

RESEARCH PAPERS, TEXTBOOKS, AND REPORTS BY P. ILICH:

[a] PAPERS IN SUBMISSION [2026]:

Ilich, P., Kahrovic, E., : A novel tumor-cytotoxic Ru-complex: a DFT study of solvation/counterion effects. [to be submitted for publication]

[b] SELECTED PEER-REVIEWED & PUBLISHED PAPERS:

43. Pavlović M., Kahrović, E., Arandjelović, S., Radulović, S., **Ilich, Predrag-Peter**, Grgurić-Šipka, S., Ljubijankić, N., Žilić, D., Jurec, J. : Tumor selective Ru(III) Schiff bases complexes with strong in vitro activity toward cisplatin-resistant MDA-MB-231 breast cancer cells. *J Biol Inorg Chem* **2023**, 28, 263-284.
doi.org/10.1007/s00775-023-01989-0
41. **Ilich, P.**, Selected Problems in Physical Chemistry; Strategies and Interpretations. Springer, Heidelberg/Berlin: **2010**, ISBN **978-3-642-04326-0**; eBook:
<http://www.springer.com/in/book/9783642043260> (accessed Aug/2026)
37. Hemann, C. F.; **Ilich, P.**; Stockert, A. L.; Choi, E-Y.; Hille, R. Resonance Raman Studies of Xanthine Oxidase: The Reduced Enzyme-Product Complex with Violapterin. *J. Phys. Chem. B*, **2005**, 109, 3023-3031. DOI: **10.1021/jp046636k**
36. **Ilich, P.**; Juranić, N. One-bond $^1J_{NC}$ nuclear spin-spin coupling in N-methylacetamide: a model for hydrogen-bonded peptides. *ChemPhysChem*, **2003**, 4, 1358-1360, DOI: **10.1002/cphc.200300647**
33. Hemann, C. F.; **Ilich, P.**; Hille, R. Vibrational Spectra of Lumazine in Water and D₂O at pH 2 to 13. Ab Initio Calculations and FTIR/Raman Spectra. *J. Phys. Chem. B* **2003**, 107, 2139-2155. DOI: **10.1021/jp026293v**
32. **Ilich, P.**; Hille, R. Oxo, Sulfido, and Tellurido Mo-enedithiolate Models for Xanthine Oxidase: Understanding the Basis of Enzyme Reactivity. *J. Am. Chem. Soc.* **2002**, 124, 6796-6797. DOI: **10.1021/ja011957k**
31. **Ilich, P.**; Hille, R. Mechanism of Formamide Hydroxylation Catalyzed by a Molybdenum-Dithiolene Complex: A Model for Xanthine Oxidase Reactivity. *J. Phys. Chem. B* **1999**, 103, 5406-5412. DOI: **10.1021/jp9904825**
29. **Ilich, P.**; Hemann, C. F.; Hille, R. Molecular vibrations of solvated uracil. Ab initio reaction field calculations and experiment. *J. Phys. Chem. B* **1997**, 101, 10923-10938. DOI: **10.1021/jp9706285**
26. **Ilich, P.**; Mishra, P. K.; Macura, S.; Burghardt, T. P. Direct observation of rhodamine dimer structures in water. *Spectrochim. Acta*, **1996**, 52A(10), 1323-1330.
doi:10.1016/0584-8539(96)01719-9
25. Juranić, N.; **Ilich, P.**; Macura, S. Hydrogen Bonding Networks in Proteins As Revealed by the Amide $^1J_{NC}$ Coupling Constant. *J. Am. Chem. Soc.* **1995**, 117, 405-410. DOI: **10.1021/ja00106a046**