

REVUE ROUMAINE DE CHIMIE (ROUMANIAN JOURNAL OF CHEMISTRY)

Tome 66, N° 3

Mars 2021

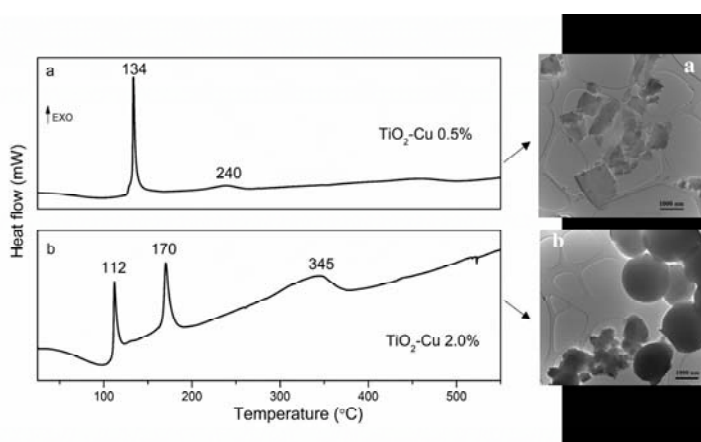
In memoriam Prof. Dumitru OANCEA

Rev. Roum. Chim., 2021, 66(3), 217-218

PAPERS

Jeanina PANDELE-CUSU, Irina ATKINSON,
Adriana RUSU, Nicoleta APOSTOL,
Valentin TEODORESCU,
Luminita PREDOANA, Imre M. SZILÁGYI,
György POKOL and Maria ZAHARESCU

Thermal behavior of Cu-doped TiO₂ gels
synthesized by the sol-gel method

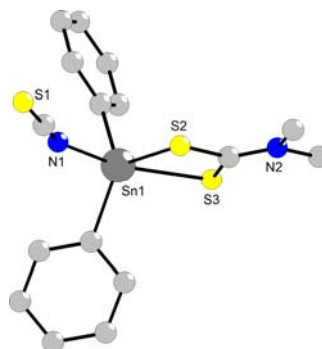


DOI: 10.33224/rch.2021.66.3.01
Rev. Roum. Chim., 2021, 66(3), 219-229

Key words: thermal behavior, Cu-doped TiO₂, sol-gel method, structural and morphological investigations.

Cătălin ȘALGĂU, Cristian SILVESTRU and
Anca SILVESTRU

Structural aspects in diorganotin(IV) complexes.
Ph₂Sn(S₂CNMe₂)(NCS) case study



DOI: 10.33224/rch.2021.66.3.02
Rev. Roum. Chim., 2021, 66(3), 231-237

Key words: diorganotin(IV) complexes, dithiocarbamate ligand, isothiocyanate ligand, structural investigation.

Niculae I. IONESCU and Veronica BRĂȚAN

Gas sorption phenomena on solid surfaces

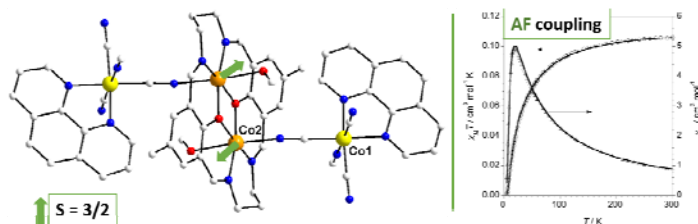
$$\frac{1}{q} = \frac{Nc}{ab} \cdot \ln(at + d)$$

DOI: 10.33224/rch.2021.66.3.03
Rev. Roum. Chim., 2021, 66(3), 239-242

Key words: adsorption solid-gas, logarithmic rate law.

Maria-Gabriela ALEXANDRU,
Diana VISINESCU, Nadia MARINO,
Giovanni De MUNNO, Francesc LLORET,
Miguel JULVE and Marius ANDRUH

Heterometallic supramolecular architectures constructed from cyanido-based $[\text{Co}^{\text{III}}(\text{AA})(\text{CN})_4]^-$ building-blocks (AA = 1,10-phenanthroline and 2,2'-bipyridine)

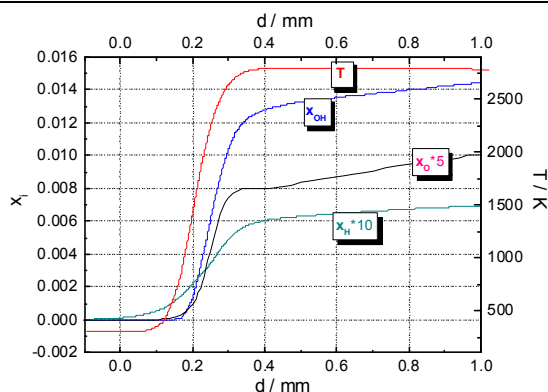


DOI: 10.33224/rch.2021.66.3.04
Rev. Roum. Chim., **2021**, 66(3), 243-254

Key words: heteroleptic cyanido complexes, supramolecular networks, magnetic properties.

Domnina RAZUS, Maria MITU,
Venera GIURCAN and Codina MOVILEANU

Laminar flame propagation in nitrogen-diluted stoichiometric $\text{H}_2\text{-N}_2\text{O}$ mixtures – a numerical study

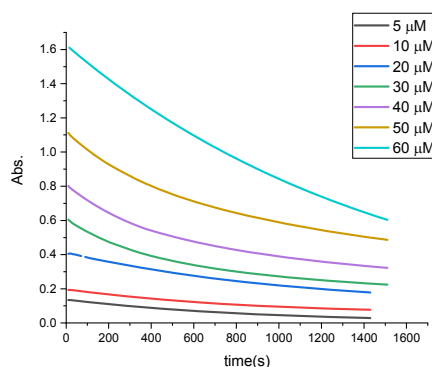


DOI: 10.33224/rch.2021.66.3.05
Rev. Roum. Chim., **2021**, 66(3), 255-265

Key words: laminar burning velocity, flame, hydrogen, nitrous oxide, rate of heat release.

Delia MĂRTINAȘ, Mihaela PUIU,
Petruța OANCEA and Adina RĂDUCAN

Assessing operational inactivation of horseradish peroxidase during Brilliant Blue G decolorization

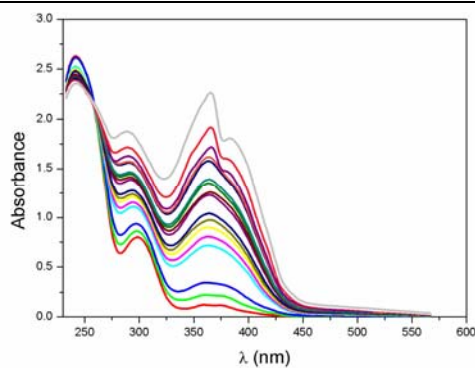


DOI: 10.33224/rch.2021.66.3.06
Rev. Roum. Chim., **2021**, 66(3), 267-272

Key words: dye degradation, peroxidase inactivation, enzymatic degradation of dyes.

Viorica MELTZER, Petruța OANCEA,
Ioana STĂNCULESCU and Elena PINCU

Physico-chemical characterization of solid state reaction between terephthalaldehyde and p-aminophenol

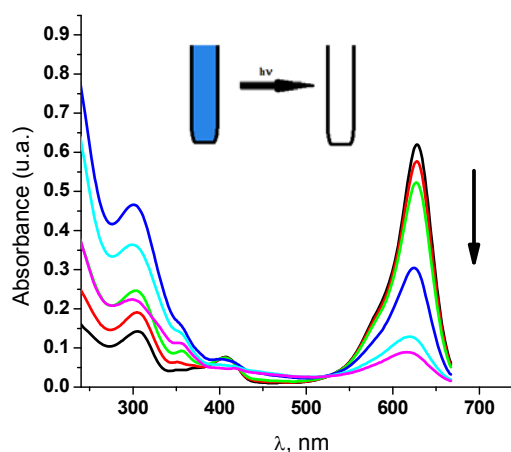


DOI: 10.33224/rch.2021.66.3.07
Rev. Roum. Chim., **2021**, 66(3), 273-280

Key words: DSC, solid state reaction, combustion calorimetry, heat of reaction.

**Daniela NEGOESCU, Petruța OANCEA,
Adina RĂDUCAN and Mihaela PUIU**

Degradation of Brilliant Blue FCF through photolysis, irradiation and photo-fenton processes: a comparative study



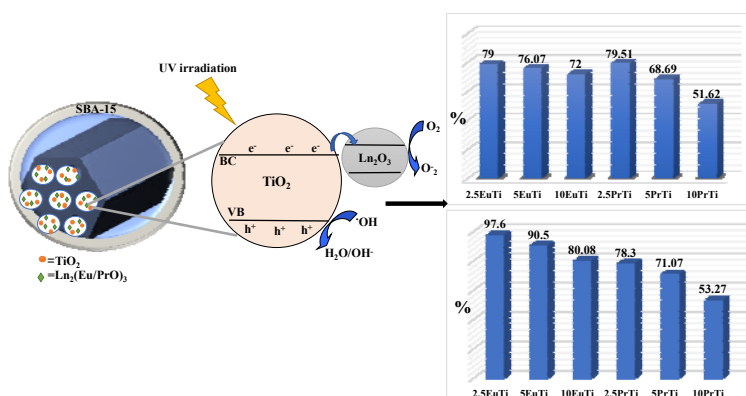
DOI: 10.33224/rch.2021.66.2.08

Rev. Roum. Chim., 2021, 65(2), 281-286

Key words: Brilliant Blue FCF, photodegradation, fenton.

**Daniela NEGOESCU, Daniela Cristina
CULITA, Irina ATKINSON,
Veronica BRATAN, Simona PETRESCU and
Viorica PARVULESCU**

Ti-SBA-15 mesoporous photocatalysts modified with lanthanides for degradation of dyes in aqueous solution



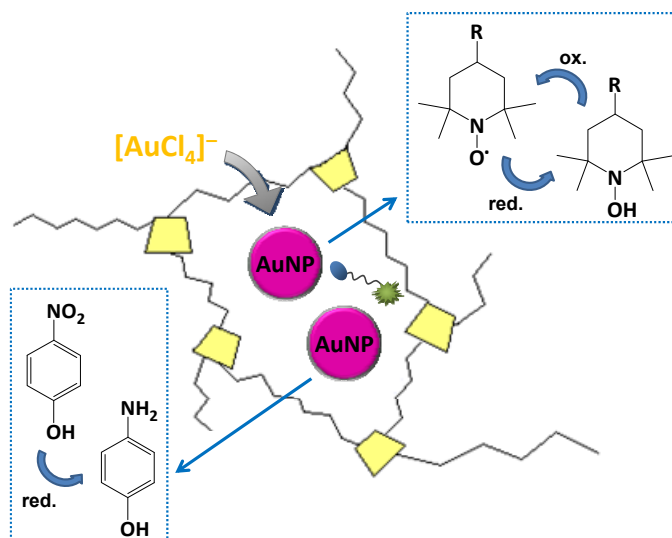
DOI: 10.33224/rch.2021.66.3.09

Rev. Roum. Chim., 2021, 66(3), 287-293

Key words: EuTi-SBA-15, PrTi-SBA-15, synthesis method, Brilliant blue FCF, photodegradation.

**Iulia MATEI, Marioara BEM,
Anca Ruxandra LEONTIEȘ,
Cristina RĂDUȚIU, Elena Irina POPESCU,
Sorin MOCANU, Florența SAVONEA,
Rodica BĂRĂȚOIU and Gabriela IONIȚĂ**

Process mediated by gold nanoparticles encapsulated in polymeric gels evidenced by EPR spectroscopy



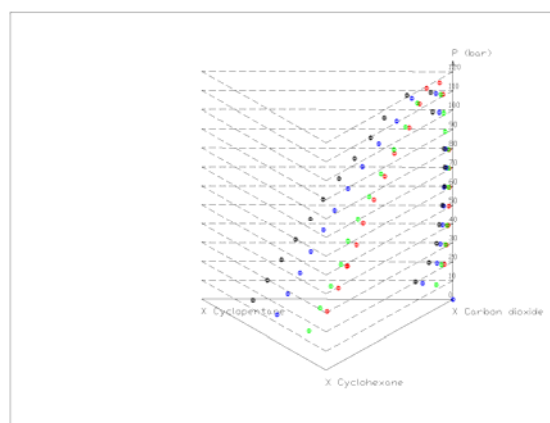
DOI: 10.33224/rch.2021.66.3.09

Rev. Roum. Chim., 2021, 66(3), 295-301

Key words: gold nanoparticles, hydrogel, nitrophenol, TEMPO, EPR spectroscopy.

Mihaela IONIȚĂ, Sergiu SIMA,
Martin CISMONTI and Catinca SECUIANU

Phase equilibria for the carbon dioxide +
cyclopentane + cyclohexane system at high
pressures



DOI: 10.33224/rch.2021.66.3.10
Rev. Roum. Chim., **2021**, 66(3), 303-308

Key words: carbon dioxide, cyclopentane, cyclohexane, high-pressures,
RK-PR EoS.