

## CURRICULUM VITAE

### Personal details:

Name, surname	<b>Dr. Gintautas Bagdžiūnas</b>
Birth date and place	October 19, 1983, Alytus, Lithuania
Address: Jonažolių st. 9-121 Vilnius Lithuania	Nationality: Lithuanian Sex: Male Status: Single
Emails:	<a href="mailto:gintautas.bagdziunas@gmail.com">gintautas.bagdziunas@gmail.com</a> <a href="mailto:gintautas.bagdziunas@gmc.vu.lt">gintautas.bagdziunas@gmc.vu.lt</a> <a href="mailto:gintautas.bagdziunas@ftmc.lt">gintautas.bagdziunas@ftmc.lt</a>

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Scopus ID: 20435407700

### Education:

2008-2012	Vilnius University, Faculty of Chemistry, Doctor of Science in chemistry. “Synthesis, Structural and Association Studies of Chiral Supramolecular Tectones based on bicyclo[3.3.1]nonane Framework”, (supervision of the thesis was Prof. E. Butkus)
2006-2008	Vilnius University, Faculty of Chemistry, MSc studies ( <i>Magnum Cum Laude</i> diploma). Title of graduation thesis was “Synthesis and Investigation of Organocatalysts for Asymmetric Reductions”, (supervision of the thesis was Prof. E. Butkus)
2002-2006	Vilnius University, Faculty of Chemistry, BSc studies. Title of the graduation thesis was “New Number of Bicyclo[3.3.1]nonane and 2-oxatricyclo[4.3.1.0 <sup>3,8</sup> ]decane Compound Synthesis and their Investigation” (supervision of the thesis was Dr. A. Žilinskas)
1990-2002	“Volungė” secondary school, Alytus, Lithuania.

### Achievements:

2001	2nd place in Lithuanian National Olympiad of Chemistry, Elektrėnai.
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- 2002 1st place in Lithuanian National Olympiad of Chemistry, Vilnius.
- 2000, 2002 1st place in “Janickis competition of chemistry”, Kaunas.
- 2002 3rd (bronze) in International Chemistry Olympiad, Groningen, Netherlands.
- 2002 3rd (bronze) in Mendeleev International Chemistry Olympiad, Almata, Kazakhstan.
- 2007 Memorial Scholarship of Yankun Family.
- 2007 Prof. J. Degutis’ Memorial Scholarship of Organic Synthesis.
- 2011 Prof. S. Kutkevičius’ Memorial Scholarship for the best PhD research work of Organic Synthesis.
- 2008-2012 LMT and LVMSF grant for the PhD studies.
- 2016 Best completed project funded by a grant from the R&D and Innovation Fund of KTU.
- 2017-2019 LMT Postdoctoral Fellowship
- 2019 Best publication in 2018 (*Biosensors and Bioelectronics*) in Vilnius University.
- 2019 Invited cover art for the *Organometallics* journal volume 38, issue 13.
- 2021, 2022 Outstanding Reviewer for the *Molecular Systems Design & Engineering* journal.

**Work experience:**

- 2005-2007 Laboratory assistant, Faculty of Chemistry, Department of Organic Chemistry, Vilnius University
- 2007-2008 Specialist on the project “Nordforsk *via* the Nordic-Baltic Network in Crystal Engineering and Supramolecular Materials“, Faculty of Chemistry, Department of Organic Chemistry, Vilnius University
- 2009-2012 Researcher on the project “Synthesis of chiral synthons and application in supramolecular chemistry and organocatalysis” (VP1-3.1-ŠMM-07-K-01-030), Faculty of Chemistry, Department of Organic Chemistry, Vilnius University
- 2013-2016 Senior Researcher, on the project “Centre of Excellence in Organic Semiconductor Research”, Faculty of Chemical Technology, Department of Polymer Chemistry and Technology, Kaunas University of Technology

2016-still	Senior Researcher, Department of Material Science and Electrical Engineering, Center for Physical Sciences and Technology
2020-still	Senior Researcher, Life Sciences Center, Institute of Biochemistry, Department of Bioanalysis, Vilnius University and leader of Group of Supramolecular Analysis.

**Pedagogical experience:**

- Laboratory of Organic Chemistry and Organic Synthesis Methods for students in the fields of medicine, chemistry and biochemistry, 2005-2007. Laboratory assistant, VU.
- From 2003 to 2011, I participated in the preparation of theoretical and laboratory tasks at the Lithuanian Chemistry Olympiads.
- Mentor of the Lithuania team in International Chemistry Olympiad, Ankara, Turkey, 2011.
- The lectures, laboratory works and seminars on the Synthesis and Materials for Solar Energy, 2014, lecturer, KTU.

**Scientific supervised and successfully defended final theses and dissertations:**

- M. Šurka “Synthesis of functionalized tris(4-benzhydrylphenyl)amines and their semiconductor properties”, bachelor's thesis of the applied chemistry program, KTU, **2015**.
- D. Palinauskas “Electrochemical synthesis and electrochromic properties of conducting polymers containing the indole and carbazole moieties”, bachelor's thesis of the chemistry of nanomaterials program, VU, **2020**.
- V. Dudkaitė “Kinetics and stability of glucose oxidase from *aspergillus niger* in various organic solvents”, bachelor's thesis of the biochemistry program, VU, **2021**.
- D. Kijavičius “Influence of magnetic field on synthesis and electrochemistry of conductive polymers”, master's thesis of the biophysics program, VU, **2021**.
- Consultant for the dissertations: G. Grybauskaitė-Kaminskienė (PhD, KTU), Š. Žukauskas (MSc and PhD, VU).

**Participation in Grants and Projects:**

1. “Crystal Engineering and Supramolecular Materials“ 2006-2010 funded by Nordic Council NordForsk (Specialist).

2. **“Synthesis of chiral synthons and application in supramolecular chemistry and organocatalysis”** (VP1-3.1-ŠMM-07-K-01-030), 2011-2015 Support to Research of Scientists and Other Researchers (Global Grant), (Junior Researcher).
3. **“Centre of Excellence in Organic Semiconductor Research (COESeR)”** Funded under: FP7-REGPOT from 2013 till 2016 (Senior Researcher).
4. **“Synthesis and properties of new nitrogen-containing heterocyclic compounds for organic Electronics“** (TAP-LU-15-015) funded by Lithuanian Ministry of Education and Science and the Science, Innovation and Informatization agency of Ukraine from 2016 till 2017, (Senior Researcher).
5. Project **“Electrochromic and Electrochemical Gas Sensor”** (No. S-LAT-17-1) funded by Research Council of Lithuania from 2017 till 2019, (Senior Researcher).
6. Project **“Biosensor Research and Engineering Competence and Technology Transfer Center (BIONSENSE)”** (No. 01.2.2-CPVA-K-703-03-0010), financed from the EU Structural Funds under Measure No. 01.2.2-CPVA-K-703 "Promotion of Centers of Excellence and Innovation and Technology Transfer Centers". Duration is from 2020 till 2023 (Chief Researcher).

**Lead applicant:**

1. **“Theoretical design of organic semiconductor molecules suitable for organic phosphorescent OLEDs”**. “Developing students' abilities by participating in scientific summer practice”, Support to LMT, terms: 2014 (summer), with a total project value of 1,877.93 Eur, Project Leader.
2. **“Development of structure and property relationship of novel nanostructured light emitting diodes (OLEDNANO)“** 2015 funded by a grant (No. MTEPI-P-15008) from a R&D and Innovation Fund of Kaunas University of Technology, with a total project value of 9999 Eur, Project Leader.
3. Postdoc grant **“Application of organic semiconductors in biological sensors and biofuel cells”** (No. 09.3.3-LMT-K-712-02-0186) funded by the European Social Fund, with a total project value of 72,249.38 Eur. The planned duration of the project was from 2017 till 2019, Chief Researcher and Project Leader.
4. Project **“An investigation and conductivity of new electropolymers based on carbazole moiety”** (09.3.3.-LMT-K-712-15-0174) “Developing students' abilities by

participating in scientific summer practice”, funded by the European Social Fund on with a total project value of 18,77.93 Eur. Duration was 2019-07-01 – 08-31, Project Leader.

5. Project “**Formation and application of functional self-assembled monolayers based on electroactive molecules on transparent electrodes**” (09.3.3.-LMT-K-712-16-0260) “Developing students' abilities by participating in scientific summer practice”, funded by the European Social Fund on with a total project value of 2,271.24 Eur. Duration was 2019-10-15 – 2020-04-30, Project Leader.

6. Project “**Supramolecular recognition-based sensors for electro- detection of biomolecules**” (P-MIP-20-329) Research Group Projects, funded by Research Council of Lithuania on with a total project value of 150,000 Eur. Duration is from 2020 till 2022, Project Leader.

#### **Research interest:**

- Organic chemistry: synthesis of functional semiconducting organic compounds for OLEDs and transistors; transition metal-catalyzed reactions;
- Supramolecular engineering and photophysics of functional molecular and nanomaterials;
- Dynamic and static stereochemistry: Synthesis chiral materials and catalysis, determination stereochemistry of organic compounds by using electronic circular dichroism (ECD) spectroscopy and density functional theory (DFT) calculations;
- Computational quantum and theoretical chemistry: conformation analysis, electronic structure and the intermolecular interactions prediction; the modelling organic reaction mechanisms, mobility of carriers in organic semiconductors in bioorganic systems by applying modified Marcus-Bagdžiūnas theory;
- Single-crystals X-ray Diffraction and Hirshfeld surface analysis (I have Radiation Safety certificate No. 1148);
- Opto- and bio-electronics (OLEDs and biosensors).

#### **Expert and Editor Activity:**

- Scientific expert of the Research Council of Lithuania
- Scientific expert of the National Research Foundation of Ukraine
- Topic Editor of the *Biosensors* journal of MDPI publishing

- The Guest Editor of Special Issue "Electrochemistry and Spectroscopy-Based Biosensors" in the *Biosensors* journal
- Guest reviewer and referee of the international scientific journals such as *ACS Applied Materials & Interfaces*, *Journal of Photochemistry and Photobiology A: Chemistry*, *Arabian Journal of Chemistry*, *Journal of Materials Chemistry C*, *Journal of Organic Chemistry*, *ChemistrySelect*, *Open Chemistry*, *Materials*, *Molecules*, *Optics*, *Micromachines and Symmetry*
- According to the Publons database, I am the reviewer of 100 scientific publications.

### Languages:

Lithuanian (native), English (good), Russian (fluent), Ukrainian (understand)

### List of the publications in the "ISI Web of Science" data base:

1. E. Orentas, **G. Bagdžiūnas**, U. Berg, A. Žilinskas, E. Butkus. Enantiospecific Synthesis and Chiroptical Properties of Bicyclic Enones. *Eur. J. Org. Chem.* **2007**, 4251-4256. (CHEMISTRY, ORGANIC, Q1)
2. S. Stončius, **G. Bagdžiūnas**, J. Malinauskienė, E. Butkus. A Study of Planar Chromophores in Dichromophoric Molecules by Circular Dichroism Spectroscopy. *Chirality* **2008**, 20, 3-4, 337-343. (CHEMISTRY, ORGANIC, Q3)
3. R. Kubilius, **G. Bagdžiūnas**, E. Butkus, Ring contraction/transannular cyclization of chiral bicyclo[3.3.1]nonanediones mediated by thallium(III) nitrate. *Tetrahedron Lett.* **2011**, 52, 346-348. (CHEMISTRY, ORGANIC, Q2)
4. **G. Bagdžiūnas**, M. Haukka, E. Butkus, Synthesis of Chiral NADH Analogue Based on Proline Template Including Thiourea and Nicotinic Acid Moieties, *Synth. Commun.* **2011**, 41, 17, 2517-2523. (CHEMISTRY, ORGANIC, Q3)
5. **G. Bagdžiūnas**, E. Butkus, S. Stončius, Synthesis of Diastereomeric Bicyclo[3.3.1]nonane Dibenzoyl Esters and Study of Their Chiroptical Properties, *Chirality* **2012**, 24, 810-816. (CHEMISTRY, ORGANIC, Q3)

### Publications after the dissertation defence:

6. **G. Bagdžiūnas**, E. Butkus, S. Stončius, Homoconjugation vs. Exciton Coupling in Chiral  $\alpha,\beta$ -Unsaturated Bicyclo[3.3.1]nonane Dinitrile and Carboxylic Acids, *Molecules* **2014**, 19(7), 9893-9906. (CHEMISTRY, ORGANIC, Q2)

7. A. Bucinskas, D. Waghray, **G. Bagdziunas**, J. Thomas, J. V. Grazulevicius, W. Dehaen, Synthesis, functionalization and optical properties of chiral carbazole based diaza[6]helicenes. *J. Org. Chem.* **2015**, 80, 5, 2521-2528. (CHEMISTRY, ORGANIC, Q1)
8. J. Bucevicius, L. Skardziute, J. Dodonova, K. Kazlauskas, **G. Bagdziunas**, S. Jursenas, S. Tumkevicius, 2,4-Bis(4-aryl-1,2,3-triazol-1-yl)pyrrolo[2,3-d]-pyrimidines: synthesis and tuning of optical properties by polar substituents. *RSC Advances*, **2015**, 5, 38610–38622. (CHEMISTRY, MULTIDISCIPLINARY, Q2)
9. T. Javorskis, S. Sriubaitė, **G. Bagdziunas**, E. Orentas. N-Protected 1, 2-Oxazetidines as a Source of Electrophilic Oxygen: Straightforward Access to Benzomorpholines and Related Heterocycles by Using a Reactive Tether. *Chemistry-A European Journal*, **2015**, 21, 25, 9157-9164. (CHEMISTRY, MULTIDISCIPLINARY, Q1)
10. A. Bucinskas, **G. Bagdziunas**, A. Tomkeviciene, D. Volynyuk, N. Kostiv, D. Gudeika, V. Jankauskas, M. Rutkis, J.V. Grazulevicius. Structure-property relationship of isomeric diphenylethenyl-disubstituted dimethoxycarbazoles. *RSC Advances*, **2015**, 5, 49577-49589. (CHEMISTRY, MULTIDISCIPLINARY, Q2)
11. D. Waghray, **G. Bagdziunas**, J. Jacobs, L. Van Meervelt, J.V. Grazulevicius, W. Dehaen. Diastereoselective Strategies towards Thia[n]helicenes. *Chemistry-A European Journal*, **2015**, 21, 51, 18791-18798. (CHEMISTRY, MULTIDISCIPLINARY, Q1)
12. M. Bezuglyi, G. Grybauskaite, **G. Bagdziunas**, J. V. Grazulevicius. Crystal structure of 1,3,6,8-tetrabromo-9-ethyl-9H-carbazole. *Acta Crystallogr E Crystallogr Commun.* **2015** May 30;71(Pt 6):o373. (CRYSTALLOGRAPHY, Q4)
13. M. Bezuglyi, G. Grybauskaite, **G. Bagdziunas**, J. V. Grazulevicius. Crystal structure of 3-bromo-9-ethyl-9H-carbazole. *Acta Crystallogr E Crystallogr Commun.* **2015** Dec 19; 71(Pt 12):o1067-8. (CRYSTALLOGRAPHY, Q4)
14. T. Javorskis, **G. Bagdziunas**, E. Orentas. N-tosyl-1,5,2,6-dithiadiazocane: a waste-free electrophilic sulfur reagent for an efficient synthesis of medium-ring S,N-heterocycles, *Chem. Commun.*, **2016**, **52**, 4325-4328. (CHEMISTRY, MULTIDISCIPLINARY, Q1)
15. A. Lazauskas, J. Baltrusaitis, L. Puodžiukynas, M. Andrulevičius, **G. Bagdziunas**, D. Volyniuk, Š. Meškiniš, G. Niaura, T. Tamulevičius, V. Jankauskaitė. Characterization of urea derived polymeric carbon nitride and resultant thermally vacuum deposited amorphous thin

films: Structural, chemical and photophysical properties, *Carbon*, **2016**, 107, 415-425. (CHEMISTRY, PHYSICAL, Q1)

16. **G. Bagdžiūnas\***, G. Grybauskaitė, N. Kostiv, K. Ivaniuk, D. Volyniuk, A. Lazauskas. Green and red phosphorescent organic light-emitting diodes with ambipolar hosts based on phenothiazine and carbazole moieties: photoelectrical properties, morphology and efficiency, *RSC Advances* **2016**, **6**, 61544-61554. (CHEMISTRY, MULTIDISCIPLINARY, Q2)

17. M. Reig, C. Gozávez, R. Bujaldón, **G. Bagdziunas**, K. Ivaniuk, N. Kostiv, D. Volyniuk, J. V. Grazulevicius, D. Velasco. Easy accessible blue luminescent carbazole-based materials for organic light-emitting diodes, *Dyes and Pigments* **2017**, 137, 24–35. (CHEMISTRY, APPLIED, Q1)

18. **G. Bagdziunas\***, M. Surka, K. Ivaniuk. High triplet energy exciton blocking materials based on triphenylamine core for organic light-emitting diodes. *Organic Electronics* **2017**, 41, 122-129. (MATERIALS SCIENCE, MULTIDISCIPLINARY, Q1)

19. E. Skuodis, A. Tomkeviciene, R. Reghu, L. Peciulyte, K. Ivaniuk, D. Volyniuk, O. Bezikonnyi, **G. Bagdziunas**, D. Gudeika, J. V. Grazulevicius. OLEDs based on the emission of interface and bulk exciplexes formed by cyano-substituted carbazole derivative. *Dyes and Pigments* **2017**, 139, 795–807. (CHEMISTRY, APPLIED, Q1)

20. M. Reig, **G. Bagdziunas**, D. Volyniuk, J. V. Grazulevicius, D. Velasco-Castrillo. Tuning the ambipolar charge transport properties of tricyanovinyl-substituted carbazole-based materials. *Phys. Chem. Chem. Phys.*, **2017**, 19, 6721-6730. (CHEMISTRY, PHYSICAL, Q1)

21. **G. Bagdžiūnas\***, S. Stončius, E. Butkus. Synthesis of Star-Shaped Aromatic Derivatives with Chirality Predetermined by Bicyclo[3.3.1]nonane Framework. *Synlett*, **2017**, 28(20): 2790-2794. (CHEMISTRY, ORGANIC, Q2)

22. M. Bezuglyi, K. Ivaniuk, D. Volyniuk, J. V. Gražulevičius, **G. Bagdžiūnas\***. An approach to discovering novel exciplex supramolecular complex based on carbazole-containing 1,8-naphthalimide. *Dyes and Pigments* **2018**, 149, 298–305. (CHEMISTRY, APPLIED, Q1)

23. **G. Bagdžiūnas\***, Š. Žukauskas, A. Ramanavičius. Insights into a Hole Transfer Mechanism between Glucose Oxidase and a p-type Organic Semiconductor. *Biosensors and Bioelectronics* **2018**, 102, 449-455. (ELECTROCHEMISTRY, Q1)

24. G. Grybauskaite, Kh. Ivaniuk, **G. Bagdziunas**, P. Turyk, P. Y. Stakhira, G. Baryshnikov, D. Volyniuk, V. V. Cherpak, B. Minaev, Z. Hotra, H. Ågren, J. V. Grazulevicius. Contribution



of TADF and Exciplex Emission for Efficient “Warm-White” OLEDs. *Journal of Materials Chemistry C*, **2018**, 6, 1543-1550. (MATERIALS SCIENCE, Q1)

25. G. Grybauskaite-Kaminskiene, D. Volyniuk, V. Mimaite, O. Bezvikonnyi, A. Bucinskas, **G. Bagdziunas**, J. V. Grazulevicius. Aggregation Enhanced Emission and Thermally Activated Delayed Fluorescence of Derivatives of 9-Phenyl-9H-Carbazole: Effects of Methoxy and tert-Butyl Substituents. *Chemistry- A European Journal*, **2018**, 38, 9581-9591. (CHEMISTRY, MULTIDISCIPLINARY, Q1)

26. M. Reig, **G. Bagdziunas**, A. Ramanavicius, J. Puigdollers, D. Velasco. Interface engineering and solid-state organization for triindole-based p-type Organic Thin-Film Transistors, *Physical Chemistry Chemical Physics*, **2018**, 20, 17889-17898. (CHEMISTRY, PHYSICAL, Q2)

27. O. Bezvikonnyi, D. Gudeika, D. Volyniuk, J.V. Grazulevicius, **G. Bagdziunas\***. Pyrenyl substituted 1,8-naphthalimide as a new material for weak efficiency-roll-off red OLEDs: a theoretical and experimental study. *New Journal of Chemistry*, **2018**, 42, 12492-12502 (CHEMISTRY, MULTIDISCIPLINARY, Q2)

28. M. Gicevicius, **G. Bagdziunas**, Y. Abduloglu, A. Ramanaviciene, O. Gumusay, M. Ak, T. Soganci, A. Ramanavicius. Experimental and Theoretical Investigations of an Electrochromic Azobenzene and 3,4-Ethylenedioxythiophene-Based Electrochemically Formed Polymeric Semiconductor. *ChemPhysChem*, **2018**, 19, 2735–2740. (CHEMISTRY, PHYSICAL, Q2)

29. M. Gicevicius, R. Celiesiute, J. Kucinski, A. Ramanaviciene, **G. Bagdziunas**, and A. Ramanavicius. Analytical Evaluation of Optical pH-Sensitivity of Polyaniline Layer Electrochemically Deposited on ITO Electrode. *Journal of The Electrochemical Society*, **2018**, 165 (14) H903-H907. (MATERIALS SCIENCE, COATINGS & FILMS, Q1)

30. **G. Bagdžiūnas\***, A. Ramanavičius. Towards direct enzyme wiring: a theoretical investigation of charge carrier transfer mechanisms between glucose oxidase and organic semiconductors. *Phys. Chem. Chem. Phys.*, **2019**, 21, 2968 – 2976. (CHEMISTRY, PHYSICAL, Q2)

31. V. Ratautaite, **G. Bagdziunas**, A. Ramanavicius, A. Ramanaviciene. An application of conducting polymer polypyrrole for the design of electrochromic pH and CO<sub>2</sub> sensors. *Journal of The Electrochemical Society*, **2019**, 166 (6), B297-B303. (MATERIALS SCIENCE, COATINGS & FILMS, Q1)

32. Š. Žukauskas, A. Ramanavičius, **G. Bagdžiūnas\***. Organic Semiconductors with Carbazole and Triphenylamine Moieties for Glucose Oxidase-Based Biosensors. *Journal of The Electrochemical Society*, **2019**, 166 (6), B316-B321. (MATERIALS SCIENCE, COATINGS & FILMS, Q1)
33. A. Popov, B. Brasiunas, L. Mikoliunaite, **G. Bagdziunas**, A. Ramanavicius, A. Ramanaviciene. Comparative Study of Polyaniline (PANI), Poly(3,4-ethylenedioxythiophene) (PEDOT) and PANI-PEDOT Films Electrodeposited on Transparent Indium Thin Oxide based Electrodes. *Polymer*, **2019**, 172, 133-141. (POLYMER SCIENCE, Q1)
34. **G. Bagdžiūnas\***, E. Butkus, E. Orentas. Hierarchical Assembly toward Nanoparticles of a Chiral Palladium Supramolecular Complex Based on Bicyclo[3.3.1]nonane Framework. *Organometallics*, **2019**, 38, 13, 2647-2653. (CHEMISTRY, ORGANIC, Q1)
35. **G. Bagdžiūnas\***, D. Palinauskas, A. Ramanavičius. Towards colourless-to-green electrochromic smart glass based on a redox active polymeric semiconductor containing carbazole moiety. *Dyes and Pigments*, **2020**, 177, 108328. (CHEMISTRY, APPLIED, Q1)
36. E. Ros, M. Reig, C.Voz, **G. Bagdziunas**, P. Ortega, D. Velasco, J. Puigdollers. Shedding light on the Negative Differential Resistance Effect observed in Organic Thin-Film Transistors. *ACS Appl. Electron. Mater.* **2020**, 2, 6, 1574–1582. (ENGINEERING, ELECTRICAL & ELECTRONIC, Q2)
37. **G. Bagdžiūnas\***, D. Palinauskas. Poly(9H-carbazole) as a Organic Semiconductor for Enzymatic and Non-Enzymatic Glucose Sensors. *Biosensors* **2020**, 10(9), 104. (CHEMISTRY, ANALYTICAL, Q1)
38. **G. Bagdžiūnas\***. Theoretical design of molecularly imprinted polymers based on polyaniline and polypyrrole for detection of tryptophan. *Mol. Syst. Des. Eng.* **2020**, 5, 1504–1512 (CHEMISTRY, PHYSICAL, Q2)
39. T. Javorskis, A. Jurys, **G. Bagdžiūnas**, E. Orentas. Synthesis of C- and N-Substituted 1,5,2,6-Dithiadiazocanes –Electrophilic-Nucleophilic Thioamination (ENTA) Reagents. *Adv. Synth. Catal.* **2021**, 363, 3329–3335 (CHEMISTRY, ORGANIC, Q1)
40. G. Grybauskaitė-Kaminskienė, V. Dudkaitė, **G. Bagdžiūnas\***. Photophysical and semiconducting properties of isomeric triphenylimidazole derivatives with a benzophenone moiety. *New Journal of Chemistry*, **2021**, 45, 19746 - 19754. (CHEMISTRY, MULTIDISCIPLINARY, Q2)

41. V. Dudkaitė, **G. Bagdžiūnas\***. Functionalization of Glucose Oxidase in Organic Solvent: Towards Direct Electrical Communication across Enzyme-Electrode Interface. *Biosensors* **2022**, 12, 335. (CHEMISTRY, ANALYTICAL, Q1)

**In other data bases (referred in Scopus):**

42. **G. Bagdžiūnas\***, J. V. Gražulevičius. Supramolecular orientation effects on the charge transport of the hydrogen-bonded molecules. *Proceedings of the Estonian Academy of Sciences* **2015**, 64 (1 S), pp. 70.

43. A. Bucinskas, A. Tomkeviciene, **G. Bagdziunas**, J.V. Gražulevičius. Effect of the number and positions of methoxy groups on the properties of carbazole and its trimers: Theoretical and experimental approach. *Proceedings of the Estonian Academy of Sciences*, **2015**, 64 (1 S), pp. 41

44. M. Bezuglyi, **G. Bagdziunas**, J. V. Gražulevičius. 1,3,6-Tribromo-9-ethyl-9*H*-carbazole. *IUCrDATA* **2016**, 1, 4, x160708.

45. **G. Bagdžiūnas\***, R. Lytvyn. A study of hyperconjugation effects in the 1,4-di-*p*-tolylbutane-1,4-dione structure. *Visnyk of the Lviv University. Series Chemistry*. **2018**, Issue 59. Pt. 2. P. 325–331.

46. Ratautaite, V.; **Bagdziunas, G.**; Brazys, E.; Ramanaviciene, A.; Ramanavicius, A. Evaluation of the Electrochromic Response of Polypyrrole in the Presence of CO<sub>2</sub> in the Solution. *Eng. Proc.* **2021**, 6, 80.

**Reviews of key events in peer-reviewed journals that show the publications/works importance:**

1. **G. Bagdžiūnas**, M. Haukka, E. Butkus, ChemInform Abstract: Synthesis of Chiral NADH Analogue Based on Proline Template Including Thiourea and Nicotinic Acid Moieties, *ChemInform* Volume 43, Issue 27, July 3, **2012**.

2. J. Bucevicius, L. Skardziute, J. Dodonova, K. Kazlauskas, **G. Bagdziunas**, S. Jursenas, S. Tumkevicius, *ChemInform* Abstract: 2,4-Bis(4-aryl-1,2,3-triazol-1-yl)pyrrolo[2,3-*d*]-pyrimidines: synthesis and tuning of optical properties by polar substituents. *ChemInform* Volume 46, Issue 36, September, **2015**.

3. T. Javorskis, S. Sriubaitė, **G. Bagdžiūnas**, E. Orentas. ChemInform Abstract: N-Protected 1,2-Oxazetidines as a Source of Electrophilic Oxygen: Straightforward Access to

Benzomorpholines and Related Heterocycles by Using a Reactive Tether. *ChemInform* Volume 46, Issue 45, November, **2015**.

4. T. Javorskis, S. Sriubaitė, **G. Bagdžiūnas**, E. Orentas. 1,2-Oxazetidines: Synthesis, Characterization, and Synthetic Applications, *Synfacts* **2015**, 11 (08), 0805-0805

5. T. Javorskis, **G. Bagdžiūnas**, E. Orentas. Synthesis of Medium-Ring S,N-Heterocycles Using a Dithiadiazocane, *Synfacts* **2016**, 12 (05), 0460-0460.

6. Cover art for *Organometallics* Volume 38, Issue 13, July 8, **2019** based on the paper by Bagdžiūnas, Butkus, and Orentas (DOI: 10.1021/acs.organomet.9b00207).

#### **The conference reports after the dissertation defence:**

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