

**Список научных трудов к.х.н., доцента Исследовательской школы
химических и биомедицинских технологий
Томского политехнического университета
Постникова Павла Сергеевича**

1. Postnikov P. S., Guselnikova O. A., Yusubov M. S., Yoshimura A., Nemykin V. N., Zhdankin V. V. Preparation and X-ray Structural Study of Dibenziodolium Derivatives // The Journal of Organic Chemistry. – 2015. – Т. 80, № 11. – С. 5783-5788.
<https://doi.org/10.1021/acs.joc.5b00741>
(2015) Импакт-фактор: 4,785. Квартиль: **Q1**.
2. Soldatova N., Postnikov P., Troyan A. A., Yoshimura A., Yusubov M. S., Zhdankin V. V. Mild and efficient synthesis of iodylarenes using Oxone as oxidant // Tetrahedron Letters. – 2016. – Т. 57, № 37. – С. 4254-4256.
<https://doi.org/10.1016/j.tetlet.2016.08.038>
(2016) Импакт-фактор: 2,193. Квартиль: **Q2**
3. Yoshimura A., Nguyen K. C., Klasen S. C., Postnikov P. S., Yusubov M. S., Saito A., Nemykin V. N., Zhdankin V. V. Hypervalent Iodine-Catalyzed Synthesis of 1,2,4-Oxadiazoles from Aldoximes and Nitriles // Asian Journal of Organic Chemistry. – 2016. – Т. 5, № 9. – С. 1128-1133.
<https://doi.org/10.1002/ajoc.201600247>
(2016) Импакт-фактор: 2,788. Квартиль: **Q2**
4. Guselnikova O., Postnikov P., Elashnikov R., Trusova M., Kalachyova Y., Libansky M., Barek J., Kolska Z., Svorcik V., Lyutakov O. Surface modification of Au and Ag plasmonic thin films via diazonium chemistry: Evaluation of structure and properties // Colloids and Surfaces a-Physicochemical and Engineering Aspects. – 2017. – Т. 516. – С. 274-285.
<https://doi.org/10.1016/j.colsurfa.2016.12.040>
(2017) Импакт-фактор: 2,829. Квартиль: **Q2**
5. Kalachyova Y., Olshtrem A., Guselnikova O. A., Postnikov P. S., Elashnikov R., Ulbrich P., Rimpelova S., Švorcík V., Lyutakov O. Synthesis, Characterization, and Antimicrobial Activity of Near-IR Photoactive Functionalized Gold Multibranched Nanoparticles // ChemistryOpen. – 2017. – Т. 6, № 2. – С. 254-260.
<https://doi.org/10.1002/open.201600159>
(2017) Импакт-фактор: 2,801. Квартиль: **Q2**

6. Soldatova N., Postnikov P., Kukurina O., Zhdankin V. V., Yoshimura A., Wirth T., Yusubov M. S. Facile One-Pot Synthesis of Diaryliodonium Salts from Arenes and Aryl Iodides with Oxone // ChemistryOpen. – 2017. – Т. 6, № 1. – С. 18-20.
<https://doi.org/10.1002/open.201600129>
(2017) Импакт-фактор: 2,801. Квартиль: **Q2**
7. Yoshimura A., Fuchs J. M., Middleton K. R., Maskaev A. V., Rohde G. T., Saito A., Postnikov P. S., Yusubov M. S., Nemykin V. N., Zhdankin V. V. Pseudocyclic Arylbenziodoxaboroles: Efficient Benzyne Precursors Triggered by Water at Room Temperature // Chemistry. – 2017. – Т. 23, № 66. – С. 16738-16742.
<https://doi.org/10.1002/chem.201704393>
(2017) Импакт-фактор: 5,160. Квартиль: **Q1**
8. Yoshimura A., Klasen S. C., Shea M. T., Nguyen K. C., Rohde G. T., Saito A., Postnikov P. S., Yusubov M. S., Nemykin V. N., Zhdankin V. V. Preparation, Structure, and Reactivity of Pseudocyclic Benziodoxole Tosylates: New Hypervalent Iodine Oxidants and Electrophiles // Chemistry. – 2017. – Т. 23, № 3. – С. 691-695.
<https://doi.org/10.1002/chem.201604475>
(2017) Импакт-фактор: 5,160. Квартиль: **Q1**
9. Yoshimura A., Nguyen K. C., Rohde G. T., Postnikov P. S., Yusubov M. S., Zhdankin V. V. Hypervalent Iodine Reagent Mediated Oxidative Heterocyclization of Aldoximes with Heterocyclic Alkenes // The Journal of Organic Chemistry. – 2017. – Т. 82, № 22. – С. 11742-11751.
<https://doi.org/10.1021/acs.joc.7b01462>
(2017) Импакт-фактор: 4,805. Квартиль: **Q1**
10. Yusubov M. S., Postnikov P. S., Yusubova R. Y., Yoshimura A., Jürjens G., Kirschning A., Zhdankin V. V. 2-Iodoxybenzoic Acid Tosylates: the Alternative to Dess–Martin Periodinane Oxidizing Reagents // Advanced Synthesis and Catalysis. – 2017. – Т. 359, № 18. – С. 3207-3216.
<https://doi.org/10.1002/adsc.201700776>
(2017) Импакт-фактор: 5.123. Квартиль: **Q1**
11. Erzina M., Guselnikova O., Postnikov P., Elashnikov R., Kolska Z., Miliutina E., Svorcik V., Lyutakov O. Plasmon-Polariton Induced, "from Surface" RAFT Polymerization, as a Way toward Creation of Grafted

Polymer Films with Thickness Precisely Controlled by Self-Limiting Mechanism // Advanced Materials Interfaces. – 2018. – Т. 5, № 22, 1801042.

<https://doi.org/10.1002/admi.201801042>

(2018) Импакт-фактор: 4,713. Квартиль: **Q1**

12. Guselnikova O., Olshtern A., Kalachyova Y., Panov I., Postnikov P., Svorcik V., Lyutakov O. Plasmon Catalysis on Bimetallic Surface-Selective Hydrogenation of Alkynes to Alkanes or Alkenes // Journal of Physical Chemistry C. – 2018. – Т. 122, № 46. – С. 26613-26622.

<https://doi.org/10.1021/acs.jpcc.8b07398>

(2018) Импакт-фактор: 4,309. Квартиль: **Q1**

13. Miliutina E., Guselnikova O., Bainova P., Kalachyova Y., Elashnikov R., Yusubov M. S., Zhdankin V. V., Postnikov P., Švorčík V., Lyutakov O. Plasmon-Assisted Activation and Grafting by Iodonium Salt: Functionalization of Optical Fiber Surface // Advanced Materials Interfaces. – 2018. – Т. 5, № 20, 1800725.

<https://doi.org/10.1002/admi.201800725>

(2018) Импакт-фактор: 4,713. Квартиль: **Q1**

14. Soldatova N., Postnikov P., Kukurina O., Zhdankin V. V., Yoshimura A., Wirth T., Yusubov M. S. One-pot synthesis of diaryliodonium salts from arenes and aryl iodides with Oxone-sulfuric acid // Beilstein Journal of Organic Chemistry. – 2018. – Т. 14. – С. 849-855.

<https://doi.org/10.3762/bjoc.14.70>

(2018) Импакт-фактор: 2,595. Квартиль: **Q2**

15. Yoshimura A., Shea M. T., Guselnikova O., Postnikov P. S., Rohde G. T., Saito A., Yusubov M. S., Nemykin V. N., Zhdankin V. V. Preparation and structure of phenolic aryliodonium salts // Chemical communications. – 2018. – Т. 54, № 73. – С. 10363-10366.

<https://doi.org/10.1039/C8CC06211K>

(2018) Импакт-фактор: 6,164. Квартиль: **Q1**

16. Yusubov M. S., Soldatova N. S., Postnikov P. S., Valiev R. R., Svitich D. Y., Yusubova R. Y., Yoshimura A., Wirth T., Zhdankin V. V. Reactions of 1-Arylbenziodoxolones with Azide Anion: Experimental and Computational Study of Substituent Effects // European Journal of Organic Chemistry. – 2018. – Т. 2018, № 5. – С. 640-647.

<https://doi.org/10.1002/ejoc.201701595>

(2018) Импакт-фактор: 3,029. Квартиль: **Q2**

17. Guselnikova O., Marque S. R. A., Tretyakov E. V., Mares D., Jerabek V., Audran G., Joly J. P., Trusova M., Svorcik V., Lyutakov O., Postnikov P. Unprecedented plasmon-induced nitroxide-mediated polymerization (PI-NMP): a method for preparation of functional surfaces // Journal of Materials Chemistry A. – 2019. – Т. 7, № 20. – С. 12414-12419.

<https://doi.org/10.1039/C9TA01630A>

(2019) Импакт-фактор: 11,301. Квартиль: **Q1**

18. Guselnikova O., Miliutina E., Elashnikov R., Burtsev V., Chehimi M. M., Svorcik V., Yusubov M., Lyutakov O., Postnikov P. Chemical modification of gold surface via UV-generated aryl radicals derived 3,5-bis(trifluoromethyl)phenyl)iodonium salt // Progress in Organic Coatings. – 2019. – Т. 136, 105211.

<https://doi.org/10.1016/j.porgcoat.2019.105211>

(2019) Импакт-фактор: 4,469. Квартиль: **Q1**

19. Guselnikova O., Postnikov P., Chehimi M. M., Kalachyovaa Y., Svorcik V., Lyutakov O. Surface Plasmon-Polariton: A Novel Way To Initiate Azide-Alkyne Cycloaddition // Langmuir. – 2019. – Т. 35, № 6. – С. 2023-2032.

<https://doi.org/10.1021/acs.langmuir.8b03041>

(2019) Импакт-фактор: 3,557. Квартиль: **Q2**

20. Guselnikova O., Postnikov P., Marque S. R. A., Švorčík V., Lyutakov O. Beyond common analytical limits of radicals detection using the functional SERS substrates // Sensors and Actuators B: Chemical. – 2019. – Т. 300, 127015.

<https://doi.org/10.1016/j.snb.2019.127015>

(2019) Импакт-фактор: 7,100. Квартиль: **Q1**

21. Guselnikova O., Samant R., Postnikov P., Trelin A., Svorcik V., Lyutakov O. Plasmon-assisted self-cleaning sensor for the detection of organosulfur compounds in fuels // Journal of Materials Chemistry C. – 2019. – Т. 7, № 45. – С. 14181-14187.

<https://doi.org/10.1039/C9TC03690C>

(2019) Импакт-фактор: 7,059. Квартиль: **Q1**

22. Soldatova N. S., Postnikov P. S., Yusubov M. S., Wirth T. Flow Synthesis of Iodonium Trifluoroacetates through Direct Oxidation of Iodoarenes by

Oxone (R) // European Journal of Organic Chemistry. – 2019. – Т. 2019, № 10. – С. 2081-2088.

<https://doi.org/10.1002/ejoc.201900220>

(2019) Импакт-фактор: 2,889. Квартиль: **Q2**

23. Yoshimura A., Makitalo C. L., Jarvi M. E., Shea M. T., Postnikov P. S., Rohde G. T., Zhdankin V. V., Saito A., Yusubov M. S. Sulfonylimino Group Transfer Reaction Using Imino-lambda(3)-iodanes with I(2) as Catalyst Under Metal-free Conditions // Molecules. – 2019. – Т. 24, № 5, 979.

<https://doi.org/10.3390/molecules24050979>

(2019) Импакт-фактор: 3,267. Квартиль: **Q2**

24. Yusubov M. S., Soldatova N. S., Postnikov P. S., Valiev R. R., Yoshimura A., Wirth T., Nemykin V. N., Zhdankin V. V. 2-Iodoxybenzoic acid ditriflate: the most powerful hypervalent iodine(v) oxidant // Chemical communications. – 2019. – Т. 55, № 54. – С. 7760-7763.

<https://doi.org/10.1039/C9CC04203B>

(2019) Импакт-фактор: 5,996. Квартиль: **Q1**

25. Audran G., Bagryanskaya E. G., Marque S. R. A., Postnikov P. New Variants of Nitroxide Mediated Polymerization // Polymers (Basel). – 2020. – Т. 12, № 7, 1481.

<https://doi.org/10.3390/polym12071481>

(2020) Импакт-фактор: 4,329. Квартиль: **Q1**

26. Guselnikova O., Kalachyova Y., Elashnikov R., Cieslar M., Kolska Z., Sajdl P., Postnikov P., Svorcik V., Lyutakov O. Taking the power of plasmon-assisted chemistry on copper NPs: Preparation and application of COFs nanostructures for CO₂ sensing in water // Microporous and Mesoporous Materials. – 2020. – Т. 309, 110577.

<https://doi.org/10.1016/j.micromeso.2020.110577>

(2020) Импакт-фактор: 5,455. Квартиль: **Q1**

27. Guselnikova O., Trelin A., Miliutina E., Elashnikov R., Sajdl P., Postnikov P., Kolska Z., Svorcik V., Lyutakov O. Plasmon-Induced Water Splitting-through Flexible Hybrid 2D Architecture up to Hydrogen from Seawater under NIR Light // ACS Applied Materials and Interfaces. – 2020. – Т. 12, № 25. – С. 28110-28119.

<https://doi.org/10.1021/acsami.0c04029>

(2020) Импакт-фактор: 9,229. Квартиль: **Q1**

28. Miliutina E., Guselnikova O., Soldatova N. S., Bainova P., Elashnikov R., Fitl P., Kurten T., Yusubov M. S., Svorcik V., Valiev R. R., Chehimi M. M., Lyutakov O., Postnikov P. S. Can Plasmon Change Reaction Path? Decomposition of Unsymmetrical Iodonium Salts as an Organic Probe // The Journal of Physical Chemistry Letters. – 2020. – Т. 11, № 14. – С. 5770-5776.

<https://doi.org/10.1021/acs.jpclett.0c01350>

(2020) Импакт-фактор: 6,475. Квартиль: **Q1**

29. Olshtrem A., Guselnikova O., Postnikov P., Trelin A., Yusubov M., Kalachyova Y., Lapcak L., Cieslar M., Ulbrich P., Svorcik V., Lyutakov O. Plasmon-assisted grafting of anisotropic nanoparticles - spatially selective surface modification and the creation of amphiphilic SERS nanoprobes // Nanoscale. – 2020. – Т. 12, № 27. – С. 14581-14588.

<https://doi.org/10.1039/D0NR02934C>

(2020) Импакт-фактор: 7,790. Квартиль: **Q1**

30. Yusubov M. S., Postnikov P., Yoshimura A., Zhdankin V. V. Benziodoxole-Derived Organosulfonates: The Strongest Hypervalent Iodine Electrophiles and Oxidants // Synlett. – 2020. – Т. 31, № 4. – С. 315-326.

<https://doi.org/10.1055/s-0039-1690761>

(2020) Импакт-фактор: 2,454. Квартиль: **Q2**

31. Ahmad A. A. L., Marutheri Parambath J. B., Postnikov P. S., Guselnikova O., Chehimi M. M., Bruce M. R. M., Bruce A. E., Mohamed A. A. Conceptual Developments of Aryldiazonium Salts as Modifiers for Gold Colloids and Surfaces // Langmuir. – 2021. - Т. 37, № 30. - С. 8897–8907.

<https://doi.org/10.1021/acs.langmuir.1c00884>

(2020) Импакт-фактор: 3.882. Квартиль: **Q2**

32. Erzina M., Guselnikova O., Miliutina E., Trelin A., Postnikov P., Svorcik V., Lyutakov O. Plasmon-Assisted Transfer Hydrogenation: Kinetic Control of Reaction Chemoselectivity through a Light Illumination Mode // The Journal of Physical Chemistry C. – 2021. - Т. 125, № 19. - С. 10318–10325.

<https://doi.org/10.1021/acs.jpcc.0c11535>

(2020) Импакт-фактор: 4,126. Квартиль: **Q2**

33. Guselnikova O., Audran G., Joly J. P., Trelin A., Tretyakov E. V., Svorcik V., Lyutakov O., Marque S. R. A., Postnikov P. Establishing plasmon

contribution to chemical reactions: alkoxyamines as a thermal probe // Chemical Science. – 2021. – Т. 12, № 11. – С. 4154-4161.

<https://doi.org/10.1039/D0SC06470J>

(2020) Импакт-фактор: 9.825. Квартиль: **Q1**

34. Guselnikova O., Postnikov P., Kosina J., Kolska Z., Trelin A., Svorcik V., Lyutakov O. A breath of fresh air for atmospheric CO₂ utilisation: a plasmon-assisted preparation of cyclic carbonate at ambient conditions // Journal of Materials Chemistry A. – 2021. – Т. 9, № 13. – С. 8462-8469.

<https://doi.org/10.1039/D0TA12530J>

(2020) Импакт-фактор: 12.732. Квартиль: **Q1**

35. Guselnikova O., Váňa J., Phuong L. T., Panov I., Rulíšek L., Trelin A., Postnikov P., Švorčík V., Andris E., Lyutakov O. Plasmon-assisted click chemistry at low temperature: an inverse temperature effect on the reaction rate // Chemical Science. – 2021. – Т. 12, № 15. – С. 5591-5598.

<https://doi.org/10.1039/D0SC05898J>

(2020) Импакт-фактор: 9.825. Квартиль: **Q1**

36. Olshtrema, A., Chertopalov, S., Guselnikova, O., Valiev, R., Perminova, A., Cieslar, M., Elashnikov, R., Fitl, P., Postnikov, P., Lancokc, J., Svorcik, V., Lyutakov O. Plasmon-assisted MXene Grafting: Tuning of Surface Termination and Stability Enhancement, 2D Materials, 2021, Preliminary accepted.

(2020) Импакт-фактор: 7.103. Квартиль: **Q1**

37. Yoshimura A., Huss C. D., Liebl M., Rohde G. T., Larson S. M., Frahm G. B., Luedtke M. W., Schumacher T. J., Gardner Z. S., Zhdankin V. V., Postnikov P. S., Yusubov M. S., Kitamura T., Saito A. Preparation, Structure, and Reactivity of Pseudocyclic β -Trifluorosulfonyloxy Vinylbenziodoxolone Derivatives // Advanced Synthesis & Catalysis. – 2021. – Т. 363, № 13. – С. 3365-3371.

<https://doi.org/10.1002/adsc.202100341>

(2020) Импакт-фактор: 5.837. Квартиль: **Q1**

к.х.н., доцент ИШХБМТ

Постников П.С.

д.х.н., директор ИШХБМТ

Трусова М.Е.

к.т.н., ученый секретарь ТПУ

Кулинич Е.А.

