

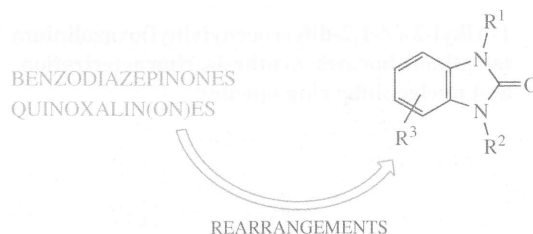
Mendeleev Communications

CONTENTS

FOCUS ARTICLE

- 1 **Advances in the synthesis of benzimidazolones via rearrangements of benzodiazepinones and quinoxalin(on)es**

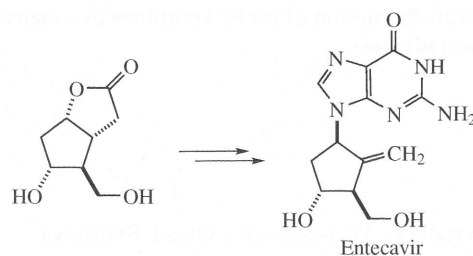
Vakhid A. Mamedov, Nataliya A. Zhukova,
Oleg G. Sinyashin



COMMUNICATIONS

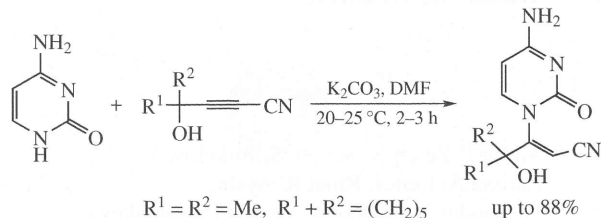
- 12 **Synthesis of racemic Entecavir**

Nikolai S. Vostrikov, Ilya F. Lobko,
Zuleikha R. Valiullina, Mansur S. Miftakhov



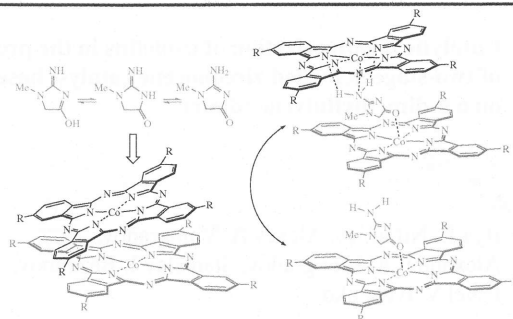
- 14 **Regio- and stereoselective modification of cytosine with cyanopropargylic alcohols**

Anastasiya G. Mal'kina, Valentina V. Nosyreva,
Olesya A. Shemyakina, Alexander I. Albanov,
Boris A. Trofimov



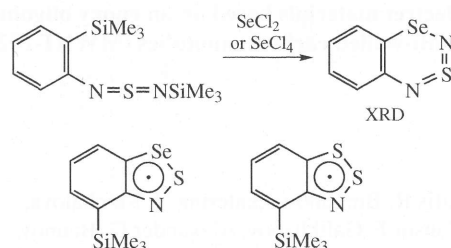
- 16 **Interaction between creatinine and sulfonated derivatives of cobalt phthalocyanine**

Artur S. Vashurin, Alena A. Voronina-Chernova,
Vladimir E. Maizlish, Oscar I. Koifman



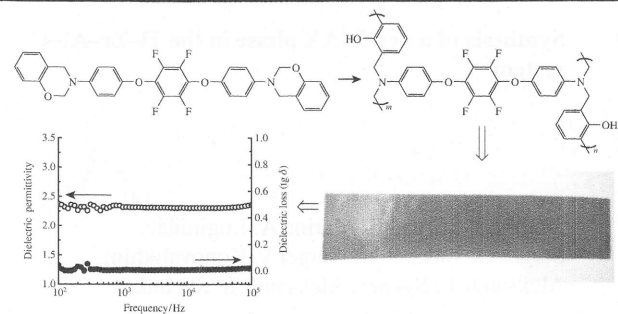
- 19 **3,1,2,4-Benzothiaselenadiazine and related heterocycles: synthesis and transformation into Herz-type radicals**

Yulia M. Volkova, Alexander Yu. Makarov,
Samat B. Zikirin, Alexander M. Genaev,
Irina Yu. Bagryanskaya, Andrey V. Zibarev



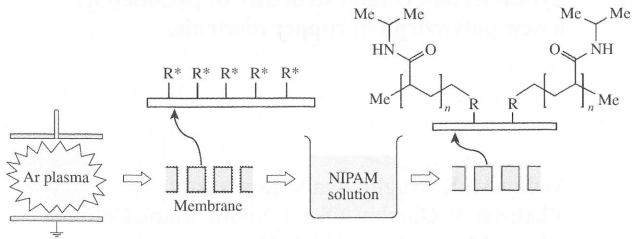
41 **Low dielectric material from novel core-fluorinated polybenzoxazine**

Yaroslav L. Kobzar, Ihor M. Tkachenko,
Eugenia V. Lobko, Oleg V. Shekera,
Anna P. Syrovets, Valery V. Shevchenko



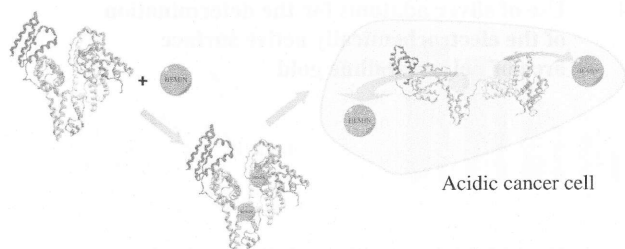
44 **Modification of the surface and pores of poly(ethylene terephthalate) track membranes using *N*-isopropylacrylamide for an improvement of membrane performances**

Denis A. Trofimov, Valery M. Shkinev,
Boris Ya. Spivakov



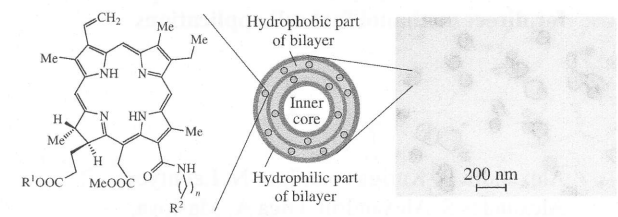
47 **A pH-controllable protein container for the delivery of hydrophobic porphyrins**

Natalya Sh. Lebedeva, Elena S. Yurina,
Yury A. Gubarev, Oscar I. Koifman



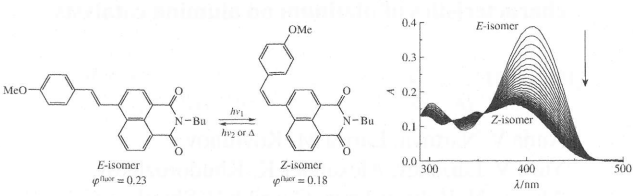
50 **Incorporation of hydrophobic chlorin photosensitizers into a liposome membrane**

Olga I. Gushchina, Vladislav A. Gramma,
Ekaterina A. Larkina, Andrey F. Mironov



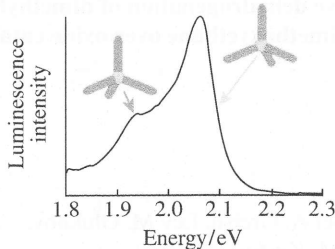
53 **Relationship between the photochromic and fluorescent properties of 4-styryl derivatives of *N*-butyl-1,8-naphthalimide**

Antonina N. Arkhipova, Pavel A. Panchenko,
Yurii V. Fedorov, Olga A. Fedorova



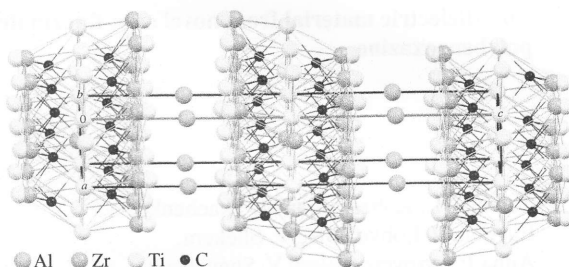
56 **Tetrapod-shaped quantum dots with secondary excitonic luminescence**

Aleksandr N. Zolotikh, Sergey G. Dorofeev,
Sergey S. Bubenov, Tatyana A. Kuznetsova



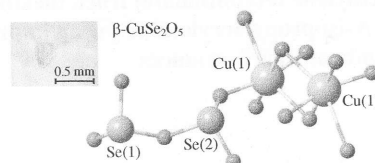
59 **Synthesis of a new MAX phase in the Ti–Zr–Al–C system**

Dmitry Yu. Kovalev, Marina A. Luginina,
Sergei G. Vadchenko, Sergei V. Konovalikhin,
Aleksandr E. Sychev, Aleksandr S. Shchukin



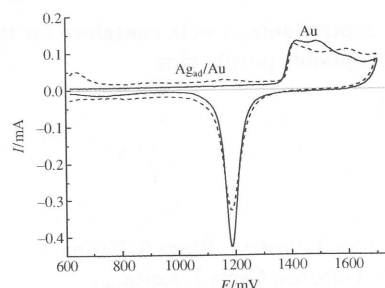
61 **Synthesis and crystal structure of β -CuSe₂O₅, a new polymorph of copper diselenite**

Vadim M. Kovrugin, Ilya V. Korniyakov,
Vladislav V. Gurzhiy, Oleg I. Siidra, Marie Colmont,
Olivier Mentré, Sergey V. Krivovichev



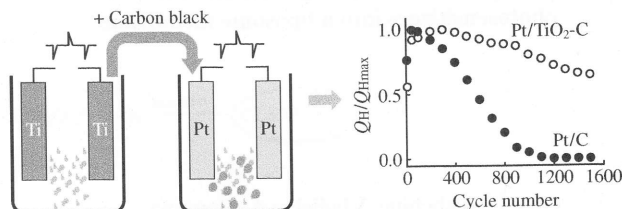
64 **Use of silver adatoms for the determination of the electrochemically active surface area of polycrystalline gold**

Yurii M. Maksimov, Boris I. Podlovchenko



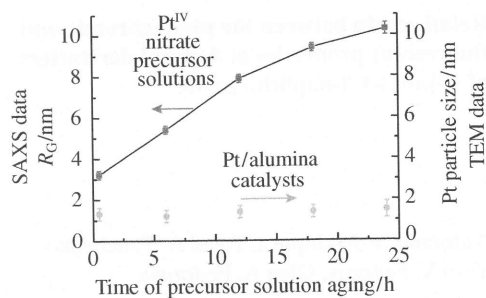
67 **Electrochemically synthesized Pt/TiO₂-C catalysts for direct methanol fuel cell applications**

Alexandra B. Kuriganova, Igor N. Leontyev,
Alexander S. Alexandrin, Olga A. Maslova,
Aydar I. Rakhmatullin, Nina V. Smirnova



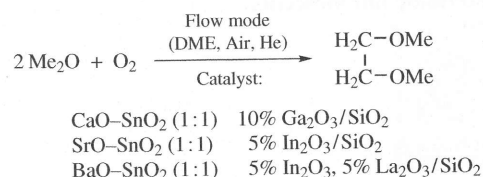
70 **Influence of a precursor solution on the characteristics of platinum on alumina catalysts**

Anna V. Nartova, Larisa M. Kovtunova,
Yurii V. Larichev, Alexander K. Khudorozhkov,
Alessia N. Bobrovskaya, Genrikh V. Shterk,
Valerii I. Bukhtiyarov



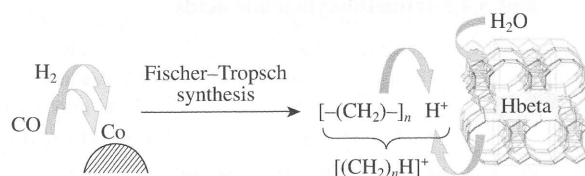
72 **Oxidative dehydrogenation of dimethyl ether to 1,2-dimethoxyethane over oxide catalysts**

Alexander A. Greish, Lev M. Glukhov,
Leonid M. Kustov



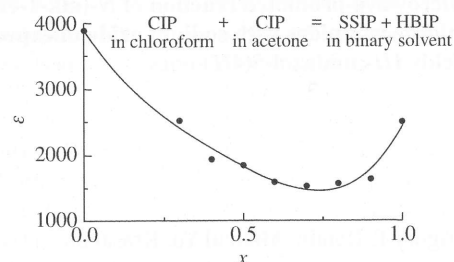
- 75 **Effect of water on the secondary transformations of hydrocarbons in the Fischer–Tropsch synthesis on Co-zeolite catalysts**

Lilia V. Sineva, Ekaterina V. Kulchakovskaya,
Ekaterina Yu. Asalieva, Vladimir Z. Mordkovich



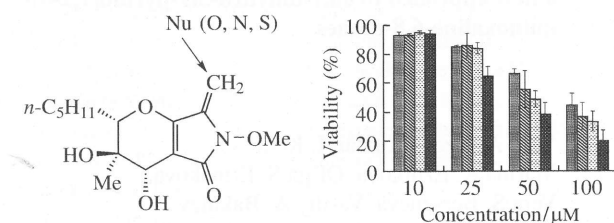
- 78 **Effect of ion solvation in binary solvents on the stability of ion pairs**

Maxim V. Tolstykh, Yulia V. Nelyubina,
Vitalii Yu. Kotov



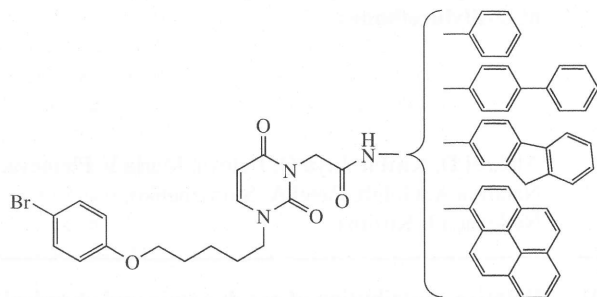
- 82 **Synthesis of 7-(4-methylphenyl)thiomethyl and 7-morpholymethyl derivatives of natural phaeosphaeride A and their cytotoxic activity**

Victoria V. Abzianidze, Ksenia P. Bolshakova,
Daria S. Prokofieva, Alexander O. Berestetskiy,
Victor A. Kuznetsov, Yuri G. Trishin



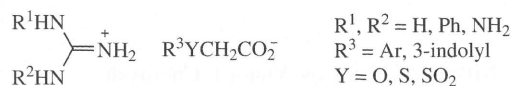
- 85 **Novel 1-[5-(4-bromophenoxy)pentyl]-3-(2-arylamino-2-oxoethyl)uracils and their antiviral properties**

Maria P. Paramonova, Anastasia L. Khandazhinskaya,
Katherine L. Seley-Radtke, Mikhail S. Novikov



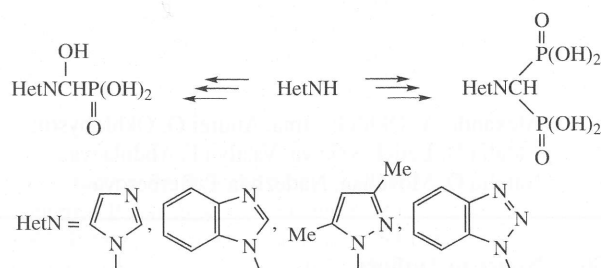
- 88 **Novel guanidinium salts of biologically active (het)arylchalcogenylacetic acids**

Sergei N. Adamovich, Igor A. Ushakov,
Alexander V. Vashchenko



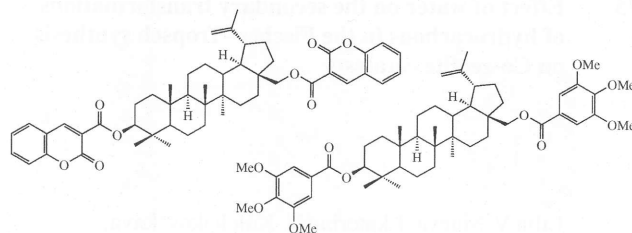
- 90 **Synthesis of new five-membered N-heterocycle derivatives of mono- and bis-phosphonic acids**

Andrey A. Prishchenko, Mikhail V. Livantsov,
Olga P. Novikova, Ludmila I. Livantsova,
Valery S. Petrosyan



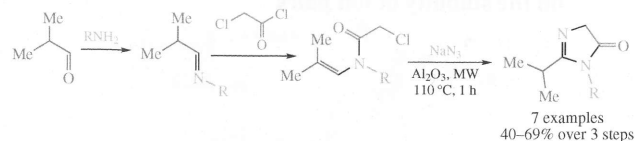
- 93 **Betulin esters with coumarin-3-carboxylic and 3,4,5-trimethoxybenzoic acids**

Ge-Yang Wang, Lei Jin, Feng-Yu Piao,
Rong-Bi Han



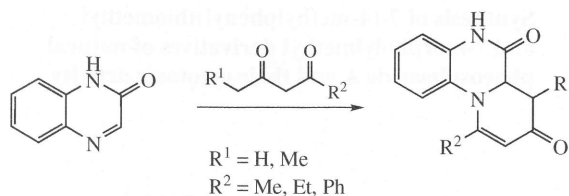
- 95 **Microwave-promoted reaction of *N*-(alk-1-enyl)-chloroacetamides with sodium azide unexpectedly yields 1*H*-imidazol-5(4*H*)-ones**

Grigory P. Kantin, Mikhail Yu. Krasavin



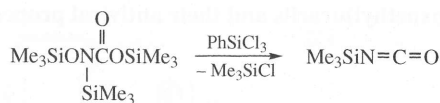
- 97 **Reactions of quinoxalin-2-one with β -diketones: a new approach to 6a,7-dihydro-5*H*-pyrido[1,2-*a*]-quinoxaline-6,8-diones**

Yurii A. Azev, Mikhail I. Kodess,
Marina A. Ezhikova, Ol'ga S. Ermakova,
Vera S. Berseneva, Vasiliy A. Bakulev



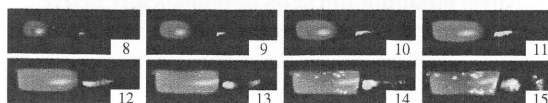
- 99 **New aspects of isocyanate synthesis with the use of *O*-silylurethanes**

Aleksei D. Kirilin, Liya O. Belova, Maria V. Pletneva,
Nataliya A. Golub, Pavel A. Storozhenko,
Nadezhda I. Kirilina



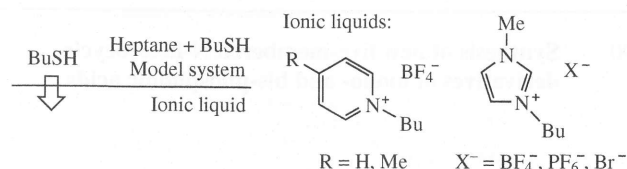
- 101 **Relative contribution of gas dynamic and chemical factors to flame penetration through small openings in a closed cylindrical reactor**

Nikolai M. Rubtsov, Victor I. Chernysh,
Georgii I. Tsvetkov, Kirill Ya. Troshin



- 104 **An alternative method for the desulfurization of hydrocarbon fuels**

Alexandra V. Okhlobystina, Andrei O. Okhlobystin,
Natalia N. Letichevskaya, Vasilya F. Abdulaeva,
Natalia O. Movchan, Nadezhda T. Berberova



- 106 **Notice to Authors**