

## INTRODUCTION

### FOREWORD

Ingrid Milošev, Saša Omanović

*Croat. Chem. Acta* 2017, 90(2), 107–108

### Mirjana Metikoš-Huković – *Curriculum Vitae*

Jozefina Katić, Ingrid Milošev

*Croat. Chem. Acta* 2017, 90(2), 109–113

### Mirjana Metikoš-Huković – *List of Publications*

Jozefina Katić

*Croat. Chem. Acta* 2017, 90(2), 115–125

### Celebrating the 80<sup>th</sup> Birthday of Professor emerita Mirjana Metikoš–Huković *Reminiscence*

Grace Karminski-Zamola

*Croat. Chem. Acta* 2017, 90(2), 127–128

DOI: 10.5562/cca3234

## SCIENTIFIC ARTICLES

### Electrochemical and Spectrophotometric Determination of Total Polyphenol Content in Croatian Apple Varieties

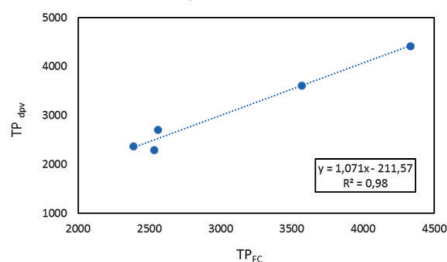
Martina Medvidović-Kosanović, Anamarija Šter, Lidija Jakobek,  
Petra Krivak, Rebecca Mađarić

*Croat. Chem. Acta* 2017, 90(2), 129–134

DOI: 10.5562/cca3120

#### ORIGINAL SCIENTIFIC ARTICLE

Total polyphenol content obtained by differential pulse  
voltammetry (TP<sub>dpv</sub>) and Folin-Ciocalteu (TP<sub>FC</sub>) method



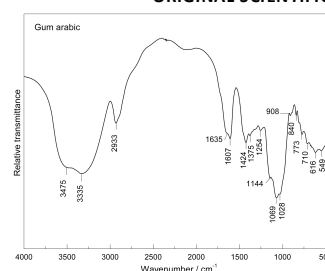
## The Effect of Gum Arabic on the Nano / Microstructure and Optical Properties of Precipitated ZnO

Željka Petrović, Mira Ristić, Svetozar Musić, Martin Fabián

*Croat. Chem. Acta* **2017**, *90*(2), 135–143

DOI: 10.5562/cca3121

ORIGINAL SCIENTIFIC ARTICLE



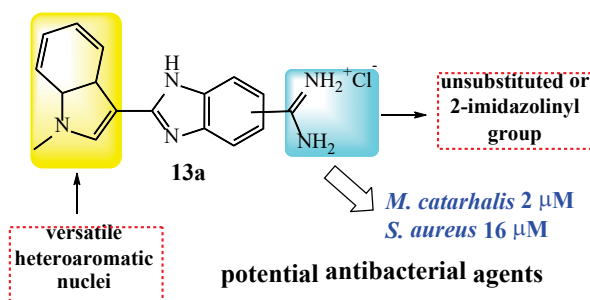
## Synthesis and SAR Study of Novel Amidino 2-substituted Benzimidazoles as Potential Antibacterial Agents

Nataša Perin, Kristina Starčević, Mihaela Perić, Hana Čipčić Paljetak, Mario Matijašić, Višnja Stepanić, Donatella Verbanac, Grace Karminski-Zamola, Marijana Hranjec

*Croat. Chem. Acta* **2017**, *90*(2), 145–154

DOI: 10.5562/cca3147

ORIGINAL SCIENTIFIC ARTICLE



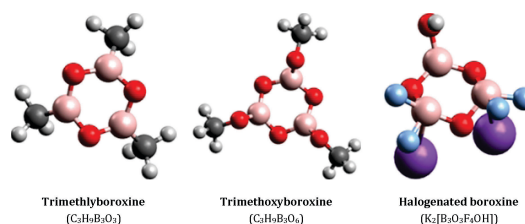
## Quantum Chemical and Biochemical Study on Antioxidant Properties of Halogenated Boroxine $K_2[B_3O_3F_4OH]$

Maja Marasović, Tea Marasović, Borivoj Galić, Mladen Miloš

*Croat. Chem. Acta* **2017**, *90*(2), 155–161

DOI: 10.5562/cca3140

ORIGINAL SCIENTIFIC ARTICLE



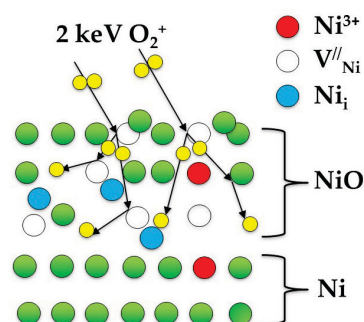
## Enhanced Oxidation of Nickel at Room Temperature by Low-energy Oxygen Implantation

Robert Peter, Iva Šarić, Mladen Petravić

*Croat. Chem. Acta* **2017**, *90*(2), 163–168

DOI: 10.5562/cca3149

ORIGINAL SCIENTIFIC ARTICLE



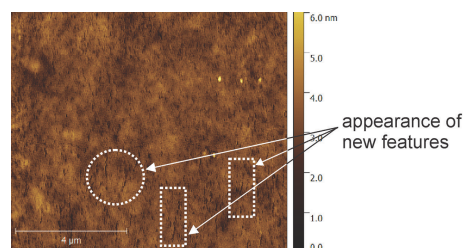
## Spectroscopical and Electrochemical Characterisation of a (3-Mercaptopropyl)-trimethoxysilane - Based Protective Coating on Aluminium Alloy 2024

Mohor Mihelčić, Angelja K. Surca, Ahmed Kreta, Miran Gaberšček

*Croat. Chem. Acta* **2017**, *90*(2), 169–175

DOI: 10.5562/cca3161

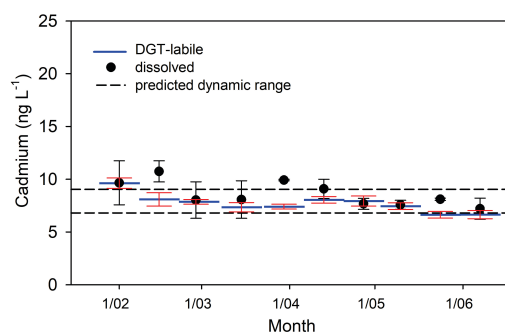
ORIGINAL SCIENTIFIC ARTICLE



## Evaluation of Discrete and Passive Sampling (Diffusive Gradients in Thin-films – DGT) Approach for the Assessment of Trace Metal Dynamics in Marine Waters – a Case Study in a Small Harbor

Ana-Marija Cindrić, Neven Cukrov, Gaël Durrieu, Cédric Garnier, Ivanka Pižeta, Dario Omanović

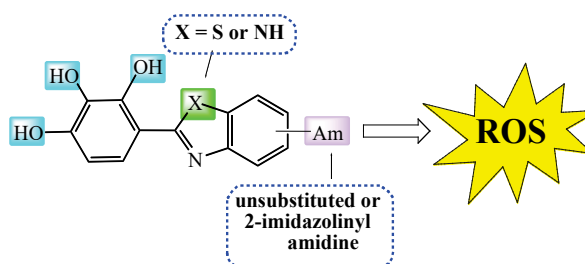
*Croat. Chem. Acta* **2017**, *90*(2), 177–185  
DOI: 10.5562/cca3163



## Synthesis and Antioxidative Potency of Novel Amidino Substituted Benzimidazole and Benzothiazole Derivatives

Livio Racané, Maja Cindrić, Nataša Perin, Petra Roškarić, Kristina Starčević, Tomislav Mašek, Maja Maurić, Jasna Dogan, Grace Karminski-Zamola

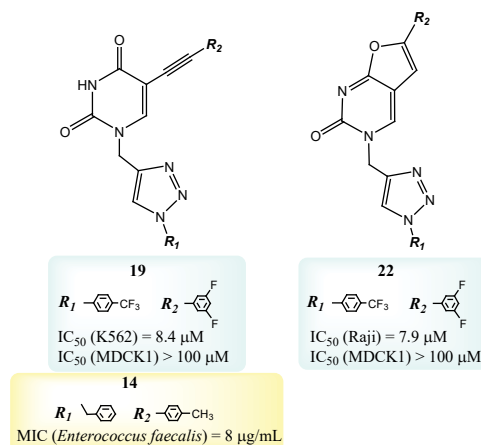
*Croat. Chem. Acta* **2017**, *90*(2), 187–195  
DOI: 10.5562/cca3146



## Synthesis, Cytostatic and Antibacterial Evaluations of Novel 1,2,3-Triazolyl-tagged Pyrimidine and Furo[2,3-d]pyrimidine Derivatives

Maja Stipković Babić, Ana Ratković, Marijana Jukić, Ljubica Glavaš-Obrovac, Domagoj Drenjančević, Silvana Raić-Malić, Tatjana Gazivoda Kraljević

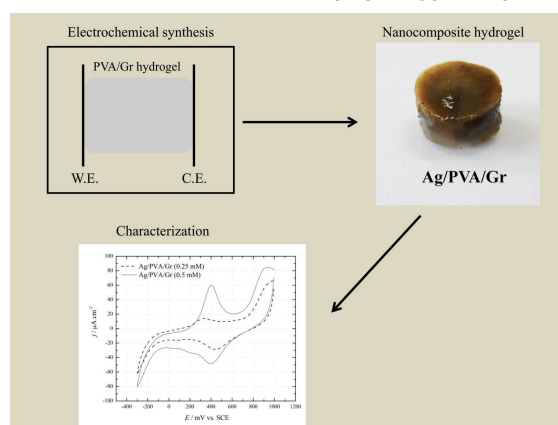
*Croat. Chem. Acta* **2017**, *90*(2), 197–205  
DOI: 10.5562/cca3165



## Graphene Based Composite Hydrogel for Biomedical Applications

Katarina Nešović, Mohamed M. Abudabbus, Kyong Yop Rhee, Vesna Mišković-Stanković

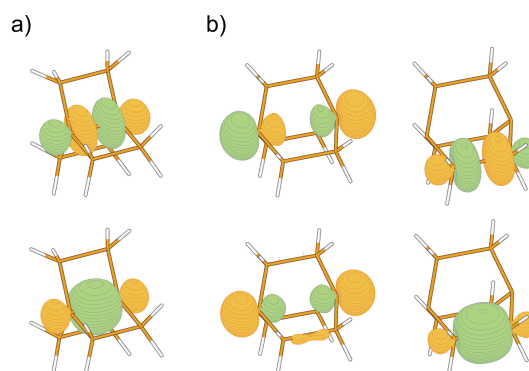
*Croat. Chem. Acta* **2017**, *90*(2), 207–213  
DOI: 10.5562/cca3133



### The Influence of Multiple Fluorination on the Ring Opening of [2.2.2]Propellane

Ivana Antol, Mirjana Eckert-Maksić

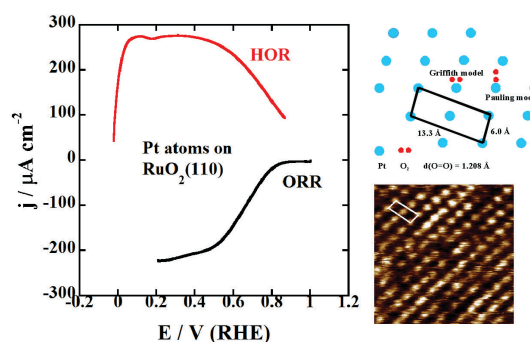
*Croat. Chem. Acta* **2017**, *90*(2), 215–223  
DOI: 10.5562/cca3172



### Single Platinum Atoms Electrocatalysts: Oxygen Reduction and Hydrogen Oxidation Reactions

Miomir B. Vukmirovic, Krishani M. Teeluck, Ping Liu, Radoslav R. Adzic

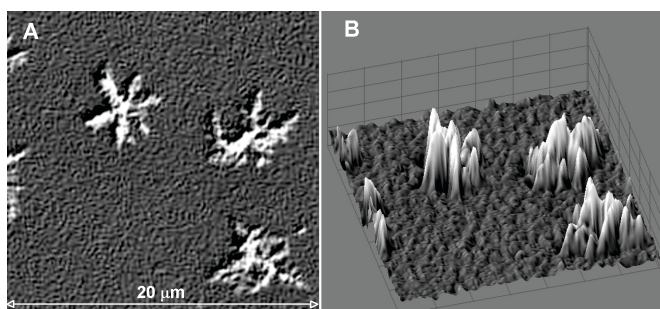
*Croat. Chem. Acta* **2017**, *90*(2), 225–230  
DOI: 10.5562/cca3176



### Sensitive Electrochemical Determination of Folic Acid Using *ex-situ* Prepared Bismuth Film Electrodes

Nives Vladislavić, Marijo Buzuk, Maša Buljac, Stjepan Kožuh, Marija Bralić, Slobodan Brnić

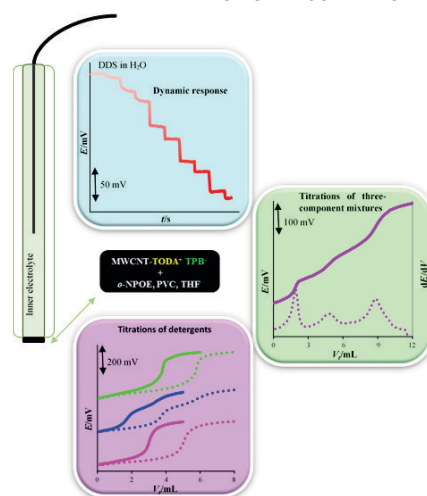
*Croat. Chem. Acta* **2017**, *90*(2), 231–239  
DOI: 10.5562/cca3162



### Application of a New Functionalized MWCNTs for the Construction of Surfactant Potentiometric Sensors

Sanja Petrušić, Mirela Samardžić, Aleksandar Széchenyi, Milan Sak-Bosnar

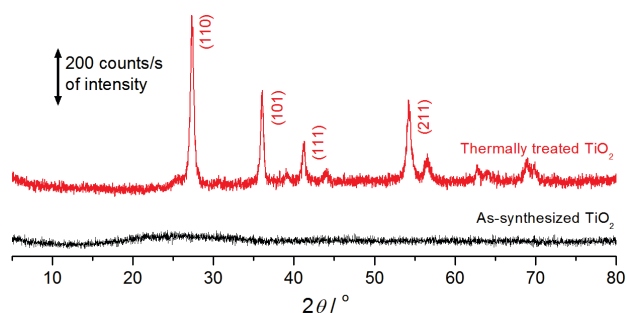
*Croat. Chem. Acta* **2017**, *90*(2), 241–250  
DOI: 10.5562/cca3164



### TiO<sub>2</sub> From Colloidal Dispersion as Support in Pt/TiO<sub>2</sub> Nanocomposite for Electrochemical Applications

Milica Košević, Gavriilo Šekularac, Ljiljana Živković, Vladimir Panić, Branislav Nikolić

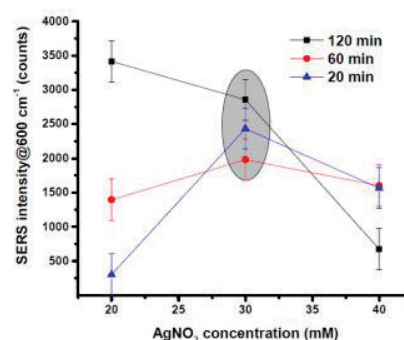
*Croat. Chem. Acta* **2017**, *90*(2), 251–258  
DOI: 10.5562/cca3175



### Silicon Nanowires Substrates Fabrication for Ultra-Sensitive Surface Enhanced Raman Spectroscopy Sensors

Hrvoje Gebavi, Lara Mikac, Marijan Marcuš, Mile Šikić, Vlasta Mohaček-Grošev, Tibor Janči, Sanja Vidaček, Emina Hasanspahić, Enisa Omanović Mikićanin, Mile Ivanda

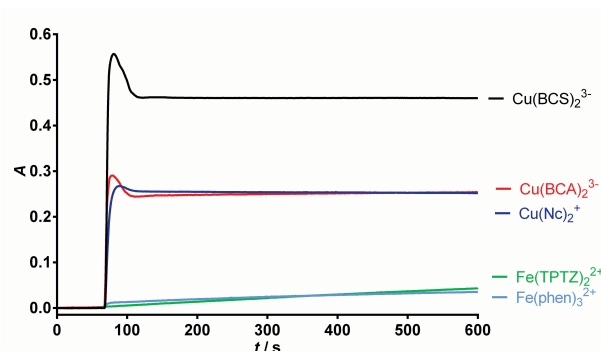
*Croat. Chem. Acta* **2017**, *90*(2), 259–262  
DOI: 10.5562/cca3127



### Kinetic Spectrophotometric Determination of N-Acetyl-L-cysteine Ethyl Ester (NACET) Generating Chromogenic Copper(I)L<sub>n</sub> Complexes with Different Ligands

Lea Kukoc-Modun, Dimitrios Tsikas, Tomislav Kraljević, Maja Biocic, Njegomir Radić

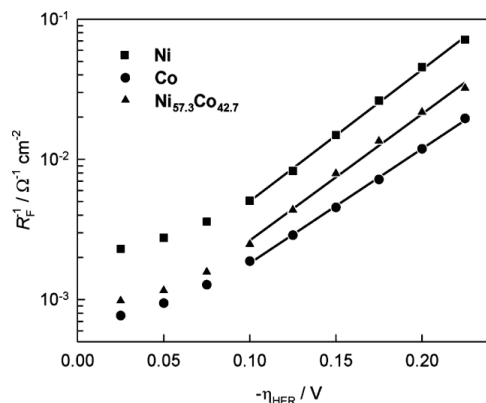
*Croat. Chem. Acta* **2017**, *90*(2), 263–271  
DOI: 10.5562/cca3135



### Electrocatalytic Activity of the Ni<sub>57.3</sub>Co<sub>42.7</sub> Alloy for the Hydrogen Evolution

Zoran Grubač, Antonija Sesar

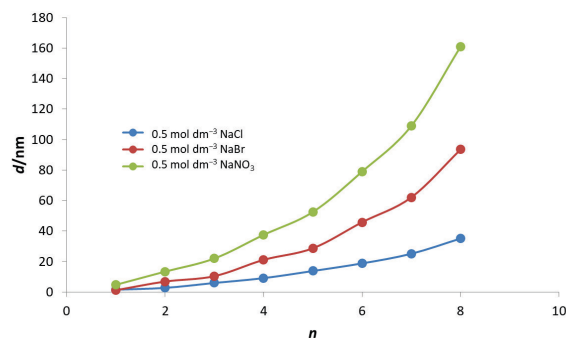
*Croat. Chem. Acta* **2017**, *90*(2), 273–280  
DOI: 10.5562/cca3174



### Polyelectrolyte Multilayers on Silica Surfaces: Effect of Ionic Strength and Sodium Salt Type

Jasmina Salopek, Anja Sadžak, Dino Kuzman, Josip Požar, Davor Kovačević

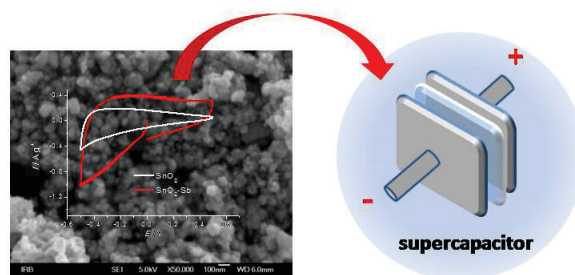
*Croat. Chem. Acta* **2017**, *90*(2), 281–287  
DOI: 10.5562/cca3179



### Electrochemical Characterisation of Sol-Gel Derived SnO<sub>2</sub> for Supercapacitor Application

Marijana Kraljić Roković, Gabrijela Ljubek, Mark Žic, Jasminka Popović

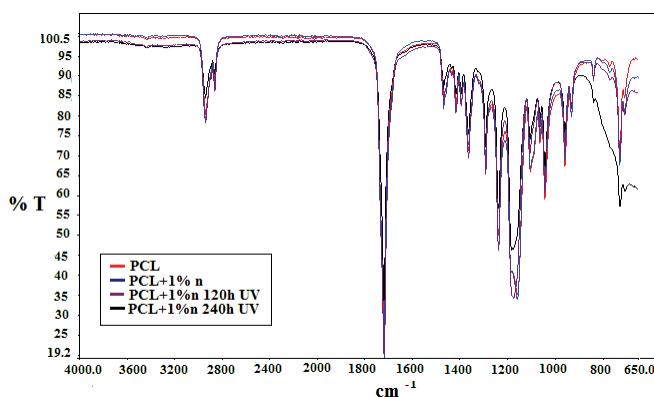
*Croat. Chem. Acta* **2017**, *90*(2), 289–295  
DOI: 10.5562/cca3180



### Effect of Micro and Nano TiO<sub>2</sub> on UV Degradation behavior of TiO<sub>2</sub> Reinforced Polycaprolactone Composites

Emi Govorčin Bajsić, Veljko Filipan, Tamara Grgurić Holjevac, Vedrana Grozdanić

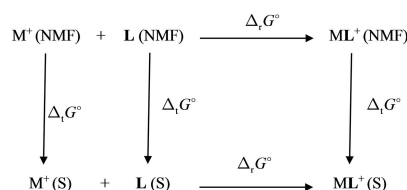
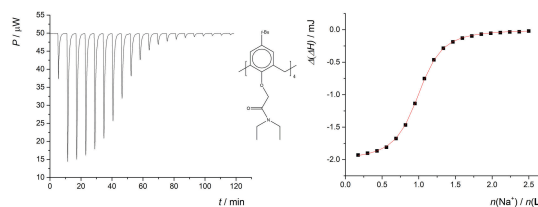
*Croat. Chem. Acta* **2017**, *90*(2), 297–306  
DOI: 10.5562/cca3141



### Complexation of Alkali Metal Cations by a Tertiary Amide Calix[4]Arene Derivative in Strongly Cation Solvating Solvents

Katarina Leko, Nikola Bregović, Marija Cvetnić, Nikola Cindro, Marina Tranfić Bakić, Josip Požar, Vladislav Tomišić

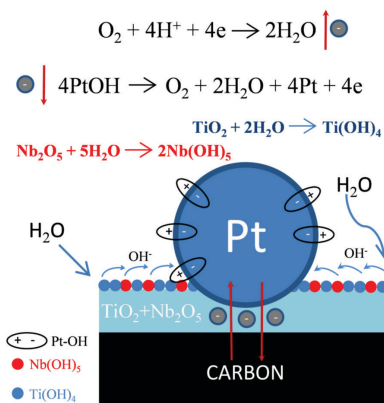
*Croat. Chem. Acta* **2017**, *90*(2), 307–314  
DOI: 10.5562/cca3200



## Poetics of Interplay and Interferences of Potentiodynamic Sweeps and Peaks in Electrocatalysis for Oxygen Electrode Reactions

Jelena M. Jaksic, Caslav M. Lacnjevac, Milan M. Jaksic

*Croat. Chem. Acta* **2017**, *90*(2), 315–331  
DOI: 10.5562/cca3201

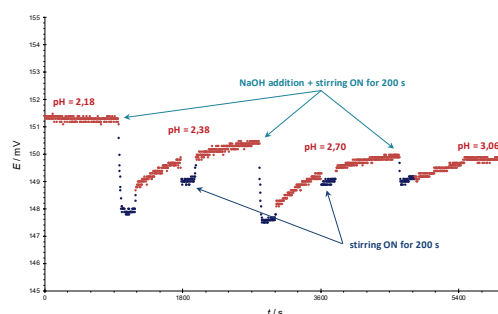


ORIGINAL SCIENTIFIC ARTICLE

## The Effects on the Response of Metal Oxide and Fluorite Single Crystal Electrodes and the Equilibration Process in the Interfacial Region

Tajana Preočanin, Danijel Namjesnik, Tin Klaić, Petar Šutalo

*Croat. Chem. Acta* **2017**, *90*(2), 333–344  
DOI: 10.5562/cca3206

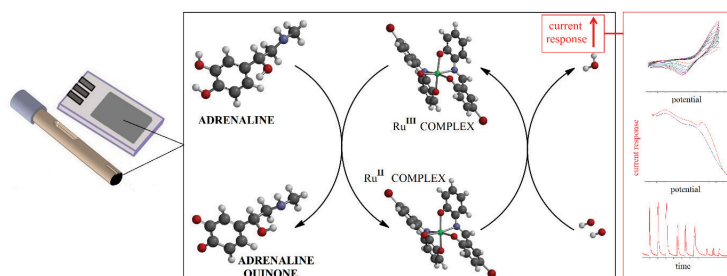


ORIGINAL SCIENTIFIC ARTICLE

## Electrochemical Determination of Adrenaline at Ru(III) Schiff Base Complex Modified Carbon Electrodes

Emir Turkušić, Safeta Redžić, Emira Kahrović, Adnan Zahirović

*Croat. Chem. Acta* **2017**, *90*(2), 345–352  
DOI: 10.5562/cca3177



ORIGINAL SCIENTIFIC ARTICLE

## Determination of Copper in Wine by Anodic Stripping Voltammetry with Rotating Glassy Carbon and Microfiber Carbon Electrode

Desanka Ž. Sužnjević, Ferenc T. Pastor, Stanislava Ž. Gorjanović

*Croat. Chem. Acta* **2017**, *90*(2), 353–357  
DOI: 10.5562/cca3178

