Curriculum Vitae

Personal Information				
Last Name	:	Strepelias		-
First Name	:	Elias		
Position	:	Assistant Professor		
Academic Field	:	Experimental Methods for Reinforced Concrete Buil	or Retrofitting of dings	
Work Address	:	International Hellenic Un	iversity	
		Alexander Campus / Scho	ool of Engineering	
		Department of Environm Thessaloniki, Greece	ental Engineering, P.O.	Box 141, 574 00,
		Reinforced Concrete, Ret	trofitting of Reinforced	Concrete
Research Interests	:	Structures, Earthquake R Methods	esistant Structures, Exp	perimental
Contact Details:	÷	τηλ.: -	e-mail: listrepelias@g	mail.com

Education	
2005	Diploma in Civil Engineering, Department of Civil Engineering, University of Patras, Greece.
2007	Master of Science in "Seismic Design of Structures", Department of Civil Engineering, University of Patras, Greece.
2012	Doctor of Philosophy, Department of Civil Engineering, University of Patras, Greece.
	Ph.D. thesis: "Retrofitting of existing frame structures through RC infilling: experimental and analytical investigation"
2018	Master of Science in Business Administration, Department of Business Administration, University of Patras, Greece

Professional	Experience
2010-2011	Adjunct lecturer (laboratory associate), Department of Civil Infrastructure Engineering, Technological Educational Institute of Patras.
2012-2014	Adjunct lecturer (scientific associate), Department of Civil Engineering, Technological Educational Institute of Western Greece.
2013-2023	Postdoctoral researcher, Structures laboratory, Department of Civil Engineering, University of Patras, Greece

2013-2023	Postdoctoral researcher, Seismic simulator laboratory, Department of Civil Engineering, University of Patras, Greece
2016-2020	Adjunct lecturer (laboratory associate), Department of Civil Engineering Educators, School of Pedagogical and Technological Education
2016-2020	Instructor, School of Science and Technology, Hellenic Open University.
2017	Adjunct lecturer, Department of Civil Engineering, University of Patras, Greece
2019	Adjunct lecturer, Department of Civil Engineering, Technological Educational Institute of Western Greece
2018-2020	Adjunct lecturer according to 407/80, Department of Civil Engineering, University of Patras, Greece
2020-2021	Scientific Personnel, Preliminary Appeals Review Authority
2021-2024	Secondary School Teacher, Ministry of Education and Religious Affairs

Teaching Experience		
A. Undergraduate		
2010-2011	Department of Civil Infrastructure Engineering, Technological Educational Institute of Patras	
	 Computer Programming I (Laboratory) Computer Programming II (Laboratory) 	
2012-2014	Department of Civil Engineering, Technological Educational Institute of Western Greece	
	Bridge Engineering	
	Construction Machines	
	Repair and Strengthening of Structures	
2016-2020	Department of Civil Engineering Educators, School of Pedagogical and Technological Education	
	Reinforced Concrete I (laboratory)	
	Reinforced Concrete II (laboratory)	
	Earthquake Resistant Design of Structures (laboratory)	
2017	Department of Civil Engineering, University of Patras, Greece	
	Design of Concrete Bridges	
2019	Department of Civil Engineering, Technological Educational Institute of Western Greece	
	Reinforced Concrete II	
	Masonry and Timber Structures	
2019-2020	Department of Civil Engineering, University of Patras, Greece	

• Design of Reinforced Concrete Linear Members (laboratory)

B. Supervision of Post Graduate Theses

2016-2020 Hellenic Open University, School of Science and Technology

Research Projects

A. Principal Investigator

I. International

II. National

B. Research Team Member			
I. In	I. International		
1.	2006-2007	LESSLOSS "Risk Mitigation for Earthquakes and Landslides", funded by E.U. (P.I.: M.N. Fardis).	
2.	2010-2011, 2013	SERIES: Seismic Engineering Research Infrastructures for European Synergies", Funded by E.U., 7th Framework Program, Capacities Specific Program, Research Infrastructures, (P.I.: M.N. Fardis).	
3.	2011	"Seismic vulnerability and retrofit of buildings", funded by Research Institute of Cyprus (P.I.: M.N. Fardis).	
4.	2011-2012, 2016	ACES "Advanced Centre of Excellence in Structural and Earthquake Engineering", funded by E.U. (P.I.: M.N. Fardis).	
5.	2015-2016	Experimental testing of connections for steel structures", funded by The University of Warwick, (P.I.: S.N. Bousias).	
6.	2017-2020	H2020-Infraia: SERA: Seismology and Earthquake Engineering Research Infrastructure Alliance for Europe», funded by E.U. (P.I.: S.N. Bousias).	
7.	2020	XP-Resilience: Extreme loading analysis of petrochemical plants and design of metamaterial-based shields for enhanced resilience», funded by E.U. (P.I.: S.N. Bousias).	
II. National			
1.	2006	ARISTION – "Evaluation of seismic vulnerability of existing buildings and development of advanced retrofitting techniques" funded by GSRT, (P.I.: T.C. Triantafillou)	
2.	2008	Investigation of the vulnerability of buildings with insufficient column lap splices funded by Technical Chamber of Greece, (P.I.: S.N. Bousias).	

3.	2010	Experimental Investigation of 4-storey reinforced concrete frames retrofitted by adding shear walls – proposals for the Greek Codes of Interventions", funded by Earthquake Planning and Protection Organization, (P.I.: M.N. Fardis).
4.	2013-2014	Experimental study of the contribution of particle damper to the reduction of the <i>response</i> of monuments to seismic excitation. «Archimedes III – research group in TEI of Patras», Education and lifelong learning, co-funded by the European Social Fund (ESF) and Greek National Resources (P.I. : A. Papalou).
5.	2014-2015	"Paradigm for Resilient Concrete Infrastructures to Extreme Natural and Man- made Threats - PRESCIENT", Education and lifelong learning, funded by ERC/GSRT, (P.I.: M.N. Fardis)
6.	2013-2015	"ARISTEIA" Action of the "Operational Program Education and Lifelong Learning" co-funded by the European Social Fund (ESF) and Greek National Resources (P.I.: N. Makris)
7.	2018-2019	Project "Supporting researchers with emphasis on young researchers - EDVM34", funded by the European Social Fund (ESF) and Greek National Resources
8.	2020	"Experimental investigation of bond-slip between concrete and reinforcement in reinforced concrete beams", funded by PRAKSYS SA (P.I.: S.N. Bousias)
9	2022	"Multiparametric monitoring platform with micro-sensors of eNceladus hellenlc supersite", Operational Program Competitiveness, Entrepreneurship and Innovation, call RESEARCH – CREATE – INNOVATE. (P.I.: K. Nikolakopoulos)

Publications in Scientific Journals (peer reviewed)		
1.	2013	Strepelias, E., Palios, X., Bousias S.N., Fardis, M.N. (2013) Experimental investigation of concrete frames infilled with RC for seismic rehabilitation, ASCE Journal of Structural Engineering, 140(1), doi:10.1061/(ASCE)ST.1943-541X.0000817
2.	2013	Fardis, M. N., Schetakis, A., & Strepelias, E. (2013). RC buildings retrofitted by converting frame bays into RC walls. <i>Bulletin of Earthquake Engineering</i> , 11(5), 1541-1561
3.	2014	 Strepelias, E., Palios, X., Bousias, S.N. and Fardis, M.N., "Chapter 16: Pseudo- Dynamic Tests of 4-Storey Non-Ductile Frames with RC Infilling of the Bay" in "Seismic Evaluation and Rehabilitation of Structures", Ilki, A. and Fardis M. (eds.), Springer International Publishing, ISBN 978-3-319-00457-0, p. 281-301, 2014.
4.	2014	 Fardis, M.N., Schetakis A. and Strepelias E., "Chapter 15: Seismic rehabilitation of concrete buildings by converting frame bays into RC Walls" in "Seismic Evaluation and Rehabilitation of Structures", Ilki, A. and Fardis M. (eds.), Springer International Publishing, ISBN 978-3-319-00457-0, p. 261-280, 2014.
5.	2014	 Papalou, A., & Strepelias, E. (2014). Structural Control of Monuments' Response under Sinusoidal Excitation Using Particle Dampers. Open Construction and Building Technology Journal, 8, 351-356.

6.	2015	Papalou, A., Strepelias, E. , Roubien, D., Bousias, S., & Triantafillou, T. (2015). Seismic protection of monuments using particle dampers in multi-drum
		Columnis. Son Dynamics and Earthquake Engineering, 77, 500-508.
7.	2015	Classical Columns with Defects. <i>Periodica Polytechnica</i> . Civil Engineering, 59(3), 303.
8.	2016	Papalou, A., & Strepelias, E. (2016). Effectiveness of particle dampers in reducing monuments' response under dynamic loads. <i>Mechanics of</i> <i>Advanced Materials and Structures</i> , 23(2), 128-135.
9.	2016	 Palios, X., Fardis, M. N., Strepelias, E., & Bousias, S. N. (2016). Unbonded brickwork for the protection of infills from seismic damage, Engineering Structures,131,614-624, http://dx.doi.org/10.1016/j.engstruct.2016.10.027
10.	2017	Stathas, N., Bousias, S.N., Palios, X., Strepelias E., Fardis, M.N. (2017) "Tests and simple models of RC frame subassemblies for postulated loss of column", ASCE Journal of Structural Engineering, 144 (2), 04017195 https://doi.org/10.1061/(ASCE)ST.1943-541X.0001951
11.	2017	Stathas, N., Bousias, S.N., Palios, X., Strepelias, E. and Fardis, M.N., (2017) "Continuous one-way RC slabs with sinking outer support: Tests and simple model", ASCE Journal of Structural Engineering, 144(2), 04017194 https://doi.org/10.1061/(ASCE)ST.1943-541X.0001887
12.	2017	 Stathas N., Palios, X., Strepelias, E., Fardis, M., Bousias, S., and Sarkis, A. (2017) "Dry-jointed precast concrete frame on rocking or fixed footings under cyclic lateral loading", Bulletin of Earthquake Engineering, 15(11), 4915-4938, doi.org/10.1007/s10518-017-0151-5.
13.	2019	Stathas, N., Karakasis, I., Strepelias, E., Palios, X., Bousias, S.N., and Fardis, M.N., (2019) "Tests and analysis of RC building, with or without masonry infills, for instantaneous column loss", Engineering Structures, 193, 57-67, https://doi.org/10.1016/j.engstruct.2019.05.015
14.	2020	Palios, X., Strepelias, E., Stathas, N., Fardis, M., Bousias, S., Chrysostomou, C., Kyriakidis, N., (2020), "Experimental study of a three-storey concrete frame structure with smooth bars under cyclic lateral loading", Bulletin of Earthquake Engineering, 18(13), 5859-5884.
15.	2020	Strepelias, E., Stathas, N., Palios, X., & Bousias, S. (2020). "Hybrid Simulation Framework for Multi-hazard Testing", American Journal of Civil Engineering, 8(1), 10-19. doi: 10.11648/j.ajce.20200801.12.
16.	2020	Park, J., Strepelias, E., Stathas, N., Kwon, O.S., Bousias, S., (2020), "Application of Hybrid Simulation Method for Seismic Perfromance Evanluation of RC Coupling Beams Subjected to Realistic Boundary Condition", Earthquake Engineering and Structural Dynamics, DOI: 10.1002/eqe.3335.
17.	2020	 Zhang, Z., Park, J., Kwon, O.S., Sextos, A., Strepelias, E., Stathas, N., Bousias, S., (2020) "Hybrid Simulation of Structure-Pipe-Structure Interaction within a Gas Processing Plant", ASCE Journal of Pipeline Systems Engineering and Practice, 12(2):04020073, DOI:10.1061/(ASCE)PS.1949-1204.0000526

18.	2021	Mihaylov, B., Trandafir, A., Palios, X., Strepelias, E. , Bousias, S., (2021) "Effect of Axial Restraint and Loading History on the Behavior of Short RC Coupling Beams", ACI Structural Journal, 118 (4).
19.	2021	Di Sarno, Luigi, Fabio Freddi, Mario D'Aniello, Oh-Sung Kwon, Jing-Ren Wu, Fernando Gutiérrez-Urzúa, Raffaele Landolfo, Jamin Park, Xenofon Palios, and Elias Strepelias , (2021), "Assessment of existing steel frames: Numerical study, pseudo-dynamic testing and influence of masonry infills." Journal of Constructional Steel Research 185 (2021): 106873.

Publications in Scientific Conference Proceedings (peer reviewed)			
A. Internatio	A. International		
1. 2007	Palios, X., Molina, X., Bousias, S.N. and Strepelias, E. (2007) "Testing rate- dependent bridge isolation devices via the pseudodynamic testing method and sub-structuring", 2 nd Int Conf on Advances in Experimental Structural Engineering, Sanghai, China		
2. 2008	Bousias, S. N., Strepelias, E. , Palios, X., Fardis, M. N., & Raftopoulos, S. (2008). Experimental study of bridge seismic isolation systems with or without supplemental energy. In <i>14th World Conference on Earthquake</i> <i>Engineering</i> , Beijing.		
3. 2010	Bousias, S., Fardis, M., Strepelias, E. and Palios, X. (2010) "Cyclic test to failure of pre-damaged retrofitted RC building", <i>fib Congress/PCI Convention</i> , Washington DC		
4. 2010	Strepelias E. , Palios X. & Bousias S. N., (2010). Experimental investigation of RC infilling for structural retrofitting – pretest analysis. In <i>14th European Conference on Earthquake Engineering</i> , Ohrid.		
5. 2013	Fardis M., Schetakis A. & Strepelias E. (2013). Seismic retrofitting of buildings by adding RC walls. In <i>fib 2013 Symposium</i> , Tel-Aviv.		
6. 2013	Palios, X., Strepelias, E. and Bousias, S.N. (2013) A novel strategy for the hybrid simulation of stiff structures, 5 th International Conference on Advances in Experimental Structural Engineering (AESE), November 2013, Taipei, Taiwan.		
7. 2014	Papalou A. & Strepelias E. , (2014). The influence of particle dampers on the response of ancient monuments. In 9 th international symposium on the conservation of monuments in the Mediterranean basin. Improvements in conservation and rehabilitation – integrated methodologies, Ankara.		
8. 2014	Papalou, A., Strepelias, E. , Roubien, D., Bousias, S. and Triantafillou, T. (2014) Seismic Reduction of Monuments' Response Using Particle Dampers, 6 th World Conf. of Structural Control and Monitoring, Barcelona.		
9. 2014	Papalou, A., Strepelias E. , Roubien, D., Bousias, S. and Triantafillou T. (2014) Vibration control of classical columns using particle dampers, <i>Int.</i> <i>Conference on Noise and Vibration Engineering</i> , Leuven.		

10.	2015 2016	 Papalou, A., Roubien, D., Triantafillou, T., & Strepelias, E. (2015). A passive control methodology for seismic safety enhancement of monumental structures. In SPIE Smart Structures and Materials+ Nondestructive Evaluation and Health Monitoring (pp. 94312G-94312G). International Society for Optics and Photonics. Stathas N., Bousias S.N., Palios X., Strepelias E. & Fardis M.N., (2016),
		Experimental study of continuous beams and slabs under loss of support conditions. <i>Fib Symposium 2016</i> . Cape Town
12.	2017	Stathas N., Karakasis I., Strepelias E., Palios X., Fardis M., Bousias S., (2017), Masonry Infilling of RC Buildings Against Progressive Collapse in case of Loss of Column. 7 th International Conference on Advances in Experimental Structural Engineering. Pavia.
13.	2018	Stathas, N., Palios, X., Strepelias, E. , Fardis, M., Bousias, S. (2018) "Cyclic lateral loading of dry-jointed precast concrete frames on rocking or fixed footings", 16th European Conf. on Earthquake Engineering, Thessaloniki.
14.	2019	 Chatzopoulou, G., Stathas, N., Strepelias, E., Palios, X., Bousias, S., Karvelas, C., Karamanos, S.A. (2019) "Strong cyclic loading of an industrial piping system", ICONHIC International Conference, Workshop on Natural Hazards & Pipeline Infrastructure, Crete.
15.	2019	Stathas, N., Strepelias, E. , Palios, X., Bousias, S., (2019) "Advanced Hybrid Simulation Application Platform", 9 th International Conference in Civil, Structural and Machanical Engineering – CSM 2019, Rome.
16.	2021	 Karvelas, C., Chatzopoulou, G., Zervaki, D., A., Stathas, N., Strepelias, E., Palios, X., Bousias, S., N., Karamanos, S., A., (2021) "Mechanical response of an industrial piping system under strong cyclic loading", Proceedings of the ASME 2021 Pressure Vessels & Piping Conference, Virtual Online
17.	2022	 Park, J., Trandafir, A., Stathas, N., Strepelias, E., Palios, X., Kwon, O. S., & Bousias, S. (2022). "Hybrid Simulation Testing of Coupling Beams", In European Conference on Earthquake Engineering and Seismology (pp. 417-432). Cham: Springer International Publishing, XI International Conference on Structural Dynamics, 23-26 November Athens, Greece.
18.	2022	Nikolakopoulos, Konstantinos G., Aggeliki Kyriou, Efthimios Sokos, Stathis Bousias, Elias Strepelias , Peter Groumpos, Vassiliki Mpelogianni et al., (2022), "Multiparametric microsensor monitoring platform of the Enceladus Hellenic supersite: the PROION project" In Earth Resources and Environmental Remote Sensing/GIS Applications XIII, vol. 12268, pp. 133- 144. SPIE
19.	2023	Nikolakopoulos Konstantinos, Aggeliki Kyriou, Efthimios Sokos, Stathis Bousias, Elias Strepelias, Peter Groumpos, Vassiliki Mpelogianni et al., (2023), "Synergy of accelerometer, GNSS, InSAR and TLS measurements in the light of PROION Project." In EGU General Assembly Conference Abstracts, pp. EGU-8367.

20.	2023	Konstantinos G. Nikolakopoulos, Aggeliki Kyriou, Efthimios Sokos, Stathis Bousias, Elias Strepelias , Peter Groumpos, Vassiliki Mpelogianni, Zafeiria Roumelioti, Anna Serpetsidaki, Dimitrios Paliatsas, Panagiotis Stephanopoulos, Athanassios Ganas, Vassiliki (Betty) Charalampoulou, Theodoros Athanasopoulos, (2023), "Outcomes of continuous monitoring of crucial infrastructure in the framework of "PROION" project", In SPIE Remote Sensing, SPIE Security+Defence, SPIE. (invited paper)
B. National		
1.	2008	Bousias S. N., Palios X., Alexakis C., Strepelias E. , Fardis M.N., Raptopoulos S., "Experimental and analytical study of seismic isolated bridges with or without supplemental energy damping – design proposals" 3 rd Hellenic Conference on Earthquake Engineering and Engineering Seismology
2.	2018	Stathas N., Bousias S.N., Palios X., Strepelias E. , Fardis M.N., (2018), "Tests and simple model for the response of RC frame subassemblies for postulated loss of column", 18 th Hellenic Concrete Conference, Athens, Greece.
3.	2018	Stathas N., Karakasis I., Strepelias E. , Palios X., Fardis M.N., Bousias S.N. (2018), "Masonry infilling of RC building against progressive collapse in case of loss of column", 18th Hellenic Concrete Conference, Athens, Greece.
4.	2018	Stathas N., Bousias S.N., Palios X., Strepelias E. , Fardis M.N., (2018), "Continuous one-way RC slabs with sinking outer support: tests and simple model", 18th Hellenic Concrete Conference, Athens, Greece.
5.	2018	Strepelias E. , Bousias S.N., Fardis M.N., (2018), "Tests on RC columns under simulated blast loading", 18th Hellenic Concrete Conference, Athens, Greece.
6.	2018	Stathas N., Strepelias E. , Palios X., Fardis M.N., Bousias S.N., (2018), "Dry-jointed precast concrete frame on rocking or fixed footings under cyclic lateral loading", 18th Hellenic Concrete Conference, Athens, Greece.
7.	2019	Lyrantzaki F., Kloukinas P., Mylonakis G., Strepelias E. , Vgenopoulou I., Bousias S.N., (2019), "Experimental Investigation of the response of retaining walls under earthquake excitation", 4 th Hellenic Conference on Earthquake Engineering and Engineering Seismology

Acknowledgement of Scientific Expertise

A. Awards - Distinctions - Scholarships

B. Citations / h-index

287, h-index = 9

C. Reviewer in Scientific Journals

Re	eviewer for the following refereed journals		
	 Structural Engineering International (SEI - IABSE) Journal of Sound and Vibration 		
Re	eviewer for International Conferences		
	• 16 th World Conference on Earthquake Engineering, Chile, 2017		
D. Member in Professional Associations			
2005-today	Technical Chamber of Greece		
2005-today	Association of Civil Engineers of Greece		

Sindos, February 2024