

REVUE ROUMAINE DE CHIMIE (ROUMANIAN JOURNAL OF CHEMISTRY)

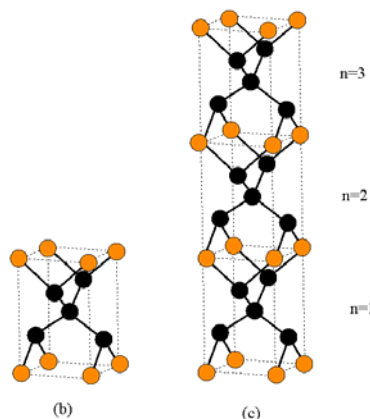
Tome 65, N° 5

Mai 2020

PAPERS

Zheng-Qing CHU, Muhammad Kamran SIDIQUI, Muhammad Faisal NADEEM and Muhammad NAEEM

Topological properties of chemical structures

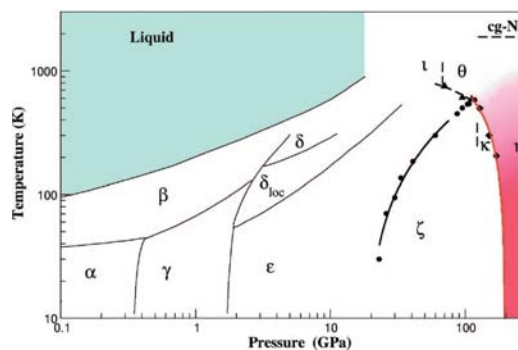


Key words: molecular graphs, cuprite, titanium difluoride, Boron-Carbon crystal structure of $P\bar{4}m2BC_3[s,t,n]$, Zagreb indices, Zagreb coindices, Sanskruti index.

DOI: 10.33224/rch.2020.65.5.01
Rev. Roum. Chim., 2020, 65(5), 411-423

Özge Akay and Hamit Yurtseven

Calculation of the thermodynamic functions using a mean field model for the fluid-solid transition in nitrogen

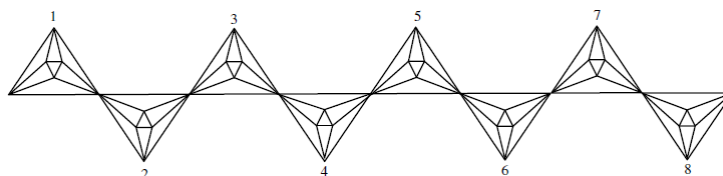


Key words: thermodynamic functions, mean field model, fluid-solid transition, N_2 .

DOI: 10.33224/rch.2020.65.5.02
Rev. Roum. Chim., 2020, 65(5), 425-432

Dan GUO, Donggang TAO, Muhammad Kamran SIDIQUI, Muhammad NAEEM, Abdul Qudair BAIG, Muhammad Razwan AZHAR

Eccentricity based topological indices of chain octahedron structure

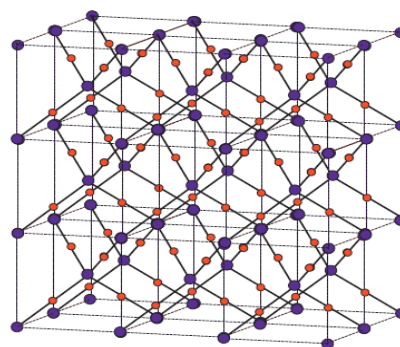


Key words: molecular graph, eccentric connectivity polynomial, eccentric connectivity index, total eccentricity, average eccentricity, atom bond connectivity index, geometric arithmetic index, chain octahedron structure.

DOI: 10.33224/rch.2020.65.5.03
Rev. Roum. Chim., 2020, 65(5), 433-445

**Muhammad Aamer RASHID, Sarfraz AHMAD,
Muhammad Kamran SIDDIQUI and
Muhammad NAEEM**

Computing topological indices of crystallographic structures

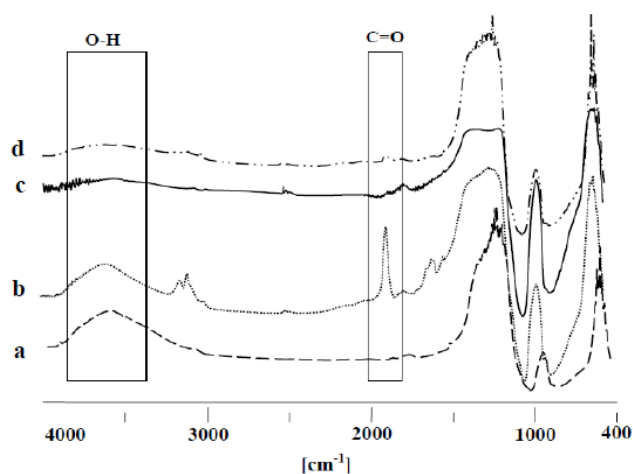


DOI: 10.33224/rch.2020.65.5.04
Rev. Roum. Chim., 2020, 65(5), 447-459

Key words: forgotten, augmented, Balaban indices, ee-defined the Zagreb indices, titanium difluoride, crystallographic structure of Cu_2O .

**Djilali BOULERBA, Abdelhalim ZOUKEL and
Mohamed Benabdallah TAOUTI**

Effect of some solvents on the molecular interaction between filler/Matrix: case of PMMA/ SiO_2 nanocomposites

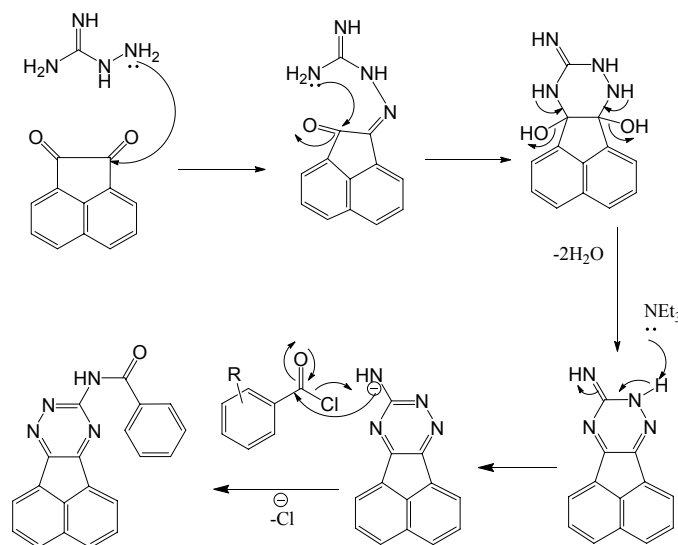


DOI: 10.33224/rch.2020.65.5.05
Rev. Roum. Chim., 2020, 65(5), 461-466

Key words: PMMA, silica, solvent, FT-IR, material studio, surface interaction energy, sol-gel.

**Somayeh Adibi SEDEH,
Mohammad Kazem MOHAMMADI,
Masood FEREIDOONNEZHAD and Ali JAVID**

Synthesis and evaluation of cytotoxic activity of new acenaphtho triazin benzamide derivatives

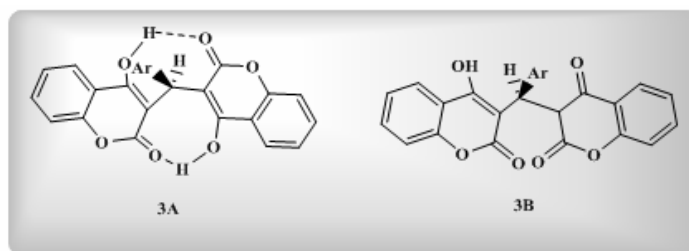


DOI: 10.33224/rch.2020.65.5.06
Rev. Roum. Chim., 2020, 65(5), 467-472

Key words: acenaphtho triazine, synthesis, guanidine, cancer.

Mozhgan SADAT-JALALI,
Mohammadreza MANAFI,
Sayed Saied HOMAMI, Banafsheh GORJI and
Amirhossein MONZAVI

Efficient synthesis of *bis*-(4-hydroxycoumarin) using sulfanilic acid as recyclable catalyst in water

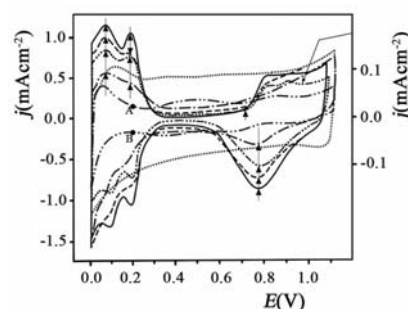


DOI: 10.33224/rch.2020.65.5.07
Rev. Roum. Chim., 2020, 65(5), 473-480

Key words: 3,3'-(arylmethylene)-bis-(4-hydroxycoumarins), biscoumarin, 4-hydroxycoumarin, sulfanilic acid.

Milica SPASOJEVIĆ,
Lenka RIBIC-ZELENOVIĆ,
Miroslav SPASOJEVIĆ and
Tomislav TRIŠOVIĆ

The effect of the composition of the alloy of RuO₂ and Pt nanocrystals on intermediate adsorption during methanol oxidation

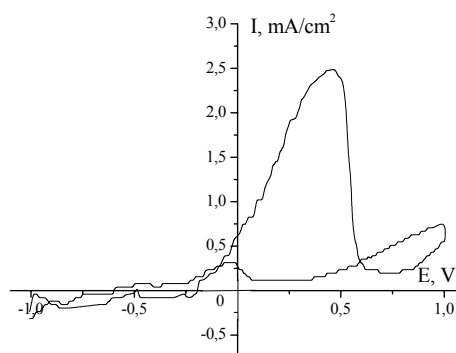


DOI: 10.33224/rch.2020.65.5.08
Rev. Roum. Chim., 2020, 65(5), 481-489

Key words: methanol, electrocatalyst, fuel cell, ruthenium, platinum.

Volodymyr DIICHUK, Iryna DIICHUK and
Igor WINKLER

A voltammetry investigation of the exchange processes running on the interphase CdSb/electrolyte

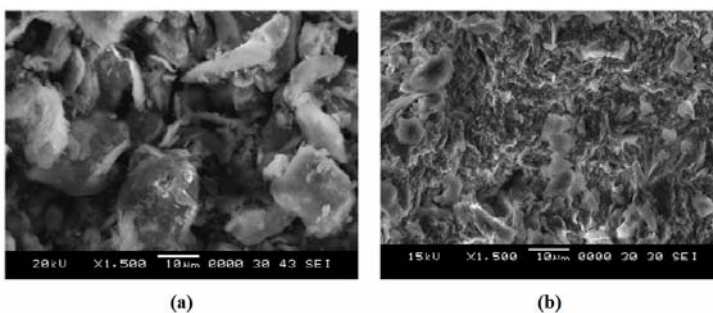


DOI: 10.33224/rch.2020.65.5.09
Rev. Roum. Chim., 2020, 65(5), 491-497

Key words: CdSb semiconductor, interphase exchange process, surface passivation, voltammetry, thermodynamic calculations.

Soufiane BOUDJEMAA and
Belkam ZIDELKHEIR

Removal properties of methylene blue from aqueous solutions by organomodified montmorillonite: isotherm, thermodynamics and kinetic studies



DOI: 10.33224/rch.2020.65.5.10
Rev. Roum. Chim., 2020, 65(5), 499-508

Key words: montmorillonite, organomodified montmorillonite, Methylene Blue, adsorption, kinetic, thermodynamic.

