

Alyona A Starikova

List of Publications by Citations

Source: <https://exaly.com/author-pdf/402953/alyona-a-starikova-publications-by-citations.pdf>

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

111
papers

939
citations

16
h-index

23
g-index

116
ext. papers

1,144
ext. citations

2.3
avg, IF

5.12
L-index

#	Paper	IF	Citations
111	Redox Isomerism in Main-Group Chemistry: Tin Complex with o-Iminoquinone Ligands. <i>European Journal of Inorganic Chemistry</i> , 2018 , 2018, 1087-1092	2.3	39
110	Usefulness of the π Aromaticity and π Antiaromaticity Concepts for Clusters and Solid-State Compounds. <i>Chemistry - A European Journal</i> , 2018 , 24, 292-305	4.8	39
109	Computational design of valence tautomeric adducts of Co(II) diketonates with redox-active o-benzoquinone ligands. <i>Dalton Transactions</i> , 2013 , 42, 1726-34	4.3	39
108	Molecular design of the valence tautomeric mixed-ligand adducts of Co(II) diketonates with redox-active ligands. <i>Mendeleev Communications</i> , 2015 , 25, 83-92	1.9	38
107	Understanding the Origin of One- or Two-Step Valence Tautomeric Transitions in Bis(dioxolene)-Bridged Dinuclear Cobalt Complexes. <i>Journal of the American Chemical Society</i> , 2020 , 142, 10692-10704	16.4	36
106	Adducts of transition metal complexes with redox-active ligands: the structure and spin-state-switching rearrangements. <i>Russian Chemical Reviews</i> , 2018 , 87, 1049-1079	6.8	33
105	Valence tautomeric dinuclear adducts of Co(II) diketonates with redox-active diquinones for the design of spin qubits: computational modeling. <i>Dalton Transactions</i> , 2015 , 44, 1982-91	4.3	32
104	Valence tautomerism and spin crossover in pyridinophane-cobalt-dioxolene complexes: an experimental and computational study. <i>Dalton Transactions</i> , 2019 , 48, 11674-11689	4.3	28
103	Computational insight into magnetic behavior and properties of the transition metal complexes with redox-active ligands: a DFT approach. <i>Pure and Applied Chemistry</i> , 2018 , 90, 811-824	2.1	27
102	A DFT computational study of the magnetic behaviour of cobalt dioxolene complexes of tetraazamacrocyclic ligands. <i>Computational and Theoretical Chemistry</i> , 2018 , 1124, 15-22	2	25
101	Coordination capabilities of metal ions and steric features of organic ligands affecting formation of mono- or binuclear zinc(II) and cadmium(II) pivalates. <i>Polyhedron</i> , 2018 , 152, 61-72	2.7	24
100	Quantum chemical modeling of magnetically bistable metal coordination compounds. Synchronization of spin crossover, valence tautomerism and charge transfer induced spin transition mechanisms. <i>Dalton Transactions</i> , 2016 , 45, 12103-13	4.3	22
99	Quantum-chemical study of spin crossover in cobalt complexes with an o-benzoquinone ligand. <i>Doklady Chemistry</i> , 2016 , 467, 83-87	0.8	21
98	Theoretical modeling of valence tautomeric dinuclear cobalt complexes. Adducts of Co(II) diketonates with cyclic redox-active tetraone ligands. <i>Dalton Transactions</i> , 2015 , 44, 17819-28	4.3	19
97	Computational design of mixed-ligand adducts of Co aminovinyl ketonates with redox-active o-quinones and their derivatives. <i>Russian Chemical Bulletin</i> , 2014 , 63, 812-820	1.7	16
96	Cobalt diketonate adducts with redox-active diiminosuccinonitriles. <i>Mendeleev Communications</i> , 2014 , 24, 329-331	1.9	16
95	Halogen-free GeO conversion: electrochemical reduction vs. complexation in (DTBC)Ge[Py(CN)] (n = 0, 1) complexes. <i>Dalton Transactions</i> , 2018 , 47, 17127-17133	4.3	16

94	Assessing the viability of extended nonmetal atom chains in $M(n)F(4n+2)$ ($M=S$ and Se). <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 1476-80	16.4	15
93	Valence tautomeric complexes of cobalt diketonates with Diimines: A quantum-chemical study. <i>Doklady Chemistry</i> , 2011 , 440, 289-293	0.8	15
92	Valence Tautomerism in Main-Group Complexes? Computational Modeling of Si, Ge, Sn, and Pb Bischelates with o-Iminoquinone Ligands. <i>European Journal of Inorganic Chemistry</i> , 2016 , 2016, 252-258	2.3	14
91	Ferromagnetically Coupled Molecular Complexes with a $Co(II)Gd(III)$ Pivalate Core: Synthesis, Structure, Magnetic Properties and Thermal Stability. <i>ChemistrySelect</i> , 2019 , 4, 14261-14270	1.8	14
90	Quantum chemical modeling of pyrene-4,5-dione adducts with cobalt diketonates. <i>Computational and Theoretical Chemistry</i> , 2016 , 1076, 74-80	2	13
89	Computational Modeling of Spin-Crossover in Mixed-Ligand Binuclear Iron and Cobalt Complexes with 5,6-Bis(salicylideneimino)-1,10-Phenanthroline. <i>Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya</i> , 2019 , 45, 105-111	1.6	12
88	Binuclear nickel(II) complexes with 3,5-di-tert-butylbenzoate and 3,5-di-tert-butyl-4-hydroxybenzoate anions and 2,3-lutidine: the synthesis, structure, and magnetic properties. <i>Russian Chemical Bulletin</i> , 2016 , 65, 2812-2819	1.7	12
87	Europium and ytterbium complexes with o-iminoquinonato ligands: synthesis, structure, and magnetic behavior. <i>Dalton Transactions</i> , 2019 , 48, 3338-3348	4.3	11
86	Tetranuclear Cu(II) and Ni(II) complexes with 1,3,5-triketone ligands: A quantum-chemical simulation of exchange interactions. <i>Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya</i> , 2015 , 41, 487-495	1.6	11
85	Mononuclear Cobalt and Iron o-Quinone Complexes with Tetradentate N-Donor Bases: Structures and Properties. <i>Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya</i> , 2020 , 46, 193-213	1.6	11
84	The First Series of Heterometallic Ln(III)-V(IV) Complexes Based on Substituted Malonic Acid Anions: Synthesis, Structure and Magnetic Properties. <i>European Journal of Inorganic Chemistry</i> , 2018 , 2018, 5075-5090	2.3	11
83	Theoretical modeling of photocontrolled spin crossover in Fe(II) phenanthroline complexes. <i>Doklady Chemistry</i> , 2015 , 460, 5-9	0.8	10
82	Binuclear Di-o-Quinone Cobalt Complexes with the Acene Linker: Quantum Chemical Study of the Structures and Magnetic Properties. <i>Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya</i> , 2019 , 45, 411-419	1.6	10
81	Quantum chemical modeling of valence tautomeric adducts of $Co(II)$ bischelates with pyrene-4,5-diimines. <i>Russian Chemical Bulletin</i> , 2017 , 66, 208-221	1.7	10
80	Molecular Structure and Photoluminescence Behavior of the Zn(II) Carboxylate Complex with Pyrazino[2,3-f][1,10]phenanthroline. <i>Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya</i> , 2020 , 46, 260-267	1.6	9
79	Easily electroreducible halogen-free germanium complexes with biologically active pyridines. <i>Inorganica Chimica Acta</i> , 2019 , 495, 119007	2.7	9
78	Spin crossover in monoadducts of Co(Salen) with pyridine and imidazole: a quantum chemical study. <i>Structural Chemistry</i> , 2014 , 25, 1865-1871	1.8	9
77	DFT Computational Design of a Ligand-Driven Light-Induced Mechanism for Spin-State Switching. <i>European Journal of Inorganic Chemistry</i> , 2013 , 2013, 4203-4219	2.3	9

76	Electronic structure and magnetic properties of the triangular nanographenes with radical substituents: a DFT study. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 1288-1298	3.6	9
75	The structurally variable network of spin couplings and migrating paramagnetic centers in binuclear o-quinone Co complexes with biradical acene linkers: a computational DFT study. <i>Dalton Transactions</i> , 2018 , 47, 15948-15956	4.3	9
74	Valence-tautomeric adducts of Co(II) diketonates based on annelated di-o-quinones: Computer simulation. <i>Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya</i> , 2017 , 43, 197-205	1.6	8
73	Rational design of potential spin qubits manipulated by the valence tautomerism mechanism: quantum-chemical modeling of the trinuclear transition metal complexes with bischelate linkers. <i>New Journal of Chemistry</i> , 2017 , 41, 6497-6503	3.6	8
72	Light-controlled spin-state-switching rearrangements of transition metal complexes with photochromic ligands. <i>Pure and Applied Chemistry</i> , 2017 , 89, 985-1005	2.1	8
71	Dispersion interactions in oligomerization of metal diketonates: a DFT evaluation. <i>Chemical Papers</i> , 2018 , 72, 829-839	1.9	8
70	Quantum chemical study of binuclear adducts of cobalt azomethine complexes with pyrene-4,5,9,10-tetraimine. <i>Russian Chemical Bulletin</i> , 2017 , 66, 1543-1549	1.7	8
69	Computational design of magnetically active trinuclear heterometallic complexes on the basis of 1,3,5-triazapentadiene ligands. <i>Chemical Papers</i> , 2018 , 72, 821-828	1.9	7
68	Dual magnetic behavior of Co(II) and Fe(II) bis(chelate) adducts with Di-o-diiminobenzoquinone: Quantum chemical modeling. <i>Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya</i> , 2017 , 43, 718-726	1.6	7
67	Quantum-chemical modeling of metal coordination compounds with photoswitchable magnetic properties controlled by ligand rearrangements. <i>Theoretical and Experimental Chemistry</i> , 2011 , 46, 363-370	1.3	7
66	Computational modeling of spin crossover phenomenon in adducts of iron bis-chelates with o-diiminobenzoquinones. <i>Russian Chemical Bulletin</i> , 2016 , 65, 1464-1472	1.7	7
65	Structure and magnetic properties of di-o-semiquinone complexes of alkali metals with a bischelate linker: a quantum chemical study. <i>Mendeleev Communications</i> , 2016 , 26, 423-425	1.9	7
64	Computational insight into magnetic behaviour of cobalt tris(2-pyridylmethyl)amine complexes with dioxolenes incorporating stable radicals. <i>Chemical Physics Letters</i> , 2021 , 762, 138128	2.5	7
63	Bimetallic coordination compounds with 5,6-bis(salicylideneimino)-1,10-phenanthroline: quantum chemical study of spin transitions. <i>Russian Chemical Bulletin</i> , 2019 , 68, 725-731	1.7	6
62	Computational modeling of LD LISC and LIESST rearrangements of a Fe(II) complex with phenanthroline modified by photochromic chromene. <i>Doklady Chemistry</i> , 2016 , 468, 152-155	0.8	6
61	Reaction of 1-(oxiran-2-ylmethyl)-1H-indole-3-carboxaldehyde with amines. <i>Mendeleev Communications</i> , 2011 , 21, 231-233	1.9	6
60	o-Quinone phenalenyl derivatives as expedient ligands for the design of magnetically active metal complexes: A computational study. <i>Chemical Physics Letters</i> , 2020 , 740, 137073	2.5	6
59	Ambidentate and redox-properties of 4,7-phenanthroline-5,6-dione in cobalt complexes: a quantum chemical study. <i>Russian Chemical Bulletin</i> , 2018 , 67, 1182-1189	1.7	6

58	Electronic Structure and Magnetic Properties of o-Benzoquinone Iron Complexes with Tetraazamacrocyclic Ligands. <i>Journal of Structural Chemistry</i> , 2019 , 60, 1219-1225	0.9	5
57	Rational Design of Electronically Labile Dinuclear Fe and Co complexes with 1,10-Phenanthroline-5,6-Diimine: A DFT study. <i>Journal of Computational Chemistry</i> , 2019 , 40, 2284-2292	3.5	5
56	Computer Simulation of the Structure and Magnetic Properties of Cobalt Complexes with N-Substituted Pyridinophanes and Radical-Functionalized o-Benzoquinones. <i>Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya</i> , 2020 , 46, 371-378	1.6	5
55	Magnetic Properties of the Dicationic Iron o-Quinone Complexes with the Pyridinophane Ligands: A Quantum Chemical Study. <i>Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya</i> , 2019 , 45, 675-679	1.6	5
54	Computational modeling of chelating properties of quinoline spiropyrans. <i>Doklady Chemistry</i> , 2013 , 453, 263-267	0.8	5
53	Adducts of tetracoordinate cobalt(II) complexes and 1-(pyridin-2-yl)methanimine: Computational search for valence tautomeric systems. <i>Russian Journal of General Chemistry</i> , 2016 , 86, 859-864	0.7	5
52	Magnetic Properties of Adducts of Trinuclear Heterometallic Complexes with Acetonitrile: Quantum Chemical Study. <i>Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya</i> , 2018 , 44, 483-488	1.6	5
51	Trinuclear adducts of cobalt diketonates based on di-o-quinone with a bis(chelate) linker: Computational search for spin qubits. <i>Doklady Chemistry</i> , 2017 , 473, 57-62	0.8	4
50	Quantum chemical study of the adducts of azomethine cobalt complexes with acenaphthene-1,2-diimines. <i>Russian Journal of General Chemistry</i> , 2017 , 87, 98-106	0.7	4
49	Quantum chemical study of photomagnetic properties of Ni(II) monochelates with chromenes. <i>Doklady Chemistry</i> , 2015 , 462, 118-122	0.8	4
48	Computational modeling of structure and magnetic properties of dinuclear di-o-benzoquinone iron complexes with linear polycyclic linkers. <i>Russian Chemical Bulletin</i> , 2020 , 69, 203-211	1.7	4
47	Reactions of [(dpp-Bian)Ln(dme) 2] (Ln = Eu, Yb) with some oxidants. <i>Inorganic Chemistry Communication</i> , 2018 , 92, 40-45	3.1	4
46	Computational modeling of the dinuclear metal complexes with di-o-quinones comprising paramagnetic acene linker groups. <i>Computational and Theoretical Chemistry</i> , 2018 , 1138, 163-167	2	4
45	Heterospin magnetically active bimetallic Fe and Co complexes of aldiminato-functionalized catechol: a DFT study. <i>Structural Chemistry</i> , 2020 , 31, 37-46	1.8	4
44	Electronic Lability of Quinonoid-Bridged Dinuclear 3 d-Metal Complexes with Tetradentate N-Donor Bases. <i>European Journal of Inorganic Chemistry</i> , 2021 , 2021, 2684-2695	2.3	4
43	Computational modeling of cobalt diketonate adducts with o-benzoquinones incorporating organosilicon radicals. <i>Russian Chemical Bulletin</i> , 2021 , 70, 309-315	1.7	4
42	Assessing the Viability of Extended Nonmetal Atom Chains in MnF _{4n+2} (M=S and Se). <i>Angewandte Chemie</i> , 2015 , 127, 1496-1500	3.6	3
41	Adducts of manganese diketonates with redox-active ligands: Computational modeling of valence tautomeric systems. <i>Computational and Theoretical Chemistry</i> , 2015 , 1070, 132-142	2	3

40	Erbium Mixed-Ligand β -Diketiminato-Diamido Complex: Unusual Structure of Diamide Ligand. <i>ChemistrySelect</i> , 2018 , 3, 1262-1267	1.8	3
39	Computer simulation of the isomerization mechanism and spectral characteristics of spiro[1,3,4]oxadiazines. <i>Russian Chemical Bulletin</i> , 2016 , 65, 40-46	1.7	3
38	Features of the Molecular Structure and Luminescence of Rare-Earth Metal Complexes with Perfluorinated (Benzothiazolyl)phenolate Ligands. <i>Molecules</i> , 2019 , 24,	4.8	3
37	Compounds of potassium and tin(II) with diiminopyridine ligands: EPR spectroscopy and theoretical study. <i>Russian Journal of General Chemistry</i> , 2017 , 87, 2582-2588	0.7	3
36	Quantum chemical study of pyridine addition to Ni(II) β -diketonate complexes. <i>Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya</i> , 2010 , 36, 597-604	1.6	3
35	Barium(II)Chromium(III) Coordination Polymers Based on Dimethylmalonate Anions: Synthesis, Crystal Structure, Magnetic Properties, and EPR Spectra. <i>European Journal of Inorganic Chemistry</i> , 2020 , 2020, 4116-4126	2.3	3
34	Supramolecular D π A-layered structures based on germanium complexes with 2,3-dihydroxynaphthalene and β -s-bidentate ligands.. <i>RSC Advances</i> , 2021 , 11, 21527-21536	3.7	3
33	Quantum-chemical study of spiro[indoline-2,2'-[2H]-chromenes] and their complexes with a silver cluster. <i>Doklady Chemistry</i> , 2017 , 474, 121-125	0.8	2
32	Dinuclear adducts of di-o-iminoquinone ligands with Co diketonates: computational insights into two-step valence tautomeric rearrangements. <i>Journal of Molecular Modeling</i> , 2017 , 23, 307	2	2
31	Quantum-chemical study of (Z)-6,8-di-tert-butyl-N-(4-methoxyphenyl)-3-((4-methoxyphenyl)imino)-3H-phenoxazine-2-amine complexation with cobalt bis(chelate)s. <i>Doklady Chemistry</i> , 2017 , 476, 215-218	0.8	2
30	Rare example of structurally characterized mononuclear N-heterocyclic carbene containing zinc carboxylate. <i>Mendeleev Communications</i> , 2020 , 30, 293-295	1.9	2
29	Computational Assessment of an Elusive Aromatic NP Molecule. <i>ACS Omega</i> , 2018 , 3, 286-291	3.9	2
28	Magnetic Properties of Acenes and Their o-Quinone Derivatives: Computer Simulation. <i>Doklady Chemistry</i> , 2018 , 478, 21-25	0.8	2
27	Quantum-chemical study of manganese(II) diketonate adducts with diimine. <i>Doklady Chemistry</i> , 2015 , 463, 211-214	0.8	2
26	Electronic structure and magnetic properties of pyridinophane complexes of iron with radical-bearing catecholates: a quantum chemical study. <i>Russian Chemical Bulletin</i> , 2021 , 70, 811-817	1.7	2
25	Acene-Linked Zethrenes and Bisphenalenyls: A DFT Search for Organic Tetraradicals. <i>Journal of Physical Chemistry A</i> , 2021 , 125, 6562-6570	2.8	2
24	Quantum-Chemical Study of Spin Transitions in Bimetallic Fe β M Complexes (M = Co, Ni, Cu, Zn) with the 1,10-Phenanthroline Linker. <i>Doklady Chemistry</i> , 2018 , 482, 181-184	0.8	2
23	Theoretical Modeling of the Structure of N-[2-[(Hydroxyalkylimino)Methyl]Phenyl]-4-Methylbenzene-Sulfamides and Their Mono- and Binuclear Copper(II) Complexes. <i>Journal of Structural Chemistry</i> , 2019 , 60, 365-372	0.9	1

22	Tetrahalocatecholates Rare Earth Complexes: Dinuclear Motifs with Intramolecular RE \square XC(Ar) Interactions. <i>Crystal Growth and Design</i> , 2020 , 20, 3396-3405	3.5	1
21	Frontispiece: Usefulness of the \square Aromaticity and \square Antiaromaticity Concepts for Clusters and Solid-State Compounds. <i>Chemistry - A European Journal</i> , 2018 , 24,	4.8	1
20	Dinuclear Cobalt and Iron Complexes with an Azomethine Derivative of 1,10-Phenanthroline: A Quantum-Chemical Study. <i>Doklady Chemistry</i> , 2019 , 487, 168-172	0.8	1
19	Computational modeling of mixed-ligand cobalt diketonate complexes with pyrene-4,5,9,10-tetraimine. <i>Doklady Chemistry</i> , 2017 , 475, 168-172	0.8	1
18	Quantum-Chemical Study of Cobalt Complexes with o-Quinones Modified with Silicon Triangulene Derivatives. <i>Doklady Chemistry</i> , 2020 , 494, 149-154	0.8	1
17	Electronic Structure and Magnetic Properties of Mixed-Ligand Cobalt Complexes Containing Organogermanium Triangulenes. <i>Russian Journal of General Chemistry</i> , 2020 , 90, 2312-2322	0.7	1
16	Quantum Chemical Study of the Structures and Stability of Copper(II) Bis(diketonate) Dimers. <i>Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya</i> , 2021 , 47, 174-179	1.6	1
15	Small anion-assisted electrochemical potential splitting in a new series of bistriarylamine derivatives: organic mixed valency across a urea bridge and zwitterionization. <i>Beilstein Journal of Organic Chemistry</i> , 2019 , 15, 2277-2286	2.5	1
14	Polynuclear architectures with cadmium and lithium ions based on the {Li ₂ Cd ₂ (O ₂ CCMe ₃) ₆ } fragment. <i>Journal of Solid State Chemistry</i> , 2021 , 294, 121842	3.3	1
13	Computational modeling of mixed-ligand cobalt complexes with o-quinone derivative of corannulene. <i>Russian Chemical Bulletin</i> , 2018 , 67, 1978-1984	1.7	1
12	DFT study of Raman scattering spectra of complexes of spiropyran with the silver cluster. <i>Russian Chemical Bulletin</i> , 2018 , 67, 972-979	1.7	1
11	Quantum Chemical Study of Spin Transitions in the Bimetallic Fe/Co Complexes with the Bis(catecholate) Bridging Ligand. <i>Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya</i> , 2021 , 47, 601-609	1.6	1
10	O,N-Heterocyclic germylenes as efficient catalysts for hydroboration and cyanosilylation of benzaldehyde. <i>New Journal of Chemistry</i> ,	3.6	1
9	Photochromic Properties and Surface Enhanced Raman Scattering Spectra of Indoline Spiropyran in Silver-Based Nanocomposite Films. <i>Optics and Spectroscopy (English Translation of Optika i Spektroskopiya)</i> , 2018 , 124, 814-820	0.7	0
8	DFT computational insight into the mechanism of the monomer \square trimer isomerism of Ni(II) bis-acetylacetonate. <i>Inorganica Chimica Acta</i> , 2021 , 517, 120183	2.7	0
7	Heterospin iron complexes with dioxolenes functionalized with stable radicals: quantum chemical study. <i>Russian Chemical Bulletin</i> , 2021 , 70, 2315-2323	1.7	0
6	o-Benzoquinone Cobalt Complexes Bearing Organosilicon Radicals: Quantum-Chemical Study. <i>Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya</i> , 2022 , 48, 233-241	1.6	0
5	Computer Design of Fe-M-Fe (M = Co, Ni, Cu, Zn) Complexes with Bis-Salicylaldiminate Linker Functionalized with 1,10-Phenanthroline. <i>Russian Journal of General Chemistry</i> , 2019 , 89, 451-458	0.7	

- 4 Quantum-Chemical Modeling of B32 Complexes with Nitrogen: Endo or Exo?. *Russian Journal of Inorganic Chemistry*, **2018**, 63, 902-905 1.5
- 3 Spin-State-Switching Rearrangements of Bis(dioxolene)-Bridged CrCo Complexes: A DFT Study. *European Journal of Inorganic Chemistry*, **2021**, 2021, 4113 2.3
- 2 Computational search for redox isomerism in Ge and Sn bis-chelates with β -diimine ligands. *Mendeleev Communications*, **2022**, 32, 49-51 1.9
- 1 A computational search for spin-crossover in bis(catecholate) diiron complexes. *Computational and Theoretical Chemistry*, **2022**, 1211, 113693 2