

**Peer reviewed publications *Philipp Schulze* (ORCID 0000-0001-5047-2354)**

**2021**

18. [Racemization-free synthesis of N \$\alpha\$ -2-thiophenoyl-phenylalanine-2-morpholinoanilide enantiomers and their antimycobacterial activity](#)

L. Mann, M. Lang, P. Schulze, J.H. Halz, R. Csuk, S. Hoenke, R.W. Seidel, A. Richter  
Amino Acids 53, 1187-1196 (2021)

DOI: 10.1007/s00726-021-03044-1

**2019**

17. [Blending Real World Gasoline with Biofuel in a Direct Conversion Process](#)

E. Nürenberg, P. Schulze, F. Kohler, M. Zubel, S. Pischinger, F. Schüth  
ACS Sustainable Chem. Eng. 7, 249-257 (2019)

DOI: 10.1021/acssuschemeng.8b03044

**2018**

16. [Cromolyn/gelatin mixtures as aqueous alignment media and utilization of their mechanical stability for a layering technique](#)

T. Niklas, P. Schulze, C. Farès  
Magn. Reson. Chem. 56, 1176-1182 (2018)

DOI: 10.1002/mrc.4786

**2017**

15. [Configurationally Stable Chiral Dithia-Bridged Hetero\[4\]helicene Radical Cation: Electronic Structure and Absolute Configuration](#)

M. Kivala, B.D. Gliemann, A.G. Petrovic, E.M. Zolnhofer, P.O. Dral, F. Hampel, G. Breitenbruch, P. Schulze, V. Raghavan, K. Meyer, P.L. Polavarapu, N. Berova  
Chemistry – An Asian Journal 12, 31-35 (2017)

DOI: 10.1002/asia.201601452

**2015**

14. [Surface modification of PDMS microfluidic devices by controlled sulfuric acid treatment and the application in chip electrophoresis](#)  
L. Gitlin, P. Schulze, S. Ohla, H.-J. Bongard, D. Belder  
Electrophoresis **36**, 449-456 (2015)  
DOI: 10.1002/elps.201400269

## 2013

13. [Synergistic Effect of Ketone and Hydroperoxide in Brønsted Acid Catalyzed Oxidative Coupling Reactions](#)  
B. Schweitzer-Chaput, A. Sud, A. Pintér, S. Dehn, P. Schulze, M. Klussmann  
Angew. Chem. Int. Ed. **52**, 13228-13232 (2013)  
DOI: 10.1002/anie.201306752  
Angew. Chem. **125**, 13470-13474 (2013)  
DOI: 10.1002/ange.201306752

## 2011

12. [Microfluidic chips for chirality exploration](#)  
S. Nagl, P. Schulze, L. Gitlin, D. Belder  
Anal. Chem. **83**, 3232–3238 (2011)  
DOI: 10.1021/ac200150w

11. [Chip electrophoresis of active banana ingredients with label-free detection utilizing deep UV native fluorescence and mass spectrometry](#)  
S. Ohla, P. Schulze, S. Fritzsche, D. Belder  
Anal. Bioanal. Chem. **399**, 1853-1857 (2011)  
DOI: 10.1007/s00216-010-4557-z

## 2010

10. [Gas Chemical Studies Using Corona Discharge Reactors](#)  
P. Schulze, A. Stankiewicz, M. Aicher, M. Mattner, A. Ulrich  
Eur. Phys. J. D. **60**, 637-644 (2010)  
DOI: 10.1140/epjd/e2010-00235-0
9. [A new weakly basic amino-reactive fluorescent label for use in isoelectric focusing and chip electrophoresis](#)

P. Schulze, M. Link, M. Schulze, S. Thürmann, O.S. Wolfbeis, D. Belder

Electrophoresis **31**, 2749-2753 (2010)

DOI: 10.1002/elps.201000007

## 2009

8. [Rapid replication of master structures by double casting with PDMS](#)

L. Gitlin, P. Schulze, D. Belder

Lab Chip **9**, 3000-3002 (2009)

DOI: 10.1039/B904684D

7. [Progress in microchip enantioseparations](#)

S. Nagl, P. Schulze, M. Ludwig, D. Belder

Electrophoresis. **30**, 2765-2772 (2009)

DOI: 10.1002/elps.200900153

6. [New diode laser-excitable green fluorescent label and its application to detection of bovine serum albumin via microchip electrophoresis](#)

M. Link, P. Schulze, D. Belder, O.S. Wolfbeis

Microchim. Acta **166**, 183-188 (2009)

DOI: 10.1007/s00604-009-0169-8

5. [Label-free fluorescence detection in capillary and microchip electrophoresis](#)

P. Schulze, D. Belder

Anal. Bioanal. Chem. **393**, 515-525 (2009)

DOI: 10.1007/s00216-008-2452-7

## 2008

4. [Impact of laser excitation intensity on deep UV fluorescence detection in microchip electrophoresis](#)

P. Schulze, M. Ludwig, D. Belder

Electrophoresis **29**, 4894-4899 (2008)

DOI: 10.1002/elps.200800179

## 2007

3. [Microfluidic glass chips with an integrated nanospray emitter for coupling to a mass spectrometer](#)

P. Hoffmann, U. Häusig, P. Schulze, D. Belder

Angew. Chem. Int. Ed. **46**, 4913-4916 (2007)

DOI: 10.1002/anie.200605152

Angew. Chem. **119**, 5000-5003 (2007)

DOI: 10.1002/ange.200605152

2. [Two-photon excited fluorescence detection at 420 nm for label-free detection of small aromatics and proteins in microchip electrophoresis](#)

P. Schulze, M. Schüttpelz, M. Sauer, D. Belder

Lab Chip **7**, 1841-1844 (2007)

DOI: 10.1039/B710762E

## 2005

1. [Deep UV laser-induced fluorescence detection of unlabeled drugs and proteins in microchip electrophoresis](#)

P. Schulze, M. Ludwig, F. Kohler, D. Belder

Anal. Chem. **77**, 1325-1329 (2005)

DOI: 10.1021/ac048596m

## Peer reviewed publications of *current co-workers*

### 2018

Diastereoselective Steroid Hydroxylation: Efficient Directed Evolution Enabled by Mutability Landscaping

Acevedo-Rocha, C. G.; Gamble, C. G.; Lonsdale, R.; Li, A.; Nett, N.; Hoebenreich, S.; Lingnau, J.; Wirtz, C.; Farès, C.; Hinrichs, H.; Deege, A.; Mulholland, A. J.; Nov, Y.; Leys, D.; McLean, K. J.; Munro, A. W.; Reetz, M. T. P450-Catalyzed Regio- and. *ACS Catal.* **2018**, 8 (4), 3395-3410.

### 2007

#### *Helical microstructure of polynorbornene*

C. Karafilidis, K. Angermund, B. Gabor, A. Rufińska, R. Mynott, G. Breitenbruch, W. Thiel, G. Fink  
*Angew. Chem.* **119**, 3819-3923 (2007)  
*Angew. Chem. Int. Ed.* **46**, 3745-3749 (2007)

### 2004

#### *Metallocenkatalysierte C7-Verknüpfung in der Hydrooligomerisierung von Norbornenen durch $\sigma$ -Bindungs-Metathese: Einblick in die Mikrostruktur von Polynorbornen*

C. Karafilidis, H. Hermann, A. Rufińska, B. Gabor, R. Mynott, G. Breitenbruch, C. Weidenthaler, J. Rust, W. Joppek, M.S. Brookhart, W. Thiel, G. Fink  
*Angew. Chem.* **116**, 2498-2500 (2004)  
*Angew. Chem. Int. Ed.* **43**, 2444-2446 (2004)

#### *Directed evolution of cyclohexanone monooxygenases: Enantioselective biocatalysts for the oxidation of prochiral thioethers*

M.T. Reetz, F. Daligault, B. Brunner, H. Hinrichs, A. Deege  
*Angew. Chem.* **116**, 4170-4173 (2004)  
*Angew. Chem. Int. Ed.* **43**, 4078-4081 (2004)

### 2001

#### *Combinatorial Discovery of New Photocatalysts for Water Purification with Visible Light*

C. Lettmann, H. Hinrichs, W.F. Maier  
*Angew. Chem.* **113**, 3258-3262 (2001)  
*Angew. Chem. Int. Ed.* **40**, 3160-3164 (2001)

#### *The development of a high throughput reactor for the catalytic screening of three phase reactions*

S. Thomson, C. Hoffmann, S. Ruthe, H.-W. Schmidt, F. Schüth  
*Appl. Catal. A* **220**, 253-264 (2001)

## 2000

[Super-high-throughput screening of enantioselective catalysts by using capillary array electrophoresis](#)

M.T. Reetz, K.M. Kühling, A. Deege, H. Hinrichs, D. Belder

Angew. Chem. **112**, 4049-4052 (2000)

Angew. Chem. Int. Ed. **39**, 3891-**3893** (2000)

[Circular dichroism as a detection method in the screening of enantioselective catalysts](#)

M.T. Reetz, K.M. Kühling, H. Hinrichs, A. Deege

Chirality **12**, 479-482 (2000)

## 1997

[Novel crown ethers with a trithiadiazapentalene-trithiotriuret redox system](#)

H. Graubaum, F. Tittelbach, G. Lutze, K. Gloe, M. Mackrodt, T. Kruger, N. Krauss, A. Deege, H. Hinrichs

Angew. Chem. Int. Ed. **36**, 1648-1650 (1997)

## 1992

[Preparation, purification, and analysis of alkylated cyclodextrins](#)

G. Schomburg, A. Deege, H. Hinrichs, E. Hübinger, H. Husmann

High Resolut. Chromatogr. **15**, 579-584 (1992)

## 1982

[Crosslinking of alkylpolysiloxane films on various types of glass surfaces including fused silica using  \$\gamma\$ -radiation of a  \$^{60}\text{Co}\$ -source. Comparison to crosslinking by thermal epoxide treatment](#)

G. Schomburg, H. Husmann, S. Ruthe, M. Herraiz

Chromatographia **15**, 599-610 (1982)