

Publication List



Diana-Speranța Bogdan (Chira)

Scientific Researcher II

Molecular and Biomolecular Physics Department

National Institute for Research and Development of Isotopic and Molecular Technologies, INCDTIM

67-103 Donat, 400293 Cluj-Napoca, România

Total number of publications: 47 (40 ISI)

Total times cited: 495

Hirsch index: 13

[Web of Science](#), [Scopus](#), [Google Scholar](#)

UEF-ID Brainmap: U-1700-035G-2929

1. Augustin C Moț, Ioana-Georgeta Grosu, **Diana Bogdan**, Xenia Filip, Anca Petran, Claudiu Filip: Novel polydopamine-based composites with adjustable antioxidant activity POLYMER **307**, 127233 (2024) (IF 4.6)
2. Alexandra Canciu, Ana-Maria Tătaru, **Diana Bogdan**, Lucian Barbu-Tudoran, Diana Olah, Mihaela Terțiș, Andreea Cernat, Cecilia Cristea: Label-free aptasensor targeting Staphylococcus aureus surface Protein A MICROCHEM J **201**, 110586 (2024) (IF 4.8)
3. Alexandra Pusta, Mihaela Terțiș, Irina Bura, **Diana Bogdan**, Maria Suci, Simona Mirel, Cecilia Cristea: Electrochemical sensor for the evaluation of doxorubicin from novel pharmaceutical formulations and serum CHEMOSENSORS **12**(4), 69 (2024) (IF 4.2)
4. Natalia Terenti, Alexandra Fălămaș, **Diana Bogdan**, Claudiu Filip, Adriana Vulcu, Anca Petran: Poly-3,4-dihydroxybenzylidenedihydrazine, a different analogue of polydopamine NANOTECHNOL REV **13**(1), 20240026 (2024) (IF 7.4)
5. Iulia Rus, Mihaela Terțiș, Anca Pop, Ionel Fizeșan, **Diana Bogdan**, Elena Matei, Daniela Oprea, Victor Diculescu, Robert Săndulescu, Cecilia Cristea: The use of a new selective AB3 aptamer for the hematologic tumor cells' detection SENSOR ACTUAT B-CHEM **394**, 134389 (2023) (IF 8.4)
6. Mihaela Terțiș, Manuela Zăgrean, Alexandra Pusta, Maria Suci, **Diana Bogdan**, Cecilia Cristea: Innovative nanostructured aptasensor for electrochemical detection of gluten in food samples MICROCHEM J **193**, 109069 (2023) (IF 4.8)
7. Anca Petran, Claudiu Filip, **Diana Bogdan**, Cordelia Zimmerer, Sebastian Beck, Teodora Radu, Jurgen Liebscher: Oxidative polymerization of 3,4-dihydroxybenzylamine—the lower homolog of dopamine LANGMUIR **39**(15), 5610-5620 (2023) (IF 3.9)
8. Anca Petran, Andreea Petronela Crișan, Claudia Lar, Adriana Popa, Teodora Radu, Alexandra Ciorîță, **Diana Bogdan**, Mihaela Silion, Claudiu Filip: Poly-2-aminomethyl-3-(3,4-dihydroxyphenyl)propionamide: from structure to properties ACS APPL POLYM MATER **5**(5), 3370-3380 (2023) (IF 5.0)
9. Mihaela Vlassa, Miuța Filip, Ștefan Kreibik, **Diana Bogdan**, Virginia Coman: Mat glass-thin layer chromatography. Application of invasion model STUDIA U BABES-BOL CHE **2022** **68**(2), 7-22 (2023) (IF 0.3)
10. **Diana Bogdan**, Ioana-Georgeta Grosu, Claudiu Filip: How thick, uniform and smooth are the polydopamine coating layers obtained under different oxidation conditions? An in-depth AFM study APPL SURF SCI **597**, 153680 (2022) (IF 6.7)
11. Alia Colniță, Daniel Marconi, Nicoleta Elena Dina, Ioana Brezeștean, **Diana Bogdan**, Ioan Turcu: 3D silver metallized nanotrenches fabricated by nanoimprint lithography as flexible SERS detection platform SPECTROCHIM ACTA A **276**, 121232 (2022) (IF 4.4)
12. Mihaela Terțiș, Petra Lia Sîrbu, Maria Suci, **Diana Bogdan**, Ovidiu Pană, Cecilia Cristea, Ioan Simon: An innovative sensor based on chitosan and graphene oxide for selective and highly-sensitive detection of serotonin CHEMELECTROCHEM **9**(6), e202101328 (2022) (IF 4.0)
13. Gheorghe Melinte, Oana Hosu, Geanina Ștefan, **Diana Bogdan**, Cecilia Cristea, Giovanna Marrazza: Poly-L-Lysine@gold nanostructured hybrid platform for lysozyme aptamer sandwich-based detection ELECTROCHIM ACTA **403**, 139718 (2022) (IF 6.6)
14. Adrian Blidar, Oana Hosu, Bogdan Feier, Geanina Ștefan, **Diana Bogdan**, Cecilia Cristea: Gold-based nanostructured platforms for oxytetracycline detection from milk by a "signal-on" aptasensing approach FOOD CHEM **371**(3), 131127 (2022) (IF 8.8)
15. Ioana Cristina Marinaș, Bianca Maria Tihăuan, Andreea Gabriela Diaconu, Xenia Filip, Anca Petran, Ioana Georgeta Grosu, **Diana Bogdan**, Lucian Barbu, Ana Maria Ivanof, Marin Angheloiu, Grațiela Grădișteanu Pîrcălăbîoru, Claudiu Filip: Polydopamine-assisted surface modification of Ti-6Al-4V alloy with anti-biofilm activity for dental implantology applications COATINGS **11**(11), 1385 (2021) (IF 3.236)
16. Alexandra Bogdan, Lorant Szolga, Gavril-Ionel Giurgi, Andreea Petronela Crișan, **Diana Bogdan**, Sarinya Hadsadee, Siriporn Jungsuttiwong, Riccardo Po, Ion Grosu, Jean Roncali: Structure-properties relationships in triarylamine-based push-pull systems-C60 dyads as active material for single-material organic solar cells DYES PIGMENTS **184**, 108845 (2021) (IF 5.122)
17. Ioan-Adrian Stoian, Bogdan-Cezar Iacob, Cosmina-Larisa Dudaș, Lucian Barbu-Tudoran, **Diana Bogdan**, Iuliu Ovidiu Marian, Ede Bodoki, Radu Oprean: Biomimetic electrochemical sensor for the highly selective detection of azithromycin in biological samples BIOSENS BIOELECTRON **155**, 112098 (2020) (IF 10.618)
18. Mihaela Terțiș, Petrică Ionuț Leva, **Diana Bogdan**, Maria Suci, Florin Graur, Cecilia Cristea: Impedimetric aptasensor for the label-free and selective detection of Interleukin-6 for colorectal cancer screening BIOSENS BIOELECTRON **137**, 123-132 (2019) (IF 10.257)
19. Alia Colniță, Nicoleta E Dina, Nicolae Leopold, Dan C Vodnar, **Diana Bogdan**, Sebastian A Porav, Leontin David: Characterization and discrimination of gram-positive bacteria using Raman spectroscopy with the aid of principal component analysis NANOMATERIALS-BASEL **7**(9), 248 (2017) (IF 3.504)
20. Mihaela Terțiș, Anca Florea, Alina Adumitrăchioaie, Andreea Cernat, **Diana Bogdan**, Lucian Barbu-Tudoran, Nicole Jaffrezic Renault, Robert Săndulescu, Cecilia Cristea: Detection of dopamine by a biomimetic electrochemical sensor based on polythioaniline bridged gold nanoparticles CHEMPLUSCHEM **82**(4) 561-569 (2017) (IF 3.205)

21. Mihaela Tertiş, Andreea Cernat, Daniela Lacatiş, Anca Florea, **Diana Bogdan**, Maria Suci, Robert Săndulescu, Cecilia Cristea: *Highly selective electrochemical detection of serotonin on polypyrrole and gold nanoparticles-based 3D architecture* ELECTROCHEM COMMUN **75**, 43-47 (2017) (IF 4.66)
22. Ede Bodoki, **Diana Bogdan**, Robert Săndulescu: *Ab initio study of the Na-colchicine positively charged complex* FARMACIA **63**(4) 539-542 (2015) (IF 1.162)
23. **Diana Bogdan**, Cristian Morari: *Effect of van der Waals interaction on the geometric and electronic properties of DNA nucleosides adsorbed on Cu(111) surface: a DFT study* J PHYS CHEM A **117**(22) 4669-4678 (2013) (IF 2.775)
24. Cristina M Muntean, Ioan Bratu, **Diana Bogdan**: *Subpicosecond processes in nucleic acids bases monitored by Raman spectroscopy* BIOMED SPECTROSC IMAGING **2**(1) 37-49 (2013)
25. Cristian Morari, **Diana Bogdan**, Cristina M. Muntean: *Binding effects of Mn²⁺ and Zn²⁺ ions on the vibrational properties of guanine-cytosine base pairs in the Watson-Crick and Hoogsteen configurations* J MOL MODEL **18**(11) 4781-4786 (2012) (IF 1.984)
26. **Diana Bogdan**, Cristian Morari: *Electronic properties of DNA nucleosides adsorbed on a Au(100) surface* J PHYS CHEM C **116**(13) 7351-7359 (2012) (IF 4.814)
27. **Diana Bogdan**, Radu Isai, Adrian Calborean, Cristian Morari: *Ab-initio study of the vibrational properties of single-walled silicon nanotubes* PHYSICA E **44**(7-8) 1441-1445 (2012) (IF 1.522)
28. M El Garah, F Palmino, F Chérioux, S Melinte, B Hackens, M Silveira Rodrigues, **D Bogdan**, E Duverger: *Adsorption of zwitterionic assemblies on Si(111) - 7 × 7: A joint tunneling spectroscopy and ab initio study* PHYS REV B **85**(3), 035425 (2012) (IF 3.767)
29. Attila Bende, **Diana Bogdan**, Cristina M Muntean, Cristian Morari: *Localization and anharmonicity of the vibrational modes for GC Watson-Crick and Hoogsteen base pairs* J MOL MODEL **17**(12) 3265-3274 (2011) (IF 1.797)
30. Vincent J Smith, **Diana Bogdan**, Mino R Caira, Mircea Bogdan, Susan A Bourne, Sorin I Fărcaş: *Cyclodextrin inclusion of four phenylurea herbicides: determination of complex stoichiometries and stability constants using solution ¹H NMR spectroscopy* SUPRAMOL CHEM **22**(3) 172-177 (2009) (IF 1.885)
31. Cristian Morari, **Diana Bogdan**, Ioan Turcu: *A first-principles study of π-conjugated thiol phenothiazine derivatives adsorbed on Au(111) surface* CENT EUR J PHYS **7**(2) 332-339 (2009) (IF 0.728)
32. Elise JC de Vries, Mino R Caira, Mircea Bogdan, Sorin I Farcas, **Diana Bogdan**: *Inclusion of parabens in β-cyclodextrin: A solution NMR and X-ray structural investigation* SUPRAMOL CHEM **21**(5) 358-366 (2009) (IF 1.885)
33. **Diana Bogdan**: *Electronic structure and driving forces in α-cyclodextrin:butylparaben inclusion complexes* PHYS LETT A **372**(23) 4257-4262 (2008) (IF 2.174)
34. Chinthaka Sanath Gangabadi, Andzelika Najda, **Diana Bogdan**, Sybren S Wijmenga, Marco Tessari: *Dependence of the size of a protein-SDS complex on detergent and Na⁺ concentrations* J PHYS CHEM B **112**(14) 4242-4245 (2008) (IF 4.189)
35. **Diana Bogdan**, Cristian Morari: *Electronic structure and driving forces in β-cyclodextrin:diclofenac inclusion complexes* PHYS LETT A **366**(4-5), 454-459 (2007) (IF 1.711)
36. **Diana Bogdan**, C Morari: *Theoretical investigation of the normal modes for the ground and first excited states of a realistic retinal chromophore model* PHYS SCRIPTA **73**(5), 447-451 (2006) (IF 1.161)
37. C Morari, **Diana Bogdan**: *A study of the anharmonic effects on the vibrational spectra of a realistic retinal chromophore model* SPECTROCHIM ACTA A **61**(8), 1881-1886 (2005) (IF 1.29)
38. **Diana Bogdan**, Cristian Morari: *Theoretical study of the docking process in the β-cyclodextrin alkylparabens inclusion complexes* ROM J PHYS **50**(9-10), 1003-1008 (2005) ISSN 1221-146X (IF 0.279)
39. Cristian Morari **Diana Bogdan**, Mircea Bogdan: *Theoretical study of the driving forces in the α- and β-cyclodextrin-diclofenac inclusion complexes* ROM J PHYS **50**(9-10), 995-1002 (2005) ISSN 1221-146X (IF 0.279)
40. Mircea Bogdan, Mino R Caira, **Diana Bogdan**, Cristian Morari, Sorin I Fărcaş: *Evidence of a bimodal binding between diclofenac-Na and β-cyclodextrin in solution* J INCL PHENOM MACRO **49**(3-4) 225-229 (2004) (IF 0.825)
41. DE Demco, X Filip, C Filip, **D Chira**, O Cozar: *Homonuclear separated local-field spectroscopy by magnetization exchange* NMR ACTA PHYSICA POLONICA A **92**(6) 1135-1149 (1997) (IF 0.311)

B+, non-ISI

1. **D Bogdan**, R Brăţfălean, R Isai, C Morari: *Ab initio study of DNA nucleotides sandwiched between Au(111) electrodes* J PHYS: CONF SER **182** 012058 (2009) ISSN 1742-6588
2. M Bogdan, C Floare, **D Bogdan**, SI Fărcaş: *Photodegradation of inclusion complexes of naproxen and niflumic acid with β-Cyclodextrin* STUDIA UBB PHYSICA **50**(4b), 721-724 (2005) ISSN 0258-8730
3. **D Bogdan**: *Complexarea prin incluziune moleculară a parabenelor cu ciclodextrine: caracterizare spectroscopică și modelele moleculară*, REVISTA DE POLITICA ȘTIINTEI ȘI SCIENTOMETRIE, 1-14 (2005) ISSN 1582-1218
4. **D Bogdan**, C Morari, M Bogdan: *NMR study of homo- and heteroassociation of aromatic molecules in aqueous solution. Numerical simulations* STUDIA UBB. PHYSICA **48**(2), 445-449 (2003) ISSN 0370-8578
5. M Bogdan, **D Bogdan**, MR Caira, SI Fărcaş: *Bimodal molecular encapsulation of mefenamic acid by β-CD solution and solid state* STUDIA UBB. PHYSICA **48**(1), 167-172 (2003) ISSN 0370-8578
6. MR Caira, EJC de Vries, M Bogdan, **D Bogdan**, SI Fărcaş: *Inclusion of alkylparabens in cyclodextrins* STUDIA UBB. PHYSICA **48**(1), 95-102 (2003) ISSN 0370-8578
7. L Filip, **D Bogdan**, M Bojiță, M Bogdan: *Spectroscopic studies on inclusion complex of sulphasalazine with cyclodextrins* STUDIA UBB. PHYSICA Special Issue **2**, 362-365 (2001) ISSN 0370-8578

Book: **Diana Bogdan**: *Complecși Moleculari de Incluziune*, Editura Grinta, Cluj-Napoca, 164 pp., 2012, ISBN 978-973-126-341-0