

## Full list of peer-reviewed publications

(Researcher ID: E-4626-2012, [orcid.org/0000-0001-5595-431X](https://orcid.org/0000-0001-5595-431X), [Google Scholar](#))

- (54) *Exchange interactions and intermolecular hybridization in a spin-1/2 nanographene dimer*  
N. Krane, E. Turco, A. Bernhardt, D. Jacob, G. Gandus, D. Passerone, M. Luisier, **M. Juríček**, R. Fasel, J. Fernández-Rossier, P. Ruffieux  
*Nano Lett.* **2023**, DOI: 10.1021/acs.nanolett.3c02633. [Link](#)
- (53) *Dimethylnonacethrene – en route to a magnetic switch*  
D. Čavlović, O. Blacque, I. Krummenacher, H. Braunschweig, P. Ravat, **M. Juríček**  
*Chem. Commun.* **2023**, 59, 7743–7746. Cover Article. [Link](#)
- (52) *Observation of the magnetic ground state of the two smallest triangular nanographenes*  
E. Turco, A. Bernhardt, N. Krane, L. Valenta, R. Fasel, **M. Juríček**, P. Ruffieux  
*JACS Au* **2023**, 3, 1358–1364. ACS Editors' Choice Article. Cover Article. [Link](#)
- (51) *Synthetic approaches to molecular fragments of carbon allotropes*  
**M. Juríček**, M. Mayor  
*Eur. J. Org. Chem.* **2023**, 26, e202300108. Guest Editorial for Special Collection. [Link](#)
- (50) *Bending pyrenacenes to fill gaps in singlet-fission-based solar cells*  
C. M. Cruz, J. C. Walsh, **M. Juríček**  
*Org. Mater.* **2022**, 4, 163–169. Special Issue on Supramolecular Chemistry. [Link](#)
- (49) *The taming of Clar's hydrocarbon*  
L. Valenta, **M. Juríček**  
*Chem. Commun.* **2022**, 58, 10896–10906. Invited Feature Article. [Link](#)
- (48) *Nonacethrene unchained: A cascade to chiral contorted conjugated hydrocarbon with two  $sp^3$ -defects*  
D. Čavlović, D. Häussinger, O. Blacque, P. Ravat, **M. Juríček**  
*JACS Au* **2022**, 2, 1616–1626. ACS Editors' Choice Article. [Link](#)
- (47) *Subphthalocyanine–triangulene dyads: Property tuning for light-harvesting device applications*  
M. G. Rasmussen, M. F. Jespersen, O. Blacque, K. V. Mikkelsen, **M. Juríček**, M. B. Nielsen  
*Energy Sci. Eng.* **2022**, 10, 1752–1762. Special Issue Journal's 10<sup>th</sup> Anniversary. [Link](#)
- (46) *Circularly polarized luminescence of [6]helicenes via excited-state intramolecular proton transfer*  
D. Göbel, S. Míguez-Lago, M. J. Ruedas-Rama, A. Orte, A. G. Campaña, **M. Juríček**  
*Helv. Chim. Acta* **2022**, 105, e202100221. Special Issue 75<sup>th</sup> Birthday of Peter Kündig. [Link](#)
- (45) *Trimesityltriangulene: A persistent derivative of Clar's hydrocarbon*  
L. Valenta, M. Mayländer, P. Kappeler, O. Blacque, T. Šolomek, S. Richert, **M. Juríček**  
*Chem. Commun.* **2022**, 58, 3019–3022. Highlighted in *Chemistry Views* (06.02.2022). [Link](#)
- (44) *Cooperative weak dispersive interactions actuate catalysis in a shape-selective abiological racemase*  
Y. Wang, M. Rickhaus, O. Blacque, K. K. Baldrige, **M. Juríček**, J. S. Siegel  
*J. Am. Chem. Soc.* **2022**, 144, 2679–2684. [Link](#)  
Highlighted in *Chimia* **2022**, 76, 594.
- (43) *Fullerene wires assembled inside carbon nanoboops*  
Y. Yang, **M. Juríček**  
*ChemPlusChem* **2022**, 87, e202100468. Invited Review Article. [Link](#)
- (42) *Cycloparaphenylene double nanoboop: Structure, lamellar packing, and encapsulation of  $C_{60}$  in the solid state*, Y. Yang, S. Huangfu, S. Sato, **M. Juríček**  
*Org. Lett.* **2021**, 23, 7943–7948. [Link](#)
- (41) *Cycloparaphenylene–phenalenyl radical and its dimeric double nanoboop*  
Y. Yang, O. Blacque, S. Sato, **M. Juríček**  
*Angew. Chem. Int. Ed.* **2021**, 60, 13529–13535. Hot & Frontispiece Article. [Link](#)  
Highlighted in *Chimia* **2021**, 75, 436.

- (40) *Rules of nucleophilic additions to zigzag nanographene diones*  
P. Ribar, L. Valenta, T. Šolomek, **M. Juríček**  
*Angew. Chem. Int. Ed.* **2021**, *60*, 13521–13528. [Link](#)  
Highlighted in *Chimia* **2021**, *75*, 887.
- (39) *Benzo[cd]triangulene: A spin 1/2 graphene fragment*  
P. Ravat, O. Blacque, **M. Juríček**  
*J. Org. Chem.* **2020**, *85*, 92–100. Invited Article in Special Issue “Functional Organic Materials”. [Link](#)
- (38) *‘Forbidden’ electrocyclizations of diradicaloids*  
T. Šolomek, P. Ravat, **M. Juríček**  
*Trends Chem.* **2019**, *1*, 705–706. Invited “Mechanism of the Month” Article. [Link](#)
- (37) *Gram-scale synthesis and supramolecular complex of precursors of Clar’s hydrocarbon triangulene*  
P. Ribar, T. Šolomek, **M. Juríček**  
*Org. Lett.* **2019**, *21*, 7124–7128. Top 5 Most Read Article (15.09.2019). [Link](#)
- (36) *Molecular magnetic switches*  
D. Čavlović, **M. Juríček**  
*Chimia* **2019**, *73*, 313–316. [Link](#)
- (35) *Helicenes as chiroptical photoswitches*  
P. Ravat, T. Šolomek, **M. Juríček**  
*ChemPhotoChem* **2019**, *3*, 180–186. Invited Concept Article. [Link](#)
- (34) *Dimethylcethrene: A chiroptical diradicaloid photoswitch*  
P. Ravat, T. Šolomek, D. Häussinger, O. Blacque, **M. Juríček**  
*J. Am. Chem. Soc.* **2018**, *140*, 10839–10847. Highlighted in *Chimia* **2018**, *72*, 725. [Link](#)
- (33) *The three C’s of cethrene*  
**M. Juríček**  
*Chimia* **2018**, *72*, 322–327. [Link](#)
- (32) *Cethrene: The chameleon of Woodward–Hoffmann rules*  
T. Šolomek, P. Ravat, Z. Mou, M. Kertesz, **M. Juríček**  
*J. Org. Chem.* **2018**, *83*, 4769–4774. [Link](#)
- (31) *Configurational stability of [5]helicenes*  
P. Ravat, R. Hinkelmann, D. Steinebrunner, A. Prescimone, I. Bodoky, **M. Juríček**  
*Org. Lett.* **2017**, *19*, 3707–3710. [Link](#)
- (30) *Chirality in curved polyaromatic systems*  
M. Rickhaus, M. Mayor, **M. Juríček**  
*Chem. Soc. Rev.* **2017**, *46*, 1643–1660. Cover Article. Selected for RSC Primer Collection. [Link](#)
- (29) *Donor–acceptor molecular triangles*  
P. Ribar, T. Šolomek, L. Le Pleux, D. Häussinger, A. Prescimone, M. Neuburger, **M. Juríček**  
*Synthesis* **2017**, *49*, 899–909. Featured in *Synfacts* **2017**, *13*, 0363. [Link](#)
- (28) *Spin-delocalization in a helical open-shell hydrocarbon*  
P. Ravat, P. Ribar, M. Rickhaus, D. Häussinger, M. Neuburger, **M. Juríček**  
*J. Org. Chem.* **2016**, *81*, 12303–12317. ACS Editors’ Choice Article. [Link](#)
- (27) *Biradicaloid with a twist: Lowering the singlet–triplet gap*  
P. Ravat, T. Šolomek, P. Ribar, **M. Juríček**  
*Synlett* **2016**, *27*, 1613–1617. Cover Article. [Link](#)
- (26) *Strain-induced helical chirality in polyaromatic systems*  
M. Rickhaus, M. Mayor, **M. Juríček**  
*Chem. Soc. Rev.* **2016**, *45*, 1542–1556. [Link](#)
- (25) *Cethrene: A helically chiral biradicaloid isomer of heptazethrene*  
P. Ravat, T. Šolomek, M. Rickhaus, D. Häussinger, M. Neuburger, M. Baumgarten, **M. Juríček**  
*Angew. Chem. Int. Ed.* **2016**, *55*, 1183–1186. Highlighted in *Chimia* **2016**, *70*, 207. [Link](#)

**Postdoctoral, graduate, and undergraduate research (13/24 first (co-)authorships)**

- (24) E. J. Dale, D. P. Ferris, N. A. Vermeulen, J. J. Henkelis, I. Popovs, **M. Juríček**, J. C. Barnes, S. T. Schneebeli, J. F. Stoddart, “Cooperative reactivity in an extended-viologen-based cyclophane”, *J. Am. Chem. Soc.* **2016**, *138*, 3667–3670. [Link](#)
- (23) Y. Yan,† **M. Juríček**,† F.-X. Coudert, N. A. Vermeulen, S. Grunder, A. Dailly, W. Lewis, A. J. Blake, J. F. Stoddart, M. Schröder, “Non-interpenetrated metal–organic frameworks based on copper(II) paddlewheel and oligoparaxylene-isophthalate linkers: Synthesis, structure, and gas adsorption”, *J. Am. Chem. Soc.* **2016**, *138*, 3371–3381. † Equal contributions. [Link](#)
- (22) E. J. Dale, N. A. Vermeulen, **M. Juríček**, J. C. Barnes, R. M. Young, M. R. Wasielewski, J. F. Stoddart, “Supramolecular explorations: Exhibiting the extent of extended cationic cyclophanes”, *Acc. Chem. Res.* **2016**, *49*, 262–273. [Link](#)
- (21) J. C. Barnes, E. J. Dale, A. Prokofjevs, A. Narayanan, I. C. Gibbs-Hall, **M. Juríček**, C. L. Stern, A. A. Sarjeant, Y. Y. Botros, S. I. Stupp, J. F. Stoddart, “Semiconducting single crystals comprising segregated arrays of complexes of  $C_{60}$ ”, *J. Am. Chem. Soc.* **2015**, *137*, 2392–2399. [Link](#)
- (20) E. J. Dale, N. A. Vermeulen, A. A. Thomas, J. C. Barnes, **M. Juríček**, A. K. Blackburn, N. L. Strutt, A. A. Sarjeant, C. L. Stern, S. E. Denmark, J. F. Stoddart, “ExCage”, *J. Am. Chem. Soc.* **2014**, *136*, 10669–10682. [Link](#)
- (19) **M. Juríček**,† J. C. Barnes,† N. L. Strutt,† N. A. Vermeulen, K. C. Ghooray, E. J. Dale, P. R. McGonigal, A. K. Blackburn, A.-J. Avestro, J. F. Stoddart, “An ExBox [2]catenane”, *Chem. Sci.* **2014**, *5*, 2724–2731. † Equal contributions. [Link](#)
- (18) S. M. Dyar, J. C. Barnes, **M. Juríček**, J. F. Stoddart, D. T. Co, R. M. Young, M. R. Wasielewski, “Electron transfer and multi-electron accumulation in ExBox<sup>4+</sup>”, *Angew. Chem. Int. Ed.* **2014**, *53*, 5371–5385. [Link](#)
- (17) **M. Juríček**, N. L. Strutt, J. C. Barnes, A. M. Butterfield, E. J. Dale, K. K. Baldrige, J. F. Stoddart, J. S. Siegel, “Induced-fit catalysis of corannulene bowl-to-bowl inversion”, *Nat. Chem.* **2014**, *6*, 222–228. Featured in *C&EN* **2014**, *92*, 25, *Nature Chemistry News and Views* **2014**, *6*, 177–178, *Chemistry World*: February 25, 2014. [Link](#)
- (16) J. C. Barnes,† **M. Juríček**,† N. A. Vermeulen,† E. J. Dale, J. F. Stoddart, “Synthesis of Ex<sup>n</sup>Box cyclophanes”, *J. Org. Chem.* **2013**, *78*, 11962–11969. † Equal contributions. [Link](#)
- (15) R. M. Young, S. M. Dyar, J. C. Barnes, **M. Juríček**, J. F. Stoddart, D. T. Co, M. R. Wasielewski, “Ultrafast conformational dynamics of electron accumulation in ExBox<sup>4+</sup> cyclophane”, *J. Phys. Chem. A* **2013**, *117*, 12438–12448. [Link](#)
- (14) **M. Juríček**,† J. C. Barnes,† E. J. Dale, W.-G. Liu, N. L. Strutt, C. J. Bruns, N. A. Vermeulen, K. C. Ghooray, A. A. Sarjeant, C. L. Stern, Y. Y. Botros, W. A. Goddard, III, J. F. Stoddart, “Ex<sup>2</sup>Box: Interdependent modes of binding in a two-nanometer-long synthetic receptor”, *J. Am. Chem. Soc.* **2013**, *135*, 12736–12746. † Equal contributions. [Link](#)
- (13) D. Cao, **M. Juríček**, Z. J. Brown, A. C.-H. Sue, Z. Liu, J. Lei, A. K. Blackburn, S. Grunder, A. A. Sarjeant, A. Coskun, C. Wang, O. K. Farha, J. T. Hupp, J. F. Stoddart, “Three-dimensional architectures incorporating stereoregular donor–acceptor stacks”, *Chem.–Eur. J.* **2013**, *19*, 8457–8465. [Link](#)
- (12) J. C. Barnes,† **M. Juríček**,† N. L. Strutt, M. Frascioni, S. Sampath, M. A. Giesener, P. L. McGrier, J. C. Bruns, C. L. Stern, A. A. Sarjeant, J. F. Stoddart, “ExBox: A polycyclic aromatic hydrocarbon scavenger”, *J. Am. Chem. Soc.* **2013**, *135*, 183–192. † Equal contributions. Cover Article. Featured in *JACS Spotlights*: November 13, 2012, *Chemistry World*: October 15, 2012, *C&EN*: September 12, 2012. [Link](#)
- (11) F. J. van den Bruele, W. de Poel, H. W. M. Sturmans, S. Pinteá, R. de Gelder, D. Wermeille, **M. Juríček**, A. E. Rowan, W. J. P. van Enkevort, E. Vlieg, “Monolayer and aggregate formation of a modified phthalocyanine on mica determined by a delicate balance of surface interactions”, *Surf. Sci.* **2012**, *606*, 830–835. [Link](#)

- (10) **M. Juríček**, K. Stout, P. H. J. Kouwer, A. E. Rowan, “*The trisubstituted-triazole approach to extended functional naphthalocyanines*”, *J. Porphyrins Phthalocyanines* **2011**, *15*, 898–907. [Link](#)
- (9) **M. Juríček**, K. Stout, P. H. J. Kouwer, A. E. Rowan, “*Fusing triazoles: Toward extending aromaticity*”, *Org. Lett.* **2011**, *13*, 3494–3497. Featured in *Synfacts* **2011**, *9*, 0958. [Link](#)
- (8) **M. Juríček**, P. H. J. Kouwer, A. E. Rowan, “*Triazole: A unique building block for the construction of functional materials*”, *Chem. Commun.* **2011**, *47*, 8740–8749. Feature Article. [Link](#)
- (7) **M. Juríček**, M. Felici, P. Contreras-Carballada, J. Lauko, S. Rodríguez Bou, P. H. J. Kouwer, A. M. Brouwer, A. E. Rowan, “*Triazole–pyridine ligands: A novel approach to chromophoric iridium arrays*”, *J. Mater. Chem.* **2011**, *21*, 2104–2111. Hot Article: December 21, 2010. [Link](#)
- (6) S. Albert-Seifried, C. E. Finlayson, F. Laquai, R. H. Friend, T. M. Swager, P. H. J. Kouwer, **M. Juríček**, H. J. Kitto, S. Valster, R. J. M. Nolte, A. E. Rowan, “*Multichromophoric phthalocyanine–peryleneimide “octads”: A photophysical study*”, *Chem.–Eur. J.* **2010**, *16*, 10021–10029. [Link](#)
- (5) **M. Juríček**, P. H. J. Kouwer, J. Reháč, J. Sly, A. E. Rowan, “*A novel modular approach to triazole-functionalized phthalocyanines using click chemistry*”, *J. Org. Chem.* **2009**, *74*, 21–25. The Journal of Organic Chemistry Featured Article. [Link](#)
- (4) **M. Juríček**, P. Kasák, M. Stach, M. Putala, “*Potential 1,1'-binaphthyl NLO-phores with extended conjugation between positions 2 and 6, and 2' and 6'*”, *Tetrahedron Lett.* **2007**, *48*, 8869–8873. [Link](#)
- (3) **M. Juríček**, H. Brath, P. Kasák, M. Putala, “*Study on the electronic effects on stereoconservativity of Suzuki coupling in chiral groove of binaphthyl*”, *J. Organomet. Chem.* **2007**, *692*, 5279–5284. [Link](#)
- (2) H. Brath, M. Dubovská, **M. Juríček**, P. Kasák, M. Putala, “*Novel route to enantiopure 2,2'-diaryl-1,1'-binaphthalenes by stereoconservative Suzuki arylation at positions 2 and 2'*”, *Collect. Czech. Chem. Commun.* **2004**, *69*, 1517–1536. [Link](#)
- (1) P. Kasák, H. Brath, M. Dubovská, **M. Juríček**, M. Putala, “*Suzuki arylation at positions 2 and 2' of 1,1'-binaphthyls: Stereochemical result depending on the sense of polarity of substrates*”, *Tetrahedron Lett.* **2004**, *45*, 791–794. [Link](#)

## Patents

- (2) J. F. Stoddart, J. C. Barnes, **M. Juríček**, “*Tetracationic cyclophanes and their use in the sequestration of polyaromatic hydrocarbons by way of complexation*” **2016**, US Patent 9,290,495 B2.
- (1) J. F. Stoddart, E. J. Dale, N. A. Vermeulen, J. C. Barnes, **M. Juríček**, “*Excage: Synthesis of niologen-like pyridinium-based cages for the selective capture of polycyclic aromatic hydrocarbons*” **2017**, US Patent 9,828,259 B2.

## Conference reports

- (2) **M. Juríček**, “*The 51<sup>st</sup> EUCHEMS Conference on Stereochemistry: The Bürgenstock tradition continues*”, *Chimia* **2016**, *70*, 563–566. [Link](#)
- (1) **M. Juríček**, L. Montero de Espinosa, L. Merz, “*The 9<sup>th</sup> Young Faculty Meeting – The crossroad for sharing ideas across the Alps*”, *Chimia* **2016**, *70*, 571–574. [Link](#)

## Career focus

- (1) Young Career Focus, *Synform* **2017**, *12*, A205–A207. [Link](#)