

**Ústav organické chemie a technologie
Fakulta chemicko-technologická
Univerzita Pardubice**

**Institute of Organic Chemistry and Technology
Faculty of Chemical Technology
University of Pardubice**

**Publikace v mezinárodních odborných časopisech za rok 2020
Scientific papers in international journals for the year 2020**

MELÁNOVÁ, K., BRUS, J., ZIMA, V., BENEŠ, L., SVOBODA, J., KOBERA, L., KUTÁLEK, P. Formation of Layered Proton - Conducting Zirconium and Titanium Organophosphonates by Topotactic Reaction: Physicochemical Properties, Proton Dynamics, and Atomic - Resolution Structure. *Inorganic Chemistry*, 2020, 59, 1, 505-513.

NOVÁKOVÁ, G., DRABINA, P., BRŮČKOVÁ, L., BÁČOVÁ, J., HANDL, J., SVOBODA, J., VRBICKÝ, M., ROUŠAR, T., SEDLÁK, M. Enantioselective Synthesis of Clavaminol A, Xestoaminol C and their Stereoisomers Exhibiting Cytotoxic Activity. *European Journal of Organic Chemistry*, 2020, 2020, 24, 3671-3679.

FECKOVÁ, M., LE POUL, P., BUREŠ, F., ROBIN-LE GUEN, F., ACHELLE, S. Nonlinear optical properties of pyrimidine chromophores. *Dyes and Pigments*, 2020, 182, November, s108659-1-108659-18.

JORDA, R., MAGAR, P., HENDRYCHOVA, D., PAUK, K., DIBUS, M., PILAŘOVÁ, E., IMRAMOVSKÝ, A., KRYSTOF, V. Novel modified leucine and phenylalanine dipeptides modulate viability and attachment of cancer cells. *European Journal of Medicinal Chemistry*, 2020, 188, February, 112036-1-112036-13.

MOSHKINA, TN., LE POUL, P., BARSELLA, A., PYTELA, O., BUREŠ, F., ROBIN-LE GUEN, F., ACHELLE, S., NOSOVA, EV., LIPUNOVA, GN., CHARUSHIN, VN. Electron-Withdrawing Substituted Quinazoline Push-Pull Chromophores: Synthesis, Electrochemical, Photophysical and Second-Order Nonlinear Optical Properties. *European Journal of Organic Chemistry*, 2020, 2020, 33, 5445-5454.

ZAZPE, R., CHARVOT, J., KRUMPOLEC, R., HROMÁDKO, L., PAVLIŇÁK, D., DVOŘÁK, F., KNOTEK, P., MICHALICKA, J., PŘIKRYL, J., NG, S., JELÍNKOVÁ, V., BUREŠ, F., MACÁK, J. Atomic Layer Deposition of MoSe₂ Using New Selenium Precursors. *FlatChem*, 2020, 21, May, 100166-1-100166-10.

CHARVOT, J., POKORNÝ, D., KLIKAR, M., JELÍNKOVÁ, V., BUREŠ, F. Towards Volatile Organoselenium Compounds with Cost-Effective Synthesis. *Molecules*, 2020, 25, 21, 5212-1-5212-9.

AGOSTINHO MONTEIRO, SE., IMRAMOVSKÝ, A., PAUK, K., RŮŽIČKOVÁ, Z., CARVALHO, C., PAVLIK, J. Synthesis of Alfaaprostol Key Intermediate Ynol via Br/Mg Exchange. *Organic preparations and procedures international*, 2020, 52, 2, 127-138.

KRÁLOVEC, K., MELOUNKOVÁ, L., SLOVÁKOVÁ, M., MANNOVÁ, N., SEDLÁK, M., BARTÁČEK, J., HAVELEK, R. Disruption of Cell Adhesion and Cytoskeletal Networks by Thiol-Functionalized Silica-Coated Iron Oxide Nanoparticles. *International Journal of Molecular Sciences*, 2020, 21, 24, 9350-1-9350-20.

SEINTIS, K., KALIS, I., KLIKAR, M., BUREŠ, F., FAKIS, M. Excitation/detection energy controlled anisotropy dynamics in asymmetrically cyano substituted tri-podal molecules. *Physical Chemistry Chemical Physics*, 2020, 22, 29, 16681-16690.

MARTÍNEK, M., VÁŇA, J., ŠEBEJ, P., NAVRÁTIL, R., SLANINA, T., LUDVÍKOVÁ, L., ROITHOVA, J., KLÁN, P. Photochemistry of a 9-Dithianyl-Pyronin Derivative: A Cornucopia of Reaction Intermediates Lead to Common Photoproducts. *ChemPlusChem*, 2020, 85, 10, 2230-2242.

CHARVOT, J., POKORNÝ, D., ZAZPE, R., KRUMPOLEC, R., PAVLIŇÁK, D., HROMÁDKO, L., PŘIKRYL, J., RODRIGUEZ PEREIRA, J., KLIKAR, M., JELÍNKOVÁ, V., MACÁK, J., BUREŠ, F. Cyclic Silyl selenides: Convenient Selenium Precursors for Atomic Layer Deposition. *ChemPlusChem*, 2020, roč. 85, č. 3, s. 576-579.

NOVOTNÁ, E., KITYK, IV., PYTELA, O., BUREŠ, F., LUDWIG, M., KLIKAR, M., OZGA, K., JEDRYKA, J. ThDione: A Powerful Electron-Withdrawing Moiety for Push-Pull Molecules. *ChemPlusChem*, 2020, 85, 7, 1549-1558.

JANÍKOVÁ, L., CHÝLKOVÁ, J., ŠELEŠOVSKÁ, R., SEDLÁK, M., VÁŇA, J., DUŠEK, L., BARTÁČEK, J. Electrochemical behavior of plant growth stimulator 1-naphthaleneacetic acid and its voltammetric determination using boron doped diamond electrode. *Journal of Electroanalytical Chemistry*, 2020, 859, February, 113855-1-113855-8.

RODRIGUEZ PEREIRA, J., ZAZPE, R., CHARVOT, J., BUREŠ, F., MACÁK, J. Molybdenum diselenide thin films grown by atomic layer deposition: An XPS analysis. *Surface Science Spectra*, 2020, 27, 2, 024006-1-024006-8.

MADEA, D., MARTÍNEK, M., MUCHOVÁ, L., VÁŇA, J., VÍTEK, L., KLÁN, P. Structural Modifications of Nile Red Carbon Monoxide Fluorescent Probe: Sensing Mechanism and Applications. *Journal of Organic Chemistry*, 2020, 85, 5, 3473-3489.

KOVÁŘ, P., ŠKODA, J., POSPÍŠIL, M., MELÁNOVÁ, K., SVOBODA, J., BENEŠ, L., KUTÁLEK, P., ZIMA, V., BUREŠ, F. How N-(pyridin-4-yl)pyridin-4-amine and its methyl and nitro derivatives are arranged in the interlayer space of zirconium sulfophenylphosphonate: a problem solved by experimental and calculation methods. *Journal of Computer-Aided Molecular Design*, 2020, 34, 6, 683-695.

PODLESNÝ, J., JELÍNKOVÁ, V., PYTELA, O., KLIKAR, M., BUREŠ, F. Acceptor-induced photoisomerization in small thienothiophene push-pull chromophores. *Dyes and Pigments*, 2020, 179, August, 108398-1-108398-9.

HASSAN, AF., ALAFID, FRA., HRDINA, R. Preparation of melamine formaldehyde/nanozeolite Y composite based on nanosilica extracted from rice husks by sol-gel method: adsorption of lead (II) ion. *Journal of Sol-Gel Science and Technology*, 2020, 95, 1, 211-222.

KOURNOUTAS, F., FIHEY, A., MALVAL, J., SPANGENBERG, A., FECKOVÁ, M., LE POUL, P., KATAN, C., ROBIN-LE GUEN, F., BUREŠ, F., ACHELLE, S., FAKIS, M. Branching effect on the linear and nonlinear optical properties of styrylpyrimidines. *Physical Chemistry Chemical Physics*, 2020, 22, 7, 4165-4176.

KOURNOUTAS, F., KALIS, IK., FECKOVÁ, M., ACHELLE, S., FAKIS, M. The effect of protonation on the excited state dynamics of pyrimidine chromophores. *Journal of Photochemistry and Photobiology A-Chemistry*, 2020, 391, March, 112398-1-112398-7.