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Publikační činnost uchazeče o jmenovací řízení

(1) Původní články v periodikách s IF (* - korespondenční autor)

1.

Matejcek P., Uhlik F., Limpouchova Z., Prochazka K.*, Tuzar Z., Webber S.E.: Experimental Study of Hydrophobically Modified Amphiphilic Block Copolymer Micelles Using Light Scattering and Nonradiative Excitation Energy Transfer. *Macromolecules* **2002**, 35, 9487–9496 (IF²⁰⁰² = 3.751).

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Uhlik F., Limpouchova Z., **Matejcek P.**, Prochazka K.*, Tuzar Z., Webber S.E.: Nonradiative Excitation Energy Transfer in Hydrophobically Modified Amphiphilic Block Copolymer Micelles. Theoretical Model and Monte Carlo Simulations. *Macromolecules* **2002**, 35, 9497–9505 (IF²⁰⁰² = 3.751).

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Matejcek P., Uhlik F., Limpouchova Z., Prochazka K.*, Tuzar Z., Webber S. E.: Hydrophobically modified amphiphilic block copolymer micelles in non-aqueous polar solvents. Fluorometric, light scattering and computer-based Monte Carlo study. *Collection of Czechoslovak Chemical Communications* **2002**, 67, 531–556 (IF²⁰¹³ = 1.137).

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Matejcek P., Humpolickova J., Prochazka K.*, Tuzar Z., Spirkova M., Hof M., Weber S. E.: Hybrid Block Copolymer Micelles with Partly Hydrophobically Modified Polyelectrolyte Shells in Polar and Aqueous Media. Experimental Study Using Fluorescence Correlation Spectroscopy, Time-Resolved Fluorescence, Light Scattering and Atomic Force Microscopy. *Journal of Physical Chemistry B* **2003**, 107, 8232–8240 (IF²⁰⁰³ = 3.679).

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Jelinek K., Uhlik F., Limpouchova Z., **Matejcek P.**, Humpolickova J., Prochazka K.*, Tuzar Z., Spirkova M., Hof M.: Block Polyelectrolyte Micelles with Hydrophobically Modified Shells. Light, Scattering, Fluorescence and Atomic Force Microscopy Experimental Study and Mean Field and Monte Carlo Computer Simulations. *Molecular Simulation* **2003**, 29, 655–660 (IF²⁰⁰³ = 0.721).

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Matejcek P., Podhajecka K., Humpolickova J., Uhlik F., Jelinek K., Limpouchova Z., Prochazka K.*, Spirkova M.: Polyelectrolyte Behavior of Polystyrene-*block*-poly(methacrylic acid) Micelles in Aqueous Solutions at Low Ionic Strength, Experimental and Theoretical Study. *Macromolecules* **2004**, 37, 10141–10154 (IF²⁰⁰⁴ = 3.898).

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Stepanek M., **Matejicek P.**, Humpolickova J., Havrankova J., Podhajecka K., Prochazka K.*, Spirkova M., Tuzar Z., Tsitsilianis C.: New Insights on the Behaviour and Self-assembly of Polystyrene/poly(2-vinylpyridine) „Hairy“ Heteroarm Star Copolymers with Highly Asymmetric Arms in Polar Organic and Aqueous Media. *Polymer* **2005**, 46, 10493–10505 (IF²⁰⁰⁵ = 2.849).

8.

Stepanek M., **Matejicek P.**, Humpolickova J., Prochazka K.*: Aggregation of Block Copolymer Micelles with Poly(2-vinylpyridine)-*block*-poly(ethylene oxide) Shells in Acid Aqueous solutions. *Langmuir* **2005**, 21, 10783–10790 (IF²⁰⁰⁵ = 3.705).

9.

Popelka S., Machova L., Rypacek F., Spirkova M., Stepanek M., **Matejicek P.**, Prochazka K.*: Dynamics of Chain Exchange between Self-assembled Diblock Copolymer Micelles of Poly(ethylene oxide)-*block*-poly(lactide) Studied by Direct Nonradiative Excitation Energy Transfer. *Collection of Czechoslovak Chemical Communications* **2005**, 70, 1811–1828 (IF²⁰¹³ = 1.137).

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Matejicek P.*, Cigler P., Prochazka K., Kral V.: Molecular Assembly of Metallacarboranes in Water: Light Scattering and Microscopy Study. *Langmuir* **2006**, 22, 575–581 (IF²⁰⁰⁶ = 3.902).

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Matejicek P., Stepanek M., Uchman M., Prochazka K.*, Spirkova M.: Atomic Force Microscopy and Light Scattering Study of Onion-Type Micelles Formed by Polystyrene-*block*-poly(2-vinylpyridine) and Poly(2-vinylpyridine)-*block*-poly(ethylene oxide) Copolymers in Aqueous Solutions. *Collection of Czechoslovak Chemical Communications* **2006**, 71, 723–738 (IF²⁰¹³ = 1.137).

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Jelinek K., Uhlik F., Limpouchova Z., **Matejicek P.**, Prochazka K.*: Copolymer Micelles with Polyelectrolyte Shell in Aqueous Media. A Mean-Field Study. *Collection of Czechoslovak Chemical Communications* **2006**, 71, 756–768 (IF²⁰¹³ = 1.137).

13.

Sachl R., Uchman M., **Matejicek P.**, Prochazka K., Stepanek M.*: Preparation and Characterization of Self-assembled Nanoparticles Formed by Poly(ethylene oxide)-*block*-poly(ϵ -caprolactone) Copolymers with Long Poly(ϵ -caprolactone) Blocks in Aqueous Solutions. *Langmuir* **2007**, 23, 3395–3400 (IF²⁰⁰⁷ = 4.009).

14.

Kubat P.*, Lang K.*, Cigler P., Kozisek M., **Matejicek P.**, Janda P., Zelinger Z., Prochazka K., Kral V.: Tetraphenylporphyrin-cobalt(III)bis(1,2-dicarbollide) conjugate:

from the solution characteristics to inhibition of HIV protease. *Journal of Physical Chemistry B* **2007**, *111*, 4539–4546 (IF²⁰⁰⁷ = 4.086).

15.

Matejicek P.*, Uchman M., Lokajova J., Stepanek M., Prochazka K., Spirkova M.: Interpolymer Complexes Based on the Core/shell Micelles. Interaction of Polystyrene-*block*-poly(methacrylic acid) Micelles with Linear Poly(2-vinylpyridine) in 1,4-Dioxane Water Mixtures and in Aqueous Solutions. *Journal of Physical Chemistry B* **2007**, *111*, 8394–8401 (IF²⁰⁰⁷ = 4.086).

16.

Matejicek P., Cigler P., Olejniczak A.B., Andrysiak A., Wojtczak B., Prochazka K., Lesnikowski Z.J.*: Aggregation Behavior of Nucleoside-boron Cluster Conjugates in Aqueous Solutions. *Langmuir* **2008**, *24*, 2625–2630 (IF²⁰⁰⁸ = 4.097).

17.

Kubat P.*, Lang K.*, Lhotak P., Janda P., Sykora J., **Matejicek P.**, Hof M., Prochazka K., Zelinger Z.: Porphyrin/Calixarene Self-Assemblies in Aqueous Solution. *Journal of Photochemistry and Photobiology A-Chemistry* **2008**, *198*, 18–25 (IF²⁰⁰⁸ = 2.362).

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Matejicek P., Uhlik F., Limpouchova Z., Prochazka K.*: The use of Monte Carlo simulations for the interpretation of light scattering and fluorescence data on self-assembling polymer systems in solutions. *Collection of Czechoslovak Chemical Communications* **2008**, *73*, 293–313 (IF²⁰¹³ = 1.137).

19.

Matejicek P.*, Uchman M., Lokajova J., Stepanek M., Spirkova M., Prochazka K.: Multilayer Polymeric Nanoparticles Based on Specific Interactions in solution: Polystyrene-*block*-poly(methacrylic acid) Micelles with Linear Poly(2-vinylpyridine) in Aqueous Buffers. *Materials and Manufacturing Processes* **2008**, *23*, 557–560 (IF²⁰⁰⁸ = 0.706).

20.

Podhájecká K.*, **Matejicek P.**, Vohlidal J., Masuda T., Pflieger J.: Photoelectrical Behavior of Perylene Derivative/ π -Conjugated Polymer System. *Synthetic Metals* **2008**, *158*, 775–781 (IF²⁰⁰⁸ = 1.962).

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Matejicek P.*, Zednik J., Ušelova K., Pleštil J., Fanfrlík J., Nykanen A., Ruokolainen J., Hobza P., Prochazka K.: Stimuli-Responsive Nanoparticles Based on Interaction of Metallocarborane with Poly(ethylene oxide). *Macromolecules* **2009**, *42*, 4829–4837 (IF²⁰⁰⁹ = 4.539).

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Uchman M., Jurkiewicz P., Cigler P., Gruner B., Hof M., Prochazka K., **Matejicek P.***: Interaction of Fluorescently Substituted Metallacarboranes with Cyclodextrins and Phospholipid Bilayers: Fluorescence and Light Scattering Study. *Langmuir* **2010**, 26, 6268–6275 (IF²⁰¹⁰ = 4.269).

23.

Uchman M., Cigler P., Gruner B., Prochazka K., **Matejicek P.***: Micelle-like Nanoparticles of Block Copolymer Poly(ethylene oxide)-*block*-poly(methacrylic acid) Incorporating Fluorescently Substituted Metallacarboranes Designed as HIV Protease Inhibitor Interaction Probes. *Journal of Colloid and Interface Science* **2010**, 348, 129–136 (IF²⁰¹⁰ = 3.068).

24.

Prochazka K.*, Limpouchova Z., Uhlik F., Kosovan P., **Matejicek P.**, Stepanek M., Uchman M., Kuldova J., Sachl R., Humpolickova J., Hof M.: Fluorescence Spectroscopy as a Tool for Investigating the Self-organized Polyelectrolyte Systems. *Advances in Polymer Science* **2011**, 241, 187–249 (IF²⁰¹¹ = 3.890).

25.

Rak J., Jakubek M., Kaplanek R.*, **Matejicek P.**, Kral V.*: Cobalt bis(dicarbollide) derivatives: Solubilization and self-assembly suppretnon. *European Journal of Medicinal Chemistry* **2011**, 46, 1140–1146 (IF²⁰¹¹ = 3.346).

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Stepanek M.*, **Matejicek P.**, Prochazka K., Filippov S. K., Angelov B., Slouf M., Mountrichas G., Pispas S.*: Polyelectrolyte-Surfactant Complexes Formed by Poly[3,5-bis(trimethylammoniummethyl)-4-hydroxystyrene iodide]-*block*poly(ethylene oxide) and Sodium Dodecyl Sulfate in Aqueous Solutions. *Langmuir* **2011**, 27, 5275–5281 (IF²⁰¹¹ = 4.186).

27.

Matejicek P.*, Brus J., Jigounov A., Pleštil J., Uchman M., Prochazka K., Gradzielski M.: On the Structure of Polymeric Composite of Metallacarborane with Poly(ethylene oxide). *Macromolecules* **2011**, 44, 3847–3855 (IF²⁰¹¹ = 5.167).

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29.

Rak J., Dejlová B., Lampová H., Kaplánek R., **Matejicek P.**, Cígler P.*, Král V.: On solubility and lipophilicity of metallacarborane pharmacophores. *Molecular Pharmaceutics* **2013**, 10, 1751–1759 (IF²⁰¹³ = 4.787).

30.

Matejicek P.*, Uchman M., Lepšík M., Srnec M., Zedník J., Kozlik P., Kalikova K.: Preparation and separation of telechelic carborane-containing poly(ethylene glycols). *ChemPlusChem* **2013**, 78, 528–535 (IF²⁰¹³ = 3.242).

31.

Trhlikova O.*, Zednik J., **Matejicek P.**, Horacek M., Sedlacek J.: Degradation and *cis-to-trans* isomerization of Poly[(2,4-difluorophenyl)acetylene]s of various initial molecular weight: SEC, NMR, DLS and EPR study. *Polymer Degradation and Stability* **2013**, 98, 1814–1826 (IF²⁰¹³ = 2.633).

32.

Dordovic V.; Uchman M., Prochazka K., Zhigunov A., Plestil J., Nykänen A., Ruokolainen J., **Matejicek P.***: Hybrid Nanospheres Formed by Intermixed Double Hydrophilic Block Copolymer Poly(ethylene oxide)-*block*-poly(2-ethyl oxazoline) with High Content of Metallocarboranes. *Macromolecules* **2013**, 46, 6881–6890 (IF²⁰¹³ = 5.927).

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Fanfrlik J.*, Kolar M., Kamlar M., Hurny D., Ruiz F. X., Cousido-Siah A., Mitschler A., Rezac J., Munusamy E., Lepsik M., **Matejicek P.**, Vesely J., Podjarny A.*, Hobza P.: The modulation of aldose reductase inhibition by halogen bond tuning. *ACS Chemical Biology* **2013**, 8, 2484–2492 (IF²⁰¹³ = 5.356).

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Tarres M., Gonzales-Cardoso P., Vinas C., Teixidor F.*, Hanninen M. M., Sillanpaa R., Dordovic V., **Matejicek P.***: Aqueous Self-Assembly and Cation Selectivity of Cobaltabisdicarbollide Dianionic Dumbbells. *Chemistry-A European Journal* **2014**, 20, 6786–6794 (IF²⁰¹⁴ = 5.731).

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Brus J.*, Zhigunov A., Czernek J., Kobera L., Uchman M., **Matejicek P.***: Control over the self-assembly and dynamics of metallocarborane nanorotors by the nature of the polymer matrix: a solid-state NMR study. *Macromolecules* **2014**, 47, 6343–6354 (IF²⁰¹⁴ = 5.800).

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Fontanet M., Rodriguez M., Fontrodona X., Romero I.*, Teixidor F.*, Viñas C., Aliaga-Alcalde N., **Matejicek P.**; Water-Soluble Manganese Inorganic Polymers: The Role of Carborane Clusters and Producing Large Structural Adjustments from Minor Molecular Changes. *Chemistry-A European Journal* **2014**, 20, 13993–14003 (IF²⁰¹⁴ = 5.731).

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Dordovic V., Uchman M.*, Zhigunov A., Nykanen A., Ruokolainen J., **Matejicek P.***: Compartmentalization in Hybrid Metallocarborane Nanoparticles Formed by Block Copolymers with Star-Like Architecture. *ACS Macro Letters* **2014**, 3, 1151–1155 (IF²⁰¹⁴ = 5.764).

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Dordovic V., Uchman M., Reza M., Ruokolainen J., Zhigunov, A., Ivankov O.I., **Matejicek P.***: Cation-sensitive compartmentalization in metallacarborane containing polymer nanoparticles. *RSC Advances* **2016**, 6, 9684–9892 (IF²⁰¹⁶ = 3.108).

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Dordovic V., Tosner Z., Uchman M., Zhigunov, A., Reza M., Ruokolainen J., Pramanik G., Cigler P., Kalikova K., Gradzielski M., **Matejicek P.***: Stealth Amphiphiles: Self-Assembly of Polyhedral Boron Clusters. *Langmuir* **2016**, 32, 6713–6722 (IF²⁰¹⁶ = 3.833).

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Serikis-Rodzen M.*, Spirkova M.*, **Matejicek P.**, Stepanek M.: Formation of linear and crosslinked polyurethane nanoparticles that self-assemble differently in acetone and in water. *Progress in Organic Coatings* **2017**, 106, 119-127 (IF²⁰¹⁷ = 2.955).

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Uchman M., Abrikosov A. I., Lepsik M., Lund M.*, **Matejicek P.***: Nonclassical Hydrophobic Effect in Micellization: Molecular Arrangement of Non-Amphiphilic Structures. *Advanced Theory and Simulations* **2018**, 1, 1700002 (IF²⁰¹⁹ = 2.951).

43.

Fernandez-Alvarez R., Dordovic V., Uchman M., **Matejicek P.***: Amphiphiles without Head-and-Tail Design: Nanostructures Based on the Self-Assembly of Anionic Boron Cluster Compounds. *Langmuir* **2018**, 34, 3541-3554. (IF²⁰¹⁸ = 3.683).

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Dordovic V., Verbraeken B., Hogenboom R., Kereiche S., **Matejicek P.**, Uchman M.*: Tuning of thermoresponsivity of a poly(2-alkyl-2-oxazoline) block copolymer by interaction with surface active and chaotropic metallacarborane anion. *Chemistry-An Asian Journal* **2018**, 13, 838-845. (IF²⁰¹⁸ = 3.698).

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Murmiliuk A., **Matejicek P.**, Filippov, S. K., Janata M., Slouf M., Pispas S., Stepanek M.*: Formation of core/corona nanoparticles with interpolyelectrolyte complex cores in aqueous solution: Insight in chain dynamics in the complex from fluorescence quenching. *Soft Matter* **2018**, 14, 7578-7585. (IF²⁰¹⁸ = 3.399).

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Fernandez-Alvarez R., Medos Z., Tosner Z., Zhigunov A., Uchman M., Hervo-Hansen S., Lund M., Bester-Rogac M.*, **Matejicek P.***: Total Description of Intrinsic Amphiphile Aggregation: Calorimetry Study and Molecular Probing. *Langmuir* **2018**, 34, 14448-14457. (IF²⁰¹⁸ = 3.683).

47.

Vrbata D., Dordovic D., Seitsonen J., Ruokolainen J., Janouskova O., Uchman M., **Matejicek P.***: Preparation of Membrane-Mimicking Lamellar Structures by Molecular Confinement of Hybrid Nanocomposites. *Chemical Communications* **2019**, 55, 2900-2903. (IF²⁰¹⁹ = 5.996).

48.

Fernandez-Alvarez R., Nova L., Uhlik F., Keraiche S., Uchman M., Kosovan P.*, **Matejicek P.***: Interactions of polyelectrolyte star-like micelles with hydrophobic counterion. *Journal of Colloid and Interface Science* **2019**, 546, 371-380. (IF²⁰¹⁹ = 7.489).

49.

Fernandez-Alvarez R., Hlavatovicova E., Rodzen K., Strachota A., Kereiche S., **Matejicek P.**, Cabrera-Gonzales J., Nunez R., Uchman M.*: Synthesis and self-assembly of carborane-containing ABC triblock terpolymer: morphology control and dual-stimuli responsive system. *Polymer Chemistry* **2019**, 10, 2774-2780. (IF²⁰¹⁹ = 5.342).

50.

Matejicek P.*: Erratic Ions: Self- and Co-Assembly of Ions of Nanometer size and of Irregular Structure. *Current Opinion in Colloid and Interface Science* **2020**, 45, 97-107. (IF²⁰²⁰ = 6.448).

51.

Li J., Janouskova O., Fernandez-Alvarez R., Mesikova S., Tosner Z., Kereiche S., Uchman M., **Matejicek P.***: Designed boron-rich polymeric nanoparticles based on nanoion pairing for boron delivery. *Chemistry-A European Journal* **2020**, 26, 14283–14989 (IF²⁰²⁰ = 5.236).

52.

Li J., Fernandez-Alvarez R., Tosner Z., Kereiche S., Uchman M., **Matejicek P.***: Engineered nanogels shape templated by closo-dodecaborate nano-ion and dictated by chemical crosslinking for efficient boron delivery. *Journal of Molecular Liquids* **2021**, 336, 116367 (IF²⁰²⁰ = 6.165).

53.

Li J., Fernandez-Alvarez R., Tosner Z., Kozlik P., Stepanek M., Zhigunov A., Urbanova M., Brus J., Uchman M., **Matejicek P.***: Polyelectrolyte based on Polynorbornene with Covalently Attached Metallacarboranes: Synthesis, Characterization and Lithium-Ion Mobility. *Macromolecules* **2021**, 54, 6867-6877 (IF²⁰²⁰ = 5.985).

(2) Presentace na titulní straně periodika s IF

1.
Collection of Czechoslovak Chemical Communications, Vol. 71, No. 5, May, 2006 (Front Cover).
2.
Collection of Czechoslovak Chemical Communications, Vol. 73, No. 3, March, 2008 (Front Cover).
3.
Macromolecules, Vol. 42, No. 13, July 14, 2009 (Front Cover).
4.
Advanced Theory and Simulations, Vol. 1, No. 1, January, 2018 (Inside Front Cover).
5.
Langmuir, Vol. 34, No. 12, March 27, 2018 (Front Cover).
6.
Soft Matter, Vol. 14, No. 37, October 7, 2018 (Inside Front Cover).
7.
Chemical Communications, Vol. 55, No. 20, March 11, 2019 (Inside Back Cover).
8.
Chemistry-A European Journal, Vol. 26, No. 63, November 13, 2020 (Frontispiece).
9.
Macromolecules, Vol. 54, No. 14, July 27, 2021 (Supplementary Cover).

(3) Původní články ve sbornících a periodikách bez IF

1.
Matejček P., Cigler P., Lesnikowski Z., Procházka K.: Behavior of Metallocarboranes in Aqueous Solutions and Their Interaction with Surfactants and Polymers; ESF Exploratory Workshop on: BioBor - Exploring New Opportunities of Boron Chemistry Towards Medicine, Lodz, Poland, 9-12 May 2008, page 74-85.
2.
Cigler P., **Matejček P.**, Kubat P., Lang K., Gruner B., Plešek J., Kejlik Z., Procházka K., Konvalinka J., Kral V.: Fluorescently Labeled Metallocarboranes: Solution Behaviour and Interaction with Serum Proteins; ESF Exploratory Workshop on: BioBor - Exploring New Opportunities of Boron Chemistry Towards Medicine, Lodz, Poland, 9-12 May 2008, page 13-17.

3.

Prochazka K., **Matejcek P.**, Uchman M., Stepanek M., Humpolickova J., Hof M., Spirkova M.: pH-Dependent Behavior of Hydrophobically Modified Polyelectrolyte Shells of Polymeric Nanoparticles; *Macromolecular Symposia* **2008**, 273, 95–102.

4.

Prochazka K., **Matejcek P.**, Stepanek M., Limpouchova Z., Hof M., Humpolickova J., Sachl R., Schroeder J.: Solvent Relaxation Studies Applied to Stimuli-responsive Core-shell Nanoparticles. Single Molecule Spectroscopy and Imaging III – Proceedings of SPIE, Ed. Enderlein J., Gryczinski Z.K., Erdmann R. 2010, Vol. 7571, Art. No. 757104.

(4) Abstrakta v databázi WOS

1.

Kubat P., Lang K., Cigler P., Kozisek M., **Matejcek P.**, Janda P., Zelinger Z., Prochazka K., Kral V.: Tetraphenylporphyrin-cobalt(III)bis(1,2-dicarbollide) conjugate: aggregation, protonation of porphyrin ring, photophysical properties and inhibition of HIV protease; *Journal of Porphyrins and Phthalocyanines* **2006**, 10, 813.

2.

Prochazka K., Stepanek M., Humpolickova J., **Matejcek P.**: Self-assembly of Polystyrene-block-poly(2-vinylpyridine)-block-poly(ethylenoxide) in Aqueous Media; *Abstracts of Papers of the American Chemical Society* **2006**, 231, 417.

3.

Prochazka K., Stepanek M., Humpolickova J., **Matejcek P.**, Hof M., Spirkova M.: Self-assembly of polystyrene-b-poly(2-vinylpyridine)-b-poly(ethylene oxide) triblock copolymer in aqueous media: Comparison and critical evaluation of results of long-term multidisciplinary studies; *Abstracts of Papers of the American Chemical Society* **2006**, 232, 71.

4.

Rak J., Kaplanek R., Dejlova B., Lampova H., **Matejcek P.**, Cigler P., Kral V.: Solubility and lipophilicity of boron cluster pharmacophores; *FEBS Journal* **2013**, 280, 109–109.

(5) Kapitoly v monografiích

1.

Rezacova P., Cigler P., **Matejcek P.**, Lepsik M., Pokorna J., Gruner B., Konvalinka J. In *Boron Science- New Technologies and Applications*; Hosmane, N. S., Ed.; CRC Press: New York, 2012; Chapter 1.3. (Medicinal Application of Carboranes: Inhibition of HIV Protease); ISBN 978-1-4398-2662-1.

2.

Matejcek P. In *Robot100: 100 rozumů*; Čejková J., Ed.; Vysoká škola chemicko technologická v Praze: Havlíčkův Brod, 2020; p. 115-117 (Fiktivní Rossum a jeho reální kolegové); ISBN 978-80-7592-062-1.

(6) Kvalifikační práce

1.

Matejcek P.: *Micely blokových kopolymerů; Studium pomocí rozptylu světla, fluorometrie a mikroskopie atomových sil.* Disertační práce, Přírodovědecká fakulta, Univerzita Karlova v Praze, Praha 2005, s 69.

2.

Matejcek P.: *Klastrové sloučeniny bóru jako nový typ amfifilů: Roztokové chování a interakce s polymery.* Habilitační práce, Přírodovědecká fakulta, Univerzita Karlova, Praha 2016, s 30.

(7) Přednášky na mezinárodních konferencích typu “invited speaker”

1.

Matejcek P., Dordovic V., Uchman M., Boron-Containing Polymeric Nanostructures Suitable for Drug Delivery. EMN Kaohsiung Meeting 2016 – Energy Materials Nanotechnology, March 14-18, Kaohsiung, Taiwan, 2016 (invited lecture).

2.

Fernandez-Alvarez R., Dordovic V., Uchman M., **Matejcek P.,** Anionic Boron Cluster Compounds as Amphiphiles without Head-and-Tail Design, 33rd conference ECIS 2019, September 8-13, Leuven, Belgium, 2019 (keynote lecture).

3.

17th International Meeting on Boron Chemistry, IME-Boron XVII, July 2023, Rennes, France, (keynote lecture); Konference původně plánována na 2020, avšak přesunuta kvůli pandemii Covid-19.

(8) Sdělení na mezinárodních konferencích (presentující autor podtržen)

1.

Matejcek P., Prochazka K., Tuzar Z., Amphiphilic block copolymer micelles with hydrophobically modified shell-forming blocks. Light scattering and fluorescence study. Discussion Meeting on MLO, Molecular Organization for Nanosystems, Kloster Banz, Germany, 2003 (poster presentation).

2.

Matejicek P., Humpolickova J., Hof M., Spirkova M., Tuzar Z., Prochazka K., Amphiphilic Block Copolymer Micelles with hydrophobically Modified Shell-forming Blocks; Fluorescence, Light Scattering and AFM study. V International Polymer seminar, Gliwice, Poland, 2003 (poster presentation).

3.

Matejicek P., Humpolickova J., Uhlik F., Jelinek K., Prochazka K., Hof M., Spirkova M., Tuzar Z., Amphiphilic Block Copolymer Micelles in Polar and Aqueous Media. Experimental Study and Computer Simulation, XVII Conference of ECIS, Florence, Italy 2003 (oral presentation).

4.

Matejicek P., Humpolickova J., Hof M., Spirkova M., Tuzar Z., Prochazka K., Experimental Study of Amphiphilic Block Copolymer Micelles with Hydrophobically Modified Shell-forming Blocks. XVII Conference of ECIS, Florence, Italy 2003 (poster presentation).

5.

Matejicek P., Uhlik F., Humpolickova J., Spirkova M., Prochazka K., Polyelectrolyte Behavior of Amphiphilic Micelles in Aqueous Solutions at Low Ionic Strength. XVIII Conference of ECIS, Almeria, Spain 2004 (poster presentation).

6.

Stepanek M., **Matejicek P.**, Spirkova M., Humpolickova J., Hof M., Prochazka K., Micelization of a Heteroarm Star Copolymer in Selective Micelles. XVIII Conference of ECIS, Almeria, Spain 2004 (poster presentation).

7.

Matejicek P., Podhajecka K., Humpolickova J., Uhlík F., Jelinek K., Limpouchova Z., Prochazka K., Polystyrene-block-poly(methacrylic acid) Micelles in Low Salt Aqueous Solutions. XVIII Conference of ECIS, Almeria, Spain 2004 (poster presentation).

8.

Cigler P., **Matejicek P.**, Rezacova P., Plesek J., Konvalinka J., Kral V., Interaction of Self-assembled Hydrophobic Compounds with Proteins: Specific Recognition of Aggregated Molecules. ICSS&T 2004 CONGRESS, Prague, Czech Republic 2004 (poster presentation).

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Medos Z., Tosner Z., Bester-Rogac M., **Matejicek P.**, Aggregation of NaCOSAN and NaFESAN aqueous mixtures. 35th conference ECIS 2021, September 5-10, Athens, Grece, 2021, (poster presentation).

(9) Účast na řešení grantů

(PM v roli řešitele nebo spoluřešitele + granty GAUK studentů uchazeče)

1.

Studium micel amfifilních polymerů ve vodných roztocích. FRVŠ (MŠMT): 1894/2004, řešitel, 2004.

2.

Interakce koloidních částic s polymery. GA ČR: 203/06/P138 (postdoktorandský grant), řešitel, 2006–2008.

3.

Funkční deriváty klastrových sloučenin boru jako inhibitory virových enzymů. GA AV: IAX00320901, spoluřešitel, 2009–2013.

4.

Nové senzory cukrů založené na asociaci boronové kyseliny s blokovými kopolymery. MOBILITY (MŠMT): 7AMB13PL025, řešitel, 2013–2014.

5.

Příprava a charakterizace nových polymerních nanokompozitů na bázi karboranů. GA ČR: P205/14-14608S, hlavní řešitel, 2014–2016.

6.

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8.

Metallakarboranové klastry pro přípravu funkčních nanostruktur a polymerních materiálů. LA GA ČR, CEUS (ARRS), Česko-Slovinsko: P108/21-20008K, řešitel, 2021–2024.

A.

Příprava a chování hybridních polymerních nanočástic vhodných pro transport metallakarboranů. GAUK: 512214, řešitel student **Vladimír Ďord'ovič**, 2014–2016.

B.

Příprava polymerních nanostruktur založených na nekovalentních interakcích karboranových klastrů. GAUK: 1588218, řešitel student **Roberto Fernandez-Alvarez**, 2018–2020.

C.

Polymerní nanočástice citlivé na vnější podněty pro transport karboranů. GAUK: 1006120, řešitel student **Jianwei Li**, 2020-2021.

(10) Ostatní publikační činnost

1.

Přírodovědci.cz, Magazín Přírodovědecké Fakulty Univerzity Karlovy, 02/2018, téma čísla: Nanosvět.

Obálka časopisu a titulní článek: „Tam dole je spousta místa“ aneb skládání v nanosvětě.

M. Anderle, **P. Matějček**.

V Praze dne

doc. RNDr. Pavel Matějček, Ph.D.