



Marieta Nichifor

Senior researcher I
nichifor@icmpp.ro

Research topics

• Chemical modification of polysaccharides • Synthesis of ionic and neutral amphiphilic polymers (hydrophobically modified polysaccharides, end-modified polymers, block copolymers) and their self-assembly into nanosized aggregates • Polymers with biomedical applications (polymer-drug conjugates, carriers for drug delivery, hypolipemic agents, antimicrobial agents)

Scientific research results

81 published articles (70 in ISI journals), 6 book chapters, 6 articles in proceedings, 14 national patents, over 30 participations at national and international scientific meetings, and 21 research grants (7 as project director, 5 as partner director in consortium projects, and member in 2 international projects)

Author output: h-index = 21; citations = 1381 (web of science); Without self citations = 1185

Relevant publications

1. M. C. Stanciu, **M. Nichifor**, G. Mocanu, C. Tuchilus, G. L. Ailiesei. Block copolymers containing dextran and deoxycholic acid polyesters. Synthesis, self-assembly and hydrophobic drug encapsulation. *Carbohydrate Polymers* 223, Article number 115118, 2019
2. M. C. Stanciu, **M. Nichifor**. Influence of dextran hydrogel characteristics on adsorption capacity for anionic dyes. *Carbohydrate Polymers* 199, 75-83, 2018
3. C. G. Tuchilus, **M. Nichifor**, G. Mocanu, M. C. Stanciu. Antimicrobial properties of chemically modified dextran. *Carbohydrate Polymers* 161, 181-186, 2017
4. **M. Nichifor**, G. Mocanu, M.C. Stanciu. "Micelle-like association of polysaccharides with hydrophobic end groups" *Carbohydrate Polymers* 110, 209-218, 2014
5. G. Bai, Y. Wang, **M. Nichifor**, M. Bastos. Critical role of the Degree of Substitution on the Interaction of Biocompatible Cholic Acid-Modified Dextran with Phosphatidylcholine Liposomes. *Langmuir* 29, 13258–13268, 2013
6. G. Bai, **M. Nichifor**, M. Bastos. Cationic Polyelectrolytes as Drug Delivery Vectors: Calorimetric and Fluorescence Study of Rutin Partition" *Journal of Physical Chemistry B* 11, 16236–16243, 2010
7. **M. Nichifor**, M. C. Stanciu, B. C. Simionescu, New cationic hydrophilic and amphiphilic polysaccharides synthesized by one pot procedure, *Carbohydrate Polymers* 82, 965-975, 2010
8. **M. Nichifor**, M. Bastos, S. Lopes, A. Lopes "Characterization of Aggregates formed by Hydrophobically Modified Cationic Dextran and Sodium Alkyl Sulfates in Salt-Free Aqueous Solutions, *Journal of Physical Chemistry B*, 112, 15554–15561, 2008
9. **M. Nichifor**, X. X. Zhu. Copolymers of N-alkylacrylamides and styrene as new thermosensitive materials. *Polymer* 44, 3063-3060, 2003.
10. **M. Nichifor**, A. Lopes, A. Carpov, E. Melo. Aggregation in water of dextran hydrophobically modified with bile acids. *Macromolecules*, 32, 7078-7085, 1999