

Lebenslauf

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Geburtsdatum: 14. September 1971
Bürgerort: Zuzwil SG
Nationalität: CH
Zivilstand: verheiratet, 2 Kinder Florian (2007) und Timo (2010)

Berufserfahrung / Lehre:

seit 2014 Leiter CCMX Materials Challenge ‚NanoScreen‘ Programm
seit 2014 Abteilungsleiter der Abteilung Particles - Biology Interactions
seit 2013 Lecturer D-BAUG, ETHZ, Air Quality and Human Health
2010 - 2014 Co-Abteilungsleiter der Abteilung Materials – Biology Interactions
2009 - 2013 Lecturer Fachhochschule Winterthur, Biomaterials
2009 - 2010 Gruppenleiter Nanointercell
2007 - 2009 Stv Gruppenleiter Nanointercell der Abteilung Materials – Biology Interactions, Empa St. Gallen
2002 - 2007 wissenschaftlicher Mitarbeiter in der Abteilung Biokompatible Materialien, Stv Gruppenleiter MaTisMed, Empa St. Gallen
1998 - 2002 Dipl. Assistent an der Mathematisch - Naturwissenschaftlichen Fakultät der Universität Fribourg

Ausbildung:

seit 2009 Empa spezifische Führungskurse (Modul 1 – 4)
2005 - 2010 Weiterbildung in Toxikologie
1998 - 2002 Doktorarbeit, Universität Fribourg
(Schwerpunkt: Zell- und Molekularbiologie)
1993 - 1997 Biologie Studium Universität Fribourg
1986 - 1992 Mathematisch-Naturwissenschaftliches Gymnasium
Kantonsschule Kollegium Schwyz
1978 - 1986 Primar- und Sekundarschule Brunnen

Militär:

2007 - 2013 eingeteilt in Reserve
2001 - 2007 ABC Schutzoffizier, Hptm
1992 - 1993 militärische Ausbildung zum Offizier

Sprachen:

deutsch Muttersprache
englisch fliessend in Wort und Schrift
französisch fliessend in Wort und gute Kenntnisse in Schrift (zweisprachiges Studium)

Wissenschaftliche Publikationen:

>5540 Zitate, 938 in 2015, h-index 32 (Quelle Google Scholar 10.11.2016)

81) Civardi C, Hirsch C, Kaiser JP, Schlagenhaut L, Mucchino C, **Wick P**, Schwarze FWMR, (2016) Release of copper-amended particles from Micronized copper-treated wood during mechanical abrasion (accepted J Nanobiotechnology)

80) Muoth C, Wichser A, Monopoli M, Correia M, Ehrlich N, Köschner K, Gallud A, Kucki M, Diener L, Jochum W, **Wick P**, Bürki-Thurnherr T (2016) A 3D microtissue co-culture model of the human placenta for nanotoxicity assessment, *Nanoscale* 8:17322-32

79) Civardi C, Van den Bulcke J, Schubert M, Michel E, Butron EM, Van Aacker J, **Wick P**, Schwarze FWMR (2016) Penetration and effectiveness of micronized copper in easily treatable and refractory wood species *Plos One* 11(9)e0163124

78) Obarzanek-Fojt M, Curdy C, Loggia N, Di Lena F, Grieder K, Bitar M, **Wick P** (2016) Tracking immune-related cell responses to drug delivery microparticles in 3D dense collagen matrix, *Europ J Pharma Biopharma* 107:180-190

77) Ulrich S, Hirsch C, Diener L, Wick P, Rossi MR, Bannwarth MB, Boesel LF, (2016) A general method for the preparation of ellipsoid-shaped supraparticles with modular compositions *RCS Advances* 6 (92), 89028-89039

76) Sillence K, Maguire CM, Roesslein M, Suarez G, Sauvain JJ, Capracotta S, Contal S, Cambier S, Yamani NE, Vennemann A, Haase A, Luch A., Wiemann M, Gutleb A, Riediker M, **Wick P**, Hole P, Prina-Mello A, (2016) Hitting the bullseye – reproducible concentration measurements with nanoparticle tracking analysis (submitted to *Nanoscale*)
Maguire CM, Sillence K, Roesslein M, et al, **Wick P**, Hole P, Prina-Mello A (2016) Addressing the reproducibility of nanoparticle sizing by the introductions of methodologies, standards and interlaboratory comparison (submitted to *Langmuir*)

75) Muoth C, Rottmar M, Schipanski A, Gmünder C, Maniura-Weber K, **Wick P**, Bürki T, (2016) A micropatterning approach to study the influence of actin cytoskeletal organization on polystyrene nanoparticle uptake by BeWo cells *RSC Advances* 6 (76), 72827-72835

74) Mukherjee SP, Kucki M, Valdes NL, Vazquez E, Kostarelos K, **Wick P**, Fadeel (2016) Detection of endotoxin contamination of graphene oxide using TNF-alpha expression test (accepted in *PlosOne*)

73) Elliott JT, Roesslein M, Song NW, Toman B, Kinsner-Ovaskainen A, Maniratanachote R, Salit ML, Sequeira F, Lee J, Kim SJ, Rossi F, Hirsch C, Krug HF, Suchaoin W, **Wick P**, (2016) Toward achieving harmonization in a nano-cytotoxicity assay measurement by interlaboratory comparisons study (accepted in *ALTEX*)

72) Hirsch C, Striegl B, Mathes S, Adlhart C, Edelmann M, Bono E, Gaan S, Salmeia KA, Hölting L, Krebs A, Nyffeler J, Pape R, Bürkle A, Leist M, **Wick P**, Schildknecht S (2016) Toxicity assessment of novel DOPO-derived organophosphorus flame retardants, *Arch Toxicol e-Pub*

71) Muoth C, Aengenheister L, Kucki M, **Wick P**, Buerki-Thurnherr T, (2016) Nanoparticle transport across the placental barrier: Pushing the field forward! *Nanomedicine* 11(8):941-57

70) Kucki M, Rupper P, Wichser A, Sarrieu C, Treossi E, Melucci M, Schwarz A, León V, Kraegeloh A, Flauhaut E, Vazquez E, Palermo V, **Wick P**, (2016) Interaction of graphene-related materials with human intestinal cells: an in vitro approach, *Nanoscale* (8) 8749-8760

- 69) Schöneberger A, Schipanski A, Malheiro V, Kucki M, Snedeker JG, **Wick P**, Maniura-Weber K, (2016) Macrophage polarization by titanium dioxide (TiO₂) particles: size matters, ACS Biomater Sci Eng 2:908-919
- 68) Schlagenhaut L, Kianfar B, Buerki-Thurnherr T, Kuo YK, Wichser A, Nüesch F, **Wick P**, Wang J (2015) Weathering of a carbon nanotube / epoxy nanocomposite under UV light and in water bath: impact on abraded particles Nanoscale 7 18524-18536
- 67) Civardi C, Schubert M, Fey A, **Wick P**, Schwarze FWMR, (2015) Micronized copper wood preservatives: efficacy of ion, nano and bulk copper against the brown rot fungus *Rhodonía placenta* Plos One 10(11): e0142578
- 66) Grafmüller S, Manser P, Diener L, Diener PA, Maeder-Althaus X, Maurizi L, Wolfram J, Krug HF, Bürki-Thurnherr T, von Mandach U, **Wick P**, (2015) Differential bidirectional transfer of polystyrene nanoparticles across the placental barrier reveals different transport kinetics Environ Health Persp 123(12)1280-1286
- 65) Grafmüller S, Manser P, Diener L, Maurizi L, Diener PA, Hofmann H, Jochum W, Krug HF, Bürki-Thurnherr T, von Mandach U, **Wick P**, (2015) Challenges and common pitfalls in nanoparticle selection for transport studies across biological tissue barrier Sci Technol Adv Mater 16;1
- 64) Schlagenauf L, Buerki-Thurnherr T, Losert S, Ott N, Wichser A, Nüesch F, **Wick P**, Wang J, (2015) Released carbon nanotubes from an epoxy-based nanocomposite: quantification and toxicity Environ Sci Technol (49)10616-10623
- 63) **Wick P**, Chortarea S, Guenat O, Roesslein M, Petri-Fink A, Rothen-Rutishauser B, (2015) *In vitro* – *ex vivo* model systems for nanosafety assessment Eur J Nanomed 7(3)169-179
- 62) Civardi C, Schwarze FWMR, **Wick P**, (2015) Environmental, health and safety perspective of copper nanoparticle-based wood preservatives: a critical comment Environ Pollu 200:126-132
- 61) Studer C, Aicher L, Gasic B, von Götz N, Hoet P, Huwyler J, Kägi R, Kase R, Kobe A, Nowack B, Rothen-Rutishauser B, Schirmer K, Schneider G, Kase R, Vermeissen E, **Wick P**, Walser T, (2015) Scientific basis for regulatory decision-making of nanomaterials CHIMIA doi:10.2533/chimia.2015.1
- 60) Bruinink A, Wang J, **Wick P**, (2015) Effect of particle agglomeration in nanotoxicology Arch Toxicol 89:659-675
- 59) Rösslein M, Elliott JT, Salit M, Petersen EJ, Hirsch C, Krug HF, **Wick P**, (2015) Assessing sources of variability in nano-cyto-toxicology measurements with cause-and-effect analysis Chem Res Toxicol 28(1)21-30 (Highlighted by Editorial Advisory Board Members Favorit CRT Articles 2016)
- 58) Chortarea S, Clift MJD, Endes C, **Wick P**, Petri-Fink A, Rothen-Rutishauser B, (2015) Repeated exposure to carbon nanotubes-based aerosols does not affect the functional properties of a 3D human epithelial airway model, Nanotoxicol, 9(8):983-993
- 57) **Wick P**, Grafmüller S, Fink-Petri A, Rothen-Rutishauser B, (2014) Metal oxide nanoparticle - cell interactions: how advanced human *in vitro* models improve the understanding of the biological effects, MRS Bulletin, 39:984-989
- 56) Kucki M, Kaiser JP, Clift MJD, Rothen-Rutishauser B, Fink A, **Wick P**, (2014) The role of the protein corona in fiber structure-activity relationship, Fibers, (2)187-210 Review

- 55) **Wick P**, Louw-Gaume AE, Kucki M, Krug HF, Kostarelos K, Fadeel B, Dawson KA, Salvati A, Vazquez E, Ballerini L, Tretiach M, Denfenati F, Flahaut E, Gauthier L, Prato M, Bianco A, (2014) Classification Framework for Graphene-based Materials *Angew Chem Int Ed* DOI:10.1002/anie.201403335
- 54) Nowack B, Mueller NC, Krug HF, **Wick P**, (2014) How to consider engineered nanomaterials in major accident regulations? *Environ Sci Europe* 26:2
- 53) Clift M, Endes C, Vanhecke D, **Wick P**, Gehr P, Schins R, Petri-Fink A, Rothen-Ruthishauser B (2014) A comparative study of different in vitro lung cell culture systems to assess the most beneficial tool for screening the potential adverse effects of carbon nanotubes *Toxicol Sci* 137(1):55-64
- 52) Oomen A, Bos P, Fernandes T, Hund-Rinke K, Boraschi D, Byrne HJ, Aschberger K, Gottardo S, von der Kammer F, Kühnel D, Hristozov D, Marcomini A, Migliore L, Scott-Fordsmand J, **Wick P**, Landsiedel R, (2014) Concern-driven integrated approaches to nanomaterial testing and assessment – Report of the NanoSafety Cluster Working Group 10, *Nanotoxicol* 8(3):334-348
- 51) Bruinink A, Bitar M, Pleschkova M, **Wick P**, Krug HF, Maniura-Weber K (2014), Addition of nanoscaled bio-inspired surface features: A revolution for bone related implants and scaffolds? *J Biomed Mater Res Part* 102(1):275-294 Review
- 50) Clift M, Frey S, Endes C, Hirsch V, Kuhn D, Johnston B, **Wick P**, Petri-Fink A, Rothen-Ruthishauser B (2013) Assessing the impact of the physical properties of industrially produced carbon nanotubes upon their interaction with human primary macrophages in vitro *BioNanoMaterials* 14(3-4):239-248
- 49) Bachmatiuk A, Mendes RG, Hirsch C, Jähne C, Lohe MR, Grothe J, Kaskel S, Klingeler R, Eckert J, **Wick P**, Rummeli MH (2013) Few-layer graphene shells and non-magnetic encapsulates; a versatile and non-toxic carbon nanomaterial *ACS Nano* (12):10552-1062
- 48) Kaiser JP, Rösslein M, Diener L, **Wick P** (2013) Human health risk of ingested nanoparticles that are added as multifunctional agents to paints: an in vitro study *PLOS ONE* 16(8):e83215
- 47) Rösslein M, Hirsch C, Kaiser JP, Krug HF, **Wick P** (2013) Comparability of in vitro tests for bioactive nanoparticles: a common assay to detect reactive oxygen species as an example *Int J Molecul Sci* 14:24320-24337
- 46) Hole P, Pottage K, Hannell C, Maguire CM, Rösslein M, Suarez G, Capracotta S, Magdolenova Z, Horev-Azaria L, Dybowska A, Cooke L, Haase A, Contal S, Vennemann A, Sauvain JJ, Crosbie K, Anguissola S, Dusinska M, Korenstein R, Gutleb AC, Wiemann M, Prina-Mello A, Riediker M, **Wick P** (2013) Interlaboratory comparison of size measurements on nanoparticles using Nanoparticle Tracking Analysis (NTA) *J Nanopart Res* 15:2101:1-12
- 45) Kettiger H, Schipanski A, **Wick P**, Huwyler J, (2013) Nanoparticle uptake and tissue distribution: from cell to organism *Int J Nanomedicine* 8:3255-3269
- 44) **Wick P**, Dini L, Kuhlbusch T, (2013) Editorial Special Issue: NanoSafety – progress in (eco)toxicology, understanding of mechanisms of action and risk assessment towards a reliable and sustainable use of nanotechnology *BioNanoMat* 14(1-2):3
- 43) Tuomela S, Autio R, Bürki-Thurnherr T, Kunzmann A, Andersson-Willman B, **Wick P**, Arslan O, Mathur S, Scheynius A, Krug HF, Fadeel B, Lahesmaa R (2013) Gene expression profiling of immune-competent cells exposed to engineered zinc oxide or titanium oxide nanoparticles: a comprehensive Toxicogenomic and Bioinformatics approach *PLOS ONE* 8:7:e68415

- 42) Rösslein M, Richter V, **Wick P**, Krug HF (2013) Nanomaterials and Ceramic Nanoparticles – Use without side effects? *J Ceramic Sci and Tech* 4(2):113-122 Review
- 41) Grafmüller S, Manser P, Krug HF, **Wick P**, von Mandach U (2013) Determination of the transport rate of xenobiotics and nanomaterials across the placenta using the ex vivo human placental perfusion model *J Vis Exp* 18;(76) e50401
- 40) Clift MJD, Raemy DO, Ali Z, Lehmann AD, Brandenberger C, **Wick P**, Parak WJ, Gehr P, Schins RPF, Rothen-Rutishauser B (2013) Can the Ames test provide an insight into nano-object mutagenicity? Investigating the interaction between nano-objects and bacteria: *Nanotoxicology* 7(8):1373-1385
- 39) Bürki-Thurnherr T, Diener L, Xiao L, Arslan O, Hirsch C, Mäder-Althaus X, Grieder K, Wampfler B, Mathur S, **Wick P**, Krug HF (2013) In vitro mechanistic study towards a better understanding of ZnO nanoparticle toxicity, *Nanotoxicology* 7(4):402-416
- 38) Som C, H.F. Krug, Nowack B, **Wick P** (2013) Towards the development of decision supporting tools that can be used for safe production and use of nanomaterials *Account of Chemical Research* 46(3):863-72, Review
- 37) Kaiser JP, Zuin S, **Wick P**, (2013) Is nanotechnology revolutionizing the paint and lacquer industry? A critical comment *Sci Tot Environ* 442:282-89, Review
- 36) Kaiser JP, Bürki-Thurnherr T, **Wick P** (2013) Influence of single walled carbon nanotubes at subtoxic concentrations on cell adhesion and other cell parameters of human epithelial cells *The Journal King Saud University – Science* 25(1),15-27
- 35) Smulders S, Kaiser JP, Zuin S, Van Landuyt KL, Tardif F, **Wick P**, Hoet PHM (2012) Contamination of nanoparticles by endotoxin: evaluation of different test methods *Particle and Fibre Toxicology* 9:41
- 34) Rothen-Rutishauser B, Clift MJD, Jud C, Fink A, **Wick P** (2012) Human epithelial cells in vitro – Are they an advantageous tool to help understand the nanomaterial-biological barrier interactions? *Euronanotox ENTL*4,01
- 33) Gasser M, **Wick P**, Clift MJD, Blank F, Diener L, Yan B, Gehr P, Krug HF, Rothen-Rutishauser B (2012) Pulmonary surfactant coating of multi-walled carbon nanotubes (MWCNTs) influences their oxidative and pro-inflammatory potential in vitro *Particle and Fibre Toxicology* 9:17
- 32) Bürki-Thurnherr T, von Mandach U, **Wick P** (2012) Knocking at the door of the unborn child: Engineered nanoparticles at the placental barrier, *Swiss Med Wkly.* 142:w13559
- 31) Moreno-Villaneuva M, Eltze T, Drellser D, Bernhardt J, Hirsch C, **Wick P**, von Scheren G, Lex K, Bürkle A (2011) The automated FADU – assay, a potential high throughput in vitro method for early screening of DNA breakage *Altex* 28:4/11:295-303
- 30) Clift MJD, Foster EJ, Studer D, **Wick P**, Gehr P, Rothen-Rutishauser, Weder C (2011) Investigating the interaction of cellulose nanofibres derived from cotton with a sophisticated 3D human lung cell coculture *Biomacromolecules*, 12, 3666-3673
- 29) **Wick P**, Clift MJD, Rösslein M, Rothen-Rutishauser B, (2011) A brief summary of carbon nanotubes science and technology: a health and safety perspective *ChemSusChem* 18;4(7):905-11 Review
- 28) Hirsch C, Rösslein M, Krug HF, **Wick P** (2011) Nanomaterial cell interactions: Are current in vitro tests reliable? *Nanomedicine* 6(5):837-47 Review

- 27) Kaiser JP, Rösslein M, Bürki-Thurnherr T, **Wick P** (2011) Carbon nanotubes – curse or blessing *Journal of Current Medicinal Chemistry* 18(14):2115-28 Review
- 26) Som C, **Wick P**, Krug HF, Nowack B (2011) Environmental and health effects of nanomaterials in nanotextiles and façade coatings *Environ Int* 37(6):1131-42 Review
- 25) Roebben GG, Ramirez-Garcia S, Hackley VA, Roesslein M, Klaessig F, Kestens V, Lynch I, Garner CM, Rawle A, Elder A, Colvin V, Kreyling W, Krug HF, Lewicka Z, McNeil S, Nel A, Patri A, **Wick P**, Wiesner M, Xia T, Oberdörster G, Dawson KA (2011) Interlaboratory reproducibility of size and surface charge measurements on nanoparticles prior to biological impact assessment *J Nanoparticle Research* 13:2675-2687
- 24) Lischer S, Körner E, Balazs DJ, Shen D, **Wick P**, Grieder K, Haas D, Heuberger H, Hegemann D (2011) Silver-nano-composite coatings with incipient antibacterial effect and subsequent cytocompatibility *J R Soc Interface* 6;8(60):1019-30
- 23) Rottmar M, Ackerknecht S, Lehmann E, **Wick P**, Maniura-Weber K (2011) A high throughput system for long term application of intermittent cyclic hydrostatic pressure on cells in culture. *Biomechanical engineering* 133:024502-1-5
- 22) Krug HF, **Wick P** (2011) Nanotoxikologie – eine interdisziplinäre Herausforderung, *Angew Chem* 6:1294-1314
- 21) Krug HF, **Wick P** (2011) Nanotoxicology: An Interdisciplinary Challenge. *Angew Chem Int Ed* 50:1260-1278
- 20) Thurnherr T, Brandenberger C, Fischer K, Diener L, Manser P, Maeder-Althaus X, Kaiser JP, Krug HF, Rothen-Rutishauser B, **Wick P** (2011) A comparison of acute and long-term effects of industrial multiwalled carbon nanotubes on human lung and immune cells in vitro. *Toxicol Lett* 200;176-186
- 19) Gasser M, Rothen-Rutishauser B, Krug HF, Gehr P, Nelle M, Yan B, **Wick P** (2010) Lipids of the pulmonary surfactant and functional groups on multi-walled carbon nanotubes influence blood plasma proteins adsorption differently. *JNanobiotech*, 8:31
- 18) **Wick P**, Malek A, Manser P, Meili D, Maeder-Althaus X, Diener L, Diener PA, Zisch A, Krug HF, von Mandach U (2010) Barrier capacity of human placenta for nanosized materials. *Environ Heath Persp* 118(3)432-436
- 17) Müller LL, Riediker M, **Wick P**, Mohr M, Gehr P, Rothen-Rutishauser B (2010) Oxidative stress and inflammation reaction upon nanoparticle exposure: differences between human lung cell mono-cultures and an advanced 3D model of the human epithelial airway. *J.R.Soc. Interface* 6:7 Suppl 1S:27-40
- 16) Thurnherr T, Su D, Diener L, Weinberg G, Manser P, Pfänder N, Arrigo R, Schuster ME, **Wick P**, Krug HF (2009) Comprehensive evaluation of in vitro toxicity of three large-scale produced carbon nanotubes on human Jurkat T cells and a comparison to crocidolite asbestos. *Nanotoxicology* 3(4) 319-338
- 15) Belyanskaya L, Weigel S, Hirsch C, Tobler U, Krug H, Bruinink A, **Wick P** (2009) Effect of carbon nanotubes on primary neuronal and glial cells. *Neurotoxicology* (30) 702-11
- 14) Spohn P, Hirsch C, Halser F, Bruinink A, Krug HF, **Wick P** (2009) C60 fullerene: a powerful antioxidant or a damaging nanonoxe? The importance of an in-depth material characterization prior to toxicity assays. *Environ Pollut* (157) 1134-39
- 13) Kaiser JP, Krug HF, **Wick P** (2009) Nanomaterial cell interactions: how carbon nanotubes affect cell physiology *Nanomedicine* 4(1) 57-63 Review

- 12) Helland A, **Wick P**, Koehler A, Schmid K, Som C (2008) Reviewing the environmental and human health knowledge base of carbon nanotubes. *CIENCIA & SAUDE COLETIVA* 13(2) 441-452
- 11) Helfenstein M, Miragoli M, Rohr S, Müller L, **Wick P**, Mohr M, Gehr P, Rothen-Rutishauser B (2008) Effects of combustion-derived ultrafine particles and manufactured nanoparticles on heart cells in vitro. *Toxicology* (253) 70-78
- 10) Kaiser JP, **Wick P**, Manser P, Spohn P, Bruinink A (2008) Single walled carbon nanotubes (SWCNT) affect cell physiology and cell architecture. *J Mater Sci: Mater Med*, 19(4) 1523-27
- 9) Belyanskaya L, Manser P, Spohn P, Bruinink A, **Wick P** (2007) The reliability and limits of the MTT conversion test for carbon nanotubes – cell interaction. *Carbon* (45) 2643-48
- 8) Helland A, **Wick P**, Köhler A, Schmid K, Som C (2007) Risk assessment of carbon nanotubes: An insight into the scientific literature & discussion. *Environ Health Perspect* 115(8) 1125-31
Review
- 7) Limbach L, **Wick P**, Manser P, Grass RN, Bruinink A, Stark WJ (2007) Exposure of engineered nanoparticles to human lung epithelial cells: Influence of chemical composition and catalytic activity on oxidative stress. *Environ Sci Technol* 41(11) 4158-63
- 6) **Wick P**, Manser P, Limbach LK, Dettlaff-Weglikowska U, Krumeich F, Roth S, Stark WJ, Bruinink A (2007) The degree and kind of agglomeration affect carbon nanotube cytotoxicity. *Toxicol Lett* (168) 121-131
- 5) **Wick P**, Manser P, Spohn P, Bruinink A (2006) In vitro evaluation of possible adverse effect of nanosized materials. *Physica Status Solidi b* 243(13) 3556-60
- 4) Brunner TJ, **Wick P**, Manser P, Spohn P, Grass RN, Limbach LK, Bruinink A, Stark WJ (2006) In vitro cytotoxicity of oxide nanoparticles: comparison to asbestos, silica and the effect of particle solubility. *Environ Sci Technol* 40(14) 4374-81
- 3) **Wick P**, Gansel X, Oulevey C, Page V, Studer I, Durst M, Sticher L (2003) The expression of the t-SNARE AtSNAP33 is induced by pathogens and mechanical stimulation. *Plant Physiol*. 132(1) 343-51
- 2) **Wick P** (2002) Intracellular vesicle transport in *Arabidopsis thaliana*: Functional characterization of the t-SNARE homologue AtSNAP33. Dissertation Universität Fribourg
- 1) Heese M, Gansel X, Sticher L, **Wick P**, Grebe M, Bouchez D, Jürgens G (2001) Functional characterization of the KNOLLE-interacting t-SNARE AtSNAP33 and its role in plant cytokinesis. *J Cell Biol*. 155(2) 239-49

Nicht indexierte Veröffentlichungen und Buchkapitel:

- 10) Müller L, Lehmann AD, Johnston BD, Blank F, **Wick P**, Petri-Fink A, Rothen-Rutishauser B, (2014) **Book chapter** Inhalation Pathway as a Promising Portal of Entry: What Has to Be Considered in Designing New Nanomaterials for Biomedical Application?, in *Handbook of Nanotoxicology, Nanomedicine and Stem Cell Use in Toxicology*, edited by Saura C. Sahu and Daniel A. Casciano. Chichester, UK: John Wiley & Sons, Ltd, pp 12.
- 9) Krug HF, **Wick P**, Hirsch C, Kühnel D, Marquardt C, Nau K, Mathes B, Steinbach C (2014) Kleine Partikel, große Bedenken: Im Gleichgewicht? Die internationale Risikodebatte zur Nanotechnologie und zu möglichen Vorsorgemaßnahmen für Arbeitsplatz und Verbraucher ASU Protect 1/2014

- 8) Krug HF, **Wick P**, Nowack B, Müller N (2012) Human- und Ökotoxizität synthetischer Nanomaterialien – Erste Erkenntnisse für die Störfallvorsorge, Bundesamt für Umwelt (BAFU), das BAFU ist ein Amt des Eidg. Departements für Umwelt, Verkehr, Energie und Kommunikation (UVEK)
- 7) Steinbach C, Krug HF, **Wick P**, Mathes B, Kühnle D, Nau K (2012) Sicherheit von Nanomaterialien: DaNa, eine Internet-Wissensplattform für Interessierte Deutsche Apothekerzeitung 152 Nr 16
- 6) Colognato R, Park M, **Wick P**, De Jong WH (2012) **Book chapter** 'Interaction with the human body' in Adverse Effects of Engineered Nanomaterials: Exposure, Toxicology and Impact on Human Health, edited by Fadeel B, Pietroiusti A, Shvedova A Academic Press Elsevier First Edition ISBN: 978-0-12-386940-1
- 5) **Wick P**, Klose R, Krug HF (2011) Nanopartikel: Trojanische Pferde – oder Alltagsgeschäft für den Körper? ASU Protect 2/11
- 4) Krug HF, Mathes B, Nau K, **Wick P** (2011) Nanomaterialien – in aller Munde? Sicherheit im Umgang mit Nanopartikeln in neuen Produkten Deutsche Apothekerzeitung Jahrgang 151 Nr27
- 3) Klein CL, Comero S, Sthalmecke B, Romazanov J, Kuhlbusch TAJ, Van Doren E, De Temmermann P_J, Mast J, **Wick P**, Krug HF, Locoro G, Hund-Rinke K, Kördel W, Friedrichs S, Maier G, Werner J, Linsinger T, Gawlik BM (2011) NM-Series of Representative Manufactured Nanomaterials NM-300 Silver Characterization, Stability, Homogeneity. JRC Scientific and Technical Reports ISBN 978-92-79-19068-1
- 2) Som C, Nowack B, **Wick P**, Krug HF (2009) Nanomaterialien in Textilien: Umwelt-, Gesundheits- und Sicherheitsaspekte. Schweizerischer Textilverband
- 1) Höck J, Hofmann H, Krug H, Lorenz C, Limbach L, Nowack B, Riediker M, Schirmer K, Som C, Stark W, Studer C, von Götz N, Wengert S, **Wick P** (2008) Precautionary Matrix for Synthetic Nanomaterials. Bundesamt für Gesundheit und Bundesamt für Umwelt, Bern

Preise:

- 2016 **Best Poster Award**, 9th CLINAM, The European Summit for Clinical Nanomedicine and Targeted Medicine
Bürki-Thurnherr T, Grafmüller S, Manser P, Muoth C, Aengenheister L, Wichser A, Jochum W, Diner PA, von Mandach U, **Wick P**, Studying nanoparticles translocation and effects at the human placenta barrier using ex vivo and advanced in vitro model systems
- 2014 **Best Poster Award**, 7th CLINAM, The European Summit for Clinical Nanomedicine and Targeted Medicine
Rösslein M, Elliot JT, Song NW, Kinsner-Ovaskainen A, Hirsch C, Hole P, Sillence K, Rossi F, **Wick P**, Comparability over time and space due to effective interlaboratory comparisons
- 2nd Best Talk Award**, 7th International Nanotoxicology Congress Antalya TR
Mouth C, Schipanski A, Bürki-Thurnherr T, Rottmar M, **Wick P**, Maniura K, Does the cell architecture influences engineered nanomaterial uptake? – an experimental approach
- 2012 **Best Poster Prize**, 5th Annual Meeting of the Swiss Association of Perinatal Pharmacology, Zurich, CH

Poster Prize, Empa PhD Symposium, Dübendorf, CH

- 2011 **Best Poster Award**, 3rd NanoImpactNet Conference Building a bridge from NanoImpactNet to nanomedical research, Lausanne, CH
Gasser M, **Wick P**, Gehr P, Krug HF, Clift MJD, Rothen-Rutishauser B, Investigating the lipid and protein coatings of different functionalized multi-walled carbon nanotubes - can these affect their potential adverse effects?
- 2010 **Certificate of Recognition** one of Elsevier's Top 10 cited articles on Scopus 2007-08
Wick P, Manser P, Limbach LK, Dettlaff-Weglikowska U, Krumeich F, Roth S, Stark WJ, Bruinink A (2007) The degree and kind of agglomeration affect carbon nanotube cytotoxicity. Toxicology Letters (168) 121-131
- 2010 **Best Poster Award**, 2nd NanoImpactNet Conference for a healthy environment in a future with nanotechnology, Lausanne, CH
Thurnherr T, Brandenberger C, Kaiser JP, Manser P, Diener L, Krug HF, Rothen-Rutishauser B, **Wick P** (2010), Long-term accumulation of multi-walled carbon nanotubes has no major effects on human lung cell survival and functionality in vitro
- 2008 **Award for the best paper 2007** of Environmental Science and Technology
Limbach L, **Wick P**, Manser P, Grass RN, Bruinink A, Stark WJ (2007) Exposure of engineered nanoparticles to human lung epithelial cells: Influence of chemical composition and catalytic activity on oxidative stress. Environ Sci Technol 41 (11) 4158-63
- 2007 **Best Poster Award**, NanoEurope, St. Gallen CH
Körner E, Balaz D, **Wick P**, Lischer S, Fortunato G, Hegemann D (2007) Nanocomposite coatings combine antimicrobial activity with cytocompatibility.

Erfolgreiche Projektanträge:

2016	H2020ProSafe GoNanoBioMat SNSF Graphene at lung Industrie Kooperation (confid)	Hauptgesuchsteller (1.3 M€ / 388k€) Hauptgesuchsteller (525 kCHF) Hauptgesuchsteller (290 k€)
2015	KTI 4D LifeTec KTI Flammschutz H2020 EU-NCL Infrastructure	Hauptgesuchsteller (640 kCHF / 320 kCHF) Co-Gesuchsteller (800 kCHF / 28 kCHF) Co-Gesuchsteller (5 M€ / 720 k€)
2014	BMBF-Antrag NanoUmwelt CCMX Challenge 7 th F&E Wound dressing	Co-Gesuchsteller (1.8 M€ / 180 k€) Hauptgesuchsteller (2.0 MCHF / 1.4 MCHF) Co-Gesuchsteller (350 kCHF / 80 kCHF)
2013	SNF NFP64 CNT Abrasion (Verl.) 7 th FP EU NanoReg BMBF DaNa II 7 th FP EU Flagship Graphene	Co-Gesuchsteller (92 kCHF / 24 kCHF) Co-Gesuchsteller (5 M€ / 120 kCHF) Co-Gesuchsteller (3 M€ / 344 k€) Co-Gesuchsteller (1000 M€ / 730 k€)
2012	SNF NRP64 NanoCopper SNF NRP64 FoodN'Immunity 7 th FP EU NANOSOLUTIONS Industrie Kooperation (confid.)	Hauptgesuchsteller (350 kCHF) Co-Gesuchsteller (350 / 150 kCHF) Mitgesuchsteller (10 M€ / 290 k€) Hauptgesuchsteller (350 kCHF)
2011	FAG Basel NP Uptake CH-Südkorea bilateral Programm	Co-Gesuchsteller (75 / 35 kCHF) Hauptgesuchsteller (50 kCHF)

	Störfall-Bericht für BAfU	Mitgesuchsteller (60 / 27 kCHF)
2010	SNF NFP64 Plazenta Perfusion SNF NFP64 CNT Abrasion 7 th FP EU MARINA IRTG NeuroNanotox (DFG)	Hauptgesuchsteller (350 kCHF) Co-Gesuchsteller (400 / 150 kCHF) Mitgesuchsteller (12 M€ / 165 k€) Mitgesuchsteller (900 / 85 k€)
2009	CCMX VIGO 7 th FP EU NanoHouse	Mitgesuchsteller (675 kCHF) Mitgesuchsteller (2.4 M€ / 70 k€)
2007	6 th F&E Protein-CNT Interaction (Network UniBe NCCR Basel) 7 th FP NanoImpactNet	Hauptgesuchsteller (100 kCHF) Mitgesuchsteller (2 M€ / 15 k€)
bis 2006	6 th FP EU CANAPE BAG / BAFU / KTI NanoRisk 5 th F&E NeuroCNTox	Unterstützung (2.5 M€ / 270 k€) Unterstützung (320 kCHF) Hauptgesuchsteller (100 kCHF)

Organisation von wissenschaftlichen Konferenzen:

2016	Scientific committee NanoMat2016 2D Nanomaterials Empa, Dübendorf, CH
2014	Scientific and organization committee Technology Aperitif: How safe is safe enough? Empa, St. Gallen, CH
2013	Scientific committee Technologie Briefing: Nanomaterialien in Fassadenbeschichtungen Empa, Dübendorf, CH Scientific and organization committee Current Challenges Facing Inorganic Nanoparticle in Medicine and Industry Insel Hospital Berne, CH Scientific and organization committee: In vitro Barrier Models: How Reliable and Clinically Relevant are these Systems? Empa, St. Gallen, CH
2012	Scientific committee and Session Chair NanoFormulation 2012, Barcelona ES Scientific committee and Session Chair NanoImpactNet QNano Joined Conference 'From theory to practice – development, training and enabling nanosafety and health research'
2011	Scientific and organization committee: Particle Day, Empa, CH Scientific committee: 3 rd NanoImpactNet Conference 'Building a bridge from NanoImpactNet to nanomedical research', Lausanne, CH
2010	Initiant und Organisator: Wissenschaft im Dialog, Empa Akademie: Plazenta – eine Barriere für ultrafeine Partikel? St. Gallen, CH

- 2009 Scientific committee:
1st NanoImpactNet Conference for a healthy environment in a future with nanotechnology, Lausanne, CH
- 2008 Scientific committee:
NanoRisk2008 Determining occupational, environmental and health impacts, Paris, F
- 2008 Organization committee:
2nd International Conference Nanotoxicology, Zürich, CH
- 2005 Organization & Member of the scientific committee:
Workshop: Human Mesenchymal Stem Cells: Selection, Cultivation, Phenotyping, Empa St. Gallen, CH

Betreuung von Diplomanden / Doktoranden:

seit 2008	1 Doktorand	Uni Bern / Bretscher Center / Empa
seit 2004	2 Doktoranden	ETH Zürich
seit 2003	6 Doktoranden	Empa
seit 2002	15 Bachelor / Master	Fachhochschule / ETH Zürich / Uni Karlsruhe / Uni Freiburg iB / Uni Strasbourg
seit 2002	9 Praktikanten	Fachhochschule

Lehre

seit 2014	ETHZ D-BAUG	Masterlehrgang Air quality and human health
2010 - 2013	Universität Bern	Masterlehrgang Climate, Environment and Human Health
2009 - 2013	ZAHW Winterthur	Masterlehrgang Biomaterialien
seit 2009	Fachhochschule Vorarlberg	Masterlehrgang Micro- und Nanotechnologie

Mitgliedschaften:

European Technology Platform Nanomedicine
International Society for Aerosols in Medicine ISAM
Swiss Aerosol Society
Schweizerische Gesellschaft für Zell- und Molekularbiologie
Swiss Society of Biomaterials
Europe Society of Biomaterials
Tissue Engineering & Regenerative Medicine International Society

Begleitgruppe für den Aktionsplan für synthetische Nanomaterialien
Begleitgruppe für den Vorsorgeraster für synthetische Nanomaterialien

Reviewer von Peer Reviewed Fachzeitschriften:

seit 2015	Associated Editor des Journal NanoImpact
2013	Co-Guest Editor of BioNanoMaterial Special Issue NANOSAFETY – Progress in (eco)toxicology, understanding of mechanisms of action and risk assessment towards a reliable and sustainable use of nanotechnology
seit 2011	Editorial Board Member des Journal Nanotoxicology

ACS Nano
Angewandte Chemie
Biomaterials

BioNanomaterials
Carbon

Chemical Research in
Toxicology

Environmental Health
Perspective
Environmental Pollution
Environmental Science
and Technology
Journal of Nanoparticle
Research

Journal of Physical
Chemistry
Journal of Hazardous
Materials
NanoLetters
Nature Nanotechnology
Nanomedicine
Neuroscience Research

Particle & Fibre Toxicology
Toxicological Science
Toxicology
Toxicology and Applied
Pharmacology
Toxicology in vitro
Toxicology Letters