

Lista lucrari 2020

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| <ol style="list-style-type: none"> <li>1. Superadsorbents for strontium and cesium removal enriched in amidoxime by a homo - IPN strategy connected with porous silica texture</li> <li>2. Epoxy coatings based on modified vegetable oils for wood surface protection against fungal degradation</li> <li>3. Electrically driven artificial muscles using novel polysiloxane elastomers modified with nitroaniline push-pull moieties</li> <li>4. Removal and separation of heavy metal ions from multicomponent simulated waters using silica/polyethyleneimine composite microparticles</li> <li>5. A 2D coordination polymer assembled from a nickel (II) tetraazamacrocyclic cation and 4,4'-(dimethylsilanediyl)diphthalate(3-) linker</li> <li>6. Syntheses and crystal structures of the one-dimensional coordination polymers formed by [Ni(cyclam)]<sup>2+</sup> cations and 1,3-bis(3-carboxypropyl)tetramethyldisiloxane anions in different degrees of deprotonation</li> <li>7. Crystal structure of bis {μ-2-[bis(2-hydroxymethyl)amino]ethanolato}bis(μ-3,5-dimethylpyrazolato)tricopper(II) dibromide sesquihydrate</li> <li>8. Crystal structure of {N1, N3 -bis[(1-benzyl-1H-1,2,3-triazol-4-yl)methylidene]-2,2-dimethylpropane-1,3-diamine}bis(thiocyanato-kN)iron(II)</li> <li>9. Crystal structure of the one-dimensional coordination polymer formed by the macrocyclic [Ni(cyclam)]<sup>2+</sup> cation and the dianion of diphenylsilanediylbis(4-benzoic acid)</li> <li>10. Crystal structure of catena-poly[[diaqua[1,2-bis(pyridin-4-yl)ethene][4-[2-(pyridin-4-yl)ethenyl]pyridinium]gold(I)iron(II)]-di-μ-cyanido] bis[dicyanidogold(I)] 1,2-bis(pyridin-4-yl)ethene dihydrate]</li> <li>11. Crystal structure of dichlorido-1kCl, 2kCl-(μ2-3,5-dimethyl-1H-pyrazolato-</li> </ol> | <ol style="list-style-type: none"> <li>E. S. Dragan, D. Humelnicu, M. Ignat, C. D. Varganici</li> <li>L. Rosu, C. D. Varganici, F. Mustata, D. Rosu, I. Rosca, T. Rusu</li> <li>E. Perju, S. Shova, D. M. Opris</li> <li>F. Bucataru, C. A. Ghiorghita, M. M. Zaharia, S. Schwarz, F. Simon, M. Mihai</li> <li>S. P. Gavrish, S. Shova, M. Cazacu, Y. D. Lampeka</li> <li>S. P. Gavrish, S. Shova, M. Cazacu, M. Dascalu, Y. D. Lampeka</li> <li>O. S. Vynohradov, V. A. Pavlenko, D. D. Naumova, S. V. Partsveska, S. Shova, S. M. Safamamadov</li> <li>K. Znoviyak, M. Seredyuk, S. O. Malinkin, S. Shova, L. Soliev</li> <li>S. P. Gavrish, S. Shova, M. Cazacu, Y. D. Lampeka</li> <li>S. V. Partsevska, D. D. Naumova, I. P. Matushko, I. A. Guralskiy</li> <li>O. S. Vynohradov, V. A. Pavlenko, I. S.</li> </ol> | ACS Applied Materials and Interfaces, 12, 44622-44638 (2020)<br>ACS Applied Materials and Interfaces, 12, 14443-14458 (2020)<br>ACS Applied Materials and Interfaces, 12, 23432-23442 (2020)<br>ACS Applied Materials and Interfaces, 12, 37585-37596 (2020)<br>Acta Crystallographica Section C: Structural Chemistry, 76 (Part 3), 419-426 (2020)<br>Acta Crystallographica Section E: Crystallographic Communications, 76(Part 3), 446-451 (2020)<br>Acta Crystallographica Section E: Crystallographic Communications, 76, 1641-1644 (2020)<br>Acta Crystallographica Section E: Crystallographic Communications, 76, 1661-1664 (2020)<br>Acta Crystallographica Section E: Crystallographic Communications, 76, 929-932 (2020)<br>Acta Crystallographica Section E: Crystallographic Communications, 76, 944-947 (2020)<br>Acta Crystallographica, Section E: Crystallographic |
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	<chem>1kN2:2kN1)(3,5-dimethyl-1H-pyrazole-2kN2}{ -2-[2-hydroxyethyl]amino-1k2N,O]ethanolato-1:2k2O:O}dicopper(II)</chem>	Safyanova, K. Znoviyak, S. Shova, S. M. Safarmamatov	Communications, 76, 1503-1507 (2020)
12.	Coordination compounds with siloxane/silane-containing ligands capable of self-assembly at nano/micro scale in solid state and in solution	M. F. Zaltariov, M. Cazacu	Advances in Inorganic Chemistry, 76(Nanoscale Coordination Chemistry), D. Ruiz Molina, R. van Eldik, Eds., Academic Press, London, 155-196 (2020)
13.	Facile method for obtaining gold-coated polyester surfaces with antimicrobial properties	M. Drobota, M. Butnaru, N. Vornicu, O. Plopa, M. Aflori	Advances in Polymer Technology, vol. 2020, Article 1D4504062/1-12 (2020)
14.	Evaluation of the antifungal activity of gold-chitosan and carbon nanoparticles on <i>Fusarium oxysporum</i>	F. D. Lipsa, E. L. Ursu, C. Ursu, S. Ulea, A. Cazacu	Agronomy, 10, Article 1143/1-11 (2020)
15.	H/D isotope effect observed in the isotropic Fermi contact interaction of formyl radical: Experimental and theoretical analysis of the inter- and intra-molecular dynamics	Y. A. Dimitriev, A. Laaksonen, N. P. Benetis	AIP Advances, 10, Article 125309/1-16 (2020)
16.	Three reactions, one catalyst: A multi-purpose platinum(IV) complex and its silica-supported homologue for environmentally friendly processes	C. Racles, M. F. Zaltariov, M. Damoc, A. M. Macsim, M. Iacob, L. Sacarescu	Applied Organometallic Chemistry, 34, e5422/1-15 (2020)
17.	Synthesis, characterization, crystal structure and toxicity evaluation of Co (II), Cu (II), Mn (II), Ni (II), Pd (II) and Pt (II) complexes with Schiff base derived from 2-chloro-5-(trifluoromethyl)aniline	G. Lupascu, E. Pahontu, S. Shova, S. F. Barbuceanu, D. C. Ilies, M. Badea, C. Paraschivescu, C. Ducu, J. Neamtu, M. Dinu, R. V. Ancuceanu, D. Dragănescu, C. E. Dinu-Pirvu	Applied Organometallic Chemistry, 34, e5931/1-13 (2020)
18.	Permethylated dinuclear Mn (III) coordination nanostructure with stripe-ordered magnetic domains	S. Shova, V. Tiron, A. Vlad, G. Novitchi, D. G. Dumitrescu, M. Damoc, M. F. Zaltariov, M. Cazacu	Applied Organometallic Chemistry, 34, e5957/1-11 (2020)
19.	New ecological solutions involved in the cleaning of a 19th century icon	T. C. Iurcovschi, V. Vasilache, I. Sandu, M. Zaharia, O. Pintilie, A. V. Sandu	Applied Sciences, 10, Article 1175/1-12 (2020)
20.	Photopolymerized films with ZnO and doped ZnO particles used as efficient photocatalysts in Malachite green dye decomposition	V. E. Podasca, M. D. Damaceanu	Applied Sciences, 10, Article 1954/1-16 (2020)
21.	Photodegradation of phenolic compounds from watter in the presence of a Pd-containing exhausted adsorbent	L. Lupa, L. Cocheci, B. Trica, A. Coroaba, A. Popa	Applied Sciences, 10, Article 8440/1-15 (2020)
22.	Effect of ITO electrode patterning on the properties of organic heterostructures based on non-	A. Stanculescu, C. Breazu, M. Socol, O. Rasoga, N. Preda, G.	Applied Surface Science, 509, Article 145351/1-6 (2020)

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32. Associative interactions between

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33.	Structural modifications of polymers by pulsed electrical discharges in liquid	C. Miron, I. Sava, L. Sacarescu, T. Ishizaki, J. F. Kolb, C. P. Lungu	Carbon-Related Materials, C. Miron, P. Mele, S. Kaneko, T. Endo, Eds., Springer Nature Switzerland, 103-133 (2020)
34.	The influence of azobenzene content on azopolyimide capacity to form laser-induced surface relief gratings	I. Sava, I. Stoica	Carbon-Related Materials, C. Miron, P. Mele, S. Kaneko, T. Endo, Eds., Springer Nature Switzerland, 87-102 (2020)
35.	Carbonic anhydrases: Versatile and useful biocatalysts in chemistry and biochemistry	A. Angeli, F. Carta, C. T. Supuran	Catalysts, 10, Article 1008/1-11
36.	A process for deriving high quality cellulose nanofibrils from water hyacinth invasive species	D. Sun, A. J. Onyianta, D. O'Rourke, G. Perrin, C. M. Popescu, L. H. Saw, Z. Cai, M. Dorris	Cellulose, 27, 3727-3740 (2020)
37.	High aspect ratio cellulose nanofibrils from macroalgae <i>Laminaria hyperborea</i> cellulose extract via a zero-waste low energy process	A. J. Onyianta, D. O'Rourke, D. Sun, C. M. Popescu, M. Dorris	Cellulose, 27, 7997-8010 (2020)
38.	The source of conductivity and proton dynamics study in TEMP-oxidized cellulose doped with various heterocyclic molecules	M. E. Culica, M. Avadanei, R. I. Baron, A. L. Chibac-Scutaru, M. Asandulesa, G. Biliuta, G. Lisa, S. Coseri	Cellulose, 27, 8585-8604 (2020)
39.	Selenolesterase enzyme activity of carbonic anhydrases	A. Angeli, F. Carta, S. Donnini, A. Capperucci, M. Ferraroni, D. Tanini, C. T. Supuran	Chemical Communications, 56, 4444-4447 (2020)
40.	Multi-stimuli responsive free-standing films of DR1-grafted silicones	C. Racles, C. Ursu, M. Dascalu, M. Asandulesa, V. Tiron, A. Bele, C. Tugui, S. Teodoroff-Onesim	Chemical Engineering Journal, 401, 126087/1-14 (2020)
41.	Microstructural and dynamical heterogeneities in ionic liquids	Y. L. Wang, B. Li, S. Sarman, F. Mocci, Z. Y. Lu, J. Yuan, A. Laaksonen, M. D. Fayer	Chemical Reviews, 120, 5798-5877 (2020)
42.	Antioxidant, cytotoxic and antimicrobial activity of chitosan preparations extracted from <i>Ganoderma lucidum</i> mushroom	S. Savin, O. Craciunescu, A. Oancea, D. Ilie, T. Ciucan, L. S. Antohi, A. Toma, A. Nicolescu, C. Deleanu, F. Oancea	Chemistry and Diversity, 17, e2000175/1-10 (2020)
43.	Synthesis and evaluation of biological activity of homodrimane sesquiterpenoids bearing 1,3,4-oxadiazole and 1,3,4-thiadiazole units	L. Lungu, A. Ciocarlan, C. Smigoni, I. Ozer, S. Shova, I. Gutu, N. Vornicu, I. Mangalagiu, M. D'Ambrosio, A. Aricu	Chemistry of Heterocyclic Compounds, 56, 578-585 (2020)
44.	Synthesis, computational studies and assessment of in vitro activity of squalene derivatives as carbonic anhydrase inhibitors	L. Clima, B. F. Craciun, A. Angeli, A. Petreni, A. Bonardi, A. Nocentini, F. Carta, P. Gratteri, M. Pinteala, C. T. Supuran	ChemMedChem, 15, 2052-2057
45.	Benzylaminoethylureido-tailed	M. Ali, A. Angeli, M.	ChemMedChem, 15, 2444-

	benzenesulfonamides show potent inhibitory activity against bacterial carbone anhydrases	Bozdag, F. Carta, C. Capasso, U. Farooq, C. T. Supuran	2447 (2020)
46.	Novel platinum-porphyrin as sensing compound for efficient fluorescent and electrochemical detection of H <sub>2</sub> O <sub>2</sub>	E. Fagadar-Cosma, N. Plesu, A. Lascu, D. Anghel, M. Cazacu, C. Ianasi, G. Fagadar-Cosma, I. Fratilescu, C. Epură	Chemosensors, 8, Article 29/1-15 (2020)
47.	Baltic <i>Fucus vesiculosus</i> as potential bio-sorbent for Zn removal: Mechanism insight	L. Branza, K. Geraki, C. Cojocaru, S. L. Holdt, M. Neamtu	Chemosphere, 238, Article 124652/1-11 (2020)
48.	Highly efficient and fast removal of colored pollutants from single and binary systems, using magnetic mesoporous silica	R. Nicola, S. G. Muntean, M. A. Nistor, A. M. Putz, L. Almasy, L. Sacarescu	Chemosphere, 261, Article 127737/1-14 (2020)
49.	The effect of phenyl substitutions on microstructures and dynamics of tetraalkylphosphonium bis(trifluoromethylsulfonyl)imide ionic liquids	Y. L. Wang, B. Li, A. Laaksonen, J. Yuan	ChemPhysChem, 21, 1202-1214 (2020)
50.	Chitosan-based drug delivery systems	C. Peptu, A. C. Humelnicu, R. Rotaru, M. E. Fortuna, X. Patras, M. Teodorescu, B. I. Tamba, V. Harabagiu	Chitin and Chitosan: Properties and Applications, L. A. M. van den Broek, C. G. Boeriu, Eds., Wiley, Hoboken, USA, 259-289 (2020)
51.	Chitin and chitosan for water purification	P. Samoila, A. C. Humelnicu, M. Ignat, C. Cojocaru, V. Harabagiu	Chitin and Chitosan: Properties and Applications, L. A. M. van den Broek, C. G. Boeriu, Eds., Wiley, Hoboken, USA, 429-460 (2020)
52.	Chitin- and chitosan-based bionanocomposites for active packaging	M. Rapa, C. Vasile	Chitin- and Chitosan-based Biocomposites for Food Packaging Applications, J. Jacob, S. Loganathan, S. Thomas, Eds., CRC Press, Boca Raton, FL, 59-68 (2020)
53.	Wood surface modification - Classic and modern approaches in wood chemical treatment by esterification reactions	C. A. Teaca, F. Tanasa	Coatings, 10, Article 629/1-31 (2020)
54.	Green synthesis of Ag nanoparticles with uncommon behaviour towards NaBH <sub>4</sub> in presence of Congo red using polyelectrolyte multilayers containing sodium carboxymethyl cellulose	C. A. Ghiorghita, E. S. Dragan, F. Bucatariu, D. Schwarz, C. Blegeșcu, M. Mihai	Colloids and Surfaces A: Physicochemical and Engineering Aspects, 585, Article 124157/1-9 (2020)
55.	Nanostructured polymer composites for selective heavy metal ion sorption	F. Bucatariu, D. Schwarz, M. Zaharia, C. Steinbach, C. A. Ghiorghita, S. Schwarz, M. Mihai	Colloids and Surfaces A: Physicochemical and Engineering Aspects, 603, Article 125211/1-10 (2020)
56.	Porous thiourea-grafted-chitosan hydrogels: Synthesis and sorption of toxic metal ions from contaminated waters	C. A. Ghiorghita, K. B. I. Borchert, A. L. Vasiliu, M. M. Zaharia, D. Schwarz, M. Mihai	Colloids and Surfaces A: Physicochemical and Engineering Aspects, 607, Article 125504/1-12 (2020)
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60. Tailoring thermal and flame retardant properties via synergistic effect in polyvinyl alcohol nanocomposites based on polyphosphonate and/or SiO<sub>2</sub> nanoparticles C. Hamciuc, T. Vlad-Bubulac, D. Serbezeanu, E. Hamciuc, M. Aflori, G. Lisa, I. Anghel, I. E. Sofran, A. Trofin
61. 5-Iodo-1-arylpypyrazoles as potential benchmarks for investigating the tuning of the hydrogen bonding D. Dumitrescu, S. Shova, I. C. Man, M. R. Caira, M. M. Popa, F. Dumitrascu
62. Spin crossover in 2D iron(II) phthalazine cyanometallic complexes V. M. Hiiuk, S. Shova, A. Rotaru, A. A. Golub, I. O. Fritsky, I. A. Guralskiy
63. A theoretical mathematical model for assessing diclofenac release from chitosan-based formulations M. M. Iftime, D. L. Dobreci, S. A. Irimiciuc, M. Agop, T. Petrescu, B. Doroftei
64. Phenothiazine based co-crystals with enhanced luminescence L. Marin, A. Bejan, S. Shova
65. Electrochemically active polyimides containing hydroxyl-functionalized triphenylmethane as molecular sensor for fluoride anion detection A. P. Chiriac, I. Butnaru, M. D. Damaceanu
66. Application of electrospun materials in bioinspired systems A. Filimon, A. M. Dobos, O. Dumbrava, A. Popa
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68. Neutral lipophilic palladium(II) complexes and their applications in electrocatalytic hydrogen production and C-C coupling reactions O. Cuzan-Munteanu, D. Sirbu, M. Giorgi, S. Shova, E. A. Gibson, M. Reglier, M. Orio, L. M. D. R. S. Martins, A. C. Benniston
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70.	Role of the main and auxiliary ligands in the nuclearity of Cu-Ln complexes	J. P. Costes, M. J. Rodriguez Douton, S. Shova, L. Vendier	European Journal of Inorganic Chemistry, (4), 382-393 (2020)
71.	Catalytic reduction of oxygen by a copper thiosemicarbazone complex	T. Straistari, A. Morozan, S. Shova, M. Reglier, M. Orio, V. Artero	European Journal of Inorganic Chemistry, vol. 2020, (48), 4549-4555 (2020)
72.	Direct and straight forward access to substituted alkyl selenols as novel carbonic anhydrase inhibitors	D. Tanini, A. Capperucci, M. Ferraroni, F. Carta, A. Angelis, C. T. Supuran	European Journal of Medicinal Chemistry, 185, Article 111811/1-6 (2020)
73.	Formation mechanisms of carbon dimer excimer laser produced plasma	P. E. Nica, C. Ursu	European Physical Journal D, 74, Article 207/1-7 (2020)
74.	Photoinduced properties of "T-type" polyimides with azobenzene or azopyridine moieties	K. Bujak, I. Sava, I. Stoica, V. Tiron, I. Topala, R. Weglowski, E. Schab-Balcerzak, J. Konieczkowska	European Polymer Journal, 126, Article 109563/1-11 (2020)
75.	Surface cationic functionalized nano-hydroxyapatite - Preparation, characterization, effect of coverage on properties and related applications	D. Timpu, L. Sacarescu, T. Vasiliu, M. V. Dinu, G. David	European Polymer Journal, 132, Article 109759 (2020)
76.	Quaternary ammonium salts of chitosan. A critical overview on the synthesis and properties generated by quaternization	B. I. Andreica, X. Cheng, L. Marin	European Polymer Journal, 139, Article 110016/1-16 (2020)
77.	Poly(N-isopropylacrylamide-co-N-vinylpyrrolidone) thermoresponsive microspheres: The low drug loading ensures the pulsatile release mechanism	G. Fundueanu, M. Constantin, S. Bucatariu, P. Ascenzi	eXPRESS Polymer Letters, 14, 63-76 (2020)
78.	Treatments and modification to improve the reaction to fire of wood and wood based products - An overview	C. M. Popescu, A. Pfriem	Fire and Materials, 44, 100-111 (2020)
79.	How to detect possible pitfalls in ePC-SAFT modelling: Extension to ionic liquids	Y. Sun, Z. Zuo, A. Laaksonen, X. Lu, X. Ji	Fluid Phase Equilibria, 519, Article 112641/1-11 (2020)
80.	A model microalga for addressing air treatment in spacecrafts	G. Soreanu, I. Cretescu, M. Diaconu, M. Ignat, V. Harabagiu, C. Cojocaru, P. Samoila	From Biofiltration to Promising Options in Gaseous Fluxes Biotreatment. Recent Developments, New Trends, and Opportunities, G. Soreanu, E. Dumont, Eds., Elsevier, Amsterdam, 397-417 (2020)
81.	How molecular chiralities of bis(mandelato)borate anions affect their binding structures with alkali metal ions and microstructural properties in tetraalkylphosphonium ionic liquids	H. W. Pei, B. Li, A. Laaksonen, Y. L. Wang	Frontiers in Chemistry, 8, Article 65/1-15 (2020)
82.	Sonochemical production of nanoscaled crystalline cellulose using organic acids	E. Robles, N. Izaguirre, B. I. Dogaru, C. M. Popescu, I. Barandiaran, J. Labidi	Green Chemistry, 22, 4627-4639 (2020)
83.	Physicochemical properties and structure of fluid at nano-/micro-	Q. Gao, Y. Zhang, S. Xu, A. Laaksonen, Y. Zhu, X.	Green Energy and Environment, 5, 274-285

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