

CV of Jürgen Caro



Common Information

Prof. Dr. Jürgen Caro Professor (W3) for Physical Chemistry (chair)
Institut für Physikalische Chemie und Elektrochemie, Leibniz Universität
Date of birth: 27. December 1951

Publications: 295 papers in peer-reviewed journals; 38 patents, *h*-Factor 46

Academic education and degrees

1992	Dr. rer. habil., University Leipzig
1989	Dr. sc. nat Academy of Sciences in Berlin-Adlershof
1977	Dr. rer. nat. at University Leipzig, (Mentor: J. Kärger), „summa cum laude“
1970-1977	Study of Chemistry, University Leipzig

Scientific carrier

Since 2001	W3 Professor for Physical Chemistry, Leibniz University Hannover
1992-2001	Leader Dpt. „Advanced Materials“ at the Institute for Applied Chemistry in Berlin
1977-1991	Central Institute for Physical Chemistry of the former DDR Academy of Sciences

Further activities and Awards

2013	Breck Award of the International Zeolite Association
2013	Ostwald-Medal of the Saxonian Academy of Sciences at Leipzig
2013-2016	Professor at the Chinese Academy of Sciences at Ningbo, China
2014-2017	Visiting Professor at Dalian University of Technology, China
2014-2017	Part-time Professor of the University at Panjin, China
2013	Director at ENMIX (European Nanoporous Materials Institute of Excellence).

10 Key publications

1. Yi Liu...J. Caro, In situ synthesis of MOF membranes on ZnAl-CO₃ LDH buffer layer-modified substrates, *J. Amer. Chem. Soc.* 136 (2014) 14353-14356.
2. A. Huang ... J. Caro, Organosilica-functionalized zeolitic imidazolate framework ZIF-90 membrane with high gas-separation performance, *Angew. Chem. Int. Ed.* 51 (2012) 10551.
3. Huang ... J. Caro, Bicontinuous zeolitic imidazolate framework ZIF-8@GO membrane with enhanced hydrogen selectivity, *J. Amer. Chem. Soc.* 136 (2014) 14686-14689.
4. Y. Liu ...N. Wang, Z.W. Cao, J. Caro, Molecular sieving through interlayer galleries, *J. Mater. Chem. A* 2 (2014) 1235-1238.
5. A. Huang ... J. Caro, Molecular Sieve Membrane with Hydrogen Permselectivity: ZIF-22 in LTA Topology, *Angew. Chem. Int. Ed.* 49 (2010) 4958.
6. Y. Li ... J. Caro, Molecular Sieve Membrane: Supported Metal-Organic Framework with High Hydrogen Selectivity, *Angew. Chem. Int. Ed.* 49 (2010) 548.
7. L. Diestel ... J. Caro, Pervaporation studies of n-hexane, benzene, mesitylene and their mixtures on zeolitic imidazolate framework ZIF-8 membranes, *Micropor. Mesopor. Mater.* 164 (2012) 288.
8. A. Huang ... J. Caro, Stepwise synthesis of sandwich-structured composite zeolite membranes with enhanced separation selectivity, *Chem. Commun.* 48 (2012) 3542.
9. H. Bux ... J. Caro, Oriented zeolitic imidazolate framework-8 membrane with sharp H₂/C₃H₈ molecular sieve separation, *Chem. of Mater.* 23 (2011) 2262.
10. H. Bux ... J. Caro, Novel MOF-membrane for molecular sieving predicted by IR-diffusion studies and molecular modeling, *Advanced Materials* 22 (2010) 4741.