

LISTA lucrarilor stiintifice

Articole ISI

1. Moisă Stoica R, Rusu CM, Deftu AT, Bacalum M, Radu M, **Radu BM**. (2025) Are You a friend or an enemy? The dual action of methylglyoxal on brain microvascular endothelial cells. *Int J Mol Sci*. 26(11):5104.
2. Zamfirache F, Prundaru G, Dumitru C, **Radu BM**. (2025) Frontal transcranial direct current stimulation in moderate to Severe depression: Clinical and neurophysiological findings from a pilot Study. *Brain Sci*. 15(6):540.
3. Dumitru C, Iacob CI, Zamfirache F, Folostina R, **Radu BM**. (2025) Sleep deprivation and memory consolidation in rats: A meta-analysis of experimental studies. *Behav Brain Res*. 487:115591.
4. Zamfirache F, Dumitru C, Trandafir DM, Bratu A, **Radu BM**. (2025) A review of transcranial electrical and magnetic stimulation usefulness in major depression disorder—lessons from animal models and patient studies. *Applied Sci* 5 (7), 4020
5. Zamfirache F, Prundaru G, Dumitru C, **Radu BM** (2025) Synergistic effects of pharmacological, environmental, and transcranial direct current stimulation interventions on depression-like behaviours in rats under social and movement restriction, *BRAIN. Broad Research in Artificial Intelligence and Neuroscience* 16 (2), 19-39
6. Şulea TA, Draga S, Mernea M, Corlan AD, **Radu BM**, Petrescu AJ, Amuzescu B (2025) Differential inhibition by cenobamate of canonical human Nav1.5 ion channels and several point mutants, *Int J Mol Sci* 26 (1), 358
7. Dumitru C, Zamfirache F, Trimbitea A, **Radu BM** (2025) Total sleep deprivation modulates working memory and depression in aged rats, *BRAIN. Broad Research in Artificial Intelligence and Neuroscience* 15 (4), 55-75
8. Mateias AL, Armasescu F, Amuzescu B, Corlan AD, **Radu BM** (2024) Inhibitory effects of cenobamate on multiple human cardiac ion channels and possible arrhythmogenic consequences, *Biomolecules*, 14(12), 1582
9. Dumitru C, Zamfirache F, Trimbitea A, **Radu BM** (2024) Total sleep deprivation modulates working memory and depression in aged rats, *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 15(4): 55-75
10. Naziroğlu M, **Radu BM**, Cucu D. (2023) Editorial: Transient receptor potential (TRP) ion channels in non-excitable cells, *Frontiers in Physiology*, 2023, 14, 1213332
11. Staicu CE, Jipa F, Porosnicu I, Bran A, Stancu E, Dobrea C, **Radu BM**, Axente E, Tiseanu I, Sima F, Sugioka K (2022) Glass lab-on-a-chip platform fabricated by picosecond laser for testing tumor cells exposed to X-ray radiation, *Applied Physics A*, 128: 770
12. Thomet U, Amuzescu B, Knott T, Mann SA, Mubagwa K, **Radu BM**. (2021) Assessment of proarrhythmogenic risk for chloroquine and hydroxychloroquine using the CiPA concept. *Eur J Pharmacol*. 2021 Dec 15;913:174632.
13. Stoica R, Rusu CM, Staicu CE, Burlacu AE, Radu M, **Radu BM**. (2021) Ca²⁺ homeostasis in brain microvascular endothelial cells. *Int Rev Cell Mol Biol*. 362:55-110.
14. Amuzescu B, Airini R, Epureanu FB, Mann SA, Knott T, **Radu BM**. (2021) Evolution of mathematical models of cardiomyocyte electrophysiology. *Math Biosci*. 334:108567.
15. Staicu CE, Jipa F, Axente E, Radu M, **Radu BM**, Sima F. (2021) Lab-on-a-Chip Platforms as Tools for Drug Screening in Neuropathologies Associated with Blood-Brain Barrier Alterations. *Biomolecules*. 11(6):916.
16. Caravia L, Staicu CE, **Radu BM**, Condrat CE, Creţoiu D, Bacalbaşa N, Suci N, Creţoiu SM, Voinea SC. (2020) Altered Organelle Calcium Transport in Ovarian Physiology and Cancer. *Cancers (Basel)*. 12(8):2232.
17. Staicu CE, Predescu DV, Rusu CM, **Radu BM**, Creţoiu D, Suci N, Creţoiu SM, Voinea SC. (2020) Role of microRNAs as Clinical Cancer Biomarkers for Ovarian Cancer: A Short Overview. *Cells*. 9(1):169.
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20. Mustăciosu CC, Banciu A, Rusu CM, Banciu DD, Savu D, Radu M, **Radu BM**. (2019) RNA-Binding Proteins HuB, HuC, and HuD are Distinctly Regulated in Dorsal Root Ganglia Neurons from STZ-Sensitive Compared to STZ-Resistant Diabetic Mice. *Int J Mol Sci*. 20(8):1965.
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Brevete internaționale

Bogdan Amuzescu, **Beatrice Mihaela Radu**, Dan Florin Mihăilescu, Stefan Mann. 2018. "Method for in vitro detection of the proarrhythmogenic risk of a drug candidate on human induced pluripotent stem cell-derived cardiomyocytes (hiPSC-CM)", European Patenting Office (EPO) Patent no. EPA18465611.4/24.10.2018, published in the Register of European Patent Office no. EP3546935 / 02.10.2019 (<https://register.epo.org/application?number=EP18465611>)

Cărți și capitole în cărți internaționale

1. Deftu AT, **Radu BM**, Cretoiu D, Deftu AF, Cretoiu SM, Xiao J. 2020. Exosomes as intercellular communication messengers for cardiovascular and cerebrovascular diseases, in *Exosomes. A Clinical Compendium*. editors Larry Edelstein and Denis Noble, Elsevier, ISBN: 978-0-12-816053-4
2. Voichitioiu AD, **Radu BM**, Pavelescu L, Cretoiu D, Deftu AT, Suci N, Cretoiu SM, 2019. Extracellular Vesicles in Cancer, in *Extracellular Vesicles and their importance in human health*, InTechOpen, DOI: 10.5772/intechopen.85117
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5. Banciu DD, Banciu A, **Radu BM**. 2016. Chapter 19. Electrophysiological Features of Telocytes. *Adv Exp Med Biol.* 913:287-302. in *Telocytes Connecting cells*, editors Xiangdong Wang, Dragos Cretoiu. Springer ISSN 0065-2598, ISBN 978-981-10-1060-6
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Selecție comunicări la conferințe

1. **Radu BM**, Moisă (Stoica) R, Piciu (Cojocaru) F, Drăghici I, Rusu CM, Banciu A, Banciu DD, Amuzescu B, Drug safety assessment for cenobamate by analyzing the action on blood brain barrier and the pro-arrhythmogenic effect, 18th National Conference of Biophysics with International Participation (CNB 2024). September 5-7, 2024, Iasi University of Life Sciences, Iasi, Romania, prezentare orală
2. **Radu BM**, Stoica R, Rusu CM, Cojocaru (Piciu) F, Banciu A, Banciu DD, Amuzescu B, Drug safety assessment for cenobamate a recently FDA-approved antiepileptic, 11th IBRO World Congress of Neuroscience, Madrid, Spania, 9-12 sep 2023, poster

3. **Radu BM**, Amuzescu B, A new FDA-approved antiepileptic drug, cenobamate, has pro-arrhythmogenic effects, 3rd International Conference on Neuroscience, Neuroinformatics, Neurotechnology and Neuro-Psycho-Pharmacology, Bucharest, Romania, 26-28 oct 2023, prezentare orală
4. Stoica R, Rusu C, Radu M, **Radu BM**, The highly reactive dicarbonyl compound, methylglyoxal, regulates the purinergic signaling pathways in brain endothelium, FENS Forum 2022, Paris, France, poster
5. **Radu BM**, Rusu C, Ciobotaru V, Merigo F, Di Chio M, Radu M, Banciu D, Bacalum M, Fabene P, Tight junction proteins expressions and cytoskeleton rearrangement are associated with brain microvascular endothelium permeabilisation in epileptogenesis, FENS Forum 2022, Paris, France, poster
6. **Radu BM**, Amuzescu B, Assessing the safety profile of a drug - an itinerary from heart to brain, Romanian conference of Neuroscience and Physiology with international participation "From brain to heart and back", September 29th-October 1st, 2022, Bucharest, Romania, prezentare orală
7. **Radu BM**, Amuzescu B, Mihailescu DF, The 'electric signature' of a proarrhythmogenic drug, 17th National Conference of Biophysics with International Participation, CNB 2022, 23-25 septembrie 2022, Tg Mures, Romania, prezentare orală
8. Amuzescu B, Thomet U, Knott T, Mann S, **Radu BM**, Mubagwa K. Detailed analysis of chloroquine and hydroxychloroquine effects on kinetics, voltage-dependent gating and block of multiple human cardiac ion channels, Safety Pharmacology Society (SPS) Annual Meeting 2021, 4-8 Octombrie 2021, Virtual Meeting, poster
9. Amuzescu B, Thomet U, Knott T, Mann S, **Radu BM**, CiPA-compliant assessment of proarrhythmogenic risk for chloroquine and hydroxychloroquine, Safety Pharmacology Society (SPS) Annual Meeting 2020, 14-16 Septembrie 2020, Virtual Meeting, poster
10. Amuzescu BP, Knott T, Mann SA, Knuepling J, Airini R, Epureanu FB, **Radu BM**, Using onset-of-block kinetic analysis of hERG1 current with a Markov model to improve in silico proarrhythmogenic risk prediction, 64th Annual Meeting of the Biophysical Society, 15-19 februarie 2020, San Diego, California, USA, poster
11. Rusu CM, Deftu AT, Banciu A, Banciu DD, **Radu BM**, Biological effects of Escherichia coli lipopolysaccharide (LPS) on blood brain barrier using an in vitro model of neuroinflammation, 28th ISFN Annual Meeting, 5-7 ianuarie 2020, Eilat, Israel, poster
12. **Radu BM**, Banciu A, Banciu DD, Dumitrescu DI, Mustaciosu CC, Rusu CM, Radu M, Melittin distinctly regulates SUR1- or SUR2-coupled Kir6.2 pore-forming subunits expression in rat dorsal root ganglia neurons, FENS Regional Meeting 2019, 10-13 iulie 2019, Belgrad, Serbia, poster
13. Knott T, Mann S, Heide J, Airini R, Epureanu F, Deftu A, Deftu AT, **Radu B**, Amuzescu B, Recording and modeling multiple ion current components and action potentials in human induced pluripotent stem cell-derived cardiomyocytes, Biophysical Society 62nd Annual Meeting, San Francisco, USA, 17-21 februarie, 2018. poster
14. Mann S, Heide J, Airini R, Epureanu FB, Deftu AF, Deftu AT, **Radu BM**, Knott T, Amuzescu B. "Development of a New CiPA-Compliant MOA In Vitro Assay on Stem Cell-Derived Cardiomyocytes including Automated Data Analysis and Model Parameter Optimization", Pharmacology Annual Meeting 2018, 30 sep – 4 oct 2018, Washington DC, USA, poster
15. Mann S, Heide J, Airini R, Epureanu FB, Deftu AF, Deftu AT, **Radu BM**, Knott T, Amuzescu B, "Development of a New CiPA-compliant Cardiac Safety Pharmacology Automated Patch-clamp Assay", Ncardia Application Workshop, 7-9 noiembrie, 2018, Cologne, Germania, poster
16. **Radu BM**. Calcium signaling in brain microvascular endothelium and its role in epilepsy, 7th World Congress. Oxidative stress, calcium signaling and TRP channels, 20-23 apr 2018, Alanya, Antalya, Turcia, comunicare orală
17. Mann S, Hiede J, **Radu B**, Amuzescu B, Knott T, Measuring multiple ion current components in human induced pluripotent stem cell-derived cardiomyocytes via automated patch-clamp, SPS Annual Meeting, Berlin, Germany, 2017, poster
18. **Radu BM**, Banciu A, Radu M, Merigo F, Banciu DD, Tsenov G, di Chio M, Bertini G, Fabene PF. Acid sensing ion channels (ASIC) in brain endothelial cells as pH sensors in epilepsy. Do they play a neuroprotective role? 9th International Symposium on Neuroprotection and Neurorepair (Neurorepair 2016), Leipzig, Germania, 2016, poster
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