

Jishan Wu

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Provost's Chair Professor | NUS Chemistry

EDUCATION	Doctor of Philosophy in Chemistry / Max-Planck Institute for Polymer Research , with Professor Klaus Müllen	2004
	Master of Science in Polymer Chemistry / Changchun Institute of Applied Chemistry, CAS , with Professor Xianhong Wang & Professor Fosong Wang	2000
	Bachelor of Science in Chemistry / Wuhan University	1997
CAREER	Provost's Chair Professor Department of Chemistry / National University of Singapore	2024–Now
	Full Professor Department of Chemistry / National University of Singapore	2017–Now
	Dean's Chair Professor Department of Chemistry / National University of Singapore	2014–2017
	Associate Professor Department of Chemistry / National University of Singapore	2012–2014
	Senior Scientist I/II (joint appointment) Institute of Materials Research and Engineering, A*STAR	2010–2018
	Assistant Professor Department of Chemistry / National University of Singapore	2007–2011
	Research Associate Department of Chemistry and Biochemistry / UCLA with Sir Fraser Stoddart	2005–2007
	Project Leader Max-Planck Institute for Polymer Research with Professor Klaus Müllen	2004–2005
SELECTED AWARDS AND HONORS	President's Science Award Singapore's highest scientific honor	2026
	Yoshida Prize From the International Organic Chemistry Foundation, to honor distinguished achievements in the field of organic chemistry	2025
	Outstanding PhD Advisor Award From Faculty of Science, NUS, for outstanding mentorship of PhD students	2025
	Provost's Chair Professorship For NUS tenured Professors with international recognition in the field and superior performance to other faculty members at the rank of Professor	2024
	National Research Foundation Investigatorship For outstanding mid-career investigators with 2.8 million S\$ grant for 5 years	2019
	Outstanding Scientist Award For outstanding researchers in NUS Faculty of Science	
	BASF-Singapore National Institute of Chemistry Award in Materials Science An industry-sponsored award for outstanding researchers in Singapore	2012
	NUS Young Researcher Award For outstanding young researchers in the National University of Singapore	2012
	Singapore National Academy of Science Young Scientist Award Singapore presidential award for outstanding young scientists in Singapore	2011

RESEARCH INTEREST	π -Conjugated macrocycles and molecular cages	
	Topological molecular carbons	
	2D and 3D aromaticity	
	Synesthetic organic spin chemistry	
	Magnetism and magnetic materials	
	Organic near infrared dyes and bioimaging	
	Organic electronics, photonics, spintronics and quantum information science	
MAJOR RESEARCH GRANTS	MOE Tier 3 programme	2025–2030
	Synthetic carbon allotropes and topological molecular carbons (TPV: 9 million S\$)	
	A*STAR MTC IRG grant	2023–2026
	Twisted carbon nanobelts with persistent chiroptical properties for photonics and electronics (TPV: 841,000 S\$)	
	MOE Tier 2 grant	2023–2026
	Toward 3D global aromaticity rules (TPV: 480,519S\$)	
	A*STAR AME grant	2020–2023
	Solution-processed nanographene based distributed feedback lasers (TPV: 674,000 S\$)	
	MOE Tier 2 grant	2019–2022
	Metal organic radical frameworks (TPV: 700,000 S\$)	
	MOE Tier 2 grant	2019–2022
	Bottom-up synthesis of post-graphene organic Dirac materials (TPV: 900,000 S\$)	
	NRF Investigatorship	2019–2024
	Toward carbon-base magnets (TPV: 2.8 million S\$)	
	AMAT-NUS Corp Lab	2018–2023
	Atomic layer deposition of carbons (TPV: 498,000 S\$)	
	MOE Tier 3 programme	2015–2020
	Open-shell polycyclic hydrocarbons for electronics, photonics and spintronics (TPV: 10 million S\$)	
	MOE Tier 2 grant	2014–2017
	Stable π -radicals as new charge and spin transporting materials (TPV: 782,000 S\$)	
	MOE Tier 2 grant	2012–2015
	Porphyrin-based NIR dyes for high-efficient solar cells (TPV: 490,000 S\$)	
	A*STAR BMRC-NMRC joint program	2011–2014
	Stable near infrared dye based fluorescent probe-library for biolabelling, biosensing and bioimaging (TPV: 532,000 S\$)	
	Defence Science and Technology Agency, DIRP	2009–2011
	Soluble and stable laser absorbing dyes (TPV: 556,000 S\$)	
	A*STAR SERC TSRP	2009–2012
	Graphene-based composites and thin-films for electrical applications (TPV: 764,000 S\$)	
	NUS Young Investigator Award	2008–2011
	Nano-sized graphene, graphyne and graphdiyne as potential materials for electronics (TPV: 500,000 S\$)	

SUMMARY OF OUTPUTS	1 monograph (" <i>Diradicaloids</i> ") and 390+ articles including <i>Nat. Chem.</i> (×5) <i>Chem</i> (×8) <i>Nat. Synth.</i> (×6) <i>Nat. Commun.</i> (×8) <i>Sci. Adv.</i> (×3) <i>J. Am. Chem. Soc.</i> (×44) <i>Angew. Chem. Int. Ed.</i> (×52) <i>Adv. Mater.</i> (×7) <i>Chem. Soc. Rev.</i> (×3) <i>Acc. Chem. Res.</i> (×3)	
SUPERVISION	Current group: 11 PDFs / 15 PhD Students Alumni: 35 PDFs, 45 PhD Students, 8 MSc Students, 20 Undergraduate, 5+ High-school Students; about 30 Alumni have become Professors/Lecturers in academia	
ESTEEM AND ACADEMIC ACTIVITIES	Invited Seminars Over 80 Invited/Keynote/Plenary Lectures in major conferences of the area, such as the International Symposium on Novel Aromatic Compounds (ISNA), International Conference on Porphyrins and Phthalocyanines (ICPP), the International Conference on Supramolecular and Macrocyclic Chemistry (ICSMC), the International Conference on Science and Technology of Synthetic Electronic Materials (ICSM), the π Symposium, and Pacifichem, among others. Organization of Scientific Meetings Chair of the 10 th Singapore International Chemistry Conference (SICC) Organizers/Co-organizers of symposia at ICPP, ICMAT and SICC series for several times Editor and Editorial Board Members Advisory board member of <i>Chem</i> (Cell Press, IF: 19.6; 2020-) Associate Editor of <i>Materials Today Chemistry</i> (Elsevier, IF: 6.7; 2021-2022) Advisory board member of <i>JACS</i> (ACS, IF: 15.7, 2024-)	
TEACHING	Polymer Chemistry I/II Advanced Polymer Science Advanced Organic Synthesis Advanced Organic Materials	UG-L3 UG-L4 PG PG
SELECTED SERVICE ROLES (at NUS)	University Promotion and Tenure Committee Member Deputy Head (Research) of the Department of Chemistry, NUS Member of the Faculty Promotion and Tenure Committee	2023–2024 2018–2021 2017–2021
FULL LIST OF AWARDS, PRIZES AND HONORS	President's Science Award (Singapore's highest scientific honor) Yoshida Prize from International Organic Chemistry Foundation Outstanding PhD Advisor Award, Faculty of Science, NUS Lead PI of an MOE Tier 3 program Provost's Chair Professorship Andrews Lectureship from the University of New South Wales, Australia Singapore National Institute of Chemistry (SNIC) Fellow NRF Investigatorship Award Highly Cited Researchers (Cross Field) list from Clarivate Analytics Asian Core Program Lectureship Award from Korea Asian Core Program Lectureship Award from Japan Asian Core Program Lectureship Award from Thailand Asian Core Program Lectureship Award from Taiwan NUS Faculty of Science Outstanding Scientist Award Lead PI of an MOE Tier 3 programme Dean's Chair Professorship	2026 2025 2025 2025 2024 2024 2020 2019 2018 2017 2017 2016 2016 2015 2015 2014

Outstanding Chemist Award / Department of Chemistry / NUS	2013
Distinguished Lectureship Award from the Chemical Society of Japan	2013
Asian Core Program Lectureship Award from Hong Kong	2012
Invited Lecturer of Asian Excellence from the Japanese Society of Polymer Science	2012
BASF-Singapore National Institute of Chemistry Award in Materials Science	2012
NUS Young Researcher Award	2012
Young Scientist Award, Faculty of Science / NUS	2011
Young Chemist Award / Department of Chemistry / NUS	2011
Singapore National Academy of Science (SNAS) Young Scientist Award	2011
Asian Core Program Lectureship Award from Japan	2009
NUS Young Investigator Award	2008

FULL LIST OF PUBLICATIONS (as of July 15th, 2026 / Citations: 34,500 / h-index: 92 Based on Google Scholar; *: Corresponding author)

Year 2026

394. Y. Wang, W. Fan, **J. Wu**,* “Molecular Nanocarbons with Diverse Connectivity and Topologies Enabled by Bismuth(III) Triflate-Mediated Benzannulation Reaction”, **Acc. Chem. Res.** **2026**, 59, 2056–2072.
393. J. Xie, Y. Zou, W. Ji, L. Wang, W. Niu, Y. Yang, X. Qu, **J. Wu**,* G. Li,* “Aethrene: A Stable Polycyclic Aromatic Hydrocarbon With a Triplet Ground State”, **Angew. Chem. Int. Ed.** **2026**, e6666833.
392. X. Ye, Y. Chen, X. Song, T. Ren, J. Wang, Y. Xie,* D. Ma,* **J. Wu**,* Zhen Li*, “A C₂-Symmetric Chiral Emitter for Deep-Blue Circularly Polarized Electroluminescence With High Dissymmetry Factors”, **Angew. Chem. Int. Ed.** **2026**, e5815007.
391. M. Díaz-Fernández, Á. F. Pérez, F. G. Gámez, P. G. Boj, J. M. Villalvilla, J. A. Quintana, Y. Wan, D. Aranda, J. M. Marín-Beloqui, **J. Wu**,* Z. Zeng,* M. A. Díaz-García,* and J. Casado*, “Ladder-Type Benzene-Perylene Dyes with Efficient Laser Properties in the Near-IR by Detracting/Activating Low/High Frequency Vibronic Modes”, **Adv. Funct. Mater.** **2026**, 36, e06356.
390. Y. Tang, **J. Wu***, “Thiophene and Benzene Rings Based Porphyrinoids with Global Aromaticity/Antiaromaticity and NIR Absorption”, book chapter in **Handbook of Porphyrin Science**, **2026 (Volume 46)**; World Scientific Publisher.
389. Z. Sun, R. Liu, W. Fan, Y. Han, Q. Zhou, T. Shen, T. Jiao, X. Li, Y. Zou*, **J. Wu***, “Alternately Twisted, Electron-Rich Rylenes and Their Stable Cations”, **Angew. Chem. Int. Ed.** **2026**, e4322934; DOI: 10.1002/anie.4322934.
388. E. Li, M. Kumar, X. Peng, T. Shen, D. Soler-Polo, Y. Wang, Y. Teng, H. Zhang, S. Song, **J. Wu***, P. Jelinek*, J. Lu*, “Rationally designed polyradical nanographenes with strong spin entanglement and perturbation resilience via Clar's goblet extension”, **Nat. Synth.** **2026**, 5, 989–998; DOI: 10.1038/s44160-026-01052-1.
387. Q. Zhou, L.-T. Bao, R. Liu, Z. Sun, Z. Ye, L. Jiao, W. Fan, Y. Zou*, H.-B. Yang*, **J. Wu***, “Aggregation-Free, Fused Perylene Pentamers: One-pot Synthesis, Narrowband Near-Infrared Emission, and Enhanced Circularly Polarized Luminescence”, **Chem. Sci.** **2026**, 17, 11892–11902; DOI: 10.1039/d6sc00676k.
386. G.-F. Huo, Y. Ding, W. Fan, L. Jiao, S. Wu, H.-B. Yang*, **J. Wu***, “Aromaticity in A Cross-Conjugated, Perylenediimide-Bridged Thiophene-Based Macrocyclic at Different Redox States”, **CCS Chem.** **2026**, DOI: 10.31635/ccschem.026.202607435.
385. Y. Sui, J. Hao, S. Wu, L. Ren, Z. Zeng*, **J. Wu***,* and Y. Ni*, “[2]Catenanes comprising two globally electron-delocalized octaphyrinoid rings: Synthesis, aromaticity and through-space electronic coupling”, **Nat. Synth.** **2026**, 5, 230–239; DOI: /10.1038/s44160-025-00918-0.

Year 2025

384. T. Jiao, C.-H. Wu, Y.-S. Zhang, X. Miao, S. Wu, S.-D. Jiang*, and **J. Wu***, “Solution-phase synthesis of Clar's goblet and elucidation of its spin properties”, **Nat. Chem.** **2025**, 17, 924–932 (**Highlighted in ChemistryWorld**).
383. L. Jiao, Y. Zou, W. Fan, Y. Han, Q. Zhou, J. Shao and **J. Wu***, “Aggregation-Free, Highly Soluble CN-Terminated Dicyclopentadiene-Fused Rylenes”, **J. Am. Chem. Soc.** **2025**, 147, 9415–9423.

382. D. Fu, J. Zhu*, L. Wang, R. Liu, L. Jiao, Z. Li, X. Zhang, L. Yang*, P. Ou*, **J. Wu***, “Biradical-mediated synergistic electrocatalysis using metal-free redox molecular catalysts”, *Nat. Commun.*, **2025**, DOI: 10.1038/s41467-025-66495-0.
381. X. Zhang, Y. Tang, C. Yang, Z. Li, D. Fu, Wang, H. Phan, L. Yang*, **J. Wu***, J. Zhu*, “Nickel-Mediated Synthesis of Fused Heterocycle-Linked Covalent Organic Frameworks for Self-Sensitized Photocatalysis”, *Angew. Chem. Int. Ed.* **2025**, e18983.
380. G. Huo, Y. Han, Wei Fan, Y. Zou, and **J. Wu***, “Aggregation-Free, Perylene-Containing π -Extended Kekulene with Improved Photoluminescence Quantum Yield.” *Chem. Asian J.* **2025**, e00442.
379. J. Zeng, W. Yu, H. Xu, X. Zhang, Q. Xu, J. Lu, K. P. Loh, and **J. Wu***, “Benzophenone-Based Polymers and Covalent Organic Framework for Photocatalytic Molecular Oxygen Activation”, *ACS Appl. Mater. & Interfaces* **2025**, *17*, 27275-27288.
378. T. Y. Gopalakrishna, A. Basavarajappa, H. S. Udaya, K. Furukawa,* **J. Wu,*** and V. G. Anand*, “Reversible Ring Oxidation of 48π Planar Nonaphyrins to Open Shell 46π Dications”, *Chem. Eur. J.* **2025**, *31*, e202500555.
377. X. Hou, T. Xu, J. Zhu, S. Wu and **J. Wu***, “Stable Fluorenyl Radicals Showing Tunable Doublet Emission”, *Chemistry* **2025**, *7*, 21.
376. Y. Zou, **J. Wu***, “Nanographenes with Multiple Zigzag Edges”, chapter in the book “**Molecular Nanographenes: Synthesis, Properties, and Applications**”, Wiley-VCH, **2025**, edited by Nazario Martín and Colin P. Nuckolls.
375. M. Díaz-Fernández, Á. Farrando Pérez, F. Gordillo Gámez, P. G. Boj, J. M. Villalvilla, J. A. Quintana, Y. Wan, D. Aranda, J. M. Marín-Beloqui, **J. Wu***, Z. Zeng*, M. A. Díaz-García*, J. Casado*, “Ladder-Type Benzene-Perylene Dyes with Efficient Laser Properties in the Near-IR by Detracting/Activating Low/High Frequency Vibronic Modes”, *Adv. Funct. Mater.* **2025**, DOI: 10.1002/adfm.202506356.
374. J. Lión-Villar, J.M. Fernández-García, S. Medina Rivero, J. Perles, S. Wu, D. Aranda, **J. Wu**, S. Seki, J. Casado*, N. Martín*, “Synthesis of zwitterionic open-shell bilayer spironanographenes”, *Nat. Chem.* **2025**, *17*, 1099–1106.
373. W. Ji, Y. Zou, L. Guo, W. Niu, T. Jiao, H. Phan, **J. Wu**, G. Li*, “Stable Iminium Singlet and Triplet Diradical(oid)s with Intense NIR-II Absorptions”, *Angew. Chem. Int. Ed.* **2025**, e202512663.
372. L. Palomo, C. M. Cruz, A. G. Campaña, B. Jiang, **J. Wu**, J. Casado*, and F. J. Ramírez*, “Chiroptical Signature and Absolute Configuration of Tröger’s Base-Based Triangular Macrocycles”, *ACS Omega* **2025**, *10*, 6419-6426.
371. A. Cárdenas, Z. Jin, Y. Ni, J. Wu, Y. Xia*, F. J. Ramírez,* and J. Casado*, “Oxidation of [3]naphthylenes to cations and dications converts local paratropicity into global diatropicity”, *Beilstein J. Org. Chem.* **2025**, *21*, 277–285.

Year 2024

370. S. Song, A. P. Solé, A. Matěj, G. Li, O. Stetsovych, D. Soler, H. Yang, M. Telychko, J. Li, M. Kumar, J. Brabec, L. Veis, **J. Wu***, P. Jelinek*, J. Lu*, “Highly-Entangled Polyradical Nanographene with Coexisting Strong Correlation and Topological Frustration”, *Nat. Chem.* **2024**, *16*, 938–944 ([Highlighted by ChemistryViews](#)).
369. Y. Zou, L. Jiao, Y. Han, L. Ren, Q. Zhou, **J. Wu***, “Peri-pentacene and Peri-hexacene Diradicaloids”, *J. Am. Chem. Soc.* **2024**, *146*, 27293–27298.
368. L. Ren, Y. Han, L. Jiao, Y. Zou and **J. Wu***, “Highly Strained, Fully π -Conjugated Porphyrin Cyclophanes: Template-free Synthesis and Global Aromaticity”, *Angew. Chem. Int. Ed.* **2024**, *63*, e202418532 ([VIP paper](#)).
367. Q. Zhou, W. Yuan, Y. Li, Y. Han, L. Bao, W. Fan, L. Jiao, Y. Zhao, Y. Ni, Y. Zou, H.-B. Yang and **J. Wu***, “[5]Helicene Based π -Conjugated Macrocycles with Persistent Figure-Eight and Möbius Shapes: Facile Synthesis, Chiral Resolution and Bright Circularly Polarized Luminescence”, *Angew. Chem. Int. Ed.* **2024**, *63*, e202417749.
366. W. Jiang, S. Wu, D. Xu, L. Tu, Y. Xie*, P. Pasqués-Gramage, P. G. Boj, M. A. Díaz-García, F. Li*, **J. Wu*** and Z. Li*, “Stable Xanthene Radicals and Their Heavy Chalcogen Analogues Showing Tunable Doublet Emission from Green to Near-infrared”, *Angew. Chem. Int. Ed.* **2024**, *63*, e202418762 ([VIP paper](#)).
365. G.-F. Huo, W.-T. Xu, J. Hu, Y. Han, W. Fan, W. Wang, Z. Sun*, H.-B. Yang*, and **J. Wu***, “Perylene-Embedded Helical Nanographenes with Emission up to 1010 nm: Synthesis, Structures, and Chiroptical Properties”, *Angew. Chem. Int. Ed.* **2024**, *63*, e202416707.
364. L. Wang, W. Niu, D. Tian*, T. Jiao, L. Zhang, X. Hou, Y. Han, Y. Zou, **J. Wu***, G. Li*, “Stable Mono-radical and Triplet Diradicals Based on Allylic Radical-Embedded All-benzenoid Polycyclic Hydrocarbons”, *Angew. Chem. Int. Ed.* **2024**, e202415746 ([Highlighted in Synfacts](#)).

363. X. Chen, Y. Zhu, Y. Xu, M. Rao, P. Pang, B. Zhang, C. Xu, W. Ni, G. Li*, **J. Wu***, M. Li*, Y. Chen, and Y. Geng, "Design of Ultra-Narrow Bandgap Polymer Acceptors for High-Sensitivity Flexible All-Polymer Short-Wavelength Infrared Photodetectors", **Angew. Chem. Int. Ed.** **2024**, 63, e202413965.
362. S. Wu, Y. Han, Y. Ni, X. Hou, H. Wei, Z. Li* and **J. Wu***, "Unveiling Möbius/Hückel Topology and Aromaticity in A Core-Expanded [10]Annulene at Different Oxidation States." **Angew. Chem. Int. Ed.** **2024**, 63, e202320144.
361. G. Huo, W.-T. Xu, Y. Han, J. Zhu, X. Hou, W. Fan, Y. Ni, S. Wu, H.-B. Yang*, **J. Wu***, "Expanded Azahelicenes with Large Dissymmetry Factors." **Angew. Chem. Int. Ed.** **2024**, 63, e202403149 (**Highlighted by ChemistryViews**).
360. T. Shen, P. Pasqués-Gramage, J. M. Villalvilla, P. G. Boj, J. A. Quintana, Y. Zou, Y. Han, L. Jiao, L. Ren, M. A. Díaz-García* and **J. Wu***, "[4]Rhombene: Solution-Phase Synthesis and Application for Distributed Feedback Lasers With Emission Beyond 830 nm." **Angew. Chem. Int. Ed.** **2024**, 63, e202410828 (**Highlighted in Synfacts**).
359. L. Ren, Y. Han, X. Hou, Y. Zou, T. Jiao, and **J. Wu***, "Cyclooctatetrathiophene Annulated Multicyclic Macrocycles." **CCS Chem.** **2024**, 6, 2758–2769.
358. L. Ren, Y. Han, X. Hou, Y. Ni, and **J. Wu***, "[2,2]Paracyclophane Bridged, Thiophene Based Macrocycles: Synthesis and Electronic Properties in Different Redox States." **Chem. Eur. J.** **2024**, e202304088.
357. S. Wu, J. Yang, Y. Ni, Y. Han, W. Chen*, and **J. Wu***, "Azatriangulenetrione as Anode Material for Sodium-Ion Batteries: Reversible Redox Chemistry Mediated by Lone Pair Electrons." **ACS Appl. Mater. Interfaces** **2024**, 16, 39349–39355.
356. Y. Zhao, Y. Zhang, J. Yang*, Y. Chen, G. Pu, Y. Wang, D. Li, W. Fan, M. Fang, **J. Wu*** and Z. Li*, "The Role of Locally Excited State and Charge Transfer State in Organic Room Temperature Phosphorescence and Corresponding Applications", **Adv. Opt. Mater.** **2024**, 12, 2400980.
355. S. Moles Quintero, J. C. Mira-Martínez, Y. Zou, M. Díaz-García, P. G. Boj, **J. Wu***, M. A. Díaz-García*, J. M. Marín-Beloqui* and J. Casado*, "Triplet formation inhibits amplified spontaneous emission in perylene-based polycyclic aromatic hydrocarbons." **J. Mater. Chem. C** **2024**, 12, 5239-5246.
354. Y. Wang, S.-C. Chen, S. Tai, D. Wang, Y. Ma, **J. Wu*** and M.-J. Lin*, "Improving the performance and stability of perovskite solar cells via surface passivation of phthalimide N-alkylammonium iodides." **J. Mater. Chem. C** **2024**, 12, 6540-6547.
353. H. Phan*, T. S. Herng, X. Hou, L. K. Nguyen, V. The La, C. D. Huynh, J. Ding, and **J. Wu***, "A high-spin s-triazine linked fluorenyl radical polymer", **RSC Adv.** **2024**, 14, 16945-16950.
352. J. Kim, D. C. Bain, V. Ding, K. Majumder, D. Windemuller, J. Feng, **J. Wu**, S. Patil, J. Anthony, W. Kim* and A. J. Musser*, "Coherent photoexcitation of entangled triplet pair states", **Nat. Chem.** **2024**, 16, 1680–1686.

Year 2023

351. W. Fan, T. M. Fukunaga, S. Wu, Y. Han, Q. Zhou, J. Wang, Z. Li, X. Hou, H. Wei, Y. Ni, H. Isobe*, **J. Wu***, "Synthesis and chiral resolution of a triply twisted Möbius carbon nanobelt", **Nat. Synth.** **2023**, 2, 880–887 (**see News & Views: Q. Miao, J. Casado, "Paradromic molecules", Nat. Synth.** **2023**, 2, 808–810).
350. T. Jiao, Y. Ni, T. Xu, X. Hou, S. Wu, L. Ren, Z. Sun*, **J. Wu***, "Synthesis of monolayer and persistent bilayer graphene fragments via a radical-mediated coupling approach", **Nat. Synth.** **2023**, 2, 1104–1115.
349. G.-F. Huo, T. M. Fukunaga, X. Hou, Y. Han, W. Fan, S. Wu*, H. Isobe*, **J. Wu***, "Facile Synthesis and Chiral Resolution of Expanded Helicenes with up to 35 cata-Fused Benzene Rings", **Angew. Chem. Int. Ed.** **2023**, 62, e20221809 (**selected as Hot Paper**).
348. Y. Zou, X. Hou, H. Wei, J. Shao, Q. Jiang, L. Ren, **J. Wu***, "Circumcoronenes", **Angew. Chem. Int. Ed.** **2023**, 62, e202301041 (**selected as a VIP paper, highlighted by Nat. Rev. Mater.**: <https://www.nature.com/articles/s41578-023-00555-z> and featured in **Angew. Chem.** **2023**, e202305289).
347. Q. Zhou, X. Hou, J. Wang, Y. Ni, W. Fan, Z. Li, X. Wei, K. Li, W. Yuan, Z. Xu, M. Zhu, Y. Zhao, Z. Sun*, **J. Wu***, "A Fused [5]Helicene Dimer with a Figure-Eight Topology: Synthesis, Chiral Resolution, and Electronic Properties", **Angew. Chem. Int. Ed.** **2023**, 62, e202302266 (**selected as Hot Paper**).
346. T. Shen, D. Dijkstra, A. Farrando-Pérez, P. G. Boj, J. M. Villalvilla, J. A. Quintana, Y. Zou, X. Hou, H. Wei, Z. Li, Z. Sun*, M. A. Díaz-García*, **J. Wu***, "Fused Triangulene Dimers: Facile Synthesis by Intramolecular Radical-Radical Coupling and Application for Near Infrared Lasers", **Angew. Chem. Int. Ed.** **2023**, 62, e202304197 (**selected as Hot Paper**).

345. L. Ren, Y. Han, X. Hou, Y. Ni, Y. Zou, T. Jiao, **J. Wu***, "Aromaticity in 2D Fully π -Conjugated Multicyclic Macrocycles", *J. Am. Chem. Soc.* **2023**, *145*, 12398–12406.
344. T. Shen, Y. Zou, X. Hou, H. Wei, L. Ren, L. Jiao, **J. Wu***, "Bis-*peri*-dinaphtho-rylenes: Facile Synthesis via Radical-Mediated Coupling Reactions and their Distinctive Electronic Structures", *Angew. Chem. Int. Ed.* **2023**, *62*, e202311928 (**selected as Hot Paper**).
343. Z. Sun, W. Fan, Y. Han, W. Yuan, Y. Ni, J. Wang, H. Wei, Y. Zhao, Z. Sun*, **J. Wu***, "Helical fused 1,2:8,9-dibenzozethrene oligomers with up to 201° end-to-end twist: "One-pot" synthesis and chiral resolution." *Chem. Sci.* **2023**, *14*, 7922-7927.
342. J. Lawrence, Y. He, H. Wei, J. Su, S. Song, A. W. Rodrigues, D. Miravet, P. Hawrylak, J. Zhao, **J. Wu***, J. Lu*, "Topological Design and Synthesis of High-Spin Aza-triangulenes without Jahn–Teller Distortions", *ACS Nano* **2023**, *17*, 20237–20245.
341. M.-W. Wang, W. Fan, X. Li, Y. Liu, Z. Li, W. Jiang, **J. Wu***, Z. Wang*, "Molecular Carbons: How Far Can We Go?", *ACS Nano* **2023**, *17*, 20734-20752.
340. S. Qiu, Y. Zhao, L. Zhang, Y. Ni, Y. Wu, H. Cong, D. Qu, W. Jiang, **J. Wu**, H. Tian, Z. Wang*, "Axially N-Embedded Quasi-Carbon Nanohoops with Multioxidation States", *CCS Chem.* **2023**, *5*, 1763-1772.
339. G. Merino*, M. Solà*, I. Fernández*, C. Foroutan-Nejad*, P. Lazzeretti*, G. Frenking*, H. L. Anderson, D. Sundholm, F. P. Cossío, M. A. Petrukhina, **J. Wu**, J. I. Wu, A. Restrepo, "Aromaticity: Quo Vadis", *Chem. Sci.* **2023**, *14*, 5569-5576.
338. X. Zhu, C. Gao, Y. Ren, X. Zhang, E. Li, C. Wang, F. Yang, **J. Wu**, W. Hu, and H. Chen*, "High-Contrast Bidirectional Optoelectronic Synapses based on 2D Molecular Crystal Heterojunctions for Motion Detection", *Adv. Mater.* **2023**, *35*, 2301468.
337. Z. Wang, M. Wang, J. Song*, **J. Wu***, Zhen Li *, "Activating photocatalytic hydrogen evolution by constructing Ni-based organic layers and tailoring its crystal facets", *Mater. Chem. Front.* **2023**, *7*, 2651-2660.

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