

LISTA DE LUCRĂRI

i. Lista lucrărilor relevante

1. CONSTANTINESCU, S.A.I., **RĂCĂNEL, I.R.**: Seismic Isolation of Bridges Using the Principle of Electromagnetic Attraction and Repulsion, Romanian Journal of Transport Infrastructure, Volume 6, Issue 1, pp. 1-14, <https://doi.org/10.1515/rjti-2017-0050>
2. GHINDEA C.L., **RĂCĂNEL I.R.**, CRUCIAT R.: Dynamic testing of a Viaduct on the Orăștie-Sibiu Highway, , Romanian Journal of Transport Infrastructure, Volume 6, Issue 1, pp. 1-14, <https://doi.org/10.1515/rjti-2017-0050>
3. GHINDEA C.L., CRUCIAT R.I., **RĂCĂNEL I.R.**: Dynamic test of a bridge over the Danube - Black Sea Channel at Agigea, Conference: 35-th Danubia Adria Symposium on Advances in Experimental Mechanics (DAS) Location: Sinaia, ROMANIA, Date: SEP 25-28, 2018 MATERIALS TODAY-PROCEEDINGS Volume: 12 Pages: 491-498 Part: 2 Published: 2019, <https://www.materialstoday.com/mechanical-properties/events/35th-danubia-adria-sym-on-adv-in-exp-mechanics/>
4. **RĂCĂNEL I.R.**, URDĂREANU V.D.: Probabilistic estimation of the strength capacity of existing concrete bridges, Structures, Volume 33, October 2021, Pages 769-775, <https://doi.org/10.1016/j.istruc.2021.04.075>, **Impact Factor: 4.1** (<https://www.sciencedirect.com/journal/structures/vol/33/suppl/C>)
5. MAZILU T., DUMITRIU M., **RĂCĂNEL I.R.**: Parametric study of the influence of non-linear elastic characteristics of rail pads on wheel-rail vibration, Materials, MDPI, Volume 16, Issue 4, DOI10.3390/ma16041531, **Impact Factor: 3.4** (<https://www.mdpi.com/1996-1944/16/4>)
6. AMĂREANU M., **RĂCĂNEL I.R.**, NEACȘU C.N., MORLOVA D.D.: Laboratory Scaled-Down Cementitious Concrete Model Used for Estimating the Bearing Capacity of a Bridge Girder Based on the Similitude Theory, *Materials* **2023**, 16(24), 7559; <https://doi.org/10.3390/ma16247559>, **Impact Factor: 3.4** (<https://www.mdpi.com/1996-1944/16/4>)
7. **RĂCĂNEL I.R.**: Theoretical Study Regarding the General Stability of Upper Chords of Truss Bridges as Beams on Continuous or Discrete Elastic Supports, *Infrastructures* **2024**, 9(3), 56; <https://doi.org/10.3390/infrastructures9030056>, **Impact Factor 2.6** (<https://www.mdpi.com/2412-3811/9/3>)

ii. Teza de doctorat

“Contribuții la studiul stabilității locale și generale a podurilor metalice cu considerarea imperfecțiunilor de execuție” susținută în data de 11 Mai 2001 sub

9. DUMITRIU M., **RĂCĂNEL I.R.**: Experimental verification of method to synthesize the track vertical irregularities, Romanian Journal of Transport Infrastructure Volume 7, Issue 2, pp. 40-60 Published: DEC 2018, DOI: <https://doi.org/10.2478/rjti-2018-0011>
10. MAZILU T., **RĂCĂNEL I.R.**, STOICESCU G.: Testing the functionality and performance of a rail damper, Romanian Journal of Transport Infrastructure, Volume 7, Issue 2, pp. 31-39 Published: DEC 2018, DOI: <https://doi.org/10.2478/rjti-2018-0010>
11. MAZILU T., **RĂCĂNEL I.R.**, GHINDEA C.L., CRUCIAT R.I., LEU M.C.: Rail joint model based on the Euler-Bernoulli beam theory, Romanian Journal of Transport Infrastructure, Volume 8, Issue 2, pp. 16-29 Published: DEC 2019, DOI: 10.2478/rjti-2019-0008
12. MAZILU T., **RĂCĂNEL I.R.**, GHINDEA C.L., GHETI M.A.: Vertical interaction between a driving wheelset and track in the presence of the rolling surfaces harmonic irregularities, Romanian Journal of Transport Infrastructure, Volume 9, Issue 2, pp. 38-52 Published: DEC 2020, DOI: 10.2478/rjti-2020-0010
13. **RĂCĂNEL I.R.**, URDĂREANU V.D.: Probabilistic estimation of the strength capacity of existing concrete bridges, Structures, Volume 33, October 2021, Pages 769-775, <https://doi.org/10.1016/j.istruc.2021.04.075>, **Impact Factor: 4.1** (<https://www.sciencedirect.com/journal/structures/vol/33/suppl/C>)
14. MAZILU T., DUMITRIU M., **RĂCĂNEL I.R.**: Parametric study of the influence of non-linear elastic characteristics of rail pads on wheel-rail vibration, Materials, MDPI, Volume 16, Issue 4, DOI10.3390/ma16041531, **Impact Factor: 3.4** (<https://www.mdpi.com/1996-1944/16/4>)
15. AMĂREANU M., **RĂCĂNEL I.R.**, NEACȘU C.N., MORLOVA D.D.: Laboratory Scaled-Down Cementitious Concrete Model Used for Estimating the Bearing Capacity of a Bridge Girder Based on the Similitude Theory, *Materials* **2023**, 16(24), 7559; <https://doi.org/10.3390/ma16247559>, **Impact Factor: 3.4** (<https://www.mdpi.com/1996-1944/16/4>)
16. **RĂCĂNEL I.R.**: Theoretical Study Regarding the General Stability of Upper Chords of Truss Bridges as Beams on Continuous or Discrete Elastic Supports, *Infrastructures* **2024**, 9(3), 56; <https://doi.org/10.3390/infrastructures9030056>, **Impact Factor 2.6** (<https://www.mdpi.com/2412-3811/9/3>)

vi. Publicații apărute în lucrări ale principalelor conferințe internaționale de specialitate

1. **RĂCĂNEL I. R.**, TEODORESCU M.E.: "Contributions regarding the simplified stability calculation of the open truss steel bridges top chord", volumul lucrărilor celei de-a 9-a Conferințe Internaționale de Structuri Metalice, Timișoara 19-22 Octombrie 2000, ISBN 973-8109-17-5, pag. 614-619
2. POPA N., DIMA A.I., **RĂCĂNEL I. R.**: "The fatigue safety rules used in Romania for steel bridges structures", First International Conference on Bridge Maintenance, Safety and Management – IABMAS 2002, Barcelona, 7 pagini

31. **RĂCĂNEL I.R.**, MUTU C.S: Influence of seismic code updates on the dynamic response of existing bridges in Romania, 8-th International Conference on Bridge Maintenance, Safety and Management (IABMA0S) Location: Foz do Iguacu, BRAZIL Date: JUN 26-30, 2016, pp.514, ISBN: 978-1-138-02851-7 (hardback+DVD), ISBN: 978-1-4987-7703-2 (eBook PDF), [https://openlibrary.org/books/OL29338203M/Maintenance Monitoring Safety Risk and Resilience of Bridges and Bridge Networks](https://openlibrary.org/books/OL29338203M/Maintenance_Monitoring_Safety_Risk_and_Resilience_of_Bridges_and_Bridge_Networks)
32. **RĂCĂNEL I. R.**, DARABAN M., URDĂREANU V. D.: Estimation of the seismic vulnerability of a roundabout road bridge near Bucharest, 8-th International Conference on Bridge Maintenance, Safety and Management (IABMA0S) Location: Foz do Iguacu, BRAZIL Date: JUN 26-30, 2016, pp.2083-2090, ISBN: 978-1-138-02851-7 (hardback+DVD), ISBN: 978-1-4987-7703-2 (eBook PDF), [https://openlibrary.org/books/OL29338203M/Maintenance Monitoring Safety Risk and Resilience of Bridges and Bridge Networks](https://openlibrary.org/books/OL29338203M/Maintenance_Monitoring_Safety_Risk_and_Resilience_of_Bridges_and_Bridge_Networks)
33. URDĂREANU V.D., **RĂCĂNEL I.R.**, DEGERATU M.et al: Experimental Study of The Dynamic Response of a Cable Under Wind Flow, Conference: 35-th Danubia Adria Symposium on Advances in Experimental Mechanics (DAS) Location: Sinaia, ROMANIA, Date: SEP 25-28, 2018 MATERIALS TODAY-PROCEEDINGS Volume: 12 Pages: 446-454 Part: 2 Published: 2019, <https://www.materialstoday.com/mechanical-properties/events/35th-danubia-adria-sym-on-adv-in-exp-mechanics/>
34. GHINDEA C.L., CRUCIAT R.I., **RĂCĂNEL I.R.**: Dynamic test of a bridge over the Danube - Black Sea Channel at Agigea, Conference: 35-th Danubia Adria Symposium on Advances in Experimental Mechanics (DAS) Location: Sinaia, ROMANIA, Date: SEP 25-28, 2018 MATERIALS TODAY-PROCEEDINGS Volume: 12 Pages: 491-498 Part: 2 Published: 2019, <https://www.materialstoday.com/mechanical-properties/events/35th-danubia-adria-sym-on-adv-in-exp-mechanics/>

