Dr. Alexandrina Nan

Publication list

1. L. Muntean, I. Grosu, S. Mager, A. Nan, "Synthesis and stereochemistry of some spiro-1,3-oxathiane derivatives", Studia Babes-Bolyai, Seria Chemia, XLIII (1-2), 267-272, 1998.
2. L. Muntean, M. Pop, I. Grosu, S. Mager, G. Ple, A. Nan, E. Bogdan, "Synthesis and Stereochemistry of some new 1,3-dioxane derivatives of 1,3 diacetylbenzene" *Revue Roumanine de Chimie*, 47(3-4), 327-332, 2002.
3. L. Muntean, M. Pop, I. Grosu, S. Mager, G. Ple, A. Nan, E. Bogdan, "Synthesis and stereochemistry of some new 1,3-dioxane derivatives of 1,3-diacetylbenzene", ChemInform 07/2003; 34(30), 2003
4. Stuparu M., Grosu I., Muntean L., Ple G., Cismas C., Terec A., Nan A., Mager S., *"Synthesis and stereochemistry of some new 1,3-oxathiane derivatives"*, *Monatsh.Chem.*, 135(1), 89-96, 2004.
5. R.Turcu, D. Bica, L. Vekas, N. Aldea, D. Macovei, A. Nan, O. Marinica, R. Grecu, C. V. L. Pop, "Conducting polymers multifunctional nanocomposites", Studia Babes-Bolyai,Seria Physica, L, 4a, 407-411, 2005.
6. R. Turcu, Al. Darabont, A. Nan, N. Aldea, D. Macovei, D. Bica, L. Vekas, O. Pana, M. L. Soran, A. A. Koos, L. P. Biro, *„New polypyrrole-multi wall carbon nanotubes hybrid materials",* Journal of Optoelectronics and Advanced Materials 2(8), 643, 2006.
7. R. Turcu, D.Bica, L. Vekas, A. Nan, D. Macovei, N. Aldea, O. Pana, O. Marinica, R. Grecu, „*Synthesis and characterization of nanostructured polypyrrole-magnetic particles hybrid materials",* Romanian Reports in Physics, 58 (3), 359–367, 2006.
8. E. Goiti, R. Hernández, R. Sanz, D. López, M. Vázquez, C. Mijangos, R. Turcu, A. Nan, D. Bica, L. Vekas, *„Novel nanostructured magneto-polymer composites",* Journal of Nanostructured Polymers and Nanocomposites 2(1), 3-10, 2006.
9. R. Turcu, A. Nan, I. Craciunescu, S. Karsten, O. Pana, I. Bratu, D. Bica, L. Vekas, O. Chauvet, D. Eberbeck, H. Ahlers, "Functionalized nanostructures with magnetite core and pyrrole copolymers shell", Journal of Nanostructured Polymers and Nanocomposites 3/2, 55-62, 2007.
10. A. Nan, I. Craciunescu, A. Bende, R. Turcu, D. Reichert, J. Liebscher, "*Synthesis and Structure Investigation of Functionalized Polypyrrole Copolymers*", Journal of Nanostructured Polymers and Nanocomposites 4/1, 3-12, 2008.
11. R. Turcu, A. Nan, I. Craciunescu, J. Liebscher, O. Pana, D. Bica, L.Vekas, C. Mijangos, "Comparative study of hybrid nanostructures of polymer-magnetic nanoparticle", *Journal of Optoelectronics and Advanced Materials*, vol. 10 (9), 2008, 2237.
12. A. Nan*, I. Craciunescu, R. Turcu, D. Reichert, J. Liebscher, Synthesis and characterization of new functionalized pyrrole copolymers. *Journal of Optoelectronics and Advanced Materials*, vol. 10 (9), 2265, 2008.
13. I. Craciunescu, A. Nan, R. Turcu, Lo Gorton, I. C. Popescu, New electrode materials based on functionalized polypyrrole, Journal *of Optoelectronics and Advanced Materials*, vol. 10 (9), 2271, 2008.
14. C. Popa, R. Turcu, I. Craciunescu, A. Nan, M. L. Ciurea, I. Stavarache, V. Iancu, Polypyrrole – porous silicon nanocomposites, *Journal of Optoelectronics and Advanced Materials*, vol. 10 (9), 2319, 2008.

15. R. Turcu, O. Pana, A. Nan, I. Craciunescu, O. Chauvet, C. Payen, „Polypyrrole coated magnetite nanoparticles from water based nanofluids“, *J. Phys. D: Appl. Phys.* 41, 245002, 9, 2008.
16. M. Bogdan, A. Nan, C. V. L. Pop, L. Barbu-Tudoran, I. Ardelean, “Preparation and NMR Characterization of Polyethyl-2-cyanoacrylate nanocapsules”, *Applied Magnetic Resonance*, 34 (1-2), 111-119, 2008.
17. A. Nan, S. Karsten, I. Craciunescu, R. Turcu, L. Vekas, J. Liebscher: “New shells for magnetic nanoparticles based on polypyrrole functionalized with α-amino acids” *ARKIVOC,* Vol. 15, 307-320, 2008.
18. N. Aldea, R. Turcu, A. Nan, I. Craciunescu, O. Pana, X. Yaning, Z. Wu, D. Bica, L. Vekas, F. Matei, „Investigation of nanostructured Fe_3O_4 polypyrrole core-shell composites by X-ray absorbtion spectroscopy and X-ray diffraction using synchrotron radiation“, *J Nanopart. Res.*, 11(6), 1429-1439, 2009.
19. A. Nan*, R. Turcu, I. Craciunescu, O. Pana, H. Scharf, J. Liebscher, Microwave-Assisted Graft Polymerization of ε-caprolactone onto Magnetite, *Journal of Polymer Science: Part A: Polymer Chemistry*, 47(20), 5379-5404, 2009.
20. I. Craciunescu, A. Nan, R. Turcu, I. Kacso, I. Bratu, C. Leostean, L. Veckas, Synthesis, characterization and drug delivery application of the temperature responsive pNIPA hydrogel, *J.Phys.Conf.Ser.*, 182, 012060, 2009.
21. S. Karsten, A. Nan, R. Turcu, J. Liebscher, Synthesis of new pyrrole-containing biomolecules as building blocks for functionalized polypyrroles in nanobiotechnology, *J.Phys.Conf.Ser.*, 182, 012067, 2009.
22. A. Nan, R. Turcu, I. Craciunescu, C. Leostean, I. Bratu, J. Liebscher, Surface initiated ring-opening polymerization of lactones on iron oxide nanoparticles, *J.Phys.Conf.Ser.*, 182, 012070, 2009.
23. R. Turcu, A. Nan, I. Craciunescu, O. Pana, C. Leostean, S. Macavei, Smart composites based on magnetic nanoparticles and responsive polymers, *J.Phys.Conf.Ser.*, 182, 012081, 2009.
24. S. Karsten, M. A. Ameen, S. I. Kaläne, A. Nan, R. Turcu, J. Liebscher, A versatile method of tethering biomolecules to pyrrole-precursosrs for functionalized magnetic polypyrrole core-shell nanoparticles, Synthesis, Vol. 17, 3021-3028, 2010
25. A. Nan*, I. Craciunescu, R. Turcu, I. Bratu, C. Leostean, O. Chauvet, E. Gautron, J. Liebscher, Novel magnetic core-shell Fe_3O_4 polypyrrole nanoparticles functionalized by peptides or albumin, ARKIVOC, Vol. 10, 185-198, 2010
26. R. Turcu, A. Nan, I. Craciunescu, C. Leostean, S. Macavei, A.Taculescu, O. Marinica, C. Daia, L. Vekas, Synthesis and characterization of magnetically controllable nanostructures using different polymers, 8th Internatioanl conference on the scientific and clinical applications of magnetic carriers. Book Series: AIP Conference Proceedings, Vol. 1311, pp. 20-27, 2010
27. A. Nan, L. David, M. Tintas, C. Lar, I. Grosu, Synthesis, stereochemistry and ring-chain tautomerism of some new bis(1,3-perhidrooxazin-2-yl)benzene derivatives, *Letters in Organic Chemistry*, Vol. 8, No. 1, p. 16-21, 2011.
28. A. Nan*, R. Turcu, J. Liebscher, Magnetite-polylactic acid core–shell nanoparticles by ring-opening polymerization under microwave irradiation, Journal of Polymer Science Part A: Polymer Chemistry, Volume 50, Issue 8, pages 1485–1490, 2012.
29. S. Karsten, A. Nan, R. Turcu, J. Liebscher, A new access to polypyrrole-based functionalized magnetic core-shell nanoparticles, Journal of Polymer Science Part A: Polymer Chemistry, Volume 50(19), pages 3986 – 3995, 2012.

30. Z. Yacob, A. Nan*, J. Liebscher, Proline-functionalized magnetic core-shell nanoparticles as efficient and recyclable organocatalysts for aldol reactions, Advanced Synthesis & Catalysis, Vol.354(17), 3259-3264, 2012.
31. S. Karsten, A. Nan, J. Liebscher, Linking applicatory functions to the 3-position of pyrrole by click chemistry, ARKIVOC, IX,204-219, 2012.
32. V.I. Petrenko, M.V. Avdeev, R. Turcu, A. Nan, L. Vekas, V.L. Aksenov, L. Rosta, L.A. Bulavin, Powder structure of magnetic nanoparticles with a substituted pyrrole copolymer shells according to small-angle neutron scattering, Journal of Surface Investigation. X-ray, Synchrotron and Neutron Techniques, Vol. 7(1), pp. 5–9, 2013.
33. C. Socaci, M. Rybka, L. Magerusan, A. Nan, R. Turcu, J. Liebscher, Magnetite nanoparticles coated with alkyne-containing polyacrylates for click chemistry, Journal of Nanoparticles Research, 15,1747, 2013.
34. A. Nan, J. Leistner, R. Turcu, Magnetite-polylactic acid nanoparticles by surface initiated organocatalysis ring opening polymerization, Journal of Nanoparticles Research, 15, 1869, 2013.
35. A. Nan, R. Turcu, J. Liebscher, Introduction of biotin or folic acid into polypyrrole magnetite core-shell nanoparticles, 233-237, 1565, 2013.
36. A. Nan, R. Turcu, J. Liebscher, A routine synthesis of magnetite applied in ionic liquids, 229 – 232, 1565, 2013.
37. R. Mrówczyński, A. Nan, J. Liebscher, Magnetic nanoparticle-supported organocatalysts – an efficient way of recycling and reuse, RSC Advances, 4(12), 5927-5952, 2014.
38. R. Mrówczyński, A. Nan*, R.Turcu, J. Leistner, J. Liebscher, Polydopamine a versatile coating for surface initiated ring opening polymerization of lactide to polylactide, Macromolecular Chemistry and Physics, 216(2), 211-217, 2015.
39. A. Nan*, A. Bunge, R. Turcu, Hybride magnetic nanostructure based on amino acids functionalized polypyrrole, AIP Conf. Proc., 1700, 060007, 2015.
40. A. Nan*, T. Radu, R. Turcu, Poly(glycidyl methacrylate)-functionalized magnetic nanoparticles as platforms for linking functionalities, bioentities and organocatalyst, RSC Advances, 6, 43330–43338, 2016.
41. M. Cîrcu, A. Nan*, G. Borodi, J. Liebscher, R. Turcu*, Refinement of magnetite nanoparticles by coating with organic stabilizers, Nanomaterials, 6(12), 228, 2016.
42. A. Petran, T. Radu, A. Nan, D. Olteanu, Ad. Filip, S. Clichici, I. Baldea, M. Suciu, R. Turcu, "Synthesis, characterization and cytotoxicity evaluation of high magnetization multifunctional nanoclusters", Journal of Nanoparticles Research, 19(1), article 10, 2017.
43. A. Nan*, A. Bunge, M. Cîrcu, A. Petran, N. D. Hădade, X. Filip, Poly(benzofurane-co-arylacetic acid) – a new type of highly functionalized polymers, Polymer Chemistry, 8, 3504–3514, 2017.
44. M.-L. Soran, O. Pană, A. Nan, C. Leoştean, I. Bratu, Synthesis and spectroscopic characterization of hybrid magnetic nanoparticles, based on Fe@Au and pyrrole, Studia UBB, Chemia, Volume 62 (LXII) 2017, pp. 105-112.
45. A. Nan*, Ioana Coralia Feher, A new polyester based on allyl α-hydroxy glutarate as shell for magnetite nanoparticles, AIP Conference Proceedings, 1917 (1), 040003, 2017
46. A. Petran, T. Radu, G. Borodi, A. Nan, M. Suciu, R. Turcu, Effects of rare earth doping on multi-core iron oxide nanoparticles properties, Applied Surface Science, Vol. 428, 492-499, 2018.

47. M. Cîrcu, A. Bunge, C. Vasilescu, S. Porav, A. Nan*, Non-catalytic, solvent free synthesis of poly(tartronic-co-glycolic acid) as a versatile coating of different surfaces, Polymer International, Volume 67, Issue 2, Pages 212–219, 2018,
48. C. Vasilescu, A. Todea, C. Paul, I.C. Benea, A. Nan, R. Turcu, F. Peter, “New multilayer magnetic biocatalyst for esterification and transesterification reactions”, New Biotechnology, Volume 44, Page S73, 2018
49. A. Nan*, I.-V. Ganea, R. Turcu, Physicochemical properties of a new magnetic nanostructure based on poly(benzofurane-co-arylacetic acid), Analytical Letter, Vol. 52, No. 1, 27–36, 2019.
50. A. Nan, X. Filip, M. Dan, O. Marincaş, “Clean production of new functional coatings of magnetic nanoparticles from sustainable resources”, Journal of Cleaner Production, Vol. 210, 10 February, Pages 687-696, 2019,
51. C. Vasilescu, A. Todea, A. Nan, M. Cîrcu, R. Turcu, I.-C. Benea, F. Peter, Enzymatic synthesis of short-chain flavor esters from natural sources using tailored magnetic biocatalysts, Food Chemistry, https://doi.org/10.1016/j.foodchem.2019.05.179