

# List of publications of Dezső Boda

- [1] D. Boda. *Complexity in Nature and Society. From Dancing Molecules to Collapsing Societies.* iASK Monographs. iASK, 2020.
- [2] D. Boda, M. Valiskó, and D. Gillespie. Modeling the Device Behavior of Biological and Synthetic Nanopores with Reduced Models. *Entropy*, 22(11):1259, 2020. IF: 2.494.
- [3] D. Fertig, M. Valiskó, and D. Boda. Rectification of bipolar nanopores in multivalent electrolytes: effect of charge inversion and strong ionic correlations. *Phys. Chem. Chem. Phys.*, 22(34):19033–19045, 2020. IF: 3.567.
- [4] D. Fertig, D. Boda, and I. Szalai. Brownian dynamics simulation of chain formation in electrorheological fluids. *Hung. J. Ind. Chem.*, 48(1):95–107, 2020.
- [5] B. Hohl, E. Mádai, D. Boda, and M. Valiskó. Modeling of a pH-tunable dual-response nanopore sensor. *J. Mol. Liq.*, 310:112946, 2020. IF: 4.513.
- [6] D. Fertig, B. Matejczyk, M. Valiskó, D. Gillespie, and D. Boda. Scaling Behavior of Bipolar Nanopore Rectification with Multivalent Ions. *J. Phys. Chem. C*, 123(47):28985–28996, 2019. IF: 4.484. #Refs = 1.
- [7] E. Mádai, M. Valiskó, and D. Boda. Applicationof a bipolar nanopore as a sensor: rectification as an additional device function. *Phys. Chem. Chem. Phys.*, 21:19772–19784, 2019. IF: 3.567.
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- [9] M. Valiskó, B. Matejczyk, Z. Ható, T. Kristóf, E. Mádai, D. Fertig, , D. Gillespie, and D. Boda. Multiscale analysis of the effect of surface charge pattern on a nanopore’s rectification and selectivity properties: from all-atom model to Poisson-Nernst-Planck. *J. Chem. Phys.*, 150(14):144703, 2019. IF: 2.843. #Refs = 4.
- [10] E. Mádai, M. Valiskó, and D. Boda. The effect of the charge pattern on the applicability of a nanopore as a sensor. *J. Mol. Liq.*, 283:391–398, 2019. IF: 4.513. #Refs = 1.
- [11] E. Mádai, B. Matejczyk, A. Dallos, M. Valiskó, and D. Boda. Controlling ion transport through nanopores: modeling transistor behavior. *Phys. Chem. Chem. Phys.*, 20(37):24156–24167, 2018. IF: 3.906. #Refs = 1.
- [12] M. Valiskó, T. Kristóf, D. Gillespie, and D. Boda. A systematic Monte Carlo simulation study of the primitive model planar electrical double layer over an extended range of concentrations, electrode charges, cation diameters and valences. *AIP Advances*, 8(2):025320, 2018. IF: 1.568. #Refs = 9.
- [13] D. Fertig, E. Mádai, M. Valiskó, and D. Boda. Simulating ion transport with the NP+LEMC method. Applications to ion channels and nanopores. *Hung. J. Ind. Chem.*, 45(1):73–84, 2017. IF: –.
- [14] E. Mádai, M. Valiskó, A. Dallos, and D. Boda. Simulation of a model nanopore sensor: Ion competition underlines device behavior. *J. Chem. Phys.*, 147(24):244702, 2017. IF: 2.965. #Refs = 1.
- [15] Z. Ható, M. Valiskó, T. Kristóf, D. Gillespie, and D. Boda. Multiscale modeling of a rectifying bipolar nanopore: explicit-water versus implicit-water simulations. *Phys. Chem. Chem. Phys.*, 17(27):17816–17826, 2017. IF: 4.123. #Refs = 2.

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