

Списък на научните трудове на **проф. Ирини Дойчинова**,  
кандидат за член-кореспондент в направление „Биологически науки“,  
(Критерии 1.1. и 1.2)

Научните трудове са представени в електронен вид в папка „Доказателства“ на електронния носител, придружаващ документите ми за конкурса и на хартиен носител.

## 1. Научни публикации в списания с импакт фактор

1. Doytchinova I, Petrova S. “N6-N7” - a Modification of the “N6-C8” Model for the Binding Site on Adenosine A1 Receptors with Improved Steric and Electrostatic Fit. *Med. Chem. Res.*, 8, 1998, 3, 143-152.  
IF(1998) = 0.896 цитати: 6
2. Heun G, Lambov N, Zlatkov A, Peikov P, Doytchinova I, Gesheva K. Biodegradable cross-linked prodrug of the bronchial dilator Vephylline: II. Kinetics and quantum chemical studies on the release mechanism. *J. Control. Release*, 58, 1999, 189-194.  
IF(1999) = 2.059 цитати: 3
3. Hadjipavlou-Litina D, Geronikaki A, Mgonzo R, Doytchinova I. Thiazolyl-N-substituted amides: a group of effective anti inflammatory agents with potential for local anaesthetic properties. Synthesis, biological evaluation and a QSAR approach. *Drug Develop. Res.*, 48, 1999, 53-60.  
IF(1999) = 1.506 цитати: 14
4. Netzeva T, Doytchinova I, Natcheva R. 2D and 3D QSAR analysis of some valproic acid metabolites and analogues as anticonvulsant agents. *Pharmaceut. Res.*, 17, 2000, 6, 727-732.  
IF(2000) = 2.475 цитати: 11
5. Dimitrova B, Doytchinova I, Zlatkova M. Reversed-phase high-performance liquid chromatography for evaluating the distribution behavior of pharmaceutical substances in suppository base Witepsol H<sub>15</sub>-phosphate buffer system. *J. Pharmaceut. Biomed. Anal.*, 23, 2000, 955-964.  
IF(2000) = 1.013 цитати: 25
6. Doytchinova I. CoMFA-Based Comparison of Two Models for Binding Site on Adenosine A1 receptors. *J. Comput.-Aid. Mol. Des.*, 15, 2001, 1, 29-39.  
IF(2001) = 3.194 цитати: 8
7. Doytchinova I, Flower D. R. Towards the quantitative prediction of T-cell epitopes: CoMFA and CoMSIA studies of peptides with affinity to class I MHC molecule HLA-A\*0201. *J. Med. Chem.*, 44, 2001, 3572-3581.  
IF(2001) = 4.139 цитати: 106
8. a) Doytchinova I, Valkova I, Natcheva R. CoMFA Study on Adenosine A<sub>2A</sub> Receptor Agonists. *Quant. Struct. – Act. Relat.*, 20, 2001, 2, 124-129.

IF(2001) = 1.414

цитати: 11

6) Doytchinova I, Valkova I, Natcheva R. Adenosine A<sub>2A</sub> receptor agonists: CoMFA – based selection of the most predictive conformation. *SAR QSAR Environ. Res.*, 13, 2002, 2, 227-235.

IF(2002) = 1.082

цитати: 6

9. Vicini P, Zani F, Cozzini P, Doytchinova I. Hydrazones of 1,2-benzisothiazole hydrazides: synthesis, antimicrobial activity and QSAR investigations. *Eur. J. Med. Chem.*, 37, 2002, 553-564.

IF(2002) = 1.705

цитати: 290

10. Blythe MJ, Doytchinova IA, Flower DR. JenPep: a database of quantitative functional peptide data for immunology. *Bioinformatics*, 18(3), 434-439, 2002.

IF(2002) = 4.615

цитати: 104

11. Doytchinova IA, Flower DR. Physicochemical explanation of peptide binding to HLA-A\*0201 major histocompatibility complex: A three-dimensional quantitative structure-activity relationship study. *PROTEINS*, 48(3), 505-518, 2002.

IF(2002) = 4.096

цитати: 40

12. Doytchinova IA, Flower DR. A Comparative Molecular Similarity Index Analysis (CoMSIA) study identifies an HLA-A2 binding supermotif. *J. Comput. Aid. Mol. Des.*, 16(8-9), 535-544, 2002.

IF(2002) = 2.931

цитати: 18

13. Doytchinova IA, Flower DR. Quantitative approaches to computational vaccinology. *Immunol. Cell Biol.*, 80(3), 270-279, 2002.

IF(2002) = 2.494

цитати: 48

14. Doytchinova IA, Blythe MJ, Flower DR. Additive Method for the Prediction of Protein-Peptide Binding Affinity. Application to the MHC Class I Molecule HLA-A\*0201. *J. Proteome Res.*, 1(3), 263-272, 2002.

IF(2003) = 5.611

цитати: 51

15. Guan P, Doytchinova IA, Flower DR. HLA-A3-supermotif defined by quantitative structure-activity relationship analysis. *Protein Eng.*, 16(1), 11-18, 2003.

IF(2003) = 2.065

цитати: 22

16. Guan P, Doytchinova IA, Zygouri C, Flower DR. MHCpred: a server for quantitative prediction of peptide-MHC binding. *Nucleic Acids Res.*, 31(13), 3621-3624, 2003.

IF(2003) = 6.575

цитати: 207

17. Guan P, Doytchinova IA, Flower DR. A Comparative Molecular Similarity Indices (CoMSIA) study of peptides binding to the HLA-A3 superfamily. *Bioorgan. Med. Chem.*, 11(10), 2307-2311, 2003.

IF(2003) = 2.185

цитати: 10

18. McSparron H, Blythe MJ, Zygouri C, Doytchinova IA, Flower DR. JenPep: A Novel Computational Information Resource for Immunobiology and Vaccinology. *J. Chem. Inf. Comp. Sci.*, 43(4), 1276 – 1287, 2003.

IF(2003) = 3.078 цитати: 49

19. Doytchinova IA, Flower DR. Towards the *in silico* identification of class II restricted T cell epitopes: a partial least squares iterative self-consistent algorithm for affinity prediction. *Bioinformatics*, 19(17), 2263 – 2270, 2003.

IF(2003) = 6.701 цитати: 52

20. Panico AM, Geronikaki A, Mgonzo R, Cardile V, Gentile B, Doytchinova I. Aminothiazole derivatives with antidegenerative activity on cartilage. *Bioorg. & Med. Chem.*, 11, 2003, 13, 2983 – 2989.

IF(2003) = 2.185 цитати: 24

21. Doytchinova IA, Flower DR. The HLA-A2-supermotif: A QSAR definition. *Org. Biomol. Chem.*, 1(15), 2648-2654, 2003.

IF(2004) = 2.194 цитати: 21

22. Doytchinova IA, Guan P, Flower DR. Identifying human MHC supertypes using bioinformatic methods. *J. Immunol.*, 172(7), 4314 – 4323, 2004.

IF(2004) = 6.486 цитати: 96

23. Hattotuagama CK, Guan P, Doytchinova IA, Zygouri C, Flower DR. Quantitative online prediction of peptide binding to the major histocompatibility complex. *J. Mol. Graph. Model.*, 22(3), 195-207, 2004.

IF(2004) = 3.036 цитати: 48

24. Doytchinova IA, Walshe VA, Jones NA, Gloster SE, Borrow P, Flower DR. Coupling in silico and in vitro analysis of peptide–MHC binding: A bioinformatic approach enabling prediction of superbinding peptides and anchorless epitopes. *J. Immunol.*, 172(12), 7495-7502, 2004.

IF(2004) = 6.486 цитати: 47

25. Doytchinova IA, Hemsley S, Flower DR. Transporter associated with antigen processing preselection of peptides binding to the MHC: A Bioinformatic evaluation. *J. Immunol.*, 173(11), 6813-6819, 2004.

IF(2004) = 6.486 цитати: 29

26. Hattotuagama CK, Guan P, Doytchinova IA, Flower DR. New horizons in mouse immunoinformatics: reliable *in silico* prediction of mouse class I histocompatibility major complex peptide binding affinity. *Org. Biomol. Chem.*, 2(22), 3274-3283, 2004.

IF(2004) = 2.194 цитати: 12

27. Doytchinova IA, Guan P, Flower DR. Quantitative structure – activity relationships and the prediction of MHC supermotifs. *Methods*, 34(4), 444-453, 2004.

IF(2004) = 3.621 цитати: 34

28. Doytchinova IA, Flower DR. *In silico* identification of supertypes for Class II Major Histocompatibility Complexes. *J. Immunol.*, 174(11), 7085-7095, 2005.

IF(2005) = 6.387 цитати: 157

29. Doytchinova IA, Walshe V, Borrow P, Flower DR. Towards the chemometric dissection of peptide-HLA-A\*0201 binding affinity: comparison of local and global QSAR models. *J. Comput. Aid. Mol. Des.*, 19(3), 203-212, 2005.

IF(2005) = 2.082

цитати: 48

30. Hattotuwigama CK, Doytchinova IA, Flower DR. *In Silico* prediction of peptide binding affinity to class I mouse major histocompatibility complexes: A Comparative Molecular Similarity Index Analysis (CoMSIA) study. *J. Chem. Inf. Model.*, 45(5), 1415-1426, 2005.

IF(2005) = 2.923

цитати: 19

31. Guan P, Doytchinova IA, Walshe VA, Borrow P, Flower DR. Analysis of peptide-protein binding using amino acid descriptors: prediction and experimental verification for HLA-A\*0201. *J. Med. Chem.*, 48(23), 7418-7425, 2005.

IF(2005) = 4.926

цитати: 42

32. Hattotuwigama CK, Toseland CP, Guan P, Taylor DJ, Hemsley SL, Doytchinova IA, Flower DR. Toward Prediction of Class II Mouse Major Histocompatibility Complex Peptide Binding Affinity: *In Silico* bioinformatic Evaluation Using Partial Least Squares, a Robust Multivariate Statistical Technique. *J. Chem. Inf. Model.*, 46(3), 1491-1502, 2006.

IF(2006) = 3.423

цитати: 17

33. Doytchinova IA, Flower DR. Class I T cell epitope prediction: improvements using a combination of Proteasome cleavage, TAP affinity, and MHC binding. *Mol. Immun.*, 43(13), 2037-2044, 2006.

IF(2006) = 4.768

цитати: 23

34. Doytchinova IA, Guan P, Flower DR. EpiJen: a server for multi-step T cell epitope prediction. *BMC Bioinformatics*, 7, 131, 2006.

IF(2006) = 3.617

цитати: 134

35. Doytchinova IA, Flower DR. Modeling the peptide-T cell receptor interaction by the Comparative Molecular Similarity Indices Analysis-Soft Independent Modeling of Class Analogy technique. *J. Med. Chem.*, 49(7), 2193-2199, 2006.

IF(2006) = 5.115

цитати: 15

36. Vicini P, Incerti M, Doytchinova IA, La Colla P, Busonera B, Loddo R. Synthesis and antiproliferative activity of benzo[d]isothiazole hydrazones. *Eur. J. Med. Chem.*, 2006, 41, 624-632.

IF(2006) = 2.187

цитати: 177

37. Doytchinova IA, Flower DR. Predicting class I Major Histocompatibility Complex (MHC) binders using multivariate statistics: Comparison of discriminant analysis and multiple linear regression. *J. Chem. Inf. Model.*, 47(1), 234-238, 2007.

IF(2007) = 2.986

цитати: 20

38. Doytchinova IA, Flower DR. Identifying candidate subunit vaccines using an alignment-independent method based on principal amino acid properties. *Vaccine*, 25(5), 856-866, 2007.

IF(2007) = 3.377

цитати: 138

39. Doytchinova IA, Flower DR. VaxiJen: a server for prediction of protective antigens, tumour antigens and subunit vaccines. *BMC Bioinformatics*, 8, 4, 2007.  
IF(2007) = 3.493 цитати: 1608
40. Walshe VA, Hattotuwadama CK, Doytchinova IA, Wong ML, Macdonald IK, Mulder A, Claas FHJ, Pellegrino P, Turner J, Williams I, Turnbull EL, Borrow P, Flower DR. Integrating in silico and in vitro analysis of peptide binding affinity to HLA-Cw\*0102: A bioinformatics approach to the prediction of new epitopes, *PLoS ONE*, 4(11), e8095, 2009.  
IF(2009) = 4.351 цитати: 16
41. Tankova L, Yoncheva K, Kovatchki D, Doytchinova I. Topical anal fissure treatment: placebo-controlled study of mononitrate and trinitrate therapies. *Int. J. Colorectal. Dis.*, 24, 461-464, 2009.  
IF(2009) = 2.102 цитати: 14
42. Dimitrov I, Garnev P, Flower DR, Doytchinova I. Peptide binding to the HLA-DRB1 supertype: A proteochemometric analysis, *Eur. J. Med. Chem.*, 45(1), 236-243, 2010.  
IF(2010) = 3.193 цитати: 16
43. Solankee A, Kapadia K, Ćirić A, Soković M, Doytchinova I, Geronikaki A. Synthesis of some new S-triazine based chalcones and their derivatives as potent antimicrobial agents, *Eur. J. Med. Chem.*, 45(2), 510-518, 2010.  
IF(2010) = 3.193 цитати: 116
44. Dimitrov I, Garnev P, Flower DR, Doytchinova I. MHC class II binding prediction – a little help from a friend, *J. Biomed. Biotech.*, special issue *Vaccine Informatics*, 2010, article ID 705821, 2010.  
IF(2010) = 1.230 цитати: 21
45. Yoncheva K, Doytchinova I, Irache JM. Different approaches for determination of the attachment degree of polyethylene glycols to poly(anhydride) nanoparticles, *Drug Develop. Ind. Pharm.*, 36(6), 676-680, 2010.  
IF(2010) = 1.396 цитати: 6
46. Dimitrov I, Garnev P, Flower DR, Doytchinova I. EpiTOP - a proteochemometric tool for MHC class II binding prediction. *Bioinformatics*, 26(16), 2066-2068, 2010.  
IF(2010) = 4.877 цитати: 43
47. Bakalova A, Varbanov H, Buyukliev R, Momekov G, Ivanov D, Doytchinova I. Platinum complexes with 5-methyl-5(4-pyridyl)hydantoin and its 3-methyl derivatives: Synthesis and cytotoxic activity – quantitative structure – activity relationships. *Arch. Pharm. Chem. Life Sci.*, 344(4), 209-216, 2011.  
IF(2011) = 1.708 цитати: 13
48. Atanasova M, Dimitrov I, Flower DR, Doytchinova I. MHC class II binding prediction by molecular docking. *Mol. Informatics*, 30(4), 368-375, 2011.  
IF(2011) = 2.390 цитати: 11
49. Patronov A, Dimitrov I, Flower DR, Doytchinova I. Peptide binding prediction for the human class II MHC allele HLA-DP2: a molecular docking approach. *BMC Struct. Biol.*, 11:32, 2011.

- IF(2011) = 2.476 цитати: 48
50. Doytchinova I, Petkov P, Dimitrov I, Atanasova M, Flower DR. HLA-DP2 binding prediction by molecular dynamics simulations. *Protein Sci.*, 20(11), 1918-1928, 2011.  
IF(2011) = 2.798 цитати: 13
51. Zhivkova Z, Doytchinova I. Prediction of steady-state volume of distribution of acidic drugs by quantitative structure – pharmacokinetics relationships. *J. Pharm. Sci.*, 101(3), 1253-1266, 2012.  
IF(2012) = 3.130 цитати: 17
52. Valkova I, Zlatkov A, Nędza K, Doytchinova I. Synthesis, 5-HT<sub>1A</sub> and 5-HT<sub>2A</sub> receptor affinity and QSAR study of 1-benzhydryl-piperazine derivatives with xanthine moiety at N4. *Med. Chem. Res.*, 21(4), 477-486, 2012.  
IF(2012) = 1.612 цитати: 5
53. Zhivkova Z, Doytchinova I. Quantitative structure – plasma protein binding relationships of acidic drugs. *J. Pharm. Sci.*, 101(12), 4627-4641, 2012.  
IF(2012) = 3.130 цитати: 28
54. Patronov A, Dimitrov I, Flower DR, Doytchinova I. Peptide binding to HLA-DP2 proteins at pH 5.0 and pH 7.0: a quantitative molecular docking study. *BMC Struct. Biol.*, 12, 20, 2012.  
IF(2012) = 2.099 цитати: 11
55. Yoncheva K, Doytchinova I, Tankova L. Preparation and evaluation of isosorbide mononitrate hydrogels for topical fissure treatment. *Curr. Drug Delivery*, 9, 452-458, 2012.  
IF(2013) = 2.248 цитати: 7
56. Dimitrov I, Flower DR, Doytchinova I. AllerTOP – a server for *in silico* prediction of allergens. *BMC Bioinformatics*, 14(Suppl. 6), S4, 2013.  
IF(2013) = 2.672 цитати: 288
57. Gevrenova R, Badjakov I, Nikolova M, Doytchinova I. Phenolic derivatives in raspberry (*Rubus L.*) germplasm collection in Bulgaria. *Biochem. Syst. Ecol.*, 50, 419-427, 2013.  
IF(2013) = 1.170 цитати: 15
58. Zhivkova Z, Doytchinova I. Quantitative structure – clearance relationships of acidic drugs. *Mol. Pharmaceutics.*, 10(10), 3758-3768, 2013.  
IF(2013) = 4.787 цитати: 12
59. Atanasova M, Patronov A, Dimitrov I, Flower DR, Doytchinova I. EpiDOCK – a molecular docking-based tool for MHC class II binding prediction. *Protein Eng. Des. Sel.*, 26(10), 631-634, 2013.  
IF(2013) = 2.319 цитати: 43
60. Stavarakov G, Valcheva V, Philipova I, Doytchinova I. Novel camphene-based anti-tuberculosis agents with nanomolar activity. *Eur. J. Med. Chem.*, 70, 372-379, 2013.  
IF(2013) = 3.432 цитати: 29

61. Ivanov S, Dimitrov I, Doytchinova I. Quantitative prediction of peptide binding to HLA-DP1 protein. *IEEE Trans. Comp. Biol. Bioinf.*, 10(3), 811-815, 2013.  
IF(2013) = 1.616 цитати: 4
62. Patronov A, Doytchinova IA. T-cell epitope vaccine design by immunoinformatics. *Open Biology*, 3, 120139, 2013.  
IF(2013) = 4.556 цитати: 289
63. Dimitrov I, Naneva L, Bangov I, Doytchinova I. AllergenFP: allergenicity prediction by descriptor fingerprints. *Bioinformatics*, 30(6), 846-851, 2014.  
IF(2014) = 4.981 цитати: 428
64. Dimitrov I, Naneva L, Bangov I, Doytchinova I. Allergenicity prediction by artificial neural networks. *J. Chemometr.*, 28, 282-286, 2014.  
IF(2014) = 1.500 цитати: 13
65. Patronov, A, Salamanova E, Dimitrov I, Flower DR, Doytchinova I. Histidine hydrogen bonding in MHC at pH 5 and pH 7 modeled by molecular docking and molecular dynamics simulations. *Curr. Comp.-Aid. Drug Des.*, 10, 41-49, 2014.  
IF(2014) = 1.268 цитати: 8
66. Naneva L, Dimitrov I, Bangov I, Doytchinova I. Allergenicity prediction by partial least squares-based discriminant analysis. *Bulg. Chem. Commun.*, 46 (2), 389-396, 2014.  
IF(2014) = 0.201 цитати: 0
67. Petkova Z, Valcheva V, Momekov G, Petrov P, Dimitrov V, Doytchinova I, Stavrakov G, Stoyanova M. Antimycobacterial activity of chiral aminoalcohols with camphane scaffold. *Eur. J. Med. Chem*, 81, 150-157, 2014.  
IF(2014) = 3.447 цитати: 15
68. Stavrakov G, Valcheva V, Philipova I, Doytchinova I. Design of novel camphene-based derivatives with antimycobacterial activity. *J. Mol. Graph. Model.*, 51, 7-12, 2014.  
IF(2014) = 1.722 цитати: 4
69. Dimitrov I, Bangov I, Flower DR, Doytchinova I. AllerTOP v.2 – a server for in silico prediction of allergens. *J. Mol. Model.*, 20, 2278, 2014.  
IF(2014) = 1.736 цитати: 638
70. Gevrenova R, Weng A, Voutguenne-Nazabadioko L, Thakur M, Doytchinova I. Quantitative Structure – Activity Relationship study on saponins as cytotoxicity enhancers. *Lett. Drug Des. Discov.*, 12, 2015, 166-171.  
IF(2015) = 0.974 цитати: 13
71. Atanasova M, Yordanov N, Dimitrov I, Berkov S, Doytchinova I. Molecular docking study on galantamine derivatives as cholinesterase inhibitors. *Mol. Inf.*, 34, 394-403, 2015.  
IF(2015) = 1.570 цитати: 17
72. Dimitrov I, Doytchinova I. Peptide binding prediction to five most frequent HLA-DQ proteins – a proteochemometric approach. *Mol. Inf.*, 34, 467-476, 2015.  
IF(2015) = 1.570 цитати: 2

73. Atanasova M, Doytchinova I. Substrate – inositol transporte interactions: molecular docking study. *Lett. Drug Des. Discov.*, 12, 622-627, 2015.

IF(2015) = 0.974

цитати: 0

74. Atanasova M, Stavrakov G, Philipova I, Zheleva D, Yordanov N, Doytchinova I. Galantamine derivatives with indole moiety: docking, design, synthesis and acetylcholinesterase activity. *Bioorg. Med. Chem.*, 23, 5382-5389, 2015.

IF(2015) = 2.923

цитати: 58

75. Zhivkova Z, Mandova T, Doytchinova I. Quantitative structure – pharmacokinetics relationship analysis of basic drugs: volume of distribution. *J. Pharm. Pharm. Sci.*, 18, 515-527, 2015.

IF(2015) = 2.330

цитати: 18

76. Zheleva-Dimitrova DZh, Balabanova V, Gevrenova R, Doichinova I, Vitkova A. Chemometrics-based Approach in Analysis of Arnicae flos. *Pharmacogn. Mag.*, 11, S538-S544, 2015.

IF(2015) = 0.831

цитати: 0

77. Stavrakov G, Valcheva V, Voynikov Y, Atanasova M, Peikov P, Doytchinova I. Design, synthesis and antimycobacterial activity of novel theophylline-7-acetic acid derivatives with amino acid moieties. *Chem. Biol. Drug Des.*, 87, 335-341, 2016.

IF(2016) = 2.396

цитати: 11

78. Dimitrov I, Doytchinova I. Associations between main food allergens and HLA-DR/DQ polymorphism. *Int. Arch. Allergy Immunol.*, 169, 33-39, 2016

IF(2016) = 2.720

цитати: 13

79. Stavrakov G, Philipova I, Zheleva D, Atanasova M, Konstantinov S, Doytchinova I. Docking-based design of galantamine derivatives with dual-site binding to acetylcholinesterase. *Mol. Inf.*, 35, 278-285, 2016.

IF(2016) = 1.955

цитати: 10

80. Yordanov V, Dimitrov I, Doytchinova I. Proteochemometrics and the MHC Binding Prediction. *Lett. Drug Des. Discov.*, 14(1), 2-9, 2017.

IF(2017) = 0.924

цитати: 2

81. Stavrakov G, Philipova I, Zheleva D, Konstantinov S, Doytchinova I. Docking-based design of galantamine-camphane hybrids as inhibitors of acetylcholinesterase. *Chem. Biol. Drug Des.*, 88, 709-718, 2017.

IF(2017) = 2.328

цитати: 18

82. Philipova I, Valcheva V, Mihaylova R, Mateeva M, Doytchinova I, Stavrakov G. Synthetic piperine amide analogs with antimycobacterial activity. *Chem. Biol. Drug Des.*, 91, 763-768, 2018.

IF(2018) = 2.256

цитати: 23

83. Yordanov V, Dimitrov I, Doytchinova I. Proteochemometrics-based prediction of peptide binding to HLA-DP proteins. *J. Chem. Inf. Model.*, 58, 297-304, 2018.

IF(2018) = 3.966

цитати: 9



84. Doytchinova IA, Flower DR. In silico prediction of cancer immunogens: current state of the art. *BMC Immunology*, 19, 11, 2018.

IF(2018) = 2.186

цитати: 8

85. Doytchinova IA, Atanasova M, Valkova I, Stavrakov G, Philipova I, Zhivkova Z, Zheleva-Dimitrova D, Konstantinov S, Dimitrov I. Novel hits for acetylcholinesterase inhibition derived by docking-based screening on ZINC database. *J. Enz. Inh. Med. Chem.*, 33, 768-776, 2018.

IF(2018) = 4.027

цитати: 25

86. Gevrenova R, Doytchinova I, Kolodziej B, Henry M. In-depth characterization of the GOTCAB saponins in seven cultivated Gypsophila L. species (Caryophyllaceae) by liquid chromatography coupled with quadrupole-Orbitrap mass spectrometer. *Biochem. Sys. Ecol.* 83, 91-102, 2019.

IF(2019) = 1.127

цитати: 8

87. Manoylov IK, Boneva GV, Doytchinova IA, Mihaylova NM, Tchorbanov AI. Protein-engineered molecules carrying GAD65 epitopes and targeting CD35 selectively down-modulate disease-associated human B lymphocytes. *Clin. Exp. Immunol.* 197, 329-340, 2019.

IF(2019) = 3.532

цитати: 5

88. Chakuleska L, Michailova R, Shkondrov A, Manov V, Zlateva-Panayotova N, Marinov G, Petrova R, Atanasova M, Krasteva I, Danchev N, Doytchinova I, Simeonova R. Bone protective effects of purified extract from *Ruscus aculeatus* on ovariectomy-induced osteoporosis in rats. *Food Chem. Toxicol.* 132, 110668, 2019.

IF(2019) = 4.679

цитати: 10

89. Kondeva-Burdina M, Doytchinova I, Krasteva I, Ionkova I, Manov V. Hepato-, neuroprotective effects and QSAR studies on flavoalkaloids and flavonoids from *Astragalus monspessulanus*. *Biotechnol. Biotechnol. Equip.* 33, 1434-1443, 2019.

IF(2019) = 1.186

цитати: 6

90. Manoylov IK, Boneva GV, Doytchinova IA, Mihaylova NM, Tchorbanov AI. Suppression of disease-associated B lymphocytes by GAD65 epitope-carrying protein-engineered molecules in a streptozotocin-induced mouse model of diabetes. *Monoclon. Antib. Immuno Diagn. Immunother.* 38, 201-208, 2019.

IF(2019) = 0.583

цитати: 1

91. Ivanov SM, Dimitrov I, Doytchinova IA. Bridging solvent molecules mediate RNase A – ligand binding. *PLoS ONE* 14, e0224271, 2019.

IF(2019) = 2.740

цитати: 3

92. Voynikov Y, Gevrenova R, Balabanova V, Doytchinova I, Nedialkov P, Zheleva-Dimitrova D. LC-MS analysis of phenolic compounds and oleraceins in aerial parts of *Portulaca oleracea* L. *J. Appl. Bot. Food Qual.* 92, 298-312, 2019.

IF(2019) = 0.953

цитати: 15

### През последните 5 години:

93. Ivanov SM, Atanasova M, Dimitrov I, Doytchinova I. Cellular polyamines condense hyperphosphorylated Tau, triggering Alzheimer's disease. *Scientific reports* 10, 10098, 2020.

IF(2020) = 4.379

цитати: 9

94. Doytchinova I, Atanasova M, Salamanova E, Ivanov S, Dimitrov, I. Curcumin inhibits the primary nucleation of amyloid-beta peptide: a molecular dynamics study. *Biomolecules* 10, 1323, 2020.

IF(2020) = 4.570

цитати: 34

95. Stavrakov G, Philipova I, Lukarski A, Atanasova M, Zheleva D, Zhivkova ZD, Ivanov S, Atanasova T, Konstantinov S, Doytchinova I. Galantamine-curcumin hybrids as dual-site binding acetylcholinesterase inhibitors. *Molecules* 25, 3341, 2020.

IF(2020) = 4.412

цитати: 14

96. Dimitrov I, Zaharieva N, Doytchinova I. Bacterial immunogenicity prediction by machine learning methods. *Vaccines* 8, 709, 2020.

IF(2020) = 4.422

цитати: 11

97. Simeonova R, Vitcheva V, Kostadinova I, Valkova I, Philipova I, Stavrakov G, Danchev N, Doytchinova I. Biochemical studies on a novel potent acetylcholinesterase inhibitor with dual-site binding for treatment of Alzheimer's disease. *C. R. Acad. Bulg. Sci.* 74, 219-225, 2021.

IF(2021) = 0.320

цитати: 0

98. Simeonova R, Zheleva D, Valkova I, Stavrakov G, Philipova I, Atanasova M, Doytchinova I. A novel galantamine-curcumin hybrid as a potential multi-target agent against neurodegenerative disorders. *Molecules* 26, 1865, 2021.

IF(2021) = 4.927

цитати: 14

99. Stavrakov G, Philipova I, Lukarski A, Atanasova M, Georgiev B, Atanasova T, Konstantinov S, Doytchinova I. Discovery of a novel acetylcholinesterase inhibitor by fragment-based design and virtual screening. *Molecules* 26, 2058, 2021.

IF(2021) = 4.927

цитати: 5

100. Salamanova E, Atanasova M, Dimitrov I, Doytchinova I. Effects of curcumin and ferulic acid on the folding of amyloid-beta peptide. *Molecules* 26, 2815, 2021.

IF(2021) = 4.927

цитати: 11

101. Simeonova R, Vitcheva V, Kostadinova I, Valkova I, Philipova I, Stavrakov G, Danchev N, Doytchinova I. In Vivo Studies on Novel Potent Acetylcholinesterase Inhibitors with Dual-site Binding for Treatment of Alzheimer's Disease. *C. R. Acad. Bulg. Sci.* 74, 906-913, 2021.

IF(2021) = 0.320

цитати: 0

102. Mladenova K, Stavrakov G, Philipova I, Atanasova M, Petrova S, Doumanov J, Doytchinova I. A galantamine-curcumin hybrid decreases the cytotoxicity of amyloid-beta peptide on SH-SY5Y cells. *Int. J. Mol. Sci.* 22, 7592, 2021.

IF(2021) = 6.208

цитати: 2

103. Doneva N, Doytchinova I, Dimitrov I. Predicting immunogenicity risk in biopharmaceuticals. *Symmetry* 13, 388, 2021.

IF(2021) = 2.940

цитати: 13

104. Chakuleska L, Shkondrov A, Popov G, Zlateva-Panayotova N, Petrova R, Atanasova M, Krasteva I, Doytchinova I, Simeonova R. Beneficial effects of the fructus Sophorai extract on experimentally induced osteoporosis in New Zealand white rabbits. *Acta Pharm.* 2022, 72, 289-302.

IF(2022) = 3.120

цитати: 1

105. Doytchinova I. Drug design - past, present, future. *Molecules* 2022, 27, 1496.

IF(2022) = 4.600

цитати: 24

106. Atanasova M, Dimitrov I, Ivanov S, Georgiev B, Berkov S, Zheleva-Dimitrova D, Doytchinova I. Virtual screening and hit selection of natural compounds as acetylcholinesterase inhibitors. *Molecules* 2022, 27, 3139.

IF(2022) = 4.600

цитати: 7

107. Spassov D, Atanasova M, Doytchinova I. Novel hits for N-myristoyltransferase inhibition discovered by docking-based screening. *Molecules* 2022, 27, 5478.

IF(2022) = 4.600

цитати: 0

108. Berkov S, Atanasova M, Georgiev B, Bastida J, Doytchinova I. The Amaryllidaceae alkaloids: an untapped source of acetylcholinesterase inhibitors. *Phytochem. Rev.* 2022, 21, 1415-1443.

IF(2022) = 8.190

цитати: 7

109. Simeonova R, Atanasova M, Stavrakov G, Philipova I, Doytchinova I. Ex vivo antioxidant and cholinesterase inhibiting effects of a novel galantamine–curcumin hybrid on scopolamine-induced neurotoxicity in mice. *Int. J. Mol. Sci.* 2022, 23, 14843.

IF(2022) = 5.600

цитати: 3

110. Ralchev NR, Markovski AM, Yankova IA, Manoylov IK, Doytchinova IA, Mihaylova NM, Shinkov AD, Tchorbanov AI. Selective Silencing of Disease-Associated B Lymphocytes from Hashimoto's Thyroiditis Patients by Chimeric Protein Molecules. *Int. J. Mol. Sci.* 2022, 23, 15083.

IF(2022) = 5.600

цитати: 1

111. Iwanov I, Rossi A, Montesi M, Doytchinova I, Sargsyan A, Momekov G, Panseri S, Naydenova E. Peptide-based targeted cancer therapeutics: Design, synthesis and biological evaluation. *Eur. J. Pharm. Sci.* 2022, 176, 106249.

IF(2022) = 4.6

цитати: 2

112. Spassov D.S., Atanasova M., Doytchinova I. A role of salt bridges in mediating drug potency: A lesson from the N-myristoyltransferase inhibitors. *Front. Mol. Biosci.* 2023, 9, 1066029.

IF(2022) = 6.113

цитати: 8

113. Angelova V.T., Tatarova T., Mihaylova R., Vassilev N., Petrov B., Zhivkova Z., Doytchinova I. Novel arylsulfonylhydrazones as breast anticancer agents discovered by Quantitative Structure - Activity Relationships. *Molecules* 2023, 28, 2058.

IF(2022) = 4.600

цитати: 3

114. Nikolova-Mladenova B., Momekov G., Zhivkova Z., Doytchinova I. Design, synthesis and cytotoxic activity of novel salicylaldehyde hydrazones against leukemia and breast cancer. *Int. J. Mol. Sci.* 2023, 24, 7352.

IF(2022) = 5.600

цитати: 1

115. Marković A, Živković A, Atanasova M, Doytchinova I., Hofmann B, George S, Kretschmer S, Rödl C, Steinhilber D, Stark H, Šmelcerović A. Thiazole derivatives as dual inhibitors of deoxyribonuclease I and 5-lipoxygenase: A promising scaffold for the development of neuroprotective drugs. *Chem. Biol. Interact.* 2023, 386, 110542.

IF(2022) = 5.100

цитати: 4

116. Spassov D. S., Atanasova M., Doytchinova I. Inhibitor trapping in N-myristoyltransferases as a mechanism for drug potency. *Int. J. Mol. Sci.* 2023, 24, 11610.

IF(2022) = 5.600

цитати: 2

117. Doytchinova I., Dimitrov I, Atanasova M. preDQ – a software tool for peptide binding prediction to HLA-DQ2 and HLA-DQ8. *EFSA Support. Publ.* 2023, 7, 8108E.

IF(2022) = 1.100

цитати: 0

118. Andonova L., Georgieva M., Atanasova M., Valkova I., Doytchinova I., Simeonova R., Zheleva-Dimitrova D., Zlatkov A. In Silico, In Vitro and In Vivo Assessment of Acetylcholinesterase Inhibitory Activity of Theobromine Derivatives Containing an Arylpiperazine Fragment. *Lett. Drug Des. Discov.* 2023, 20, 1645-1655.

IF(2022) = 1.000

цитати: 0

119. Atanasova M., Dimitrov I., Fernandez A., Moreno J., Koning F., Doytchinova I. Assessment of novel proteins triggering celiac disease via docking-based approach. *Molecules* 2024, 29, 138.

IF(2022) = 4.600

цитати: 0

120. Doytchinova I., Atanasova M., Fernandez A., Moreno J., Koning F., Dimitrov I. Modeling peptide-protein interactions by a logo-based method: Application in peptide-HLA binding predictions. *Molecules* 2024, 29, 284.

IF(2022) = 4.600

цитати: 0

121. Kostadinova I, Atanasova M, Stavrakov G, Philipova I, Doytchinova I. A galantamine-curcumin hybrid lacks the depressant side effect of acetylcholinesterase inhibitors. *Biotechnol. Biotechnol. Equip.* 2024, 38:1, 2305903.

IF(2022) = 1.400

цитати: 0

122. Spassov D.S., Atanasova M., Doytchinova I. Inhibitor trapping in kinases. *Int. J. Mol. Sci.* 2024, 25, 3249.

IF(2022) = 5.600

цитати: 0

**Общ IF = 393.564<sup>§</sup>**

**Общо цитати на публикации в списания с IF в Scopus (17.05.2024 г.) : 6412\***

**Общ IF за последните 5 години = 128.575<sup>§</sup>**

## Общо цитати на публикации в списания с IF през последните 5 години: 3832\*

§Съгласно Clarivate Journal Citation Reports в годината на публикацията. За публикациите през 2023 г. и 2024 г. са взети импакт факторите за 2022 г.

\*Съгласно Scopus без самоцитати на автора и повтарящи се цитати (справка 17.05.2024 г.)

## 2. Научни публикации в списания без IF

1. Дойчинова И, Михайлова Д, Начева Р. Количествени зависимости между химичната структура и биологичната активност на серия 1,3,7-триалкил-заместени ксантини – модели de novo. *Фармация, София*, 39, 1989, 2, 27-33.

цитати: 0

2. Дойчинова И, Михайлова Д, Начева Р. Количествени зависимости между химичната структура и биологичната активност на серия 1,3,7-триалкил-заместени ксантини. Модели, свързани с линейното изменение на свободната енергия. *Фармация, София*, 39, 1989, 5, 5-10.

цитати: 0

3. Дойчинова И, Михайлова Д, Начева Р. Киселинно-основни отношения на серия 4-фенил-1,2,3,4-тетрахидроизохинолини – експериментално определяне и теоретично пресмятане. *Фармация, София*, 39, 1989, 6, 4-8.

цитати: 0

4. Doichinova I, Natcheva R, Kasem F, Natova L, Nikolova M. Synthesis, Biological Activity and QSAR-Analysis of a Series of Piperazine Derivatives with Analgesic Action. *Comptes rendus de l'Academie bulgare des Sciences*, 46, 1993, 8, 139-141. IF(2007) = 0.106

цитати: 0

5. Doichinova IA, Natcheva RN, Mihailova DN. QSAR-Studies of 8-Substituted Xanthines as Adenosine Receptors Antagonists. *Eur. J. Med. Chem.*, 29, 1994, 2, 133-138. IF(1997) = 0.809

цитати: 17

6. Дойчинова И, Начева Р, Михайлова Д. QSAR анализ на серия новосинтезирани производни на ксантина. *Фармация, София*, 43, 1995, 1, 8-12.

цитати: 0

7. Дойчинова И, Начева Р, Михайлова Д. QSAR анализ на серия 3-пропилксантини с бронходилатиращо действие. *Фармация, София*, 43, 1995, 5-6, 30-36.

цитати: 0

8. Doytchinova I, Natcheva R. QSAR-Study on a Series of 1,4-disubstituted Piperazines with Analgesic Activity. *Acta Pharm.*, 47, 1997, 3, 189-195. IF(2010) = 1.312

цитати: 2

9. Netzeva T, Natcheva R, Doytchinova I, Lesigiarska I, Mihailova D. Theoretical investigation of the chemical structure and QSAR-analysis of a series of 9-substituted artemisinin derivatives. *Archives of the Balkan Medical Union*, 33, 1998, 4, 189-198.

цитати: 0

10. Netzeva T, Natcheva R, Doytchinova I. A QSAR Study of Some Ethers of Dihydroartemisinin as Antimalarial Agents. *Pharmacia, Sofia*, 46, 1999, 1, 5-10.

цитати: 0

11. Flower DR, Doytchinova IA. Immunoinformatics and the prediction of immunogenicity. *Appl. Bioinformatics*, 1(4), 167-176, 2002.

цитати: 21

12. Guan P, Doytchinova IA, Zygouri C, Flower DR. MHCpred: bringing a quantitative dimension to the online prediction of MHC binding. *Appl. Bioinformatics*, 2(1), 63-66, 2003.

цитати: 73

13. Doytchinova IA, Taylor P, Flower DR. Proteomics in Vaccinology and Immunobiology: An Informatics Perspective of the Immunone. *J. Biomed. Biotechnol.*, 2003(5), 267 – 290, 2003.

цитати: 27

14. Toseland CP, Taylor DJ, McSparron H, Hemsley SL, Blythe MJ, Paine K, Doytchinova IA, Guan P, Hattotuagama CK, Flower DR. AntiJen: a quantitative immunology database integrating functional, thermodynamic, kinetic, biophysical and cellular data. *Immunome Res.*, 1: 4, 2005.

цитати: 0

15. Guan P, Davies M, Taylor DJ, Wan S, McSparron H, Hemsley SL, Toseland C, Blythe MJ, Taylor PD, Walshe V, Hattotuagama CK, IDoytchinova IA, Coveney PV, Borrow P, Flower DR. Computational Chemistry, Informatics, and the Discovery of Vaccines. *Curr. Comput. Aided Drug Des.* 1(4), 377-398, 2005.

цитати: 1

16. Guan P, Doytchinova I, Hattotuagama C, Flower DR. MHCpred 2.0, an updated quantitative T cell epitope prediction server. *Appl. Bioinformatics*, 5(1), 55-61, 2006.

SJR(2006) = 0.694

цитати: 70

17. Davies MN, Guan P, Blythe MJ, Salomon J, Toseland CP, Hattotuagama C, Walshe V, Doytchinova IA, Flower DR. Using databases and data mining in vaccinology. *Expert Opin. Drug Discov.*, 2(1), 19-35, 2007. IF(2009) = 1.354

цитати: 8

18. Doytchinova IA, Flower DR. QSAR and the prediction of T-cell epitopes. *Current Proteomics*, 5(2), 73-95, 2008. IF(2011) = 3.179

цитати: 5

19. Doytchinova IA, Flower DR. Bioinformatic approach for identifying parasite and fungal candidate subunit vaccines. *The Open Vaccine Journal*, 1(1), 22-26, 2010.

цитати: 53

20. Flower DR, Macdonald IK, Ramakrishnan K, Davies MN, Doytchinova IA. Computer-aided selection of candidate vaccine antigens. *Immunome Res.*, 6(Suppl. 2), S1, 2010.

SJR(2010) = 1.776

цитати: 93

21. Dimitrov I, Flower DR, Doytchinova I. Improving *in silico* prediction of epitope vaccine candidates by union and intersection of single predictors. *World J. Vaccines*, 1(2), 15-22, 2011.

цитати: 0

22. Bangov I, Naneva L, Moskovkina M, Dimitrov I, Doytchinova I. Application of Descriptor Fingerprints in QSAR Studies. *Annual of Konstantin Preslavsky University of Shumen*, 22B1, 28-36, 2013.

цитати: 0

23. Йорданов Н, Атанасова М, Димитров И, Дойчинова И. Холинестеразните инхибитори в лечението на болест на Алцхаймер. *Неврология и психиатрия*, 44(2), 35-49, 2013.

цитати: 0

24. Walshe V, Hattotuwigama C, Doytchinova I, Flower DR. A dataset of experimental HLA-B\*2705 peptide binding affinities. *Dataset Papers in Science*, 2014, article ID 914684, 2014.

цитати: 0

25. Dimitrov I, Kochev N, Moskovkin, M, Naneva L, Paskaleva V, Doytchinova I, Milina R, Mustafa ZA, Bangov I. Some New Results Obtained by Using Descriptor Fingerprints in QSAR and QSPR Investigations. *Acta Scientifica Naturalis*, 1, 45-50, 2014.

цитати: 0

26. Zhivkova Z, Doytchinova I. In silico quantitative structure – pharmacokinetics relationship modeling on acidic drugs: half-life. *Int. J. Pharm. Pharm. Sci.*, 6(9), 283-289, 2014.

SJR(2014) = 0.316

цитати: 3

27. Zaharieva N, Dimitrov I, Flower DR, Doytchinova I. Immunogenicity prediction by VaxiJen: a 10 year overview. *J. Proteomics Bioinform.*, 10, 11, 2017.

SJR(2017) = 0.291

цитати: 0

28. Atanasova M, Dimitrov I, Doytchinova I. T-cell epitope prediction by sequence-based methods and molecular docking of proteins from *Boophilus microplus*. *Pharmacia, Sofia*, 64(3), 13-21, 2017.

цитати: 1

29. Atanasova M, Dimitrov I, Doytchinova I. Prediction of peptide binding to swine leukocyte antigen (SLA-1) proteins by molecular docking. *Pharmacia, Sofia*, 64(4), 3-15, 2017.

цитати: 0

30. Yordanov V, Dimitrov I, Doytchinova I. Proteochemometric analysis of peptides binding to human leukocyte antigen (HLA) proteins from locus DP. *Pharmacia, Sofia*, 64(4), 31-42, 2017.

цитати: 0

31. Kadiyska T, Mladenova M, Dimitrov I, Doytchinova I. Milk allergy in HLA-DRB1\*14:19/14:21 paediatric patients: a bioinformatics approach. *Pharmacia Sofia*, 65, 23-27, 2018.

цитати: 2

32. Stavrakov G, Philipova I, Lukarski A, Valkova I, Atanasova M, Dimitrov I, Konstantinov S, Doytchinova I. Acetylcholinesterase inhibitors selected by docking-based screening - proof-of-concept study. *Bulg. Chem. Commun.* 50, Special Issue J, 40-48, 2018.

SJR(2018) = 0.137

цитати: 1

33. Atanasova MD, Sasheva P, Yonkova IM, Doytchinova IA. Modelling the interaction and prediction of microtubule assembly inhibition of podophyllotoxin and its derivatives by molecular docking. *Bulg. Chem. Commun.* 51, 513-520, 2019.

SJR(2019) = 0.142

цитати: 1

34. Zaharieva N, Dimitrov I, Flower DR, Doytchinova I. VaxiJen Dataset of Bacterial Immunogens: An Update. *Curr. Comput.-Aided Drug Des.* 15, 398-400, 2019.

SJR(2019) = 0.216

цитати: 28

### **През последните 5 години:**

35. Doytchinova I, Tchorbanov A. Design of multi-epitope vaccine against SARS-CoV-2. *Cybern. Inf. Technol.* 20, 185-193, 2020.

SJR(2020) = 0.272

цитати: 0

36. Doytchinova I, Tchorbanov A, Ivanov S. Immunoinformatic analysis of human thyroglobulin. *Cybern. Inf. Technol.* 20, 194-200, 2020.

SJR(2020) = 0.272

цитати: 0

37. Stoyanov BP, Dimitrov I, Doytchinova IA, Bangov IP. Clustering of red/white wine and allergen/non-allergen data sets by using descriptor fingerprints. *IOP Conf. Series: Material Science and Engineering* 1031, 012053, 2021.

SJR(2019) = 0.198

цитати: 1

**Общо цитати на статии в списания без IF: 407\***

\*Съгласно Scopus без самоцитати на автора и повтарящи се цитати (справка 17.05.2024 г.)

### **3. Глави в монографии**

1. Flower, D.R., IA. Doytchinova, K. Paine, P. Taylor, M.J. Blythe, D. Lamponi, C. Zygouri, P. Guan, H. McSparron, H. Kirkbride: Computational Vaccine Design. In: *Drug Design: Cutting Edge Approaches*, (Ed. D.R. Flower), RSC publications, Cambridge, 136-180, 2002.

цитати: 0

2. Flower, D.R., H. McSparron, M.J. Blythe, C. Zygouri, D. Taylor, P. Guan, S. Wan, P. Coveney, V. Walshe, P. Borrow, IA. Doytchinova: Computational vaccinology: quantitative approaches. In: *Immunoinformatics: Bioinformatic Strategies for Better*



*Understanding of Immune Function*, (Eds. G. Bock, J. Goode), Wiley J. & Sons Ltd., Chichester, 102-120, 2003.

цитати: 0

3. Hattotuwigama, C.K., P. Guan, M. Davies, D.J. Taylor, V. Walshe, S.L. Hemsley, C. Toseland, I.A. Doytchinova, P. Borrow, D.R. Flower: Empirical, AI, and QSAR Approaches to Peptide – MHC Binding Prediction. In: *In silico Immunology*. (Eds. D.R. Flower, J. Timmis), Springer, New York, 139-176, 2007.

цитати: 0

4. Guan, P., I.A. Doytchinova, D.R. Flower: Identifying Major Histocompatibility Complex Supertypes. In: *In silico Immunology*. (Eds. D.R. Flower, J. Timmis), Springer, New York, 197-234, 2007.

цитати: 0

5. Guan, P., I.A. Doytchinova, D.R. Flower: The classification of HLA supertypes by GRID/CPCA and hierarchical clustering methods. In: *Immunoinformatics: Predicting Immunogenicity In Silico*, Series: Methods in Molecular Biology, Vol. 409, (Ed. D.R. Flower), 143-154, 2007.

SJR(2007) = 0.666

цитати: 2

6. Hattotuwigama, C., I.A. Doytchinova, D.R. Flower: Towards the Prediction of Class I and II Mouse Major Histocompatibility Complex Peptide Binding Affinity: In Silico Bioinformatic Step by Step Guide Using Quantitative Structure-Activity Relationships. In: *Immunoinformatics: Predicting Immunogenicity In Silico*, Series: Methods in Molecular Biology, Vol. 409, (Ed. D.R. Flower), 227-245, 2007.

SJR(2007) = 0.666

цитати: 10

7. Hattotuwigama, C.K., P. Guan, I.A. Doytchinova, D.R. Flower: *In Silico* QSAR-Based Predictions of Class I and Class II MHC Epitopes. In: *Immunoinformatics* (Eds. C. Schoenbach, S. Ranganathan, V. Brusic), Methods in Molecular Biology, Springer Science+Business Media, LLC, New York, 63 – 89, 2007.

SJR(2007) = 0.666

цитати: 0

8. Flower, D.R., M.N. Davies, I.A. Doytchinova: Identification of Candidate Vaccine Antigens In Silico. In: *Immunomic Discovery of Adjuvants and Candidate Subunit Vaccines* (Eds. D. R. Flower, Yvonne Perrie), Springer New York Heidelberg Dordrecht London, 39-73, 2013.

цитати: 0

9. Mahida, N., M. Blythe, M.N. Davies, I.A. Doytchinova, D.R. Flower. Toward the computer-aided discovery and design of epitope ensemble vaccines. In: *Post-genomic approaches in drug and vaccine development*. River Publishers, Denmark, 2015, pp. 205-244.

цитати: 3

10. Dimitrov I., Atanasova M., Patronov A., Flower D.R., Doytchinova I. A cohesive and integrated platform for immunogenicity prediction. In: *Vaccine Design. Methods and Protocols*. Volume 2. Thomas S. (Ed.), Methods in Molecular Biology. Springer, 2016, 1404, pp. 761-770.

SJR(2016) = 0.585

цитати: 2

11. Doytchinova I, Atanasova M, Stavrakov G, Philipova I, Zheleva-Dimitrova D. Galantamine derivatives as acetylcholinesterase inhibitors: docking, design, synthesis, and inhibitory activity. In: Computational Modeling of Drugs Against Alzheimer's Disease. Roy K, (Ed.), Neuromethods 132, Springer Protocols, Humana Press, New York, USA, 2018, pp. 163-176.

SJR(2018) = 0.154

цитати: 4

12. Dimitrov I, Yordanov V, Flower DR, Doytchinova I. Proteochemometrics for the Prediction of Peptide Binding to Multiple HLA class II proteins. In: Multi-Target Drug Design Using Chem-Bioinformatic Approaches. Roy K, (Ed.), Methods in Pharmacology and Toxicology, Springer Protocols, Humana Press, New York, USA, 2019, pp. 395-404.

SJR(2019) = 0.125

цитати: 1

### **През последните 5 години:**

13. Dimitrov I, Doytchinova I. An Alignment-Independent Platform for Allergenicity Prediction. In: Tomar N. (eds) Immunoinformatics. Methods in Molecular Biology, vol 2131. Humana, New York, NY, pp. 147-153, 2020.

SJR(2022) = 0.422

цитати: 3

14. Thomas S, Doytchinova I. In silico identification of the B-cell and T-cell epitopes of the antigenic proteins of Staphylococcus aureus for potential vaccines. In: Thomas S. (ed) Vaccine Design: Methods and Protocols. Volume 3: Resources for Vaccine Development. Methods in Molecular Biology, vol 2412. Springer Science+Business Media, LLC, pp. 439-447, 2022.

SJR(2022) = 0.422

цитати: 0

15. Atanasova M, Doytchinova I. Docking-Based Prediction of Peptide Binding to MHC Proteins. In: Reche PA (ed) Computational Vaccine Design. Methods in Molecular Biology, vol 2673. Springer Science+Business Media, LLC, pp. 237-249, 2023.

SJR(2022) = 0.422

цитати: 1

16. Dimitrov I, Doytchinova I. Prediction of Bacterial Immunogenicity by Machine Learning Methods. In: Reche PA (ed) Computational Vaccine Design. Methods in Molecular Biology, vol 2673. Springer Science+Business Media, LLC, pp. 289-303, 2023.

SJR(2022) = 0.422

цитати: 2

### **Общо цитати на глави в книги: 50\***

\*Съгласно Scopus без самоцитати на автора и повтарящи се цитати (справка 17.05.2024 г.).

#### 4. Учебници и учебни помагала

1. И. Дойчинова, Цв. Живкова. Фармакокинетика. Учебник за студенти по фармация. Медицинско издателство „Арсо“, София, 2012 г. ISBN: 978-954-9301-85-4
2. Г. Вайсилов, И. Г. Иванов, И. Дойчинова, К. Т. Кирилов, Л. Литов, П. Петков. Суперкомпютърни приложения в природните науки. Сборник лекции. Национален център за суперкомпютърни приложения. София, 2012 г. ISBN: 978-954-92937-1-5
3. Doytchinova I, Zhivkova Z, Dimitrov I, Valkova I, Atanasova M. Pharmacokinetics. Basic Principles and Applications. Medical University of Sofia. Sofia, 2012.
4. Doytchinova I, Zhivkova Z, Dimitrov I, Valkova I, Atanasova M. Pharmacokinetics. Basic Principles and Applications. Second Edition. Medical University of Sofia. Sofia, 2014.
5. Zhivkova Z, Doytchinova I. Physical Chemistry. Basic Principles and Applications in Pharmacy. Medical University of Sofia. Sofia, 2014.
6. Цв. Живкова, И. Дойчинова. Физикохимия. Учебник за студенти по фармация. Издателство „Медицина и физкултура“, София, 2016 г. ISBN: 978-954-420-317-7

#### През последните 5 години:

7. Дойчинова И., Живкова Ц. Фармакокинетика, Учебник за студенти по фармация. Второ допълнено и преработено издание. 2019, Софттрейд, София, ISBN: 978-954-334-227-3
8. Zhivkova Z, Doytchinova I. Physical Chemistry. Basic Principles and Applications in Pharmacy. Second Edition. Medical University of Sofia. Sofia, 2019.
9. Цв. Живкова, И. Дойчинова. Физикохимия. Учебник за студенти по фармация. Второ допълнено и преработено издание. Издателство „СОФТТРЕЙД“, София, 2020 г. ISBN: 978-954-334-234-1

#### 5. Дисертации

1. Дойчинова И. Компютъризиран лекарствен дизайн на вещества, активни върху A1 и A2 аденозинови рецептори. Дисертация за присъждане на научната степен „Кандидат на науките“ (сега ОНС „Доктор“). Научен ръководител: проф. Димитрия Михайлова, дфн, Научен консултант: гл. ас. Румяна Начева, кфн. Катедра „Химия“, Фармацевтичен факултет, Висш медицински институт-София (сега Медицински университет-София). Специализиран научен съвет по органична химия и органична технология при Висшата атестационна комисия. Рецензенти: проф. д-р Петър Узунов, дбн, ст.н.с. Хозе Канети, кхн. 1993 г.
2. Дойчинова И. In silico изследване на пептиди-епитопи на Т-лимфоцитите. Дисертация за присъждане на научната степен „Доктор на науките“. Специализиран научен съвет по теоретична и изчислителна химия при Висшата атестационна комисия. Рецензенти: проф. д-р Маргарита Караиванова, дмн, ст.н.с. I ст. д-р Станимир Кюркчиев, дмн, ст.н.с. II ст. Илза Пъжева, дбн. 2008 г.