# Dr. Jens Smiatek

*Curriculum Vitae*

## Personal Information

Born April 13, 1978 in Lemgo, Germany

Nationality German

## Present Work Address


Position Group leader: Theory of Electrolyte Solutions

Address Helmholtz Institute Münster: Ionics in Energy Storage
Forschungszentrum Jülich GmbH
Corrensstrasse 46
D-48149 Münster (Germany)

E-Mail smiatek@uni-muenster.de

Phone +49 251 83 29179


## Education

2017 – 2018 **Habilitation in Theoretical Physics**, *Department of Physics and Mathematics*, University of Stuttgart, Habilitation thesis and final talk on April 11, 2018.

2005–2009 **Ph. D. in Theoretical Physics**, *Physics Faculty*, Bielefeld University.
Supervisor: Prof. Dr. Friederike Schmid

1998–2005 **1st State Examination for High School Teachers in Chemistry and Physics**.
Bielefeld University (Final mark: 1.3)
*2001–2005: Studies of Physics, Social Studies and Chemistry*
*1999–2005: Studies of Physics and Social Studies*
*1998–1999: Studies of German Language and History*

1997–1998 **Military Service**, *6. Panzergrenadierbataillon 212 (Augustdorf)*.

1988–1997 **Städtisches Gymnasium Barntrup**.
Allgemeine Hochschulreife (Final mark: 2.2)

1984–1988 **Grundschule Bösingfeld**.

## Habilitation Thesis

| | |
|---|---|
| Title | *Soft matter in solution: from hydrodynamics to hydrogen bonds* |
| Institution | University of Stuttgart, Department of Physics and Mathematics |
| Year | 2017 |

## Ph. D. Thesis

| | |
|---|---|
| Title | *Mesoscopic simulations of electrohydrodynamic phenomena* |
| Supervisor | Prof. Dr. Friederike Schmid |
| Institution | Condensed Matter Theory, Physics Faculty, Bielefeld University |
| Date | March $16^{th}$, 2009 |
| Final mark | 1.0 |

## Work Experience

| | |
|---|---|
| 2017–Present | **Group leader**<br>*Theory of Electrolyte Solutions*<br>Helmholtz Institute Münster: Ionics in Energy Storage<br>Forschungszentrum Jülich GmbH (Germany) |
| 2012–2017 | **Group leader and Habilitand**<br>*Theoretical Chemical Physics*<br>Institute for Computational Physics<br>University of Stuttgart (Germany) |
| 2009–2012 | **Scientific Associate (Post-Doc)**<br>*Theory of Complex Systems*<br>Advisor: Prof. Dr. Andreas Heuer<br>Institute of Physical Chemistry<br>University of Münster (Germany) |
| 2005–2009 | **Scientific Associate (Ph. D. student)**<br>*Condensed Matter Theory*<br>Supervisor: Prof. Dr. Friederike Schmid<br>Physics Faculty<br>Bielefeld University (Germany) |

## Longer Research Visits

| | |
|---|---|
| 2015 | Czech Academy of Sciences, Prague, Czech Republic (January 2015) |
| 2014 | University of Luxembourg, Luxembourg (December 2014) |
| 2014 | National Center of Biomolecular Research, Brno, Czech Republic (May 2014) |
| 2010 | Tsinghua University, Beijing, PR China (October – November 2010) |

## Research Interests

Topics
- Charged objects in solution: polyelectrolytes and ions
- Dynamic and structural properties of complex electrolyte solutions
- Molecular theories of solvation: solvation principles and thermodynamic effects
- Co-solute and specific ion effects and their influence on macromolecular folding equilibria

## Third-Party Funded Projects as Principal Investigator

2015 – 2018 *Molekulardynamik-Simulationen zur Untersuchung der Entfaltungspfade von DNA G-Quadruplexen*

Sonderforschungsbereich 716, Deutsche Forschungsgemeinschaft

116.400 Euro

2014 – 2017 *Atomistic and mesoscopic simulations of polyelectrolytes and ionomers*

Cluster of Excellence 'Simulation Technology', Deutsche Forschungsgemeinschaft

205.000 Euro

2013 – 2016 *Untersuchung über die Wechselwirkungen von gestreckten, immobilisierten Polyelektrolyten mit externen elektrischen Feldern und Flüssigkeitsströmungen in Gegenwart beschränkter Mikrogeometrien*

Single Project, Deutsche Forschungsgemeinschaft

116.400 Euro

## Organization of Workshops

2014 CECAM/SFB 716 International Workshop: *Biological Molecules under Non-natural Conditions*, Stuttgart, Germany

2011 $3^{rd}$ International TRR 61 Ph. D. Students Workshop: *Multilevel Molecular Assemblies: Structure, Dynamics and Function*, Münster, Germany

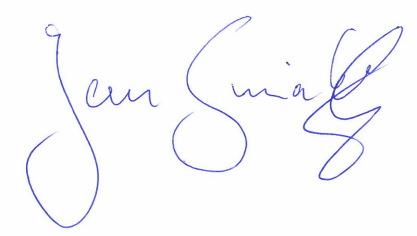
## Reviewing Activities

Journals Angewandte Chemie, Journal of the American Chemical Society, Physical Review Letters, Langmuir, Journal of Physical Chemistry Letters, Soft Matter, Journal of Chemical Theory and Computation, Journal of Physical Chemistry B, Journal of Chemical Physics, ChemPhysChem, Chemistry Select, Physical Review E, Journal of Polymer Science B, Chemical Physics Letters, Physica A, Microfluidics and Nanofluidics,

Organizations Department of Energy (USA), Israelian Science Foundation, Czech Science Foundation, National Science Centre Poland, Austrian Science Fund, Irish Research Council

## Collaborations 2008 – 2018

| | |
|---|---|
| National | Prof. Dr. Andreas Heuer, University of Münster, Germany |
| | Prof. Dr. Martin Winter, University of Münster, Germany |
| | Prof. Dr. Armido Studer, University of Münster, Germany |
| | Prof. Dr. Hans-Joachim Galla, University of Münster, Germany |
| | Prof. Dr. Monika Schönhoff, University of Münster, Germany |
| | Prof. Dr. Regine von Klitzing, Technical University Berlin, Germany |
| | Prof. Dr. Martin Dressel, University of Stuttgart, Germany |
| | Prof. Dr. Joachim Maier, MPI for Solid State Research, Stuttgart, Germany |
| | Dr. Klaus-Dieter Kreuer, MPI for Solid State Research, Stuttgart, Germany |
| | Prof. Dr. Johannes Kästner, University of Stuttgart, Germany |
| | Prof. Dr. Heinz Sturm, BAM Berlin, Germany |
| | Prof. Dr. Hans-Jörg Kunte, BAM Berlin, Germany |
| | Prof. Dr. Rudolf Friedrich, University of Münster, Germany |
| | Prof. Dr. Christian Holm, University of Stuttgart, Germany |
| | Prof. Dr. Friederike Schmid, University of Mainz, Germany |
| | Prof. Dr. Steffen Hardt, Technical University Darmstadt, Germany |
| | Prof. Dr. Gerhard Grübel, University of Hamburg, Germany |
| | Prof. Dr. Lars V. Schäfer, Ruhr University Bochum, Germany |
| | Prof. Dr. Erwin Galinski, University of Bonn, Germany |
| International | Prof. Dr. Michael P. Allen, University of Warwick, UK |
| | Prof. Dr. Lifeng Chi, Soochow University, China |
| | Prof. Dr. Pavel Jungwirth, Czech Academy of Sciences, Prague, CZ |
| | Prof. Dr. Dongsheng Liu, Tsinghua University, Beijing, China |
| | Prof. Dr. Patric Jannasch, Lund University, SWE |
| | Prof. Dr. Boris Gorshunov, Institute of Physics and Technology,, Moscow, RUS |
| | Prof. Dr. Seishi Shimizu, University of York, UK |



Borgholzhausen, December 2, 2018 Dr. Jens Smiatek

## Publications

### Peer-reviewed

1. Oprzeska-Zingrebe, E. A.; Meyer, S.; Rohloff, A.; Kunte, H.-J.; Smiatek, J.
   Influence of compatible solute ectoine on distinct DNA structures: thermodynamic insights into molecular binding mechanisms and destabilization effects.
   *Phys. Chem. Chem. Phys.* 20, 25861 (2018)
2. Krishnamoorthy, A. N.; Oldiges, K.; Winter, M.; Heuer, A.; Cekic-Laskovic, I.; Holm, C.; Smiatek, J.
   Electrolyte solvents for high voltage lithium ion batteries: ion correlation and specific anion effects in adiponitrile.
   *Phys. Chem. Chem. Phys.* 20, 25701 (2018)
3. Krishnamoorthy, A. N.; Holm, C.; Smiatek, J.
   Specific ion effects for polyelectrolytes in aqueous and non-aqueous media: the importance of the ion solvation behavior.
   *Soft Matter* 14, 6243 (2018)
4. Hartmann, J.; Roy, T; Szuttor, K.; Smiatek, J.; Holm, C.; Hardt, S.
   Relaxation of surface-tethered polymers under moderate confinement.
   *Soft Matter* 14, 7926 (2018).
5. Smiatek, J.; Holm C.
   From the atomistic to the macromolecular scale: distinct simulation approaches for polyelectrolyte solutions.
   in Handbook of Materials Modeling; pp. 1–15, edited by Andreoni W.; Yip S.; Springer (2018).
6. Michalowsky, J.; Zeman, J.; Holm, C.; Smiatek, J.
   A polarizable MARTINI model for monovalent ions in aqueous solution.
   *J. Chem. Phys* 149, 163319 (2018)
7. Krishnamoorthy, A. N.; Holm, C.; Smiatek, J.
   Influence of cosolutes on chemical equilibrium: a KirkwoodâĂŞBuff theory for ion pair association-dissociation processes in ternary electrolyte solutions.
   *J. Phys. Chem. C* 122, 10293 (2018)
8. Oprzeska-Zingrebe, E. A.; Smiatek, J.
   Aqueous ionic liquids in comparison with standard co-solutes - Differences and common principles in their interaction with protein and DNA structures.
   *Biophys. Rev.* 10, 809 (2018)
9. Weyman, A.: Bier, M.; Holm, C.; Smiatek, J.
   Microphase separation and the formation of ion conductivity channels in poly(ionic liquid)s: a coarse-grained molecular dynamics study.
   *J. Chem. Phys.* 148, 193824 (2018)
10. Oprzeska-Zingrebe, E. A.; Smiatek, J.
    Preferential binding of urea to single-stranded DNA structures: a molecular dynamics study.
    *Biophys. J.* 114, 1551 (2018)
11. Uhlig, F.; Zeman, J.; Smiatek, J.; Holm, C.
    First-principles parameterization of polarizable coarse-grained force fields for ionic liquids.
    *J. Chem. Theory Comput.* 14, 1471 (2018)

12. Zeman, J.; Uhlig, F.; Smiatek, J.; Holm, C.
    A coarse-grained polarizable force field for the ionic liquid 1-butyl-3-methylimidazolium hexafluorophosphate.
    *J. Phys. Condens. Matter* 29, 504004 (2017)
13. Smiatek, J.
    Aqueous ionic liquids and their effects on protein structures: an overview on recent theoretical and experimental results.
    *J. Phys. Condens. Matter* 29, 233001 (2017)
14. Markthaler, D.; Zeman, J.; Baz, J.; Smiatek, J.; Hansen, N.
    Validation of Trimethylamine-N-Oxide (TMAO) force fields based on thermophysical properties of aqueous TMAO solutions.
    *J. Phys. Chem. B* 121, 10674 (2017)
15. Belyanchikov, M. A.; Zhukov, E. S.; Tertia, S.; Zhugayevych, A.; Dressel, M.; Uhlig, F.; Smiatek, J.; Fyta, M.; Thomas, V. G.; Gorshunov, B. P.
    Vibrational states of nano-confined water molecules in beryl based on first principles calculations and optical experiments. *Phys. Chem. Chem. Phys.* 19, 30740 (2017)
16. Roy, T.; Szuttor, K.; Smiatek, J.; Holm, C.; Hardt, S.
    Electric-field-induced stretching of surface-tethered polyelectrolytes in a microchannel.
    *Phy. Rev. E* 96, 032503 (2017)
17. Roy, T.; Szuttor, K.; Smiatek, J.; Holm, C.; Hardt, S.
    Stretching of surface-tethered polymers in pressure-driven flow under confinement.
    *Soft Matter* 13, 6189 (2017)
18. Diddens, D.; Lesch, V.; Heuer, A.; Smiatek, J.
    Aqueous ionic liquids and their influence on peptide conformations: denaturation and dehydration mechanisms
    *Phys. Chem. Chem. Phys.* 19, 20430 (2017)
19. Kobayashi, T.; Reid, J. E. S. J.; Shimizu, S.; Fyta, M.; Smiatek, J.
    The properties of residual water molecules in ionic liquids: a comparison between direct and inverse Kirkwood-Buff approaches.
    *Phys. Chem. Chem. Phys.* 19, 18924 (2017)
20. Niskanen, J.; Sahle, C. J.; Gilmore, K.; Uhlig, F.; Smiatek, J.; Föhlisch, A.
    Disentangling structural information from core-level excitation spectra.
    *Phys. Rev. E* 96, 013319 (2017)
21. Szuttor, K.; Roy, T.; Hardt, S.; Holm, C.; Smiatek, J.
    The stretching force on a tethered polymer in pressure-driven flow.
    *J. Chem. Phys.* 147, 034902 (2017)
22. Landsgesell, J.; Holm, C.; Smiatek, J.
    Simulation of weak polyelectrolytes: a comparison between the constant pH and the reaction ensemble method.
    *J. Chem. Theory Comput.* 13, 852 (2017)
23. Michalowsky, J.; Schäfer, L. V..; Holm, C. Smiatek, J.
    A refined polarizable water model for the coarse-grained MARTINI force field with long-range electrostatic interactions.
    *J. Chem. Phys.* 146, 054501 (2017)

24. Smiatek, J.; Hansen, N.; Kästner, J.
    Free energy calculation methods and rare event sampling techniques for biomolecular simulations.
    Chapter 6 in Simulating Enzyme Reactivity: Computational Methods in Enzyme Catalysis;
    pp. 185–214, edited by Tunon, I.; Moliner, V.; The Royal Society of Chemistry (2017)
25. Landsgesell, J.; Holm, C.; Smiatek, J.
    Simulation of weak polyelectrolytes: a comparison between the constant pH and the reaction ensemble method.
    *Europ. Phys. J. Spec. Top.* 226, 725 (2017)
26. Krishnamoorthy, A. N.; Zeman, J.; Holm, C.; Smiatek, J.
    Preferential solvation and ion association properties in aqueous dimethyl sulfoxide solutions.
    *Phys. Chem. Chem. Phys.* 18, 31312 (2016)
27. Schroer, M. A.; Michalowsky, J.; Fischer, B.; Smiatek, J.; Grübel, G.
    Stabilizing effect of TMAO on globular PNIPAM states: Preferential attraction induces preferential hydration.
    *Phys. Chem. Chem. Phys.* 18, 31459 (2016)
28. Hahn, M. B.; Uhlig, F.; Solomun, T.; Smiatek, J.; Sturm, H.
    Combined influence of ectoine and salt: Spectroscopic and numerical evidence for compensating effects on aqueous solutions.
    *Phys. Chem. Chem. Phys.* 18, 28398 (2016)
29. Lesch, V.; Heuer, A.; Rad, B. R., Winter, M.; Smiatek, J.
    Atomistic insights into deep eutectic electrolytes: The influence of urea on the electrolyte salt LiTFSI in view of electrochemical applications.
    *Phys. Chem. Chem. Phys.* 18, 28403 (2016)
30. Micciulla, S.; Michalowsky, J.; Schroer, M. A.; Holm, C.; von Klitzing, R.; Smiatek, J.
    Concentration dependent effects of urea binding to poly(N-isopropylacrylamide) brushes: a combined experimental and numerical study.
    *Phys. Chem. Chem. Phys.* 18, 5324 (2016)
31. Lesch, V.; Heuer, A.; Holm, C.; Smiatek, J.
    Properties of apolar solutes in alkyl-imidazolium based ionic liquids: The crucial importance of local interactions.
    *ChemPhysChem* 17, 387 (2016)
32. Vögele, M.; Holm, C., Smiatek, J.
    Coarse-grained simulations of polyelectrolyte complexes: MARTINI based models for poly(styrene sulfonate) and poly(diallyldimethylammonium).
    *J. Chem. Phys.* 143, 243151 (2015)
33. Hahn, M. B.; Solomun, T., Wellhausen, R.; Hermann, S.; Seitz, H.; Meyer, S.; Kunte, H.-J.; Zeman, J.; Uhlig, F.; Smiatek, J.; Sturm, H.
    Influence of the compatible solute ectoine on the local water structure: Implications for the binding of the protein G5P to DNA.
    *J. Phys. Chem. B* 119, 15212 (2015)
34. Fahrenberger, F.; Hickey, O. A.; Smiatek, J.; Holm, C.
    The influence of charge-induced variations in the local permittivity on the static and dynamic properties of polyelectrolyte solutions.
    *J. Chem. Phys.* 143, 243140 (2015)

35. Fahrenberger, F.; Hickey, O. A.; Smiatek, J.; Holm, C.
Importance of varying permittivity on the conductivity of polyelectrolyte solutions.
*Phys. Rev. Lett.* 115, 118301 (2015)
36. Lesch, V.; Heuer, A.; Tatsis, V. A.; Holm, C.; Smiatek, J.
Peptides in presence of aqueous ionic liquids - Tunable co-solutes as denaturants or protectants?
*Phys. Chem. Chem. Phys.* 17, 26049 (2015)
37. Vögele, M.; Holm, C., Smiatek, J.
Properties of the polarizable MARTINI water model - A comparative study for aqueous electrolyte solutions.
*J. Mol. Liquids* 212, 103 (2015)
38. Lesch, V.; Heuer, A.; Holm, C.; Smiatek, J.
Solvent effects of 1-ethyl-3-methylimidazolium acetate: Solvation and dynamic behavior of polar and apolar solutes.
*Phys. Chem. Chem. Phys.* 17, 8480 (2015)
39. Wohlfarth, A.; Smiatek, J.; Kreuer, K.-D.; Takamuku, S.; Jannasch, P.; Maier, J.
Proton dissociation of sulfonated polysulfones: Influence of molecular structure and conformation.
*Macromolecules* 48, 1134 (2015)
40. Krishnamoorthy, A. N.; Holm, C.; Smiatek, J.
Local water dynamics around antifreeze protein residues in the presence of osmolytes: The importance of hydroxyl and disaccharide groups.
*J. Phys. Chem. B* 118, 11613 (2014)
41. Micciulla, S.; Sanchez, P. A.; Smiatek, J.; Qiao, B.; Sega, M.; Laschewsky, A.; Holm, C.; von Klitzing, R.
Layer-by-layer formation of oligoelectrolyte multilayers: A combined experimental and computational study.
*Soft Mater.* 12, S14 (2014)
42. Hickey, O. A.; Holm, C.; Smiatek, J.
Lattice-Boltzmann simulations of the electrophoretic stretching of polyelectrolytes: The importance of hydrodynamic interactions.
*J. Chem. Phys.* 140, 164904 (2014)
43. Smiatek, J.; Heuer, A.
Deprotonation mechanism of a single-stranded DNA i-motif.
*RSC Adv.* 4, 17110 (2014)
44. Bohner, M. U.; Zeman, J.; Smiatek, J.; Arnold, A.; Kästner, J.
Nudged-elastic band used to find reaction coordinates based on the free energy.
*J. Chem. Phys.* 140, 074109 (2014)
45. Smiatek, J.; Wohlfarth, A.; Holm, C.
The solvation and ion condensation properties for sulfonated polyelectrolytes in different solvents – A computational study.
*New J. Phys.* 16, 025001 (2014)
46. Smiatek, J.
Osmolyte effects: Impact on the aqueous solution around charged and neutral spheres.
*J. Phys. Chem. B* 118, 771 (2014)

47. Smiatek, J.; Janssen-Müller, D.; Friedrich, R.; Heuer, A.
Systematic detection of hidden complexities in the unfolding mechanism of a cytosine-rich DNA strand.
*Physica A* 394, 136 (2014)
48. Smiatek, J.; Harishchandra, R. K.; Galla, H.-J.; Heuer, A.
Low concentrated hydroxyectoine solutions in presence of DPPC lipid bilayers: A computer simulation study.
*Biophys. Chem.* 180–181, 102 (2013)
49. Smiatek, J.; Heuer, A.; Wagner, H.; Studer, A.; Hentschel, C.; Chi, L.
Coat thickness dependent adsorption of hydrophobic molecules at polymer brushes.
*J. Chem. Phys.* 138, 044904 (2013)
50. Hentschel, C.; Wagner, H.; Smiatek, J.; Heuer, A.; Fuchs, H.; Zhang, X.; Studer, A.; Chi, L.
AFM-based force spectroscopy on polystyrene brushes: effect of brush thickness on protein adsorption.
*Langmuir* 29, 1850 (2013)
51. Meinhardt, S.; Smiatek, J.; Eichhorn, R.; Schmid, F.
Separation of chiral particles in micro- or nanofluidic channels.
*Phys. Rev. Lett.* 108, 214504 (2012)
52. Smiatek, J.; Harishchandra, R. K.; Rubner, O.; Galla, H.-J.; Heuer, A.
Properties of compatible solutes in aqueous solution.
*Biophys. Chem.* 160, 62 (2012)
53. Smiatek, J.; Liu, D.; Heuer, A.
High temperature unfolding simulations of a single-stranded DNA i-motif.
*Curr. Phys. Chem.* 2, 115 (2012)
54. Smiatek, J.; Chen, C.; Liu, D.; Heuer, A.
Stable conformations of a single stranded deprotonated DNA i-motif.
*J. Phys. Chem. B* 115, 13788 (2011)
55. Smiatek, J.; Heuer, A.
Calculation of free energy landscapes: A histogram reweighted metadynamics approach.
*J. Comput. Chem.* 32, 2084 (2011)
56. Smiatek, J.; Schmid, F.
Mesoscopic simulations of electroosmotic flow and electrophoresis in nanochannels.
*Comp. Phys. Comm.* 182, 1941 (2011)
57. Smiatek, J.; Schmid, F.
Polyelectrolyte electrophoresis in nanochannels: A Dissipative Particle Dynamics simulation.
*J. Phys. Chem. B* 114, 6266 (2010)
58. Smiatek, J.; Sega, M.; Schiller, U. D.; Holm, C.; Schmid, F.
Mesoscopic simulations of the counterion-induced electro-osmotic flow: A comparative study.
*J. Chem. Phys.* 130, 244702 (2009)
59. Smiatek, J.; Allen, M. P.; Schmid, F.
Tunable-slip boundaries for coarse-grained simulations of fluid flow.
*Europ. Phys. J. E* 26, 115 (2008)

### Non peer-reviewed publications

60. Sanchez, P. A.; Smiatek, J.; Qiao, B.; Sega, M.; Holm, C.
Atomistic simulation of oligoelectrolyte multilayer growth.
*High Performance Computing in Science and Engineering '15*, Springer Publications (2016)
61. Zhou, J.; Smiatek, J.; Asmolov, E. S.; Vinogradova, O. I.; Schmid, F.
Application of tunable-slip boundary conditions in particle-based simulations.
*High Performance Computing in Science and Engineering '14*, Springer Publications (2015)
62. Heuer, A.; Smiatek, J.; Strauss, B.; Riedl, D.
Informationsgehalt von Fussball-Spieldaten.
*Fussball in Forschung und Lehre - Beiträge und Analysen zum Fussballsport XIX* in Schriften der Deutschen Vereinigung für Sportwissenschaft Band 240, Czwalina (2014)
63. Smiatek, J.; Schmid, F.
Mesoscopic simulation methods for studying flow and transport in electric fields in micro- and nanochannels.
*Advances in Microfluidics*, InTech Scientific Publications (2012)
64. Smiatek, J.; Schmid, F.
Mesoscopic simulations of polyelectrolyte electrophoresis in nanochannels.
*High Performance Computing in Science and Engineering '10*, Springer Publications (2011)

## Theses

65. Smiatek, J.
Soft matter in solution: from hydrodynamics to hydrogen bonds.
Habilitation thesis, University of Stuttgart, Stuttgart (2017)
66. Smiatek, J.
Mesoscopic simulations of electrohydrodynamic phenomena.
Ph.D. thesis, Bielefeld University, Bielefeld (2009)
67. Smiatek, J.
Untersuchung von Simulationen zur stochastischen Dynamik unter Zwangsbedingungen.
Hausarbeit zum 1. Staatsexamen für LA Sek. I/II, Bielefeld University, Bielefeld (2005)

## Summary

**Peer-reviewed publications: 59**

- Review articles: 4
- Publications as single author: 2
- Publications as first author: 17
- Publications as last author: 24

**Publications in peer-reviewed journals:**

- Physical Review Letters (2)
- Physical Chemistry Chemical Physics (12)
- Journal of Chemical Physics (10)
- Journal of Physical Chemistry A and B (7)
- Journal of Chemical Theory and Computation (1)
- Macromolecules (1)
- Others (25)

## Citations metrics

**H-index:**

- ISI Web of Science: 16
- Google Scholar: 18

**Sum of the times cited:**

- Google Scholar: 872

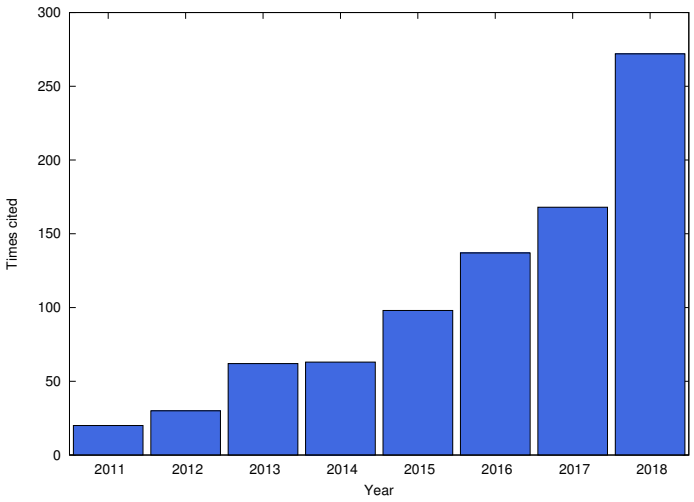
**ResearcherID:**

- G-9933-2012

**OrcidID:**

- 0000-0002-3821-0690

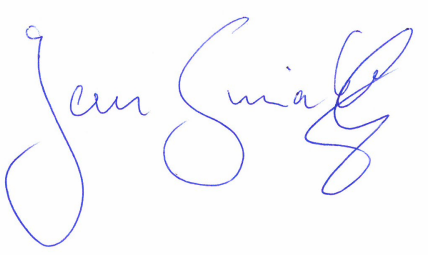
**Citation distribution per year:**



## Invited Talks

1. *Influence of co-solutes and ions on the stability of DNA*
   Conference: Simulation of Systems with Large Particle Numbers, Heidelberg, September 2018
2. *Proteins and aqueous ionic liquids: stabilization and destabilization mechanisms*
   RWTH Aachen, September 2018
3. *Co-solute effects: Stabilization and destabilization mechanisms in the light of molecular theories of solution*
   University of Dortmund, April 2018
4. *Biological co-solutes and their interactions with macromolecules*
   Goethe University Frankfurt a. M. , December 2017
5. *Biological co-solutes and their interactions with macromolecules*
   Institut für Mikrobiologie & Biotechnologie, Bonn, April 2017
6. *Aqueous ionic liquids and their influence on peptide conformations: denaturation and dehydration mechanisms*
   Spring meeting Deutsche Physikalische Gesellschaft, Dresden, March 2017
7. *Aqueous ionic liquids and their influence on peptide conformations: denaturation and dehydration mechanisms*
   DECHEMA ProcessNet Jahrestreffen MolMod, Frankfurt a. M., March 2017
8. *Solvent effects in electrolyte solutions*
   Helmholtz-Institute Ionics in Energy Storage Münster, February 2017
9. *Aqueous ionic liquids and their influence on peptide conformations: denaturation and dehydration mechanisms*
   Lorentz Workshop: Understanding Ionic Liquids on Different Length and Time Scales, Leiden, The Netherlands, February 2017
10. *Coarse-grained simulations of soft matter in microfluidic devices*
    $42^{nd}$ Micro and Nano Engineering, Vienna, Austria, September 2016
11. *Macromolecules in solution: The influence of physical and chemical effects*
    Bielefeld University, April 2016
12. *Molecular simulations of solution effects - chemical and physical properties at different length scales*
    University of Münster, February 2016
13. *Macromolecules in solution - More than the sum of the parts*
    AMOLF, Amsterdam, The Netherlands, December 2015
14. *Macromolecules, solvents and co-solutes - A crucial interplay*
    Lorentz Workshop: The future of multi-scale soft matter modeling, Leiden, The Netherlands, September 2015
15. *Macromolecules, solvents and co-solutes - A crucial interplay*
    University of Darmstadt, May 2015
16. *Macromolecules, solvents and co-solutes - A crucial interplay*
    Bundesanstalt für Materialforschung und -prüfung, Berlin, April 2015
17. *Macromolecules, solvents and co-solutes - A crucial interplay*
    University of Würzburg, January 2015
18. *Macromolecules, solvents and co-solutes - A crucial interplay*
    Czech Academy of Sciences, Prague, Czech Republic, January 2015

19. *Macromolecules, solvents and co-solutes - A crucial interplay*
    University of Luxembourg, Luxembourg, December 2014
20. *Macromolecules, solvents and co-solutes - A crucial interplay*
    University of Mainz, October 2014
21. *Solvent effects and their influence on the properties of soft matter*
    Institute Charles Sadron, Strasbourg, France, June 2014
22. *Solvent effects and their influence on the properties of soft matter*
    University of Tübingen, June 2014
23. *Solvent effects and their influence on the dynamic and static properties of macromolecules*
    German Electron Synchrotron (DESY), Hamburg, May 2013
24. *Computer simulations of biological soft matter systems*
    University of Dortmund, October 2011
25. *Unfolding mechanisms and the free energy landscape of the DNA i-motif*
    Workshop: Multilevel molecular assemblies, structure and function, Beijing, PR China, October 2010
26. *Polyelectrolyte electrophoresis in microchannels: Influence of salt concentration and slippage effects*
    Workshop: Multilevel molecular assemblies, structure and function, Münster, October 2009
27. *Tunable slip boundaries and electrokinetic effects in microchannels*
    University of Münster, November 2008
28. *Tunable slip boundaries and electrokinetic effects in microchannels*
    FIAS Frankfurt, January 2008



Borgholzhausen, December 2, 2018 Dr. Jens Smiatek