

CURRICULUM VITAE

Donglin Jiang
<https://blog.nus.edu.sg/chmjd/>

Professor Donglin Jiang has been widely recognized as pioneer in the area of covalent organic frameworks (COFs). Since 2005, Dr. Jiang has been devoted to the design, synthesis, and functional exploration of 2D polymers and COFs when he set up an independent laboratory at Institute for Molecular Science (IMS), National Institutes for Natural Sciences (NINS), Japan. Especially he has been a leading figure in establishing the basis of the field of 2D polymers and COFs. He has explored the design principles of tetragonal, trigonal, Kagome and anisotropic COFs, the synthetic reactions including azine, phenazine, squaraine, --C=C-- , ketazine, $\text{--C}\equiv\text{C--}$, and diacetylene linkages, and the synthetic methods including templated synthesis, modulated pattern synthesis, and micro-interfacial polymerization, and diverse COF materials and their structure-originated functions. Dr. Jiang has developed the first examples, including the semiconducting COFs, light-emitting COFs, photoconductive COFs, energy-storage COFs, asymmetric catalytic COFs, photocatalytic COFs, ion-conducting COFs and spin-functional COFs, thus greatly developing, expanding, and deepening the area.

1. Academic Positions

2/2018 –	Professor, National University of Singapore
1/ 2016 – 2 / 2018	Professor, Japan Advanced Institute of Science and Technology
5 / 2005 – 12 / 2015	Associate Professor, Institute for Molecular Science, National Institutes of Natural Sciences, Japan
10 / 2000 – 4 / 2005	Group Leader, Strategic Basic Research Program, The Exploratory Research for Advanced Technology (ERATO), Japan Science and Technology Agency (JST), Japan
6 / 1998 – 9 / 2000	Assistant Professor, The University of Tokyo, Japan
10 / 2009 – 3 / 2013	Researcher, Strategic Basic Research Program, Precursory Research for Embryonic Science and Technology (PRESTO), JST, Japan
10 / 2005 – 3 / 2009	Researcher, Strategic Basic Research Program, PRESTO, JST, Japan
4 / 1997 – 6 / 1998	Young Scientist Fellowship, Japan Society for the Promotion of Science (JSPS), The University of Tokyo, Japan

2. Education

3 / 1998	Ph.D in Chemistry and Biotechnology, The University of Tokyo
2 / 1992	Master in Polymer Science & Engineering, Zhejiang University
6 / 1989	B.S. in Chemistry, Zhejiang University

3. Academic Honors, Awards and Fellowships

- 2025 SNIC Award 2025
- 2022 Fellow of The European Academy of Sciences
- 2021 Alexander von Humboldt Research Award
- 2017 The Chemical Society of Japan Award for Creative Work
- 2017 President Research Award, JAIST
- 2006 The Wiley Award of The Society of Polymer Science, Japan
- 2006 The Young Scientists' Prize, The Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science (MRXT), Japan
- 2005 Young Lectureship Award, The Chemical Society of Japan
- 2000 Excellent Lecture Award of Annual National Meeting, Chemical Society of Japan
- 1997 Young Scientist Fellowship, JSPS, Japan

- 2025 The World's most highly cited researcher in Chemistry by Clarivate Analytics
- 2024 The World's most highly cited researcher in Chemistry by Clarivate Analytics
- 2023 The World's most highly cited researcher in Chemistry by Clarivate Analytics
- 2022 The World's most highly cited researcher in Chemistry by Clarivate Analytics
- 2021 The World's most highly cited researcher in Chemistry by Clarivate Analytics
- 2020 The World's most highly cited researcher in Chemistry by Clarivate Analytics
- 2019 The World's most highly cited researcher in Chemistry by Clarivate Analytics
- 2018 The World's most highly cited researcher in Chemistry by Clarivate Analytics

4. Professional Membership and Editorial and Advisory Board Member

- Member of The American Chemical Society (1996 – present)
- Member of The Chemical Society of Japan (1994 – present)
- Member of The Society of Polymer Science, Japan (1998 – present)
- Editorial Advisory Board Committee Member, CCS Chemistry (2018 – present)

- Guest Editor, *Chemical Society Review* (2022, special issue on porous organic polymers)
- Guest Editor: *J. Poly. Sci.* Tribute special issue dedicated to Prof. Takuzo Aida,
- Guest Editor: *J. Phy. Chem.* Special Issue on Porous Solids for Energy Applications: Clathrate hydrates, Metal-organic frameworks (MOFs) and Covalent-organic frameworks (COFs)

5. Organization Chair and Committee of Symposiums and Conferences

- 2024, Organization committee, The 9th International Conference on Metal-Organic Frameworks and Open Framework Compounds (MOF2024), July 15-19 (2024). Singapore
- 2019, Organization Chair, The 10th Japan-China Joint Symposium on Functional Supramolecular Architecture, Institute for Molecular Science, Zhejiang University, June 7-10 (2019), China.
- 2019, Organization Chair, The International Workshop on Covalent Organic Frameworks, May 11-14, 2019, Tianjin University, China.
- 2018, Organization Committee, Symposium of MOFs and COFs in the 10th Singapore International Conference of Chemistry of (SICC-10), December 16-19 (2018)
- 2017, Organization Chair, Japan-China Joint Symposium on Functional Supramolecular Architecture, Institute for Molecular Science, Tianjin, China, February 23-26 (2017)
- 2016, Organization Chair, Japan-China Joint Symposium on Functional Supramolecular Architecture, Institute for Molecular Science, Okazaki, Japan, February 23-26 (2016)
- 2015, Organization Committee, Frontiers of Organic Porous Materials: Structures, Properties and Applications, Symposium 223 in Pacifichem 2015@Hawaii, Honolulu (2015)
- 2014, Organization Chair, China-Japan Joint Symposium on Functional Supramolecular Architecture, Tianjin University, December 10-14 (2014)
- 2014, Organization Committee, The 4th International Conference on Metal-Organic Frameworks and Open Framework Compounds, Kobe, Japan, September 28-October 2 (2014)
- 2013, Organization Chair, China-Japan Joint Symposium on Functional Supramolecular Architecture, Sooshow University, October 25-28 (2013)

- 2013, Organization Chair, Japan-China Joint Symposium on Functional Supramolecular Architecture, Okazaki, Jan 18-21 (2013)
- 2011, Organization Chair, China-Japan Joint Symposium on Functional Supramolecular Architecture, Beijing, October 6-10 (2011)
- 2010, Organization Chair, JSPS Asian Core Program China-Japan Joint Symposium on Functional Supramolecular Architecture, Changchun, July 25-28 (2010)
- 2009, Organization Chair, SOKENDAI Asian Winter School "Molecular Science – Central Roles in Multidisciplinary Fields", Okazaki, December 1-4 (2009)
- 2009, Organization Chair, JSPS Asian Core Program China-Japan Joint Symposium on Functional Supramolecular Architecture, Sapporo, Hokkaido, Japan, August 2-5 (2009)
- 2008, Organization Chair, JSPS Asian Core Program China-Japan Joint Symposium on Functional Supramolecular Architecture, Beijing, December 20-21 (2008)
- 2008, Organization Chair, SOKENDAI Asian Winter School "Molecular Sciences on Different Space-Time Scales", Okazaki, December 9-12 (2008)
- 2008, Organization Chair, JSPS Asian Core Program China-Japan Joint Symposium on the π -Conjugated Molecules towards Functional Materials, Beijing, February 24-25 (2008)
- 2006, Organization Chair, Winter School of JSPS Asian Core Program on Frontiers of Materials, Photo- and Theoretical Molecular Sciences, Beijing, December 5-8 (2006)

6. Invited Plenary Speaker, Symposium, Endowed, & Award Lectures

- Keynote Lecture Speaker, The 1st International Symposium Chemistry, Physics & Devices of Organic 2D Crystals, Dresden, Germany, October 5–10, 2025.
- Plenary Speaker, Science for Industry, Madrid, Spain, Jan 18-20, 2024
- Invited Speaker, Gordon Research Conference on Nanoporous Materials & Their Applications, NH, USA, August 6-11, 2023
- Keynote Speaker, The 11th Singapore International Conference on Chemistry, Singapore, December 11-14, 2022
- Invited Speaker, Summer School “Synthetic 2D Materials”, Dresden, Germany. September 19-23, 2022
- Invited Speaker, Organic 2D Crystalline Materials: Chemistry, Physics and Devices (O2DMAT), Madrid, Spain, September 13-15, 2022
- Invited Speaker, The 3rd International Conference on Porous Organic Polymers (POPs-2021), Boulder, USA, August 28-September 1, 2022.
- Plenary Speaker, The 16th Conference of the Asian Crystallographic Association (AsCA 2019), Singapore, December 17-20, 2019.
- Plenary Speaker, The 1st International Symposium on Tropical Marine Resources Utilization and Green Chemical Engineering, Hainan University, December 14-15, 2019.
- Keynote Speaker, Materials Beyond VI, Fudan University, July 17-20, 2019.
- Keynote (Plenary) Speaker, The 6th International Conference on Metal-Organic Frameworks, Auckland, New Zealand, December 8-12, 2018.
- Plenary Speaker, The 15th National Conference on Liquid Crystal Polymers and Supramolecular Ordering Structures, Qingdao, August 7-10 (2018)
- Plenary Speaker, The 5th EOC Symposium, Nankai University, July 8-14, 2018.
- Keynote (Plenary) Speaker, Flatlands beyond Graphene, Leipzig, Germany, September 3-7, 2018.
- Plenary Speaker, The 2017 National Polymer Symposium of China, Chengdu, October 9-14, 2017.
- Keynote Speaker, Workshop on 2D Materials, Dresden, Germany, August 28-September 1, 2017.
- Award Lecture, The 97th Annual Meeting of Chemical Society of Japan, Keio University, Yokohama, Japan, March 16-19, 2017.

- Keynote Speaker, The 9th Singapore International Chemical Conference (SICC-9), Singapore, December 10-15, 2016.
- Plenary Speaker, The 24th Japan Polyimide & Aromatic Polymer Conference, Nomi, Japan, Dec 8, 2016.
- Invited Speaker, The 26th Conference of the Condensed Matter Division (CMD26); topical colloquium "Condensed Matter Science in Porous Frameworks", Groningen, The Netherlands, September 3-6, 2016.
- Plenary Speaker, POLYMAT's Spotlight, San Sebastian, Spain, June 21-24, 2016.
- Keynote Speaker, International Conference on Nanoscience and Nanotechnology (ICONN), Canberra, Australia, February 7-11, 2016.
- Invited Speaker, Pacificchem 2015, Honolulu, USA, December 15-20, 2015.
- Keynote (Plenary) Speaker, The 1st European Conference on Metal-Organic Frameworks and Porous Polymers, Potsdam, Germany October 11-14, 2015.
- Keynote Speaker, China NANO2015, Beijing, September 3-5, 2015.
- Invited Speaker, The 250th American Chemical Society National Meeting, Boston, August 16-20, 2015.
- Keynote Speaker, Commemorative Golden Jubilee Chemistry Conference, Singapore, August 6-8, 2015.
- Keynote Speaker, The 8th International Conference on Materials for Advanced Technologies (ICMAT2015), Singapore, June 28–July 3, 2015.
- Invited Speaker, The 13th International Conference on Polymer Advanced Technologies (PAT2015), Hangzhou, June 25-28, 2015.
- Keynote Speaker, The 2nd International Symposium on Aggregation-Induced Emission, Guangzhou, May 15-18, 2015.
- Keynote Speaker, The 7th International Symposium on Advanced Materials and Nanotechnology (AMN-7), Nelson, New Zealand, February 8-12, 2015.
- Keynote Speaker, China-Japan Joint Symposium on Supramolecular Architecture, Tianjin University, December 11-13, 2014.
- Keynote Speaker, IUPAC International Conference on Novel Materials and their Synthesis (NMS) & International Symposium on Fine Chemistry and Functional Polymers (FCFP), Zhenzhou, China, October 11-15, 2014.
- Keynote Speaker, The 2nd International Symposium on Polymer Ecomaterials (PEM2014), Kunming, August 22-26, 2014.

- Keynote Speaker, Symposium on Computational Materials for Catalysis and Photovoltaics, Suzhou, May 25-28, 2014.
- Invited Speaker, The 248th ACS National Meeting & Exposition, San Francisco, CA, USA, August 10-14, 2014.
- Invited Speaker, Sino-German Symposium on π -Conjugated Nanomaterials for Catalysis and Clean Energy Applications, Berlin, Germany, April 1-4, 2014.
- Keynote Speaker, The 6th China-Japan Joint Symposium on Functional Supramolecular Architecture, Suzhou, October 25-28, 2013.
- Keynote Speaker, The 9th IUPAC International Symposium on Novel Materials and Their Synthesis, Shanghai, October 17-22, 2013.
- Invited Speaker, The 246th ACS National Meeting, Indianapolis, USA, September 8-12, 2013.
- Invited Speaker, The 11th China-Japan Joint Symposium on Conduction and Photoconduction in Organic Solids and Related Phenomena, Changchun, September 1-4, 2013.
- Keynote Speaker, The 15th Asian Chemical Congress, Singapore, August 18-23, 2013.
- Invited Speaker, The International Symposium on Aggregation-Induced Emission, Wuhan, May 17-20, 2013.
- Keynote Speaker, The 2013 MOF young investigator symposium, Shanghai, May 12-14, 2013.
- Keynote Speaker, Japan-China Joint Symposium on Functional Supramolecular Architecture, Okazaki, Japan, January 19-21, 2013.
- Invited Speaker, The 244th ACS National Meeting, Philadelphia, USA, August 19-23, 2012.
- Invited Speaker, The 10th International Symposium on Functional π -Electron Systems (F- π -10), Beijing, October 13-17, 2011.
- Keynote Speaker, The China-Japan Joint Symposium on Functional Supramolecular Architecture, Beijing, October 6-10, 2011.
- Invited Speaker, The 2011 National Polymer Symposium of China, Dalian, September 24-28, 2011.
- Invited Speaker, The 2nd FAPS Polymer Congress (FAPS-PC2011), Beijing, May 8-12, 2011.

- Keynote Speaker, The Beijing-Guangzhou-Hong Kong Symposium on Polymer, Guangzhou, January 3-6, 2011.
- Keynote Speaker, The Xiangshan Science Conference on Functional Supramolecular Systems, Beijing, October 27-29, 2010.
- Keynote Speaker, The China-Japan Joint Symposium on Functional Supramolecular Architecture, Changchun, July 25-28, 2010.
- Invited Speaker, The 239th ACS National Meeting, San Francisco, USA, March 21-25, 2010.
- Keynote Speaker, The 3rd International Symposium on Creation of Functional Nanospace by Metal-Organic Frameworks, Kanagawa University, Japan, February 23, 2010.
- Keynote Speaker, The 5th IUPAC International Symposium on Novel Materials and Their Synthesis, Shanghai, October 18-24, 2009.
- Keynote Speaker, International Conference on Organic Photonics and Electronics 2009 (ICOPE2009), The 11th International Conference on Organic Nonlinear Optics (ICONO11), Beijing, September 20-25, 2009.
- Invited Speaker, 2009 National Polymer Symposium of China, Tianjin, August 18-22, 2009.
- Keynote Speaker, Japan-China Joint Symposium on Functional Supramolecular Architecture, Sapporo, Japan, August 2-5, 2009.
- Keynote Speaker, China-Japan Joint Symposium on Functional Supramolecular Architecture, Beijing, December 20-21, 2008.
- Keynote Speaker, The 2008 National Symposium on Solar Energy Photochemistry and Photocatalysis, Shanghai, November 2-4, 2008.
- Keynote Speaker, The Second CAS Symposium on Applied Chemistry, Changchun, September 23-25, 2008.
- Keynote Speaker, The 5th International Symposium on High-Tech Polymer Materials (HTPM-V), Beijing, October 27-29, 2008.
- Keynote Speaker, The 2008 Asian-Core Program Symposium and Annual Meeting, KAIST, Korea, March 6-9, 2008.
- Keynote Speaker, China-Japan Joint Symposium on the π -Conjugated Molecules towards Functional Materials, Beijing, February 24-25, 2008.
- Keynote Speaker, The 2008 Chinese Academy of Sciences International Symposium on Advanced Polymer Materials, Ningbo, April 5-9, 2008.

- Invited Speaker, The 9th China-Japan Joint Symposium on Conduction and Photoconduction in Organic Solids and Related Phenomena, Beijing, October 27-29, 2007.
- Invited Speaker, The 2007 National Polymer Symposium of China, Chengdu, October 9-13, 2007.
- Keynote Speaker, The 309th Xiangshan Science Conference on Soft Matter, Beijing, September 25-27, 2007.
- Award Lecture, The 55th Symposium on Macromolecules, The Japan Society of Polymer Science, Toyama University, Japan, September 20-22, 2006.
- Invited Speaker, International Symposium on Polymer Chemistry, Dalian, June 8-11, 2006.
- Invited Speaker, International Symposium on Polymer Physics, Suzhou, June 1-5, 2006.
- Keynote Speaker, The 4th East Asia Polymer Conference, Tianjin, March 28-31, 2006.
- Invited Speaker, The 14th POLYCHAR World Forum on Advanced Materials, Nara, Japan, April 17-21, 2006.

7. Invited Lectures, Colloquiums and Lectureships

- Universidad Autónoma de Madrid
- University of Ludwig-Maximilians-Universität München
- Max Plank Institute for Polymer Research
- Technische Universität Dresden
- Technische Universität München
- Catalan Institution for Research and Advanced Studies (ICREA) & Institute of Chemical Research of Catalonia (ICIQ), Spain
- Sandford University
- University of South Florida
- The University of Tokyo
- Osaka University
- Nagoya University
- Tokyo Institute of Technology
- Nara Advanced Institute of Technology
- Hokkaido University

8. Highlighted in Journals, Newspapers, and TV

- August 13, 2025
Phys. Org. Covalent organic frameworks harness both singlet and triplet states for photocatalysis
 FoS, NUS, Research News: Powering reactions with dual light states
- March 10, 2025
Chemistry World (Royal Society of Chemistry) | Feature | COFs head for the big time by Mina Notman
 Highlighted our historic work in the field.
- June 2024
 Highlighted by
 FoS, NUS Research News: Artificial photosynthesis to produce hydrogen peroxide
 FoS, NUS on X
 COFs CATALYSIS ONLINE
 Nanowerk News: Artificial photosynthesis to produce hydrogen peroxide
 Physical.ORG: New photocatalytic COFs mimic photosynthesis for H₂O₂ production
 Bioengineer.Org: Artificial photosynthesis to produce hydrogen peroxide
 ScienMag: Artificial photosynthesis to produce hydrogen peroxide
 Technology News: News Material Mimics Photosynthesis
- April 2024
 bilibili: <https://www.bilibili.com/read/cv33863039/>
 X-mol: <https://www.x-mol.com/news/884864>
 Weixin: <https://mp.weixin.qq.com/s/7qBT2dAlCsmRLwW5Ln7qwA>
- February 2024
 ScienceNet.CN: <https://paper.sciencenet.cn/htmlpaper/2024/2/202421512131946095432.shtm>
 X-MOL: <https://www.x-mol.com/paper/1757449537794576384>
 ResearchGate: <https://www.researchgate.net/publication/378182086>
 Tweet@COF_Paper: https://twitter.com/COF_papers/status/1757368223387767228
 XIAO KE HUA XUE (WeChat Public Account): <https://mp.weixin.qq.com/s/6tttcwUQM4d25KU1sjGeJg>
 CUI HUA JI (WeChat Public Account): https://mp.weixin.qq.com/s/PSn_5OMliki81xnZtYbcsg
 NA MI REN (WeChat Public Account): <https://mp.weixin.qq.com/s/HRGs3ldUwJWhqGfao7hKhQ>
 FoS, NUS: <https://www.science.nus.edu.sg/blog/2024/02/28/photosynthesis-with-water-and-air/>
 X: <https://twitter.com/ResearchFoS/status/1762719939729981599>
 EurekAlert: <https://www.eurekalert.org/news-releases/1035910>
 Science Daily: <https://www.sciencedaily.com/releases/2024/02/240228115357.htm>
 Phys.Org: <https://www.nature.com/articles/s41929-023-01102-3/metrics>
 My Droll: <https://mydroll.com/researchers-develop-novel-method-to-photosynthesize-hydrogen-peroxide-using-water-and-air/>
 Verve Times: <https://vervetimes.com/new-method-developed-by-researchers-generates-hydrogen-peroxide-from-water-and-air-through-photosynthesis/>
 Newscontinue: <https://newscontinue.com/researchers-develop-novel-method-to-photosynthesize-hydrogen-peroxide-using-water-and-air/>

Swift Telecast: <https://swifttelecast.com/researchers-develop-novel-method-to-photosynthesize-hydrogen-peroxide-using-water-and-air/>

- February 2024
Azom.Com: <https://www.azom.com/news.aspx?newsID=62625>
Technology Networks: <https://www.technologynetworks.com/tn/news/new-catalyst-can-photosynthesize-hydrogen-peroxide-using-just-water-and-air-384375>
- December 2023
X-MOL: <https://www.x-mol.com/news/874583>
Zhihu: <https://zhuanlan.zhihu.com/p/672975302>
COF Cui Hua Zai Xian: <https://mp.weixin.qq.com/s/7Hn48t-NBDRaZTWDdGCc2Q>
COFs Qian Yan: https://mp.weixin.qq.com/s/5NCTowmLETVTsnmq2_33Ew
MOFs Zai Xian: <https://mp.weixin.qq.com/s/F900OZ2Npa0KNMNJyol71w>
ResearchGate: <https://www.researchgate.net/publication/376045112>
WEI BO: <https://weibo.com/ttarticle/p/show?id=2309404980226454061129>
- January 19, 2022, Highlighted by phys.org, “Water clusters in hydrophobic crystalline porous covalent organic frameworks”
- January 19, 2022, Highlighted by Flipboard; “Water clusters in hydrophobic crystalline porous covalent organic frameworks”
- November 19, 2021, Highlighted by Newsbreak “Water cluster in hydrophobic crystalline porous covalent organic frameworks”
- November 19, 2021, Highlighted by Nature Chemistry Community “Water Cluster in Hydrophobic Crystalline Porous Covalent Organic Frameworks”
- September 05, 2021, Highlighted by *ChemistryViews* “Covalent Organic Frameworks Light UP”
- July 06, 2021, Highlighted by AlphaGalileo “Tiny Tweaks to Sparkle: Editing Light-Emitting Organic Molecules Via Surface Modification”
- November 16, 2020, Interviewed by *Nat. Commun.* 11, 5336 (2020), “Donglin Jiang answers questions about 15 years of research on covalent organic frameworks” – Interviewed by Senior Editor Dr. Johannes Kreutzer of *Nature Communications*
- April 24, 2020, Selected as Very Important Paper of *Angew. Chem.*
- October 9, 2019, Highlighted by Phys. Org. “Photocatalytic hydrogen production from water”
- October 20, 2017, Highlighted by Kanazawa Television
- October 13, 2016, Highlighted by Natureaisa Website
- August 3, 2016, Highlighted by Nikkan Kogyo Shimbun
- July 28, 2016, Highlighted by Kokkoku News
- July 27, 2016, Highlighted by Press Release by JAIST

- May 11, 2016, Highlighted by Nikkan Kogyo Shimbun
- April 29, 2016, Highlighted by Kokkoku News
- April 29, 2016, Highlighted by The Science News
- April 28, 2016, Highlighted by Press Release by JAIST
- April 15, 2016, Highlighted by Kokkoku News
- April 5, 2016, Highlighted by Press Release by JAIST
- November 2015, Highlighted by *Synfacts* 11 1269 (2015), Persistent COF: A Stable Platform for Asymmetric Organocatalysis by T. M. Swage and L. Chen
- October 6, 2015, Highlighted by Phys. Org.
- September 28, 2015, Highlighted by Chemeurope.Com.
- September 25, 2015, Highlighted by EurekAlert&AAAS, Exploration of stable, crystalline, porous covalent organic frameworks
- September 25, 2015, Highlighted by press release by IMS
- September 22, 2015, Highlighted by *Chemistry World*, Firming COFs up takes Michael reaction catalysis forward by A. Extrance
- Jan 28, 2014, Highlighted by *Synfacts*
- January 2014, Highlighted by Nature Publishing Group Japanese Website
- December 9, 2013, Highlighted by Nikkan kogyo Shimbun
- December 6, 2013, Highlighted by The Science News
- December 2, 2013, Highlighted by Nanotech Japan
- November 15, 2013, Highlighted by Press Release by IMS
- Jan 28, 2013, Highlighted by Nikkan Kagaku Shimbun
- Jan 23, 2013, Highlighted by Press Release by IMS
- May 24, 2012, Highlighted by The Science News
- May 17, 2012, Highlighted by Nikkei Sangyo Shimbun
- May 14, 2012, Highlighted by Environmental business
- May 14, 2012, Highlighted by Nikkan Kagaku Shimbun
- May 11, 2012, Highlighted by Press Release by JST and IMS
- December 19, 2011, Highlighted by *ACS Noteworthy Chemistry*, Switch on Luminescence by Locking Molecular Rotors
- December 2, 2011, Highlighted by The Science News
- November 30, 2011, Highlighted by Nikkan Kagaku Shimbun
- November 28, 2011, Highlighted by Nanotech Japan

- November 24, 2011, Highlighted by Nikkei Sangyo Shimbun
- November 21, 2011, Highlighted by Nikkan Kagaku Shimbun
- November 17, 2011, Highlighted by Nekkei Bioonline
- November 16, 2011, Highlighted by Kagaku Kogyo Nippo
- November, Highlighted by Nature Publishing Group Japanese Website
- November 16, 2011, Highlighted by Press Release by IMS and JST
- September 20, 2011, Highlighted by DIME
- September 15, 2011, Highlighted by DWV-Mitteilungen
- September 12, 2011, Highlighted by *Chemical & Engineering News*, Volume 89 Issue 37 p. 21, Framework Compound Conducts Electrons by M. Jacoby
- September 6, 2011, Highlighted by *Nature Nanotechnology*, Porous Polymer Charged up by O. Vaughan
- September 1, 2011, Highlighted by SpectroscopyNOW
- August 23, 2011, Highlighted by Physorg.com
- August 22, 2011, Highlighted by Green Car Congress
- August 22, 2011, Highlighted by Nano Werk
- August 12, 2011, Selected as Very Important Paper of Angew. Chem.
- August 1, 2011, Highlighted by Nikkan kogyo Shimbun
- July 29, 2011, Highlighted by The Science News
- July 5, 2010, Highlighted by NPG Asia Materials Highlights
- June 28, 2010, Highlighted by *ACS Noteworthy Chemistry*
- June 7, 2010, Highlighted by The Science News
- May 22, 2010, Highlighted by Chunichi News
- October 13, 2008, Highlighted by *Chemical & Engineering News*, Covalent Conducting Belts by Jyllian N. Kemsley
- September 30, 2008, Selected as Very Important Paper of Angew. Chem.
- January 17, 2005, Highlighted by *Heart Cut*, ACS
- October 30, 2004. Highlighted by The Asahi Shimbun
- October 6, 2004, Highlighted by *Nature*, Research Highlights 431, 643. Photoelectrochemistry: Molecular Trees Split Water by A. Wright
- 2004, Highlighted by *Chemistry World* (RSC) 2004, Issue 3, March.
- February 25, 2003, Highlighted by Nikkei Sangyo Shimbun
- February 12, 2003, Highlighted by Nihon Keizai Shimbun

- January 8, 2003, Highlighted by Fuji Television.
- November 12, 2002, Highlighted by Nikkei Sangyo Shimbun
- 2000, Highlighted by *Photonics Spectra* 34, 48 (2020).
- December 13, 1999, Highlighted by *Chemical & Engineering News*, Dendritic Rod Emits Blue Light by M. Freemantle
- October 26, 1998, Highlighted by *Chemical & Engineering News* 1998, 43, 37. Mimicking Natural Photosynthesis by M. Freemantle
- July 13, 1998, Highlighted by Nippon Kogyo Shimbun
- October 20, 1997, Highlighted by *Chemical & Engineering News*. Trapping Photons in Macromolecular Trees, 1997, 42, 35.
- August 25, 1997, Highlighted by Nihon Keizai Shimbun
- July 31, 1997, Highlighted by *Nature News & Views*, Trees to Trap Photons, by S. Mukamel
- October 24, 1996, Highlighted by Nikkei Sangyo Shimbun
- August 1, 1996, Highlighted by Nippon Kogyo Shimbun

9. Publications

Field: 2D Polymers, Covalent Organic Frameworks; Their Chemistry, Physics, Materials, and Applications

Google Scholar Citations: 48,000+; H-index: 100

Average Citation per Paper: 266

Monograph: 1 (Volume I & II); Book Chapters: 15; Patent: 9

Synthesis of Covalent Organic Frameworks via Coupling Polymerization

Zhuoer Li, Shanshan Tao, Matthew Addicoat, Toshikazu Nakamura, and Donglin Jiang*

Nature Synthesis 2025, 4, XXXX–XXXX. DOI: 10.1038/s44160-025-00895-4

Exploring Three-Dimensional Porphyrin-Based Covalent Organic Frameworks with Outstanding Solar Energy Conversion

Jiaqi Guo, Yunyu Guo, Mingxuan Zhang, Hongde Yu, Haohao Bi, Jingyi Feng, Jiahuan Wang, Keyu Geng, Thomas Heine, Junliang Sun, Di Li*, Donglin Jiang*, and Enquan Jin*
J. Am. Chem. Soc. 2025, 147, 30369–30379. DOI: 10.1021/jacs.5c09844

Polycrystalline Covalent Organic Frameworks: Multiscale Structural Insights from Morphological Diversity to Dynamic Lattice Evolution

Juan Li, Yukun Liu, Xuezeng Tian, Shulin Chen, Shanshan Tao, Masaki Takeguchi, and Donglin Jiang*

J. Am. Chem. Soc. 2025, 147, 26955–26968. DOI: 10.1021/jacs.5c09081

Harvesting Singlet and Triplet Excitation Energies in Covalent Organic Frameworks for Highly Efficient Photocatalysis

Ruoyang Liu, Dan Zhao, Sailun Ji, Haipei Shao, Yongzhi Chen, Minjun Feng, Tie Wang, Juan Li, Ming Lin, Tze Chien Sum, Ning Yan, Shu Seki, and Donglin Jiang*

Nature Materials 2025, 24, 1245–1257. DOI: 10.1038/s41563-025-02281-z

Covalent Organic Framework Photocatalysts for Green and Efficient Photochemical Transformations

Yongzhi Chen, Yuanyuan Guo, Tie Wang, Sailun Ji, Haipei Shao, Ming Lin, Shu Seki, Ning Yan, and Donglin Jiang*

Nature Communications 2025, 16, 6495. DOI: 10.1038/s41467-025-61853-4

An Ethynyl-Linked sp-Carbon-Conjugated Covalent Organic Framework through Sonogashira Cross-Coupling Reactions

Hao Yang, Shanshan Tao, Shuyue He, and Donglin Jiang*

J. Am. Chem. Soc. 2025, 147, 19667–19674. DOI/10.1021/jacs.5c01709

Semiconducting Covalent Organic Frameworks

Donglin Jiang*, Vincent Guan Wu Tan, Yifan Gong, Haipei Shao, Xinyu Mu, Zhangliang Luo, and Shuyue He

Chem. Rev. 2025, 125, 6203–6308. DOI: 10.1021/acs.chemrev.4c00950

Superacid In-Situ-Protected Synthesis of Covalent Organic Frameworks

Xingyao Ye, Ruoyang Liu, Xinyu Mu, Shanshan Tao, Hao Yang, Xuejiao J. Gao, Shuo-Wang Yang, and Donglin Jiang*

J. Am. Chem. Soc. 2025, 147, 6942–6957. DOI/10.1021/jacs.4c17548

Crystalline, Porous Figure-Eight-Noded Covalent Organic Frameworks (Hot Paper)

Yaling Li, Shanshan Tao, Yongzhi Chen, Xingyao Ye, Haipai Shao, Ming Lin, Yongfeng Zhi, and Donglin Jiang*

Angew. Chem., Int. Ed. 2025, 64, e2025103. DOI: 10.1002/anie.2025103

Vertically Expanded Covalent Organic Frameworks for Photocatalytic Water Oxidation into Oxygen

Shuailei Xie, Ruoyang Liu, Mengyu Liu, Hetao Xu, Xiong Chen, Xinchun Wang, and Donglin Jiang*

Angew. Chem., Int. Ed. 2025, 64, e202416771. DOI: 10.1002/anie.202416771 (Correction to this paper)

Synthesis of Single Crystal Two-Dimensional Covalent Organic Frameworks and Uncovering Their Hidden Structural Features by Three-Dimensional Electron Diffraction

Lejian Deng, Wantao Chen, Guojun Zhou, Ying Liu, Lingmei Liu, Yu Han, Zhehao Huang*, Donglin Jiang*

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Vertically Expanded Crystalline Porous Covalent Organic Frameworks

Shuailei Xie, Matthew Addicoat, and Donglin Jiang*

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Photocatalysis with Covalent Organic Frameworks

Yongzhi Chen and Donglin Jiang*

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Ketazine-Linked Crystalline Porous Covalent Organic Frameworks

Xinyu Mu, Shuailei Xie, Xingyao Ye, Shanshan Tao, Juan Li, and Donglin Jiang*

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Helicene Covalent Organic Frameworks for Robust Light Harvesting and Efficient Energy Transfers (VIP)

Cong Yin, Xingyao Ye, Shanshan Tao, Dan Zhao, Yongfeng Zhi, and Donglin Jiang*

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Wiring Covalent Organic Frameworks with Conducting Polymers

Yifan Gong, Lejian Deng, Xiaoyi Xu, Ruoyang Liu, Juan Li, Ning Huang, and Donglin Jiang*

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Exceptional Anhydrous Proton Conduction in Covalent Organic Frameworks

Shanshan Tao and Donglin Jiang*

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Accelerating Anhydrous Proton Transport in Covalent Organic Frameworks: Pore Chemistry and Its Impacts (VIP)

Shanshan Tao and Donglin Jiang*

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Molecular design of covalent organic framework photocatalysts

Yongzhi Chen and Donglin Jiang*

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Hierarchical Assembly of Donor–Acceptor Covalent Organic Frameworks for Photosynthesis of Hydrogen Peroxide from Water and Air

Yongzhi Chen, Ruoyang Liu, Yuanyuan Guo, Gang Wu, Tze Chien Sum, Shuo Wang Yang, and Donglin Jiang*

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Covalent Organic Frameworks: Linkage Chemistry and Its Critical Role in The Evolution of π Electronic Structures and Functions

Chunyu He, Shanshan Tao, Ruoyang Liu, Yongfeng Zhi*, and Donglin Jiang*

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Light-Gating Crystalline Porous Covalent Organic Frameworks

Guangtong Wang¶, Yu Feng¶, Xingyao Ye, Zhongping Li, Shanshan Tao, and Donglin Jiang*

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Photoresponsive Covalent Organic Frameworks: Visible-Light Controlled Conversion of Porous Structures and Its Impacts (Hot Paper)

Yu Feng, Guangtong Wang, Ruoyang Liu, Xingyao Ye, Shanshan Tao, Matthew A. Addicoat, Zhongping Li, QiuHong Jiang, and Donglin Jiang*

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Linkage-Engineered Donor–Acceptor Covalent Organic Frameworks for Optimal Photosynthesis of Hydrogen Peroxide from Water and Air

Ruoyang Liu[†], Yongzhi Chen[†], Hongde Yu, Miroslav Položij, Yuanyuan Guo, Tze Chien Sum, Thomas Heine, and Donglin Jiang*

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Crystalline, Porous Helicene Covalent Organic Frameworks

Qianqian Yan, Shanshan Tao, Ruoyang Liu, Yongfeng Zhi, and Donglin Jiang*

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Covalent Organic Frameworks: Reversible 3D Coalesce via Interlocked Skeleton–Pore Actions and Impacts on π Electronic Structures

Juan Li, Lili Liu, Xuan Tang, Xi Bai, Yukun Liu, Dongsheng Wang, Shanshan Tao, Ruoyang Liu, and Donglin Jiang*

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Integrated Interfacial Design of Covalent Organic Framework Photocatalysts to Promote Hydrogen Evolution from Water

Ting He, Wenlong Zhen, Yongzhi Chen, Yuanyuan Guo, Zhuoer Li, Ning Huang, Zhongping Li, Ruoyang Liu, Yuan Liu, Xu Lian, Can Xue, Tze Chien Sum, Wei Chen, and Donglin Jiang*

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Covalent Organic Frameworks

Ke Tian Tan, Fuxiang Wen, David Rodríguez-San-Miguel, Ning Huang, Felix Zamora, Xinliang Feng, Wei Wang, Arne Thomas, Donglin Jiang*

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Exciton Diffusion and Annihilation in An sp^2 Carbon-Conjugated Covalent Organic Framework

Xinzi Zhang, Keyu Geng, Donglin Jiang*, and Gregory D. Scholes*

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Ting He, Chenhuai Yang, Yongzhi Chen, Ning Huang, Shuming Duan, Zhicheng Zhang, Wenping Hu, and Donglin Jiang*

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Covalent Organic Frameworks: Chemistry of Pore Interface and Wall Surface Perturbation and Impact on Functions

Lejian Deng, Zhichao Ding, Xingyao Ye, and Donglin Jiang*

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Ke Tian Tan, Shanshan Tao, Ning Huang, and Donglin Jiang*

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Jia Xin Koh, Keyu Geng, and Donglin Jiang*

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Zhongping Li, Keyu Geng, Ting He, Ke Tian Tan, Ning Huang, Qiuhong Jiang, Yuki Nagao, and Donglin Jiang*

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Hydroxide Anion Transport in Covalent Organic Frameworks

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Ting He, Keyu Geng, and Donglin Jiang*

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Covalent Organic Frameworks: A Molecular Platform for Designer Polymeric Architectures and Functional Materials

Donglin Jiang*

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Covalent Organic Frameworks: An Ideal Platform for Designing Ordered Materials and Advanced Applications

Ruoyang Liu, Ke Tian Tan, Yifan Gong, Yongzhi Chen, Zhuoer Li, Shuailei Xie, Ting He, Zhen Lu, Hao Yang, and Donglin Jiang*

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