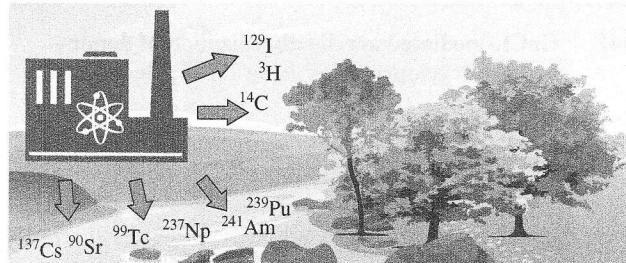


Mendeleev Communications

CONTENTS

FOCUS ARTICLE

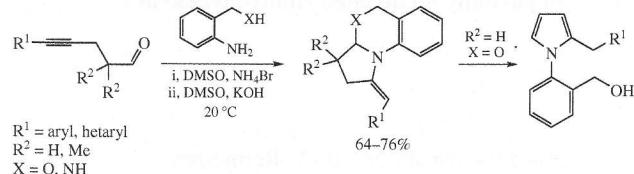
319 Nuclear power industry and the environment



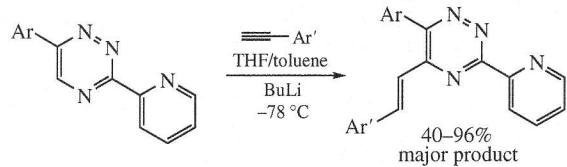
Boris F. Myasoedov, Stepan N. Kalmykov

COMMUNICATIONS

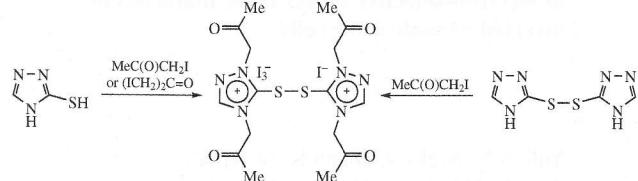
329 One-pot synthesis of 1-arylalkylidene-1,2,3,3a-tetrahydro-5*H*-pyrrolo[1,2-*a*][3,1]benzoxazines and 1-arylalkylidene-1,2,3,3a,4,5-hexahydropyrrolo[1,2-*a*]quinazolines from 5-arylalk-4-ynals and *o*-aminobenzyllic alcohol/amine

Valentin D. Gvozdev, Konstantin N. Shavrin,
Mikhail P. Egorov, Oleg M. Nefedov

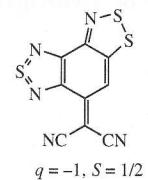
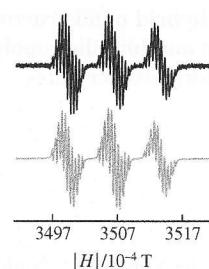
332 Reaction of lithium 2-arylethynides with 6-aryl-3-(2-pyridyl)-1,2,4-triazines as an access to 6-aryl-5-arylvinyl-3-(2-pyridyl)-1,2,4-triazines

Albert F. Khasanov, Dmitry S. Kopchuk,
Igor S. Kovalev, Olga S. Taniya, Grigory V. Zyryanov,
Vladimir L. Rusinov, Oleg N. Chupakhin

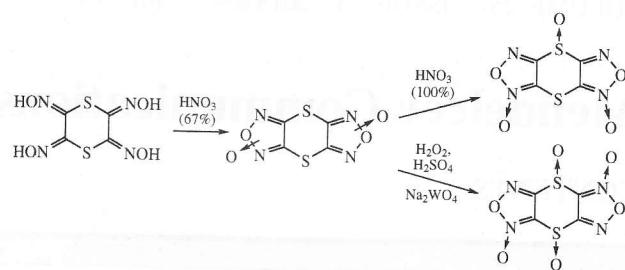
334 One-pot synthesis of disulfide-tethered ionic liquids by the reaction between 4*H*-1,2,4-triazole-3-thiol and α -iodoketones

Lyudmila G. Shagun, Ivan A. Dorofeev,
Larisa V. Zhilitskaya, Lyudmila I. Larina,
Nina O. Yarosh

336 Novel long-lived π -heterocyclic radical anion: a hybrid of 1,2,5-thiadiazolo- and 1,2,3-dithiazolidyls

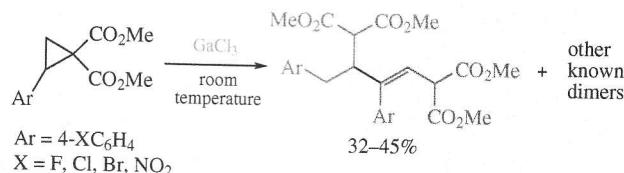
Elena A. Chulanova, Irina G. Irtegova,
Nadezhda V. Vasilieva, Irina Yu. Bagryanskaya,
Nina P. Gritsan, Andrey V. Zibarev $q = -1, S = 1/2$ 

339 [1,4]Dithiino[2,3-*c*:5,6-*c'*]bis[1,2,5]oxadiazole di-*N*-oxide: synthesis and oxidation to mono- and bis-*S*-oxides



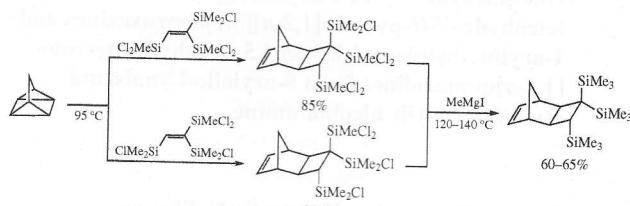
Lidia S. Konstantinova, Stanislav A. Amelichev, Sergei G. Zlotin, Marina I. Struchkova, Tamara I. Godovikova, Oleg A. Rakitin

341 GaCl_3 -mediated acyclic dimerization of donor-acceptor cyclopropanes using 1,2-dipole reactivity



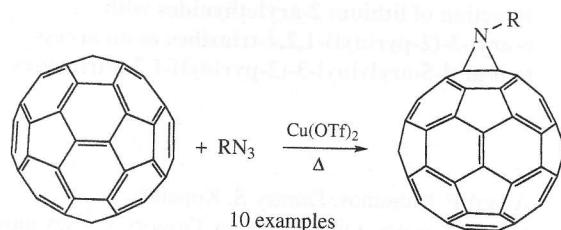
Roman A. Novikov, Anna V. Tarasova, Yury V. Tomilov

344 $[2\sigma+2\sigma+2\pi]$ -Cycloaddition of quadricyclane to partially methylated chlorosilylalkenes



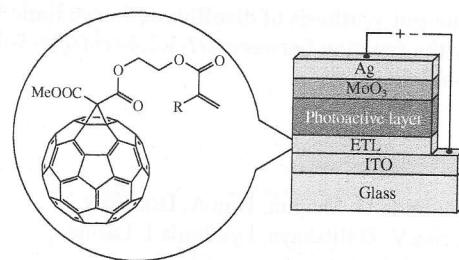
Pavel P. Chapala, Maxim V. Bermeshev, Valentin G. Lakhtin, Alexander M. Genaev, Alexander N. Tavtorkin, Eugene Sh. Finkelshtein

346 Cycloaddition of alkyl azides to fullerene C_{60} in the presence of $\text{Cu}(\text{OTf})_2$



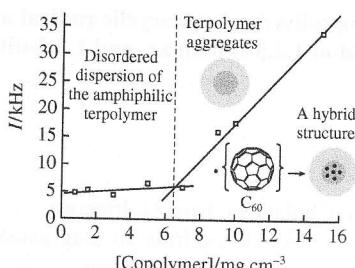
Arslan R. Akhmetov, Airat R. Tuktarov, Natal'ya R. Popod'ko, Usein M. Dzhemilev

348 Acrylate and methacrylate derivatives of fullerenes as electron-selective buffer layer materials for inverted organic solar cells



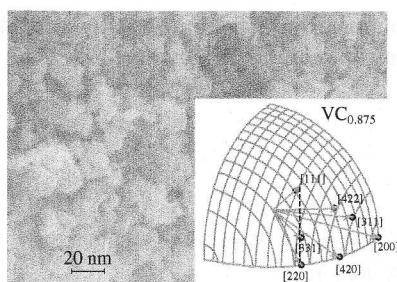
Yuliya N. Biglova, Diana K. Susarova, Azat F. Akbulatov, Akhat G. Mustafin, Pavel A. Troshin, Mansur S. Miftakhov

350 New hybrid nanostructures of C_{60} fullerene based on an amphiphilic copolymer of *N*-vinylpyrrolidone and (di)methacrylates



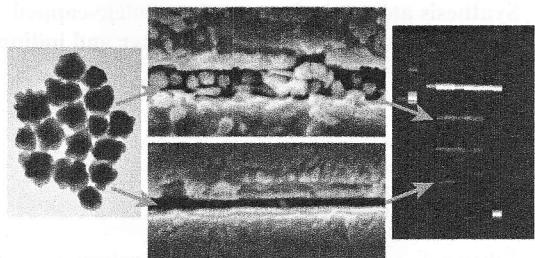
Svetlana V. Kurmaz, Nadezhda A. Obraztsova

353 Strain distortions in vanadium carbide $\text{VC}_{0.875}$ nanopowders



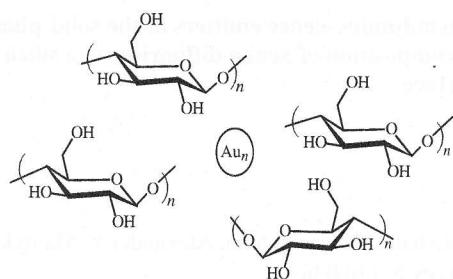
Aleksandr I. Gusev, Alexey S. Kurlov,
Andrey A. Rempel

356 Size-selective contrasting of cracks on a metal surface by gold nanoparticles



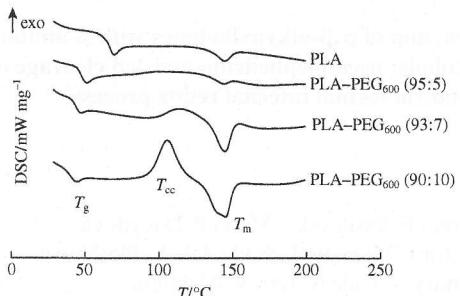
Mikhail S. Kotelev, Dmitry S. Kopitsyn,
Ivan A. Tiunov, Vladimir A. Vinokurov,
Andrei A. Novikov

358 Mesoporous material from microcrystalline cellulose with gold nanoparticles: a new approach to metal-carrying polysaccharides



Alexander Yu. Vasil'kov, Margarita S. Rubina,
Albina A. Gallyamova, Alexander V. Naumkin,
Michael I. Buzin, Galina P. Murav'eva

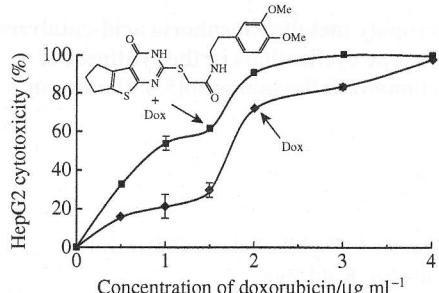
361 Mechanical and thermophysical properties of biodegradable polylactide compositions with ethyl cellulose and chitosan containing poly(ethylene glycol)



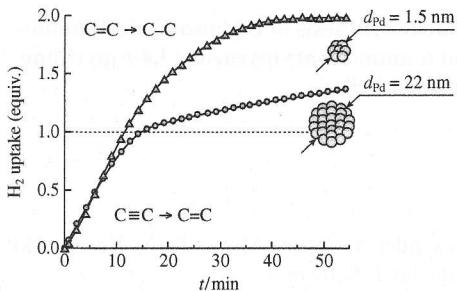
Svetlana Z. Rogovina, Kristine V. Aleksanyan,
Andrei V. Grachev, Aleksandr A. Berlin,
Eduard V. Prut

364 Novel PARP1 inhibitors potentiate doxorubicin antitumor activity *in vitro*

Tatiana V. Rakitina, Alexey A. Zeifman,
Fedor N. Novikov, Oleg V. Stroganov,
Victor S. Stroylov, Igor V. Svitanko,
Anastasia Frank-Kamenetskii,
Ghermes G. Chilov

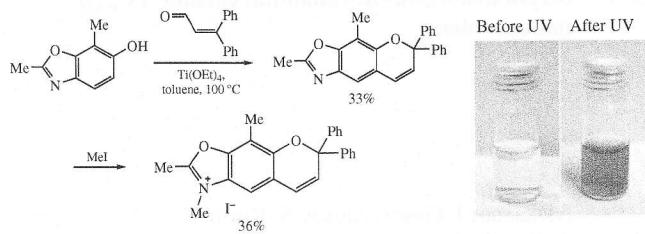


367 Size effect in the liquid phase semihydrogenation of substituted alkynes over supported Pd/Al₂O₃ catalysts



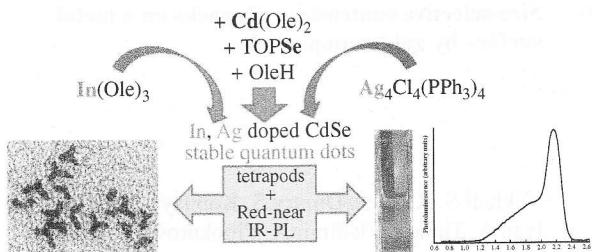
Pavel V. Markov, Olga V. Turova, Igor S. Mashkovsky,
Aleksandr K. Khudorozhkov, Valery I. Bukhtiyarov,
Aleksandr Yu. Stakheev

370 New photochromes equipped with positively charged ammonium fragments



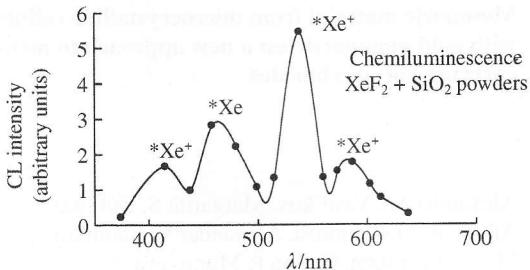
Vladimir Lokshin, Sergey V. Paramonov,
Olga A. Fedorova

372 Synthesis and optical properties of oleic-capped CdSe quantum dots doped with silver and indium



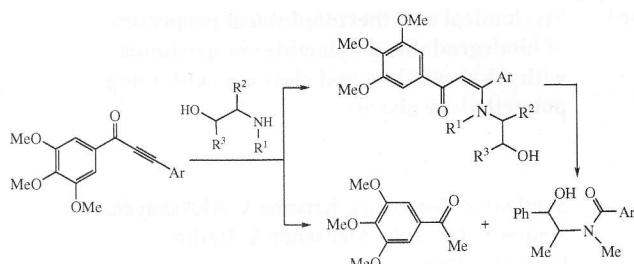
Pavel A. Kotin, Sergei S. Bubnov,
Tatyana A. Kuznetsova, Sergey G. Dorofeev

375 Chemiluminescence emitters in the solid-phase decomposition of xenon difluoride on a silica gel surface



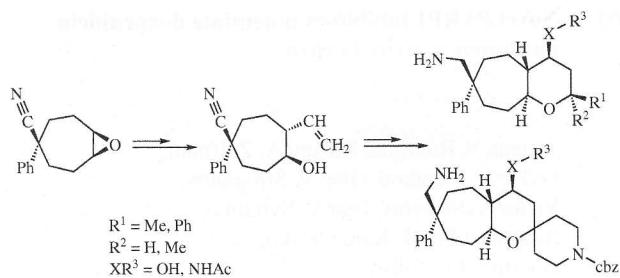
Gul'shat A. Masyagutova, Alexander V. Mamykin,
Sergey S. Ostakhov

377 Reaction of α,β -alkynylketones with β -amino alcohols: pseudoephedrine-assisted cleavage of triple bond via formal internal redox process



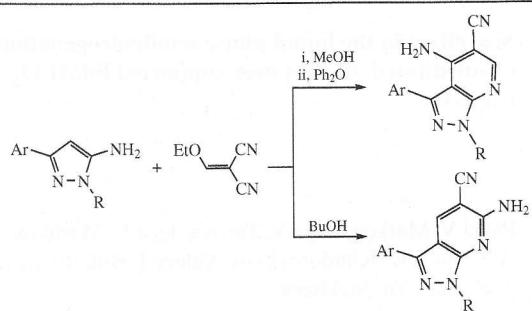
Sergei F. Vasilevsky, Maria P. Davydova,
Victor I. Mamatuyk, Nadezhda V. Pleshkova,
Dmitry S. Fadeev, Igor V. Alabugin

380 Heteropoly metallophosphoric acid-catalyzed Prins-type cyclizations in the synthesis of functionalized 8-oxabicyclo[5.4.0]undecanes



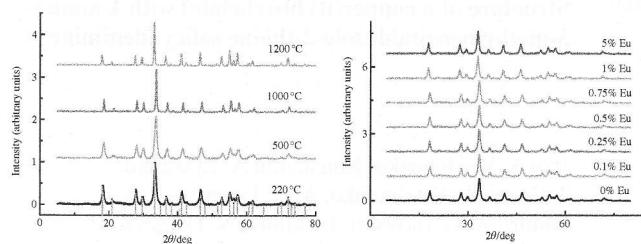
Aleksandr I. Tsybin, Valeriy P. Perevalov,
Tatiana Yu. Koldaeva

382 A facile synthesis of regioisomeric 4-amino- and 6-amino-3-arylpyrazolo[3,4-*b*]pyridine-5-carbonitriles



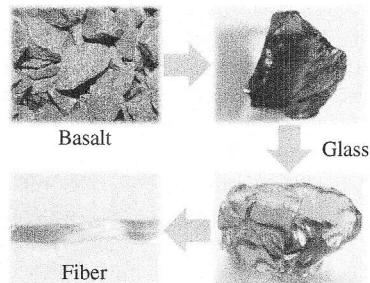
Alexander A. Petrov, Alexander N. Kasatochkin,
Stanislav I. Selivanov

384 Solvothermal synthesis of Eu³⁺-doped holmium aluminum garnet



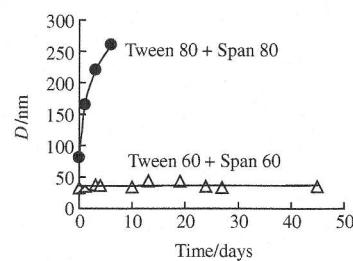
Lina Pavasaryte, Beatriz Julián López,
Aivaras Kareiva

386 Effect of deferrization on continuous basalt fiber properties



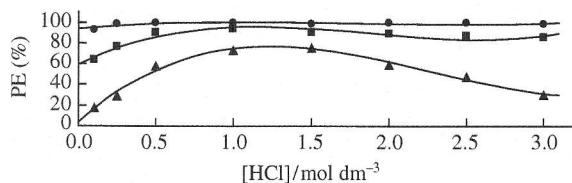
Mikhail S. Manylov, Sergey I. Gutnikov,
Yakov V. Lipatov, Artem P. Malakho,
Bogdan I. Lazoryak

389 Properties of nanocapsules obtained from oil-in-water nanoemulsions



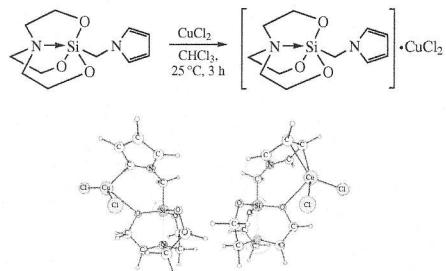
Marina Yu. Koroleva, Tatyana Yu. Nagovitsina,
Evgeny V. Yurtov

391 Liquid–liquid extraction of palladium(II) in diantripyrilalkane–benzoic acid–HCl–H₂O stratifying systems



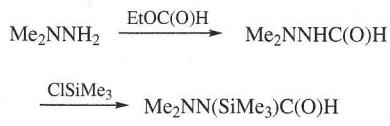
Ivan A. Kasatkin, Mikhail I. Degtev,
Leonid I. Toropov

393 Synthesis and calculated structure of a copper(II) complex with 1-(1-silatranyl methyl)pyrrole



Vera V. Belyaeva, Elena F. Belogolova,
Yuliya I. Bolgova, Olga M. Trofimova

395 Synthesis and molecular properties of formic hydrazides



Liya O. Belova, Maria V. Pletneva, Nataliya A. Golub,
Aleksei D. Kirilin, Viktor D. Sheludyakov,
Pavel A. Storozhenko, Alexander A. Korlyukov

Structure of a copper(II) bis(chelate) with 1-amino-3-methylbenzimidazole-2-thione salicylideneimine

Igor S. Vasilchenko, Konstantin A. Lyssenko,
Tat'yana A. Kuz'menko, Ali I. Uraev,
Dmitrii A. Garnovskii, Lyudmila N. Divaeva,
Anatolii S. Burlov

