

A universality of ethane-bridged bis-porphyrin structural motif for effective supramolecular chirogenesis, sensor development, and light harvesting systems

Borovkov, Victor The UGC-SAP Sponsored International Conference on New Horizons in Synthetic and Materials Chemistry (ICSMC-2015) : Mumbai, India, November 26-28, 2015 : abstract book 2015 / p. 8

Aerobic cascade oxidation of substituted cyclopentane-1, 2-diones using metalloporphyrin catalysts [Online resource]

Oja, Karolin; Borovkov, Victor; Kananovich, Dzmitry; Järving, Ivar; Lopp, Margus Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [7-8 märtsil 2018, Tallinn : teesid] GSFMT Scientific Conference 2018 : Tallinn, March 7-8, 2018 : abstracts 2018 / 1 p <http://fmdk.ut.ee/teesid-2018/>

Aerobic cascade oxidation of substituted cyclopentane-1,2-diones using metalloporphyrin catalysts

Maljutenko, Karolin; Borovkov, Victor; Kananovich, Dzmitry; Järving, Ivar; Lopp, Margus Tetrahedron 2018 / p. 661–664 : ill <https://doi.org/10.1016/j.tet.2017.12.009> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Aerobic oxidations in asymmetric synthesis : catalytic strategies and recent developments

Kananovich, Dzmitry; Elek, Gabor Zoltan; Lopp, Margus; Borovkov, Victor Frontiers in chemistry 2021 / art. 614944 <https://doi.org/10.3389/fchem.2021.614944> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

An efficient method for longterm configurational stabilization of chiral tricyclic dipeptide via heterocomplexation approach

Hu, Xiaoyun; Yin, Zhongyou; Guo, Jianxin; **Borovkov, Victor**; Shan, Zixing ChemistrySelect 2019 / p. 3210-3213 <https://doi.org/10.1002/slct.201900099>

Application of ethane-bridged bis-porphyrin structural motif for effective supramolecular chirogenesis, sensor development, and light harvesting systems

Borovkov, Victor; Gathergood, Nicholas 229th ECS Meeting : May 29 - June 2, 2016, San Diego, CA : abstract book 2016 / art. 836

Application of octaethylporphyrin structural motif for supramolecular chirogenesis

Borovkov, Victor; Gathergood, Nicholas Eighth [i.e. Ninth] International Conference on Porphyrins and Phthalocyanines (ICPP-9) : July 3-8, 2016, Nanjing, China 2016 / p. 33 <http://www.icpp-spp.org/icpp9/BOOKofABSTRACTS.pdf>

Application of octaethylporphyrin structural motif for supramolecular chirogenesis

Borovkov, Victor 227th ECS Meeting : May 24-28, 2015, Chicago, Illinois, USA : [abstracts] 2015 / p. 946 <https://ecs.confex.com/ecs/227/webprogram/Paper49194.html>

Asymmetric Biginelli-like reaction catalyzed by chiral TADDOL-derived phosphoric acid bearing two hydroxyl groups

Guo, Jianxin; Zhang, Rui; Yin, Zhongyou; Hu, Xiaoyun; **Borovkov, Victor** The 23rd International Electronic Conference on Synthetic Organic Chemistry 15 nov 2019 - 15 dec 2019 2019 / 8 p. : ill <https://doi.org/10.3390/ecsoc-23-06647>

Asymmetric synthesis of 2-amino-8-oxo-9,10-epoxydecanoic acid via cyclopropane cleavage strategy [Online resource]

Elek, Gabor Zoltan; Koppel, Kaur; Borovkov, Victor; Lopp, Margus; Kananovich, Dzmitry Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [7-8 märtsil 2018, Tallinn : teesid] GSFMT Scientific Conference 2018 : Tallinn, March 7-8, 2018 : abstracts 2018 / 1 p <http://fmdk.ut.ee/teesid-2018/>

Benchmarking computational methods and influence of guest conformation on chirogenesis in zinc porphyrin complexes

Osadchuk, Irina; Borovkov, Victor; Aav, Riina; Clot, Eric Physical chemistry chemical physics 2020 / p. 11025–11037 <https://doi.org/10.1039/D0CP00965B> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Benzyne-mediated nonconcerted pathway toward synthesis of sterically crowded [5]- and [7]oxahelicenoids, stereochemical and theoretical studies, and optical resolution of helicenoids

Gawade, Prashant M.; Khose, Vaibhav N.; Badani, Purav M.; **Kaabel, Sandra; Borovkov, Victor** Journal of organic chemistry 2019 / p. 860-868 : ill <https://doi.org/10.1021/acs.joc.8b02507> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Book review of "Lanthanide metal-organic frameworks"

Borovkov, Victor Frontiers in chemistry 2015 / p. 1-2 : ill <http://dx.doi.org/10.3389/fchem.2015.00050>

Chiral Auxiliaries and Chirogenesis

2021 <https://doi.org/10.3390/books978-3-0365-1017-0>

Chiral Auxiliaries and Chirogenesis II

2021 <https://doi.org/10.3390/books978-3-0365-1155-9>

Chiral auxiliaries and chirogenesis ii

Symmetry 2021 / art. 1157 <https://doi.org/10.3390/sym13071157> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Chiral heterocycle-based receptors for enantioselective recognition

Khose, Vaibhav N.; John, Marina E.; Pandey, Anita D.; **Borovkov, Victor**; Karnik, Anil V. Chiral Auxiliaries and Chirogenesis 2021 / p. 27-101 <https://doi.org/10.3390/books978-3-0365-1017-0> <https://doi.org/10.3390/sym10020034>

Chiral heterocycle-based receptors for enantioselective recognition

Khose, Vaibhav N.; John, Marina E.; Pandey, Anita D.; **Borovkov, Victor**; Karnik, Anil V. Symmetry 2018 / 75 p : ill <https://doi.org/10.3390/sym10020034> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Chiral recognition by supramolecular porphyrin-hemicucurbit[8]uril-functionalized gravimetric sensors

Magna, Gabriele; **Šakarašvili, Marko**; Stefanelli, Manuela; Giancane, Gabriele; Bettini, Simona; Valli, Ludovico; **Ustrnul, Lukas**; **Borovkov, Victor**; **Aav, Riina**; Monti, Donato; Di Natale, Corrado; Paolesse, Roberto ACS applied materials and interfaces 2023 / p. 30674–30683 <https://doi.org/10.1021/acsami.3c05177> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Chirogenesis in Chemical Science

2023 <https://doi.org/10.1142/12915> https://www.esteeer.com/record=b5748359*est

Chirogenesis in supramolecular systems

Ustrnul, Lukas; **Borovkov, Victor**; **Aav, Riina** Chirogenesis in Chemical Science 2023 / p. 69-123 : ill https://doi.org/10.1142/9789811259227_0002 https://www.esteeer.com/record=b5748359*est

Chirogenesis in supramolecular systems

Kanagaraj, Kuppusamy; Yang, Cheng; **Borovkov, Victor** Fundamentals of supramolecular chirality 2021 / p. 85-147 https://doi.org/10.1142/9781800610255_0004

Chirogenesis in supramolecular systems on the basis of porphyrinoids

Borovkov, Victor Proceedings : 2018, Symmetry 2017 ; vol. 2 2018 / p. 83 <https://doi.org/10.3390/proceedings2010083>

Chirogenesis in Zinc porphyrins : theoretical evaluation of electronic transitions, controlling structural factors and axial ligation

Osadchuk, Irina; **Aav, Riina**; **Borovkov, Victor**; Clot, Eric ChemPhysChem 2021 / p. 1817–1833 : ill <https://doi.org/10.1002/cphc.202100345> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Conformational switching of ethano-bridged Cu₂H₂-bis-porphyrin induced by aromatic amines

Bettini, Simona; Maglie, Emanuela; Pagano, Rosanna; **Borovkov, Victor** Beilstein journal of nanotechnology 2015 / p. 2154-2160 : ill <https://doi.org/10.3762/bjnano.6.221> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Controlling chirogenic effects in porphyrin based supramolecular systems: theoretical analysis versus experimental observations

Osadchuk, Irina; **Luts, Hanna-Eliisa**; **Zahharova, Aleksandra**; **Tamm, Toomas**; **Borovkov, Victor** ChemPhysChem 2024 / art. e202400104 <https://doi.org/10.1002/cphc.202400104> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Direct asymmetric three-component Mannich reaction catalyzed by chiral counteranion-assisted silver

Yin, Zhongyou; Guo, Jianxin; Zhang, Rui; **Borovkov, Victor** The journal of organic chemistry 2020 / p. 10369–10377 : ill <https://doi.org/10.1021/acs.joc.0c00031>

Directional Approach to Enantiomerically Enriched Functionalized [7]Oxa-helicenoids and Groove-Based Selective Cyanide Sensing

Khose, Vaibhav N.; Hasan, Mohammed; Khot, Sushil C.; Mobin, Shaikh M.; **Borovkov, Victor**; Karnik, Anil V. Journal of organic chemistry 2019 / p. 1847–1860 : ill <https://doi.org/10.1021/acs.joc.9b02100>

Editorial : Stimuli-responsive emissive organic and metal-organic compounds

Chen, Zhao; Deng, Dian-Dian; **Aav, Riina**; **Borovkov, Victor**; Sun, Yue Frontiers in chemistry 2022 / art. 946617 <https://doi.org/10.3389/fchem.2022.946617> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Efficient synthesis of novel quinolinone derivatives via catalyst-free multicomponent reaction

Du, Rui; Han, Liangliang; Zhou, Zhongqiang; **Borovkov, Victor** Letters in organic chemistry 2020 / p. 403–407 <http://doi.org/10.2174/1570178616666190828092728>

Enantio-differentiating hydrogenation of alkyl 3-oxobutanoates over tartaric acid-modified Ni catalyst: Enthalpy-entropy compensation effect as a tool for elucidating mechanistic features

Osawa, Tsutomu; Wakasugi, Masahiro; Kizawa, Tomoko; **Borovkov, Victor**; Inoue, Yoshihisa *Molecular catalysis* 2018 / p. 131-136 : ill <https://doi.org/10.1016/j.mcat.2018.02.023> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Enantioselective one-pot synthesis of α,β -epoxy ketones via aerobic oxidation of cyclopropanols

Elek, Gabor Zoltan; Borovkov, Victor; Lopp, Margus; Kananovich, Dzmitry *Organic letters* 2017 / p. 3544-3547 : ill <https://doi.org/10.1021/acs.orglett.7b01519> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Enantioselective synthesis of epoxyketones via aerobic oxidation of cyclopropanols

Elek, Gabor Zoltan; Borovkov, Victor; Lopp, Margus; Kananovich, Dzmitry *Open Readings* 2017 : 60th International Conference for Students of Physics and Natural Sciences, March 14-17, 2017, Vilnius, Lithuania : programme and abstracts 2017 / p. 140 : ill http://www.openreadings.eu/wp-content/uploads/2017/03/OR2017_abstracts_book.pdf

Enhanced sensing properties of cobalt bis-porphyrin derivative thin films by a magneto-plasmonic-opto-chemical sensor

Colombelli, A.; Manera, Maria Grazia; Borovkov, Victor; Giancane, Gabriele *Sensors and actuators B : chemical* 2017 / p. 1039-1048 : ill <https://doi.org/10.1016/j.snb.2017.01.192> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Ethane-bridged bisporphyrin conformational changes as an effective analytical tool for nonenzymatic detection of urea in the physiological range

Buccolieri, Alessandro; Hasan, Mohammed; Bettini, Simona; Borovkov, Victor *Analytical chemistry* 2018 / p. 6952-6958 : ill <https://doi.org/10.1021/acs.analchem.8b01230> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Ethane-bridged bis-porphyrin structural motif for effective supramolecular chirogenesis, sensor development, and light harvesting

Borovkov, Victor *The International Conference on Polymers and Advanced Materials (POLYMAT-2015)* : Huatulco, Mexico, October 18-22, 2015 : abstracts book 2015 / p. 9-10

Facile and environmentally benign aerobic cascade oxidation of substituted cyclopentane-1,2-diones using metalloporphyrin catalysts [Online resource]

Maljutenko, Karolin; Borovkov, Victor; Kananovich, Dzmitry; Lopp, Margus *Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [7-8 märts 2017, Tartu : teesid]* 2017 / [1] p. : ill <http://fntdk.ut.ee/teesid/>

Helicene-based chiral auxiliaries and chirogenesis

Hasan, Mohammed; Borovkov, Victor *Symmetry* 2018 / 48 p. : ill <https://doi.org/10.3390/sym10010010> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Helicene-Based Chiral Auxiliaries and Chirogenesis

Hasan, Mohammed; Borovkov, Victor *Chiral Auxiliaries and Chirogenesis* 2021 / p. 103-150 <https://doi.org/10.3390/books978-3-0365-1017-0> <https://doi.org/10.3390/sym10010010>

Hemicucurbituril complexes with Porphyrins - chirality induction and sensing

Ustrnul, Lukas; Šakarašvili, Marko; Konrad, Nele; Borovkov, Victor; Aav, Riina *Twelfth International Conference on Porphyrins and Phthalocyanines : ICPP-12 : book of abstracts* 2022 / p. 318 http://www.icpp-spp.org/img_icpp12/ICPP-12%20BOA.pdf

Heterocomponent ternary supramolecular complexes of porphyrins : a review

Prigorchenko, Elena; Ustrnul, Lukas; Borovkov, Victor; Aav, Riina *Porphyrin Science by Women. Volume 3: Materials, Sensors, Energy and Catalysis* 2021 / p. 816-833 https://doi.org/10.1142/9789811223556_0071

Heterocomponent ternary supramolecular complexes of porphyrins: a review

Prigorchenko, Elena; Ustrnul, Lukas; Borovkov, Victor; Aav, Riina *Journal of porphyrins and phthalocyanines* 2019 / p. 1308-1325 : ill <https://doi.org/10.1142/S108842461930026X> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Highly chemo- and regioselective synthesis and subsequent directional catalyst-free transformation of enantiopure bioxirane derivatives

Hu, Xiaoyun; Li, Kang; Guo, Jianxin; Wang, Cui; Ma, Ling; Borovkov, Victor *Tetrahedron* 2022 / art. 132763 <https://doi.org/10.1016/j.tet.2022.132763> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Highly chemoselective solvent-free synthesis of 1,3,5-triaryl-1,5- diketones: crystallographic investigation and intramolecular weak bifurcated H bonds involving aliphatic C-H group

Yin, Zhongyou; Xiong, Changkun; Guo, Jianxin; Borovkov, Victor *Synlett* 2019 / p. 2143-2147 <https://doi.org/10.1055/s-0039-1690224>

Highly sensitive conformational switching of ethane-bridged mono-zinc bis-porphyrin as an application tool for rapid monitoring of aqueous ammonia and acetone

Buccolieri, Alessandro; Manno, D.; Serrano, Aida; Santino, A.; Hasan, Mohammed; Borovkov, Victor; Giancane, Gabriele *Sensors and actuators B : chemical* 2018 / p. 685-691 : ill <https://doi.org/10.1016/j.snb.2017.11.021> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Host-guest complexes of 2-aminocyclohexyl thioureas and zinc porphyrins: chiroptic properties and binding mechanism
Konrad, Nele; Meniailava, Darya; **Osadchuk, Irina**; Aav, Riina; **Borovkov, Victor**; **Kananovich, Dzmitry** GSFMT Scientific Conference 2020 : Tallinn, February 4-5, 2020 : abstracts 2020 / p. 44 <http://fntdk.ut.ee/wp-content/uploads/2020/01/GSFMT2020.pdf>

Importance of molecular symmetry for enantiomeric excess recognition by NMR

Norvaiša, Karolis; O'Brien, John E.; **Osadchuk, Irina**; Twamley, Brendan; **Borovkov, Victor**; Senge, Mathias O. Chemical communications 2022 / p. 5423-5426 <https://doi.org/10.1039/D2CC01319C> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

An insight on type I collagen from horse tendon for the manufacture of implantable devices

Salvatore, Luca; Gallo, Nunzia; Aiello, Antonella; Lunetti, Paola; Hasan, Mohammed; **Borovkov, Victor** International journal of biological macromolecules 2020 / p. 291-306 <https://doi.org/10.1016/j.ijbiomac.2020.03.082>

Magnetoplasmonic waves/HOMO-LUMO free π -electron transitions coupling in organic macrocycles and their effect in sensing applications

Manera, Maria Grazia; Giancane, Gabriele; **Borovkov, Victor** Chemosensors 2021 / art. 272 <https://doi.org/10.3390/chemosensors9100272> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Medium viscosity effect on fluorescent properties of Sn(IV)-tetra(4-sulfonatophenyl)porphyrin complexes in buffer solutions

Mamardashvili, Galina; Maltceva, Olga; Lazovski, Dmitriy; Khodov, Ilja; **Borovkov, Victor** Journal of molecular liquids 2019 / p. 1047-1053 : ill <https://doi.org/10.1016/j.molliq.2018.12.118>

Mixed oxime-functionalized IL/16-s-16 Gemini surfactants system: physicochemical study and structural transitions in the presence of promethazine as a potential chiral pollutant

Pandya, Subhashree Jayesh; **Kapitanov, Illia**; **Borovkov, Victor**; Ghosh, Kallol K.; **Karpichev, Yevgen** Chemosensors 2022 / art. 46 <https://doi.org/10.3390/chemosensors10020046> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Porphyrin-based (chir)optical sensing of amino-functionalized thiourea organocatalysts

Konrad, Nele; Horetski, Matvey; Sihtmäe, Mariliis; **Osadchuk, Irina**; Truong, Khai-Nghi; **Borovkov, Victor**; Aav, Riina; **Kananovich, Dzmitry** Twelfth International Conference on Porphyrins and Phthalocyanines : ICPP-12 : book of abstracts 2022 / p. 393 http://www.icpp-spp.org/img_icpp12/ICPP-12%20BOA.pdf

Porphyrin-based hybrid nanohelices : cooperative effect between molecular and supramolecular chirality on amplified optical activity

Anfar, Zakaria; Kuppan, Balamurugan; Scalabre, Antoine; Nag, Rahul; Pouget, Emilie; Nlate, Sylvain; Magna, Gabriele; Di Filippo, Ilaria; Monti, Donato; Naitana, Mario L.; Stefanelli, Manuela; **Nikonovich, Tatsiana**; **Borovkov, Victor**; Aav, Riina; Paolesse, Roberto; Oda, Reiko The journal of physical chemistry B 2024 / p. 1550-1556 <https://doi.org/10.1021/acs.jpcc.3c07153> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Porphyrinoid based supramolecular probes for chirality sensing

Borovkov, Victor; Gathergood, Nicholas Symmetry : culture and science 2017 / p. 175-178 : ill <http://journal-scs.symmetry.hu/content-pages/volume-28-number-2-pages-161-240-2017/>

Preface

Borovkov, Victor; Aav, Riina Chirogenesis in Chemical Science 2023 / p. vii-xi https://doi.org/10.1142/9789811259227_fmatter

Preface to "Chiral Auxiliaries and Chirogenesis"

Borovkov, Victor Chiral Auxiliaries and Chirogenesis 2021 / p. ix-xi <https://doi.org/10.3390/books978-3-0365-1017-0>

Preface to "Chiral Auxiliaries and Chirogenesis II"

Borovkov, Victor Chiral Auxiliaries and Chirogenesis II 2021 / p. IX-XI <https://doi.org/10.3390/books978-3-0365-1155-9> [Symmetry Special Issue: Chiral Auxiliaries and Chirogenesis II](#)

A quinoline-appended cyclodextrin derivative as a highly selective receptor and colorimetric probe for nucleotides

Kanagaraj, K.; Xiao, C.; Rao, M.; Fan, C.; **Borovkov, Victor**; Cheng, G.; Zhou, D.; Zhong, Z.; Su, D.; Yu, X.; Yao, J.; Hao, T.; Wu, W.; Chruma, J.J.; Yang, C. iScience 2020 / art. 100927, 67 p. : ill <https://doi.org/10.1016/j.isci.2020.100927>

Self-assembly of chiral cyclohexanohemicucurbit[n]urils with bis(Zn porphyrin): size, shape, and time-dependent binding

Šakarašvili, Marko; Ustrnul, Lukas; Suut, Elina; Nallaparaju, Jagadeesh Varma; Mishra, Kamini Atindrakumar; **Konrad, Nele**; Adamson, Jasper; **Borovkov, Victor**; Aav, Riina Molecules 2022 / art. 937, 13 p. : ill <https://doi.org/10.3390/molecules27030937> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Spectroscopic study of (all-R,R)-cyclohexanohemicucurbit[8]uril and its host-guest supramolecular hexafluorophosphate complexes

Konrad, Nele; Kananovich, Dzmitry; Aav, Riina; Borovkov, Victor Proceedings : Symmetry 2017 ; vol. 2 2018 / p. 64
<http://dx.doi.org/10.3390/proceedings2010064>

Stereoselective Biginelli-like reaction catalyzed by a chiral phosphoric acid bearing two hydroxy groups

Hu, Xiaoyun; Guo, Jianxin; Wang, Cui; Zhang, Rui; **Borovkov, Victor** Beilstein journal of organic chemistry 2020 / p. 1875–1880
<https://doi.org/10.3762/bjoc.16.155> [Journal metrics at WOS](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Stereospecific synthesis of cyclic sulfite esters with sulfur-centered chirality via diastereoselective strategy and intramolecular H-Bonding assistance

Hu, Xiaoyun; Yin, Zhongyou; Guo, Jianxin; Adamson, Jasper; Fujiki, Michiya; **Borovkov, Victor** Journal of Organic Chemistry 2021 / p. 379 - 387 <https://doi.org/10.1021/acs.joc.0c02147> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Sui Generis helicene-based supramolecular chirogenic system : enantioselective sensing, solvent control, and application in chiral group transfer reaction

Hasan, Mohammed; Khose, Vaibhav N.; Mori, Takuzo; **Borovkov, Victor;** Karnik, Anil V. ACS omega 2017 / p. 592-598 : ill
<https://doi.org/10.1021/acsomega.6b00522> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Supramolecular chirogenesis in a sterically hindered Porphyrin : a critical theoretical analysis

Osadchuk, Irina; Luts, Hanna-Eliisa; Norvaiša, Karolis; **Borovkov, Victor;** Senge, Mathias O. Chemistry : a European journal 2023 / art. e202301408 <https://doi.org/10.1002/chem.202301408>

Supramolecular chirogenesis in a sterically hindered porphyrin: a critical theoretical analysis

Osadchuk, Irina; Luts, Hanna-Eliisa; Norvaiša, Karolis; **Borovkov, Victor;** Senge, Mathias O. Chemistry : a European journal 2023 / art. e202302275 <https://doi.org/10.1002/chem.202302275> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Supramolecular Chirogenesis in bis-porphyrin: crystallographic structure and CD spectra for a complex with a chiral guanidine derivative

Osadchuk, Irina; Konrad, Nele; Truong, Khai-Nghi; Rissanen, Kari; Clot, Eric; **Aav, Riina; Kananovich, Dzmitry; Borovkov, Victor** Symmetry 2021 / 14 p. : ill <https://doi.org/10.3390/sym13020275> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Supramolecular Chirogenesis in bis-porphyrin: crystallographic structure and CD spectra for a complex with a chiral guanidine derivative

Osadchuk, Irina; Konrad, Nele; Truong, Khai-Nghi; **Aav, Riina; Kananovich, Dzmitry; Borovkov, Victor** Chiral Auxiliaries and Chirogenesis II 2021 / p. 83-96 <https://doi.org/10.3390/sym13020275> <https://doi.org/10.3390/books978-3-0365-1155-9>

Supramolecular chirogenesis in chemical and related sciences : editorial

Sun, Yue; **Aav, Riina; Borovkov, Victor** Frontiers in chemistry 2021 / art. 679332 <https://doi.org/10.3389/fchem.2021.679332> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Supramolecular chirogenesis in porphyrin chemistry : Recent developments and further prospects

Borovkov, Victor Twelfth International Conference on Porphyrins and Phthalocyanines : ICPP-12 : book of abstracts 2022 / p. 30
http://www.icpp-spp.org/img_icpp12/ICPP-12%20BOA.pdf

Supramolecular chirogenesis in zinc porphyrins by enantiopure hemicucurbit[n]urils (n = 6, 8)

Ustrnul, Lukas; Kaabel, Sandra; Burankova, Tatsiana; **Martõnova, Jevgenija; Konrad, Nele; Borovkov, Victor; Aav, Riina** Chemical communications 2019 / p. 14434-14437 : ill <https://doi.org/10.1039/c9cc07150d> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Supramolecular chirogenesis in zinc porphyrins by interaction with enantiopure hemicucurbiturils

Ustrnul, Lukas; Kaabel, Sandra; Burankova, Tatsiana; **Konrad, Nele; Borovkov, Victor; Aav, Riina** 14th International Symposium on Macrocyclic and Supramolecular Chemistry (ISMSC2019), June 2-6 2019, Lecce, Italy : book of abstracts 2019 / p. 489 <https://sti.chem.polimi.it/ismc2019/>

Supramolecular chirogenesis in zinc porphyrins: complexation with enantiopure thiourea derivatives, binding studies and chirality transfer mechanism

Konrad, Nele; Meniailava, Darya; **Osadchuk, Irina;** Adamson, Jasper; **Hasan, Mohammed;** Clot, Eric; **Aav, Riina; Borovkov, Victor; Kananovich, Dzmitry** Journal of porphyrins and phthalocyanines 2020 <https://doi.org/10.1142/S108842461950192X> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Suprastars of Chemistry

2022 <https://doi.org/10.3389/978-2-88976-456-3>

Suprastars of chemistry : editorial

Xiao, Tangxin; James, Tony D.; **Borovkov, Victor;** Castellano, Ronald K.; Deng, Chao Frontiers in Chemistry 2022 / art. 932508

Symmetry : culture and science. Vol. 28, No. 2, Symmetry and asymmetry phenomena in chemical, green, and related sciences : a thematic issue

2017 <http://journal-scs.symmetry.hu/content-pages/volume-28-number-2-pages-161-240-2017/>

Symmetry and asymmetry phenomena in chemical, green, and related sciences

Borovkov, Victor; Gathergood, Nicholas Symmetry : culture and science 2017 / p. 165-166 <http://journal-scs.symmetry.hu/content-pages/volume-28-number-2-pages-161-240-2017/>

Tailor-made supramolecular chirogenic system based on Cs-symmetric rigid organophosphoric acid host and amino alcohols : mechanistic studies, bulkiness effect, and chirality sensing

Hasan, Mohammed; Khose, Vaibhav N.; Pandey, Anita D.; **Borovkov, Victor**; Karnik, Anil V. Organic Letters 2016 / p. 440 - 443 <https://doi.org/10.1021/acs.orglett.5b03477> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The intriguing story of bis-porphyrins in chemical sensors

Bettini, Simona; **Borovkov, Victor**; Giancane, Gabriele; Grover, Nikita; Mattern, Cornelia; Ottolini, Michela; Pagano, Rosanna; Senge, Mathias O.; Valli, Ludovico Twelfth International Conference on Porphyrins and Phthalocyanines : ICPP-12 : book of abstracts 2022 / p. 235 http://www.icpp-spp.org/img_icpp12/ICPP-12%20BOA.pdf

The role of the central metal ion of ethane-bridged bis-porphyrins in histidine sensing

Bettini, Simona; Pagano, Rosanna; **Borovkov, Victor**; Giancane, Gabriele; Valli, Ludovico Journal of colloid and interface science 2019 / p. 762-770 : ill <https://doi.org/10.1016/j.jcis.2018.08.116>

Thiourea organocatalysts as emerging chiral pollutants : en route to porphyrin-based (chir)optical sensing

Konrad, Nele; Horetski, Matvey; Sihtmäe, Mariliis; Osadchuk, Irina; Senge, Mathias O.; **Borovkov, Victor**; Aav, Riina; **Kananovich, Dzmitry** Chemosensors 2021 / art. 278 <https://doi.org/10.3390/chemosensors9100278> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)