

Dr. Claudiu Filip
Lista publicațiilor științifice

Articole în reviste cotate ISI

1. A. Petran, N. D. Hädade, C. Filip, X. Filip, A. Bende, A. Popa, J. Liebscher, "Poly[3,4-dihydroxybenzhydrazide]: A Polydopamine Analogue?" *Macromolec. Chem. Phys.* **219** (2018) 1700564
2. *DarkSide* Collaboration, "DarkSide-20k: A 20 tonne two-phase LAr TPC for direct dark matter detection at LNGS" *Eur. Phys. J. Plus* **133** (2108) 131
3. M. Cîrcu, C. Filip "Closer to the polydopamine structure: new insights from a combined $^{13}\text{C}/^1\text{H}/^2\text{H}$ solid-state NMR study on deuterated samples" *Polym. Chem.* **9**, (2018) 3379-3387
4. X. Filip, M. O. Miclăuș, F. Martin, C. Filip, I. G. Grosu, "Optimized multi-step NMR-crystallography approach for structural characterization of a stable quercetin solvate", *J. Pharm. Biomed. Anal.* **138** (2017) 22-28
5. *DarkSide* Collaboration, "The DarkSide Experiment" *Il Nuovo Cimento C* **40** (2107) 52
6. *DarkSide* Collaboration, "Cryogenic Characterization of FBK RGB-HD SiPMs" *J. Instrum.* **12** (2107) P09030
7. M. O. Miclăuș, X. Filip, C. Filip, F. A. Martin, I. G. Grosu, "Highly sensitive solid forms discrimination on the whole tablet of the active ingredients in quercetin dietary supplements by NMR crystallography approaches", *J. Pharm. Biomed. Anal.* **124** (2016) 274–280
8. M. O. Miclăuș, I. E. Kacso, F. A. Martin, L. David, M.M. POP, C. Filip, X. Filip, "Crystal Structure and Desolvation Behaviour of the Tadalafil Monosolvates with Acetone and Methyl Ethyl Ketone", *J. Pharm. Sci.*, **104** (2015) 3782–3788
9. A. Petran, R. Mrowczynski, C. Filip, R. Turcu, J. Liebscher "Melanin-like polydopa amides – synthesis and applications in functionalization of magnetic nanoparticles", *Polym. Chem.* **6** (2015) 2139-2149
10. X. Filip, C. Filip, "Can the conformation of the flexible hydroxyl groups be constrained by simple NMR crystallography approaches? The case of quercetin solid forms" *Solid State NMR* **65** (2015) 21-28
11. M. Miclăuș, I.G. Grosu, X. Filip, C. Tripon, C. Filip, „Optimizing structure determination from powders of crystalline organic solids with high molecular flexibility: the case of lisinopril dihydrate”, *CrystEngComm* **16** (2014) 299-301
12. J. Liebscher, R. Mrowczynski, S.A. Scheidt, C. Filip, N.D. Hadade, R. Turcu, A. Bende, S. Beck, "Structure of Polydopamine: a Never-Ending Story?", *Langmuir*, **29** (2013) 10539-10548
13. X. Filip, I.G. Grosu, M. O. Miclăuș, C. Filip, „NMR crystallography methods to probe complex hydrogen bonding networks: application to structure elucidation of anhydrous quercetin”, *CrystEngComm* **15** (2013) 4131-4142
14. X. Filip, Gh. Borodi, C. Filip, „Testing the limits of sensitivity in a solid-state structural investigation by combined X-Ray Powder Diffraction, Solid-State NMR and molecular modelling”, *Phys. Chem. Chem. Phys.* **13** (2011) 17978-17986
15. I. Bratu, Gh. Borodi, I. Kacso, Z. Moldovan, C. Filip, F. Dragan, M. Vasilescu, S. Simon, "New solid form of Norfloxacin: Structural studies", *Spectroscopy – An International Journal*, **25** (2011) 53-62
16. A. Hangan, Gh. Borodi, X. Filip, C. Tripon, C. Morari, L. Oprean, C. Filip, "The structure of N-(5-ethyl-[1,3,4] - thiadiazole-2-yl)-toluenesulfonamide by combined X-Ray Powder Diffraction, ^{13}C Solid-State NMR, and molecular modeling", *Acta Crystallogr. B* **66** (2010) 615-621

17. X. Filip, C. Filip, "SD-CAS: Spin Dynamics by Computer Algebra System", *J. Magn. Reson.* **207** (2010) 95-113
18. X. Filip, C. Tripon, Gh. Borodi, L. Oprean, C. Filip, "Structural investigation of Lisinopril by powder X-Ray diffraction and solid-state NMR", *J. Phys. Conf. Ser.* **182**, 012007 (2009)
19. X. Filip, C. Tripon, S.P. Brown, C. Filip, "Increasing the accuracy of structural investigations by MAS spin-echo solid-state NMR experiments", *J. Phys. Conf. Ser.* **182**, 012025 (2009)
20. C. Tripon, X. Filip, V.V. Morariu, C. Filip, "New solid-state experiments for investigating molecular structure: the CHCC approach", *J. Phys. Conf. Ser.* **182**, 012033 (2009)
21. J.P. Bradley, C. Tripon, C. Filip, S. P. Brown, "Determining relative proton-proton proximities from the build-up of two-dimensional correlation peaks in ^1H double-quantum MAS NMR: insight from multi-spin density-matrix simulations", *Phys. Chem. Chem. Phys.* **11**, 6941-6952 (2009)
22. M. Aluas, C. Tripon, J.M. Griffin, X. Filip, V. Ladizhansky, R.G. Griffin, S. P. Brown, C. Filip, "CHHC and ^1H - ^1H Magnetization Exchange: Analysis by Experimental Solid-State NMR and 11-Spin Density Matrix Simulations", *J. Magn. Reson.* **199**, 173 (2009)
23. X. Filip, C. Tripon, M. Aluas, C. Filip, "New Solid-State NMR Techniques for Investigating Structure and Dynamics in Soft Solids and Biomaterials", *J. Opt. Adv. Mater.* **10**, 2277-2281 (2008)
24. J.M. Griffin, C. Tripon, A. Samoson, C. Filip, S.P. Brown, "Low-Load Rotor-Synchronized Hahn-Echo Pulse Train (RS-HEPT) ^1H Decoupling in Solid-State NMR: Factors Affecting MAS Spin-Echo Dephasing Time", *Magn. Reson. Chem.* **45**, S198-S208 (2007)
25. T.N. Pham, S. Masiero, S. Lena, J.M. Griffin, C. Gottarelli, C. Filip, S.P. Brown, "Quantifying Hydrogen-Bonding Strength: The Determination of $^2\text{h}J_{\text{NN}}$ Couplings in Self-Assembled Guanosines by Solid-State ^{15}N MAS NMR", *Phys. Chem. Chem. Phys.* **9**, 3416 (2007)
26. M. Aluas, C. Tripon, X. Filip, C. Filip, "Extracting intramolecular dynamics information from conventional and remote protons CP/MAS NMR build-up curves", *J. Opt. Adv. Mater.* **9**, 664-667 (2007)
27. C. Tripon, M. Aluas, X. Filip, C. Filip, "Polarization transfer from remote protons in ^{13}C CP/MAS", *J. Magn. Reson.* **183**, 68 (2006)
28. C. Tripon, D. Toloman, M. Aluas, C. Filip, I. Ardelean, *J. Opt. Adv. Mater.* **8**, 1129-1131 (2006)
29. X. Filip, C. Tripon, C. Filip, "Heteronuclear decoupling under fast MAS by a rotor synchronized Hahn-echo pulse train", *J. Magn. Reson.* **176**, 239 (2005);
30. M. Aluas, C. Filip, "Solid-State NMR Characterization of Cross-Linking in EPDM/PP Blends from ^1H - ^{13}C Polarization Transfer Dynamics", *Solid State NMR*, **27**, 165-173 (2005);
31. D. Rovnyak, C. Filip, B. Itin, A.S. Stern, G. Wagner, R.G. Griffin, J.C. Hoch, "Multiple-quantum magic-angle spinning spectroscopy using nonlinear sampling", *J. Magn. Reson.* **161**, 43 (2003);
32. C.P. Jaroniec, C. Filip, R.G. Griffin, "3D TEDOR NMR experiments for the simultaneous measurement of multiple carbon-nitrogen distances in uniformly ^{13}C , ^{15}N -labeled solids", *J. Am. Chem. Soc.* **124**, 10728 (2002);
33. A. Wiesmath, C. Filip, D.E. Demco, B. Blumich, "NMR of multipolar spin states excited in strongly inhomogeneous magnetic fields", *J. Magn. Reson.* **154**, 60 (2002);
34. C. Filip, M. Bertmer, D.E. Demco, B. Blumich, "Application of the Floquet theory to multiple quantum NMR of dipolar-coupled multi-spin systems under magic angle spinning", *Molec. Phys.* **99**, 1575 (2001);
35. C. Filip, X. Filip, M. Bertmer, D. E. Demco, B. Blumich, "Dipolar and J encoded DQ MAS spectra under rotational resonance", *J. Magn. Reson.* **150**, 184 (2001);
36. A. Wiesmath, C. Filip, D.E. Demco, B. Blumich, "Double-quantum-filtered NMR signals in inhomogeneous magnetic fields", *J. Magn. Reson.* **149**, 258 (2001);

37. L.V. Giurgiu, C. Filip, M. Mehring, "Spin dynamics in $Gd_xY_{1-x}Ba_2Cu_3O_{6.85}$ investigated by ESR of Gd spin probes", *Appl. Magn. Reson.* **19**, 339 (2000);
38. S. Knorr, X. Filip, A. Darabont, O. Pana, R. Ordean, C. Filip, L.V. Giurgiu, M. Mehring, "Spin relaxation in the quasi-one-dimensional conductor $Rb_2Pt(CN)_4(FHF)_{0.4}$ ", *Appl. Magn. Reson.* **19**, 373 (2000);
39. C. Filip, S.Hafner, "Analysis of multiple-pulse techniques under fast MAS conditions", *J. Magn. Reson.* **147**, 250 (2000);
40. L.V. Giurgiu, X. Filip, O. Pana, C. Filip, A. Darabont, R. Ordean, S. Knorr, J. Rahmer, M. Mehring, "EPR investigation of the spin relaxation in the quasi-one-dimensional platinum conductors", *J. Optoelectr. Adv. Mater.* **2**, 371 (2000);
41. L.V. Giurgiu, M.N. Grecu, X. Filip, A. Darabont, E. Indrea, I.G. Deac, C. Filip, R. Ordean, G.D. Popescu, E. Surducan, J. Blasco, G. Papavassilou, "Mn-site doping effects in the giant magnetoresistive perovskite $La_{2/3}Ca_{1/3}MnO_3$: An EPR investigation", *J. Optoelectr. Adv. Mater.* **2**, 375 (2000);
42. R. Turcu, W. Graupner, C. Filip, A. Bot, M. Brie, R. Grecu, "Studies of Intermolecular Interactions in Polypyrrole and Conjugated Composites Based on Polypyrrole", *Adv. Mater. Opt. Electron.* **9**, 157-165 (1999);
43. C. Filip, S. Hafner, I. Schnell, D.E. Demco, H.W. Spiess, "Solid-state nuclear magnetic resonance spectra of dipolar-coupled multi-spin system under magic angle spinning", *J. Chem. Phys.* **110**, 423-440 (1999);
44. O. Pana, R. Tatar, C. Filip, L.V. Giurgiu, C. Kessler, "Soliton energy band for the six-fold degenerated CDW in the $K_2(CN)_4Br_{0.3} \cdot 3.2H_2O$ system", *Phys. Lett. A* **242**, 329 (1998);
45. C. Filip, X. Filip, D.E. Demco, S.Hafner, "Spin Dynamics under Magic Angle Spinning by Floquet Formalism" *Molec. Phys.* **92**, 757-771 (1997);
46. D.E. Demco, F. Weigand, C. Fulber, X. Filip, C. Filip, "Spin-Lattice Relaxation in Multiple-Pulse Experiments as constrast Parameter in NMR Imaging of Solids", *Appl. Magn. Reson.* **12**, 363-374 (1997); **citations: 2**
47. D.E. Demco, X. Filip, C. Filip, D. Chira, O. Cozar, "Homonuclear Separated Local-Field Spectroscopy by Magnetization Exchange NMR", *Acta Physica Polonica A*, **92**, 1135-1149 (1997);
48. C. Kessler, P. Castelaz, G. Borodi, C. Filip, Al. Darabont, L.V. Giurgiu, M. Mehring, "Exchange interactions between Gd^{3+} and the conduction electron system in the normal state of $Y_{1-x}Gd_xBa_2Cu_3O_{7-y}$ ", *Physica B* **229**, 113-127 (1997);
49. O. Pana, C. Kessler, C. Filip, L.V. Giurgiu, I. Ursu, M. Mehring, "Platinum Hyperfine Interaction and Delocalization of Solitons in KCP as Seen by ESR", *Appl. Magn. Reson.* **12**, 247-253 (1997);
50. L.V. Giurgiu, C. Filip, A. Darabont, G. Borodi, R. Ordeanu, X. Filip, C. Kessler, M. Mehring, "Interaction between Gd-localized and conduction electron spins in the normal state of oxygen deficient $YBaCuO$ ", *Balkan Phys. Lett.* **5**, 1099 (1997);
51. C. Filip, L.V. Giurgiu, X. Filip, C. Kessler, M. Mehring, "Low Temperature Gd^{3+} ESR Linewidth Behavior in $Y_{0.25}Gd_{0.75}Ba_2Cu_3O_{7-y}$ ", *Czech. J. Phys.* **46**, 1143-1144 (1996);
52. C. Filip, C. Kessler, F. Balibanu, P. Kleeman, Al. Darabont, L.V. Giurgiu, M. Mehring, "Magnetic interactions between Gd ions in $Y_{1-x}Gd_xBa_2Cu_3O_{7-y}$. An ESR investigation", *Physica B*, **222**, 16-30 (1996);
53. C. Filip, C. Kessler, F. Balibanu, P. Kleeman, A. Darabont, L.V. Giurgiu, M. Mehring, "ESR Investigation of the Exchange Interaction Involving Gd-Ions in the Normal State of $Y_{1-x}Gd_xBa_2Cu_3O_{7-y}$ Oriented Powders", *Physica C* **235**, 1645-1646 (1994);