

Dr Aljaz Godec

Emmy Noether group Mathematical bioPhysics, Max Planck Institute for Multidisciplinary Sciences

(formerly Max Planck Institute for Biophysical Chemistry)

30th January 2023

Personal data:

Family name, first name: Godec Aljaz

Date of birth: 22nd February 1984 (Maribor, Slovenia)

Nationality: Slovenia

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Secretary: Ms. Eveline Heinemann & Ms. Stefanie Teichmann

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Education and Positions:

Diploma (2007) and Doctorate (2012), University of Ljubljana, Slovenia

2017 - present head of the Mathematical bioPhysics Group, Max Planck Institute for Multidisciplinary Sciences, Göttingen, Germany

(formerly Max Planck Institute for Biophysical Chemistry)

(hosted by Prof. Helmut Grubmüller)

2014 - 2017 Alexander von Humboldt postdoctoral fellow, Theoretical Physics at the Institute of Physics and Astronomy, University of Potsdam, Germany

(with Prof. Ralf Metzler)

2013 - 2017 research associate, Theory Department, National Institute of Chemistry (NIC), Ljubljana, Slovenia (on leave)

2012 - 2014 postdoctoral fellow, Theoretical Physics at the Institute of Physics and Astronomy, University of Potsdam, Germany (with Prof. Ralf Metzler)

2012 - 2013 research fellow, Theory Department, National Institute of Chemistry, Ljubljana, Slovenia (on leave)

2007 - 2012 young researcher, Theory Department, NIC Ljubljana, Slovenia

Other education and training:

- 2021 Training on “Unconscious bias & thought patterns” – workshop on gender-IQ
- 2009 Training on intellectual property, patent practice and academics entrepreneurship (workshop organized by the Slovenian research agency ARRS in Ljubljana)
- 2008 39th IFF Spring School on soft matter physics: Soft Matter – From Synthetic to Biological Materials, Research Centre Jülich (GER)

Languages:

Slovene (mother tongue), English (proficient), German (proficient); FORTRAN (proficient), Mathematica (proficient)

Publications and citations:

64 journal articles, 1 book chapter; Hirsch factor (H-index): Web of Science 22, Google Scholar 24; Citations: >1610 citations; >70 citations in 2015, >80 citations in 2016, >100 citations in 2017, >100 citations in 2018, >150 citations in 2019, >220 citations in 2020, >230 citations in 2021, >260 citations in 2022, >30 citations in 2023 (so far)

Awards, prizes and honors:

- 2023 ERC Consolidator Grant
- 2022 Henriette Herz-Scout of the Alexander von Humboldt foundation
- 2020 Outstanding Reviewer for Journal of Physics A: Math. Theor.
- 2017 Karl-Scheel Prize of the Berlin Physical Society (PGzB)
- 2017 Academy of Finland Fellow (declined)
- 2017 DFG Emmy Noether group
- 2016 Journal of Physics A Emerging talent
- 2016 PKS Distinguished Postdoctoral Fellow (declined)
- 2015 participant in the 65th Lindau Nobel laureate meeting
- 2015 Josef Stefan Golden Emblem Prize for PhD thesis with the highest impact
- 2014 Alexander von Humboldt fellowship for postdoctoral researchers
- 2012 Pregl award for exceptional PhD thesis
- 1998-2007 Zois scholarship for gifted students

Recent Conferences and Seminars/Workshops (since 2020) (* = virtual)

- 2022 “CeNoS Colloquium”, Univ. of Münster (GER) - *Interfaces and Dynamical Transitions in Strongly Interacting Many-body Systems* (invited talk)
- 2022 “Rare Events in Physics and Climate”, Ben Gurion University of the Negev (IL) - *Extreme value statistics of ergodic diffusion processes* (invited talk)
- 2022 CECAM workshop “Data Modeling and Computation”, EPFL Lausanne (CH) - *Time-reversal symmetry and dissipation in dynamics with memory* (invited talk)
- 2022 CPTS Symposium of the Max Planck Society, Harnack house Berlin (GER) - *Time-reversal symmetry and dissipation in dynamics with memory* (invited talk)
- 2022 BMS Symposium of the Max Planck Society, Harnack house Berlin (GER) - *Biological challenges for non-equilibrium physics* (invited talk)
- 2022 Venice meeting on Fluctuations in small complex systems VI (ITA) - *Time (ir)reversibility in the presence of memory* (invited talk)
- 2022 WE-Heraeus-Seminar on “Entropy and the Second Law of Thermodynamics –” “The past, the present, and the future”, Physikzentrum Bad Honnef (GER) - *Time-reversal symmetry and dissipation in dynamics with memory* (invited talk)
- 2022 Non-Markovian dynamics far from equilibrium, ICTP Trieste (ITA) - *Time-reversal symmetry and dissipation in dynamics with memory* (invited talk)
- 2022 DFG Research Unit FOR-5099 Colloquium, University of Freiburg (GER) - *Physics*

- of shadows: thermodynamic implications of memory in coarse-grained dynamics*
(invited talk *)
- 2022 Physics Colloquium, CUA Washington (USA) - *Physics of shadows: thermodynamic implications of memory in low-dimensional observables* (invited talk *)
- 2021 Venice meeting on Fluctuations in small complex systems V (ITA) - *Criticality in stochastic many-body systems: from cell adhesion to the Ising model (and back)*
(invited talk)
- 2021 Physics Colloquium, Northwestern Polytechnical University (China) - *Observing Shadows: Mathematical Signatures of Memory and Their Physical Interpretation*
(invited talk; virtual)
- 2021 Physics & Applied Mathematics Colloquium, University of Shanghai (virtual) - *Observing Shadows: Mathematical Signatures of Memory and Their Physical Interpretation* (invited talk)
- 2021 DPG Spring Meeting (virtual) - *Small diffusive systems warm up faster than they cool down* (invited talk / “Hauptvortrag”)
- 2021 APS March Meeting (virtual) - *Small systems warm up faster than they cool down*
(contributed talk)
- 2020 Physics colloquium, NORDITA Stockholm (SWE) - *Why small systems warm up faster than they cool down* (invited talk)

Research funding and supervision:

- Funding:** - ERC Consolidator Grant
(2023-2028; 2 million EUR)
- Henriette Herz-Scout of the Alexander von Humboldt Foundation
(2022; 2 postdoc positions for 2 years)
- Emmy Noether research group, German Research Foundation (DFG)
(2017-2023; ~1.7 million EUR)
- Academy of Finland Fellow (declined), Academy of Finland
(2017-2022, ~440 K EUR)
- Humboldt Fellowship for Postdoctoral Researchers, Alexander von Humboldt
foundation (2014-2017; 125 K EUR)
- Independent research project, Slovenian Research Agency ARRS
(2016-2017, 50 K EUR)

Supervision:

- Completed:** BSc Theses: Oliver Kindler (2014), Alex Berdin (2014), and Markus Dahlenburg (2015) [co-supervisor, University of Potsdam]
Michelle Kemper (2019), Mathematics Dept., Univ. Göttingen,
[co-supervision with Prof. Anja Sturm]
Santiago Carrero Ibanez, Mathematics Dept. Univ. Göttingen,
[co-supervision with Prof. Anja Sturm]
Diploma Thesis: Ivan Jamnik (2012) [co-supervisor, University of Ljubljana]
MSc Theses: Maria Schwarzl, (2014) [co-supervisor, University of Potsdam],
Janik Schüttler (2021), Physics Dept., ETH Zürich [co-supervision with
Prof. Matthias Krüger], Gerrit Wellecke (2022), Physics Dept., Univ. Göttingen
PhD Theses: Henning Krüseemann (2016) [co-supervisor, University of Potsdam]
Alessio Lapolla (2021), Physics Dept. & GGNB-PBCS, Univ. Göttingen
Maximilian Vossel (2022) Physics Dept. & GGNB-PBCS, Univ. Göttingen
Kristian Blom (2022) Physics Dept. & GGNB-PBCS, Univ. Göttingen

Ongoing: BSc Theses:

- Santiago Carrero Ibanez (since Nov. 2022), Physics Dept., Univ. Göttingen
Maximilian Keitel (since Dec. 2022), Physics Dept., Univ. Göttingen

PhD Theses:

Cai Dieball (since Oct. 2019), Rick Bebon (since Jan. 2022)

Refereeing

Referee for: Science Advances; PNAS; Physical Review Letters; Physical Review X; Physical Review Research; Physical Review E; New Journal of Physics; Journal of Statistical Mechanics; Journal of Chemical Physics; Scientific Reports; Soft Matter; Journal of Physics A: Mathematical and Theoretical; Biophysical Journal; Biophysical Reports; PlosONE; Proceedings of the Royal Society A; Chaos, Solitons & Fractals; Journal of Biological Physics; Biophysical Journal; Europhysics Letters; Langmuir; Physics Letters A; Applied Mathematics and Computation; Physica A; Physical Biology; Acta Biomaterialia

Editorial role

Associate editor for: Frontiers in Physics

Teaching experience

- i) Full faculty member of GGNB (Göttingen Graduate School for Neurosciences, Biophysics, and Molecular Biosciences) & GAUSS (Georg-August University School of Science)
- ii) Lecturing:
 - *Current Topics in Theoretical Physics*, Masters program in Physics (Univ. of Göttingen)
 - *Advanced Mathematical Methods in Statistical Mechanics* (GGNB/GAUSS graduate course in the program 'Physics of Biological and Complex systems' – PBCS)
 - *Advanced Computational Methods in Statistical Mechanics* (GGNB/GAUSS graduate course in the program 'Physics of Biological and Complex systems' – PBCS)
 - *Current Topics in Biophysics* (GGNB/GAUSS program PBCS)
 - *Theoretical Physics and Theory and applications of stochastic processes and Biophysics* (at Univ. of Potsdam, substituting for Prof. Ralf Metzler)

1 LIST OF PUBLICATIONS

A Manuscripts under review:

- A.1 R. Bebon & **A. Godec**, *Controlling Uncertainty of Empirical First-Passage Times in the Small-Sample Regime*. Under review (2023) (arXiv:2301.08732)
- A.2 K. Blom & **A. Godec**, *Global Speed Limit for Finite-Time Dynamical Phase Transition in Nonequilibrium Relaxation*. Under revision (2023) (arXiv:2209.14287)
- A.3 C. Diebal & **A. Godec**, *Feynman-Kac theory of time-integrated functionals: Itô versus functional calculus*. Revised version under review (2023) (arXiv:2206.04034)
- A.4 D. Hartich & **A. Godec**, *Comment on "Inferring broken detailed balance in the absence of observable currents"*. Revised version under review (2022). (arXiv:2112.08978)
- A.5 D. Hartich & **A. Godec**, *Violation of local detailed balance despite a clear time-scale separation*. Revised version under review (2023). (arXiv:2111.14734)

B Journal articles:

- B.1 C. Diebal & **A. Godec**, *Direct Route to Thermodynamic Uncertainty Relations and Their Saturation*. Phys. Rev. Lett. article in press (2023). (arXiv:2208.06402)
- B.2 K. Blom, N. Ziethen, D. Zwicker, & **A. Godec**, *Thermodynamically Consistent Phase-Field Theory Including Nearest-Neighbor Pair Correlations Explains Failure of Mean-Field Reasoning*. Phys. Rev. Research. article in press (2023). (arXiv:2204.02962)
- B.3 **A. Godec** & D. E. Makarov, *Challenges in Inferring the Directionality of Active Molecular Processes from Single-Molecule Fluorescence Resonance Energy Transfer Trajectories*. J. Phys. Chem. Lett. **14**, 49 (2023).
- B.4 C. Diebal & **A. Godec**, *On correlations and fluctuations of time-averaged densities and currents with general time-dependence*. J. Phys. A: Math. Theor. **55**, 475001 (2022).
- B.5 C. Dieball & **A. Godec**, *Mathematical, Thermodynamical, and Experimental Necessity for Coarse Graining Empirical Densities and Currents in Continuous Space*. Phys. Rev. Lett. **129**, 140601 (2022). [See accompanying [press release](#).]
- B.6 C. Dieball & **A. Godec**, *Coarse Graining Empirical Densities and Currents in Continuous-Space Steady States*. Phys. Rev. Research **4**, 033243 (2022).
- B.7 J. Li, J-F. Xie, **A. Godec**, K. R. Weninger, C. Liu, J. C. Smith, & L. Hong, *Non-ergodic internal dynamics of a globular protein observed over fourteen orders in time*. Chem. Sci. **13**, 9668 (2022).
- B.8 C. Zunke, J. Bewerunge, F. Platten, S. Egelhaaf, & **A. Godec**, *First passage statistics of colloids on fractals: theory and experimental realization*. Science Advances **8**, eabk0627 (2022). [Covered in [ProPhysik magazine](#).]
- B.9 C. Dieball, D. Krapf, M. Weiss, & **A. Godec**, *Scattering fingerprints of two-state dynamics*. New J. Phys. **24**, 023004 (2022).
- B.10 D. Hartich & **A. Godec**, *Emergent memory and kinetic hysteresis in strongly driven networks*. Phys. Rev. X **11**, 041047 (2021).
- B.11 K. Blom & **A. Godec**, *Criticality in Cell Adhesion*. Phys. Rev. X **11**, 031067 (2021). [See accompanying [press release](#).]
- B.12 D. Hartich & **A. Godec**, *Thermodynamic Uncertainty Relation Bounds the Extent of Anomalous Diffusion*. Phys. Rev. Lett. **127**, 080601 (2021). [**Editors' Suggestion** & covered in a [Viewpoint in Physics](#)]
- B.13 A. Lapolla & **A. Godec**, *BetheSF V2: 3-point propagator and additional external potentials*. Comp. Phys. Commun. **269**, 108131 (2021).

- B.14 A. Lapolla, M. Vossel, & **A. Godec**, *Time- and ensemble-average statistical mechanics of the Gaussian Network Model*. J. Phys. A: Math. Theor. **54**, 355601 (2021).
- B.15 J. Li, X. Hu, T. Neusius, X. Cheng, M. D. Smith, **A. Godec**, L. Hong, R. Metzler, and J. C. Smith, *Reply to: Insufficient evidence for ageing in protein dynamics*. Nature Phys., **17**, 775 (2021).
- B.16 A. Lapolla & **A. Godec**, *A Toolbox for Quantifying Memory in Dynamics Along Reaction Coordinates*. Phys. Rev. Research **3**, L022018 (2021).
- B.17 A. Lapolla & **A. Godec**, *Single-file diffusion in a bi-stable potential: signatures of memory in the barrier-crossing of a tagged-particle*. J. Chem. Phys. **153**, 194104 (2020).
- B.18 A. Lapolla & **A. Godec**, *Faster uphill relaxation in thermodynamically equidistant temperature quenches*. Phys. Rev. Lett. **125**, 110602 (2020); see [Erratum](#) with corrected Proof of Theorem 1. [**Editors' Suggestion** & covered in a [Focus story in Physics](#) and a [commentary in PhysicsWorld](#).]
- B.19 A. Lapolla, D. Hartich, & **A. Godec**, *Spectral theory of fluctuations in time-average statistical mechanics of reversible and driven systems*. Phys. Rev. Research **2**, 043084 (2020).
- B.20 A. Lapolla & **A. Godec**, *BetheSF: Efficient computation of the exact tagged-particle propagator in single-file systems via the Bethe eigenspectrum*. Comp. Phys. Commun. **258**, 107569 (2021).
- B.21 T. Ukmar-Godec, P. Fang, A. Ibáñez de Opakua, F. Henneberg, **A. Godec**, M.-S. Cima-Omori, A. Chari, E. Mandelkow, H. Urlaub & M. Zweckstetter, *Proteasomal degradation of the intrinsically disordered protein tau at single-residue resolution*. Science Advances **6**, eaba3916 (2020).
- B.22 A. Lapolla and **A. Godec**, *Manifestations of projection-induced memory: general theory and the tilted single file.*, Front. Phys. **7**, 182 (2019).
- B.23 D. Hartich and **A. Godec**, *Extreme value statistics of ergodic Markov processes from first passage times in the large deviation limit*, J. Phys. A: Math. Theor. **52**, 244001 (2019). ([Invited for a special issue 'New trends in first-passage methods and applications in the life sciences and engineering'](#))
- B.24 D. Hartich and **A. Godec**, *Interlacing Relaxation and First-Passage Phenomena in Reversible Discrete and Continuous Space Markovian Dynamics*, J. Stat. Mech. **024002** (2019) (arxiv.org/abs/1802.10049).
- B.25 D. Hartich and **A. Godec**, *Duality between relaxation and first passage in reversible Markov dynamics: rugged energy landscapes disentangled*, New J. Phys. (Fast Track Communication), **20**, 112002 (2018).
- B.26 A. Lapolla and **A. Godec**, *Unfolding tagged Particle Histories in Single-File Diffusion: Exact Single- and Two-Tag Local Times Beyond Large Deviation Theory*, New J. Phys. **20**, 113021 (2018).
- B.27 M. Schwarzl, **A. Godec** and R. Metzler, *Quantifying non-ergodicity of anomalous diffusion with higher order moments*, Sci. Rep., **7**, 3878 (2017).
- B.28 T. Ukmar-Godec, L. Bertineti, J. Dunlop, **A. Godec**, M. Grabiger, A. Masic, H. Nguyen, I. Zlotnikov, P. Zaslansky and D. Faivre, *Materials Nanoarchitecturing via Cation-Mediated Protein Assembly: Making Limpet Teeth without Mineral*, Adv. Mat. **29**, 1701171 (2017).
- B.29 **A. Godec** and R. Metzler, *First passage-time statistics for two-channel diffusion*, J. Phys. A: Math. Theor. **50**, 084001 (2017) ([Invited for a special issue 'Emerging talents'](#))
- B.30 **A. Godec** and R. Metzler, *Universal proximity effect in target search kinetics in the few-encounter limit*, Phys. Rev. X, **6**, 041037 (2016).

- B.31 **A. Godec** and R. Metzler, *Active transport improves the precision of linear long distance molecular signalling*, *J. Phys. A: Math. Theor.* **49**, 364001 (2016) [[Invited for a special issue on Marian Smoluchowski's 1916 paper – a century of inspiration](#)]
- B.32 M. Schwarzl, **A. Godec**, G. Oshanin and R. Metzler, *A single predator charging a herd of prey: effects of self volume and predator-prey decision-making*, *J. Phys. A: Math. Theor.* **49**, 225601 (2016). (see also accompanying press release: <http://phys.org/news/2016-04-theoretical-tiger-statistical-sheep-probe.html>)
- B.33 **A. Godec** and R. Metzler, *First passage time distribution in heterogeneity controlled kinetics: going beyond the mean first passage time*, *Sci. Rep.* **6**, 20349 (2016).
- B.34 **A. Godec** and R. Metzler, *Signal focusing through active transport*, *Phys. Rev. E* **92**, 010701(R) (2015).
- B.35 H. Krüsemann, **A. Godec** and R. Metzler, *Ageing first passage time density in continuous time random walks and quenched energy landscapes*, *J. Phys. A: Math. Theor.* **48**, 285001 (2015). ([selected by the editorial board as highlight for IOP-select](#))
- B.36 **A. Godec** and R. Metzler, *Optimization and universality of Brownian search in a basic model of quenched heterogeneous media*, *Phys. Rev. E* **91**, 052134 (2015).
- B.37 **A. Godec**, A. V. Chechkin, E. Barkai, H. Kantz and R. Metzler, *Localisation and universal fluctuations in ultraslow diffusion processes*, *J. Phys. A: Math. Theor. (FTC)* **47**, 492002 (2014). ([selected as 2014 Highlight of J. Phys. A](#))
- B.38 M. Bauer, **A. Godec** and R. Metzler, *Diffusion of finite-size particles in two-dimensional channels with random wall configurations*, *Phys. Chem. Chem. Phys.* **16**, 6118 (2014).
- B.39 **A. Godec**, M. Bauer and R. Metzler, *Collective dynamics effect transient subdiffusion of inert tracers in flexible gel networks*, *New. J. Phys. (FTC)* **16**, 092002 (2014). ([selected as New. J. Phys. Highlight 2014](#))
- B.40 H. Krüsemann, **A. Godec** and R. Metzler, *First-passage statistics for aging diffusion in systems with annealed and quenched disorder*, *Phys. Rev. E* **89**, 040101(R) (2014).
- B.41 **A. Godec**, J. C. Smith and F. Merzel, *Soft collective fluctuations governing hydrophobic association*, *Phys. Rev. Lett.* **111**, 127801 (2013).
- B.42 **A. Godec** and R. Metzler, *Linear response, fluctuation-dissipation relation, and finite-system-size effects in superdiffusion*, *Phys. Rev. E* **88**, 012116 (2013).
- B.43 **A. Godec** and R. Metzler, *Finite-Time Effects and Ultraweak Ergodicity Breaking in Superdiffusive Dynamics*, *Phys. Rev. Lett.* **110**, 020603 (2013).
- B.44 **A. Godec** and F. Merzel, *Physical origin underlying the entropy loss upon hydrophobic hydration* *J. Am. Chem. Soc.* **134**, 17574 (2012).
- B.45 T. Ukmar, U. Maver, O. Planinšek, A. Pintar, V. Kaučič, **A. Godec** and M. Gaberšček, *Guest-host van der Waals interactions decisively affect the molecular transport in mesoporous media*, *J. Mater. Chem.* **22**, 1112 (2012).
- B.46 **A. Godec**, J. C. Smith and F. Merzel, *Increase of both order and disorder in the first hydration shell with increasing solute polarity*, *Phys. Rev. Lett.* **107**, 267801 (2011).
- B.47 A. Žnidaršič, **A. Godec** and M. Gaberšček. *pH-based one pot synthesis of biocompatible olive shaped inorganic particles*, *Mater. Res. Bull.* **47**, 967 (2012).
- B.48 T. Ukmar, U. Maver, O. Planinšek, A. Pintar, V. Kaučič, M. Gaberšček and **A. Godec**, *Understanding controlled drug release from mesoporous silicates: Theory and Experiment*, *J. Control. Rel.* **155**, 409 (2011).
- B.49 T. Ukmar, M. Gaberšček, F. Merzel and **A. Godec**, *Modus operandi of controlled release from mesoporous matrices: a theoretical perspective*, *Phys. Chem. Chem. Phys.* **13**, 15311 (2011).

- B.50 T. Ukmar, **A. Godec**, O. Planinšek, V. Kaučič, G. Mali and M. Gaberšček, *Phase (trans)formation and physical state of a model drug in mesoscopic confinement*, Phys. Chem. Chem. Phys. **13**, 16046 (2011).
- B.51 **A. Godec**, T. Ukmar, M. Gaberšček and F. Merzel, *Inversion of pore size dependence of solute transport kinetics from increasingly attractive ordered porous matrix*, Europhys. Lett. **92**, 60011 (2010).
- B.52 U. Maver, A. Žnidaršič, D. Saboti, S. Srčič, M. Gaberšček, **A. Godec** and O. Planinšek, *The relation between the interfacial contact and SiO₂ coating efficiency and properties in the case of two clarithromycin polymorphs*, Coll. Surf. A: Physicochem. Eng. Aspects **371**, 119 (2010).
- B.53 **A. Godec**, M. Gaberšček, J. Jamnik, D. Janežič and F. Merzel, *Ion-size effect within the aqueous solution interface at the Pt(111) surface : molecular dynamics studies*, Phys. Chem. Chem. Phys. **12**, 13566 (2010).
- B.54 O. Planinšek, J. Zadnik, M. Kunaver, S. Srčič and **A. Godec**, *Structural evolution of indomethacin particles upon milling: time-resolved quantification and localization of disordered structure studied by IGC and DSC*, J. Pharm. Sci. **99**, 1968 (2010).
- B.55 **A. Godec**, M. Gaberšček, J. Jamnik and F. Merzel, *14. Nonlinear diffusion in two-dimensional ordered porous media based on a free volume theory*, J. Chem. Phys. **131**, 234106 (2009).
- B.56 T. Ukmar, **A. Godec**, U. Maver, O. Planinšek, M. Bele, J. Jamnik and M. Gaberšček, *Suspensions of modified TiO₂ nanoparticles with supreme UV filtering ability*, J. Mater. Chem. **19**, 8176 (2009).
- B.57 **A. Godec**, M. Gaberšček and J. Jamnik, *Comment on the article "A new understanding of the relationship between solubility and particle size"*, J. Sol. Chem. **38**, 135 (2009).
- B.58 **A. Godec**, U. Maver, M. Bele, O. Planinšek, S. Srčič, M. Gaberšček and J. Jamnik, *Vitrification from solution in restricted space: formation and stabilization of amorphous nifedipine in a nanoporous silica xerogel carrier*, Int. J. Pharm. **343**, 131 (2007).
- B.59 U. Maver, **A. Godec**, M. Bele, O. Planinšek, S. Srčič, M. Gaberšček and J. Jamnik, *Novel hybrid silica xerogels for stabilization and controlled release of drug*, Int. J. Pharm. **330**, 164 (2007).

C Chapters in books

- C.1 D. Hartich & **A. Godec**, *Reaction kinetics in the few-encounter limit*. In *CHEMICAL KINETICS BEYOND THE TEXTBOOK*, Ed: K. Lindenberg, R. Metzler, & G. Oshanin. (World Scientific, 2019, in press) [<https://doi.org/10.1142/q0209>].