

Списък на научните трудове
на проф. д-н Людмил Антонов
прямо 01.06.2024г.

A. Монографии и глави от монографии

- A.1. *Tautomerism – Methods and Theories*, L.Antonov (Editor), Wiley-VCH, Weinheim (2014)
- A.2. Preface. L.Antonov; in *Tautomerism – Methods and Theories*, L.Antonov (Editor), Wiley-VCH, XV-XVII (2014)
- A.3. Tautomerism: Introduction, history, and recent developments in experimental and theoretical methods. P.J.Taylor, G. van der Zwan & L.Antonov; in *Tautomerism – Methods and Theories*, L.Antonov (Editor), Wiley-VCH, 1-24 (2014)
- A.4. Absorption UV-Vis spectroscopy and chemometrics: from qualitative conclusions to quantitative analysis. L.Antonov; in *Tautomerism – Methods and Theories*, L.Antonov (Editor), Wiley-VCH, 25-47 (2014)
- A.5. *Tautomerism – Concepts and Applications in Science and Technology*, L.Antonov (Editor), Wiley-VCH, Weinheim (2016)
- A.6. Triage for tautomers: the choice between experiment and computation. P.J.Taylor & L.Antonov; in *Tautomerism – Concepts and Applications in Science and Technology*, L.Antonov (Editor), Wiley-VCH, 11-34 (2016)
- A.7. The Fault Line in Prototropic Tautomerism. P.J.Taylor & L.Antonov; in *Tautomerism – Concepts and Applications in Science and Technology*, L.Antonov (Editor), Wiley-VCH, 95-112 (2016)
- A.8. Controlled Tautomerism: Is It Possible? D.Nedeltcheva & L.Antonov; in *Tautomerism – Concepts and Applications in Science and Technology*, L.Antonov (Editor), Wiley-VCH, 273-294 (2016)

B. Обзорни публикации в реферирани списания с импакт фактор или импакт ранг

- B.1. Drawbacks of the present standards for processing absorption spectra recorded linearly as a function of wavelength. L.Antonov; *Trends in Analytical Chemistry*, **16**, 536-543 (1997) – Q1
- B.2. Resolution of overlapping UV-Vis absorption bands and quantitative analysis. L.Antonov & D.Nedeltcheva; *Chemical Society Reviews*, **29**, 217-227 (2000) – Q1
- B.3. Chemometric models for quantitative analysis of tautomeric Schiff bases and azodyes. D.Nedeltcheva, L.Antonov, A.Lycka, B.Damyanova & S.Popov; *Current Organic Chemistry*, **13**, 217-240 (2009) – Q1
- B.4. Excited-state intramolecular proton transfer: a short introductory review. H.C.Joshi & L.Antonov; *Molecules*, **26**, art. 1475 (2021) – Q1*
- B.5. Effects and Influence of External Electric Fields on the Equilibrium Properties of Tautomeric Molecules. I.Angelov, L.Zaharieva & L.Antonov; *Molecules*, **28**, art. 695 (2023) – Q1

* № 72 в списъка "Highly cited papers" на списанието и № 4 в списъка на най-цитирани публикации на WoS в област „Tautomerism“.

C. Публикации в реферирани списания с импакт фактор или импакт ранг

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- C.2. Thione-thiol tautomerism and stability of 2- and 4-mercaptopyridines and 2-mercaptopyrimidine. S.Stoyanov, I.Petkov, L.Antonov, T.Stoyanova, P.Karagiannidis & P.Aslanidis; *Canadian Journal of Chemistry*, **68**, 1482-1489 (1990) – Q2
- C.3. Analysis of the overlapping bands in UV-Vis absorption spectroscopy. L.Antonov & S.Stoyanov; *Applied Spectroscopy*, **47**, 1030-1035 (1993) – Q2
- C.4. Approach for increased information from the second-derivative spectra in UV-Vis absorption spectroscopy. L.Antonov & S.Stoyanov; *Applied Spectroscopy*, **47**, 1712-1715 (1993) – Q2
- C.5. Spectrophotometric investigation of the complex formation between aza-15-crown-5 containing chromoionophores and alkali and alkaline earth metal ions in acetonitrile. L.Antonov & N.Mateeva; *Talanta*, **41**, 1489-1492 (1994) – Q1
- C.6. Quantitative analysis of tautomeric equilibrium in 1-phenylazo-4-naphthols - a new approach. S.Stoyanov, L.Antonov, B.Soloveytchik & V.Petrova; *Dyes & Pigments*, **26**, 149-158 (1994) – Q1
- C.7. Structure investigations of N-acylated amines by means of UV-Vis spectroscopy. S.Stoyanov, A.Dobrev & L.Antonov; *Monatshefte fuer Chemie*, **125**, 259-266 (1994) – Q4
- C.8. Spectroscopic study on the complexation of an aza-15-crown-5 containing chromofluoroionophore with Ba²⁺ and Ca²⁺ cations. N.Mateeva, V.Enchev, L.Antonov, T.Deligeorgiev & M.Mitewa; *Journal of Inclusion Phenomena*, **20**, 323-333 (1994) – Q2
- C.9. Resolution of overlapping UV-Vis absorption bands - quantitative analysis of tautomeric equilibria. L.Antonov & S.Stoyanov; *Analytica Chimica Acta*, **314**, 225-232 (1995) – Q1
- C.10. Tautomeric equilibrium in 1-phenylazo-2-naphthol - a quantitative study. L.Antonov, S.Stoyanov & T.Stoyanova; *Dyes & Pigments*, **27**, 133-142 (1995) – Q1
- C.11. Spectrophotometric investigation on the complex formation of an aza-15-crown-5 containing styryl dyes with Ba²⁺ and Ca²⁺ cations. M.Mitewa, N.Mateeva, L.Antonov & T.Deligeorgiev; *Dyes & Pigments*, **27**, 219-225 (1995) – Q1
- C.12. Colour and constitution relationships in some potentially tautomeric acid azo dyes - C.I. Acid Red 138 and its homologues. S.Stoyanov, T.Iijima, T.Stoyanova & L.Antonov; *Dyes & Pigments*, **27**, 237-247 (1995) – Q1
- C.13. Azo-quinonehydrazone tautomerism in 2-phenylazo-1-naphthol. L.Antonov & S.Stoyanov; *Dyes & Pigments*, **28**, 31-39 (1995) – Q1
- C.14. Noise reduction in second derivative UV-Vis spectroscopy. L.Antonov & S.Stoyanov; *Spectroscopy Letters*, **29**, 231-239 (1996); **29**, 967 (1996) – Q3
- C.15. Step by step filter - an approach for noise reduction in the derivative UV-Vis spectra. L.Antonov & S.Stoyanov; *Analytica Chimica Acta*, **324**, 77-83 (1996) – Q1
- C.16. Spectral properties of aza-15-crown-5 containing styryl dyes in solution. L.Antonov, N.Mateeva, M.Mitewa & S.Stoyanov; *Dyes & Pigments*, **30**, 235-243 (1996) – Q1
- C.17. Ammonium-azonium tautomerism in some N,N-dialkylaminoazodyes: Part 1 - General considerations. T.Stoyanova, S.Stoyanov, L.Antonov & V.Petrova; *Dyes & Pigments*, **31**, 1-12 (1996) – Q1

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- C.22. Spectral properties and molecular structure of 4-aryl-3-cyano-1,1-diphenyl-2-azabutadienes. V.Dryanska, P.Denkova, L.Shishkova, S.Stoyanov, L.Antonov & S.Spasov; *Spectroscopy Letters*, **26**, 1067-1077 (1996) – Q3
- C.23. Fourth derivative spectroscopy - a critical view. L.Antonov; *Analytica Chimica Acta*, **349**, 295-301 (1997) – Q1
- C.24. Spectrophotometric investigation of on the complexation between chromo- and fluoroionophores containing aza-15-crown-5 moiety and alkaline and alkaline-earth metal ions. M.Mitewa, N.Mateeva & L.Antonov; *Quimica Analitica*, **16**, S153-S162 (1997) – Q1
- C.25. Aggregation and tautomeric properties of C.I. Acid Red 138. T.Iijima, E.Jojima, L.Antonov, S.Stoyanov & T.Stoyanova; *Dyes & Pigments*, **37**, 81-92 (1998) – Q1
- C.26. Theoretical investigations on the tautomerism of 1-Phenylazo-4-naphthol and its isomers. L.Antonov, S.Kawauchi, M.Satoh & J.Komiyama; *Dyes & Pigments*, **38**, 157-164 (1998) – Q1
- C.27. *Ab Initio* modeling the solvent influence on the azo-hydrazone tautomerism. L.Antonov, S.Kawauchi, M.Satoh & J.Komiyama; *Dyes & Pigments*, **40**, 163-170 (1999) – Q1
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- C.29. Step-by-step filter based program for calculations of highly informative derivatives curves. V.Petrov, L.Antonov, H.Ehara & N.Harada; *Computers and Chemistry*, **24**, 561-569 (2000) – Q3
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- C.31. A new dimeric Pd(III)Pd(II) complex with 7,7,8,8-tetracyanoquinodimethane. N.Mincheva, L.Ballester, L.Antonov & M.Mitewa; *Synthesis and Reactivity in Inorganic and Metal-Organic Chemistry*, **30**, 1643-1651 (2000) – Q4
- C.32. Complexation properties of Schiff bases containing N-phenylaza-15-crown-5 moiety. L.Antonov, M.Vladimirova, E.Stanoeva, W.M.F.Fabian, L.Ballester & M.Mitewa; *Journal of Inclusion Phenomena*, **40**, 23-28 (2001) – Q2
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- C.36. Estimation of two-photon absorption characteristics by a global fitting procedure. L.Antonov, K.Kamada & K.Ohta; *Applied Spectroscopy*, **56**, 1508-1511 (2002) – Q2
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- C.39. Tautomerism in hydroxynaphthaldehyde anils and azo analogues: a combined experimental and computational study. W.M.F.Fabian, L.Antonov, D.Nedeltcheva, F.S.Kamounah & P.J.Taylor; *Journal of Physical Chemistry A*, **108**, 7603-7612 (2004) – Q1
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- C.46. Two-Photon Absorption Properties of Dehydrobenzo[12]annulenes and Hexakis(phenylethynyl)benzenes: Effect of Edge-Linkage. K.Kamada, L.Antonov, S.Yamada, K.Ohta, T.Yoshimura, K.Tahara, A.Inaba, M.Sonoda & Y.Tobe; *ChemPhysChem*, **8**, 2671-2677 (2007) – Q1
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- C.51. Exploiting the tautomerism for switching/signaling purposes. L.Antonov, V.Deneva, S.Simeonov, V.Kurteva, D.Nedeltcheva & J.Wirz; *Angewandte Chemie International Edition*, **48**, 7875-7878 (2009)[†] – Q1
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- C.53. Tautocrowns: a concept for a sensing molecule with an active side-arm. L.Antonov, V.Kurteva, S.Simeonov, V.Deneva, A.Crochet & K.M.Fromm; *Tetrahedron*, **66**, 4292-4297 (2010) – Q1
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- C.63. Tautomerism of 4,4'-dihydroxy-1,1'-naphthaldazine studied by experimental and theoretical methods. A.Ahmedova, S.Simeonov, V.Kurteva & L.Antonov; *Chemistry Central Journal*, **7**, art. 29 (2013) – Q2
- C.64. Stereochemistry of Disilanylene-Containing Cyclic Compounds. Thermal Reactions of cis- and trans-3,4-Benzo-1,2-diisopropyl-1,2-dimethyl-1,2-disilacyclobut-3-ene. A.Naka, J.Ikagai, J.Sakata, M.Ishikawa, Y.Hayashi, L.Antonov, S.Kawauchi & T.Yamabe; *Organometallics*, **32**, 6476-6487 (2013) – Q1

[†] Най-добра научна публикация на ИОХЦФ-БАН за 2009г.

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