

REVUE ROUMAINE DE CHIMIE (ROUMANIAN JOURNAL OF CHEMISTRY)

Tome 63, N^{os} 5-6

Mai-Juin 2018

Acad. Maria ZAHARESCU 80th anniversary
List of publications

Rev. Roum. Chim., 2018, 63(5-6), 353-381

Vlad T. POPA

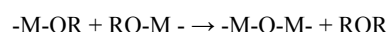
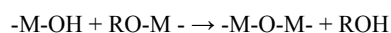
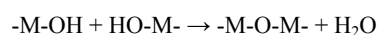
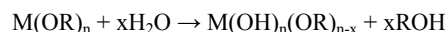
Maria Zaharescu: Eminent Researcher, Adviser, Colleague and Friend

Rev. Roum. Chim., 2018, 63(5-6), 383-384

REVIEW

Maria CRIȘAN

A short history of the sol-gel processes initiated in
Institute of Physical Chemistry



Rev. Roum. Chim., 2018, 63(5-6), 385-392

Key words: sol-gel process, nanomaterials, thin films, powders.

PAPERS

Tanja PEČNIK, Sebastjan GLINSEK,
Brigita KMET and Barbara MALIČ

Influences of Ba/Sr ratio and Mn doping on
microwave dielectric properties of Ba_xSr_{1-x}TiO₃
thin films

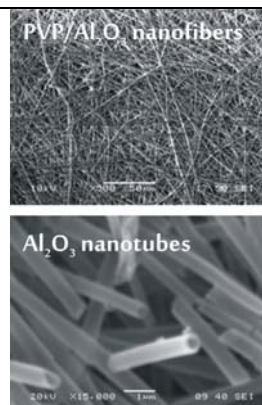


Rev. Roum. Chim., 2018, 63(5-6), 393-400

Key words: chemical solution deposition, thin films, composition,
Mn doping, dielectric properties.

Orsolya KÉRI, Eszter KOCSIS,
Zsombor Kristóf NAGY, Bence PARDITKA,
Zoltán ERDÉLYI and Imre Miklós SZILÁGYI

Preparation of Al₂O₃ coated PVA and PVP
nanofibers and Al₂O₃ nanotubes by electrospinning
and atomic layer deposition



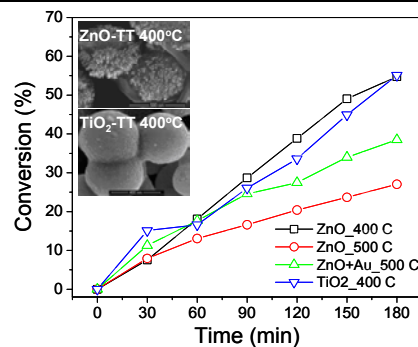
Rev. Roum. Chim., 2018, 63(5-6), 401-406

Key words: polymer, Al₂O₃, nanofiber, nanotube, electrospinning,
atomic layer deposition.

Susana MIHAIU, Oana Cătălina MOCIOIU, Luminita PREDOANA, Irina ATKINSON, Silviu PREDA, Cristina VLADUT, Ecaterina TENEA, Mihai STOICA, Jeanina PANDELE-CUSU, Crina ANASTASESCU, Jose M. CALDERON-MORENO, Mihai ANASTASESCU, Mariuca GARTNER and Ioan BALINT

Pristine and Au-modified ZnO vs. TiO₂ nano-powders prepared by sol-gel method: synthesis, structural properties and photocatalytic degradation of rhodamine B

Rev. Roum. Chim., 2018, 63(5-6), 407-417

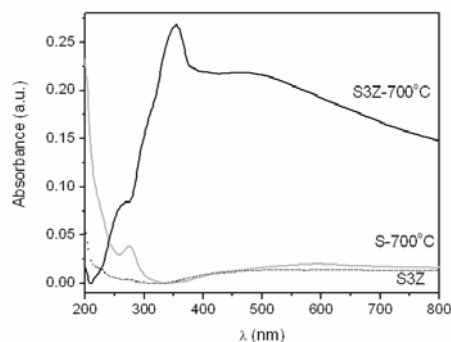


Key words: sol-gel method, ZnO and Au-modified ZnO, TiO₂, Rhodamine B degradation, simulated solar light.

Oana Cătălina MOCIOIU, Irina ATKINSON, Jeanina CUSU-PANDELE, Veronica BRĂTAN, Simona PETRESCU, Diana Irinel BĂILĂ and Ana-Maria MOCIOIU

Structural and physico-chemical characterization of Zn-doped SiO₂ glasses obtained by sol-gel route

Rev. Roum. Chim., 2018, 63(5-6), 419-424

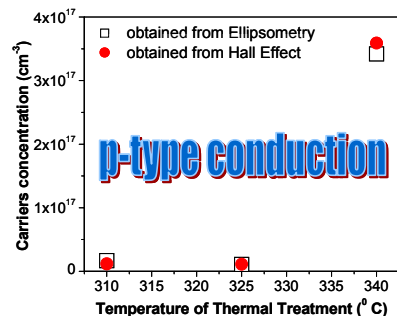


Key words: Zn-doped SiO₂ glasses, sol-gel route, UV-VIS measurements.

Mihai STOICA, Mihai ANASTASESCU, Jose M. CALDERON-MORENO, Madalina NICOLESCU, Petre OSICEANU, Silviu PREDA, Maria COVEI (DUTA), Mircea MODREANU and Mariuca GARTNER

Sr doped Cu₂O a new p-type material for photovoltaic applications

Rev. Roum. Chim., 2018, 63(5-6), 425-435

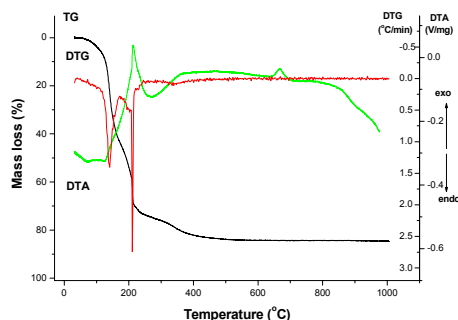


Key words: Cu₂O-Sr films, MOCVD, surface chemistry, optical properties, Hall Effect.

Diana VISINESCU, Bogdan JURCA and Oana CARP

Thermal behaviour of some precursors of zinc aluminate spinels used in a green combustion method

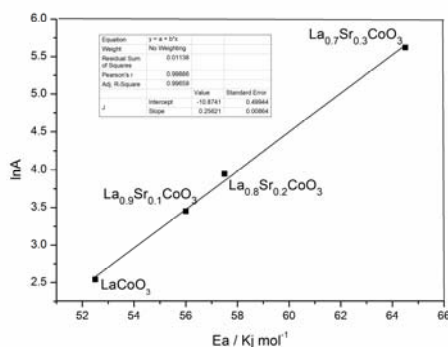
Rev. Roum. Chim., 2018, 63(5-6), 437-446



Key words: ZnAl₂O₄, starch, combustion synthesis.

**Florica PAPA, Daniela BERGER,
Gianina DOBRESCU, Razvan STATE, and
Niculae I. IONESCU**

Correlation of the Sr-dopant content
in $\text{La}_{1-x}\text{Sr}_x\text{CoO}_3$ with catalytic activity
for hydrogen peroxide decomposition

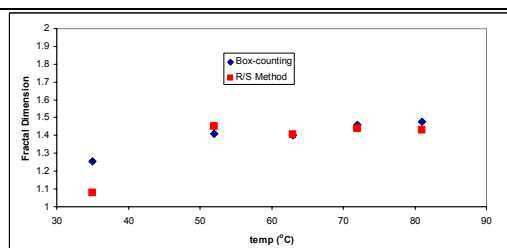


Rev. Roum. Chim., 2018, 63(5-6), 447-453

Key words: perovskite, hydrogen peroxide decomposition, lanthanum cobaltite, strontium doped lanthanum cobaltite.

**Gianina DOBRESCU, Veronica BRĂȚAN and
Niculae I. IONESCU**

The fractal dimension of oscillations on a CO/Pd
supported catalyst

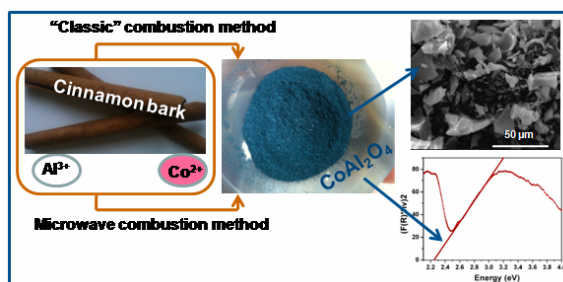


Rev. Roum. Chim., 2018, 63(5-6), 455-458

Key words: oscillations, CO oxidation.

**Dana GINGAȘU, Ioana MÎNDRU,
Luminița PATRON, Gabriela MARINESCU,
Adelina IANCULESCU, Vasile-Adrian SURDU,
Simona ȘOMĂCESCU, Silviu PREDA and
Ovidiu OPREA**

Synthesis of cobalt aluminate nanoparticles by
combustion methods using cinnamon bark extract

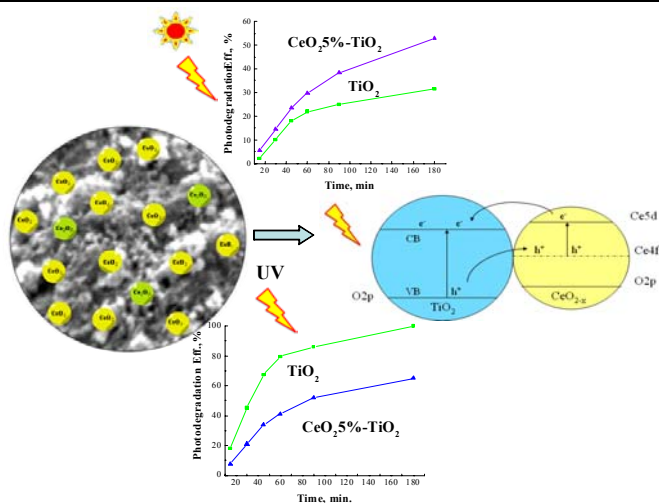


Rev. Roum. Chim., 2018, 63(5-6), 459-466

Key words: cobalt aluminate, combustion method, morphology, band gap.

**Teodor DIACONU, Madalina CIOBANU,
Gabriela PETCU, Daniela CULITA,
Silviu PREDA, Jeanina PANDELE-CUSU,
Mihaela MURESEANU and
Viorica PARVULESCU**

Cerium modified mesoporous TiO_2 photocatalyst
obtained by sol-gel method

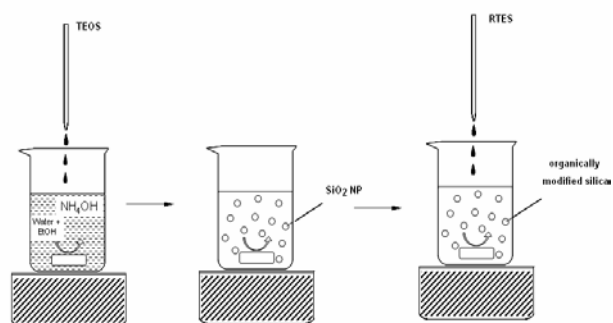


Rev. Roum. Chim., 2018, 63(5-6), 467-474

Key words: Ce doped TiO_2 , TiO_2 sol-gel, photocatalysis, MO degradation.

Ioana Cătălina GÎFU,
Monica Elisabeta MAXIM, Alina IOVESCU,
Ludmila ARICOV, Anca Ruxandra
LEONTIEȘ, Mihai ANASTASESCU,
Claudia Mihaela NINCIULEANU,
Elvira ALEXANDRESCU and
Dan F. ANGHEL

Water-repellent glass by hydrophobically modified poly(acrylate)-surfactant complexes and silica

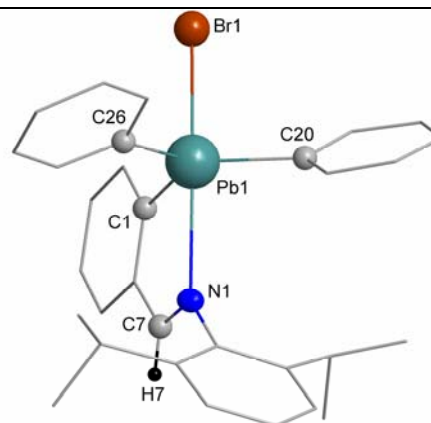


Key words: sol-gel method; layer-by-layer technique; hydrophobically modified poly(acrylate)-surfactant complex; silica nanoparticle; organic-inorganic hybrid films.

Rev. Roum. Chim., 2018, 63(5-6), 475-480

Adina CRISTEA, Dragoș MARGINEANU,
Anca SILVESTRU and Cristian SILVESTRU

Synthesis, spectroscopic characterization and solid state structure of [(E)-2-{2',6'- $\text{Pr}_2\text{C}_6\text{H}_3\text{N}=\text{CH}\}\text{C}_6\text{H}_4\text{]PbPh}_2\text{Br}$ – a hypervalent (10-Pb-5) species

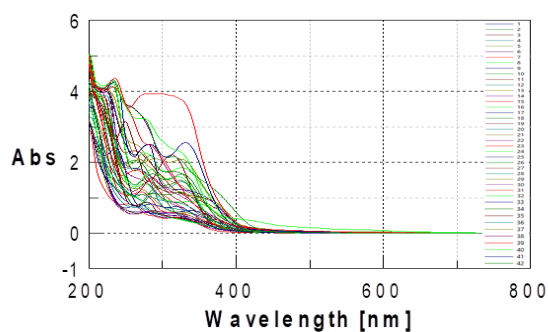


Key words: hypervalent triaryllead(IV) compound, (imino)aryl substituent, X-ray molecular structure, solution NMR studies.

Rev. Roum. Chim., 2018, 63(5-6), 481-487

Ileana Maria SIMION, Horia F. POP and
Costel SÂRBU

Spectrophotometric characterization of Roumanian medicinal herbs assisted by robust chemometrics expertise

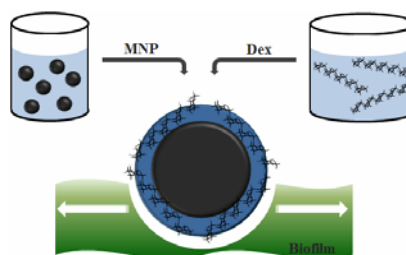


Key words: spectrophotometric, chemometric, medicinal plant, principal component analysis.

Rev. Roum. Chim., 2018, 63(5-6), 489-496

Ana Lacramioara LUNGOCI,
Mariana PINTEALA,
Anca Roxana PETROVICI, Irina ROSCA,
Ioana Andreea TURIN-MOLEAVIN and
Adrian FIFERE

Biosynthesized dextran coated magnetic nanoparticles with antifungal activity

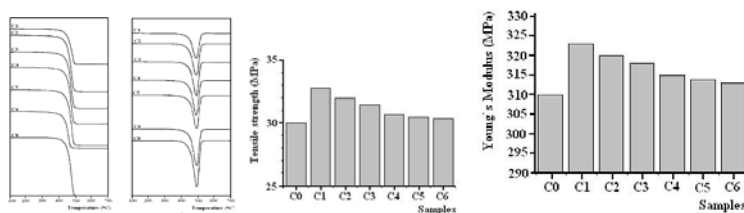


Key words: dextran, magnetic nanoparticle, antifungal activity, propiconazole

Rev. Roum. Chim., 2018, 63(5-6), 497-503

Fulga TANASĂ and Mădălina ZĂNOAGĂ

Comparative evaluation of properties of some novel maleated polypropylene-SiO₂ composites in correlation with the morphology of the filler

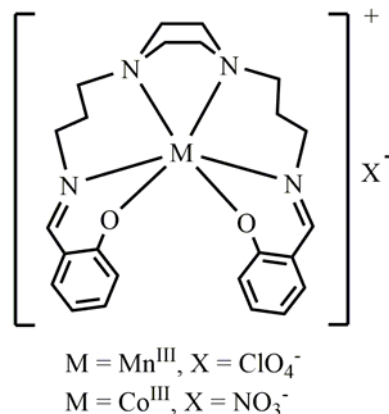


Rev. Roum. Chim., 2018, 63(5-6), 505-513

Key words: polymer nanocomposites, silica particles, interfacial interactions, thermal properties, mechanical properties.

Ildiko BUTA, Anamaria ARDELEAN, Liliana CSEH, Valentin BADEA, Florica MANEA, Emese GAL, Peter LÖNNECKE, Evamarie HEY-HAWKINS and Otilia COSTISOR

New mononuclear cobalt(III) and manganese(III) complexes containing a hexadentate Schiff base ligand



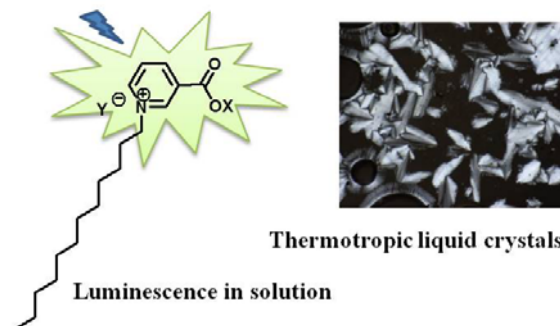
Rev. Roum. Chim., 2018, 63(5-6), 515-519

Key words: cobalt(III) complex, manganese(III) complex, Schiff base, cyclic voltammetry.

Maria Angela SPIRACHE, Carmen CRETU, Liliana CSEH, Viorel SASCA, Valentin BADEA, Ramona TUDOSE, Livia Nicoleta DEVESELEANU-CORICI, Otilia COSTISOR and Elisabeta I. SZERB

Ionic salts of nicotinic acid as multifunctional materials

Multifunctional materials based on ionic liquid crystals

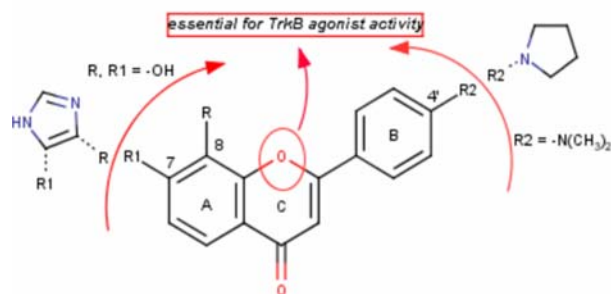


Rev. Roum. Chim., 2018, 63(5-6), 521-525

Key words: ionic liquid crystalline salts, polarized optical microscopy, fluorescence.

Alina BORA, Sorin AVRAM, Ana BOROTA, Ramona CURPAN and Liliana HALIP

Theoretical study of some 7,8-dihydroxyflavone analogues as tropomyosin-related kinase B agonists

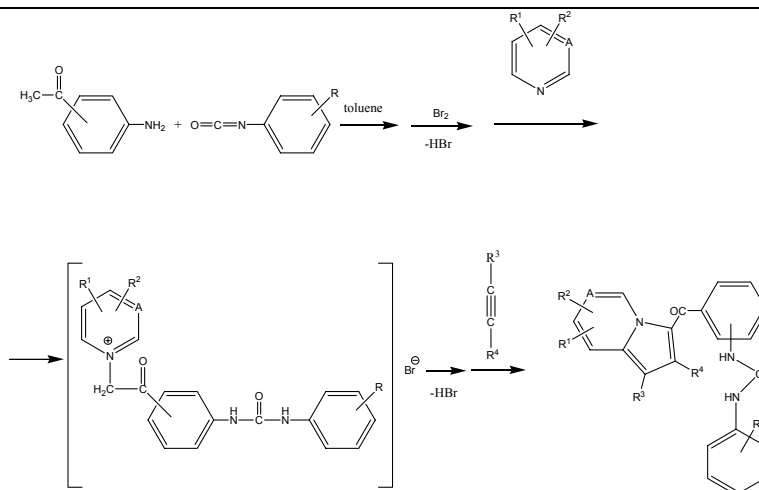


Rev. Roum. Chim., 2018, 63(5-6), 527-533

Key words: flavonoids, 7,8-dihydroxyflavone, DFT, ADME, toxicity related risk.

Emilian GEORGESCU,
Florentina GEORGESCU,
Alina NICOLESCU, Florea DUMITRASCU,
Constantin DRAGHICI, Marcel Mirel POPA,
Adriana T. MARINOIU and Calin DELEANU

Indolizines and azaindolozines substituted with a phenylureidobenzoyl moiety by 1,3-dipolar cycloaddition of their corresponding *N*-ylides with acetylenes



Key words: *N*-[3-(3-phenylureido)phenacyl]pyridinium bromides, *N*-[3/4-(3-phenylureido)-phenacyl]quinolinium bromides, *N*-[3/4-(3-phenylureido)phenacyl]pyrimidinium bromides, 1,3-dipolar cycloadditions, indolizines, azaindolozines.

Rev. Roum. Chim., **2018**, 63(5-6), 535-543

Mihaela I. MOCANU, Andrei A. PATRASCU,
Augustin M. MADALAN and Marius ANDRUH

New mixed ligand complexes resulting from the reaction of β -diketonato derivatives with a Mannich base

