## Christophe Chassenieux

## List of Publications by Citations

 $\textbf{Source:} \ https://exaly.com/author-pdf/4243836/christophe-chassenieux-publications-by-citations.pdf$ 

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.

122 papers 3,606 citations

33 h-index 54 g-index

130 ext. papers

3,977 ext. citations

6.3 avg, IF

5.61 L-index

#	Paper	IF	Citations
122	Dynamic polymeric micelles versus frozen nanoparticles formed by block copolymers. <i>Soft Matter</i> , <b>2010</b> , 6, 3111	3.6	227
121	Rheology of associative polymer solutions. <i>Current Opinion in Colloid and Interface Science</i> , <b>2011</b> , 16, 18-26	7.6	185
120	The analysis of solution self-assembled polymeric nanomaterials. <i>Chemical Society Reviews</i> , <b>2014</b> , 43, 2412-25	58.5	133
119	Structural and Rheological Study of a Bis-urea Based Reversible Polymer in an Apolar Solvent Langmuir, <b>2002</b> , 18, 7218-7222	4	126
118	Association of Hydrophobically End-Capped Poly(ethylene oxide). <i>Macromolecules</i> , <b>1997</b> , 30, 4952-4958	5.5	119
117	Study of Interaction of Poly(ethylene imine) with Sodium Dodecyl Sulfate in Aqueous Solution by Light Scattering, Conductometry, NMR, and Microcalorimetry. <i>Langmuir</i> , <b>2000</b> , 16, 4495-4510	4	109
116	Characterization of aqueous micellar solutions of amphiphilic block copolymers of poly(acrylic acid) and polystyrene prepared via ATRP. Toward the control of the number of particles in emulsion polymerization. <i>Polymer</i> , <b>2003</b> , 44, 509-518	3.9	91
115	Structure and gelation mechanism of silk hydrogels. <i>Physical Chemistry Chemical Physics</i> , <b>2010</b> , 12, 3834	-4.46	79
114	Synthesis by RAFT of Amphiphilic Block and Comblike Cationic Copolymers and Their Use in Emulsion Polymerization for the Electrosteric Stabilization of Latexes. <i>Macromolecules</i> , <b>2005</b> , 38, 280-28	8 <del>§</del> .5	77
113	Amphiphilic gradient poly(styrene-co-acrylic acid) copolymer prepared via nitroxide-mediated solution polymerization. Synthesis, characterization in aqueous solution and evaluation as emulsion polymerization stabilizer. <i>Polymer</i> , <b>2006</b> , 47, 1935-1945	3.9	77
112	Recent trends in pH/thermo-responsive self-assembling hydrogels: from polyions to peptide-based polymeric gelators. <i>Soft Matter</i> , <b>2016</b> , 12, 1344-59	3.6	75
111	Controlling the Dynamics of Self-Assembled Triblock Copolymer Networks via the pH. <i>Macromolecules</i> , <b>2011</b> , 44, 4487-4495	5.5	73
110	Stabilization of Water-in-Water Emulsions by Polysaccharide-Coated Protein Particles. <i>Langmuir</i> , <b>2016</b> , 32, 1227-32	4	66
109	Synthesis and Structural Characterization of Neutral and Cationic Alkylaluminum Complexes Based on Bidentate Aminophenolate Ligands. <i>Organometallics</i> , <b>2003</b> , 22, 3732-3741	3.8	65
108	Chain Stopper-Assisted Characterization of Supramolecular Polymers. <i>Macromolecules</i> , <b>2005</b> , 38, 5283-5	53857	64
107	Amphiphilic Diblock Copolymers with a Moderately Hydrophobic Block: Toward Dynamic Micelles. <i>Macromolecules</i> , <b>2010</b> , 43, 2667-2671	5.5	61
106	Stable Dispersions of Highly Anisotropic Nanoparticles Formed by Cocrystallization of Enantiomeric Diblock Copolymers. <i>Macromolecules</i> , <b>2007</b> , 40, 4037-4042	5.5	59

## (2019-2007)

105	New covalent bonded polymerBalcium silicate hydrate composites. <i>Journal of Materials Chemistry</i> , <b>2007</b> , 17, 913-922		50	
104	Polymeric micelles encapsulating photosensitizer: structure/photodynamic therapy efficiency relation. <i>Biomacromolecules</i> , <b>2014</b> , 15, 1443-55	6.9	49	
103	In situ glyco-nanostructure formulation via photo-polymerization induced self-assembly. <i>Polymer Chemistry</i> , <b>2018</b> , 9, 2868-2872	4.9	43	
102	Optical Analysis of Beads Encoded with Quantum Dots Coated with a Cationic Polymer. <i>Advanced Materials</i> , <b>2007</b> , 19, 4420-4425	24	43	
101	Calcium-induced gelation of whey protein aggregates: Kinetics, structure and rheological properties. <i>Food Hydrocolloids</i> , <b>2018</b> , 79, 145-157	10.6	38	
100	Synthesis of Amphiphilic Poly(acrylic acid)-b-poly(n-butyl acrylate-co-acrylic acid) Block Copolymers with Various Microstructures via RAFT Polymerization in Water/Ethanol Heterogeneous Media. <i>Macromolecules</i> , <b>2014</b> , 47, 51-60	5.5	38	
99	Heat-induced gelation of plant globulins. Current Opinion in Food Science, 2019, 27, 18-22	9.8	37	
98	Synergistic effects of mixed salt on the gelation of Etarrageenan. <i>Carbohydrate Polymers</i> , <b>2014</b> , 112, 10-5	10.3	37	
97	Ionization of amphiphilic acidic block copolymers. <i>Journal of Physical Chemistry B</i> , <b>2012</b> , 116, 7560-5	3.4	37	
96	Rheological characterisation of bis-urea based viscoelastic solutions in an apolar solvent. <i>Journal of Colloid and Interface Science</i> , <b>2007</b> , 310, 624-9	9.3	37	
95	Neutral Polymeric Surfactants Derived from Dextran: A Study of Their Aqueous Solution Behavior. <i>Macromolecular Chemistry and Physics</i> , <b>2005</b> , 206, 2038-2046	2.6	37	
94	The effect of adding NaCl on thermal aggregation and gelation of soy protein isolate. <i>Food Hydrocolloids</i> , <b>2017</b> , 70, 88-95	10.6	34	
93	The effect of the pH on thermal aggregation and gelation of soy proteins. <i>Food Hydrocolloids</i> , <b>2017</b> , 66, 27-36	10.6	34	
92	The Copolymer Blending Method: A New Approach for Targeted Assembly of Micellar Nanoparticles. <i>Macromolecules</i> , <b>2015</b> , 48, 6516-6522	5.5	34	
91	Thermoresponsive Hydrogels Based on Telechelic Polyelectrolytes: From Dynamic to <b>E</b> rozen Networks. <i>Macromolecules</i> , <b>2018</b> , 51, 2169-2179	5.5	34	
90	Acid-induced gelation of whey protein aggregates: Kinetics, gel structure and rheological properties. <i>Food Hydrocolloids</i> , <b>2018</b> , 81, 263-272	10.6	33	
89	Structure of pH sensitive self-assembled amphiphilic di- and triblock copolyelectrolytes: micelles, aggregates and transient networks. <i>Physical Chemistry Chemical Physics</i> , <b>2013</b> , 15, 3955-64	3.6	33	
88	Towards more realistic reference microplastics and nanoplastics: preparation of polyethylene micro/nanoparticles with a biosurfactant. <i>Environmental Science: Nano</i> , <b>2019</b> , 6, 315-324	7.1	32	

87	Charge Dependent Dynamics of Transient Networks and Hydrogels Formed by Self-Assembled pH-Sensitive Triblock Copolyelectrolytes. <i>Macromolecules</i> , <b>2014</b> , 47, 2439-2444	5.5	32
86	Thermal aggregation and gelation of soy globulin at neutral pH. Food Hydrocolloids, 2016, 61, 740-746	10.6	32
85	Effect of the pH and NaCl on the microstructure and rheology of mixtures of whey protein isolate and casein micelles upon heating. <i>Food Hydrocolloids</i> , <b>2017</b> , 70, 114-122	10.6	31
84	Structure of self-assembled native soy globulin in aqueous solution as a function of the concentration and the pH. <i>Food Hydrocolloids</i> , <b>2016</b> , 56, 417-424	10.6	30
83	Tuning the aggregation behavior of pH-responsive micelles by copolymerization. <i>Polymer Chemistry</i> , <b>2015</b> , 6, 2761-2768	4.9	29
82	Structural characterization of amphiphilic homopolymer micelles using light scattering, SANS, and cryo-TEM. <i>Macromolecules</i> , <b>2013</b> , 46, 6319-6325	5.5	29
81	Miniemulsion polymerization of styrene using well-defined cationic amphiphilic comblike copolymers as the sole stabilizer. <i>Colloid and Polymer Science</i> , <b>2005</b> , 284, 142-150	2.4	29
80	Multiresponsive Hydrogels Formed by Interpenetrated Self-Assembled Polymer Networks. <i>Macromolecules</i> , <b>2014</b> , 47, 8386-8393	5.5	28
79	Influence of Preparation Conditions on the Self-Assembly by Stereocomplexation of Polylactide Containing Diblock Copolymers. <i>Macromolecules</i> , <b>2004</b> , 37, 3401-3406	5.5	28
78	Control of the Reversible Shear-Induced Gelation of Amphiphilic Polymers through Their Chemical Structure. <i>Macromolecules</i> , <b>2005</b> , 38, 527-536	5.5	27
77	Blending block copolymer micelles in solution; Obstacles of blending. <i>Polymer Chemistry</i> , <b>2016</b> , 7, 1577-	-14583	26
76	1H NMR Study of the Association of Hydrophobically End-Capped Poly(ethylene oxide). <i>Macromolecules</i> , <b>1998</b> , 31, 4035-4037	5.5	26
75	The effect of aggregation into fractals or microgels on the charge density and the isoionic point of globular proteins. <i>Food Hydrocolloids</i> , <b>2016</b> , 60, 470-475	10.6	25
74	Heat-induced gelation of aqueous micellar casein suspensions as affected by globular protein addition. <i>Food Hydrocolloids</i> , <b>2018</b> , 82, 258-267	10.6	24
73	Asymmetrical flow field-flow fractionation with multi-angle light scattering and quasi-elastic light scattering for characterization of polymersomes: comparison with classical techniques. <i>Analytical and Bioanalytical Chemistry</i> , <b>2014</b> , 406, 7841-53	4.4	24
<del>72</del>	Dynamic Properties of the Transient Network formed by Telechelic Ionomers Studied by Dynamic Light Scattering and Dynamic Mechanical Analysis. <i>Macromolecules</i> , <b>1995</b> , 28, 8504-8510	5.5	24
71	Polymersomes from Amphiphilic Glycopolymers Containing Polymeric Liquid Crystal Grafts. <i>ACS Macro Letters</i> , <b>2015</b> , 4, 1119-1122	6.6	23
70	Heat-set emulsion gels of casein micelles in mixtures with whey protein isolate. <i>Food Hydrocolloids</i> , <b>2017</b> , 73, 213-221	10.6	23

## (2005-2010)

69	Abrupt Shear Thickening of Aqueous Solutions of Hydrophobically Modified Poly(N,N?-dimethylacrylamide-co-acrylic acid). <i>Macromolecules</i> , <b>2010</b> , 43, 10055-10063	5.5	23
68	Temperature study of [N(C3H7)4]2Cd2Cl6 by thermal analysis, Raman scattering, and X-ray powder diffraction: Evidence of phase transitions. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2011</b> , 390, 2987-2994	3.3	23
67	Shear-induced gelation of associative polyelectrolytes. <i>Polymer</i> , <b>2010</b> , 51, 1964-1971	3.9	23
66	Complexation between a Hydrophobically Modified Chitosan and Cyclodextrin Homodimers Singly or Doubly Connected through Their Primary Sides: Effects of Their Molecular Architecture on the Polymer Properties in Solution. <i>Macromolecules</i> , <b>2004</b> , 37, 4635-4642	5.5	23
65	Formation of Nanoparticles of Polylactide-Containing Diblock Copolymers: Is Stereocomplexation the Driving Force?. <i>Macromolecules</i> , <b>2002</b> , 35, 1484-1486	5.5	23
64	Exploiting Salt Induced Microphase Separation To Form Soy Protein Microcapsules or Microgels in Aqueous Solution. <i>Biomacromolecules</i> , <b>2017</b> , 18, 2064-2072	6.9	22
63	Heat-induced gelation of mixtures of micellar caseins and plant proteins in aqueous solution. <i>Food Research International</i> , <b>2019</b> , 116, 1135-1143	7	22
62	pH- and Thermoresponsive Self-Assembly of Cationic Triblock Copolymers with Controlled Dynamics. <i>Macromolecules</i> , <b>2017</b> , 50, 416-423	5.5	21
61	Heat-induced and acid-induced gelation of dairy/plant protein dispersions and emulsions. <i>Current Opinion in Food Science</i> , <b>2019</b> , 27, 43-48	9.8	20
60	Progressive Freezing-in of the Junctions in Self-Assembled Triblock Copolymer Hydrogels during Aging. <i>Macromolecules</i> , <b>2012</b> , 45, 1025-1030	5.5	20
59	Transforming frozen self-assemblies of amphiphilic block copolymers into dynamic pH-sensitive micelles. <i>Macromolecular Rapid Communications</i> , <b>2012</b> , 33, 753-9	4.8	19
58	Hydrophobically Modified Poly(acrylic acid) Using 3-Pentadecylcyclohexylamine: Synthesis and Rheology. <i>Macromolecular Chemistry and Physics</i> , <b>2005</b> , 206, 464-472	2.6	19
57	Association of Telechelic Ionomers in Apolar Solvents. <i>Macromolecular Rapid Communications</i> , <b>2001</b> , 22, 1216	4.8	19
56	Amphiphilic copolymers of styrene with a surfactant-like comonomer: gel formation in aqueous solution. <i>Journal of Molecular Structure</i> , <b>2000</b> , 554, 99-108	3.4	19
55	Heat-induced gelation of micellar casein/plant protein oil-in-water emulsions. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2019</b> , 569, 85-92	5.1	18
54	Kinetics of NaCl induced gelation of soy protein aggregates: Effects of temperature, aggregate size, and protein concentration. <i>Food Hydrocolloids</i> , <b>2018</b> , 77, 66-74	10.6	18
53	Elongation of Telechelic Ionomers under Shear: a Rheological and Rheo-optical Study. <i>Macromolecules</i> , <b>2000</b> , 33, 1796-1800	5.5	18
52	Synthesis and swelling behaviour of hydrophobically modified responsive polymers in dilute aqueous solutions. <i>Polymer</i> , <b>2005</b> , 46, 12190-12199	3.9	17

51	Structure and flow of dense suspensions of protein fractal aggregates in comparison with microgels. <i>Soft Matter</i> , <b>2016</b> , 12, 2785-93	3.6	16
50	Specific effect of calcium ions on thermal gelation of aqueous micellar casein suspensions. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2018</b> , 163, 218-224	6	16
49	Transient and quasi-permanent networks in xyloglucan solutions. <i>Carbohydrate Polymers</i> , <b>2015</b> , 129, 216-23	10.3	15
48	Heat-induced gelation of mixtures of whey protein isolate and sodium caseinate between pH 5.8 and pH 6.6. <i>Food Hydrocolloids</i> , <b>2016</b> , 61, 433-441	10.6	14
47	Formation of rodlike silica aggregates directed by adsorbed thermoresponsive polymer chains. <i>Langmuir</i> , <b>2010</b> , 26, 2279-87	4	14
46	Highlighting the Role of the Random Associating Block in the Self-Assembly of Amphiphilic Block <b>R</b> andom Copolymers. <i>Macromolecules</i> , <b>2015</b> , 48, 7613-7619	5.5	13
45	Mechanism of the spontaneous formation of plant protein microcapsules in aqueous solution. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2019</b> , 562, 213-219	5.1	13
44	pH and ionic strength responsive core-shell protein microgels fabricated via simple coacervation of soy globulins. <i>Food Hydrocolloids</i> , <b>2020</b> , 105, 105853	10.6	13
43	Fast and effective quantum-dots encapsulation and protection in PEO based photo-cross-linked micelles. <i>Journal of Colloid and Interface Science</i> , <b>2016</b> , 476, 222-229	9.3	12
42	Telechelic ionomers studied by light scattering and dynamic mechanical measurements. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>1996</b> , 112, 155-162	5.1	12
41	Inhibition and Promotion of Heat-Induced Gelation of Whey Proteins in the Presence of Calcium by Addition of Sodium Caseinate. <i>Biomacromolecules</i> , <b>2016</b> , 17, 3800-3807	6.9	12
40	Oligomeric and polymeric surfactants for the transfer of luminescent ZnO nanocrystals to water. Journal of Materials Chemistry C, <b>2013</b> , 1, 2158	7.1	11
39	Columnar aggregates of crown ether substituted phthalocyanines perpendicularly anchored on a surface via a selective binding site. <i>Journal of Porphyrins and Phthalocyanines</i> , <b>2002</b> , 06, 563-570	1.8	11
38	Heat-induced gelation of mixtures of casein micelles with whey protein aggregates. <i>Food Hydrocolloids</i> , <b>2019</b> , 92, 198-207	10.6	10
37	Effect of Connectivity on the Structure and the LiquidBolid Transition of Dense Suspensions of Soft Colloids. <i>Macromolecules</i> , <b>2015</b> , 48, 7995-8002	5.5	10
36	Interplay of thermal and covalent gelation of silanized hydroxypropyl methyl cellulose gels. <i>Carbohydrate Polymers</i> , <b>2015</b> , 115, 510-5	10.3	9
35	Evidence for the coexistence of interpenetrating permanent and transient networks of hydroxypropyl methyl cellulose. <i>Biomacromolecules</i> , <b>2014</b> , 15, 311-8	6.9	9
34	pH-Sensitive hydrogels formed by self-assembled amphiphilic triblock copolyelectrolytes. <i>Reactive and Functional Polymers</i> , <b>2013</b> , 73, 965-968	4.6	9

33	pH Induced Desaggregation Of Highly Hydrophilic Amphiphilic Diblock Copolymers <b>2011</b> , 7-16		9
32	Data on the characterization of native soy globulin by SDS-Page, light scattering and titration. <i>Data in Brief</i> , <b>2016</b> , 9, 749-752	1.2	9
31	Interpenetrated Si-HPMC/alginate hydrogels as a potential scaffold for human tissue regeneration. Journal of Materials Science: Materials in Medicine, <b>2016</b> , 27, 99	4.5	9
30	Branched Wormlike Micelles Formed by Self-Assembled Comblike Amphiphilic Copolyelectrolytes. <i>Macromolecules</i> , <b>2015</b> , 48, 7604-7612	5.5	8
29	Mixtures of sodium caseinate and whey protein aggregates: Viscosity and acid- or salt-induced gelation. <i>International Dairy Journal</i> , <b>2018</b> , 86, 110-119	3.5	8
28	Slow dynamics in transient polyelectrolyte hydrogels formed by self-assembly of block copolymers. <i>Physical Review E</i> , <b>2013</b> , 87, 062302	2.4	8
27	Xyloglucan gelation induced by enzymatic degalactosylation; kinetics and the effect of the molar mass. <i>Carbohydrate Polymers</i> , <b>2017</b> , 174, 517-523	10.3	8
26	Viscoelastic Properties of Hydrogels Based on Self-Assembled Multisticker Polymers Grafted with pH-Responsive Grafts. <i>Macromolecules</i> , <b>2017</b> , 50, 8178-8184	5.5	7
25	Viscosity of mixtures of protein aggregates with different sizes and morphologies. <i>Soft Matter</i> , <b>2019</b> , 15, 4682-4688	3.6	7
24	Influence of sodium dodecyl sulfate on the kinetics and control of RAFT/MADIX polymerization of acrylamide. <i>Journal of Polymer Science Part A</i> , <b>2018</b> , 56, 760-765	2.5	7
23	Salt-induced thermal gelation of xyloglucan in aqueous media. <i>Carbohydrate Polymers</i> , <b>2019</b> , 223, 11508	<b>33</b> 0.3	7
22	One and two dimensional self-assembly of comb-like amphiphilic copolyelectrolytes in aqueous solution. <i>Soft Matter</i> , <b>2013</b> , 9, 8931	3.6	7
21	Micellar RAFT/MADIX Polymerization. ACS Macro Letters, 2017, 6, 1342-1346	6.6	7
20	Effect of Self-Assembly on Phase Separation of Di- and Triblock Copolymers Mixed with Homopolymers in Aqueous Solution. <i>Macromolecules</i> , <b>2016</b> , 49, 3427-3432	5.5	7
19	pH-Controlled Rheological Properties of Mixed Amphiphilic Triblock Copolymers. <i>Macromolecules</i> , <b>2016</b> , 49, 7469-7477	5.5	6
18	The effect of the competition for calcium ions between Ecarrageenan and Hactoglobulin on the rheology and the structure in mixed gels. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2015</b> , 475, 9-18	5.1	5
17	Structure and rheology during catastrophic phase inversion of Pickering emulsions stabilized with fumed silica particles. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2020</b> , 593, 1246.	3ð <sup>.1</sup>	5
16	Formation of porous hydrogels by self-assembly of photo-cross-linkable triblock copolymers in the presence of homopolymers. <i>Polymer</i> , <b>2016</b> , 106, 152-158	3.9	5

15	The effect of protein aggregate morphology on phase separation in mixtures with polysaccharides. Journal of Physics Condensed Matter, <b>2014</b> , 26, 464102	1.8	5
14	Biopolymers: State of the Art, New Challenges, and Opportunities <b>2013</b> , 1-6		5
13	Effect of the hydrophobicity of fumed silica particles and the nature of oil on the structure and rheological behavior of Pickering emulsions. <i>Journal of Dispersion Science and Technology</i> , <b>2019</b> , 40, 110	69 <sup>-</sup> -∳17	8 <sup>5</sup>
12	Structural, Viscoelastic, and Electrochemical Characteristics of Self-Assembled Amphiphilic Comblike Copolymers in Aqueous Solutions. <i>Journal of Physical Chemistry B</i> , <b>2017</b> , 121, 867-875	3.4	3
11	Structure of a self-assembled network made of polymeric worm-like micelles. <i>Polymer Bulletin</i> , <b>2016</b> , 73, 2689-2705	2.4	3
10	Polymer Probe Diffusion in Globular Protein Gels and Aggregate Suspensions. <i>Journal of Physical Chemistry B</i> , <b>2018</b> , 122, 8075-8081	3.4	3
9	Heat-induced gelation of casein micelles. Food Hydrocolloids, 2021, 118, 106755	10.6	3
8	Electrochemical characterization of viscoelastic solutions of supramolecular polymers in phosphonium-based ionic liquids. <i>Journal of Electroanalytical Chemistry</i> , <b>2015</b> , 744, 101-109	4.1	2
7	Aggregation behaviour of monosulfonated telechelic ionomers. <i>Polymer International</i> , <b>2000</b> , 49, 561-56	563.3	2
6	Rheology <b>2012</b> ,		1
5	Novel green strategy to improve the hydrophobicity of cellulose nanocrystals and the interfacial elasticity of Pickering emulsions. <i>Cellulose</i> , <b>2021</b> , 28, 6201	5.5	1
4	Dynamic Mechanical Properties of Networks of Wormlike Micelles Formed by Self-Assembled Comblike Amphiphilic Copolyelectrolytes. <i>Macromolecules</i> , <b>2016</b> , 49, 7045-7053	5.5	1
3	Gelation of whey protein fractal aggregates induced by the interplay between added HCl, CaCl2 and NaCl. <i>International Dairy Journal</i> , <b>2020</b> , 111, 104824	3.5	0
2	Synthesis and self-assembly of a penta[60]fullerene bearing benzo[]perylenetriimide units <i>RSC Advances</i> , <b>2021</b> , 11, 6002-6007	3.7	
1	Rheology and structure of Pickering emulsions undergoing transitional phase inversion using a mixture of hydrophilic and hydrophobic silica particles. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> <b>2022</b> 644, 128801	5.1	