

Dr. Boris Mizaikoff

CURRICULUM VITAE

Section 1: Curriculum Vitae

Section 2: List of Publications



Boris Mizaikoff

November 2018

SECTION 1

Curriculum Vitae

BORIS MIZAIKOFF

Professor and Chair, Director IABC

DATA

Professional:

Institute of Analytical and Bioanalytical Chemistry (IABC)
Ulm University
Albert-Einstein-Allee 11
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Germany

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ResearchID: <http://www.researcherid.com/rid/G-9959-2013>

ORCID: <http://orcid.org/0000-0002-5583-7962>

Research Gate: https://www.researchgate.net/profile/Boris_Mizaikoff/

EDUCATION

2004 Tenure, Georgia Institute of Technology (U.S.A.)
2000 Habilitation, Analytical Chemistry, Vienna University of Technology, Institute of Analytical Chemistry (Austria)
1996 Ph.D., Analytical Chemistry, Vienna University of Technology, Institute of Analytical Chemistry (Austria)
1993 Diploma, Analytical Chemistry, Vienna University of Technology, Institute of Analytical Chemistry (Austria)

Advisors:

Prof Robert Kellner († 1997), Vienna University of Technology, Institute of Analytical Chemistry (Diploma, Ph.D.)
Prof. Matthew Hall, University of Texas (Austin), Dept. of Mechanical Engineering (Postdoctoral)

PROFESSIONAL EXPERIENCE

Since 2018 **Adjunct Professorship** at The Arctic University of Norway (UiT); Tromsø, Norway
Since 2018 **Guest Professorship** at University of Johannesburg; Johannesburg, South Africa
2018 **Visiting Professor** (Tan Chin Tuan Fellow) at Nanyang Technical University (NTU); Singapore
2013 **OCE Distinguished Visiting Professor** at CSIRO; Perth, Australia
2013 and 2014 **Visiting Professor** at INCTAA/UNICAMP, University of Campinas; Campinas, Brazil
Fall 2007-present **Chaired Professor (W3) and Director of the Institute of Analytical and Bioanalytical Chemistry** at the University of Ulm, Germany; **Director of the Focused Ion Beam Center UUlM and of the Service Center Elemental Analysis**
2007 Declined offer for Director position of the Institute of Ecological Chemistry (IOEC) @ Helmholtz Research Center for Environmental Health, Munich, Germany
2007 Declined offer for Director position of the National Center of Sensor Research (NCSR) @ Dublin City University, Dublin, Ireland
2005-present Member of the Center for Cell and Molecular Signaling at Emory University, School of Physiology
2004-2007 Director of the Focused Ion Beam (FIB²) Center at Georgia Tech
2004-present Georgia Institute of Technology, School of Chemistry and Biochemistry, **Associate Professor (tenured)**
2000-2004 Georgia Institute of Technology, School of Chemistry and Biochemistry, **Assistant Professor** (Director of the Applied Sensors Laboratory)
2000 Habilitation at Vienna University of Technology, Institute of Analytical Chemistry, **Professor**
1997-2003 Coordination of 4 interdisciplinary, multinational **European Union Research Projects**
1997-1998 University of Texas, Dept. of Mechanical Engineering (Austin, TX), **Postdoctoral Fellow**
1996-2000 Vienna University of Technology, Institute of Analytical Chemistry, **Assistant Professor** (Director Chemical Sensors Laboratory)
1992-1996 Vienna University of Technology, Institute of Analytical Chemistry, **Research Assistant**

Ph.D. thesis completed: **29**; Diploma thesis completed: **25**; Master thesis completed: **32**

Currently in progress: **21** Ph.D., **5** Master

RESEARCH INTERESTS

Optical chemical sensors, biosensors and biomimetic sensors in the mid-infrared (3-20 μm) spectral range; quantum cascade laser based sensors; multifunctional (nano)analytical platforms; system miniaturization, integration and micro-/nanofabrication; on-chip diagnostic; focused ion beam based nanofabrication; (bio)molecular recognition architectures for separation and sensing applications; molecularly templated materials; functionalized sol-gel membranes; solid phase extraction with functionalized materials; multivariate/chemometric data evaluation; hyperspectral imaging; advanced vibrational spectroscopy in the far- and nearfield; integrated THz probes; environmental analytical chemistry; process analytical chemistry; biomedical diagnostics.

HONORS AND AWARDS

2018	<i>Tan Chin Tuan Fellow 2018 @ Nanyang Technical University (NTU)</i>
2017	<i>Collaboration Award Industry-Science (Kooperationspreis Wirtschaft-Wissenschaft) by Ulm University</i>
2017	<i>Fellow of the Center for Integrated Quantum Science and Technology (IQST) @ Ulm University</i>
2016	<i>RSC Emerging Technologies Award by the Royal Society of Chemistry (RSC)</i>
2014	<i>Fresenius-Lecturer 2014 by the German Chemical Society (GDCh)</i>
2013	<i>Fellow of the Royal Society of Chemistry (RSC)</i>
2010	<i>Craver Award by the Coblenz Society</i>
2009	<i>Robert Kellner Lecture Award by the Division of Analytical Chemistry, EuCheMS</i>
2006	<i>Fellow of the American Association for the Advancement of Science (AAAS)</i>
2005	<i>Class of 1934 Outstanding Interdisciplinary Activities Award by the Georgia Institute of Technology</i>
2005	<i>Pittsburgh Conference Achievement Award by the Society for Analytical Chemists of Pittsburgh</i>
2004	<i>Fritz Feigl Award by the Austrian Society of Analytical Chemistry</i>
2004	<i>Meggers Award by the Society of Applied Spectroscopy</i>
2003	<i>Sigma Xi Outstanding Young Faculty Award by the Georgia Institute of Technology</i>
1999	<i>Pro Analytica Award by the Institute of Analytical Chemistry, Vienna University of Technology</i>
1997	<i>Erwin Schrödinger Research Award by the Austrian Science Foundation</i>
1996	<i>Mobility Award by the Academic Workingparty of the Vienna University of Technology</i>
1993	<i>GÖCH Science Award by the Austrian Chemical Society</i>

PROFESSIONAL AND SYNERGISTIC ACTIVITIES (for brevity from 1999)

2016-present	Editorial Advisory Board of <i>ACS Sensors</i> (American Chemical Society; ACS)
2014-2017	Editorial Advisory Board of <i>Analytical Chemistry</i> (American Chemical Society; ACS)
2014-present	Editorial Board of <i>Scientific Reports</i>
2013-2015	Associate Editor of <i>Photonics Research</i> (The Optical Society; OSA)
2009-present	Associate Editor Europe of <i>Analyst</i> (Royal Society of Chemistry; RSC)
2007-present	International Advisory Board of <i>Analytical and Bioanalytical Chemistry</i>
2007	Chairman <i>IEEE Sensors Conference</i>
2005	Chairman <i>Gordon Research Conference on Chemical Sensors and Interfacial Design</i>
2005	Chairman <i>PRF Summer School on Chemometrics in Sensor Technology</i>
2004	Co-Chairman <i>ACS ProSpectives Conference Emerging Opportunities in Chemical Sensing and Biosensing</i>
2003-present	International Advisory Board <i>Encyclopedia of Sensors</i>
2003-present	Editorial Board <i>Sensor Letters</i>
2003-present	Associate Editor <i>IEEE Sensors Journal</i>
2003	Co-Chairman <i>Gordon Research Conference on Chemical Sensors and Interfacial Design</i>
2002-200	Co-PI NSF IGERT project: "Signals in the Sea" (granted; PD: Mark Hay, School of Biology)
2002-present	Program Committee <i>SPIE Photonics West, Biomedical Optics</i>
2002-2005	Editorial Board <i>Microchimica Acta</i>
2001-present	Program Committee <i>IEEE Sensors Conference</i>
2001-present	Permanent Committee <i>International Conference on Advanced Semiconductor Devices and Microsystems</i>
2001-present	Organizer <i>IEEE-ISA Workgroup on Chemical and Biological Sensors</i>
2001-present	Permanent Committee <i>IWA Conference on Automation in Water Quality Monitoring</i>
2000-present	Permanent Steering Committee <i>Europt(r)oede Conference Series</i>
1999-2002	Editorial Board <i>Spectroscopy Letters</i>
1999-present	Co-founder <i>Advanced Study Course on Optical Chemical Sensors (ASCOS-Series)</i>

SHORT NARRATIVE BIOGRAPHY

Dr. Boris Mizaikoff received his Ph.D. in Analytical Chemistry at the Vienna University of Technology in 1996. Heading the Chemical Sensor Laboratory (CSL), he has been responsible for numerous research projects in the field of chemical IR sensors, including several multinational projects funded by the European Union. In 1997, he has been with the University of Texas, Austin/USA as a postdoctoral fellow. In October 2000 he finalized his Habilitation (Assoc. Prof. for Analytical Chemistry) at the Vienna University of Technology. Since Fall 2000, he was faculty member at the Georgia Institute of Technology, School of Chemistry and Biochemistry, heading the Applied Sensors Laboratory (ASL). Since 2004 he was Director of the Focused Ion Beam Center (FIB² Center) at Georgia Tech, and since 2005 member of the Center for Cell and Molecular Signaling at Emory University, School of Physiology. In Fall 2007, he has joined the faculty at Ulm University, Germany, as a Chaired Professor and Director of the Institute of Analytical and Bioanalytical Chemistry (IABC). Today, his research interests focus on optical sensors, biosensors, and biomimetic sensors operating in the mid-infrared spectral range, applications of novel IR light sources (e.g., quantum cascade and interband cascade lasers), system miniaturization and integration based on micro- and nanofabrication, multifunctional (nano)analytical platforms (e.g., combination AFM-IR, etc.), focused ion beam (FIB) microscopy, development of (bio)molecular recognition architectures for separation and sensing applications (e.g., molecularly templated materials), chemometric data evaluation, environmental analytical chemistry with focus on water quality monitoring, process analytical chemistry, and biomedical diagnostics. He is author/co-author of 300+ peer-reviewed publications, 16 patents, and 100+ plenary, keynote, and invited contributions at scientific conferences (**WoS: h-index: 42**).

REVIEWER

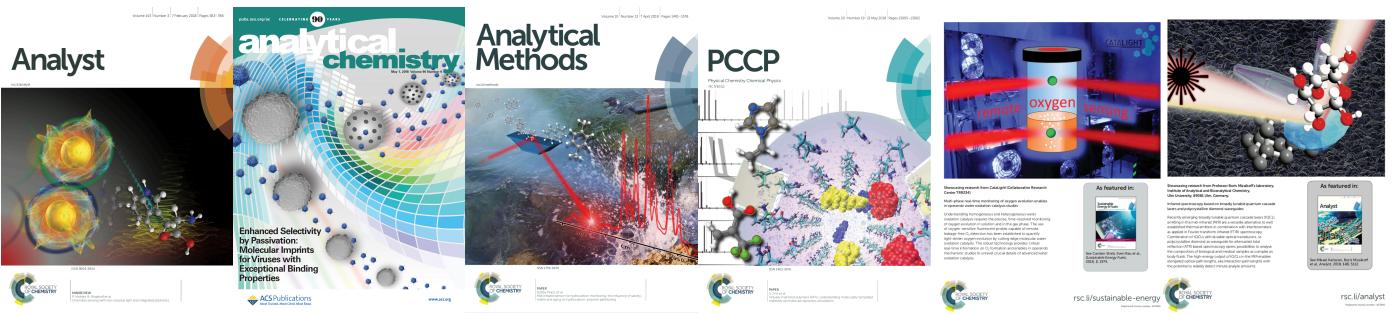
Journals: Nature Mat., Anal. Chem., J. Phys. Chem., J. for Analyt. and Bioanalyst. Chem., Sensors & Actuators, Env. Sci. Technol., JACS, J. of Lightwave Technol., Angew. Chemie, Anal. Chim. Acta, Intern. J. Environ. Anal. Chem., IEEE Sensors, J. Appl. Phys., etc.
Agencies: NIH, DOE, NSF, European Union, PRF, EPA, DFG, ERC Consolidator Panel

SECTION 2

List of Publications

COVER GALLERY





2018



PUBLICATIONS

Patents

16. **Author(s):** A. Wilk, J. C. Carter, M. P. Crisp, A. M. Manuel, S.-S. Kim, B. Mizaikoff
Title: *Substrate-Integrated Hollow Waveguide Sensors*
Patent: U.S. patent pending **No:** US 20130081447 A1 **Year:** 2013
15. **Author(s):** J. S. Szobota, J. M. Brown, C. C. Walters, M. M. Disko, B. Mizaikoff
Title: *Method and Apparatus for a Mid-Infrared (MIR) System for Real Time Detection of Petroleum in Colloidal Suspensions of Sediments and Drilling Muds during Drilling Operations, Logging and Production Operations*
Patent: U.S. patent granted **No:** US 2-12/0170023 A1 **Year:** 2012
14. **Author(s):** J. C. Carter, J. W. Chan, J. E. Trebes, S. M. Angel, B. Mizaikoff
Title: *Combined Raman and IR Fiber-Based Sensor for Gas Detection*
Patent: U.S. patent granted **No:** US 20120105827 A1 **Year:** 2012
13. **Author(s):** G. Lamps, J. Yadav, B. Mizaikoff
Title: *Radiographic Contrast Media Capture Material*
Patent: PCT patent granted **No:** WO 2008101166 A1 **Year:** 2008
12. **Author(s):** C. Kranz, B. Mizaikoff, W. Schuhmann, K. Eckhard
Title: *Near Field Scanning Measurement – Alternating Current – Scanning Electrochemical Microscopy Devices and Methods of Their Use*
Patent: PCT patent granted **No:** WO 2008066779 **Year:** 2008
11. **Author(s):** B. Mizaikoff, H. Shin, P. Haring, D. Surawicz
Title: *Integrated Sensing Probes, Methods of Fabrication Thereof, and Methods of Use Thereof*
Patent: U.S. patent granted **No:** WO 2008105888 **Year:** 2008
10. **Author(s):** B. Mizaikoff, C. Charlton, M. Giovannini, J. Faist
Title: *Thin Film Waveguides, Methods of Fabrication Thereof, and Detection Systems*
Patent: PCT patent granted **No:** WO 2007030737 **Year:** 2007
9. **Author(s):** R. Weiss, B. Mizaikoff
Title: *Rezeptoren für Mykotoxine
(Receptors for mycotoxins)*
Patent: PCT patent granted **No:** WO 2003101580 **Year:** 2003
8. **Author(s):** R. Weiss, B. Mizaikoff
Title: *Rezeptoren für Mykotoxine
(Receptors for mycotoxins)*
Patent: Austrian patent granted **No:** A 837/2002 **Year:** 2002
7. **Author(s):** C. Kranz, B. Mizaikoff, A. Lugstein, E. Bertagnolli
Title: *Vorrichtung für die gleichzeitige Durchführung einer elektrochemischen und einer topographischen Nahfeld-Mikroskopie
(Combined Scanning Electrochemical and Topographical Nearfield Microscopy)*
Patent: Japan, patent pending **No:** 502381/2002 **Year:** 2002
6. **Author(s):** A. Lugstein, E. Bertagnolli, C. Kranz, B. Mizaikoff
Title: *Verfahren zur Herstellung einer Vorrichtung für die gleichzeitige Durchführung einer elektrochemischen und einer topographischen Nahfeld-Mikroskopie
(Fabrication of Combined Scanning Electrochemical and Topographical Nearfield Microscopy Tips)*
Patent: European patent granted **No:** 01940013.4 **Year:** 2002
5. **Author(s):** C. Kranz, B. Mizaikoff, A. Lugstein, E. Bertagnolli
Title: *Vorrichtung für die gleichzeitige Durchführung einer elektrochemischen und einer topographischen Nahfeld-Mikroskopie
(Combined Scanning Electrochemical and Topographical Nearfield Microscopy)*
Patent: European patent granted **No:** 01944719.2 **Year:** 2002
4. **Author(s):** A. Lugstein, E. Bertagnolli, C. Kranz, B. Mizaikoff
Title: *Verfahren zur Herstellung einer Vorrichtung für die gleichzeitige Durchführung einer elektrochemischen und einer topographischen Nahfeld-Mikroskopie
(Fabrication of Combined Scanning Electrochemical and Topographical Nearfield Microscopy Tips)*
Patent: USA patent granted **No:** 10/297562 **Year:** 2002

3. **Author(s):** C. Kranz, B. Mizaikoff, A. Lugstein, E. Bertagnolli
Title: *Vorrichtung für die gleichzeitige Durchführung einer elektrochemischen und einer topographischen Nahfeld-Mikroskopie*
(Combined Scanning Electrochemical and Topographical Nearfield Microscopy)
Patent: USA patent granted **No:** 10/297627 **Year:** 2002

2. **Author(s):** A. Lugstein, E. Bertagnolli, C. Kranz, B. Mizaikoff
Title: *Verfahren zur Herstellung einer Vorrichtung für die gleichzeitige Durchführung einer elektrochemischen und einer topographischen Nahfeld-Mikroskopie*
(Fabrication of Combined Scanning Electrochemical and Topographical Nearfield Microscopy Tips)
Patent: Austrian patent granted **No:** AT 410.032 **Year:** 2001

1. **Author(s):** C. Kranz, B. Mizaikoff, A. Lugstein, E. Bertagnolli
Title: *Vorrichtung für die gleichzeitige Durchführung einer elektrochemischen und einer topographischen Nahfeld-Mikroskopie*
(Combined Scanning Electrochemical and Topographical Nearfield Microscopy)
Patent: Austrian patent granted **No:** AT 410.845 **Year:** 2001

Peer-reviewed Publications

2018 accepted or in press

316. Author(s): J. P. Guin, M. Dinc, B. Mizaikoff
 Title: *Selective Navigation of Bisphenol-A from Water to a Polarity Tuned Porous Molecularly Imprinted Polymer*
 Journal: *Chemistry Select* Vol.: DOI: accepted Year: 2018
315. Author(s): Y. Hu, Q. Chen, L. Ci, K. Cao, B. Mizaikoff
 Title: *Carbon Nanodots Based Attenuated Total Reflection Surface-Enhanced Infrared Absorption Spectroscopy and its Application to the Analysis of Adenine in Aqueous Solution*
 Journal: *Analytical and Bioanalytical Chemistry* Vol.: DOI: accepted Year: 2018
314. Author(s): E. Tütüncü, B. Mizaikoff
 Title: *Cascade Laser Sensing Concepts for Advanced Breath Diagnostics*
 Journal: *Analytical and Bioanalytical Chemistry* Vol.: DOI: accepted Year: 2018
313. Author(s): L. T. Hagemann, M. M. McCartney, A. G. Fung, D. J. Peirano, C. E. Davis, B. Mizaikoff
 Title: *Portable Combination of Fourier Transform Infrared Spectroscopy and Differential Mobility Spectrometry for Advanced Vapor Phase Analysis*
 Journal: *Analyst* Vol.: DOI: accepted Year: 2018
312. Author(s): P. Stenclova, S. Freisinger, H. Barth, A. Kromka, B. Mizaikoff
 Title: *Cyclic Changes in the Amide Bands within Escherichia Coli Biofilms Monitored by Real-Time Infrared Attenuated Total Reflection Spectroscopy*
 Journal: *Applied Spectroscopy* Vol.: DOI: accepted Year: 2018
311. Author(s): Á. I. López-Lorente, P. Wang, S. Klose, J. Balko, R. Lu, L. Dürselen, B. Mizaikoff
 Title: *Surface Analysis of Sheep Menisci after Meniscectomy via Infrared Attenuated Total Reflection Spectroscopy*
 Journal: *Journal of Biophotonics* Vol.: DOI: accepted Year: 2018
310. Author(s): T. Öner, P. Thiam, G. Kos, R. Krska, F. Schwenker, B. Mizaikoff
 Title: *Machine Learning Algorithms for the Automated Classification of Contaminated Maize at Regulatory Limits via Infrared Attenuated Total Reflection Spectroscopy*
 Journal: *World Mycotoxin Journal* Vol.: DOI: accepted Year: 2018
309. Author(s): J. Petrucci, E. Tütüncü, A. Cardoso, B. Mizaikoff
 Title: *Real-time and Simultaneous Monitoring of NO, NO₂ and N₂O Using Substrated-integrated Hollow Waveguides Coupled to Compact FTIR Spectrometer*
 Journal: *Applied Spectroscopy* Vol.: DOI: 10.1177/0003702818801371 Year: 2018

2019

308. Author(s): N. A. Karaseva, B. Pluhar, E. A. Beliaeva, T. N. Ermolaeva, B. Mizaikoff
 Title: *Synthesis and Application of Molecularly Imprinted Polymers for Trypsin Piezoelectric Sensors*
 Journal: *Sensors & Actuators B: Chemical* Vol.: 288 Pages: 272-279 Year: 2019

2018

307. Author(s): N. Schauer, M. Dinc, B. Raabe, T. Hummel, M. Müller, H. Sobek, B. Mizaikoff
 Title: *Inhibitor-assisted Thermolysin-imprinted Beads Selectively Remove Matrix Metalloproteases from CHO Cell Culture in Biotechnological Production Processes*
 Journal: *RSC Advances* Vol.: 8 Pages: 32387-32394 Year: 2018
306. Author(s): E. Tütüncü, M. Nägele, S. Becker, M. Fischer, J. Koeth, C. Wolf, S. Köstler, V. Ribitsch, A. Teuber, M. Gröger, S. Kress, M. Wepler, U. Wachter, J. Vogt, P. Radermacher, B. Mizaikoff
 Title: *ICLs in the ICU: Advanced Photonic Sensors based on Interband Cascade Lasers for Real-time Mouse Breath Analysis*
 Journal: *ACS Sensors* Vol.: 3 Pages: 1743-1749 Year: 2018
305. Author(s): P. Wang, J. Balko, R. Lu, A. I. López-Lorente, L. Dürselen, B. Mizaikoff
 Title: *Analysis of Human Menisci Degeneration via Infrared Attenuated Total Reflection Spectroscopy*
 Journal: *Analyst* Vol.: 143 Pages: 5023-5029 Year: 2018

- 304.** **Author(s):** N. Schwenk, B. Mizaikoff, S. Cárdenas, A. I. López-Lorente
Title: *Gold-Nanostar-Based SERS Substrates for Studying Protein Aggregation Processes*
Journal: Analyst **Vol.:** 143 **Pages:** 5103-5111 **Year:** 2018
- 303.** **Author(s):** J. Haas, E. V. Catalán , P. Piron , M. Karlsson, B. Mizaikoff
Title: *Analyzing Glucose in Human Saliva with Broadly Tunable Quantum Cascade Lasers and Polycrystalline Diamond*
Journal: Analyst **Vol.:** 143 **Pages:** 5112-5119 **Year:** 2018
- 302.** **Author(s):** F. L. Huber, S. Amthor, B. Schwarz, B. Mizaikoff, C. Streb, S. Rau
Title: *Multi-phase Real-time Monitoring of Oxygen Evolution Enables *in operando* Water Oxidation Catalysis Studies*
Journal: Sustainable Energy and Fuels **Vol.:** 2 **Pages:** 1974-1978 **Year:** 2018
- 301.** **Author(s):** C. Frey, H. Barth, C. Kranz, B. Mizaikoff
Title: *Horizontal Black Lipid Bilayer Membranes for Studying Pore-forming Toxins*
Journal: Analytical Methods **Vol.:** 10 **Pages:** 3153-3161 **Year:** 2018
- 300.** **Author(s):** Y. Hu, Á. I. López-Lorente, B. Mizaikoff
Title: *A Versatile Analytical Platform Based on Graphene-Enhanced Infrared Attenuated Total Reflection Spectroscopy*
Journal: ACS Photonics **Vol.:** 5 **Pages:** 2160-2167 **Year:** 2018
- 299.** **Author(s):** F. Seichter, E. Tuetuencue, T. Schneider, J. Vogt, U. Wachter, M. Groeger, S. Kress, P. Radermacher, B. Mizaikoff
Title: *Online Monitoring of Carbon Dioxide and Oxygen in Exhaled Mouse Breath via iHWG-FTIR-LS Spectroscopy*
Journal: Journal of Breath Research **Vol.:** 12 **Pages:** 036018: 1-11 **Year:** 2018
- 298.** **Author(s):** J. Haas, E. V. Catalán, P. Piron, F. Nikolajeff, L. Österlund, M. Karlsson, B. Mizaikoff
Title: *Polycrystalline Diamond Thin-film Waveguides for Mid-infrared Evanescent Field Sensors*
Journal: ACS Omega **Vol.:** 3 **Pages:** 6190-6198 **Year:** 2018
- 297.** **Author(s):** M. Dinc, H. Basan, T. Hummel, M. Müller, H. Sobek, I. Rapp, T. Diemant, R. J. Behm, M. Lindén, B. Mizaikoff
Title: *Selective Binding of Inhibitor-Assisted Surface-Imprinted Core/Shell Microbeads in Protein Mixtures*
Journal: Chemistry Select **Vol.:** 3 **Pages:** 4277-4282 **Year:** 2018
- 296.** **Author(s):** M. Gast, S. Kühner, H. Sobek, P. Walther, B. Mizaikoff
Title: *Enhanced Selectivity by Passivation: Molecular Imprints for Viruses with Exceptional Binding Properties*
Journal: Analytical Chemistry **Vol.:** 90 **Pages:** 5576-5585 **Year:** 2018
- 295.** **Author(s):** Stefan Zink, Francisco Alirio Moura, Pedro Alves da Silva Autreto, Douglas Soares Galvão, Boris Mizaikoff
Title: *Efficient Prediction of Suitable Functional Monomers for Molecular Imprinting via Local Density of States Calculations*
Journal: Physical Chemistry Chemical Physics (PCCP) **Vol.:** 20 **Pages:** 13153-13158 **Year:** 2018
- 294.** **Author(s):** Stefan Zink, Francisco Alirio Moura, Pedro Alves da Silva Autreto, Douglas Soares Galvão, Boris Mizaikoff
Title: *Virtually Imprinted Polymers (VIPs): Understanding Molecularly Templatized Materials via Molecular Dynamics Simulations*
Journal: Physical Chemistry Chemical Physics (PCCP) **Vol.:** 20 **Pages:** 13145-13152 **Year:** 2018
- 293.** **Author(s):** M. Gast, S. Kühner, H. Sobek, B. Mizaikoff
Title: *Understanding the Viral Load during the Synthesis of Virus Imprinted Particles via Real-Time Quantitative PCR*
Journal: Analyst **Vol.:** 143 **Pages:** 2616-2622 **Year:** 2018
- 292.** **Author(s):** J. Petrucci, A. Wilk, A. Cardoso, B. Mizaikoff
Title: *A Hyphenated Preconcentrator-Infrared-Hollow-Waveguide Sensor System for N₂O Sensing*
Journal: Scientific Reports **Vol.:** 8 **Pages:** 5909: 1-6 **Year:** 2018
- 291.** **Author(s):** A. I. López-Lorente, R. A. Picca, J. Izquierdo, C. Kranz, B. Mizaikoff, C. Di Franco, S. Cárdenas, N. Cioffi, G. Palazzo, A. Valentini
Title: *Ion Beam Sputtering Deposition and Characterization of Silver Nanoparticles and TiO_x/ZnO Nanocomposites for Surface Enhanced Vibrational Spectroscopy*
Journal: Microchimica Acta **Vol.:** 185 **Pages:** 1-9 **Year:** 2018
- 290.** **Author(s):** R. Geitner, S. Götz, R. Stach, M. Siegmann, P. Krebs, S. Zechel, K. Schreyer, A. Winter, M. D. Hager, U. S. Schubert, S. Gräfe, B. Dietzek, B. Mizaikoff, M. Schmitt, J. Popp
Title: *Hydrogel-Embedded Model Photo Catalytic System Investigated by Raman and IR Spectroscopy Assisted by Density Functional Theory Calculations and Two-Dimensional Correlation Analysis*
Journal: Journal of Physical Chemistry A **Vol.:** 122 **Pages:** 2677-2687 **Year:** 2018
- 289.** **Author(s):** I. S. M. Khalil, A. F. Tabak, Y. Hamed, M. Tawakol, N. El Gohary, B. Mizaikoff, M. Sitti
Title: *Independent Actuation of Two-Tailed Microrobots*
Journal: IEEE Robotics and Automation Letters **Vol.:** 3 **Pages:** 1703-1710 **Year:** 2018

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|------|-------------------|--|--------------|-----|---------------|-----------|
| 288. | Author(s): | R. Stach, B. Pejcic, C. Heath, M. Myers, B. Mizaikoff | | | | |
| | Title: | <i>Mid-Infrared Sensor for Hydrocarbon Monitoring: The Influence of Salinity, Matrix and Aging on Hydrocarbon-Polymer Partitioning</i> | | | | |
| | Journal: | Analytical Methods | Vol.: | 10 | Pages: | 1516-1522 |
| 287. | Author(s): | H. Basan, M. Dinc, B. Mizaikoff | | | | |
| | Title: | <i>Inhibitor-assisted Synthesis of Molecularly Imprinted Microbeads for Protein Recognition</i> | | | | |
| | Journal: | Analytical Methods | Vol.: | 10 | Pages: | 997-1005 |
| 286. | Author(s): | V. Kokoric, J. Theisen, A. Wilk, C. Penisson, G. Bernard, B. Mizaikoff | | | | |
| | Title: | <i>Determining the Partial Pressure of Volatile Components via Substrate-Integrated Hollow Waveguide Infrared Spectroscopy with Integrated Microfluidics</i> | | | | |
| | Journal: | Analytical Chemistry | Vol.: | 90 | Page: | 4445-4451 |
| 285. | Author(s): | J. Haas, M. Schwartz, U. Rengstl, M. Jetter, P. Michler, B. Mizaikoff | | | | |
| | Title: | <i>Chem/Bio Sensing with Non-Classical Light and Integrated Photonics</i> | | | | |
| | Journal: | Analyst | Vol.: | 143 | Pages: | 593-605 |
| 284. | Author(s): | R. S. Fernandes, M. Dinc, I. M. Raimundo Jr., B. Mizaikoff | | | | |
| | Title: | <i>Synthesis and Characterization of Porous Surface Molecularly Imprinted Silica Microsphere for Selective Extraction of Ascorbic Acid</i> | | | | |
| | Journal: | Microporous & Mesoporous Materials | Vol.: | 264 | Pages: | 28-34 |
| 283. | Author(s): | N. Kumar, Y. Hu, S. Singh, B. Mizaikoff | | | | |
| | Title: | <i>Emerging Biosensor Platforms for the Assessment of Water- Borne Pathogens</i> | | | | |
| | Journal: | Analyst | Vol.: | 143 | Pages: | 359-373 |

2017

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|------|-------------------|--|---------------|--|-----------------|-------------------------------------|--------------|-----|---------------|-------------|--------------|------|
| 282. | Author(s): | R. Stach, J. Haas, E. Tütüncü, S. Daboss, C. Kranz, B. Mizaikoff | Title: | <i>polyHWG: 3D Printed Substrate-Integrated Hollow Waveguides for Mid-Infrared Gas Sensing</i> | Journal: | ACS Sensors | Vol.: | 2 | Pages: | 1700-1705 | Year: | 2017 |
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