



ISSN:1026-3500

Russian Chemical Bulletin



Volume 74, Issue 8
August 2025

33 articles in this issue

Active site as the heart of carbohydrases

Reviews | 12 September 2025 | Pages: 2257 - 2263

Carbocyanines with metal chelating groups as promising tools for diagnostics and therapy

Reviews | 12 September 2025 | Pages: 2264 - 2281

Chitosan and composites with chitosan: production, properties and applications

Reviews | 12 September 2025 | Pages: 2282 - 2291

Polymethine dyes as efficient probes/sensors for studying biomolecular systems

Reviews | 12 September 2025 | Pages: 2292 - 2302

Bioluminescent test systems based on viable cells expressing bacterial luciferase or firefly luciferase

Reviews | 12 September 2025 | Pages: 2303 - 2311

New functions of cholinesterases in the development of Alzheimer's disease as a target for neuroprotective drugs

Reviews | 12 September 2025 | Pages: 2312 - 2331

Boronic acids: broad specificity of inhibition of penicillin-binding proteins and β -lactamases conferring bacterial antibiotic resistance

Analysis of molecular dynamics and structure of adsorption layers on silica gel in various solvents by the spin probe technique

Full Articles | 12 September 2025 | Pages: 2360 - 2366

Dynamic protonation states and vacancy migration modulate glutaminase C catalysis: essential role of Lys481 and Tyr466

Full Articles | 12 September 2025 | Pages: 2367 - 2376

Surface-enhanced Raman spectral features enrichment by selective hydrolysis of protein molecule peptide bonds

Full Articles | 12 September 2025 | Pages: 2377 - 2385

Fluorene attachment to graphene and MoS₂ monolayers: impact on electronic and optical properties

Full Articles | 12 September 2025 | Pages: 2386 - 2391

Three-component mediator biosensors based on lactate oxidase for the analysis of biological fluids

Full Articles | 12 September 2025 | Pages: 2392 - 2402

Reaction of 2,9-dichloro-1,10-phenanthroline with secondary amines as a convenient approach to a new class of promising ligands

Full Articles | 12 September 2025 | Pages: 2403 - 2412

Synthesis and biological activity of 5-sulfonamide-substituted 3-hydroxyoxindoles with 3-cyanomethyl and 3-carboxymethyl groups

Full Articles | 12 September 2025 | Pages: 2413 - 2426

Synthesis of functionalized hydroxymethyl-substituted organophosphorus acids

Synthesis and study of binary and ternary selenium-containing nanodispersions based on amphiphilic molecular brushes and Photoditazine

Full Articles | 12 September 2025 | Pages: 2449 - 2458

Nanoparticle conjugation with polymer ligands: influence of surface modification on protein corona formation

Full Articles | 12 September 2025 | Pages: 2459 - 2465

Molecular approach to evaluate the integrity of the serum albumin adsorption layer on the surface of mixed iron oxide nanoparticles

Full Articles | 12 September 2025 | Pages: 2466 - 2474

Nanosized polymer-enzyme films based on poly(ionic liquids): design and application

Full Articles | 12 September 2025 | Pages: 2475 - 2484

Effect of the C-terminal sequence on the catalytic properties and thermal stability of bacterial formate dehydrogenase

Full Articles | 12 September 2025 | Pages: 2485 - 2493

Role of singlet and triplet states in thermal *cis*—*trans* isomerization of azo dyes with dihydroquinoline and tetrazole moieties

Full Articles | 12 September 2025 | Pages: 2494 - 2502

Physicochemical properties of ommochromes as natural antioxidants

Full Articles | 12 September 2025 | Pages: 2503 - 2509

Poly(vinyl alcohol) cryogels prepared in a frozen DMSO medium and filled with poly(3-hydroxybutyric acid)-based dispersed particles formed *in situ* by replacing the organic solvent for water

Chemical and microbiological degradation of polycaprolactone prepared under different synthesis conditions

Full Articles | 12 September 2025 | Pages: 2521 - 2534

Polyimides based on unsymmetrical 3,4'-[4,4'-(diphenyldioxy)]diphthalic anhydride: synthesis and properties

Full Articles | 12 September 2025 | Pages: 2535 - 2544

Scaffold models based on terpolymers of collagen—chitosan—(meth)acrylic monomer synthesized in the presence of an amine complex of triethylborane

Full Articles | 12 September 2025 | Pages: 2545 - 2554

Physicochemical analysis for the structure-forming role of plant antioxidants in the formation of biopolymer-liposomal complexes

Full Articles | 12 September 2025 | Pages: 2555 - 2564

Synthesis of possible metabolites of 16 α , 17 α -cyclohexaprogesterone and evaluation of their antiproliferative activity in hormone-dependent breast cancer cell lines

Full Articles | 12 September 2025 | Pages: 2565 - 2571

Discriminatory silylation of hydroxymethyl and hydroxyethyl groups in the product of the Grieco lactone conversion. Approaches to the total synthesis of (\pm)-methylenolactocin

Full Articles | 12 September 2025 | Pages: 2572 - 2578

Chelate complexes of Pd^{II}, Rh^I, and Pt^{II} with *P*^{*},*P*-bidentate phosphine-bicyclophosphoramidite

Brief Communications | 12 September 2025 | Pages: 2579 - 2584

Synthesis and spectral properties of new 1,4-benzodiazepin(benzoxazepin)one derivatives

Synthesis of a new hybrid compound based on camptothecin and lithocholic acid and study of its antitumor properties

IX International Conference Supramolecular Systems at the Interface