Gleb E. Yakubov

List of Publications by Year
in descending order

#	Article	IF	Citations
1	How hydrocolloids can control the viscoelastic properties of acid-swollen collagen pastes. Food Hydrocolloids, 2022, 126, 107486.	5.6	5
2	Instrumental characterization of xanthan gum and scleroglucan solutions: Comparison of rotational rheometry, capillary breakup extensional rheometry and soft-contact tribology. Food Hydrocolloids, 2022, 130, 107681.	5.6	3
3	Flavour compounds affect protein structure: The effect of methyl anthranilate on bovine serum albumin conformation. Food Chemistry, 2022, 388, 133013.	4.2	8
4	Dynamic Tribology Protocol (DTP): Response of salivary pellicle to dairy protein interactions validated against sensory perception. Food Hydrocolloids, 2021, 113, 106478.	5.6	20
5	Viscoelasticity of non-colloidal hydrogel particle suspensions at the liquidâ€“solid transition. Soft Matter, 2021, 17, 5073-5083.	1.2	6
6	Development of a separated-dough method and flour/starch replacement in gluten free crackers by cellulose and fibrillated cellulose. Food and Function, 2021, 12, 8425-8439.	2.1	2
7	Depletion of HP1Î± alters the mechanical properties of MCF7 nuclei. Biophysical Journal, 2021, 120, 2631-2643.	0.2	6
8	Heterodyne Brillouin microscopy for biomechanical imaging. Biomedical Optics Express, 2021, 12, 6259.	1.5	4
9	Rheology, microstructure and diffusion in soft gelatin nanocomposites packed with anionic nanogels. Food Structure, 2021, 30, 100216.	2.3	2
10	Viscoelastic behaviour of rapid and slow self-healing hydrogels formed by densely branched arabinoxylans from Plantago ovata seed mucilage. Carbohydrate Polymers, 2021, 269, 118318.	5.1	9
11	Creating polysaccharide-protein complexes to control aqueous lubrication. Food Hydrocolloids, 2021, 119, 106826.	5.6	9
12	Tailored nanocellulose-grafted polymer brush applications. Journal of Materials Chemistry A, 2021, 9, 17173-17188.	5.2	18
13	The Mechanosensory Role of Osteocytes and Implications for Bone Health and Disease States. Frontiers in Cell and Developmental Biology, 2021, 9, 770143.	1.8	18
14	The role of saliva in oral processing: Reconsidering the breakdown path paradigm. Journal of Texture Studies, 2020, 51, 67-77.	1.1	40
15	Food biotechnology. Current Opinion in Chemical Engineering, 2020, 30, 53-59.	3.8	3
16	Probing the effect of aroma compounds on the hydrodynamic properties of mucin glycoproteins. European Biophysics Journal, 2020, 49, 799-808.	1.2	7
17	Understanding the lost functionality of ethanol in non-alcoholic beer using sensory evaluation, aroma release and molecular hydrodynamics. Scientific Reports, 2020, 10, 20855.	1.6	12
18	The Effect of Dissolved Gases on the Short-Range Attractive Force between Hydrophobic Surfaces in the Absence of Nanobubble Bridging. Langmuir, 2020, 36, 9987-9992.	1.6	9

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19	Structural Insights into the Mechanism of Heatâ€Set Gel Formation of Polyisocyanopeptide Polymers. Macromolecular Rapid Communications, 2020, 41, e2000304.	2.0	6
20	Policy, toxicology and physicochemical considerations on the inhalation of high concentrations of food flavour. Npj Science of Food, 2020, 4, 15.	2.5	18
21	Wood hemicelluloses exert distinct biomechanical contributions to cellulose fibrillar networks. Nature Communications, 2020, 11, 4692.	5.8	117
22	Investigating the influence of pectin content and structure on its functionality in bio-flocculant extracted from okra. Carbohydrate Polymers, 2020, 241, 116414.	5.1	22
23	Modeling the Impact of Microgravity at the Cellular Level: Implications for Human Disease. Frontiers in Cell and Developmental Biology, 2020, 8, 96.	1.8	69
24	Temperature fractionation, physicochemical and rheological analysis of psyllium seed husk heteroxylan. Food Hydrocolloids, 2020, 104, 105737.	5.6	36
25	Enabling the Rational Design of Low-Fat Snack Foods: Insights from In Vitro Oral Processing. Journal of Agricultural and Food Chemistry, 2019, 67, 8725-8734.	2.4	12
26	Mucin immobilization in calcium alginate: A possible mucus mimetic tool for evaluating mucoadhesion and retention of flavour. International Journal of Biological Macromolecules, 2019, 138, 831-836.	3.6	12
27	Glycaemic, gastrointestinal, hormonal and appetitive responses to pearl millet or oats porridge breakfasts: a randomised, crossover trial in healthy humans. British Journal of Nutrition, 2019, 122, 1142-1154.	1.2	21
28	Lubrication by biomacromolecules: mechanisms and biomimetic strategies. Bioinspiration and Biomimetics, 2019, 14, 051001.	1.5	17
29	Responsive polysaccharide-grafted surfaces for biotribological applications. Biotribology, 2019, 18, 100092.	0.9	8
30	Functional categorisation of dietary fibre in foods: Beyond â€˜solubleâ€™ vs â€˜insolubleâ€™. Trends in Food Science and Technology, 2019, 86, 563-568.	7.8	88
31	Probing adhesion between nanoscale cellulose fibres using AFM lateral force spectroscopy: The effect of hemicelluloses on hydrogen bonding. Carbohydrate Polymers, 2019, 208, 97-107.	5.1	22
32	Multi-scale assembly of hydrogels formed by highly branched arabinoxylans from Plantago ovata seed mucilage studied by USANS/SANS and rheology. Carbohydrate Polymers, 2019, 207, 333-342.	5.1	24
33	Rheological and structural properties of complex arabinoxylans from Plantago ovata seed mucilage under non-gelled conditions. Carbohydrate Polymers, 2018, 193, 179-188.	5.1	35
34	Mucin gel assembly is controlled by a collective action of non-mucin proteins, disulfide bridges, Ca2+-mediated links, and hydrogen bonding. Scientific Reports, 2018, 8, 5802.	1.6	84
35	Quantitative structural organisation model for wheat endosperm cell walls: Cellulose as an important constituent. Carbohydrate Polymers, 2018, 196, 199-208.	5.1	61
36	Brush-Like Polysaccharides With Motif-Specific Interactions. , 2018, , .		0

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37	Surface rearrangement of adsorbed EGCGâ€“mucin complexes on hydrophilic surfaces. International Journal of Biological Macromolecules, 2017, 95, 704-712.	3.6	8
38	Multi-layer mucilage of Plantago ovata seeds: Rheological differences arise from variations in arabinoxylan side chains. Carbohydrate Polymers, 2017, 165, 132-141.	5.1	86
39	Friction, lubrication, and in situ mechanics of poroelastic cellulose hydrogels. Soft Matter, 2017, 13, 3592-3601.	1.2	14
40	Formation and tribology of fucoidan/chitosan polyelectrolyte multilayers on PDMS substrates. Biotribology, 2017, 12, 15-23.	0.9	6
41	Mucoadhesive functionality of cell wall structures from fruits and grains: Electrostatic and polymer network interactions mediated by soluble dietary polysaccharides. Scientific Reports, 2017, 7, 15794.	1.6	26
42	Dip-and-Drag Lateral Force Spectroscopy for Measuring Adhesive Forces between Nanofibers. Langmuir, 2016, 32, 13340-13348.	1.6	5
43	Mapping nano-scale mechanical heterogeneity of primary plant cell walls. Journal of Experimental Botany, 2016, 67, 2799-2816.	2.4	34
44	SIgA Binding to Mucosal Surfaces Is Mediated by Mucin-Mucin Interactions. PLoS ONE, 2015, 10, e0119677.	1.1	48
45	Tribology of particle suspensions in rolling-sliding soft contacts. Biotribology, 2015, 3, 1-10.	0.9	45
46	Attractive Forces between Hydrophobic Solid Surfaces Measured by AFM on the First Approach in Salt Solutions and in the Presence of Dissolved Gases. Langmuir, 2015, 31, 1941-1949.	1.6	49
47	Aqueous lubrication by fractionated salivary proteins: Synergistic interaction of mucin polymer brush with low molecular weight macromolecules. Tribology International, 2015, 89, 34-45.	3.0	60
48	Lubrication of starch in ionic liquidâ€“water mixtures: Soluble carbohydrate polymers form a boundary film on hydrophobic surfaces. Carbohydrate Polymers, 2015, 133, 507-516.	5.1	12
49	Interpreting atomic force microscopy nanoindentation of hierarchical biological materials using multi-regime analysis. Soft Matter, 2015, 11, 1281-1292.	1.2	38
50	Concentration of salivary protective proteins within the bound oral mucosal pellicle. Oral Diseases, 2014, 20, 707-713.	1.5	78
51	Lubrication. Monographs in Oral Science, 2014, 24, 71-87.	0.9	8
52	What interactions drive the salivary mucosal pellicle formation?. Colloids and Surfaces B: Biointerfaces, 2014, 120, 184-192.	2.5	74
53	Understanding glycoprotein behaviours using Raman and Raman optical activity spectroscopies: Characterising the entanglement induced conformational changes in oligosaccharide chains of mucin. Advances in Colloid and Interface Science, 2013, 199-200, 66-77.	7.0	38
54	Lubrication and load-bearing properties of human salivary pellicles adsorbed <i>ex vivo</i> on molecularly smooth substrata. Biofouling, 2012, 28, 843-856.	0.8	28

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55	Interaction of Tea Polyphenols and Food Constituents with Model Gut Epithelia: The Protective Role of the Mucus Gel Layer. Journal of Agricultural and Food Chemistry, 2012, 60, 3318-3328.	2.4	23
56	Experimental and Theoretical Studies on the Binding of Epigallocatechin Gallate to Purified Porcine Gastric Mucin. Journal of Physical Chemistry B, 2012, 116, 13010-13016.	1.2	33
57	Normal and Shear Forces between Surfaces Bearing Porcine Gastric Mucin, a High-Molecular-Weight Glycoprotein. Biomacromolecules, 2011, 12, 1041-1050.	2.6	61
58	Influence of ionic strength on the tribological properties of pre-adsorbed salivary films. Tribology International, 2011, 44, 956-962.	3.0	59
59	Influence of ionic strength changes on the structure of pre-adsorbed salivary films. A response of a natural multi-component layer. Colloids and Surfaces B: Biointerfaces, 2010, 77, 31-39.	2.5	99
60	Charge reversal by salt-induced aggregation in aqueous lactoferrin solutions. Colloids and Surfaces B: Biointerfaces, 2010, 78, 53-60.	2.5	27
61	Polyphenol Control of Cell Spreading on Glycoprotein Substrata. Journal of Biomaterials Science, Polymer Edition, 2009, 20, 841-851.	1.9	13
62	Cell nanomechanics and focal adhesions are regulated by retinol and conjugated linoleic acid in a dose-dependent manner. Nanotechnology, 2009, 20, 285103.	1.3	14
63	Viscous Boundary Lubrication of Hydrophobic Surfaces by Mucin. Langmuir, 2009, 25, 2313-2321.	1.6	130
64	Mitochondrial displacements in response to nanomechanical forces. Journal of Molecular Recognition, 2008, 21, 30-36.	1.1	35
65	Interaction of human whole saliva and astringent dietary compounds investigated by interfacial shear rheology. Food Hydrocolloids, 2008, 22, 1068-1078.	5.6	96
66	Temperature Dependence of Mucin Adsorption. Langmuir, 2008, 24, 902-905.	1.6	10
67	Double-Globular Structure of Porcine Stomach Mucin: A Small-Angle X-ray Scattering Study. Biomacromolecules, 2008, 9, 3216-3222.	2.6	40
68	Structural hysteresis and hierarchy in adsorbed glycoproteins. Journal of Chemical Physics, 2008, 129, 071102.	1.2	27
69	From Rheology to Tribology: Multiscale Dynamics of Biofluids, Food Emulsions and Soft Matter. AIP Conference Proceedings, 2008, , .	0.3	6
70	Tracking displacements of intracellular organelles in response to nanomechanical forces. , 2008, , .		5
71	Complex Desorption of Mucin from Silica. Langmuir, 2007, 23, 7096-7100.	1.6	33
72	Charge and Interfacial Behavior of Short Side-Chain Heavily Glycosylated Porcine Stomach Mucin. Biomacromolecules, 2007, 8, 3791-3799.	2.6	51

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73	Molecular Structure and Rheological Properties of Short-Side-Chain Heavily Glycosylated Porcine Stomach Mucin. Biomacromolecules, 2007, 8, 3467-3477.	2.6	85
74	Surface roughness and hydrodynamic boundary conditions. Physical Review E, 2006, 73, 045302.	0.8	118
75	Collective Dynamics of an End-Grafted Polymer Brush in Solvents of Varying Quality. Physical Review Letters, 2004, 92, 115501.	2.9	51
76	Dynamic Effects on Force Measurements. 2. Lubrication and the Atomic Force Microscope. Langmuir, 2003, 19, 1227-1234.	1.6	171
77	The thermodynamic equation for the dissolution of solids in liquids.. Journal of Molecular Liquids, 2001, 91, 33-46.	2.3	0
78	A Study of the Linear Tension Effect on the Polystyrene Microsphere Wettability with Water. Colloid Journal, 2001, 63, 518-525.	0.5	15
79	Dynamic effects on force measurements. I. Viscous drag on the atomic force microscope cantilever. Review of Scientific Instruments, 2001, 72, 2330-2339.	0.6	88
80	Forces between polystyrene surfaces in waterâ€“electrolyte solutions: Long-range attraction of two types?. Journal of Chemical Physics, 2001, 114, 8124-8131.	1.2	68
81	Contact angles on hydrophobic microparticles at waterâ€“air and waterâ€“hexadecane interfaces. Journal of Adhesion Science and Technology, 2000, 14, 1783-1799.	1.4	54
82	Interaction Forces between Hydrophobic Surfaces. Attractive Jump as an Indication of Formation of â€œStableâ€•Submicrocavities. Journal of Physical Chemistry B, 2000, 104, 3407-3410.	1.2	118
83	Wetting and Interfacial Transitions in Dilute Solutions of Trisiloxane Surfactants. Langmuir, 1998, 14, 5023-5031.	1.6	67
84	Surface/interfacial tension dynamics of vesicle-forming surfactants. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1995, 101, 251-260.	2.3	11