Scientific publications of Dr. Marc A. Ilies

PUBLICATIONS (**over 3100 citations, H-Index = 31)**

A. Books

K. Sakurai, **M. A. Ilies**, Editors: "Targeted Nanosystems for Therapeutic Applications: New Concepts, Dynamic Properties, Efficiency, and Toxicity", ACS Books & Oxford University Press, American Chemical Society: Washington, DC, **2019**, 348 pp, published online 03/20/19 (https://pubs.acs.org/isbn/9780841233836).

M. A. Ilies, Editor: "Control of Amphiphile Self-Assembling at the Molecular Level: Supra-Molecular Assemblies with Tuned Physicochemical Properties for Delivery Applications", ACS Books & Oxford University Press, ACS Symposium Series 1271, American Chemical Society: Washington, DC, **2017**, 331 pp, ISBN 9780841232747, web: https://pubs.acs.org/isbn/9780841232747.

B. Book chapters (invited, peer-reviewed)

10. U. K. Mondal, **M. A. Ilies**, "Efflux pumps, NHE1, monocarboxylate transporters and ABC transporter subfamily inhibitors", in "pH Interfering Agents As Chemosensitizers In Cancer Therapy", C. T. Supuran and S. Carradori Eds., Elsevier, **2020**, pp. 95-120.

9. **M. A. Ilies**, J.-Y. Winum, "Carbonic anhydrase inhibitors for the treatment of tumors: therapeutic, immunologic, and diagnostic tools targeting isoforms IX and XII." in "Carbonic Anhydrases", C. T. Supuran, A. Nocentini Eds, Elsevier, **2019**, pp. 331-365.

8. R. K. K. Sanku, O. O. Karakus, M. Ilies, **M. A. Ilies**, "Inclusion complexes in drug delivery and drug targeting: formation, characterization and biological applications" in "Targeted Nanosystems for Therapeutic Applications: New Concepts, Dynamic Properties, Efficiency, and Toxicity", ACS Books, Washington, DC, **2019**, pp. 187-221.

7. A. M. Shabana, M. A. Ilies "Drug delivery to hypoxic tumors targeting carbonic anhydrase IX", in "Targeted Nanosystems for Therapeutic Applications: New Concepts, Dynamic Properties, Efficiency, and Toxicity", ACS Books, Washington, DC, **2019**, pp. 223-252.

6. U. Satyal, V. D. Sharma, J. A. Shif, **M. A. Ilies** "Interface-Engineered Amphiphilic Block Copolymers with Tuned Enzymatic Resistance for Controlled Delivery of Chemotherapeutic Drugs", in "Control of Amphiphile Self-Assembling at the Molecular Level: Supra-Molecular Assemblies with Tuned Physicochemical Properties for Delivery Applications", M. A. Ilies Ed., **ACS Books**, Washington, DC, **2017**, 211-229.

5. **M. A Ilies**, U. Satyal, V. D. Sharma "Synthetic Delivery Systems for DNA, siRNA, and mRNA Based on Pyridinium Amphiphiles", in "Control of Amphiphile Self-Assembling at the Molecular Level: Supra-Molecular Assemblies with Tuned Physicochemical Properties for Delivery Applications", M. A. Ilies Ed., **ACS Books**, Washington, DC, **2017**, 1-34.

4. S. Akocak, **M. A. Ilies** "Next-generation primary sulfonamide CA inhibitors" in "Targeting Carbonic Anhydrases", C. T. Supuran, C. Capasso Eds., **Future Science**, London, **2014**, 35-51.

3. **M. A. Ilies**, T. V. Sommers, L. C. He, A. Kizewski, V. D. Sharma "Pyridinium Amphiphiles in Gene Delivery - Present and Perspectives" in "Amphiphiles: Molecular Assembly and Applications", R. Nagarajan Ed., **ACS Books**, **2011**, 23-38.

2. **M. A. Ilies** "Metal complexes as dual carbonic anhydrase inhibitors" in "Drug Design of Zinc-Enzyme Inhibitors: Functional, Structural, and Disease Applications" (Binghe Wang Series in Drug Discovery and Development), C. T. Supuran, J. Y. Winum Eds., **Wiley**, **2009**, 439-472.

1. **M. A. Ilies** and M.D. Banciu, "Non-sulfonamide carbonic anhydrase inhibitors" in "Carbonic Anhydrase, Its Inhibitors and Activators", C.T. Supuran, A. Scozzafava, J. Conway Eds., **CRC Press**, Boca Raton, **2004**, pp. 207-239.

C. Articles in peer-reviewed scientific periodicals

66. U. K. Mondal, K. Doroba, A. M. Shabana, R. Adelberg, Md. R. Alam, C. T. Supuran, M. A. Ilies, "PEG Linker Length Strongly Affects Tumor Cell Killing by PEGylated Carbonic Anhydrase Inhibitors in Hypoxic Carcinomas Expressing Carbonic Anhydrase IX", ***Int. J. Mol. Sci.*** **2021**, 22, 1120. doi.org/10.3390/ijms22031120.

65. J. T. Andring, M. Fouch, S. Akocak, A. Angeli, C. T Supuran, M. A. Ilies, R. McKenna, "Structural Basis of Nanomolar Inhibition of Tumor-Associated Carbonic Anhydrase IX: X-Ray Crystallographic and Inhibition Study of Lipophilic Inhibitors with Acetazolamide Backbone" ***J. Med. Chem***. **2020**, 63, 21, 13064–13075.

64. S. Akocak, Ö. Güzel-Akdemir, R. K. K. Sanku, S. S. Russom, B. I. Iorga, C. T. Supuran, **M. A. Ilies**, "Pyridinium Derivatives of 3-Aminobenzenesulfonamide are Nanomolar Potent Inhibitors of Tumor-expressed Carbonic Anhydrase Isozymes CA IX and CA XII", ***Bioorganic Chemistry***, **2020**, 103, 104204.

63. F. Dumitrascu, **M. A. Ilies**, "Recent Advances in the Nenitzescu Indole Synthesis (1990-2019)", ***Adv. Heterocycl. Chem***., **2020**, 133, in press, https://doi.org/10.1016/bs.aihch.2020.03.001

62. S. Zamanova, A. M. Shabana, U. K. Mondal, **M. A. Ilies**, "Carbonic anhydrases as disease markers", ***Expert Opin. Ther. Pat.***, 29(7), 509-533 (**2019**).

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