

Curriculum Vitae (CV)
Prof. Dr. Christoph Janiak



Institute for Inorganic Chemistry and Structural Chemistry
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born 1961 in Berlin, Germany, married, four children

1979 – 1984 Chemistry studies at the Technische Universität Berlin (TU Berlin)

1982 – 1983 Chemistry studies at the University of Oklahoma (OU), Norman, USA,

1984 Diploma (TU Berlin) and Master of Science (University of Oklahoma),
advisors Prof. Herbert Schumann, Prof. Jerold J. Zuckerman (OU)

1985 – 1987 Ph.D. at TU Berlin, advisor Prof. Dr. Herbert Schumann

1988 – 1990 Postdoc at Cornell-University, advisor Prof. Dr. Roald Hoffmann

1990 – 1991 Industrial postdoc, Central Polyolefin Division, BASF AG, Ludwigshafen

1991 – 1995 Habilitation at TU Berlin

1996 – 2010 Associate Professor, Univ. Freiburg for Inorganic and Analytical Chemistry

2007 – 2010 Project coordinator *Regio Chimica*, binational integrated Bachelor of Chemistry
between Université de Haute-Alsace (UHA/ENSCMu) and Univ. Freiburg

since 2010 Full Professor (Chair) for Bioinorganic Chemistry and Catalysis, Univ. Düsseldorf

Awards and Fellowships

1980 Klaus-Koch Award; 1981–1984 Fellowship of the Cusanuswerk; 1985–1987 Fellowship of the Fonds of the Chemical Industry (FCI); 1987 Award of the Fonds of the Chemical Industry (FCI); 1988 Schering Award; 1991 Heinz-Maier-Leibnitz Award; 1996 ADUC Award; 1997 Heisenberg Fellowship; 2005 Fellow of the Royal Society of Chemistry (FRSC); 2006 Visiting professor at the Univ. of Angers, France; 2015-2018 Visiting professor at Wuhan University of Technology, China; 2018-2020 Visiting professor at Petru Poni Institute, Iasi, Romania; 2018-2023 Visiting professor at Shenzhen Polytec and Sun-Yat Sen Univ., China.

Research Interests and Projects

– Metal-organic frameworks (MOFs), coordination polymers, chirality, supramolecular interactions
– Metal nanoparticles: Synthesis and catalysis; nanoparticles in ionic liquids

Editorial and Advisory Boards

2005-now *Zeitschrift Anorganische Allgemeine Chemie (ZAAC, Wiley)*
2006-2011 *Crystal Engineering Communications (CrystEngComm, RSC)*
2012-now *ChemistryOpen (Wiley)*
2013-2016 *Inorganica Chimica Acta (Elsevier)*
2014-2016 *Nano-Structures & Nano-Objects (Elsevier)*

Author and co-author of over 690 journal publications, book chapters, text books and patents;
h-Index: 88 Web of Science ISI; 88 Scopus; 94 Google Scholar; number of total citations > 41 000
(Google Scholar) (all numbers October 2023)

10 Most Important Publications (out of ca. 670 peer-reviewed journal articles)

10. S. Xing, J. Liang, P. Brandt, F. Schäfer, A. Nuhnen, T. Heinen, I. Boldog, J. Möllmer, M. Lange, O. Weingart, C. Janiak, *Capture and Separation of SO₂ Traces in Metal-Organic Frameworks via Pre-synthetic Pore Environment Tailoring by Methyl Groups*. *Angew. Chem. Int. Ed.* **2021**, 60, 17998-18005. <https://doi.org/10.1002/anie.202105229> (IF: 12.959)
9. J. Liang, V. Gvilava, C. Jansen, S. Öztürk, A. Spieß, J. Lin, S. Xing, Y. Sun, H. Wang, C. Janiak, *Cucurbituril-Encapsulating Metal–Organic Framework via Mechanochemistry: Adsorbents with Enhanced Performance*. *Angew. Chem. Int. Ed.* **2021**, 60, 15365-15370. <https://doi.org/10.1002/anie.202100675> (IF: 12.959)
8. J. Liang, A. Nuhnen, S. Millan, H. Breitzke, V. Gvilava, G. Buntkowsky, C. Janiak, *Encapsulation of a Porous Organic Cage into the Pores of a Metal-Organic Framework for Enhanced CO₂ Separation*. *Angew. Chem. Int. Ed.* **2020**, 59, 6068-6073. <https://doi.org/10.1002/anie.201916002> (IF: 12.959)
7. Ü. Kökçam-Demir, A. Goldman, L. Esrafilı, M. Gharib, A. Morsali, O. Weingart, C. Janiak, *Coordinatively unsaturated metal sites (open metal sites) in metal-organic frameworks: design and applications*. *Chem. Soc. Rev.* **2020**, 49, 2751-2798. <https://doi.org/10.1039/c9cs00609e> (IF: > 30)
6. J. Dechnik, J. Gascon, C. J. Doonan, C. Janiak, C. J. Sumby, *Mixed-Matrix Membranes*. *Angew. Chem. Int. Ed.* **2017**, 56, 9292-9310. <http://dx.doi.org/10.1021/ic5006456> (IF: 12.959)
5. S. S. Mondal, A. Bhunia, A. Kelling, U. Schilde, C. Janiak, H.-J. Holdt, *Giant Zn₁₄ Molecular Building Block in Hydrogen-bonded Network with Permanent Porosity for Gas Uptake*. *J. Am. Chem. Soc.* **2014**, 136, 44-47. <http://dx.doi.org/10.1021/ja410595q> (IF: 13.038)
4. S. F. L. Mertens, C. Vollmer, A. Held, M. H. Aguirre, M. Walter, C. Janiak, T. Wandlowski, *“Ligand-Free” Cluster Quantized Charging in an Ionic Liquid*. *Angew. Chem. Int. Ed.* **2011**, 50, 9735-9738. <http://dx.doi.org/10.1002/anie.201104381> (IF: 12.959)
3. S. K. Henninger, H. A. Habib, C. Janiak, *MOFs as adsorbents for low temperature heating and cooling applications*. *J. Am. Chem. Soc.* **2009**, 131, 2776-2777. <http://dx.doi.org/10.1021/ja808444z> (IF: 13.038)
2. C. Janiak, *Engineering coordination polymers towards applications*. *Dalton Trans.* **2003**, 2781-2804. <http://dx.doi.org/10.1039/b305705b> (IF: 4.177, >3000 citations)
1. C. Janiak, T. G. Scharmann, S. A. Mason, *Two-dimensional water and ice layers: Neutron diffraction studies at 278, 263 and 20 K*; *J. Am. Chem. Soc.* **2002**, 124, 14010-14011. <http://dx.doi.org/10.1021/ja0274608> (IF: 13.038)