

Prof. dr hab. IWONA WAWER

Publikacje/Papers

191. Jamróz M.K., Paradowska K., Zawada K., Makarova K., Kaźmierski S., Wawer I.. ^1H and ^{13}C NMR-based sugar profiling with chemometric analysis and antioxidant activity of herbhoneys and honeys. *J Sci Food Agric.* 94 (2014) 246-255 IF 1,759
190. Stępień D.K., Cyrański M.K., Dobrzycki Ł., Wałejko P., Baj A., Witkowski S., Paradowska K., Wawer I.. The effect of rotating substituent in 2,2,5,7,8-pentamethylchroman derivatives. X-ray, ^{13}C CP MAS analysis and DFT analysis. *J. Mol. Struct.* 1076 (2014) 512–517 IF 1,599
189. Kozielewicz P., Paradowska K., Eric S., Wawer I., Zloh M. Insights into mechanism of anticancer activity of pentacyclic oxindole alkaloids of *Uncaria tomentosa* by means of a computational reverse virtual screening and molecular docking approach. *Monatsh. Chem.* (2014) 145:1201–1211 IF 1,69
188. Marinov M., Stoyanov N., Ugrinov A., Angelova S., Wawer I., Pisklak M., Enchev V.. Solid-state structures of 2-(4-hydroxyphenyl)-Substituted phenalene-1,3-dione and indan-1,3-dione; *J. Struct. Chem.* (2014) 55 (3), 446-455, IF 0,501
187. Paradowska K., Wawer I. Solid-state NMR in the analysis of drugs and naturally occurring materials. *J. Pharm. Biomed. Analysis*, 2014, 93, 27-4260, 12254-12259. IF =2,947
186. Pisklak, D.M., Zielińska-Pisklak, M., Szeleszczuk, Ł., Wawer, I. ^{13}C cross-polarization magic-angle spinning nuclear magnetic resonance analysis of the solid drug forms with low concentration of an active ingredient-propranolol case. *J. Pharm. Biomed. Analysis*, 93 (2014) 68-72. IF=2,947.
185. Bodera P., Stankiewicz W., Zawada K., Antkowiak B., Paluch M., Kieliszek J., Kalicki B., Bartosinski A., Wawer I. Changes in antioxidant capacity of blood due to mutual action of electromagnetic field (1800 MHz) and opioid drug (tramadol) in animal model of persistent inflammatory state. *Pharmacol. Reports*, 2013, 65(421), 421-428. IF=1,965.
184. Jamróz M., Paradowska K., Zawada K., Makarova K., Kaźmierski S., Wawer I., ^1H and ^{13}C NMR-based sugar profiling with chemometric analysis and antioxidant activity of herbhoneys and honeys. *J. Sci. Food Agric.* 94 (2) (2013) 246–255. IF = 1,759.
183. Berłowski A., Zawada K., Wawer I., Paradowska K. Antioxidant Properties of Medicinal Plants from Peru. *Food and Nutrition Sciences*, 2013, 4, 71-77. IF = 0,24.
182. Gawryś M., Zawada K., Wawer I. Aronia w diecie diabetyków. *Diabetologia Kliniczna*, 2012, 1 (5), 196-200.
181. Wawer I. Odżywiają czy leczą? *Przemysł Farmaceutyczny*, 2012, 6, 46-49
180. Ahmedova A., Paradowska K., Wawer I. ^1H , ^{13}C MAS NMR and DFT GIAO study of quercetin and its complex with Al(III) in solid state. *J. Inorg. Biochem.*, 2012, 110, 27-35. IF=3,386.
179. Zielińska-Pisklak Monika, Pisklak Dariusz Maciej, Wawer Iwona. Application of ^{13}C CPMAS NMR for qualitative and quantitative characterization of carvedilol and its commercial formulations. *J. Pharm. Sci.*, 2012, 101, 1763-1772. IF=3,055.
178. Pisklak Dariusz Maciej, Szeleszczuk Łukasz, Wawer Iwona. ^1H and ^{13}C magic-angle spinning nuclear magnetic resonance studies of the chicken eggshell. *J. Agric. Food Chem.*, 2012, 60, 12254-12259. IF=2,823.
177. Wawer Iwona. Chleb “orientalny” jako żywność funkcjonalna. *Przegląd Piekarski i Cukrowniczy*, 2012, 5, 24.
176. Wawer Iwona. Suplementy na wagę. *Przemysł Farmaceutyczny*, 2012, 3, 78
175. Venelin Enchev, Silvia Angelova, Marin Rogojerov, Iwona Wawer, Kalina Kostova, Valentin Monev, On the solid state structure of 2-carboxy-indan-1,3-dione, *J. Phys. Chem. A*, 115, 2026-2034 (2011) IF=2,899
174. Łażiewski, M. Steczkiewicz, K. Knizewski, L. Wawer, I. Ginalska, K. Novel transmembrane lipases of alpha/beta hydrolase fold, *FEBS Letters* 2011, 585, 870-874. IF 3,601

173. Jamróz, M.K., Jamróz, M.H., Dobrowolski, J.C., Gliński, J.A., Davey, M.H., Wawer, I. "Novel and unusual triterpene from Black Cohosh. Determination of structure of 9,10-seco-9,19-cyclolanostane xyloside (cimipodocarpa-side) by NMR; IR and Raman spectroscopy and DFT calculations" *Spectrochimica Acta Part A* 2011, 78, 107-112. IF 1,566
172. Jamróz, M.K.; Paradowska, K.; Gliński, J.A.; Wawer, I. "¹³C CPMAS NMR studies and DFT calculations of triterpene xylosides isolated from *Actaea racemosa*" *Journal of Molecular Structure* 2011, 994, 248-255. IF 1,599
171. Zielińska-Pisklak, M.A.; Pisklak, D.M.; Wawer, I. "¹H and ¹³C NMR characteristics of β-blockers" *Magnetic Resonance in Chemistry* 2011, 49, 284-290. IF 1,247
170. Ahmedova, A.; Marinova, P.; Paradowska, K.; Stoyanov, N.; Wawer, I.; Mitewa, M. "Spectroscopic aspects of the coordination modes of 2,4-dithiohydantoins: Experimental and theoretical study on copper and nickel complexes of cyclohexanespiro-5-(2,4-dithiohydantoin)" *Inorganica Chimica Acta* 2010, 363, 3919-3925. IF 2,322
169. Ahmedova, A.; Marinova, P.; Paradowska, K.; Marinov, M.; Wawer, I.; Mitewa, M. "Structure of 2,4-dithiohydantoin complexes with copper and nickel: Solid-state NMR as verification method" *Polyhedron* 2010, 29, 1639-1645. IF 2,207
168. Tkaczyk, M.; Dawidowski, M.; Herold, F.; Wolska, I.; Wawer, I. "¹³C CPMAS NMR, XRD and GIAO DFT study of selected chiral 2,6-diketopiperazines" *Journal of Molecular Structure* 2010, 975, 78-84. IF 1,551
167. Marszałek, R.; Pisklak, M.; Holsztyński, D.; Wawer, I. "¹H, ¹³C and ³¹P MAS NMR studies of lyophilized brain tumors" *Solid State Nuclear Magnetic Resonance* 2010, 37, 21-27. IF 1,368
166. Marszałek, R.; Pisklak, M.; Jankowski, W.; Łukasziewicz, J.; Horsztyński, D.; Wawer, I. "NMR and gas chromatography studies of lyophilized human brain tumors" *Acta Poloniae Pharmaceutica, Drug Research* 2010, 67, 129-136. IF 0,358
165. K. Makarova, K. Łastawska, K. Zawada, I. Wawer. Spin trapping study of the influence of taxifolin on Fenton reaction in ethanol and methanol. *Current Topics in Biophysics*, 2010, vol.33 (suppl. A), 153-156.
164. K. Zawada, J. Celińska, E. Matyska-Piekarska, I. Wawer, J. K. Łącki. Antioxidant capacity of serum measured using tempo scavenging assay in patients with rheumatoid arthritis. *Current Topics in Biophysics*, 2010, vol.33 (suppl.)
163. Zawada K., Wolniak M., Kazimierczuk Z., Wawer I. Structural studies of 4,5,6,7-tetrabromobenzimidazole derivatives by means of solid-state ¹³C, ¹⁵N NMR spectroscopy and DFT calculations. *J. Mol. Struct.*, 2009; 918, 174-182. IF=1,594.
162. Jamróz M., Bąk J., Gliński J., Koczorowska A., Wawer I. Molecular structure of actein: ¹³C CPMAS NMR, IR, X-Ray diffraction studies and theoretical DFT-GIAO calculations. *J. Mol. Struct.*, 2009; 933, 118-125. IF=1,594.
161. Wawer Iwona. Hormeza w medycynie. *Homeopatia Polska*, 2009; 74, 3-6.
160. E. Enchev, S. Angelova, N. Markova, I. Wawer, E. Stanoeva, M. Mitewa, Ab initio and DFT study of the structure of metal ion complexes with N-benzeniline-15-crown-5, Bulg. *Chem. Communications*, 40 (4), 1-6 (2008)
159. Paradowska K., Gubica T., Temeriusz A., Cyrański Mi. K., Wawer I. ¹³C CP MAS NMR and crystal structure of methyl glycopyranosides. *Carbohydrate Research*, 2008; 343, 2299-2307. [IF=1.723]
158. Zielińska A., Paradowska K., Jakowski J., Wawer I. ¹³C CP MAS NMR and GIAO-CHF/DFT calculations of flavonoids: morin, kaempferol, tricin, genistein, formononetin and 3,7-dihydroxyflavone. *Journal of Molecular Structure*, 2008; 873, 109-116. [IF= 1.486]
157. Wolniak Michał, Oszmiański Jan, Wawer Iwona. Solid state NMR studies and DFT calculations of flavonoids: baicalein, baicalin and vogonoside. *Magnetic Resonance in Chemistry*, 2008; 46, 215-225. [IF= 1.434]
156. Wolniak Michał, Wawer Iwona. ¹³C CPMAS NMR and DFT calculations of anthocyanidins. *Solid State Nuclear Magnetic Resonance*, 2008; 34, 44–51. [IF= 1.508]
155. Oszmiański Jan, Wolniak Michał, Wojdyło Aneta, Wawer Iwona. Influence of apple puree preparation and storage on polyphenol contents and antioxidant activity. *Food Chemistry*, 2008; 107, 1473-1484. [IF= 3.052]

154. Paradowska Katarzyna, Wolniak Michał, Pisklak Maciej, Gliński Jan A., Davey Matthew H., Wawer Iwona. ^{13}C , ^{15}N CPMAS NMR and GIAO DFT calculations of stereoisomeric oxindole alkaloids from Cat's Claw (*Uncaria tomentosa*). Solid State Nuclear Magnetic Resonance, 2008. [IF= 1.50]
153. Pisklak Maciej, Król Marek, Herold Franciszek, Wolska Irena, Wawer Iwona. Structural studies of pyrido[1,2-c]pyrimidine derivatives by ^{13}C CPMAS NMR, X-ray diffraction and GIAO/DFT calculations. Journal of Molecular Structure, 2008; 892, 325-330. IF=1,594
152. Paradowska Katarzyna, Wolniak Michał, Fijałek Zbigniew, Wawer Iwona. Identification and analysis of drugs in the solid state by ^{13}C CPMAS NMR: suxamethonium chloride and hydrocortisonum (corhydron). Acta Poloniae Pharmaceutica-Drug Research, 2008; 65, 295-301.
151. Dąbrowska-Bernstein Barbara, Zawada Katarzyna, Wawer Iwona. PADMA BASIC - roślinny suplement diety bogaty w naturalne przeciutleniacze. Klinika Pediatryczna, 16 (5) 5036-5041 (2008).
150. Wawer Iwona. Problemy "Gender Medicine". Medycyna Dydaktyka Wychowanie, 2008; 40, 14-15.
149. Holzgrabe Ulrike, Wawer Iwona, Diehl Bernd (ed.). NMR spectroscopy in pharmaceutical analysis. Elsevier, Amsterdam 2008. ISBN: 978-0-444-53173-5
148. Wawer Iwona. qNMR in solid state. Holzgrabe Ulrike, Wawer Iwona, Diehl Bernd (ed.). NMR spectroscopy in pharmaceutical analysis. Elsevier, Amsterdam 2008, 63-82.
147. Wawer Iwona. Solid-state measurements of drugs and drug formulations. Holzgrabe Ulrike, Wawer Iwona, Diehl Bernd (ed.). NMR spectroscopy in pharmaceutical analysis. Elsevier, Amsterdam 2008, 201-231.
146. Lopez J. M., Männle F., Wawer I., Buntkowsky G., Limbach H. H. NMR studies of double proton transfer in hydrogen bonded cyclic N,N'- diarylformamidine dimers: conformational control, kinetic HH/HD/DD isotope effects and tunneling. Phys. Chem. Chem. Phys., 2007; 9, 4498-4513.
145. Oszmiański Jan, Wolniak Michał, Wojdyło Aneta, Wawer Iwona. Comparative study of polyphenolic content and antiradical activity of cloudy and clear apple juices. J. Sci. Food. Agric., 2007; 87, 573-579.
144. Getsova M. Todorovsky D. Enchev V. Wawer I. Cerium (III / IV) and Cerium (IV) - Titanium (IV) Citric Complexes Prepared in Ethylene Glycol Medium. Monatshefte Chem., 2007; 138, 389-401.
143. Dobrowolski M. A., Cyrański M. K., Pisklak Dariusz, Wawer Iwona, Matosiuk D. Structural studies of 1-aryl-2-aminoimidazolinium bromides: focus on tautomer preference of the 2-aminoimidazoline moiety in the solid state. Polish J. Chem., 2007; 81, 1037-1048.
142. Wolniak Michał, Tomczykowa Monika, Tomczyk Michał, Gudej Jan, Wawer Iwona. Antioxidant activity of extracts and flavonoids from *Bidens tripartita*. Acta Polon. Pharm. - Drug Research, 2007; 63, 441-447.
141. Zawada Katarzyna Dorota, Wawer Iwona. Beta-karoten i witamina A w diecie i w suplementach diety. Essentia Medica, 2007; 37 (1), 52-57.
140. Wawer Iwona. W stronę gender-medicine - suplementacja selenem dla mężczyzn. Essentia Medica, 2007; 38 (2), 64-69.
139. Łuszczewski Adam, Matyska-Piekarska Ewa, Trefler Jakub, Wawer Iwona, Łęcki Jan, Śliwińska-Stańczyk Paula. Reaktywne formy tlenu - znaczenie w fizjologii i stanach patologii organizmu. Reumatologia 2007; 45 (5), 284-289.
138. Nartowska Jadwiga, Wawer Iwona, Skopińska-Różewska Ewa. Saponiny steroidowe rodzaju Convallaria L. W: Endogenne i egzogenne modulatory odporności i angiogenezy (monogr.), Olsztyn 2007; 303-321.
137. M. Getsova, D. Todorovsky, V. Enchev, I. Wawer, Cerium (III / IV) and Cerium (IV) – Titanium (IV) Citric Complexes Prepared in Ethylene Glycol Medium, Monatshefte Chem., 138, 389-401 (2006)
136. Wawer Iwona, Wolniak Michał, Paradowska Katarzyna. Solid state NMR study of dietary fiber powders from aronia, bilberry, black currant and apple. Solid State Nucl. Magn. Reson., 2006; 30, 106-113.

135. Wolniak Michał, Tomczyk Michał, Gudej Jan, Wawer Iwona. Structural studies of methyl brevifolincarboxylate and DFT calculations. *Journal of Molecular Structure*, 2006; 825, 26-31.
134. Matyska-Piekarska Ewa, Łuszczewski Adam, Łącki Jan, Wawer Iwona. Rola stresu oksydacyjnego w etiopatogenezie reumatoidalnego zapalenia stawów. *Postępy Hig. Med. Dośw.*, 2006; 60, 617-623.
133. Wawer Iwona, Pisklak Maciej, Chilmończyk Zdzisław. ^1H , ^{13}C , ^{15}N NMR analysis of sildenafil base and citrate (Viagra) in solution, solid state and pharmaceutical dosage forms. *Journal of Pharmaceutical and Biomedical Analysis*, 2005; 38, 865-870.
132. Morzycki Jacek W., Paradowska Katarzyna, Dąbrowska-Balcerzak Karolina, Jastrzebska Izabella, Siergejczyk Leszek, Wawer Iwona. ^{13}C NMR study of spirostanes and furostanes in solution and solid state. *J. Mol. Struct.*, 2005; 744-747, 447-455.
131. Wawer Iwona, Pisklak Maciej, Paradowska Katarzyna. NMR ciała stałego - zastosowania w farmacji i diagnostyce medycznej. *Wiadomości Chemiczne*, 2005; 59, 121-137.
130. I.Wawer, Selen – suplement o wszechstronnym zastosowaniu” *Lek w Polsce*, 15(2) 24-29 (2005)
129. I. Wawer, M. Zielińska, M. Trojanowski, Farmaceutyczne zastosowania magnetycznego rezonansu jądrowego (NMR), *Lek w Polsce*, 15 (8) 27-30 (2005)
128. Pisklak Maciej, Kossakowski Jerzy, Perliński Mirosław, Wawer Iwona. ^1H , ^{13}C NMR studies and GIAO/DFT calculations of substituted N-(4-aryl-1-piperazinylbutyl) derivatives, new analogues of buspirone. *J. Mol. Struct.*, 2004; 698, 93-102.
127. Todorowsky D.S., Getsova M.M., Wawer I., Stefanov P., Enchev V. On the chemical nature of lanthanum-titanium citric complexes, precursors of $\text{La}_2\text{Ti}_2\text{O}_7$. *Materials Letters*, 2004; 58, 3559-3563.
126. Witkowski S., Paradowska K., Wawer I. ^{13}C CP/MAS studies of vitamin E model compounds. *Magn. Reson. Chem.*, 2004; 42, 863-869.
125. Marszałek R., Nartowska J., Wawer I. Nowe możliwości badania roślin leczniczych z użyciem mikrotomografii magnetyczno-rezonansowej. *Herba Polonica*, 2004; 50, 119-129.
124. Wawer I. Fizykochemiczne badania leków homeopatycznych. *Standardy Med.*, 2004; 1, 4-7.
123. Wawer I. Impresje na temat żurawiny. *Lek w Polsce*, 2004; 14 (5), 27-29.
122. Wawer I. Badania leków homeopatycznych. *Lek w Polsce*, 2004; 14 (12), 97-103.
121. M. Pisklak, D. Maciejewska, F. Herold, I. Wawer, Solid state structure and GIAO DFT calculations for coumarin anticoagulants, warfarin and sintrom, *J. Mol. Struct.*, 649, 169-176 (2003)
120. Żołek Teresa, Paradowska Katarzyna, Krajewska Dorota, Różański Andrzej, Wawer Iwona. ^1H , ^{13}C MAS NMR and GIAO-CPHF calculations of chloramphenicol, thiامphenicol and their pyrrole analogues. *J. Mol. Struct.*, 2003; 646, 141-149.
119. Żołek Teresa, Paradowska Katarzyna, Wawer Iwona. ^{13}C CP MAS NMR and GIAO-CHF calculations of coumarins. *Solid State Nucl. Magn. Reson.*, 2003; 23, 77-87.
118. Temeriusz Andrzej, Rowińska Magdalena, Paradowska Katarzyna, Wawer Iwona. Synthesis and solid state ^{13}C and ^1H NMR analysis of new oxamide derivatives of methyl 2-amino-2-deoxy- α -D-glucopyranoside and ester of amino acids or dipeptides. *Carbohydrate Research*, 2003; 338, 183-188.
117. Temeriusz A., Anulewicz-Ostrowska R., Paradowska K., Wawer I. Crystal Structure and Solid State ^{13}C NMR of Methyl- α -D-Mannofuranoside. *J. Carbohydr. Chem.*, 2003; 22, 593-601.
116. Horsztyński D., Wawer I., Grieb P. Badania liofilizowanych tkanek nowotworów mózgu metodą ^1H MAS-NMR. *Neurol. Neurochir. Pol.*, 2003; 37, 123-132.
115. M. Pisklak, M. Perliński, J. Kossakowski, I. Wawer, ^{13}C CPMAS NMR and molecular modelling in the studies of new analogues of buspirone, *Acta Polon. Pharm.-Drug Res.*, 59, 461-465 (2002)
114. Kwieciński S., Weychert M., Jasiński A., Kulinowski P., Wawer I., Sieradzki E. Tablet disintegration monitored by magnetic resonance imaging. *Applied Magn. Reson.*, 2002; 22, 23-29.
113. Witkowski S., Wawer I. ^{13}C NMR studies of conformational dynamics in a-tocopherol esters

- in solution and solid state. *J. Chem. Soc., Perkin Trans. 2*, 2002; 433-436.
112. Maciejewska D., Midura-Nowaczek K., Wawer I. Conformational analysis of e-aminocaproyl-a-amino acids in solution and in solid state by ^1H , ^{13}C NMR and molecular modelling. *J. Mol. Struct.*, 2002; 604, 269-278.
111. Pisklak M., Herold F., Anulewicz-Ostrowska R., Wawer I. Structural studies of 4-aryloctahydro-pyrido[1,2-c]pyrimidine derivatives. *J. Mol. Struct.*, 2002; 605, 85-92.
110. Wawer I., Weychert M., Piekarska-Bartoszewicz B., Temeriusz A. ^1H , ^{13}C and ^{15}N NMR study of nitrosoureido sugars, derivatives of 2-amino-2-deoxy-b-D-glucopyranoside and amino acids and peptides. *Polish Journal of Chemistry*, 2002; 76, 1127-1136.
109. Morzycki J. W., Wawer I., Grysikiewicz A., Maj J., Siergiejczyk L., Zaworska A. ^{13}C NMR study of 4-azasteroids in solution and solid state. *Steroids*, 2002; 67, 621-626.
108. Wawer I., Temeriusz A., Anulewicz-Ostrowska R., Strohl D. The structure and conformations of methyl 3,4,6-tri-O-acetyl-2deoxy-(3',3'-dicyclohexylfluoreido)-beta-d-glucopyranoside. *J. Carbohydr. Chem.*, 2002; 21, 235-246.
107. Wasek M., Wawer I. Badania antyoksydacyjnych właściwości win owocowych i gronowych metodą EPR. *Przemysł Fermentacyjny i Owocowo-Warzywny*, 2002; 22-23.
106. M. Goss, M. Wasek, I. Wawer, Badanie składu i antyutleniających właściwości ekstraktów z kory sosny (*Pinus silvestris L.*) i kory głogu (*Crataegus monogyna L.*), *Farmacja Polska*, 57, 756-757 (2001)
105. A. Ochmańska, M. Wasek, I. Wawer, Badanie składu i właściwości antyoksydacyjnych preparatów z dzikiej róży, *Farmacja Polska*, 57, 753-754 (2001)
104. J. Kobylińska, M. Wasek, I. Wawer, Badanie preparatów antocyjanowych z owoców aronii (*Aronia melanocarpa E.*), *Farmacja Polska*, 57, 752-753 (2001)
103. Dega-Szafran Z., Gąszczyk I., Maciejewska D., Szafran M., Tykarska E., Wawer I. ^{13}C CPMAS NMR and X-ray diffraction studies of some N-(carboxyalkyl)morpholinium chlorides. *J. Mol. Struct.*, 2001; 560, 261-273.
102. Cyranski M., Wawer I., Zielinska A., Mrożek A., Koleva V., Lozanova Ch. Structural studies of 1-(2-hydroxy-4-bromophenyl)-4-methyl-4-imidazoline-2-ones. *J. Phys. Org. Chem.*, 2001; 14, 1-5.
101. Bednarek E., Modzelewska-Banachiewicz B., Cyrański M., Sitkowski J., Wawer I. ^1H , ^{13}C and ^{15}N NMR study of 5-carboxymethyl-1,2,4-triazole and 5-oxo-1,2,4-triazine derivatives. *J. Mol. Struct.*, 2001; 562, 167-175.
100. Wawer Iwona, Zielinska Agnieszka. ^{13}C CP MAS NMR of flavonoids. *Magn. Reson. Chem.*, 2001; 39, 374-380.
99. Wasek M., Nartowska J., Wawer I., Tudruj T. Electron spin resonance assessment of the antioxidant potential of medicinal plants. Part I. Contribution of anthocyanosides and flavonoids to the radical scavenging ability of fruit and herbal teas. *Acta Polon. Pharm.*, 2001; 58, 283-288.
98. Nartowska J., Strzelecka H., Wawer I. Triterpenoid saponins from *Anthyllis vulneraria L.* *Acta Polon. Pharm.*, 2001; 58, 289-291.
97. Enchev Venelin, Ismailova Anife, Iwanowa Galya, Wawer Iwona, Stoyanov Neyko, Mitewa Mariana. Quantum chemical and spectroscopic study on the structure of 2-acetylidan-1,3-dione complexes with metal (II) ions. *J. Mol. Struct.*, 2001; 595, 67-76.
96. Wawer I., Nartowska J., Cichowlas A. ^{13}C cross polarisation MAS NMR study of some steroidal sapogenins. *Solid State NMR*, 2001; 20, 35-45.
95. Wawer I., Witkowski S. Analysis of solid state ^{13}C NMR spectra of biologically active compounds. *Current Organic Chemistry*, 2001; 5, 987-999.
94. Wojtulewska Wiesława, Bok Maciej, Werblan Lidia, Żołek Teresa, Wawer Iwona. ^1H , ^7Li , ^{13}C and ^{19}F NMR study of LiAsF₆ solutions of alkyl carbonates. *Molecular Physics Reports*, 2001; 33, 78-81.
93. Wasek Marek, Gierczyk Jerzy, Wawer Iwona. Electron spin resonance assessment of the antioxidant potential of fruit juices and wines. *Molecular Physics Reports*, 2001; 33, 152-154.
92. Witkowski S., Wawer I. Cross-polarisation MAS ^{13}C NMR in 2,2,5,7,8-pentamethylchroman-6-a-tocopherol model Compound. *Molecular Physics Reports*, 2001; 33, 74-77.
91. Walejko P., Żołek T., Witkowski S., Wawer I. Investigation of conformational effects in

- glucosides of α -tocopherol derivatives. Mol. Physics. Reports, 2001; 33, 70-73.
90. Wasek M., Wawer I., Kunachowicz H., Izdebska A. Antyoksydacyjny potencjał soków owocowych - badania metodą spektroskopii elektronowego rezonansu paramagnetycznego. Żywienie człowieka i metabolizm, 2001; 28, 99.
 89. Temeriusz A., Rowińska M., Piekarska-Bartoszewicz B., Anulewicz-Ostrowska R., Wawer I. Crystal structure and solid state ^{13}C NMR analysis of N'-(methyl 3,4,6-tri-O-acetyl α - and β -D-glucopyranosid-2-yl)N-oxamide derivatives of p-chloroaniline, N,N-diethylamine, N-methylamine and N-ethylamine. Carbohydr. Res., 2001; 334, 71-79.
 88. Wawer I. Antocyjanidyny, struktura i działanie antyoksydacyjne. Farmacja Polska, 2001; 57, 728-731.
 87. Zielinska A., Rodowski D., Wawer I. Żurawina - skład, właściwości antyoksydacyjne i lecznicze. Farmacja Polska, 2001; 57, 731-733.
 86. J. Pusz, B. Nitka, A. Zielinska, I. Wawer, Synthesis and physicochemical properties of the Al(III), Ga(III) and In(III) complexes with chrysins, Microchem. J., 65 (2000) 245
 85. M. Plass, M. Weychert, I. Wawer, B. Piekarska-Bartoszewicz and A.Temeriusz, IR and ^1H NMR study of 3,4,6-tri-O-acetyl-2-deoxy-2-beta-D-glucopyranosides with dipeptides J. Carbohydr. Chem., 19 (2000) 1059-1074
 84. P.Wałejko, S. Witkowski, I. Wawer, T. Szczepanik, ^1H and ^{13}C NMR studies of vitamine E glycosides Molecular Physics Reports, 29 (2000) 192-194
 83. S. Witkowski, D. Maciejewska, I. Wawer, A solution and solid state conformations of chromanol esters, ^{13}C MAS NMR and d-NMR study. J.C.S.Perkin Trans II, (2000) 1471-1476
 82. I. Wawer, R. Anulewicz-Ostrowska, D. Maciejewska, V. Koleva, Structure and hydrogen bonding of N2-(hydroxyaryl)-N1-alkylthioureas, Pol. J. Chem, 74 (2000) 823-835
 81. J. Jaroszevska- Manaj, D. Maciejewska, I. Wawer, Multinuclear NMR study and CIAO-CHF calculations of two quinoacridinium salts Magn. Reson. Chem., 38 (2000) 482-485
 80. M. Mitewa, G. Gencheva, S.Bobev, G. Gachev, D. Mehandjiev and I. Wawer, Formation and stabilization of monomeric Pt(III) species through complexation with linear tetrapyrrole ligand bilirubin, Res. Chem. Intermed. 25 (1999) 431-439
 79. R. Anulewicz, I.Wawer, B.Piekarska-Bartoszewicz, A. Temeriusz, Crystal structure and solid state ^{13}C NMR analysis of methyl 3,4,6-tri-O-acetyl-2-deoxy-2-(3-phenylureido)-beta-D -glucopyranoside J. Carbohydr.Chem., 18 (1999) 617-628
 78. A.Temeriusz, B.Piekarska-Bartoszewicz, M.Weychert, I.Wawer, Synthesis and NMR study of NN-bis(methyl 3,4,6-tri-O-acetyl-2-deoxy-b-D-glucopyranosid-2-yl)urea and its nitroso derivative Pol.J.Chem, 73 (1999) 1011-1018
 77. I. Wawer, M. Weychert, J. Klimkiewicz, B. Piekarska-Bartoszewicz and A. Temeriusz NMR study of methyl 3,4,6-tri-O-acetyl-2-deoxy-2-(3-alkylureido)-beta-D-glucopyranosides Magn, Reson. Chem., 37 (1999) 189-194
 76. A. Szelejewska-Wozniakowska, Z. Chilmonczyk, A. Les, I. Wawer, ^{13}C MAS NMR of buspirone analogues, Part II. Hydrochlorides and perchlorates of 1-aryl piperazine-4-alkylimides, Solid State NMR, 14 (1999) 59-65
 75. A. Szelejewska-Wozniakowska, Z. Chilmonczyk, A. Les, I. Wawer ^{13}C CPMAS NMR and GIAO CHF calculations of buspirone analogues, Part I, Solid State NMR, 13 (1998) 63-70
 74. D. Maciejewska, V. Koleva, I. Wawer ^{13}C CP MAS NMR study of 4,4-di-substituted - azobenzenes , Pol. J. Chem., 72 (1998) 2531-2536
 73. M. Skarzynski, G. Cynkowska, L. Abis, S. Spera, I.Wawer Identification and determination of the glyceride and tris-(2-hydroxyethyl)isocyanurate structures in the average macromolecule of a polyester with ^{13}C and ^1H NMR spectroscopy J. Appl. Polymer. Sci., 70 (1998) 675-687
 72. A. Zimniak, I. Oszczapowicz, A. Sikora and I. Wawer Solvent-dependent conformational transitions in deacetylcephalothin investigated by ^1H NMR and IR, J. Mol. Struct., 443 (1998) 115-121
 71. A. Zimniak, I. Oszczapowicz, A. Sikora and I. Wawer, Conformational temperature effects in deacetylcephalothin investigated by experimental and simulated ^1H NMR, Bull. Acad. Sci. Polon. 46 (1998) 181-185

70. M. Weychert, J. Klimkiewicz, I. Wawer, B. Piekarska-Bartoszewicz, A. Temeriusz ^{15}N and ^1H NMR study of ureido sugars, derivatives of 2-amino-2-deoxy- β -D-glucopyranosides, *Magn. Reson. Chem.*, 36 (1998) 727-731
69. I. Wawer, B. Piekarska-Bartoszewicz, A. Temeriusz, M. Potrzebowksi and W. Ciesielski, ^{13}C CPMAS NMR study of ureido sugars, derivatives of 2-amino-2-deoxy-beta-D-glucopyranose and dipeptide, *Solid State NMR*, 12 (1998) 45-50
68. U. Holzgrabe, B. Diehl, I. Wawer NMR spectroscopy in pharmacy. (Review) *J. Pharmaceut. Biomed. An.*, 17 (1998) 557-616
67. I. Wawer, A. Zielinska, D. Maciejewska, V. Koleva, Ch. Lozanova, Molecular structure of 1-(2-hydroxyaryl)-hydantoines, an assessemnt by ^{13}C NMR, FT IR and semi-empirical calculations *J. Mol. Structure*, 444 (1998) 63-67
66. S. Witkowski, P. Walejko, I. Wawer ^{13}C CP MAS NMR study of 6-O-(β -D-glucopyranosyl) and 6-O-(β -D-manno pyranosyl)-d-a-tocopheros, *Solid State NMR*, 10 (1998) 123-128
65. G. Gencheva, M. Mitewa, G. Gochev, I. Wawer, V. Enchev Synthesis and structure of a new dimeric Pt(II)-Pt(III) complex with o-phthalic acid, *Synth. React. Inorg. Met.Org. Chem*, 28 (1998) 515-527
64. I. Wawer, M. Mitewa, NMR study on Pt(III) and Pt(III)-Pt(II) complex species with organic acids and bilirubin, *An. Univ. Sofia*, 90 (1998) 149-154
63. S. Kwieciński, M. Weychert, I. Wawer, A. Jasiński and P. Kulinowski NMR microscopy of drug release from tablets, *MAGMA*, 5 (1997) 164
62. A. Temeriusz, B. Piekarska-Bartoszewicz, I. Wawer, Synthesis and characterization by ^{13}C CPMAS and high resolution ^1H , ^{13}C NMR of new ureido sugars, derivatives of methyl 2-amino-2-deoxy-beta-D-glucopyranose and dipeptides, *Carbohydr. Res.* 304 (1997) 335-340
61. I. G. Shenderovich, G.S. Denisov, Z. Kęcki, I. Wawer NMR and EPR study of the nitroxide radical (TEMPO) interaction with phenols. *Spectroscopy Letters*, 30, 1515 (1997)
60. R. Anulewicz, I. Wawer, M. K. Krygowski, F. Maennle, H.H. Limbach, Combined X-ray diffraction and ^{15}N CP MAS NMR study of molecular structure and proton order/disorder phenomena in cyclic NN-bisarylformamidine dimers, *J.Am.Chem.Soc.*, 119, 12223-12230 (1997)
59. R. Anulewicz, I. Wawer, B. Piekarska-Bartoszewicz, A. Temeriusz, Crystal structure and solid state NMR analysis of 3,4,6-tri-O-acetyl-2-deoxy-2[3-(2-ureido)- β -D-glucopyranoside with D-valine *J. Carbohydr. Chem*, 16, 739-749 (1997)
58. M. Plass, I. Wawer, B. Piekarska-Bartoszewicz and A. Temeriusz, Infrared and ^1H NMR studies of hydrogen bonding in N-(2-amino-2-deoxy- β -D-glucopyranoside)-N'-carbamoyl-L-amino-acid-esters *J. Phys. Org. Chem*, 10, 747-754 (1997)
57. I. Wawer and A. Zielinska ^{13}C CPMAS NMR studies of flavonoids. I. Solid state conformation of quercetin, quercetin 5-sulphonic acid and some simple polyphenols. *Solid State NMR*, 10 (1997) 33-38
56. V. Koleva, T. Dudev, I. Wawer ^1H and ^{13}C NMR study and AM1 calculations of some azobenzenes and N-benzylidene anilines; effect of substituents on the molecular planarity, *J. Mol. Structure*, 412, 153-159 (1997)
55. J. Klimkiewicz, L. Stefaniak, E. Grech, G. A. Webb, I. Wawer An ^{15}N NMR study of the protonation of two di-(a-pirydyl)compounds in solutions and the solid state *Solid State NMR*, 7, 79-81 (1996)
54. J. Sitkowski, L Stefaniak, I. Wawer, Ł. Kaczmarek, G. A. Webb. A solution and solid state ^{15}N NMR study of hydrogen bonding in a Schiffs base. *Solid State NMR*, 7, 83-84 (1996)
53. I. Wawer, B. Piekarska-Bartoszewicz, A. Temeriusz ^{13}C , ^{15}N CP MAS and high resolution multinuclear NMR study of methyl 3,4,6-tri-O- acetyl-2-(3-arylureido)-2-deoxy-beta-D-glucopyranosides, *Carbohydr. Res.*, 290, 137-146 (1996)
52. F. Maennle, I. Wawer, H.-H. Limbach Observation and characterization by ^{15}N CP MAS NMR of a double proton transfer in cyclic dimers of ^{15}N , ^{15}N -di-(4-bromophenyl)formamidine in the solid state. *Chem. Phys. Letters*, 256, 657-662 (1996)
51. A. Wawer, I. Wawer, B. Piekarska-Bartoszewicz, A. Temeriusz, ^1H NMR study of hydrogen bonding and hydrogen to deuterium isotope exchange in some new ureido sugars, *Spectrosc. Letters*, 29, 1079-1090 (1996)

50. I. Wawer, V. Koleva, Structure and hydrogen bonding of solid N¹-alkyl-N²-arylthioureas, *Magn. Reson. Chem.*, 34, 207-212 (1996)
49. R. Anulewicz, I. Wawer, B. Piekarska-Bartoszewicz, Crystal structure and solid state NMR analysis of 3,4,6-tri-O-acetyl-2-deoxy-2[3-(2-phenylethyl)-ureido]- β -D-glucopyranoside, *Carbohydr. Research*, 281, 1-10 (1996)
48. I. Wawer, B. Piekarska-Bartoszewicz, A. Temeriusz, ¹³C CP MAS and high resolution ¹H, ¹³C, ¹⁵N NMR study of new ureido sugars, derivatives of 2-amino-2-deoxy - β -D-glucopyranose and L-amino acids, *Carbohydr. Res.*, 279, 83-91 (1995)
47. M. Mikolajczyk, M. J. Potrzebowski, S. Kazimierski, H. Gross, B. Costisella, I. Keitel, M. W. Wieczorek, I. Wawer, Synthesis and conformational dynamics of 1,1,5,5-tetrahydro-7,7,8,8-tetramethyl-3,3-spirobi[2,4-benzodithiepin], *J. Org. Chem.*, 60, 6335-6341 (1995)
46. K. Wozniak, I. Wawer, D. Ströhl, Structural similarities and differences between N-phenylureas and N-phenylthioureas, *J. Phys. Chem.*, 99, 8888-8895 (1995)
45. J. Oszczapowicz, I. Wawer, M. Dargatz, E. Kleinpeter, ¹⁵N NMR spectra of trisubstituted amidines. Substituent effect., *J. C. S. Perkin Trans. II*, 1127 (1995)
44. I. Wawer, B. Piekarska-Bartoszewicz, A. Temeriusz, ¹³C CP MAS and high resolution ¹H, ¹⁵N NMR study of ureido sugars, *Carbohydrate Res.* 267, 167 (1995).
43. W. Kozminski, F. Aguilar-Parrilla, I. Wawer, H.H. Limbach, L. Stefaniak, Solid state ¹⁵N and ¹³C NMR study of 1-methyl-5-thiomethyl tetrazole, *Solid State NMR*, 4, 121 (1995).
42. J. Gust, I. Wawer, Relationship between nitroxide radical scavenging and anticorrosion properties of some polyphenols, *Corrosion*, 51, 37 (1995).
41. I. Wawer, V. Kolewa, NMR study of the N¹,N¹-dimethyl-N²-arylureas, *J.Mol.Struct.* 344, 251 (1995).
40. I. Wawer, G. S Denisow, Z. Kecki, Hydrogen bonding of fluoroanilines studied by means of nitroxide radical probe, *J. Mol. Struct.*, 327, 313 (1994).
39. I. Wawer, T. Krysiak, Z. Kecki, NMR and EPR study of hydrogen bonding in chloroanilines, *J. Mol. Struct.* 326, 163 (1994).
38. I. Wawer, D. Ströhl, E. Kleinpeter, Nitroxide radical as a probe for molecular conformation, I. ¹³C NMR study of the nitroxide radical interaction with benzamides and acrylamides, *Magn. Reson. Chem.*, 31, 758 (1993).
37. W. Kolodziejki, I.Wawer, K. Wozniak, J.Klinowski, Hydrogen bonding and the structure of substituted ureas. Solid-state NMR, vibrational spectroscopy and single crystal X-ray diffraction studies, *J. Phys. Chem.* 97, 12147 (1993).
36. I. Wawer, V. Koleva, ¹H, ¹³C, ¹⁵N NMR study of N¹-alkyl-N²-arylthioureas, *Magn. Reson. Chem.*, 31, 365 (1993).
35. A. Wawer, I. Wawer, Kinetic isotope effect in hydrogen isotope exchange between diphenylphosphine and hexylamine in aprotic solvents, *J. Mol. Liquids*, 54, 18 (1992).
34. J.Gust, I.Wawer, The studies of relationship between structure and anticorrosion properties of gallotannins. Part I. *Pol. J.Chem.*, 66, 733-741 (1992).
33. I.Wawer, Methyl assignments in ¹H and ¹³C spectra of N, N-dimethylamidines, *J. Mol. Liquids*, 52, 243-250 (1992).
32. I. Wawer, Z. Kecki, G.S. Denisow, Pentafluoroaniline hydrogen bonding and proton exchange, *Spectrosc. Letters*, 24, 1363, (1991)
31. A. Wawer, I. Wawer, Kinetic isotope effect in hydrogen isotope exchange between diphenylphosphine and methanol or 2-methylpropane-2-thiol in aprotic solvents, *J. Chem. Soc. Perkin Transactions II*, 2045-2050 (1990).
30. I. Wawer, J. Jaroszewska-Manaj, ¹H and ¹³C NMR study of the self-association of methylquinolines, *Pol. J. Chem.*, 64, 379-382 (1990).
29. I. Wawer, Hindered rotation in amidines, *J. Mol. Structure*, 218, 165-167 (1990).
28. I. Wawer, Solvent effect on ¹³C NMR chemical shifts and rotational barrier in N¹,N¹-dimethyl and N¹,N¹- hexamethylene-N2-phenylformamidines, *Magn. Reson. Chem.*, 27, 11031-1038 (1989).
27. I.Wawer, NMR study of the substituent effects on the internal steric hindrances in amidines, *Magn. Reson. Chem.*, 27, 557-581 (1989).

26. J. Jaroszewska-Manaj, I. Wawer, J. Oszczapowicz, ^1H and ^{13}C NMR study of 1-ethyl-2-b-aminovinyl quolinium iodides, *J. Chem. Research*, (S) 400-401 (1988); (M) 3101-3117 (1988).
25. I. Wawer, W. Kolodziejki, ^{13}C NMR study of the interactions of amides and amidines with nitroxide radical, *Ber. Bunsenges. Phys.Chemie*, 92, 637-641 (1988).
24. I. Wawer, J. Osek, ^1H NMR study of the reaction kinetics of N,N-dialkylformamide dimethyl acetal with secondary amines, *J. Chem. Soc. Perkin Transactions II*, 993-996 (1988).
23. I. Wawer, A ^1H and ^{13}C NMR study of hindered rotation in N^1,N^1 - dimethyl- N^2 -substituted phenylacetamidines, *Magn. Reson. Chem.*, 26, 601-607 (1988).
22. I. Wawer, A ^{13}C NMR study of hindered rotation in N^1,N^1 -3-oxa-pentamethylene- N^2 -substituted-phenylformamidines, *J. Mol. Liquids*, 38, 1-10 (1988).
21. I. Wawer, A ^1H and ^{13}C NMR study of hindered rotation in N^1,N^1 -dimethyl- N^2 -substituted phenylformamidines, *Polish J. Chem.*, 62, 233-239 (1988).
20. W. Kinasiewicz, A. Les, I. Wawer, Ab initio SCF calculations of the barrier to internal rotation in formamidine and its derivatives, *J. Mol. Structure (Theochem)*, 168, 1-14 (1988).
19. I. Wawer, A ^{13}C NMR study of hindered rotation in N^1,N^1 -penta and N^1,N^1 -hexamethylene- N^2 -substituted phenylformamidines, *Magn. Reson. Chem.*, 25, 514-517 (1987).
18. F. Schuppe, J. Schaller, A. Kolbe, I. Wawer, Influence of hydrogen bonding on the diffusion behaviour of benzyl alkohol, *J. Mol. Liquids*, 34, 223-230 (1987).
17. A. Wawer, I. Wawer, Kinetics of deuterium isotope exchange between tiophenol or t-butylthiol and i-propylthiol, *React. Kinet. Catal. Letters*, 30, 17 (1986).
16. A. Wawer, I. Wawer, ^1H NMR study on the associacion between thiols and sulphides, *Z. phys. Chemie*, Leipzig, 267, 909-914 (1986).
15. I. Wawer, J. Osek, ^1H and ^{13}C NMR identyfication of the reaction products of N^1,N^1 -dialkylformamide dimethylacetals with secondary amines, *J. Chem. Soc. Perkin Transactions II*, 1669-1671 (1985).
14. I. Wawer, St. Warycha, ^1H and ^{13}C NMR study of the interaction of pyridine, picolines and 2,6- dimethylpyridine with 2,2,4-trimethylpentane, *Polish J.Chem.*, 59, 565-572 (1985).
13. J.Jaroszewska, I.Wawer, J.Oszczapowicz, ^{13}C and ^1H NMR spectral studies of N-alkylmethylquinolinium salts, *Org. Magn. Reson.*, 22, 323-327 (1984).
12. A. Wawer, I. Wawer, Kinetics of deuterium isotope exchange between t-butylthiol and di-phenylphosphine, *React. Kinet. Catal. Letters*. 26, 167-171 (1984).
11. I. Wawer, A. Wawer, PMR study of hydrogen bonding of alkanethiols and ethanol with trinbutylphosphine, *Z. phys. Chemie*, Leipzig, 265, 757-761 (1984).
10. I. Wawer, A. Wawer, K. Olejniczak, PMR study on the self-associacion of alkanethiols, *Z. phys. Chemie*, Leipzig, 265, 177-182 (1984).
9. W. Koch, I. Wawer, H.G. Hertz, Solvation of Al^{+3} in methanol. Separate nuclear magnetic T1 measurements for solvation sphere and bulk, *Z. phys. Chem., Neue Folge*, 132, 161-174 (1982).
8. I. Wawer, PMR study of ligand exchange rates in aluminium perchlorate solutions in methanol and ethanol, *Adv. Mol. Relax. Inter. Processes*, 23, 269-277 (1982).
7. I. Wawer, Z. Kecki, Ion-solvent interactions as studied by proton magnetic resonance. Part IV. Ligand exchange rates in aluminium halide and perchlorate solutions in methanol and ethanol, *Polish. J. Chem.*, 55, 219-226 (1981),
6. St. Warycha, I. Wawer, PMR study of 2,6-lutidine hydrogen bonding with isobutyl and tertbutyl alkohols, *Adv. Mol. Relax. Inter. Processes*, 14, 329-335 (1979).
5. I. Wawer, A. Grembowicz, Z. Kecki, Ion-solvent interactions as studied by proton magnetic resonance. Part III. Aluminium halide solutions in acetonitrile, *Polish J. Chem.*, 52, 1769-1774 (1978).
4. I. Wawer, S.W. Zenin, Wlijanie malych dobawok spirtow na strukturu wody, *Zhur. Fiz. Khim. USSR*, 52, 203-204 (1978).
3. I. Wawer, Wiązania wodorowe i struktura roztworów alkoholowych, in "Spektroskopia oddziaływań międzymolekularnych", t III, ed. Z. Kęcki, Wydawnictwa UW, pp.69-120, Warszawa 1978.
2. I.Wawer, Z.Kęcki, PMR study of 2,6-ditertbutyl-p-cresol hydrogen bonding with chloroform

and acetone, Ber. Bunsenges. Phys. Chem., 80, 522-525 (1976).

1. I. Karczewska (Wawer), Z. Kecki, Ion-solvent interactions as studied by proton magnetic resonance. Part II. ZnCl_2 in ethanol methanol and water, Roczniki Chem.48, 1571-76 (1974).