

## Mihaiela C. Stuparu

Fisa de autoevaluare

Indeplinirea criteriilor CNADTCU pe toata activitatea (Mihaiela C. Stuparu)

Lista publicatiilor considerate (in ordine cronologica)

1. J. Stanojkovic, R.A. Saikia, M.C. Stuparu, "Peri-Annulations Bestow Configurational Stability onto Chiral Molecular Graphene Bowls", *Organic Letters* **2025**, 27, 13181-13186, <https://doi.org/10.1021/acs.orglett.5c03767>
2. M. Stuparu, "Solution is not the only solution: nanographenes by mechanochemistry" *Trends in Chemistry* **2025**, 7, 259-262, <https://doi.org/10.1016/j.trechm.2025.02.0072025>
3. J. Stanojkovic, N. Terenti, M.C. Stuparu\*, "Direct Edge Functionalization of Corannulene-Coronene Hybrid Nanographenes" *JACS AU* **2025**, <https://doi.org/10.1021/jacsau.4c01218> (IF = 8.6)
4. Z. Zhang, M.C. Stuparu\*, "Intramolecular direct arylation through mechanochemistry: efficient synthesis of corannulene-based peri-annulated curved nanographenes, *Science China-Chemistry* **2025**, <https://doi.org/10.1007/s11426-024-2520-y> (IF = 10.4)
5. Z.B. Zhang, D. Csókás, I. Fernández, M.C. Stuparu\*, "Chiral stacks of a curved nanographene" *Chem.* **2024**, 10, 3199-3211, <https://doi.org/10.1016/j.chempr.2024.07.008> (IF=19.1)
6. G. Hum, E. M. Muzammil, Y. Li, Yongxin, F. Garcia\*, M.C. Stuparu\*, "Mechanochemical Synthesis of Corannulene Flanked N-heterocyclic Carbene (NHC) Precursors and Preparation of Their Metal Complexes, *Chem. Eur. J.* **2024**, 30, e202402056, <https://doi.org/10.1002/chem.202402056> (IF=5.02)
7. G. Băti, D. Csókás, M. C. Stuparu\*, "Mechanochemical Scholl Reaction on Phenylated Cyclopentadiene Core: One-Step Synthesis of Fluoreno[5]helicenes", *Chem. Eur. J.*, **2024**, 29, e202302971, <https://doi.org/10.1002/chem.202302971> (IF = 5.02)
8. G. Băti, D. Csókás, G.-I. Giurgi, J. Zhou, L. A. Szolga, R. D Webster, M. C Stuparu\*: "Non-Fullerene Electron Acceptors Based on Hybridisation of Corannulene and Thiophene-S,S-Dioxide Motifs" *Chem. Eur. J.*, **2023**, 29, e202203856, <https://doi.org/10.1002/chem.202203856> (IF = 5.02)
9. G. Hum, S. J. I. Phang, H. C. Ong, F. León, S. Quek, Y. X. J. Khoo, C. Li, Y. Li, J. K Clegg, J. Díaz, M. C Stuparu, F. García, "Main Group Molecular Switches with Swivel Bifurcated to Trifurcated Hydrogen Bond Mode of Action", *J. Am. Chem. Soc.* **2023**, 145, 23, 12475–12486, <https://doi.org/10.1021/jacs.2c12713> (IF = 15.00)

10. B. Gabor, S. Laxmi, M. C. Stuparu\*: “Mechanochemical Synthesis of Corannulene: Scalable and Efficient Preparation of a Curved Polycyclic Aromatic Hydrocarbon under Ball Milling Conditions”, *ChemSusChem*, **2023**, accepted (IF = 8.4).
11. Q. Zhong, V. Barat, D. Csokas, K. Niu, M. Gorecki, A. Ghosh, J. Björk, D. Ebeling, L. Chi\*, A. Schirmeisen\*, M. C. Stuparu\*: “On-Surface Stereochemical Characterization of a Highly Curved Chiral Nanographene by Non-Contact Atomic Force Microscopy and Scanning Tunneling Microscopy”, *CCS Chem*, **2023**, DOI:<https://doi.org/10.31635/ccschem.023.202303065> (IF = 11.2).
12. J. Stanojkovic, R. Williams, Z. Zhang, J. Zhou, R. D. Webster, M. C. Stuparu\*: “Synthesis of Precisely Functionalizable Curved Nanographenes via Graphitization-Induced Regioselective Chlorination in a Mechanochemical Scholl Reaction”, *Nat. Commun.* **2023**, *14*, 803 (IF = 16.6).
13. M. C. Stuparu\*: “Macromolecular Architectures of Corannulene: Synthesis, Properties, and Applications of Polymers Containing a Molecular Bowl of Carbon”, *Chem. Mat.* **2023**, *35*, 1836 (IF = 8.6).
14. D. Halilovic, D. Csókás, R. D Webster, M. C Stuparu\*: “Bilateral Aromatic Extension of Corannulene Nucleus”, *Eur. J. Org. Chem.* **2022**, e202101548 (IF = 2.8).
15. Khan\*, M. C. Stuparu\*: “Poly( $\beta$ -hydroxy thioether)s: synthesis through thiol-epoxy ‘click’ reaction and post-polymerization modification to main-chain polysulfonium salts”, *J. Macromol. Sci, Part A, Pure Appl. Chem.* **2022**, *59*, 2 (IF = 2.2).
16. T. Yong, B. Gabor, F. Garcia,\* M. C. Stuparu\*: “Mechanochemical Transformation of Planar Polyarenes to Curved Fused-Ring Systems”, *Nat. Commun.* **2021**, *12*, 5187 (IF = 16.6).
17. M. C. Stuparu\*: “Corannulene: A Curved Polyarene Building Block for the Construction of Functional Materials”, *Acc. Chem. Res.* **2021**, *54*, 2858 (IF = 18.3).
18. Saha, D. Csókás, M. Budanović, R. D. Webster, I. Pápai, M. C. Stuparu\*: “Synthesis of Azahelicenes through Mallory Reaction of Imine Precursors: Corannulene Substrates Provide an Exception to the Rule in Oxidative Photocyclizations of Diarylethenes”, *Chem. Sci.* **2021**, *12*, 3977 (IF = 8.4).
19. T. Eom, V. Barat, A. Khan, M. C. Stuparu\*: “Aggregation-Free and High Stability Core-Shell Polymer Nanoparticles with High Fullerene Loading Capacity, Variable Fullerene Type, and Compatibility towards Biological Conditions”, *Chem. Sci.* **2021**, *12*, 4949 (IF = 8.4).
20. D. Halilovic, V. Rajeshkumar, M. C. Stuparu\*: “Synthesis and Properties of Bis-corannulenes”, *Org. Lett.* **2021**, *23*, 1468 (IF = 5.2).

21. V. Barat, T. Eom, A. Khan, M. C. Stuparu\*: "Buckybowl Polymers: Synthesis of Corannulene-Containing Polymers through Post-Polymerization Modification Strategy", *Polym. Chem.* **2021**, 12, 5209 (IF = 4.6).
22. V. Barat and M. C. Stuparu\*: "Corannulene Chalcogenides", *Chem. Asian J.* **2021**, 16, 20 (IF = 4.1).
23. H. Khuntia, T. Trinadh, K. S. Bhavani, T. Anusha, M. C. Stuparu\*, P. K. Brahman\*: "Synthesis and characterization of corannulene-metal-organic framework support material for palladium catalyst: An excellent anode material for accelerated methanol oxidation", *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2021**, 615, 126237 (IF = 5.5).
24. K. S. Bhavani, T. Anusha, M. C. Stuparu\*, P. K. Brahman\*: "Synthesis and characterization of palladium nanoparticles-corannulene nanocomposite: An anode electrocatalyst for direct oxidation of methanol in alkaline medium", *Journal of Electroanalytical Chemistry*, **2021**, 900, 115654 (IF = 4.5).
25. Gabor, D. Csokas, T. Yong, S. M. Tam, R. R. S. Shi, R. D. Webster, I. Papai, F. Garcia\*, M. C. Stuparu\*: "Mechanochemical Synthesis of Corannulene-Based Curved Nanographenes", *Angew. Chem. Int. Ed.* **2020**, 59, 21620 (IF = 16.6).
26. B. T. Muhammad, V. Barat, T. M. Koh, X. Wu, A. Surendran, N. Yantara, A. Bruno, A. C. Grimsdale, M. C. Stuparu\* and W. L. Leong\*: "Novel Amphiphilic Corannulene Additive for Moisture-Resistant Perovskite Solar Cells", *Chem. Commun.* **2020**, 56, 11997 (IF = 4.9).
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29. J. Stanvokjovic, J. Oh, A. Khan\*, M. C. Stuparu\*: "Synthesis of Thermoresponsive Oligo (ethylene glycol) Polymers through Radical Ring-Opening Polymerization of Vinylcyclopropane Monomers", *RSC Advances*, **2020**, 10, 2359 (IF = 3.9).
30. E. M. Muzammil, D. Halilovic, and M. C. Stuparu\*: "Synthesis of Corannulene-based Nanographenes", *Commun. Chemistry*, **2019**, 2, 58 (IF = 5.9).
31. V. Barat, M. Budanovic, D. Halilovic, J. Huh, R. D. Webster, S. Mahadevegowda, M. C. Stuparu\*: "A General Approach to Non-Fullerene Electron Acceptors Based on the Corannulene Motif", *Chem. Commun.* **2019**, 55, 3113 (IF = 4.9).

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37. S. Sreejith, N. V. Menon, Y. Wang, H. Joshi, S. Liu, K. C. Chong, Y. Kang, H. Sun and M. C. Stuparu\*: "All-organic Luminescent Nanodots from Corannulene and Cyclodextrin Nano-Assembly: Continuous-Flow Synthesis, Non-Linear Optical Properties, and Bio-Imaging Applications", *Mat. Chem. Front.* **2017**, 1, 831 (IF = 7).
38. S. Mahadevegowda, M. C. Stuparu\*: "Thermoresponsive Corannulenes", *Eur. J. Org. Chem.* **2017**, 3, 570 (IF = 2.8).
39. E. M. Muzammil, A. Khan,\* M. C. Stuparu\*: "Post-Polymerization Modification Reactions of Poly(Glycidyl Methacrylate)s", *RSC Adv.*, **2017**, 7, 55874 (IF = 3.9).
40. V. Rajeshkumar, M. C. Stuparu\*: "A Photochemical Approach to Aromatic Extension of the Corannulene Nucleus", *Chem. Commun.* **2016**, 52, 9957 (IF = 4.9).
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42. V. Rajeshkumar, M. Courté, D. Fichou, M. C Stuparu\*: "Synthesis and Properties of a Buckybowl-Buckyball Dyad", *Synlett*, **2016**, 27, 2101 (IF = 2).
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50. M. C. Stuparu\*: “Towards Macromolecular Architectures of Corannulene”, *Chimia*, **2011**, *65*, 799 (IF = 1.2).

Nr lucrare	Punctaje				OBS
	FIC 100 pct	FIC <sub>D</sub> 70 pct	FIC <sub>A</sub> 50 pct	FIC <sub>AC</sub> 25 pct	
1	5.0	5.0	5.0	5.0	
2	13.6	13.6	13.6	13.6	
3	8.6	8.6	8.6	8.6	
4	10.4	10.4	10.4	10.4	
5	19.1	19.1	19.1	19.1	
6	5.02	5.02	5.02	5.02	
7	5.02	5.02	5.02	5.02	-
8	5.02	5.02	5.02	5.02	-
9	15	15	-	-	-
10	8.4	8.4	8.4	8.4	-
11	11.2	11.2	11.2	11.2	-
12	16.6	16.6	16.6	16.6	
13	8.6	8.6	8.6	8.6	-
14	2.8	2.8	2.8	2.8	-
15	2.2	2.2	2.2	2.2	

16	16.6	16.6	16.6	16.6	-
17	18.3	18.3	18.3	18.3	
18	8.4	8.4	8.4	8.4	
19	8.4	8.4	8.4	8.4	
20	5.2	5.2	5.2	5.2	
21	4.6	4.6	4.6	4.6	-
22	4.1	4.1	4.1	4.1	
23	5.5	5.5	5.5	5.5	-
24	4.5	4.5	4.5	4.5	-
25	16.6	16.6	16.6	16.6	-
26	4.9	4.9	4.9	4.9	-
27	4.3	4.3	4.3	4.3	-
28	4.3	4.3	4.3	4.3	-
29	3.9	3.9	3.9	3.9	
30	5.9	5.9	5.9	5.9	
31	4.9	4.9	4.9	4.9	
32	4.9	4.9	4.9	4.9	-
33	3.6	3.6	3.6	3.6	
34	15	15	15	15	-
35	5.8	5.8	5.8	5.8	-
36	4.1	4.1	4.1	4.1	-
37	7	7	7	7	
38	2.8	2.8	2.8	2.8	
39	3.9	3.9	3.9	3.9	
40	4.9	4.9	4.9	4.9	-
41	2.8	2.8	2.8	2.8	-
42	2	2	2	2	
43	2.8	2.8	2.8	2.8	
44	3.9	3.9	3.9	3.9	
45	2.8	2.8	2.8	2.8	-
46	16.6	16.6	16.6	16.6	
<b>TOTAL</b>	339.86	339.86	324.86	324.86	-
<b>Indeplinire</b>	<b>DA</b>	<b>DA</b>	<b>DA</b>	<b>DA</b>	

<b>%</b>	<b>339.86 %</b>	<b>485.5 %</b>	<b>649.7 %</b>	<b>1299.4 %</b>	

H index realizat	23	25	25
Sursa	Web of Science	Google Scholar	Scopus
Barem	13		
Grad de indeplinire	DA (190 %)		

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*Autstuper*