

Сеизмология и сеизмично инженерство

2025

Dimitar Stefanov, Dimcho Solakov, Stela Simeonova, Plamena Raykova-Tsankova. Risk assessment for the city of Veliko Tarnovo. Environmental Protection and Disaster Risks (EnviroRisks 2024), LNNS, volume 883, Springer Cham, 2025, ISBN:978-3-031-74707-6, ISSN:2367-3370

E. Oynakov, A. Terziyski, I. Aleksandrova. A Study on the Relationship Between Radon Volume Activity in the Surface Atmosphere and Seismic Activity in the Year 2022 Using METER.AC Open Network Data.. International conference on Environmental protection and disaster RISKS, Springer, 2025, ISBN:ISBN:978-619-7065-38-1, SJR (Scopus):0.175

Maria Chamati, Mariya Popova. Environmental impact of the 7 June 2023 moderate earthquake in Plovdiv and Asenovgrad area, Bulgaria.. Lecture Notes in Networks and Systems, 883, Springer Nature, 2025, ISSN:2367-3389, DOI:https://doi.org/10.1007/978-3-031-74707-6_6, 44-52.

P. Raykova, D. Solakov, S. Simeonova. A new empirical relation converting magnitude applied in Bulgarian seismological practice (MP) to moment magnitude (MW). Comptes rendus de l'Académie bulgare des Sciences, 78, 3, Доклади на Българската академия на науките, 2025, DOI:10.7546/CRABS.2025.03.08, 383-392.

Petya Trifonova, Emil Oynakov, Mariya Popova, Irena Aleksandrova. Seismic Variations before Eastern Anatolian Catastrophic Events in February 2023. Natural Hazards, 120, 10, Springer, 2025, ISSN:1573-0840, DOI:<https://doi.org/10.1007/s11069-024-06831-7>

2024

Atanasova-Zlatarev Mila, Nikolov Hristo, Protopopova-Kakar Valentina. Study of the coseismic deformations in the balkan peninsula area from SAR data. WGAAL2023 proceedings/ International Workshop Geosciences in active areas (WGAAL2023), (IGEO) Books and parts of books; Editors: José Arnoso Sampedro, Emilio J. Vélez Herranz, 2024, ISBN:978-84-128033-6-5, DOI:<https://doi.org/10.20350/digitalCSIC/16338>, 40-47

D. Solakov, S. Simeonova, Plamena Raykova. Probabilistic earthquake scenarios for the city of Varna. Proceedings of 24th International Multidisciplinary Scientific GeoConference SGEM 2024, 24, 1.1, STEF92 Technology, 2024, ISBN:978-619-7603-67-5, ISSN:1314-2704, DOI:10.5593/sgem2024/1.1/s05.651

Dimcho Enchev Solakov, Dimitar Stefanov, Stela Simeonova, Plamena Raykova-Tsankova. Seismic Risk Assessment for the City of Sofia, Bulgaria. Geosciences 2024, 14, 14(11), Multidisciplinary Digital Publishing Institute (MDPI), 2024, ISSN:2076-3263, DOI:10.3390/geosciences14, 1-16.

Dimcho Solakov, Stela Simeonova, Plamena Raykova. Deterministic earthquake scenario for the city of Sofia. Proceedings of 24th International Multidisciplinary Scientific GeoConference SGEM 2024, 24, 1.1, STEF92 Technology, 2024, ISBN:978-619-7603-67-5, ISSN:1314-2704, DOI:10.5593/sgem2024/1.1/s05.61, SJR (Scopus):0.141

E. Oynakov, M. Popova. Seismicity of the Territory of Bulgaria and Adjacent Lands Based on NOTSSI Data for 2023. GeoStudies, 2024, ISSN:3033-0238, DOI:10.3897/geostudies.@.e133185

E. Oynakov, R. Ivanov, A. Radulov, L. Pashova, M. Popova, Y. Donkova. Equivalent linear site response analysis for the Sofia Basin. Proceedings: 18th World Conference on Earthquake Engineering, International Association for Earthquake Engineering, 2024, ISSN:3006-5933

Emil Oynakov, Radan Ivanov, Liliya Dimitrova, Alexander Radulov. Evaluation and analysis of microseismic records on the territory of the Sofia Basin. Journal of Theoretical and Applied Mechanics, 54, 4, Bulgarian Academy of Sciences, National committee of theoretical and applied mechanics, 2024, ISSN:1314-8710

Mila Atanasova-Zlatareva, Hristo Nikolov, Plamena Raykova. Creating earthquake maps for the using GIS. Proceedings 9th International Conference on Cartography and GIS, 16-21 June 2024, Nessebar, Bulgaria: , Eds: Bandrova T., Konečný M., Marinova S., Bulgarian Cartographic Association, University of Architecture, Civil Engineering and Geodesy Endorsed by International Cartographic Association, 2024, ISSN:1314-0604, 337-347

P. Raykova-Tsankova, D. Solakov, S. Simeonova. Seismological Analysis of the Swarm Type Seismicity in the Kresna Seismogenic Zone (Bulgaria). 12th Congress of the Balkan Geophysical Society, May 2024, Volume 2024, European Association of Geoscientists & Engineers, 2024, DOI:10.3997/2214-4609.202449BGS7, 1-5

Pashova L, Radulov A, Ivanov R, Dimitrova L. Cartographic representation analysis of earthquake hazard and risk maps for the Sofia region. Proceedings, 9th International Conference on Cartography and GIS, 16-21 June 2024, Nessebar, Bulgaria, Bulgarian Cartographic Association, 2024, ISSN:1314-0604, 1022-1033

Plamena Raykova, Dimcho Solakov, Stela Simeonova. Temporal Characteristics of the February 6, 2023 MW7.8, Turkey Earthquake Aftershock Sequence. Comptes rendus de l'Académie bulgare des Sciences, 77, 3, „Prof. Marin Drinov“ Publishing House of Bulgarian Academy of Sciences, 2024, ISSN:1310–1331 (Print), 2367–5535 (Online), DOI:10.7546/CRABS.2024.03.07, 370-379.

Radan Ivanov. Analysis of the rocking behaviour of buildings during earthquake by the discrete element method. proceedings: 13th International scientific forum condition assessment, maintenance and rehabilitation of civil engineering facilities, Association of Civil Engineers of Serbia, 2024, ISBN:978-86-88897-20-4, DOI:10.46793/SGISXIII.09RI, 100-107

Zhelyazov T.. Models analyzing the response of the adhesive joint between FRP and concrete: a comparative analysis. Discover Mechanical Engineering, 3, SpringerLink, 2024, ISSN:2731-6564, DOI:<https://doi.org/10.1007/s44245-024-00060-9>

Zhelyazov, T., Ólafsson, S., Rupakhety, R.. Assessment of the efficiency of the base isolation for a bridge structure.. Proceedings of the 12th International Conference on Bridge Maintenance, Safety and Management, IABMAS 2024, CRC Press/Balkema, 2024, ISBN:978-103277040-6, DOI:<https://doi.org/10.1201/9781003483755-28>, 270-277

Zhelyazov, T., Pshenichnov, S.. The transient dynamic wave process in unidirectional composites.. Mathematics and Mechanics of Solids, 30, 5, SAGE PUBLICATIONS LTD, 2024, ISSN:10812865, DOI:<https://doi.org/10.1177/10812865241276197>, 1090-1108. SJR (Scopus):0.615, JCR-IF (Web of Science):1.7

Zhelyazov, T.. Modeling the Response of Friction Pendulum Systems. Advances in Transdisciplinary Engineering, 62, IOS press BV, 2024, ISBN:978-164368559-5, ISSN:2352751X, DOI:<https://doi.org/10.3233/ATDE241093>, 1021-1027.

Александър Илиев, Димитър Стефанов, Петър Николов. Нелинейни статични анализи на интегрален стоманобетонен мост. Механика Транспорт Комуникации, 22, 2, ВТУ "Тодор Каблешков", 2024, ISSN:2367-6620 (online), VIII-7-VIII-12

Димчо Солаков, Димитър Стефанов, Стела Симеонова, Пламена Райкова-Цанкова. Сценарии за сеизмичния риск на големите градове в България. Издателство на БАН "Проф. Марин Дринов", 2024, ISBN:978-619-245-412-8, 177

Пашова Л., Иванов Р., Паскалева И. Анализ на силни земни движения от земетресението в гр. Перник, 22 май 2012 г., записани в района на гр. София. СУБ, Съюз на учените в България, 2024, ISBN:978-954-397-050-6, 128-135

Димчо Солаков, Димитър Стефанов, Стела Симеонова, Пламена Райкова. Оценка на опасностите от катастрофални земетресения и последствията от тях. Националната научна програма „Опазване на околната среда и намаляване на риска от неблагоприятни явления и природни бедствия" Резултати и постижения, „АЗ-БУКИ“, 2024, ISBN:978-619-7667-71-4, 337-365

Boyko Rangelov, Emil Oynakov, Irena Aleksandrova. A new insight view to the strong (M7.2 and M7.8) earthquakes of 1904 in Bulgaria. Earthquake - Ecological Risk and Security Research, 2, 2, 2024, ISSN:3029-150X, DOI:10.59429

2023

Buchakchiev, V., Dragomirov, D., Pandourska, E., Georgieva, G., Dimitrova, L.. Seismicity in the Bransfield Strait, Antarctica, for the period 2020-2023 as recorded from LIVV seismic station. Comptes rendus de l'Acade'mie bulgare des

Sciences, Tome 76, 12, 2023, ISSN:2367–5535,
DOI:<https://doi.org/10.7546/CRABS.2023.12.07>, 1851-1959. SJR (Scopus):0.16,
JCR-IF (Web of Science):1.106

D. Stefanov, D. Solakov, J. Milkov. Assessment of the effects of strong earthquakes on the city of Plovdiv. IOP Conference Series: Materials Science and Engineering, 1276, 1, IOP Publishing, 2023, ISSN:1757-899X, DOI:10.1088/1757-899X/1276/1/012008

Dimcho Solakov, Stela Simeonova, Petya Trifonova, Plamena Raykova, Metodi Metodiev. Earthquake Risk Scenarios for the City of Veliko Tarnovo. In: Dobrinkova, N., Nikolov, O. (eds) Environmental Protection and Disaster Risks. EnviroRISKs 2022, 638, Lecture Notes in Networks and Systems, Springer, 2023, DOI:10.1007/978-3-031-26754-3_2

Dimitar Stefanov, Dimcho Solakov, Jordan Milkov. Assessment of the Effects of Strong Earthquakes in the City of Ruse. Springer series “Studies in Systems, Decision and Control”, 638, Springer Nature, 2023, ISSN:2198-4182, 3-14.

Emil Oynakov, Liliya Dimitrova, Lyubka Pashova, Dragomir Dragomirov. Compilation of Regional Homogeneous Seismic Catalog for Identification of Tsunamigenic Zones in the Black Sea Region. Geosciences 2023, 13, 8, MDPI, 2023, ISSN:ISSN: 2076-3263, DOI:10.3390/geosciences13080221, SJR (Scopus):0.66

Emil Oynakov, Maria Popova, Irena Aleksandrova, Yordan Milkov. Determination of the dynamic and fractal characteristics of time series from a separate seismic energy source in the Balkan Peninsula. Proceedings of 23rd International Multidisciplinary Scientific GeoConference SGEM, 23, 1.1, 2023, ISBN:ISBN 978-619-7603-56-9, ISSN:ISSN 1314-2704, DOI:DOI 10.5593/sgem2023/1.1/s05.67

Emil Oynakov, Radan Ivanov, Irena Aleksandrova, Mariya Popova, Jordan Milkov. Aquifer identification by passive seismic methods in selected areas of the Sofia Basin. Proceedings: International scientific conference geotechnical aspects of civil engineering and earthquake engineering, Association of Civil Engineers of Serbia, 2023, ISBN:978-86-88897-17-4, 17-34

Emil Oynakov, Radan Ivanov, Irena Aleksandrova, Yordan Milkov, Maria Popova. Assessment of the nakamura's vulnerability index of an earthen dam, from ambient noise recordings. Proceedings of 23rd International Multidisciplinary Scientific GeoConference SGEM, 23, 1, 2023, ISBN:ISBN 978-619-7603-56-9, ISSN:ISSN 1314-2704, DOI:DOI 10.5593/sgem2023/1.1/s02.23

Ivanov R., Oynakov E., Aleksandrova I., Popova M., Milkov J.. Evaluation of the fundamental frequency and damping of a cast-in-situ reinforced-concrete building by ambient noise analysis. Проблеми на географията, Книга 1-2, Книга 1-2, Национален институт по геофизика, геодезия и география – БАН, 2023, ISSN:ISSN 0204-7209; ISSN 2367-6671, DOI:DOI: 10.35101/prg-2023.1-2.1, 3-14

Mila Atanasova, Plamena Raykova, Hristo Nikolov. Determining the Deformations of the Earth's Surface after the Earthquakes in Turkey-Syria of 06 February 2023 - Initial Results. *Comptes rendus de l'Académie bulgare des Sciences*, 76, 4, Bulgarian Academy of Sciences, 2023, ISSN:1310–1331, DOI:<https://doi.org/10.7546/CRABS.2023.04.07>, 554-562.

Oynakov, E., Ivanov, R., Aleksandrova, I., Milkov, J., Popova, M.. Evaluation of the Nakamura vulnerability index of a cast-in-situ reinforced-concrete building from ambient noise records. *Lecture Notes in Networks and Systems*, 638, Springer Nature, 2023, ISSN:ISSN 2367-3370, DOI:<https://doi.org/10.1007/978-3-031-26754-3>, 66-76.

Petya Trifonova, Metodiev, M., Solakov D., Simeonova S.. Safety and security planning and disaster management in case of an earthquake in Bulgaria. *Proceedings of 23rd International Multidisciplinary Scientific GeoConference SGEM*, 2023, ISSN:1314-2704, DOI:10.5593/sgem2023/5.1/s23.81.

Petya Trifonova, Nikolay Miloshev, Liliya Dimitrova, Metodi Metodiev, Diana Jordanova, Daniel Ishlyamski. Earth observation capacity of the National Geoinformation center of Bulgaria as part of the tools for geo- and anthropogenic-hazard management in EPOS. *Journal of Integrated Disaster Risk Management*, IDRiM Society, 2023, ISSN:2185-8322, DOI:<https://doi.org/10.5595/001c.91239>

Solakov, D., Simeonova, S., Trifonova, P., Metodiev, M., Raykova, P.. Earthquake scenarios and population exposure for the city of Plovdiv. *Natural Hazards*, Springer, 2023, ISSN:0921-030X, DOI:<https://doi.org/10.1007/s11069-023-06087-7>

Stefanov D., Solakov D., Milkov J.. Consequences on people and the building stock of a strong earthquake for the city of Varna. 1.1, *STEF92 Technology*, 2023, ISSN:1314-2704, DOI:10.5592/sgem2023/1.1/s05.65, 541-548.

Александър Илиев, Димитър Стефанов. Взаимодействие почва-конструкция (SSI) при сеизмично реагиране на стоманобетонен мост. *Научно списание 'Механика Транспорт Комуникации'*, 21, 1, 2023, ISSN:ISSN 2367-6620 (online), XIV-1-XIV-6

Александър Илиев, Димитър Стефанов. Сравнение на сеизмичното реагиране на стоманобетонен гредови мост с елатомерни и оловно-гумени лагери. *XXIII Международна научна конференция всу'2023*, 1, Висше строително училище "Любен Каравелов", 2023, ISSN:1314-071X, 461-468

Д. Солаков, С. Симеонова, Пл. Райкова, М. Атанасова. Афтершокова активност след катастрофалното земетресение (MW7.8) от 6 февруари 2023 г. *SES 2023 Nineteenth International Scientific Conference SPACE, ECOLOGY, SAFETY 24 – 26 October 2023*, Sofia, Bulgaria, Space Research and Technology Institute - Bulgarian Academy of Sciences, 2023, ISSN:p-ISSN 2603–3313; e-ISSN 2603–3321, 25-30

Димчо Солаков, Стела Симеонова, Пламена Райкова. Земетресението от 2023 г. Mw7.8 в Турция - пространствено времева характеристика на

афтершоковата поредица, първоначални резултати. Списание на Българската Академия на Науките, 136, 2, Издателство на БАН "Проф. Марин Дринов", 2023, ISSN:0007-3989, 8-

Ойнаков Е., Александрова И., Попова М.. Пространствена и времева вариация на сеизмичността в България на основа Каталога на земетресенията (1981-2019). Проблеми на географията, Книга 1-2, Книга 1-2, Национален институт по геофизика, геодезия и география – БАН, 2023, ISSN:ISSN 0204-7209; ISSN 2367-6671, DOI:DOI: 10.35101/prg-2023.1-2.2, 15-30

Boyko Rangelov, Memet Salih Bayraktutan, Emil Oynakov. Natural geophysical fields in Turkey and geodynamics – relationships and correlations. XI Национална конференция по геофизика, XI Национална конференция по геофизика, 2023