

INTRODUCTION

FOREWORD

Ernest Meštrović, Vladislav Tomićić, and Andrea Usenik

Croat. Chem. Acta 2025, 98(2), XI – XI

SCIENTIFIC ARTICLES

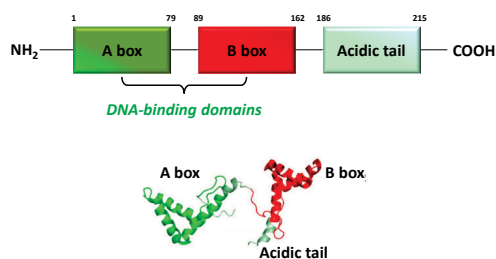
REVIEW

G-Quadruplex-Forming Aptamers as Selective Inhibitors of HMGB1 Protein: a Journey from Design to Their Functional Validation

Ettore Napolitano, Andrea Criscuolo, Claudia Riccardi, Chiara Platella, Domenica Musumeci, Daniela Montesarchio

Croat. Chem. Acta 2025, 98(2), 67–78

DOI: 10.5562/cca4189



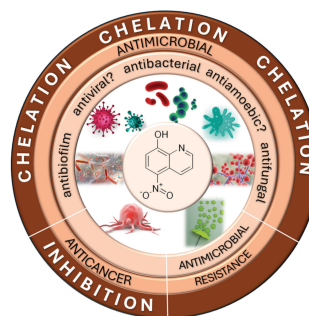
REVIEW

Small Molecule, Big Potential – Nitroxoline in the Era of Rising Antimicrobial Resistance

Mirna Petković Didović, Davorka Repac Antić, Davor Kopilović, Sugita Komić, Ivana Gobin

Croat. Chem. Acta 2025, 98(2), 79–97

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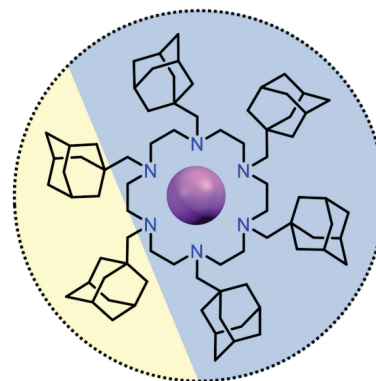
ORIGINAL SCIENTIFIC ARTICLE

Synthesis, Alkali Metal Cation Binding and Computational Analysis of Adamantane-substituted Hexaaza Crown Ethers

Tatjana Šumanovac, Mihaela Jakić, Kata Mlinarić-Majerski, Marina Šekutor

Croat. Chem. Acta 2025, 98(2), 99–107

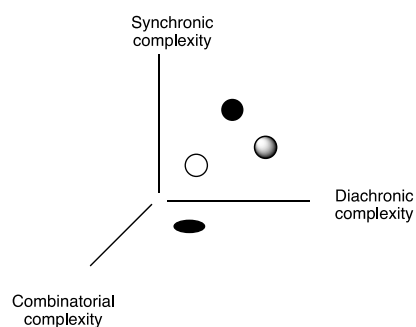
DOI: 10.5562/cca4146



Metaphysics of Systems: Complexity, Parent System, and the Graph-theoretical Interpretation of Chemical Reaction Mechanisms

Hrvoj Vančik

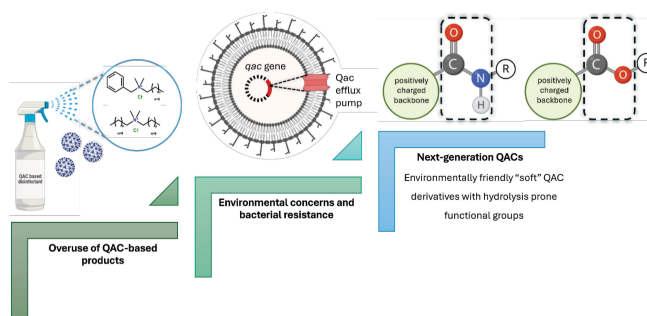
Croat. Chem. Acta **2025**, *98*(2), 109–115
DOI: 10.5562/cca4161



A Short Review on Quaternary Ammonium Compounds (QACs): From Antibacterial Action to Next-Generation Design

Doris Crnčević, Renata Odžak, Matilda Šprung

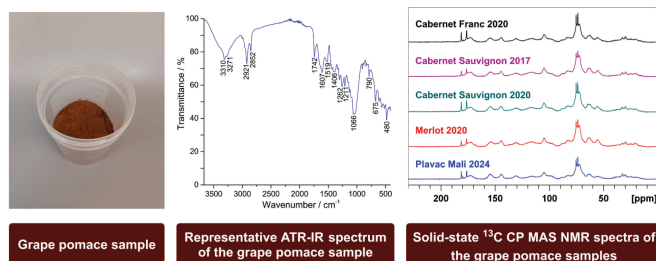
Croat. Chem. Acta **2025**, *98*(2), 117–126
DOI: 10.5562/cca4169



Solid State Characterization of Croatian Wine Grape Pomace by NMR and ATR-FTIR

Jelena Parlov Vuković, Tomislav Jednačak, Leda Divjak, Katarina Smetko, Marina Tišma, Ana-Marija Klarić, Ana-Marija Jagatić Korenika, Ana Bucić-Kojić, Predrag Novak

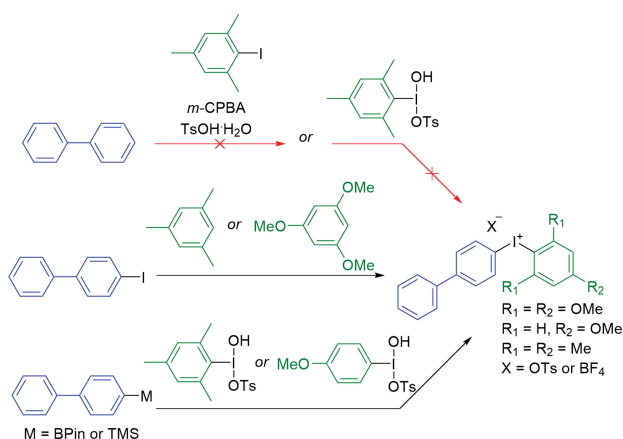
Croat. Chem. Acta **2025**, *98*(2), 127–132
DOI: 10.5562/cca4176



Synthesis of Biphenyl Iodonium Salts as (Radio)labelling Precursors for Fluoroarenes

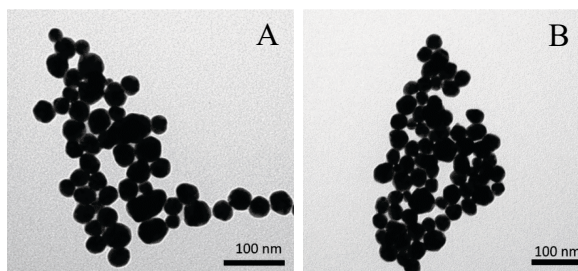
Niels Knippenberg, Jan Szczepecki, Richard Nekanovič, Vincent Ornelis, Thomas J. Cleij, Kasper Eersels, Bart van Grinsven, Hanne Diliën

Croat. Chem. Acta **2025**, *98*(2), 133–144
DOI: 10.5562/cca4165



Gold Nanoparticles Functionalized with Peptidoglycan Monomer and 1-Adamantylamine Protect Dopaminergic Neurons Against Oxidative Damages Induced by L-Dopa

Ivan Mamić, Maja Beus, Nikolina Kalčec, Nikolina Peranić, Ruža Frkanec, Petra Turčić, Ivana Vinković Vrček



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Teaching Chemistry in the New Bachelor “Regenerative Medicine and Technology”

Matthew B. Baker, Gavin Hazell, Sabine van Rijt, W. Matthijs Blankesteyn, Tim Welting, Guus van den Akker, Jurica Bauer



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