (2013), "Interaction of piled foundation with a rupturing normal fault", *Géotechnique*, 63(12): 1042–1059 (<u>J48</u>).
- J47. Gazetas G., **Anastasopoulos I.**, Adamidis O., Kontoroupi Th. (2013), "Nonlinear Rocking Stiffness of Foundations", *Soil Dynamics and Earthquake Engineering*, 47, 83–91 (J47).
- J46. Giannakou A., Gerolymos N., Gazetas G., Tazoh T., **Anastasopoulos I.** (2013), "<u>Closure</u> to Seismic Behavior of Batter Piles: Elastic Response", *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 139(1): 185–187 (J46).
- J45. **Anastasopoulos I.**, Loli M., Georgarakos T., Drosos V. (2013), "Shaking Table Testing of Rocking—isolated Bridge Pier", *Journal of Earthquake Engineering*, 17(1): 1–32 (J45).
- J44. **Anastasopoulos I.**, Kourkoulis R., Gelagoti F., Papadopoulos E. (2012), "Rocking Response of SDOF Systems on Shallow Improved Sand: an Experimental Study", *Soil Dynamics and Earthquake Engineering*, 40: 15–33 (J44).
- J43. Kourkoulis R., **Anastasopoulos I.**, Gelagoti F., Kokkali P. (2012), "Dimensional Analysis of SDOF Systems Rocking on Inelastic Soil", *Journal of Earthquake Engineering*, 16(7): 995–1022 (J43).
- J42. Gelagoti F., Kourkoulis R., **Anastasopoulos I.**, Gazetas G. (2012), "Nonlinear Dimensional Analysis of Trapezoidal Valleys Subjected to Vertically Propagating SV Waves", *Bulletin of the Seismological Society of America*, 102(3): 999–1017 (J42).
- J41. Kourkoulis R., Gelagoti F., **Anastasopoulos I.** (2012), "Rocking Isolation of Frames on Isolated Footings: Design Insights and Limitations", *Journal of Earthquake Engineering*, 16 (3): 374–400 (J41).
- J40. Drosos V., Georgarakos T., Loli M., **Anastasopoulos I.,** Zarzouras O., and Gazetas G. (2012), "Soil–Foundation–Structure Interaction with Mobilization of Bearing Capacity: An Experimental Study on Sand", *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 138(11): 1369–1386 (J40).
- J39. Gelagoti F., Kourkoulis R., **Anastasopoulos I.,** Gazetas G. (2012), "Rocking Isolation of Low Rise Frame Structures Founded on Separate Footings", *Earthquake Engineering and Structural Dynamics*, 41(7): 1177–1197 (J39).
- J38. Kourkoulis R., Gelagoti F., **Anastasopoulos I.**, Gazetas G. (2012), "Hybrid Method for Analysis and Design of Slope Stabilizing Piles", *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 138(1): 1–14 (J38).

- J37. Loli M., Bransby M.F., **Anastasopoulos I.**, Gazetas G. (2012), "Interaction of Caisson Foundations with a Seismically Rupturing Normal Fault: Centrifuge Testing versus Numerical Simulation", *Géotechnique*, 62(1): 29–43 (J37).
- J36. Gelagoti F., Kourkoulis R., **Anastasopoulos I.**, Gazetas G. (2012), "Rocking-isolated frame structures: Margins of safety against toppling collapse and simplified design approach", *Soil Dynamics and Earthquake Engineering*, 32(1): 87–102 (<u>J36</u>).
- J35. **Anastasopoulos I.**, Gelagoti F., Kourkoulis R., Gazetas G. (2011), "Simplified Constitutive model for Simulation of Cyclic Response of Shallow Foundations: Validation against Laboratory Tests", *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 137(12): 1154–1168 (J35).
- J34. Kouroussis G., Gazetas G., **Anastasopoulos I.,** Verlinden O., Conti C. (2011), "Discrete modelling of vertical track–soil coupling for vehicle–track dynamics", *Soil Dynamics and Earthquake Engineering*, 31(12):1711–1723 (<u>J34</u>).
- J33. Garini E., Gazetas G., and **Anastasopoulos I.** (2011), "Asymmetric 'Newmark' sliding caused by motions containing severe 'directivity' and 'fling' pulses", *Géotechnique*, 61(9): 733–756 (J33).
- J32. Loli M., **Anastasopoulos I.**, Bransby M.F., Waqas A., Gazetas G. (2011), "Caisson Foundations subjected to Reverse Fault Rupture: Centrifuge Testing and Numerical Analysis", *J. Geotechnical and Geoenv. Engineering*, ASCE, 137(10): 914–925 (J32).
- J31. Kourkoulis R., Gelagoti F., **Anastasopoulos I.**, Gazetas G. (2011), "Slope stabilizing piles and pile-groups: Parametric study and design insights", *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 137(7): 663–677 (J31).
- J30. **Anastasopoulos I.**, Georgarakos T., Georgiannou V., Drosos V., Kourkoulis R. (2010), "Seismic Performance of Bar-Mat Reinforced-Soil Retaining Wall: Shaking Table Testing versus Numerical Analysis with Modified Kinematic Hardening Constitutive Model", *Soil Dynamics & Earthquake Engineering*, 30(10): 1089–1105 (J30).
- J29. Kourkoulis R., **Anastasopoulos I.**, Gelagoti F., Gazetas G. (2010), "Interaction of Foundation–Structure Systems with Seismically–Precarious Slopes: Numerical Analysis with Strain Softening Constitutive Model", *Soil Dynamics & Earthquake Engineering*, 30(12): 1430-1445 (J29).
- J28. **Anastasopoulos I.**, Gazetas G., Loli M., Apostolou M, Gerolymos N. (2010), "Soil Failure can be used for Earthquake Protection of Structures", *Bulletin of Earthquake Engineering*, 8(2): 309-326 (J28).
- J27. Gelagoti F., Kourkoulis R., **Anastasopoulos I.**, Gazetas G. (2010), "Seismic wave propagation in a very soft alluvial valley: Sensitivity to ground-motion details and soil nonlinearity, and generation of a parasitic vertical component", *Bulletin of the Seismological Society of America*, 100(6): 3035–3054 (J27).
- J26. **Anastasopoulos I.**, Antonakos G., Gazetas G. (2010), "Slab Foundation subjected to Thrust Faulting: Parametric Analysis and Simplified Design Method", *Soil Dynamics & Earthquake Engineering*, 30(10): 912–924 (J26).
- J25. Gazetas G., Garini E., **Anastasopoulos I.**, Gerorgarakos T. (2010), "Effects of Near–Fault Ground Shaking on Sliding Systems", *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 135(12): 1906–1921 (J25).
- J24. **Anastasopoulos I.**, Gazetas G. (2010), "Analysis of cut-and-cover tunnels against large tectonic deformation", *Bulletin of Earthquake Engineering*, 8(2): 283-307 (J24).
- J23. Giannakou A., Gerolymos N., Gazetas G., Tazoh T., **Anastasopoulos I.** (2010), "Seismic Behaviour of Batter Piles: Elastic Response", *Journal of Geotechnical Engineering*, ASCE, 136(9): 1187-1199 (J23).
- J22. **Anastasopoulos I.**, Alfi S., Gazetas G., Bruni S., and Van Leuven A. (2009), "Numerical and experimental assessment of advanced concepts to reduce noise and vibration on urban railway turnouts", *Journal of Transportation Engineering*, ASCE, 135(5): 279–287 (J22).

- J21. Bruni S., **Anastasopoulos I.**, Alfi S., Van Leuven A., Apostolou M., and Gazetas G. (2009), "Train-induced Vibrations on Urban Metro and Tram Turnouts", *Journal of Transportation Engineering*, ASCE, 135(7): 397–405 (J21).
- J20. **Anastasopoulos I.** (2009), "<u>Closure</u> to Fault Rupture Propagation through Sand: Finite-Element Analysis and Validation through Centrifuge Experiments", *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 135(6): 846–850 (J20).
- J19. Bruni S., **Anastasopoulos I.**, Alfi S., Van Leuven A., Gazetas G. (2009) "Effects of train impacts on urban turnouts: modelling and validation through measurements", *Journal of Sound and Vibration*, 324(3–5): 666–689 (J19).
- J18. **Anastasopoulos I.,** Gazetas G., Bransby M.F., Davies M.C.R., and El Nahas A. (2009), "Normal Fault Rupture Interaction with Strip Foundations", *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 135(3): 359-370 (J18).
- J17. **Anastasopoulos I.**, Gazetas G., Drosos V., Georgarakos T., and Kourkoulis R. (2008), "Design of bridges against large tectonic deformation", *Earthquake Engineering and Engineering Vibration*, 7(4): 345–368 (J17).
- J16. Gazetas G., Pecker A., Faccioli E., Paolucci R., and **Anastasopoulos I.** (2008), "Preliminary Design Recommendations for Dip-slip Fault–Foundation Interaction", *Bulletin of Earthquake Engineering*, 6(4): 677–687 (J16).
- J15. **Anastasopoulos I.,** Callerio A., Bransby M.F., Davies M.C.R., El. Nahas A., Faccioli E., Gazetas G., Masella A., Paolucci R., Pecker A., Rossignol E. (2008), "Numerical Analyses of Fault–Foundation Interaction", *Bulletin of Earthquake Engineering*, 6(4): 645–675 (J15).
- J14. Faccioli E., **Anastasopoulos I.**, Callerio A., and Gazetas G. (2008), "Case histories of fault–foundation interaction", *Bulletin of Earthquake Engineering*, 6(4): 557–583 (J14).
- J13. Gerolymos N., Giannakou A., **Anastasopoulos I.,** and Gazetas G. (2008), "Evidence of beneficial role of inclined piles: Observations and Summary of Numerical Analyses", *Bulletin of Earthquake Engineering*, 6(4): 705–722 (J13).
- J12. **Anastasopoulos I.**, Gerolymos N., Gazetas G., and Bransby M. F. (2008), "Simplified approach for design of raft foundations against fault rupture. Part I: Free-field", *Earthquake Engineering and Engineering Vibration*, 7(2): 147–163 (J12).
- J11. **Anastasopoulos I.**, Gerolymos N., Gazetas G., and Bransby M. F. (2008), "Simplified approach for design of raft foundations against fault rupture. Part II: Soil–Structure Interaction", *Earthquake Engineering and Engineering Vibration*, 7(2): 165–179 (J11).
- J10. **Anastasopoulos I.,** Gerolymos N., Drossos V., Kourkoulis R., Georgarakos, P., Gazetas G. (2008) "Behaviour of Deep Immersed Tunnel under Combined Normal Fault Rupture Deformation and Subsequent Seismic Shaking", *Bulletin of Earthquake Engineering*, 6(2): 213–239 (J10).
- J9. **Anastasopoulos I.,** Gerolymos N., Drosos V., Kourkoulis R., Georgarakos P., Gazetas G. (2007) "Nonlinear Response of Deep Immersed Tunnel to Strong Seismic Shaking", *Journal of Geotechnical and Geoenv. Engineering*, ASCE, 133(9): 1067–1090 (J9).
- J8. **Anastasopoulos I.,** & Gazetas G. (2007), "Foundation–structure systems over a rupturing normal fault: Part II. Analysis of the Kocaeli case histories", *Bulletin of Earthquake Engineering*, 5(3): 277–301 (J8).
- J7. **Anastasopoulos I.,** & Gazetas G. (2007), "Foundation-Structure Systems over a Rupturing Normal Fault: Part I. Observations after the Kocaeli 1999 Earthquake", *Bulletin of Earthquake Engineering*, 5(3): 253–275 (J7).
- J6. **Anastasopoulos I.**, & Gazetas G. (2007), "Analysis of Failure of Scissors Crossover Guardrail Support Base-Plates and the Role of Foundation–Structure Interaction", *Engineering Failure Analysis*, 14(5): 765–782 (J6).
- J5. Anastasopoulos I., Gazetas G., Bransby M.F., Davies M.C.R., El Nahas A. (2007), "Fault Rupture Propagation through Sand: Finite Element Analysis and Validation through

- Centrifuge Experiments", *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 133(8): 943–958 (J5).
- J4. Gerolymos N., **Anastasopoulos I.,** Gazetas G. (2007) "Opening ceremony shaft for the Athens 2004 Olympic Games", *Geotechnical Engineering*, ICE, 160(2): 61–71 (J4).
- J3. Gazetas G., Gerolymos N., **Anastasopoulos I.** (2005), "Response of Three Athens Metro Underground Structures in the 1999 Parnitha Earthquake", *Soil Dynamics & Earthquake Engineering*, 25(7-10): 617–633 (J3).
- J2. Gazetas G., Psarropoulos P.N., **Anastasopoulos I.**, and Gerolymos N. (2004), "Seismic Behaviour of Flexible Retaining Systems Subjected to Short Duration Moderately Strong Excitation", *Soil Dynamics & Earthquake Engineering*, 24(7): 537–550 (J2).
- J1. Peeta S., **Anastassopoulos I.** (2002), "Automatic Real-time Detection of Erroneous Detector Data using Fourier Transforms for On-Line Traffic Control Architectures", *Transportation Research Record*, 1811: 1–11.

Chapters in Books

- B8. **Anastasopoulos I.**, Agalianos A., Sakellariadis L., Jones L. (2019), "Seismic Resilience of Existing Infrastructure: Mitigation Schemes for Soil–Structure Systems Subjected to Shaking and Faulting, and Crisis Management System". In: Noroozinejad Farsangi E., Takewaki I., Yang T., Astaneh-Asl A., Gardoni P. (eds) Resilient Structures and Infrastructure. Springer, Singapore (<u>B8</u>).
- B7. **Anastasopoulos I.**, Christou L.-O. (2016), "Numerical Analysis of Monopile Foundation for Offshore Wind Turbines". In: Jubilee Volume–Andreas Anagnostopoulos 50 Years of service at the National Technical University of Athens; Kavvadas M. (Ed.); Tsotras.
- B6. **Anastasopoulos I.**, Zarzouras O., Drosos V., Gazetas G. (2015), "Caisson foundations subjected to seismic faulting: reduced–scale physical modelling", In: *Experimental Research in Earthquake Engineering*, Taucer F., Apostolska R. (Editors), Springer International: Switzerland, pp. 405–422 (B6).
- B5. **Anastasopoulos I.** (2010), "Beyond conventional capacity design: towards a new design philosophy", In: *Soil–Foundation–Structure Interaction*, Orense R.O., Chow N., and Pender M.J. (Editors), CRC Press, Taylor & Francis Group: New York, pp. 213–220 (B5).
- B4. Tazoh T., Sato M., Jang J., Taji Y., Gazetas G., **Anastasopoulos I.** (2010), "Kinematic response of batter pile foundation: centrifuge tests", In: *Soil–Foundation–Structure Interaction*, Orense R.O., Chow N., and Pender M.J. (Editors), CRC Press, Taylor & Francis Group: New York, pp. 41–48 (<u>B4</u>).
- B3. Gazetas G., **Anastasopoulos I.,** Apostolou M. (2007), "Shallow and Deep Foundations under Fault Rupture or Strong Seismic Shaking", *Earthquake Geotechnical Engineering*, Pitilakis K. (Editor), Springer: Berlin, pp. 185–210 (B4).
- B2. Gazetas G., **Anastasopoulos I.,** Gerolymos N., Mylonakis G., & Syngros C. (2005), "The Collapse of the Hanshin Expressway (Fukae) Bridge, Kobe 1995: Soil–Foundation–Structure Interaction, Reconstruction, Seismic Isolation", In: *Entwicklungen in der Bodenmechanik, Bodendynamik und Geotechnik, Festschrift zum 60. Geburstag von Univ.-Professor Dr.-Ing.habil. Stavros A. Savidis*, Frabk Rackwitz, Springer: Berlin, pp. 93–120.
- B1. Mylonakis G., Gazetas G., Gerolymos N., and **Anastasopoulos I.** (2000), "Detrimental Role of Soil-Structure Interaction and the Collapse of the 18-Pier Fukae Bridge in Kobe", In: *Recent Advances in Applied Mechanics*, T. Katsikadelis, D.E. Beskos and E.E. Gdoutos (Editors), NTUA: Athens, pp.145–159.

Conference Proceedings

C168. Kanellopoulos C., Jeremić B., **Anastasopoulos I.**, Stojadinović B. (2020), "Use of the domain reduction method to simulate the seismic response of an existing structure protected by resonating unit cell metamaterials", Proc. EURODYN 2020, XI International Conference

- on Structural Dynamics, Athens, Greece, 23–25 November, M. Papadrakakis, M. Fragiadakis, C. Papadimitriou (Eds.).
- C167. Bowman A.J., Adamidis O., Dashti S., **Anastasopoulos I.** (2020), "Co-seismic response of a mat-founded structure on deposits with silty-sand layers", *Proc.* 4th European Conf. on *Physical Modelling in Geotechnics*, ECPMG 2020, Luleå, Sweden, 7–8 September, J. Laue & T. Bansal (Eds.).
- C166. Agalianos A., Korre E., Abdoun T.H., **Anastasopoulos I.** (2020), "Experimental study of the interaction of shallow foundations with an emerging strike-slip fault rupture", *Proc.* 4th *European Conf. on Physical Modelling in Geotechnics*, ECPMG 2020, Luleå, Sweden, 7–8 September, J. Laue & T. Bansal (Eds.)
- C165. Jones L., **Anastasopoulos I.** (2020), "Physical modelling of geotechnical structures subjected to hydraulic scour", *Proc.* 4th European Conf. on Physical Modelling in Geotechnics, ECPMG 2020, Luleå, Sweden, 7–8 September, J. Laue & T. Bansal (Eds.)
- C164. Antoniou M., Kourkoulis R., Gelagoti G., **Anastasopoulos I.**, Gazetas G. (2019), "Seismic response of a novel guyed foundation system for offshore wind turbines", *Proc. 8th Naional Conf. on Geotechnical and Geoenv. Engng.*, 6–8 November, Athens, Greece (in Greek).
- C163. Agalianos A., **Anastasopoulos I.** (2019), "Numerical Simulation of the Interaction of a Rigid Slab Foundation with a Strike–slip Fault", *Proc. 8th National Conf. on Geotechnical and Geoenv. Engineering*, 6–8 November, 2019, Athens, Greece (in Greek).
- C162. Sakellariadis L., **Anastasopoulos I.**, Gazetas G. (2019), "Nonlinear Pile-Group Seismic Response: The Collapse of Fukae Bridge (Kobe, 1995)", *Proc.* 8th National Conf. on Geotechnical and Geoenv. Engineering, 6–8 November, 2019, Athens, Greece (in Greek).
- C161. Kassas K., Adamidis O., Gerolymos N., **Anastasopoulos I.** (2019), "Numerical Simulation of a Shallow Foundation Resting on Liquefiable Soil", *Proc.* 8th National Conf. on Geotechnical and Geoenv. Engineering, 6–8 November, 2019, Athens, Greece (in Greek).
- C160. Alber S., O. Adamidis O., **Anastasopoulos I.** (2019), "Geotechnical applications for 3D printed granular media", *Proc.* 2nd Int. Conf. on Natural Hazards & Infrastructure (ICONHIC), 23-26 June, 2019, Chania, Greece.
- C159. Kassas K., Bekcic D., **Anastasopoulos I.** (2019), "Hybrid foundation as an alternative to monopile decommissioning", *Proc.* 2nd Int. Conf. on Natural Hazards & Infrastructure (ICONHIC), 23-26 June, 2019, Chania, Greece.
- C158. Agalianos A., de Coquereaumont O., **Anastasopoulos I.** (2019), "Strike–slip fault rupture propagation through sand and interaction with slab foundations", *Proc.* 2nd Int. Conf. on Natural Hazards & Infrastructure (ICONHIC), 23-26 June, 2019, Chania, Greece.
- C157. Psychari A., Agalianos A., Sakellariadis L., **Anastasopoulos I.** (2019), "On the effect of RC moment–axial load interaction in the moment capacity of a pile group", *Proc.* 2nd Int. Conf. on Natural Hazards & Infrastructure (ICONHIC), 23-26 June, 2019, Chania, Greece.
- C156. Marin A., Truffer P., **Anastasopoulos I.** (2019), "Selection and generation of input motions for the estimation of co-seismic deformations of geotechnical structures", *Proc.* 2nd *Int. Conf. on Natural Hazards & Infrastructure (ICONHIC)*, 23-26 June, 2019, Chania, Greece.
- C155. Jones L., **Anastasopoulos I.** (2019), "Design and Characterisation of a 1-g Testing Apparatus for Simulating the interaction between Tsunamis and Geotechnical Systems", *Proc.* 2nd *Int. Conf. on Natural Hazards & Infrastructure (ICONHIC)*, 23-26 June, 2019, Chania, Greece.
- C154. Sieber M., Keller A., Vassiliou M., **Anastasopoulos I.** (2019), "On the development of a simplified analysis method for 3D rocking of circular surface foundations", *Proc.* 2nd *Int. Conf. on Natural Hazards & Infrastructure (ICONHIC)*, 23-26 June, 2019, Chania, Greece.
- C153. Sakellariadis L., **Anastasopoulos I.**, Gazetas G. (2019), "Investigations on the Collapse of Fukae Bridge, Kobe 1995: Actual pile-group vs. rocking footing", *Proc.* 2nd Int. Conf. on Natural Hazards & Infrastructure (ICONHIC), 23-26 June, 2019, Chania, Greece.
- C152. Sieber M., Klar S., Vassiliou M., **Anastasopoulos I.** (2019), "On the calibration of a simplified method for rocking structures", *Earthquake Geotechnical Engineering for*

- Protection and Development of Environment and Constructions: Proc. 7th Int. Conf. on Earthquake Geotechnical Engineering (VII ICEGE), Rome, Italy, 17-20 June 2019.
- C151. Sakellariadis L., Henschel M, Marin A., **Anastasopoulos I.** (2019), "Widening of existing bridges on pile groups exploiting nonlinear soil-structure interaction", *Earthquake Geotechnical Engineering for Protection and Development of Environment and Constructions: Proc. 7th Int. Conf. on Earthquake Geotechnical Engineering (VII ICEGE), Rome, Italy, 17-20 June 2019.*
- C150. Garini E., Gazetas G., **Anastasopoulos I.** (2019), "Soil amplification response of Mexico City clay in the M_S7.1 Puebla, 2017 earthquake", *Earthquake Geotechnical Engineering for Protection and Development of Environment and Constructions: Proc. 7th Int. Conf. on Earthquake Geotechnical Engineering (VII ICEGE), Rome, Italy, 17-20 June 2019.*
- C149. Adamidis O., Sinan U., **Anastasopoulos I.** (2019), "Effects of partial drainage on the response of Hostun sand: An experimental investigation at element level", *Earthquake Geotechnical Engineering for Protection and Development of Environment and Constructions: Proc. 7th Int. Conf. on Earthquake Geotechnical Engineering (VII ICEGE), Rome, Italy, 17-20 June 2019.*
- C148. **Anastasopoulos I.**, Agalianos A. (2019), "Foundation-structure systems subjected to faulting-induced deformation: Numerical and physical modelling, design methods, mitigation techniques", *Earthquake Geotechnical Engineering for Protection and Development of Environment and Constructions: Proc.* 7th Int. Conf. on Earthquake Geotechnical Engineering (VII ICEGE), Rome, Italy, 17-20 June 2019.
- C147. **Anastasopoulos I.** (2018), "Soil–Structure Interaction in the Seismic Design and Retrofit of Bridges", *Proc. Conferenze di Geotecnica di Torino, XXV Ciclo*, November 8-9, 2018, Torino, Italy.
- C146. Adamidis O., Alber S., **Anastasopoulos I.** (2018), "Investigation into 3D printing of granular media", *Proc. 9th Int. Conf. on Physical Modelling in Geotechnics (ICPMG 2018)*, July 17-20, 2018, London, UK, Vol.1, pp. 113-118.
- C145. Taeseri D., Sakellariadis L., Schindler R., **Anastasopoulos I.** (2018), "Bearing capacity of surface and embedded foundations on a slope: Centrifuge modelling", *Proc.* 9th Int. Conf. on Physical Modelling in Geotechnics (ICPMG 2018), July 17-20, 2018, London, UK, Vol.2, pp. 1321-1325.
- C144. Antoniou M., Gelagoti F., **Anastasopoulos I.** (2018), "Seismic Performance of a Novel Guyed System for the Support of Offshore Wind-Turbines", *Proc.* 16th European Conf. on Earthquake Engineering (16ECEE), June 18-21, 2018, Thessaloniki, Greece.
- C143. Taeseri D., Laue J., Schindler R., Sakellariadis L., **Anastasopoulos I.** (2018), "Centrifuge and Numerical Study of Shallow and Embedded Foundations on Dry Sand Under Combined Loading Conditions", *Proc. 16th European Conf. on Earthquake Engineering (16ECEE)*, June 18-21, 2018, Thessaloniki, Greece.
- C142. Sieber M.S., Agalianos A., **Anastasopoulos I.** (2018), "Motorway Bridges Subjected to Strike-Slip Faulting: 3D Numerical Analysis", *Proc.* 16th European Conf. on Earthquake Engineering (16ECEE), June 18-21, 2018, Thessaloniki, Greece.
- C141. Agalianos A., Psychari A., Vassiliou M.F., Stojadinovic B., **Anastasopoulos I.** (2018), "Seismic Performance Comparison Of Two Rocking Isolation Alternatives For An Overpass Bridge", *Proc.* 16th European Conf. on Earthquake Engineering (16ECEE), June 18-21, 2018, Thessaloniki, Greece.
- C140. Kassas K., Adamidis O., Vasic N., Herzog R., **Anastasopoulos I.** (2018), "Shear Modulus of Hostun Sand", *Proc.* 16th European Conf. on Earthquake Engineering (16ECEE), June 18-21, 2018, Thessaloniki, Greece.
- C139. Kampas G., Knappett J.A., Brown M.J., **Anastasopoulos I.**, Nikitas N., Alonso-Rodriguez A., Fuentes R. (2018), "Suitability of Equivalent Linear Soil Models for Analysing the Seismic Response of a ConcreteTunnel", *Proc.* 16th European Conf. on Earthquake Engineering (16ECEE), June 18-21, 2018, Thessaloniki, Greece.

- C138. Fadaee M., Hashemi K., **Anastasopoulos I.,** Gazetas G., Hadizadeh M. (2018), "Physical Modeling of Interaction of a 3-Story Building with a Reverse Fault Rupture", *Proc.* 16th European Conf. on Earthquake Engineering (16ECEE), June 18-21, 2018, Thessaloniki, Greece.
- C137. Jones L., **Anastasopoulos I.** (2018), "Development of an Apparatus for the Simulation of Coastal Structures Subjected to Tsunami", *Proc.* 16th European Conf. on Earthquake Engineering (16ECEE), June 18-21, 2018, Thessaloniki, Greece.
- C136. **Anastasopoulos I.**, Jones L. (2017), "Design of foundation–structure systems against faulting: new developments and mitigation techniques", *Proc.* 3rd Int. Conf. on Performance-based Design in Earthquake Geotechnical Engineering PBD-III Vancouver 2017, July 16–19, Vancouver, Canada.
- C135. Sakellariadis L., Agalianos A., **Anastasopoulos I.,** Anastasopoulos P. (2017), "RARE System for real-time seismic damage assessment of Bridges Pilot application", *Proc.* 3rd Int. Conf. on Performance-based Design in Earthquake Geotechnical Engineering PBD-III Vancouver 2017, July 16–19, Vancouver, Canada.
- C134. Kassas K., **Anastasopoulos I.** (2017), "Numerical Analysis of Hybrid Foundation for Next Generation Offshore Wind Turbines in Deep Waters", *Proc. 3rd Int. Conf. on Performance-based Design in Earthquake Geotechnical Engineering PBD-III Vancouver 2017*, July 16–19, Vancouver, Canada.
- C133. Psychari A., Agalianos A., Vassiliou M., Stojadinovic B., **Anastasopoulos I.** (2017), "Seismic Performance of a Rocking Isolated Overpass Bridge", *Proc.* 3rd Int. Conf. on Performance-based Design in Earthquake Geotechnical Engineering PBD-III Vancouver 2017, July 16–19, Vancouver, Canada.
- C132. Sieber M., Agalianos A., **Anastasopoulos I.** (2017), "3D numerical analysis of motorway overpass bridge subjected to strike-slip faulting", *Proc. 3rd Int. Conf. on Performance-based Design in Earthquake Geotechnical Engineering PBD-III Vancouver 2017*, July 16–19, Vancouver, Canada.
- C131. Loli M., Gazetas G. Knappett J.A., **Anastasopoulos I.** (2016), "Use of Micro-Pile Inclusions to Enhance Foundation Rocking Isolation", *1st International Conference on Natural Hazards & Infrastructure, ICONHIC 2016*, 28–30 June, Chania, Greece.
- C130. Agalianos A., **Anastasopoulos I.**, Sakellariadis L., Gazetas G. (2016), "Numerical simulation of the seismic response of a typical motorway bridge in the longitudinal direction: the effect of abutment stoppers", *1st International Conference on Natural Hazards & Infrastructure, ICONHIC 2016*, 28–30 June, Chania, Greece.
- C129. Sakellariadis L., Agalianos A., **Anastasopoulos I.**, Gazetas G. (2016), "Numerical simulation of the Seismic Response of Motorway Bridges in the Transverse direction: Critical Factors", *1st International Conference on Natural Hazards & Infrastructure, ICONHIC 2016*, 28–30 June, Chania, Greece.
- C128. Kladis A., Gelagoti F., Laourakis N., **Anastasopoulos I.** (2016), "A simplified method for the analysis of embedded footings accounting for soil inelasticity and foundation uplifting", *Ist International Conference on Natural Hazards & Infrastructure, ICONHIC 2016*, 28–30 June, Chania, Greece.
- C127. Loli M., Kassas K., **Anastasopoulos I.** (2016), "Centrifuge testing of a hybrid foundation for offshore wind turbines: experimental technique and preliminary results", *Proc.* 3rd *European Conf. on Physical Modelling in Geotechnics, Eurofuge* 2016, 1–3 June, Nantes, France, pp. 263–268.
- C126. Loli M., **Anastasopoulos I.**, Knappett J.A., Brennan A.J. (2016), "Retrofit of existing multi-block quay walls: centrifuge modeling", *Proc.* 3rd European Conf. on Physical Modelling in Geotechnics, Eurofuge 2016, 1–3 June, Nantes, France, pp. 331–336.
- C125. **Anastasopoulos I.**, Anastasopoulos P.Ch., Agalianos A., Sakellariadis L. (2015), "On the development of a rapid response system for motorways", *Proc.* 6th Int. Conf. on Earthquake Geotechnical Engineering, 1–4 November, Christchurch, New Zealand.

- C124. Loli M., Knappett J.A., Brown M.J., **Anastasopoulos I.**, Gazetas G. (2015), "Centrifuge testing of a bridge pier on a rocking isolated foundation supported on unconnected piles on sand", *Proc.* 6th Int. Conf. on Earthquake Geotechnical Engineering, 1–4 November, Christchurch, New Zealand.
- C123. Garini E., Gazetas G., **Anastasopoulos I.** (2015), "3-Dimensional Rocking and Sliding Case Histories in the 2014 Cephalonia, Greece Earthquakes", *Proc.* 6th Int. Conf. on Earthquake Geotechnical Engineering, 1–4 November, Christchurch, New Zealand.
- C122. Tsatsis A., **Anastasopoulos I.**, Gazetas G. (2015), "Buried pipelines subjected to normal fault:simulation vs experiment", *Proc. XVI European Conf. on Soil Mechanics and Geotechnical Engineering*, 13–17 September, Edinburgh, UK.
- C121. Garini E., Zakkak R., **Anastasopoulos I.**, Gazetas G. (2015), "Seismic performance of gravity retaining walls subjected to strong Excitation", *Proc. XVI European Conf. on Soil Mechanics and Geotechnical Engineering*, 13–17 September, Edinburgh, UK.
- C120. Leung A.K., **Anastasopoulos I.**, Augarde C., Barreto D., Brennan A.J., Brown M.J., Chandler H.W., Connolly D., Davies T., Gao Z., Ivanovic A., Kenny M.J., Knappett J.A., Lombardi D., McDougall J., Medero G.M., Muir Wood D., El Mountassir G., Osman A.S., Pytharou-li S., Sentenac P., Stewart B., Switzer C., Tarantino A., Wheeler S.J., Woodward P.K., and Zielinski M. (2015), "An overview of research activities and achievement in Geotechnics from the Scottish Universities Geotechnics Network (SUGN)", *Proc. XVI European Conf. on Soil Mechanics and Geotechnical Engineering*, 13–17 September, Edinburgh, UK.
- C119. **Anastasopoulos I.**, Loli M., Antoniou M., Knappett J., Brennan A. (2015), "Centrifuge testing of multi-block quay walls", *Proc. SECED 2015 Conference: Earthquake Risk and Engineering towards a Resilient World*, 9–10 July, Cambridge UK.
- C118. **Anastasopoulos I.**, Sakellariadis L., Agalianos A. (2015), "Simplified method to estimate the seismic vulnerability of bridges considering soil-structure interaction", *Proc. SECED 2015 Conference: Earthquake Risk and Engineering towards a Resilient World*, 9–10 July, Cambridge UK.
- C117. **Anastasopoulos I.**, Theofilou M. (2015), "On the development of a hybrid foundation for offshore wind turbines", Proc. 3rd Int. Symposium on Frontiers in Offshore Geotechnics (ISFOG), Oslo, Norway, V. Meyer (Ed.), 10–12 June.
- C116. Kokkali P., Abdoun T., **Anastasopoulos I.** (2015), "Tactile pressure sensors in centrifuge modeling of rocking foundations", *Proc. Int. Foundations Congress and Equipment Expo 2015, IFCEE 2015*, San Antonio (TX), USA, 17–21 March, pp. 74-83.
- C115. Loli M., **Anastasopoulos I.**, Knappett J., Brown M., Gazetas G. (2014), "Experimental Investigation of the Nonlinear Soil–Foundation–RC Pier Interaction in Seismic Loading", *Proc.* 7th National Conf. on Geotechnical and Geoenvironmental Engineering, Athens, Greece, 5–7 November (in Greek).
- C114. Theofilou M., **Anastasopoulos I.**, Gazetas G. (2014), "Novel hybrid foundation for offshore wind turbines", Proc. 7th National Conf. on Geotechnical and Geoenvironmental Engineering, Athens, Greece, 5–7 November (in Greek).
- C113. Christou O.-L., **Anastasopoulos I.,** Gazetas G. (2014), "Foundation of offshore wind turbine with monopole", *Proc.* 7th *National Conf. on Geotechnical and Geoenvironmental Engineering*, Athens, Greece, 5–7 November (in Greek).
- C112. Sakellariadis L., Agalianos A., **Anastasopoulos I.,** Gazetas G. (2014), "Simplified method to estimate the seismic vulnerability of bridges considering soil-structure interaction", *Proc.* 7th National Conf. on Geotechnical and Geoenvironmental Engineering, Athens, Greece, 5–7 November (in Greek).
- C111. Garini E., Gazetas G., **Anastasopoulos I.** (2014), "Retaining wall dynamic response under horizontal earthquake excitation", *Proc.* 7th National Conf. on Geotechnical and Geoenvironmental Engineering, Athens, Greece, 5–7 November (in Greek).

- C110. Agalianos A., Sakellariadis L., **Anastasopoulos I.**, Gazetas G. (2014), "Simplified method for seismic analysis of motorway bridges", *Proc.* 2nd Int. Conf. on Bridges: Innovations on Bridges and Soil–Bridge Interaction, IBSBI 2014, Athens, Greece, October 16–18.
- C109. Kourkoulis R., **Anastasopoulos I.**, Gelagoti F., Lekkakis P., Christou O.-L., Gazetas G. (2014), "Seismic response of offshore wind turbines founded on monopiles or suction caissons: a comparison", *Proc.* 2nd Int. Conf. on Earthquake Engineering and Seismology, Istanbul, Turkey, 25–29 August 2014.
- C108. Brennan A.J., Knappett J.A., Bertalot D., Loli M., **Anastasopoulos I.** (2014), "Dynamic centrifuge modelling facilities at the University of Dundee and their application to studying seismic case histories", *Proc.* 8th Int. Conf. on Physical Modelling in Geotechnics 2014 (ICPMG2014), Perth, Australia, 14–17 January, Ch. Gaudin & D. White (Eds.).
- C107. Loli M., **Anastasopoulos I.**, Knappett J.A., Brown M.J. (2014), "Use of Ricker wavelet ground motions as an alternative to push-over testing", *Proc.* 8th Int. Conf. on Physical Modelling in Geotechnics 2014 (ICPMG2014), Perth, Australia, 14–17 January, Ch. Gaudin & D. White (Eds.).
- C106. **Anastasopoulos I.**, Drosos V., Antonaki N. (2014), "Shaking Table Testing of Retrofitted 3-storey Building", Proc. 8th Int. Conf. on Physical Modelling in Geotechnics 2014 (ICPMG2014), Perth, Australia, 14–17 January, Ch. Gaudin & D. White (Eds.).
- C105. Kokkali P., Abdoun T., **Anastasopoulos I.**, Kourkoulis R., Gelagoti F., Gazetas G. (2014), "Experimental Investigation of The Rocking Response of SDOF Systems on Sand", *Proc.* 8th Int. Conf. on Physical Modelling in Geotechnics 2014 (ICPMG2014), Perth, Australia, 14–17 January, Ch. Gaudin & D. White (Eds.).
- C104. **Anastasopoulos I.,** Gazetas G. (2013), "Stratoni Tailings Dams: Analysis of Fault Rupture Propagation", *Proc.* 2nd Nat. Conf. of Dams & Reservoirs, 7–8 November, Athens, Greece (in Greek).
- C103. Kouroussis G., **Anastasopoulos I.**, Gazetas G., Verlinden O. (2013), "Three-dimensional finite element modelling of dynamic pile–soil–pile interaction in time domain", Proc. COMPDYN 2013, 4th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, Kos Island, Greece, 12–14 June, M. Papadrakakis, N.D. Lagaros, V. Plevris (eds.).
- C102. Tsatsis A., **Anastasopoulos I.**, Gelagoti F., Kourkoulis R. (2013), "Effectiveness of In-soil Seismic Isolation taking into account of Soil-Structure Interaction" *Proc.* 18th Int. Conf. on Soil Mechanics and Geotechnical Engineering, 2–6 September, Paris, France.
- C101. **Anastasopoulos I.,** Loli M., Gazetas G., Bransby F. (2013), "Caisson foundation subjected to normal faulting: experiment vs. analysis" *Proc. 15th European Conference on Soil Mechanics and Geotechnical Engineering–Geotechnics of Hard Soils Weak Rocks*, Athens, September, A. Anagnostopoulos et al. (Eds.), Vol. 4., pp. 353-358.
- C100. **Anastasopoulos I.** (2013), "Structural damage of a 5-storey building: differential settlement due to construction of an adjacent building or because of construction defects?" *Proc.* 7th *Int. Conf. on Case Histories in Geotechnical Engineering*, Chicago, IL, April 29-May 4, paper 8.16a.
- C99. Manoledaki K., Drosos V., **Anastasopoulos I.**, Vintzilaiou E., Gazetas G. (2012), "Out-of-plane response of three-leaf stone masonry walls taking account of soil-structure interaction: an experimental study", *Proc.* 8th Int. Conf. on Structural Analysis of Historical Constructions, Wroclau, Poland, October 15-17.
- C98. Kouroussis G., **Anastasopoulos I.**, Gazetas G., Conti C, and Verlinden O. (2012), "Effect of the Track/Soil Coupling on the Railway-induced Ground Vibrations", *Proc. 19th Int. Congress on Sound and Vibration*, Vilnius, Lithuania, July 8-12.
- C97. **Anastasopoulos I.**, Drosos V., Antonaki N., Rontogianni A. (2012), "The Role of Soil–Foundation–Structure Interaction on the Seismic Performance of an Existing 3-storey Building: Shaking Table Testing", *Proc. 15th Int. Conf. on Earthquake Engineering*, Lisbon, Portugal, September 24-28, 2012, Paper 4865.

- C96. Manoledaki A.A., Drosos V., **Anastasopoulos I.**, Vintzileou E., Gazetas G. (2012), "Experimental assessment of the seismic response of three-leaf stone masonry walls, with due consideration to soil–structure interaction", *15th Int. Conf. on Earthquake Engineering*, Lisbon, Portugal, September 24-28, 2012, Paper 4309.
- C95. Loli M., **Anastasopoulos I.**, Gazetas G., Cattari S., Degli Abbati S., Lagomarsino S. (2012), "Response of Historic Masonry Structures to Tectonic Ground Displacements", *Proc.* 15th Int. Conf. on Earthq. Engng, Lisbon, Portugal, Sept. 24-28, 2012, Paper 3935.
- C94. **Anastasopoulos I.** (2012), "Effectiveness of shallow soil improvement on the performance of rocking-isolated bridge piers: monotonic and cyclic pushover testing", 2nd International Conference on Performance-Based Design in Earthquake Geotechnical Engineering, Taormina, Italy, May 28–30, 2012.
- C93. Drosos V., Georgarakos T., Loli M., **Anastasopoulos I.**, Gazetas G. (2012), "Nonlinear soil–foundation interaction: an experimental study on sand", 2nd International Conference on Performance-Based Design in Earthquake Geotechnical Engineering, Taormina, Italy, May 28–30, 2012.
- C92. **Anastasopoulos I.**, Loli M., Gelagoti F., Kourkoulis R., Gazetas G. (2012), "Nonlinear soil–foundation interaction: numerical analysis", 2nd International Conference on Performance-Based Design in Earthquake Geotechnical Engineering, Taormina, Italy, May 28–30, 2012.
- C91. Tsatsis A., Kourkoulis R., **Anastasopoulos I.**, Gazetas G. (2011), "Bridge Pier founded on Pile-group: Ductile Design Against Faulting", *Proc. International Conference: Innovations on Bridges and Soil–Bridge Interaction, IBSBI 2011*, Athens, Greece, October 13-15, 2011.
- C90. **Anastasopoulos I.**, Kourkoulis R., Papadopoulos E. (2011), "1-g Experimental Investigation of the Metaplastic Rocking Response of 1-dof Oscillators on Shallow Footings", *Proc.* 4th Japan–Greece Workshop on Seismic Design of Foundations, Innovations in Seismic Design, and Protection of Cultural Heritage, Kobe, 6–7 October.
- C89. **Anastasopoulos I.**, Loli M., Drosos V., Gazetas G. (2011), "Cyclic Pushover and Shake Table Testing of Bridge Pier with Foundation Uplifting and Soil Yielding", *Proc.* 4th Japan–Greece Workshop on Seismic Design of Foundations, Innovations in Seismic Design, and Protection of Cultural Heritage, Kobe, Japan, 6–7 October.
- C88. Loli M., **Anastasopoulos I.** (2011), "Normal and Reverse Fault Rupture Interaction with Caisson Foundations: Centrifuge Modeling and Numerical Simulation", *Proc.* 4th Japan–Greece Workshop on Seismic Design of Foundations, Innovations in Seismic Design, and Protection of Cultural Heritage, Kobe, Japan, 6–7 October.
- C87. **Anastasopoulos I.**, Loli M., Gelagoti F., Kourkoulis R., Gazetas G. (2011), "Nonlinear Soil–Foundation Interaction: Numerical Analysis", *Proc.* 4th Japan–Greece Workshop on Seismic Design of Foundations, Innovations in Seismic Design, and Protection of Cultural Heritage, Kobe, Japan, 6–7 October.
- C86. Loli M., **Anastasopoulos I.**, Bransby M.F., Gazetas G. (2011), "Normal αnd Reverse Fault Rupture Interaction with Caisson Foundations: Centrifuge Modelling and Numerical Simulation", 5th International Conference on Earthquake Geotechnical Engineering, Santiago, Chile, 10-13 January.
- C85. Kourkoulis R., Gelagoti F., **Anastasopoulos I.**, Gazetas G. (2011), "Stabilization of seismically unstable slopes using Piles: Parametric Analysis", 5th International Conference on Earthquake Geotechnical Engineering, Santiago, Chile, 10-13 January.
- C84. Gelagoti F., Kourkoulis R., **Anastasopoulos I.,** Gazetas G. (2011), "Effect of Soil Nonlinearity on the Seismic response of a very soft Alluvial Valley", 5th International Conference on Earthquake Geotechnical Engineering, Santiago, Chile, 10-13 January.
- C83. Kouroussis G., Gazetas G., **Anastasopoulos I.**, Conti C., Verlinden O. (2011), "Lumped mass model of vertical dynamic coupling of a railway track on elastic homogeneous or layered halfspace", *Proc. EURODYN 2011 : 8th International Conference on Structural Dynamics*, 4-6 July, Leuven, Belgium.

- C82. **Anastasopoulos I.**, Drosos V., Georgarakos T., Gazetas G. (2010), "Experimental Validation of Bridge Pier Seismic Design Employing Soil Ductility", *Proc.* 6th Hellenic Conference on Geotechnical and Geoenvironmental Engineering, Volos, 29/9–1/10, Vol. 1, pp. 299–303 (in Greek).
- C81. Drosos V., Gelagoti F., Kourkoulis R., **Anastasopoulos I.**, Gazetas G. (2010), "New Thessaloniki Commercial Port: Non-linear seismic Analysis of the Quay Wall", *Proc.* 6th Hellenic Conference on Geotechnical and Geoenvironmental Engineering, Volos, 29/9–1/10, Vol. 1, pp. 313–319 (in Greek).
- C80. Gelagoti F., Kourkoulis R., **Anastasopoulos I.**, Gazetas G. (2010), "Non-Linear Inelastic Behavior of Foundations: Application on the Seismic Protection of Frame Structures", *Proc.* 6th Hellenic Conference on Geotechnical and Geoenvironmental Engineering, Volos, 29/9–1/10, Vol. 1, pp. 483–490 (in Greek).
- C79. Gelagoti F., Kourkoulis R., **Anastasopoulos I.**, Gazetas G. (2010), "Seismic Soil-Foundation-Frame Interaction under Valley-affected Ground Motion", *Proc.* 6th Hellenic Conference on Geotechnical and Geoenvironmental Engineering, Volos, 29/9–1/10, Vol. 1, pp. 491-498 (in Greek).
- C78. **Anastasopoulos I.** (2010), "Seismic Design of Bridges against Seismic Faulting", *Proc.* 6th *Hellenic Conference on Geotechnical and Geoenvironmental Engineering*, Volos, 29/9–1/10, Vol. 1, pp. 501–508 (in Greek).
- C77. Kourkoulis R., Gelagoti F., **Anastasopoulos I.**, Gazetas G. (2010), "Pile Effectiveness for Slope Stabilization: 3D Numerical Investigation", *Proc.* 6th Hellenic Conference on Geotechnical and Geoenvironmental Engineering, Volos, 29/9–1/10, Vol. 2, pp. 107–114 (in Greek).
- C76. **Anastasopoulos I.**, Bouziou D. (2010), "3-D Seismic Response of Bridge Pier on Pilegroup: Towards a New Design Philosophy", *Proc.* 6th Hellenic Conference on Geotechnical and Geoenvironmental Engineering, Volos, 29/9–1/10, Vol. 3, pp. 275-282 (in Greek).
- C75. Loli M., **Anastasopoulos I.**, Bransby M.F., Gazetas G. (2010), "Caisson foundation subjected to normal faulting: Experimental and analytical study", *Proc.* 6th Hellenic Conference on Geotechnical and Geoenvironmental Engineering, Volos, 29/9–1/10, Vol. 3, pp. 283–290 (in Greek).
- C74. **Anastasopoulos I.**, Georgarakos T., Drosos V., Gazetas G. (2010), "Experimental Soil–Foundation–Bridge Pier Interaction: Towards a Reversal of Capacity design", *Proc.* 5th Int. Conf. on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics and Symposium in Honor of Professor I.M. Idriss, San Diego, CA, May 24-29.
- C73. **Anastasopoulos I.**, Georgarakos T., Kourkoulis R., Gazetas G. (2010), "Design of bridges against seismic faulting: methodology and applications", *Proc.* 5th Int. Conf. on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics and Symposium in Honor of Professor I.M. Idriss, San Diego, CA, May 24-29.
- C72. **Anastasopoulos I.**, Kourkoulis R., Drosos V., Georgarakos T., Gazetas G. (2009), "Methodology for Design Analysis of Bridges against an Emerging Fault Rupture", *Proc.* 3rd Greece–Japan Workshop: Seismic Design, Observation, Retrofit of Foundations, Santorini 22–23 September, pp. 375–392.
- C71. **Anastasopoulos I.** (2009), "Simplified Method for the Design of Raft Foundations against a Direct Hit by Thrust Faulting" *Proc.* 3rd Greece–Japan Workshop: Seismic Design, Observation, Retrofit of Foundations, Santorini 22–23 September, pp. 419–437.
- C70. Stavropoulou E., **Anastasopoulos I.**, Gazetas G. (2009), "Preliminary SFSI Studies for the Messina Bridge Foundations", *Proc.* 3rd Greece–Japan Workshop: Seismic Design, Observation, Retrofit of Foundations, Santorini 22–23 September, pp. 438–448.
- C69. **Anastasopoulos I.**, Loli M., Gerolymos N., Apostolou M., Gazetas G. (2009), "Towards a Reversal of Seismic Capacity Design. Part A: Analysis of Bridge Pier–Foundation System", *Proc.* 3rd Greece–Japan Workshop: Seismic Design, Observation, Retrofit of Foundations, Santorini 22–23 September, pp. 393–406.

- C68. **Anastasopoulos I.**, Georgarakos T., Drosos V., Giannakos S., Gazetas G. (2009), "Towards a Reversal of Seismic Capacity Design: Part B. Shaking", *Proc.* 3rd Greece–Japan Workshop: Seismic Design, Observation, Retrofit of Foundations, Santorini 22–23 September, pp. 407–418.
- C67. Kourkoulis R., Gelagoti F., **Anastasopoulos I.**, Gazetas G. (2009), "Piles for Stabilising Seismically Precarious Slopes. Part A: Development and Validation", *Proc.* 3rd Greece–Japan Workshop: Seismic Design, Observation, Retrofit of Foundations, Santorini 22–23 September, pp. 506–519.
- C66. Kourkoulis R., Gelagoti F., **Anastasopoulos I.**, Gazetas G. (2009), "Piles for Stabilising Seismically Precarious Slopes. Part B: Parametric Analysis and Design Charts", *Proc. 3rd Greece–Japan Workshop: Seismic Design, Observation, Retrofit of Foundations*, Santorini 22–23 September, pp. 520–533.
- C65. Gazetas G., **Anastasopoulos I.**, Loli M., Gerolymos N. (2009), "Nonlinear Inelastic Seismic Response of Slender Bridge Pier on Surface Foundation", *Proc.* 2nd Int. Conf. on Computational Dynamics and Earthquake Engineering COMPDYN.
- C64. **Anastasopoulos I.,** Loli M., Gerolymos N., Apostolou M., Gazetas G. (2008), "Bridge Pier–Foundation: Beyond the Conventional Seismic Capacity Design", *Proc. 3rd National Conference on Earthquake Engineering & Engineering Seismology*, Athens, 5–7 November, Paper 1866 (in Greek).
- C63. **Anastasopoulos I.,** Drosos V., Georgarakos T., Kourkoulis R., Gazetas G. (2008), "Design of Rail and Road Bridges against Seismic Faulting. Part 1: Foundation", *Proc. 3rd National Conference on Earthquake Engineering & Engineering Seismology*, Athens, 5–7 November, Paper 1954 (in Greek).
- C62. **Anastasopoulos I.,** Drosos V., Georgarakos T., Kourkoulis R., Gazetas G. (2008), "Design of Rail and Road Bridges against Seismic Faulting. Part 2: Superstructure", *Proc.* 3rd *National Conference on Earthquake Engineering & Engineering Seismology*, Athens, 5–7 November, Paper 1955 (in Greek).
- C61. **Anastasopoulos I.,** Gazetas G., Malios I. (2008), "Major Domokos ($\Sigma\Gamma$ 26) Rail Bridge: Design against Seismic Faulting", *Proc.* 3^{rd} *National Conference on Earthquake Engineering & Engineering Seismology*, Athens, 5–7 November, Paper 1956 (in Greek).
- C60. **Anastasopoulos I.,** Gazetas G. (2008), "Kamena Vourla Cut & Cover Tunnels: Analysis of the Consequences of a Possible Fault Rupture", *Proc.* 3rd National Conference on Earthquake Engineering & Engineering Seismology, Athens, 5–7 November, Paper 1887 (in Greek).
- C59. **Anastasopoulos I.,** Gerolymos N., Drosos V., Kourkoulis R., Georgarakos T., Gazetas G. (2008), "Rion–Antirrion Immersed Tunnel: Design for Combined Faulting Deformation and Subsequent Seismic Shaking", *Proc.* 3rd National Conference on Earthquake Engineering & Engineering Seismology, Athens, 5–7 November, Paper 1976 (in Greek).
- C58. **Anastasopoulos I.,** Bransby F., (2008), "Design of Slab Foundations against Seismic Faulting. Part I: Free–Field", *Proc. 3rd National Conference on Earthquake Engineering & Engineering Seismology*, Athens, 5–7 November, Paper 1957 (in Greek).
- C57. **Anastasopoulos I.,** Bransby F., (2008), "Design of Slab Foundations against Seismic Faulting. Part 2: Soil Structure Interaction", *Proc.* 3rd Nat. Conference on Earthquake Engineering & Engineering Seismology, Athens, 5–7 November, Paper 1958 (in Greek).
- C56. Giannakou A., Gerolymos N., **Anastasopoulos I.,** Gazetas G. (2008), "Seismic Behaviour of Inclined Piles: Role Beneficial or Detrimental?", *Proc.* 3rd Nat. Conf. on Earthquake Engineering & Engineering Seismology, Athens, 5–7 November, Paper 1856 (in Greek).
- C55. Garini E., **Anastasopoulos I.,** Gazetas G. (2008), "Paradoxical Sliding Behavior of Block Triggered by Near–Fault Ground Motions", *Proc.* 3rd National Conference on Earthquake Engineering & Engineering Seismology, Athens, 5–7 November, Paper 2035 (in Greek).
- C54. Gazetas G., **Anastasopoulos I.** (2008) "Case Histories of Foundations on top of a Rupturing Normal Fault during the Kocaeli 1999 Earthquake", *Proc.* 6th International Conference on

- Case Histories in Geotechnical Engineering and Symposium in honor of professor James K. Mitchell, Arlington, VA (USA), August 11-16.
- C53. Gazetas G., **Anastasopoulos I.** (2008), "Structures on Faults", *Proc. Symposium «National Technical University of Athens in the Forefront of Research & Technology»*, Aθήνα, NTUA, 6–7 December (in Greek).
- C52. Bruni S., **Anastasopoulos I.**, Alfi S., Van Leuven A., Apostolou M., and Gazetas G. (2008), "Effects of train impacts on urban turnouts: modeling and validation through measurements", *Proc.* 10th International Conference on Applications of Advanced Technologies in Transportation, 27-30 May 2008.
- C51. **Anastasopoulos I.**, Alfi S., Bruni S., Van Leuven A., Apostolou M., and Gazetas G. (2008), "Advanced methods for the reduction of train impacts on urban turnouts: analytical evaluation and real-scale verification of new concepts", *Proc.* 10th Int. Conf. on Applications of Advanced Technologies in Transportation, 27-30 May 2008.
- C50. **Anastasopoulos I.**, Gazetas G., Gerolymos N., Bransby M. F., and Davies M.C.R. (2008), "Normal Fault Rupture Propagation Through Sand: A Simplified Semi–Analytical Approach", *Proc. BGA Int. Conf. on Foundations*, Dundee, Scotland, 24–27 June 2008.
- C49. **Anastasopoulos I.**, Georgarakos T., Drosos V., Gazetas G. (2008), "Fault Rupture–Foundation Interaction: Physical Modeling at the New Experimental Facility of NTUA", *Proc.* 3rd National Conference on Earthquake Engineering & Engineering Seismology, Athens, 5–7 November, Paper 1847 (in Greek).
- C48. Georgarakos T., Drosos V., **Anastasopoulos I.**, Gazetas G. (2008), "Experimental Verification of the Seismic Response of Reinforced Soil Walls in the New Shaking Table of the NTUA Soil Mechanics Laboratory", *Proc. 3rd National Conference on Earthquake Engineering & Engineering Seismology*, Athens, 5–7 November, Paper 1996 (in Greek).
- C47. **Anastasopoulos I.**, Gazetas G. (2008), "Seismic Design of Buildings against Tectonic Faulting", *Proc.* 3rd National Conference on Earthquake Engineering & Engineering Seismology, Athens, 5–7 November, Paper 1842 (in Greek).
- C46. Gazetas G., **Anastasopoulos I.**, Georgarakos T., Drosos V. (2008), "NTUA Soil Mechanics Laboratory: New Division for the Simulation of the Seismic Response of Soil–Structure Systems", *Proc.* 3rd National Conference on Earthquake Engineering & Engineering Seismology, Athens, 5–7 November, Paper 2023 (in Greek).
- C45. **Anastasopoulos I.**, Prassa Ch., Giannakos S., Gazetas G. (2008), "Seismic Response of Geofoam-Isolated Retaining Walls", *Proc.* 3rd National Conference on Earthquake Engineering & Engineering Seismology, Athens, 5–7 November, Paper 2063 (in Greek).
- C44. **Anastasopoulos I.**, Antonakos G., Giannakos S., Gazetas G. (2008), "Interaction of Foundation Beam with a Reverse Fault Rupture", *Proc. 3rd National Conf. on Earthquake Engineering & Engineering Seismology*, Athens, 5–7 November, Paper 2097 (in Greek).
- C43. Plelli-Tsaltaki A., **Anastasopoulos I.**, Gazetas G. (2008), "Analysis of failure of the Düzce-Bolu viaduct bearings in the 12-11-1999 Turkey earthquake", *Proc.* 3rd National Conference on Earthquake Engineering & Engineering Seismology, Athens, 5–7 November, Paper 2088 (in Greek).
- C42. Panos I., Georgiannou V., **Anastasopoulos I.**, (2008), "Analytical Simulation of the Experimental Response of Sand to Bender Element Excitation", *Proc.* 3rd Nat. Conf. on Earthquake Engineering & Engineering Seismology, Athens, 5–7 November, Paper 2055.
- C41. **Anastasopoulos I.**, Kourkoulis R., Gazetas G., Halkias B., Papadimitriou F. (2008), "Development of Earthquake Crisis Management strategic plan for Metropolitan Highway Systems", *Proceedings 17th Congress of IABSE*, September 17–19, Chicago, USA.
- C40. Gazetas G., **Anastasopoulos I.** (2007), "Interaction of Foundations with a Rupturing Fault: Case Histories from Gölcük 1999", *Proc. Turkish Spec. Symposium in Soil Mechanics and Geotechnical Eng. on "Soil-Structure Interaction in Theory and Practice"*, Nov. 8–10.

- C39. S. Alfi, **Anastasopoulos I.**, Bruni S., Gazetas G., and Van Leuven A. (2007), "Reducing Impacts At Turnouts: Modelling Approaches And Measurements", *Proceedings, Railway Engineering* 2007, 20–21 June, University of Westminster, London, U.K.
- C38. **Anastasopoulos I.**, Gazetas G., Bransby M.F., Davies M.C.R., El Nahas A. (2007), "Shallow Foundations over Rupturing Normal Faults: Analysis and Experiments", *Proceedings of the 4th International Conference on Earthquake Geotechnical Engineering*, Thessaloniki, Greece, 25–28 June 2007.
- C37. **Anastasopoulos I.,** Gerolymos N., Drosos V., Kourkoulis R., Georgarakos T., Gazetas G. (2007), "Behaviour of Deep Immersed Tunnel under Major Fault Rupture Deformation", *Proceedings of the 4th International Conference on Earthquake Geotechnical Engineering*, Thessaloniki, Greece, 25–28 June 2007.
- C36. **Anastasopoulos I.**, Gazetas G. (2007), "Interaction of Shallow and Deep Foundations with a Rupturing Normal Fault", *Proceedings of the 2nd Japan-Greece Workshop on Seismic Design, Observation, and Retrofit of Foundations*, Tokyo, Japan, 3–4 April, pp. 197–211.
- C35. Gazetas G., **Anastasopoulos I.**, Gerolymos N., Drosos V., Kourkoulis R., Georgarakos T. (2007), "Deep Immersed Tunnel under Combined Major Fault Rupture Deformation and Subsequent Strong Seismic Shaking", *Proceedings of the 2nd Japan-Greece Workshop on Seismic Design, Observation, and Retrofit of Foundations*, Tokyo, 3–4 April, pp. 1–26.
- C34. Gazetas G., **Anastasopoulos I.** (2007), "Overturning of Buildings in Adapazari during the 1999 Kocaeli Earthquake", *Proc.* 6th Turkish National Conference on Earthquake Engineering, Istanbul Technical University, 16–20 October.
- C33. Garini E., Gazetas G., **Anastasopoulos I.** (2007), "Rupture–Directivity and Fling–Step Effects on Newmark Block Sliding", *Proceedings of the 4th International Conference on Earthquake Geotechnical Engineering*, Thessaloniki, Greece, 25–28 June 2007.
- C32. Kourkoulis R., Gelagoti F., **Anastasopoulos I.**, Gazetas G. (2007), "Interaction of Earthquake-Triggered Landslide with Foundation-Structure Systems", *Proceedings of the 2nd Japan-Greece Workshop on Seismic Design, Observation, and Retrofit of Foundations*, Tokyo, Japan, 3–4 April, pp. 51–63.
- C31. Kourkoulis R., **Anastasopoulos I.**, Gazetas G. (2006), "Analysis of Soil–Structure Interaction during Earthquake–induced Landslides on Strain–Softening Soil", *Proceedings of the 1st European Conference on Earthquake Engineering and Seismology*, Geneva, Switzerland, 3–8 September.
- C30. **Anastasopoulos I.**, Gazetas G. (2006), "Design of Rodinion Bridge against Possible Tectonic Dislocation", *Proc.* 5th Hellenic Conference on Geotechnical and Geoenvironmental Engineering, Xanthi, 31/5 2/6, Vol. 2, pp. 51–56 (in Greek).
- C29. **Anastasopoulos I.**, Gazetas G., Sigalas I. (2006), "Design of O.E.K. Housing Complex against Displacement of the Atalanti Fault: Soil–Foundation–Structure Interaction", *Proc.* 5th Hellenic Conf. on Geotech. and Geoenv. Engng., Xanthi, 31/5–2/6, Vol. 2, pp. 57–64.
- C28. Garini E., Gerolymos N., **Anastasopoulos I.**, Gazetas G. (2006), "Analysis of Pile Against Large Displacements in Liquefied Soil", *Proc.* 5th Hellenic Conference on Geotechnical and Geoenvironmental Engineering, Xanthi, 31/5 2/6, Vol. 2, pp. 127–134 (in Greek).
- C27. Gazetas G., Dakoulas P., **Anastasopoulos I.** (2006), "Failure of Harbor Quaywalls in the Lefkada 14-8-2003 Earthquake", *Proc.* 5th Hellenic Conference on Geotechnical and Geoenvironmental Engineering, Xanthi, 31/5 2/6, Vol. 2, pp. 159–166 (in Greek).
- C26. Klimis N., Apostolou M., Anastasiadis A., **Anastasopoulos I.**, Gazetas G. (2006), "Nestos Bridge: Risk of Extended Liquefaction, Counter-Measures with Piles and Soil Improvement", *Proc.* 5th Hellenic Conference on Geotechnical and Geoenvironmental Engineering, Xanthi, 31/5 2/6, Vol. 3, pp. 207–214 (in Greek).
- C25. Kourkoulis R., **Anastasopoulos I.**, Gazetas G. (2006), "Rion–Antirrion Bridge: Geotechnical Static and Dynamic Analysis of Pier M3", *Proc.* 5th Hellenic Conf. on Geotech. and Geoenv. Engng., Xanthi, 31/5 2/6, Vol. 3, pp. 215–222 (in Greek).

- C24. **Anastasopoulos I.**, Gazetas G., Pavlides S. (2006), "Stratoni Tailings Dams: Analysis of Ierissos Fault Rupture Propagation", *Proc. 5th Hellenic Conference on Geotechnical and Geoenvironmental Engineering*, Xanthi, 31/5 2/6, Vol. 3, pp. 319–326 (in Greek).
- C23. Giannakou A., Nomikos P., **Anastasopoulos I.**, Youta–Mitra P., Sofianos A., Gazetas G. (2006), "Dynamic Response of Tunnels Analysis of Seismic Failure Case History", *Proc.* 5th Hellenic Conference on Geotechnical and Geoenvironmental Engineering, Xanthi, 31/5 2/6, Vol. 3, pp. 445–452 (in Greek).
- C22. **Anastasopoulos I.**, Gazetas G., Sigalas I., Pavlides S. (2006), "Failures and Successful Performance of Buildings Subjected to Fault Induced Displacement: Case Histories from the Kocaeli 1999 Earthquake", *Proc.* 5th Hellenic Conference on Geotechnical and Geoenvironmental Engineering, Xanthi, 31/5 2/6, Vol. 2, pp. 65–72 (in Greek).
- C21. Gerolymos N., **Anastasopoulos I.**, Gazetas G., Tsimonos Th. (2006), "OAKA: Retaining Structure Design of the Opening Ceremony Shaft", *Proc.* 5th Hellenic Conference on Geotechnical and Geoenvironmental Engineering, Xanthi, 31/5 2/6, Vol. 2, pp. 517–524.
- C20. **Anastasopoulos I.**, Gerolymos N., Drosos V., Gergarakos T., Kourkoulis R., Gazetas G. (2006), "Dynamic Analysis and Seismic Design of Immersed Tunnel: A Parametric Study", *Proc.* 5th Hellenic Conference on Geotechnical and Geoenvironmental Engineering, Xanthi, 31/5 2/6, Vol. 3, pp. 415–422 (in Greek).
- C19. **Anastasopoulos I.**, Apostolou M., Gazetas G., Tsimonos Th. (2006), "Kamena Vourla Cut & Cover Tunnels: Analysis of the Consequences of a Possible Fault Rupture", *Proc.* 5th *Hellenic Conference on Geotechnical and Geoenvironmental Engineering*, Xanthi, 31/5 2/6, Vol. 3, pp. 423–428 (in Greek).
- C18. **Anastasopoulos I.** & Gazetas G. (2006), "Design of Foundations and Structures Against Fault Displacement", *ETC-12 Workshop*, Athens, Greece, January 20–21.
- C17. Gazetas G., **Anastasopoulos I.,** and Dakoulas P. (2005), "Failure of harbor quaywalls in the Lefkada 2003 earthquake", *Proceedings of Geotechnical Earthquake Engineering Satellite Conference Performance Based Design in Earthquake Geotechnical Engineering: Concepts and Research*, Osaka, Japan, 10 September 2005, pp. 62–69.
- C16. Giannakou A., Nomikos P., **Anastasopoulos I.,** Sofianos A., Gazetas G. & P. Yiouta-Mitra (2005), "Seismic Behaviour of Tunnels in Soft Soil: Parametric Numerical Study and Investigation on the Causes of Failure of the Bolu Tunnel (Düzce, Turkey, 1999)", *Proceedings of the ITA-AITES 2005 World Tunnel Congress & 31st General Assembly*, Istanbul- Turkey, May 7–12, 2005.
- C15. **Anastasopoulos I.,** Gazetas G. (2005), "Design Against Fault Rupture: Methodology and Applications in Greece", *Proc. 1st Greece–Japan Workshop: Seismic Design, Observation and Retrofit of Foundations*, Athens, October 11–12, 2005, pp. 345–366.
- C14. **Anastasopoulos I.** (2005), "Behaviour of Foundations over Surface Fault Rupture: Analysis of Case Histories from the Izmit (1999) Earthquake", *Proceedings of the 16th International Conference on Soil Mechanics & Earthquake Engineering*, Osaka, Japan, September 12–16, 2005, pp. 2623–2626.
- C13. Gazetas, G., **Anastasopoulos I.,** & Gerolymos, N. (2005), "Overturning of Buildings in Adapazari, during the 1999 Kocaeli earthquake", *Proceedings of the 2nd International Conference on Urban Earthquake Engineering*, Tokyo, March 7–8, 2005, pp. 193–198.
- C12. Gazetas G., Apostolou M., **Anastasopoulos I.** (2004), "Seismic Bearing Capacity and Uplifting Foundations: Adapazari 1999", *Proceedings of the 5th International Conference on Case Histories in Geotechnical Engineering*, New York, April 13–17, 2004.
- C11. **Anastasopoulos I.,** Gazetas G., Psarropoulos P. (2004), "On the Seismic Response of Flexible Retaining Structures", *Proceedings of the 11th International Symposium on Soil Dynamics and Earthquake Engineering*, University of California, Berkeley, 7-9 January, 2004, Vol. 1, pp. 96–103.

- C10. Gazetas G., Gerolymos N., and **Anastasopoulos I.** (2004), "The Behaviour of Three Athens Metro Underground Structures in the Parnitha (Athens) Earthquake", *Proceedings of the 11th International Symposium on Soil Dynamics and Earthquake Engineering*, University of California, Berkeley, 7–9 January, 2004, Vol. 1, pp. 390–397.
- C9. Gazetas G., **Anastasopoulos I.,** Garini E. (2003), "The Lefkada (14-8-03) Earthquake: Failures in Harbour Quaywalls", *Proc.* 3rd National Conference of Ports and Harbours, Athens 24–27 November, pp. 83–110 (in Greek).
- C8. Gazetas G., Apostolou M. and **Anastasopoulos I.** (2003), "Seismic Uplifting of Foundations on Soft Soil, with Examples from Adapazari (Izmit 1999, Earthquake), *BGA International Conference on Foundations Innovations, Observations, Design & Practice in the University of Dundee*, Scotland, September 2–5, pp. 37–50.
- C7. Apostolou M., Gazetas G., Makris N., **Anastasopoulos I.** (2003), "Rocking of Foundations under Strong Seismic Excitation". *Proceedings of Fib International Symposium on Concrete Structures in Seismic Regions*, Athens, 6–8 May.
- C6. Fardis N., Georgarakos P., Gazetas G., **Anastasopoulos I.** (2003), "Sliding Isolation of Structures: Effect of Horizontal and Vertical Acceleration" *Proceedings of Fib International Symposium on Concrete Structures in Seismic Regions*, Athens, 6–8 May.
- C5. Gazetas G., Gerolymos N., **Anastasopoulos I.,** Novack M., Benissi M. (2003), "The Behaviour of Three Athens Metro Underground Structures in the Parnitha (Athens) Earthquake", *FIB Int. Symp. on Concrete Structures in Seismic Regions*, Athens, 6–8 May.
- C4. **Anastasopoulos I.,** Gazetas G., Psarropoulos Pr. (2003), "Flexible Retaining Walls: Why they do not often Fail in Strong Seismic Shaking", *Proceedings of Fib International Symposium on Concrete Structures in Seismic Regions*, Athens, 6–8 May.
- C3. Syngros C., **Anastasopoulos I.,** Mylonakis G., Gazetas G. (2003), "The Collapse of Fukae (Hanshin Expressway) Bridge, Kobe 1995: Contribution of Soil–Structure Interaction, Reconstruction and Isolation", *Proceedings of the Fib International Symposium on Concrete Structures in Seismic Regions*, Athens, 6–8 May.
- C2. Apostolou M., **Anastasopoulos I.,** Gazetas G. (2002), "Analysis of Sliding and Overturning of Monuments in the Parnitha Earthquake for Estimating the Ground Acceleration", *Proc.* 2nd National Conference on Earthquake Engineering and Engineering Seismology, Thessaloniki, 28–30 November (in Greek).
- C1. **Anastasopoulos I.,** Gerolymos N., Gazetas G. (2001), "Possible Causes of the Collapse of an Approach Span of the Nishinomiya-ko Bridge: Kobe 1995", *Proc. 4th Hellenic Conf. on Geotechnical and Geoenvironmental Engineering*, Athens, Vol. 2, pp. 83–90 (in Greek).

Other Scholarly Publications

- O9. **Anastasopoulos I.** (2011), "Analysis and Evaluation of Damage to a 5-storey Building: Differential Settlement due to Erection of Neighboring Building or Construction Defects?", *Journal of the Hellenic Society of Civil Engineers*, No. 397 (in Greek).
- O8. Gazetas G., **Anastasopoulos I.**, Georgarakos T., Drosos V. (2010), "NTUA Laboratory of Soil Mechanics: New Division for Experimental Simulation of Soil Structure Systems", Journal of the Hellenic Society of Civil Engineers No. 384 (in Greek).
- O7. **Anastasopoulos I.**, Gazetas G. (2009), "Design of Bridges against Tectonic Deformation", *Proc. Workshop of the Hellenic Society of Bridges*, Patras, 12 October (*in Greek*).
- O6. Gazetas G., **Anastasopoulos I.**, Drosos V. Georgarakos T., Kourkoulis R. (2007), "Seismic Perfromance of Reinforced-earth Retaining Walls in the New NTUA Shaking Table", *Proc.*, *Workshop: Geotech. Appl. of Geosynthetic Materials*, Athens, 11 Januray (*in Greek*).
- O5. **Anastasopoulos I.** (2006), "New Shaking Table at the Soil Mechanics Laboratory of the Scholl of Civil Engineering of NTUA", *Journal of the Hellenic Society Hellenic Society of Soil Mechanics & Foundation Engineering*, Vol. 6, pp. 20–23 (in Greek).

- O4. Gazetas G., **Anastasopoulos I.** (2004), "Design of Foundation and Temporary Retaining Structure of the International Broadcasting Center", *NTUA Publication: "The National Technical University of Athens and the Olympic Games of Athens 2004"* (in Greek).
- O3. Gazetas G., Gerolymos N., **Anastasopoulos I.** (2004), "Temporary Retaining Structure of the Opening Ceremony Shaft", *NTUA Publication: "The National Technical University of Athens and the Olympic Games of Athens 2004" (in Greek).*
- O2. **Anastasopoulos I.** (1999), "Kobe: Unique Experience for the Students of NTUA", *Journal of the Technical Chamber of Greece*, Vol. 2058, July 5 (in Greek).
- O1. **Anastasopoulos I.** (1999), "Field Trip to Kobe Unique Experience for the Students of NTUA", *Journal TECHNIKA*, June, pp. 26–32 (in Greek).

Dissertations and Theses

- III. **Anastasopoulos, I.** (2005), "Fault Rupture–Soil–Foundation–Structure Interaction", *Ph.D. Dissertation*, School of Civil Engineering, National Technical University, Athens.
- II. Anastassopoulos, I. (2000), Fault Tolerance and Incident Detection Using Fourier Transforms, M.Sc. Thesis, School of Civil Engineering, Purdue University, West Lafayette, IN., USA.
- I. **Anastassopoulos, I.** (1999), "Analysis of Failure of 2 Bridges in the Kobe–1995 Earthquake and the Role of Soil", *Diploma Thesis*, School of Civil Engineering, National Technical University, Athens.