

Dr. Balázs Balogh
LIST OF PUBLICATIONS
2003-2024

1. Keglevich Gy.; Kégl T.; Chuluunbaatar T.; Dajka B.; Mátyus P.; **Balogh B.**; Kollár L.: Hydroformylation of styrene in the presence of rhodium-2,4,6-trialkylphenyl-phosphole in situ catalytic systems.
J. Mol. Catal. A: Chem., **200**, 131-136 (2003). DOI: [10.1016/S1381-1169\(03\)00046-3](https://doi.org/10.1016/S1381-1169(03)00046-3)
IF 2.264
2. Anwair M.A.S.; Károlyházy L.; Szabó D.; **Balogh B.**; Kövesdi I.; Harmat V.; Krenyác J.; Gellért Á.; Takács-Novák K.; Mátyus P.: Lipophilicity of aminopyridazinone regioisomers.
J. Agric. Food Chem., **51**, 5262-5270 (2003). DOI: [10.1021/jf0343938](https://doi.org/10.1021/jf0343938)
IF 2.102
3. Bágyi I.; **Balogh B.**; Czajlik A.; Éliás O.; Gáspári Z.; Gergely V.; Hudáky I.; Hudáky P.; Kalászi A.; Károlyházy L.; Keserű K.; Kiss R.; Krajsovsky G.; Láng B.; Nagy T.; Rác Á.; Szentesi A.; Tábi T.; Tapolcsányi P.; Vaik J.; Koo J.C.P.; Chass G.A.; Farkas Ö.; Perczel A.; Mátyus P.: Generation and analysis of the conformational potential energy surfaces of *N*-acetyl-*N*-methyl-*L*-alanine-*N*'-methylamide. An exploratory ab initio study.
J. Mol. Struct.: THEOCHEM, **625**, 121-136 (2003). DOI: [10.1016/S0166-1280\(03\)00009-5](https://doi.org/10.1016/S0166-1280(03)00009-5)
IF 1.027
4. Borosy A.P.; **Balogh B.**; Mátyus P.: Alignment-free descriptors for quantitative structure-rate constant relationships of [4+2]cycloadditions.
J. Mol. Struct.: THEOCHEM, **729**, 169-176 (2005). DOI: [10.1016/j.theochem.2005.01.054](https://doi.org/10.1016/j.theochem.2005.01.054)
IF 1.045
5. **Balogh B.**; Hetényi Cs.; Keserű Gy.M.; Mátyus P.: Structure-based calculation of binding affinities of α_{2A} -adrenoceptor agonists.
ChemMedChem, **2**, 801-805 (2007). DOI: [10.1002/cmdc.200600251](https://doi.org/10.1002/cmdc.200600251)
IF 2.825
6. Jójárt B.; **Balogh B.**; Márki A.: Modeling the human oxytocin receptor for drug discovery efforts.
Expert Opin. Drug Discovery, **2**, 1579-1590 (2007). DOI: [10.1517/17460441.2.12.1579](https://doi.org/10.1517/17460441.2.12.1579)
IF 1.354 (2009)
7. **Balogh B.**; Jójárt B.; Wágner Zs.; Kovács P.; Gyires K.; Zádori Z.; Falkay Gy.; Márki Á.; Viskolcz B.; Mátyus P.: 3D QSAR models for α_{2a} -adrenoceptor agonists.
Neurochem. Int., **51**, 268-276 (2007). DOI: [10.1016/j.neuint.2007.05.021](https://doi.org/10.1016/j.neuint.2007.05.021)
IF 2.975

8. Daruházi Á.E.; Sente L.; **Balogh B.**; Mátyus P.; Béni Sz.; Takács M.; Gergely A.; Horváth P.; Szőke É.; Lemberkovics É.:
Utility of cyclodextrins in the formulation of genistein Part 1. Preparation and physicochemical properties of genistein complexes with native cyclodextrins.
J. Pharm. Biomed. Anal. **48**, 636-640 (2008). DOI: [10.1016/j.jpba.2008.06.007](https://doi.org/10.1016/j.jpba.2008.06.007)
IF 2.629
9. **Balogh B.**; Szilágyi A.; Gyires K.; Bylund D.B.; Mátyus P.:
Molecular modelling of subtypes (α_{2A} , α_{2B} and α_{2C}) of α_2 adrenoceptors: A comparative study.
Neurochem. Int., **55**, 355-361(2009). DOI: [10.1016/j.neuint.2009.05.004](https://doi.org/10.1016/j.neuint.2009.05.004)
IF 3.541
10. Mercader J.; Iffiú-Soltész Zs.; Brenachot X.; Földi Á.; Dunkel P.; **Balogh B.**; Attané C.; Valet P.; Mátyus P.; Carpéné C.:
SSAO substrates exhibiting insulin-like effects in adipocytes as a promising treatment option for metabolic disorders.
Future Med. Chem., **2**, 1735-1749 (2010). DOI: [10.4155/fmc.10.260](https://doi.org/10.4155/fmc.10.260)
IF 1.424
11. Dunkel P.; **Balogh B.**; Meleddu R.; Maccioni E.; Gyires K.; Mátyus P.:
Semicarbazide sensitive amine oxidase/vascular adhesion protein-1: A patent survey.
Expert Opin. Ther. Pat., **21**, 1453-1471 (2011). DOI: [10.1517/13543776.2011.594040](https://doi.org/10.1517/13543776.2011.594040)
IF 3.571
12. Arany Á.; Bolgár B.; **Balogh B.**; Antal P.; Mátyus P.:
Multi-aspect candidates for repositioning: Data fusion methods using heterogeneous information sources.
Curr. Med. Chem., **20**, 95-107 (2013). DOI: [10.2174/0929867311302010010](https://doi.org/10.2174/0929867311302010010)
IF 3.715
13. Bolgár B.; Arany Á.; Temesi G.; **Balogh B.**; Antal P.; Mátyus P.:
Drug repositioning for treatment of movement disorders: From serendipity to rational discovery strategies.
Curr. Top. Med. Chem., **13**, 2337-2367 (2013). DOI: [10.2174/15680266113136660164](https://doi.org/10.2174/15680266113136660164)
IF 3.453
14. Tóth L.; Fu Y.; Zhang H.Y.; Mándi A.; Kövér K.E.; Illyés T.Z.; Kiss-Szikszai A.; **Balogh B.**; Kurtán T.; Antus S.; Mátyus P.:
Preparation of neuroprotective condensed 1,4-benzoxazepines by regio- and diastereoselective domino Knoevenagel-[1,5]-hydride shift-cyclization reaction.
Beilstein J. Org. Chem., **10**, 2594-2602 (2014). DOI: [10.3762/bjoc.10.272](https://doi.org/10.3762/bjoc.10.272)
IF 2.757

15. Parrino B.; Carbone A.; Ciancimino C.; Spano V.; Montalbano A.; Barraja P.; Cirrincione G.; Diana P.; Sissi C.; Palumbo M.; Pinato O.; Pennati M.; Beretta G.; Folini M.; Mátyus P.; **Balogh B.**; Zaffaroni N.:
Water-soluble isoindolo[2,1-a]quinoxalin-6-imines: In vitro antiproliferative activity and molecular mechanism(s) of action.
Eur. J. Med. Chem., **94**, 149-162 (2015). DOI: [10.1016/j.ejmech.2015.03.005](https://doi.org/10.1016/j.ejmech.2015.03.005)
IF 3.902
16. Huleatt P.B.; Khoo M.L.; Chua Y.Y.; Tan T.W.; Liew R.S.; **Balogh B.**; Deme R.; Göloncsér F.; Magyar K.; Sheela D.P.; Ho H.K.; Sperlágh B.; Mátyus P.; Chai C.L.L.:
Novel arylalkenylpropargylamines as neuroprotective, potent, and selective monoamine oxidase B inhibitors for the treatment of Parkinson's disease.
J. Med. Chem., **58**, 1400-1419 (2015). DOI: [10.1021/jm501722s](https://doi.org/10.1021/jm501722s)
IF 5.589
17. **Balogh B.**; Pázmány T.; Mátyus P.:
Analysis of Edg-Like LPA receptor-ligand interactions.
Curr. Pharm. Des. **21**, 3533-3547 (2015). DOI: [10.2174/1381612821666150216120500](https://doi.org/10.2174/1381612821666150216120500)
IF 3.052
18. Carpéné C.; Hasnaoui M.; **Balogh B.**; Mátyus P.; Fernandez-Quintela A.; Rodriguez V.; Portillo M. P.; Mercader J.:
Dietary phenolic compounds interfere with the fate of hydrogen peroxide in human adipose tissue but do not directly inhibit primary amine oxidase activity.
Oxid. Med. Cell. Longevity ID 2427618 (2016). DOI: [10.1155/2016/2427618](https://doi.org/10.1155/2016/2427618)
IF 4.492
19. Les Parellada F.; Deleruyelle S.; Cassagnes L. E.; Nepveu F.; Boutin J. A.; **Balogh B.**; Arbones-Mainar J.M.; Biron S.; Marceau P.; Richard D.; Nepveu F.; Mauriège P.; Carpéné C.:
Piceatannol and resveratrol share inhibitory effects on hydrogen peroxide release, monoamine oxidase and lipogenic activities in adipose tissue, but differ in their antilipolytic properties.
Chem.-Biol. Interact. **258**, 115-125, (2016). DOI: [10.1016/j.cbi.2016.07.014](https://doi.org/10.1016/j.cbi.2016.07.014)
IF 2.618
20. **Balogh B.**; Carbone A.; Spano V.; Montalbano; A.; Barraja P.; Cascioferro S.; Diana P.; Parrino B.:
Investigation of Isoindolo[2,1-a]quinoxaline-6-imines as topoisomerase I inhibitors with molecular modeling methods.
Curr. Comp.-Aided Drug Des. **13**, 208-221 (2017).
DOI: [10.2174/1573409913666170124100334](https://doi.org/10.2174/1573409913666170124100334)
IF 0.77
21. Fábíán; M.; **Balogh; B.**; Czudor; Zs.; Örfi; L.:
New computational studies to support cyclin-dependent kinase 9 inhibitor screening and design.
Acta Pharm. Hung. **89**, 31-38 (2019)
IF -

22. Krajsovsky G. ; **Balogh B.** ; Mándity I.:
Molekulák ábrázolásának történeti áttekintése a kezdetektől napjainkig.
GYÓGYSZERÉSZET **63**, 5 (2019)
IF -
23. Szilágyi K.; Hajdú I.; Flachner B.; Lőrincz Z.; Balczer J.; Gál P.; Závodszy P.; Pirl C.; **Balogh B.**; Mándity I. M.; Cseh S.; Dorman Gy.:
Design and Selection of Novel C1s Inhibitors by *In Silico* and *In Vitro* Approaches.
Molecules, **24**, 3641 (2019). DOI: [10.3390/molecules24203641](https://doi.org/10.3390/molecules24203641)
IF 3.267
24. **Balogh, B.**; Ivánczi, M.; Nizami, B.; Beke-Somfai T.; Mándity, I. M.:
ConjuPepDB: a database of peptide–drug conjugates.
Nucleic Acids Res. **49**, D1102-D1112 (2021). DOI: [10.1093/nar/gkaa950](https://doi.org/10.1093/nar/gkaa950)
IF 19.16
25. Pérez-Regidor, L.; Guzmán-Caldentey, J.; Oberhauser, N.; Punzón, C.; **Balogh, B.**;
Pedro, J. R.; Falomir, E.; Nurisso, A.; Mátyus, P.; Menéndez, J. C.:
Small Molecules as Toll-like Receptor 4 Modulators Drug and In-House Computational
Repurposing.
Biomedicines, **10**, 2326 (2022). DOI: [10.3390/biomedicines10092326](https://doi.org/10.3390/biomedicines10092326)
IF 4.7
26. Ivánczi, M., **Balogh, B.**; Kis, L.; Mándity, I.
Molecular Dynamics Simulations of Drug-Conjugated Cell-Penetrating Peptides.
Pharmaceuticals, **16**, 1251 (2023). DOI: [10.3390/ph16091251](https://doi.org/10.3390/ph16091251)
IF 4.3
27. Kraszni, M.; **Balogh, B.**; Mándity I.; Horváth, P.
Advantages of Induced Circular Dichroism Spectroscopy for Qualitative and
Quantitative Analysis of Solution-Phase Cyclodextrin Host–Guest Complexes.
Int. J. Mol. Sci. **25**, 412 (2024) DOI: [10.3390/ijms25010412](https://doi.org/10.3390/ijms25010412)
IF 4.9 (year 2023 data)
28. Czompa, A.; Bogdán, D.; **Balogh, B.**; Erei, E.; Selymes, P.; Csomos A.
Sustainable and Safe N-alkylation of N-heterocycles by Propylene Carbonate under
Neat Reaction Conditions.
Int. J. Mol. Sci. **25**, 5523 (2024) DOI: [1422-0067/25/10/5523#](https://doi.org/10.3390/ijms25010412)
IF 4.9 (year 2023 data)
29. Attila, I.; **Balázs, B.**; István, M.
GraphCPP: the new state-of-the-art method for cell-penetrating peptide prediction via
graph neural networks.
Brit. J. Pharmacol. **182**, 494-509 (2024). DOI: [10.1111/bph.17388](https://doi.org/10.1111/bph.17388)
IF 6.8 (year 2023 data)

PATENT

Mátyus P., Németh J., Magyar K., Somogyi A., Dunkel P., Somfai G.M., **Balogh B.**,
Túros Gy.:

Use of dihydralazine for the treatment of diseases related to elevated semicarbazide-
sensitive amine oxidase (SSAO) activity.

PCT Int. Appl. (2010), [WO 2010015870 A1 20100211](#)