

Curriculum Vitae

Peter Wick
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google scholar: <https://scholar.google.com/citations?user=iWEfobcAAAAJ&hl=de>

Date of birth: 14. September 1971

Birthplace Zuzwil SG, Switzerland

Nationality: Swiss

Civil Status: married, 2 children Florian (2007) and Timo (2010)

Education:

2023 IDM Advanced Academic Leadership Program
2016 SMP Management course (4 days)
since 2009 Empa internal leadership trainings (Modul 1 – 4)
2005 - 2010 Education in Toxicology
1998 - 2002 PhD Thesis, University of Fribourg Prof Dr JP Métraux
(focus on cellular- and molecular biology)
1993 - 1997 Study and Diploma degree in biology at University of Fribourg

Academic appointments and professional experience:

Since ..2023 Adjunct Professor ETH Zurich, Health Science and Technology Department
since 2014 Head Particles - Biology Interactions Laboratory
since 2014 Modul leader in Research Focus Area 'Health and Performance'
2010 - 2014 Co-Head Materials – Biology Interactions Laboratory
2009 - 2010 Group leader Nanointercell
2007 - 2009 Deputy Group leader Nanointercell of Materials – Biology Interactions Laboratory, Empa St. Gallen
2002 - 2007 Scientific Collaborator Laboratory for Biocompatible Materials, Deputy Group leader MaTisMed, Empa St. Gallen
1998 - 2002 Dipl. Assistant at the Faculty of Natural Science University of Fribourg

Institutional responsibilities:

2020 - 2022 Member of the Swiss National COVID-19 Science Task Force
since 2018 Head of National Contact Point Nano.CH
2017 - 2019 Coordinator H2020 Prosafe 'GoNanoBioMat'
2014 - 2019 Coordinator CCMX Materials Challenge 'NanoScreen'

Awards and Honors:

2018 **Best Poster Award**, 8th Submit CLINAM, Basel
Bürki-Thurnherr T, Grafmüller S, Manser P, Muoth C, Aengenheister L, Wichser A, Jochum W, Diner PA, von Mandach U, Wick P

2014 **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

- 2010 **Certificate of Recognition one of Elsevier's Top 10 cited articles on Scopus 07-08**
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
- 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

Approved Research Grants:

Over 55 third party projects, total volume of 17 MCHF

2024	Industrial cooperation (confid)	main applicant (135 kCHF)
2023	HEurope CHIASMA	co-applicant (5.5M€ / 1050 k€)
	HEurope INSIGHT	co-applicant (7.1M€ / 675 k€)
	HEurope Toxbox	co-applicant (5.1M€ / 350 k€)
	HEurope Metrino	co-applicant (6.4 M€ / 680 k€)
	Industrial cooperation (confid)	main applicant (252 kCHF)
	Federal Food safety eatable coatings	main applicant (95 kCHF)
	RIC-2D joint initiative	co-application (4 M\$ / 380k\$)
2022	HEurope MACRAME	co-applicant (7.1M€ / 835 k€)
	Mirto Foundation	main applicant (45 kCHF)
	Elgin Foundation	main applicant (150 kCHF)
	Dr. Hans Altschüler Foundation	main applicant (30 kCHF)
	Dr. Gerberten Bosch Foundation	main applicant (50 kCHF)
	Animalfree Research	main applicant (30 CHF)
2021	HEurope NOVA	co-applicant (7.5M€ / 850 k€)
	Industrial cooperation (confid.)	main applicant (156 kCHF)
2020	InnoSuisse ReMask	co-applicant (1.9 MCHF / 120 kCHF)
	Industrial cooperation (confid.)	main applicant (550 kCHF)
2019	Industrial cooperation (confid)	main applicant (35 kCHF)
	EmpaPostDoc Cofound	co-applicant (80 kCHF)
	H2020 SpearHead Safegraph	co-applicant (1 M€ / 300 k€)
2018	Contact Point Nano.CH	main applicant (625 kCHF)
	BAFU BMBF DaNa Support	main applicant (80 kCHF)
	H2020 Nanorigo	co-applicant (4.5 M€ / 165 k€)
2017	SNSF Dynamic X	co-applicant (550 kCHF / 200 kCHF)
	H2020 ProSafe GoNanoBioMat	main applicant (1.3 M€ / 388 k€)
	Industrial cooperation (confid.)	main applicant (16 kCHF)
	Industrial cooperation (confid.)	main applicant (35 kCHF)
	H2020 REFINE	co-applicant (4.8 M€ / 470 k€)
2016	SNSF Graphene at Lung	main applicant (525 kCHF)
	Industrial cooperation (confid)	main applicant (290 k€)
2015	KTI 4DLifeTec SCGE	main applicant (640 kCHF)
	KTI Flame Retardants	co-applicant (800 kCHF / 28 kCHF)
	H2020 EU-NCL Infrastructure	co-applicant (5 M€ / 720 k€)
2014	BMBF NanoUmwelt	co-applicant (1.8 M€ / 180 k€)
	CCMX Challenge NanoScreen	main applicant (2.0 MCHF / 1.4 MCHF)
	7 th F&E Wound dressing	co-applicant (350 kCHF / 80 kCHF)
2013	SNSF NFP64 CNT Abrasion (cont.)	co-applicant (92 kCHF / 24 kCHF)
	7 th FP EU NanoReg	co-applicant (5 M€ / 120 kCHF)
	BMBF DaNa II	co-applicant (3 M€ / 344 k€)
	7 th FP EU Flagship Graphene	co-applicant (1000 M€ / 730 k€)
2012	SNSF NRP64 NanoCupper	main applicant (350 kCHF)
	SNSF NRP64 FoodN'Immunity	co-applicant (350 kCHF / 150 kCHF)
	7 th FP EU NANOSOLUTIONS	main applicant (10 M€ / 290 k€)
	Industrial cooperation (confid.)	main applicant (350 kCHF)
2011	FAG Basel NP Uptake	co-applicant (75 kCHF / 35 kCHF)
	CH-South Korea bilateral Program	main applicant (50 kCHF)
	Main Accident Report for FOEN	co-applicant (60 kCHF / 27 kCHF)
2010	SNSF NFP64 Placenta Perfusion	main applicant (350 kCHF)

	SNSF NFP64 CNT Abrasion	co-applicant (400 kCHF / 150 kCHF)
	7 th FP EU MARINA	co-applicant (12 M€ / 165 k€)
	IRTG NeuroNanotox (DFG)	co-applicant (900 k€ / 85 k€)
2009	CCMX VIGO	co-applicant (675 kCHF)
	7 th FP EU NanoHouse	co-applicant (2.4 M€ / 70 k€)
2007	6 th F&E Protein-CNT Interaction	main applicant (100 kCHF)
	7 th FP NanoImpactNet	co-applicant (2 M€ / 15 k€)
until 2006	6 th FP EU CANAPE	supporter (2.5 M€ / 270 k€)
	BAG / BAFU / KTI NanoRisk	supporter (320 kCHF)
	5 th F&E NeuroCNTox	main applicant (100 kCHF)

Peer-reviewed publications:

>15800 cited, 1420 in 2023, h-index 59 (Source Google Scholar 24.02.2024)

>11400 cited, 1120 in 2023, h-index 51 (Source Scopus 24.02.2024)

159) Krupnik L, Avaro J, Liebi M, Anaraki Iranpour N, Kohlbrecher J, Sologuebenko A, Handschin S, Rzepiela AJ, Appel C, Totu T, Blanchet CE, Barton AE, Digigow R, Philipp E, Flühmann B, Sliva BFB, Neels A, Wick P, (2024) Iron-carbohydrate complexes treating iron anaemia: Understanding the nano-structure and interactions with proteins through orthogonal characterization, *JCR* 4(1)566-79

158) Lin H, Buerki-Thurnherr T, Kaur J, **Wick P**, Pelin M, Tubaro A, Carniel FC, Tretiach M, Flahaut E, Iglesias D, Vázquez E, Cellot G, Ballerini L, Castagnola V, Benfenati F, Armirotti A, Sallustrau A, Taran F, Keck M, Bussy C, Vranic S, Kostarelos K, Connolly M, Maria Navas J, Mouchet F, Gauthier L, Baker J, Suarez-Merino B, Kanerva T, Prato M, Fadeel B, Bianco A, (2024) Environmental and health impacts of graphene and other two-dimensional materials: a graphene flagship perspective, *ACSNano* 18(8)6038-94

157) Gupta G, Wang Z, Kissling VM, Gogos A, **Wick P**, Bürki-Thurnherr T, (2024) Boron nitride nanosheets induce lipid accumulation and autophagy in human alveolar lung epithelial cells cultivated at the air-liquid interface, *Small*, 2308148

156) **Wick P**, Zhang H, Lin S, Li X, Zhang C, Ardon HA, (2024) Special Issue: Environmental and Health impacts of two-dimensional nanomaterials, editorial, *NanoImpact*, 100491

155) Meier P, Clement P, Altenried S, Reina G, Ren Q, Zuest R, Enger O, Choi F, Nestle N, Deisenroth T, Neubauer P, **Wick P**, (2023) Quaternary ammonium-based coating of textiles is effective against bacteria and viruses with a low risk to human health, *SciRep* 13(1)20556

154) Bossart J, Rippl A, Barton AE, Flühmann B, Digigow R, Buljan M, Ayala-Nunez V, **Wick P**, (2023) Uncovering the dynamics of cellular responses induced by iron-carbohydrate complexes in human macrophages using quantitative proteomics and phosphoproteomics, *Biomed Pharmacother*, 166,115404

153) Krupnik L, Joshi P, Kappler A, Flühmann B, Alston A, Digigow R, **Wick P**, Neels A, (2023) Critical nanomaterial attributes of iron-carbohydrate nanoparticles: Leveraging orthogonal methods to resolve the 3-dimensional structure, *EJPS* 188, 106521

152) Romeo D, Clement P, **Wick P**, (2023) Release and toxicity assessment of carbon nanomaterial reinforced polymers during the use and end-of-life phases: A comparative review, *NanoImpact*, 100477

151) Malina T, Hirsch C, Rippl A, Panacek D, Polakova K, Sedajova V, Scheibe M, Zboril R, **Wick P**, (2023) Safety assessment of graphene acid and cyanographene: Towards new carbon-based nanomedicine, *Carbon* 211,118093

150) Chortarea S, Gupta G, Saarimäki LA, Netkueakul W, Manser P, Aengenheister L, Wichser A, Fortino V, **Wick P**, Greco D, Buerki-Thurnherr T, (2023) Transcriptomic profiling reveals differential cellular response to copper oxide nanoparticles and polystyrene nanoplastics in perfused human placenta, *Environ Intern*, 108015

149) Ivanoska-Dacikj A, Oguz-Gouillart Y, Hossain G, Kaplan M, Sivri Ç, Ros-Lis JV, Mikucioniene D, Munir MU, Kizildag N, Unal S, Safarik I, Akgül E, Yıldırım N, Bedeloğlu AC, Ünsal ÖF, Herwig G, Rossi RM, **Wick P**, Clement P, Sarac AS (2023) Advanced and Smart Textiles during and after the COVID-19 Pandemic: Issues, Challenges, and Innovations, *Healthcare* 11,8,1115

148) Mullins M, Himly M, Llopis IR, Furxhi I, Hofer S, Hofstätter N, **Wick P**, Romeo D, Kühnel D, Siivola K, Catalan J, Hund-Rinke K, Xiarchos I, Linehan S, Schuurbiens D, Bilbao AG, Barruetabena L, Drobne D, (2023) *Environ Sys Decisions* 43,1,3-15

147) Korejwo D, Chortarea S, Louka C, Buljan M, Rothen-Rutishauser B, **Wick P**, Buerki-Thurnherr T (2023) Gene expression profiling of human macrophages after graphene oxide and graphene nanoplatelets treatment reveals particle-specific regulation of pathways, *NanoImpact*, 100452

146) Bürgi JJ, Rösslein M, Nolte O, **Wick P**, Goy RG, Stranders S, Dollenmaier G, Peier K, Nohynek B, Fischer A, Stolz R, Cettuzzi M, Graf L, Korte W, (2022) Mild COVID-19 induces early, quantifiable, persistent troponin I elevations in elder men, *Frontiers in Cardiovascular Medicine* 9,1053790

- 145) Iranpour Anaraki N, Liebi M, Iranshahi K, Blanchet C, **Wick P**, Neels A, (2022) Time-Resolved Study on Self-Assembling Behavior of PEGylated Gold Nanoparticles in the Presence of Human Serum Albumin: A System for Nanomedical Applications, *ACS Appl Nanomat* 5(12)18921-29
- 144) Romeo D, Louka C, Gudino B, Wigström J, **Wick P**, (2022) Structure-activity relationship of graphene-related materials: A meta-analysis based on mammalian in vitro toxicity data, *Nanoimpact* 28,100436
- 143) Meier P, Zabara M, Hirsch C, Gogos A, Tscherrig D, Richner G, Nowack B, **Wick P**, (2022) Evaluation of fiber and debris release from protective COVID-19 mask textiles and in vitro acute cytotoxicity effects, *Environ Intern* 167,107364
- 142) Netkueakul W, Chortarea S, Li H, Qiu G, Jovic M, Gaan S, Hannig Y, Bürki-Thurnherr T, Wang J, **Wick P**, (2022) Airborne emissions from combustion of epoxy-graphene nanoplatelets composites and their cytotoxicity on lung cells via air liquid interface cell exposure in vitro, *NanoImpact*, 100414
- 141) Chortarea S, Kuru OC, Netkueakul W, Buerki-Thurnherr T, Pelin M, Keshavan S, Song Z, Gomez J, Villaro E, Luna L, Kontis N, Anagnostopoulos G, Galiotis C, Caataldi P, Kinloch I, Fadel B, Bussy C, Kostarelos K, Bianco A, Prato M, **Wick P**, (2022) Impact of abraded graphene reinforced composites: a multi organ – multi-endpoint study in vitro and in vivo, *J Hazard Mat* 435, 129053
- 140) Furer LA, Clement P, Herwig G, Rossi RM, Bhoelan F, Amacker M, Stegemann T, Bürki-Thurnherr B, **Wick P**, (2022) A novel inactivated virus system (InVis) for a fast and inexpensive assessment of viral disintegration, *Sci Rep* 12(1),1-11
- 139) Romeo D, Hirsch R, Nowack B, **Wick P** (2022), Approach towards in vitro-based human toxicity effect factors for the life cycle impact assessment of inhaled low-solubility particles, *Environ Sci & Technol*, 56,8552-8560
- 138) Buljan M, **Wick P** (2022) Tailoring design of nanomaterials and systems to individualize patient treatments, *Chimia* 76(3)236
- 137) Batt T, Annaheim S, Clement P, Furer L, Hirsch C, Varanges V, Caglar B, Michaud V, Wang J, Richner G, **Wick P**, Rossi R, (2022) COVID-19 pandemic response, from an emergency solution to a long term innovation game changer for the textile industry, *Chimia* 76(3)249
- 136) Meier P, Zabara M, Hirsch C, Gogos A, Tscherrig D, Richner G, Nowack B, **Wick P** (2022) Evaluation of fiber and debris release from protective COVID-19 mask textiles and in vitro acute cytotoxicity effects, *Environ Int Sep*;167:107364
- 135) Bürgi JJ, Rösslein M, Hornung H, Jentsch J, Boller VL, Dollenmaier G, **Wick P**, Peier K, Nohynek B, Fischer A, Stolz R, Cettuzzi M, Reut M, Boy RG, Nolte O, Korte W (2022) Divergent humoral responses in mild to moderate SARS-CoV-2 infection over time-indication of persistence of the virus? *J infection* 84(3)418-467
- 134) Iranpour Anaraki N, Liebi M, Ong Q, Blanchet C, Maurya AK, Stellacci F, Salentinig S, **Wick P**, Neels A, (2022) In situ investigations on gold nanoparticles stabilization mechanism in biological environments containing HSA, *Adv Funct Mat* 32(9)2110253
- 133) May S, Rippl A, Bürkle A, **Wick P**, Hirsch C, (2022) Assessing genotoxicity of various different ENM by the novel semi-automated FADU assay and the traditional alkaline comet assay, *Nanomaterials* 12(2)220
- 132) Romeo D, Hirsch R, Nowack B, Jolliet O, Fankte P, **Wick P** (2022) In vitro based human toxicity effect factors: challenges and opportunities for nanomaterial impact assessment *Environ Sci Nano* 9,1913-1925
- 131) Romeo D, Nowack B, **Wick P**, (2022) Combined in vitro-in vivo dosimetry enables the extrapolation of in vitro doses to human exposure levels: a proof of concept based on a meta-analysis of in vitro and in vivo titanium dioxide toxicity data *NanoImpact* 25,100376
- 130) Mitrano D, **Wick P**, Nowack B, (2021) Small(er) particles, big(ger) problems? Placing nanoplastics in context with global plastic pollutions, *Nat Nanotech* 16(5)491-500

- 129) Wiesli MG, Kaiser JP, Gautier E, **Wick P**, Maniura K, Rottmar M, Wahl P (2021) Influence of ceftriaxone on human bone cell viability and in vitro mineralization potential is concentration and time-dependent *Bone & Joint Research* 10 (3), 218-225
- 128) SARS-CoV-2 IgG and IgA antibody response is gender dependent and IgG antibodies rapidly decline early on (2021) Korte W, Buljan M, Rösslein M, **Wick P**, Golubov V, Jentsch J, Reut M, Peier K, Nohynek B, Fischer A, Stolz R, Cettuzzi M, Nolte O *Journal of Infection* 82(1),e11-e14
- 127) Hempt C, Hirsch C, Hannig Y, Rippl A, **Wick P**, Bürki-Thurnherr T, (2021) Investigation the effect of differently produced synthetic amorphous silica (E 551) on the integrity and functionality of the human intestinal barrier using an advanced in vitro co-culture model, *Archives of Toxicol* 95 (3), 837-852
- 126) Iranpour Anaraki N, Sadeghpour A, Iranshahi K, Ong Khac Q, Cendrowska U, Toncelli C, Dommann A, **Wick P**, Neels A, (2020) A new approach for time-resolved and dynamic investigations on nanoparticles agglomeration, *Nanoresearch* 13(10)2847-2856
- 125) Franz P, Bürkle A, **Wick P**, Hirsch C, (2020) Exploring flow cytometry-based micronucleus scoring for reliable nanomaterial genotoxicity assessment *Chem Res Toxicol*, 33(10)2538-2549 (plus Supplemental Cover)
- 124) Hempt C, Kaiser JP, Scholder O, Bürki-Thurnherr T, Hofmann H, Kucki M, Rippl A, Schuster TB, **Wick P**, Hirsch C, (2020) The impact of synthetic amorphous silica (E 551) on differentiated caco-2 cells, a model for the human intestinal epithelium *Toxicol in vitro* 104903
- 123) Milosevic A, Romeo D, **Wick P**, (2020) Predictive nanotoxicology: How nanomaterial biotransformation remains an unmet challenge, *SMALL* 16(36) 1907650 (on invitation plus Cover)
- 122) Nikraves N, Borchard G, Hofmann H, Philip E, Flühmann B, **Wick P**, (2020) Factors Influencing safety and efficacy of intravenous iron-carbohydrate nanomedicines: from production to clinical practice, *Nanomed: Nanotechnol, Biol Med* 26, 102178
- 121) Schmutz M, Borges O, Jesus S, Borchard G, Perale G, Zinn M, Sips AJAM, Soeteman-Hernandez LG, **Wick P**, Som C, (2020) A methodological Safe-by-Design approach for the development of nanomedicines, *Front Bioeng Biotechnol* 8, 258
- 120) Romero D, Saleri B, Hischier R, Nowack B, **Wick P**, (2020) An integrated pathway based on in vitro data for the human hazard assessment of nanomaterials *Environ Intern* 137;105505
- 119) Jesus S, Marques AP, Duarte A, Soares E, Costa JP, Colaco MA, Schmutz M, Som C, Borchard G, **Wick P**, Borges O (2020) Chitosan nanoparticles: shedding light on immunotoxicity and hemocompatibility, *Front Bioeng Biotechnol* 8;100
- 118) Saleri B, Kaiser JP, Rösslein M, Hischier R, Nowack B, **Wick P**, (2020) Relative potency approach for using in vitro information for definition of effect factors of human toxicity in life cycle impact assessment *Nanotoxicology* 14:2, 275-286
- 117) Beyeler S, Steiner S, Wotzkow C, Tschanz SA, Sengal AA, **Wick P**, Haenni B, Alves MP, von Garnier C, Blank F, (2020) Multi-walled carbon nanotubes activate and shift polarization of pulmonary macrophages and dendritic cells in an in vivo model of chronic obstructive lung disease *Nanotoxicol* 14(1);77-96
- 116) Schmutz M, Hischier R, **Wick P**, Blatt T, Wäger P, Nowack B, Som C (2020) Cotton or surgical masks – what ecological factors are relevant for their sustainability? *Sustainability* 12 (24), 10245
- 115) Borchard G, Som C, Zinn M, Ostafe V, Borges O, Perale G, **Wick P** (2020) Polymeric Nano-Biomaterials for Medical Applications: Advancements in Developing and Implementation Considering Safety-By-Design Concepts *Front Bioeng Biotechnol* 8,1132 (editorial for Special Issue)
- 114) Netkueakul W*, Korejwo D*, Hammer T, Chortarea S, Rupper R, Braun O, Clamae M, Rothen-Rutishauser B, Buerki-Thurnherr T, Wang J*, **Wick P***, (2020) Release of graphene-related materials from epoxy-based composites: characterization, quantification and hazard assessment *in vitro*, *NanoScale* 12(19)10703-10722

- 113) Cassano JC, Rösslein M, Kaufmann R, Lüthi T, Schicht O, **Wick P**, Hirsch C, (2020) A novel approach to increase robustness, precision and high-throughput capacity of single cell gel electrophoresis, *ALTEX* 37(1);95-109
- 112) **Wick P**, Franz P, Huber S, Hirsch C, (2020) Innovative techniques and strategies for a reliable high-throughput genotoxicity assessment, *Chem Res Toxicol* 33;283-285
- 111) Hesler M, Aengenheister L, Ellinger B, Drexel R, Straskraba S, Jost CC, Meier F, Buechel C, **Wick P**, Bürki-Thurnherr T, Kohl Y, (2019) Multi-endpoint toxicological assessment of polystyrene nano- and micro- particles in different biological models in vitro, *Toxicol in Vitro* 61,104610
- 110) Ghaemi B, Moshiri A, Herrmann IK, Hajipour MJ, **Wick P**, Amani A, Sharmin Kharrazi (2019) Supramolecular insights into domino effect of Ag@ZnO-induced oxidative stress in melanoma cancer cells, *ACS Applied Materials & Interfaces* 11 (50), 46408-46418
- 109) Jesus S, Schmutz M, Som C, Borchard G, **Wick P**, Borges O (2019) Hazard assessment of polymeric nanobiomaterials for drug delivery: what can we learn from literature so far, *Frontiers in bioengineering and biotechnology* 7, 268
- 108) Casalini T, Limongelli V, Schmutz M, Som C, Jordan O, **Wick P**, Borchard G, Perale G (2019) Molecular modeling for nanomaterial-biology interactions: Opportunities, challenges and perspectives *Frontiers in bioengineering and biotechnology* 7, 268
- 107) Warth B, Preindl K, Manser P, **Wick P**, Marko D, Buerki-Thurnherr T, (2019) Transfer and metabolism of the xenoestrogen zeralenone in human perfused placenta *EHP* 127 10,107004
- 106) Petersen EJ, Hirsch C, Elliot JT, **Wick P**, Krug HF, Aengenheister L, May S, Rösslein M, (2019) Cause and effect analysis: a new approach for developing robust nano-bio assays. *Chem Res Toxicol* 33(5),1039-1054
- 105) Roman DL, Roman M, Som C, Schmutz M, Hernandez E, **Wick P**, Casaline T, Perale G, Ostafe V, Isvoran A, Computational assessment of the pharmacological profiles of degradation products of chitosan (2019) *Front BioengBiotechnol* 7,214
- 104) Aengenheister L, Dugershaw BBB, Manser P, Wichser A, Schoenenberger R, **Wick P**, Hesler M, Kohl Y, Straskraba S, Suter MJF, Bürki-Thurnherr T, (2019) Investigating the accumulation and translocation of titanium dioxide nanoparticles with different surface modifications in static and dynamic human placental transfer models, *Europ J Pharma Biopharma* 142,488-497
- 103) Prina-Mello A, Schmid R, **Wick P**, Caputo F, Boisseau P, et al (2019) On the issue of transparency and reproducibility in nanomedicine, *Nat Nanotech* 14(7)629-631
- 102) Siegrist S, Cörek E, Detampel P, Sandström J, **Wick P**, Huwylar J, (2019) Preclinical Safety evaluation strategy for Nanomedicines, *Nanotoxicology* 13(1)73-99
- 101) Anthis AHC, Tsolaki E, Didierlaurent L, Staubli S, Zboray R, Neels A, Dietrich D, Manser P, Desbiolles LM, Leschka S, Wildermuth S, Lehner S, Chavatte-Palmer P, Jochum W, **Wick P**, Dommann A, Bürki-Thurnherr T, Fischer T, Hornung R, Bertazzo S, Herrmann IK (2019) Nano-analytical characterization of endogenous minerals in healthy placental tissue: mineral distribution, composition and ultrastructure, *Analyst* 144(23), 6850-6857
- 100) Civardi C, Grolimund D, Schubert M, **Wick P**, Schwarze FWMR, (2019) Micronized copper-treated wood: copper remobilization into spores from the copper-tolerant wood-destroying fungus *Rhodonia placenta* *Environmental Science Nano* 6(2),425-431
- 99) Maguire CM, Rösslein M, **Wick P**, Prina-Mello A, (2018) Characterisation of particles in solution—a perspective on light scattering and comparative technologies *STAM* 19(1)732-745
- 98) Aengenheister L, Dietrich D, Sadeghpour A, Manser P, Diener L, Wichser A, Karst U, **Wick P**, Bürki-Thurnherr T, (2018) Gold nanoparticle distribution in advanced in vitro and ex vivo human placental barrier models, *J Nanobiotechnol* 16(1)1-16

- 97) Bohmer N, May S, Rippl A, Roesslein M, Hea MB, Kwak MJ, Song NW, **Wick P**, Hirsch C, (2018) Interference of engineered nanomaterials in flow cytometry: a case study *Colloids and surfaces B: Biointerfaces* 172,635-645
- 96) Fadeel B, Bussy C, Guijarro SM, Fernandez-Pacheco EV, Flahaut E, Maouchet F, Evariste L, Gauthier L, Koivisto J, Vogel U, Jimenez CM, Delogu L, Bürki-Thurnherr T, **Wick P**, Beloin-Saint-Pierre D, Hirschier R, Pelin M, Carniel FC, Tretiach M, Cesca F, Benfenati F, Scaini D, Ballerini L, Kostarelos K, Prato M, Bianco A, (2018) Disentangling structure-activity relationships for graphene-based materials *ACS Nano* 12 (11) 10582-10620
- 95) Drasler B, Kucki M, Delhaes F, Bürki-Thurnherr T, Vanhecke D, Korejwo D, Petri-Fink Alke, Rothen-Rutishauser B, **Wick P**, (2018) Single exposure to aerosolized graphene oxide and graphene nanoplatelets did not initiate an acute biological response in a 3D human lung model *Carbon* 137, 125-135
- 94) Notter T, Aengenheister L, Welber-Stadlbauer U, Naegeli H, **Wick P**, Meyer U, Buerki-Thurnherr B, (2018) Prenatal exposure to TiO₂ nanoparticles in mice cause behavioral deficits relevant for autism spectrum disorder, *Translational Psychiatry* 8(1)193
- 93) Beyeler S, Chortarea S, Rothen-Rutishauser B, Petri-Fink A, **Wick P**, Tschanz SA, von Garnier C, Blank F (2018) Acute effects of multi-walled carbon nanotubes on primary bronchial epithelial cells from COPD patients, *Nanotoxicol* 12(7)699-711
- 92) Bürki-Thurnherr T, Schäpper K, Aengenheister L, **Wick P**, (2018) Developmental toxicity of nanomaterials: Need for a better understanding of indirect effects, *Chem Res Toxicol* 31(8)641-642
- 91) Kucki M, Aengenheister L, Diener L Rippl AV, Vranic S, Newman L, Vazquez E, Kostarelos K, **Wick P**, Buerki-Thurnherr T (2018) Impact of graphene oxide on human placental trophoblast viability, functionality and barrier integrity *2D Materials* 5(3):035014
- 90) Aengenheister L, Kucki M, Keevend K, Muoth C, Schönenberger R, Diener L, **Wick P**, Bürki-Thurnherr T, (2018) An Advanced human in vitro co-culture model for translocation studies across the human placenta barrier *Scientific Reports* 8(1):5288
- 89) May S, Hirsch C, Rippl A, Wichser A, Bohmer N, Bürkle A, **Wick P**, (2018) Transient DNA damage following exposure to gold nanoparticles *Nanoscale* 10,15723-15735
- 88) Maguire CM, Silence K, Roesslein M, Hannell C, Suarez G, Sauvain JJ, Capracotta S, Contal S, Cambier S, Yamani NE, Dusinska M, Dybowska A, Vennemann A, Cooke L, Haase A, Luch A, Wiemann M, Gutleb A, Korenstein R, Riediker M, **Wick P**, Hole P, Prina-Mello A, (2017) Benchmark of Nanoparticle Tracking Analysis on measuring nanoparticles sizing and concentration, *J Micro- and Nano-Manufacturing* 5(4)041002
- 87) Kucki M, Diener L, Bohmer N, Hirsch C, Krug HF, Palermo V, **Wick P** (2017) Uptake of graphene oxide by human intestinal cells in vitro is dependent on cell morphology and topography, *J NanoBioTech* 15:46
- 86) Winkler HC, Suter M, **Wick P**, von Moos L, Schraner E, Naegeli H (2017) Pro-interleukin-1B induction in resting dendritic cells exposed to a common nanostructured food additive, *Particle & Fiber Toxicol*14:21
- 85) Kaiser JP, Roesslein M, Diener L, Nowack B, **Wick P**, (2017) Cytotoxic effects of nanosilver are highly dependent from the chloride concentration and the carbon content (FCS) in the culture media *J Nanobiotechnology* 6:15(1):5
- 84) Chortarea S, Barosova H, Clift MJD, **Wick P**, Petri-Fink A, Rothen-Rutishauser B (2017), Human asthmatic bronchial cells are more susceptible to subchronic repeated exposures of aerosolized carbon nanotubes at occupationally relevant doses than healthy cells, *ACS Nano* 11(8):7615-25
- 83) Muoth C, Grossgarten M, Karst U, Ruiz J, Astruc D, Moya S, Diner L, Grieder K, Wichser A, Jochum W, **Wick P**, Buerki-Thurnherr T, (2017) Impact of particle size and surface modification on the localization and penetration of gold nanoparticles in human placental co-culture microtissues, *Nanomedicine*12:10:1119-1133

- 82) 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**, (2017) Toward achieving harmonization in a nano-cytotoxicity assay measurement by interlaboratory comparisons study ALTEX 34(2):201-208
- 81) Rösslein M, Liptrott N, Owen A, Boisseau P, **Wick P**, Hermann IK (2017) Sound understanding of environmental, health and safety, clinical, and market aspects is imperative to clinical translation of nanomedicines, *Nanotoxicol* 11:2:147-149
- 80) Mehn D, Rösslein M, Calzolari L, **Wick P**, Caputo F, Gilliland D, Bigger or more? (2017) Nanoparticle characterization methods in dimer recognition, *RSC Advances* 7:27747-27754
- 79) 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 (2017) Multiparameter toxicity assessment of novel DOPO-derived organophosphorus flame retardants, *Arch Toxicol* 91:407-425
- 78) Civardi C, Schlagenhauf L, Kaiser JP, Hirsch C, Mucchino C, Wichser A, **Wick P**, Schwarze FWMR, (2016) Release of copper-amended particles from Micronized copper-treated wood during mechanical abrasion, *J Nanobiotechnology* 28;14(1):77
- 77) 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
- 76) 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
- 75) 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
- 74) 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
- 73) 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
- 72) 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 (2016) *PlosOne* 23;11(11):e166816
- 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) Grafmüller S, Manser P, Diner L, Maurizi L, Diener PA, Hofmann H, Jochum W, Krug HF, Bürki-Thurnherr T, von Mandach U, **Wick P**, (2016) Challenges and common pitfalls in nanoparticle selection for transport studies across biological tissue barrier *Sci Technol Adv Mater* 16;1
- 67) Schlagenhauf 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

- 66) 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 *Rhodonia placenta* Plos One 10(11): e0142578
- 65) 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
- 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 69(1-2):52-6
- 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 21;53(30):7714-8
- 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-Rutishauser 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-Rutishauser 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)12: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 Res15:2101:1-12
- 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 ENTL4,01

- 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, Roesslein 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 Health 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, 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

Book chapters and other non-indexed publications:

- 14) Schmutz M, Borges O, Borchard G, **Wick P**, Som C (2020) **Book chapter** Guidelines as a starting point to address the needs of small and medium enterprises regarding the Safe-by-design of polymeric nanobiomaterials for drug delivery
- 13) Kucki M, Kaiser JP, Cliff MJD, Rothen-Rutishauser B, Petri-Fink A, **Wick P**, (2016) **Book chapter** The role of the protein corona in fibre structure-activity relationships, in *NanoFibres: Friend or Foe?*, edited by

A. Fink, B. Rothen-Rutishauser and MJD Clift, Basel CH, MDPI (Multidisciplinary Digital Publishing Institute) ISBN 978-3-03842-278-5

12) Hirsch C, Gaan S, Salmeia KA, Mathes S, Striegl B, **Wick P**, Schildknecht S, (2016) Multiparameter in vitro toxicity assessment of novel DOPO-derived organophosphorus flame retardants, *Toxicology Letters* 258, S137

11) Buerki-Thurnherr T, Muoth C, Aengenheister L, Kucki M, Manser P, Diener L, Wichser A, Schönenberger R, Jochum W, **Wick P**, (2016) Establishment of novel advanced in vitro models of the human placental barrier for nanoparticle translocation and effect studies, *Reproductive Toxicology* 64, 25

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, Sthalmücke 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

Proceedings:

23) Beyeler SM, Chortarea S, Rothen-Rutishauser B, Petri-Fink A, **Wick P**, Blank F (2017) Multi-walled carbon nanotubes exposure in healthy and chronic obstructive pulmonary disease, *Chest* 151(5)A106

22) Winkler H, von Moos LM, Kornprobst J, Schneider M, Hilty FM, et al **Wick P**, Zimmermann MB (2017) Nanostructured iron compounds for nutrition in vitro and in vivo assessment of safety and adsorptive pathways, *Am J Hematol* 92(8)E454

21) Muoth C, Aengenheister L, Grossgarten M, Karst U, Manser P, Diener L, Kucki M, Wichser A, Jochum W, **Wick P**, Bürki-Thurnherr T, (2017) Steering nanoparticles-placenta interactions: impact of particle properties and functionalization on placental uptake, penetration and biological effects, *Placenta* 57, 231-2

- 20) Clift MJD, Schins RPF, Poland CA, Endes C, Duffin R, **Wick P**, Petri-Fink A and Rothen-Rutishauser B (2015) Determination of advanced in vitro systems as valid, alternative test models to assess the potential genotoxicity of carbon nanotubes (submitted)
- 19) **Wick P**, Grafmüller S, Bürki-Thurnherr T, von Mandach U (2013) Knocking at the door of the unborn child: Issues in developmental and placental nanotoxicology, and directions for future research *Repro Toxicol* 41:41-20
- 18) Clift MJD, Endes C, Vanhecke D, **Wick P**, Gehr P, Schins RPF, Petri-Fink A, Rothen-Rutishauser B (2013) Efficiency and efficacy of using sophisticated 3D in vitro system of the human epithelial airway barrier to gain insight into the hazard posed by nanomaterials. *Toxicol Lett* 221S;S146-S147
- 17) Kaiser JP, Diner L, **Wick P** (2013) Nanoparticles in paints: A new strategy to protect facade and surface? *Conference Series J of Physics* 429(1) article number 012036
- 16) Hirsch C, Kaiser JP, Wessling F, Fischer K, Roesslein M, **Wick P**, Krug HF, (2011) A novel comprehensive evaluation platform to assess nanoparticle toxicity in vitro, *Proceeding, Nanosafe Meeting Grenoble FR J Phys Conference series Vol 304:1:012053*
- 15) Lischer S, Kröner E, Balazs DJ, Shen D, **Wick P**, Grieder K, Haas D, Heuberger M, Hegemann D (2010) Ag-containing plasma polymer coatings with antibacterial and cytocompatible properties, *European Cells and Material Vol 20 Suppl 3;23*
- 14) Kaiser JP, Mäder-Althaus X, Krug HF, **Wick P** (2010) Single walled carbon nanotubes affect cell physiology of epithelial cells, *European Cells and Materials Vol 20 Suppl 3:24*
- 13) Hirsch C, Wessling F, Fischer K, rösslein M, **Wick P**, Hofmann H, Krug HF (2010) A novel comprehensive evaluation platform to assess nanoparticle toxicity in vitro, *European Cells and Materials Vol 20 Suppl 3:112*
- 12) **Wick P**, Malek A, Diener PA, Zisch A, Krug HF, von Mandach U (2010) Human placenta: An efficient barrier for nanomaterials? *European Cells and Material Vol 20 Suppl 3;270*
- 11) **Wick P** (2009) Nano Textiles: a hazard free opportunity? *Proceeding, International Conference on Latest Advances in High-Tech Textiles and Textile-Based Materials*
- 10) Maniratanachote R, Thurnherr T, **Wick P**, Krug HF (2009) Effects of Multiwalled Carbon Nanotubes on Human B Lymphocytes. *Drug Meta Rev* 41:94-95 Suppl. 2
- 9) Hirsch C, Belyanskaya L, Weigel S, Tobler U, Krug HF, **Wick P** (2009) Effects of single-walled carbon nanotubes on mixed neuro-glial cultures from chicken spinal cord and dorsal root ganglia. *J Neurochem* 110:74-75 Suppl. 1
- 8) Malek A, **Wick P**, Manser P, Meili D, Maeder-Althaus X, Diener L, Diener PA, Zisch A, Krug HF, von Mandach U (2008) Placenta perfusion system: A human ex vivo model system to study the maternal-fetal barrier capacity for nanosized materials. *Placenta* 29(8) A67
- 7) Krug HF, Pulskamp K, Wörle-Knirsch JM, **Wick P** (2008) In vitro assessment of nanomaterial toxicity: Need for better characterization of materials and methods. 15 pp, Monte Verità, Switzerland
- 6) Balazs D, Shen D, Lischer S, Grieder K, Fortunato G, Hossain MM, Korner E, **Wick P**, Haas D, Heuberger M (2008) Multifunctional nanocomposite plasma coatings: Enabling new biomaterials applications. *Materials Research Society Symposium Proceedings* 1056, pp. 46-47
- 5) **Wick P**, Kaiser JP, Manser P, Spohn P, Bruinink A (2007) The presence of carbon nanotubes affect cell physiology and interferes with cell adhesion. *Proceedings Viennano 07 ISBN 978-3-901657-25-1*, 119-124
- 4) **Wick P**, Malek A, Manser P, Meili D, Maeder-Althaus X, Diener L, Diener PA, Zisch A, Krug HF, von Mandach U (2008) Placenta perfusion system: A human ex vivo model system to study the maternal - Fetal barrier capacity for nanosized materials. *Placenta* 29 (8):A67-A67
- 3) Maniura K, **Wick P**, Kaiser JP, Baumgartner F, Ackerknecht S, Bruinink A (2006) Influence of surface topography and mechanical stimulation on cell architecture and osteogenic differentiation of human bone-related cells. *Cytotherapy* 8: 44-44 P-32 Suppl. 2

2) Maniura K, Baumgartner F, **Wick P**, Bruinink A (2005) The level of adipogenesis occurring during osteoblast differentiation of human bone marrow cells can be controlled by cultivation protocols. Bone 36, Supplement 2 p295

1) Hälgl M, **Wick P**, Tobler U, Schug J, Bruinink A (2003) Effect of culture conditions on human bone (marrow) cell performance European Cells and Materials Vol5, Suppl Issue1:31

Invited talks:

- 2022 KEC Conference (joint session Gov4Nano – Refine) virtual
Quadrimed Congress, Crans Montana, CH
Nanoweek Conference, Cyprus, GR
- 2021 13th CLINAM European and Global summit for Nanomedicine virtual
Particles & Health Conference London, GB
2DMAT Conference, Paris F
ETHZ IFNH Seminar, Zurich CH
Filterakademie Workshop, Zug CH
Gesundheitsforum St. Gallen, St. Gallen, CH
Restart – von der Krise zur Chance, Berlin, D
- 2020 Behördendialog Vaduz, FL
Seminar AMI Fribourg, CH
- 2019 131th Conference Scientific Federation, Carbon nanotubes and Graphene Technologies, Milan, I
Swissmaterials day, Schaffhausen, CH
- 2018 EUFEPS Annual Meeting, Frankfurt, D
Sommerschol Djion, F
Swissnanoconvention, Zurich, CH
- 2017 ACS Annual Meeting New Orleans, US
Swiss Nanoconvention, Fribourg CH
NanoBioMed Krems, AT
Cambridge Graphene Center, Cambridge; UK
NMSA, Malaga, ES
- 2016 Final Meeting NanoReg I, Berne, CH
Workshop: Implications of nanomedicine for pharmacists, Amsterdam, NL
I-net Basel Nanomedicine, Basel, CH
AMAES Summerschool, Colone, Germany
9th European Technology Platform Nanomedicine, Heraklion, GR
8th International Nanotoxicology Congress, Bosten, USA
CCMX Annual Meeting, Berne, CH
4DLifeTech Shareholder Event, Solothurn, CH
Opening Symposium of the Center for Translational Nanomedicine, Mainz, DE
Nanotoxikologie – Sicherheitsforschung für die Biomedizin und Auswirkungen auf die Umwelt, Erlangen, DE
- 2015 Begleitgruppensitzung Aktionsplan synthetische Nanomaterialien, Berne, CH
European Nanomedicine Meeting, SFNano conference, Grenoble, F
EUSAAT workshop, Linz, AT
EUFEPS Workshop, Geneva, CH
8th CLINAM the European Summit for Clinical Nanomedicine and targeted medicine, Basel, CH
5th Zing Bionanomaterials Conference, Carvoeiro, P
- 2014 NanoVision 2015, Science-Industry-Symposium, Stuttgart, DE
8th Aachen-Dresden International Textile Conference, Dresden, DE
Swiss Society of Toxicology Meeting, Basel, CH
Green Toxicology, Dübendorf, CH
7th CLINAM the European Summit for Clinical Nanomedicine and targeted medicine, Basel, CH
NanoExpo SNSF NFP64, St. Gallen, CH
7th International Nanotoxicology Congress Antalya, TR
CECAM workshop ,1072 Two-dimensional inorganic materials (2DIM)
EU FP7 Consortium Quasinano, EPF Lausanne, CH
Oekotox Dübendorf, CH
- 2013 Current Challenges Facing Inorganic Nanoparticles in Medicine and Industry, CCMX & NanoDiaRA Workshop, Berne, CH

- INNOBITE's 1st Workshop Biorefinery & Nanocellulose, Dübendorf, CH
 12th FELASA SECAL Congress, Barcelona, ES
 41st Conference of the European Teratology Society, Stresa, IT
 World Materials Research Institute Forum, Dübendorf, CH
 Materials Day Rostock, DE
 Annual Meeting CCMX, Bern, CH
 2nd International Fresenius Conference, Environmental Risk assessment of Biocides,
 Materials Valley, Nanopartikel – Einsatz in der Medizin, Chemie und Verfahrenstechnik
 Hanau DE
 Postgraduales Masterstudium Versicherungsmedizin, Adliswil, CH
 CCMX Winter School, Kandersteg, CH
 2012 Swiss Biotech Roundtable Rüslikon, CH
Keynote: BioValley Science Day / The Toyama Symposium, Basel, CH
 Informulation 2012 Barcelona, ES
 SwissNanoconvention / NanoDiaRA, Lausanne, CH
 Seminar University of Graz (OE)
 OECD Meeting Paris, FR
 9th International Conference and Workshop on Biological Barriers – in vitro and in silico
 Tools for Drug Delivery and Nanosafety Research, Saarbrücken, DE
 Schweizerische Gesellschaft für Arbeitssicherheit SGAS, Olten, CH
 CNT Workshop, EAWAG, CH
 2011 Gesund Wohnen Amt für Energie und Umwelt St. Gallen, St. Gallen, CH
 Workshop on role of proteins in nanoparticle transport across biological barriers, Dublin,
 IR
 Seminar Adolphe Merkle Institute Fribourg, CH
 NanotechItaly2011, Venice, IT
 Textail-Day ‚Nanotechnologie – Chance oder Risiko?‘ Dübendorf, CH
 LGL Kongress ‚Gesunde Umwelt – Gesunde Bevölkerung‘, München, DE
 Seminar National Institute for Standardization and Technology (NIST), US
 2010 Seminar Universität Konstanz, DE
 OTTI Fachforum Carbon Nanotubes, Regensburg, DE
 Biotechnet Meeting, Olten, CH
 2nd International Mini-Symposium on Nanotoxicology, Stockholm, SE
 16th Rencontre Pharmapeptides ‘Nanotoxicology and Drug Delivery’,
 Archamps, FR
 BioNanoMed 2010 International Congress Nanotechnology in medicine and Biology,
 Krems, AT
 Seminar EAWAG, CH
 International Aerosol Conference Helsinki, FI
 3rd Nanotoxicology2010, Edinburgh, UK
 2009 Konferenz: Nanotechnologie für Faserkunststoffverbunde DLR Braunschweig DE,
 Intern. Conference on Latest Advances in High-Tech Textiles and Textile-Based
 Materials, Ghent, BE Keynote
 Workshop zu Chancen und Risiken der Nanotechnologie, Technologie Zentrum Köthen,
 DE
 Technology Aperitif: Materials for the Life Sciences: Information on new Call for
 Collaborative Research Proposals with Industry, Fribourg, CH
 13th ETH Conference on Combustion Generated nanoparticles, Zurich, CH
 NanoBio-Europe'09 Grenoble FR, Keynote
 Assessment of the biological effects of Nanomaterials Symposium, KTH-Royal Institute of
 Technology Stockholm, SE
 2008 Nanoparticles and the Gastrointestinal Tract 3th International Symposium, Düsseldorf, DE
 Nanorisk2008 Determining occupational, environmental and health impacts, Paris, FR
 60. Kongress der Deutschen Gesellschaft für Urologie e.V. Stuttgart, DE
 2nd International Conference Nanotoxicology Zürich, CH
 International Inhalation Symposium Hannover, DE
 NanoCoating Days European Nanotechnical Association ena, Zürich, CH
 Department of Medicine, Section of Anatomy, University of Fribourg, CH
 2007 International Symposium on Nanotechnology in Environmental Protection and Pollution
 (ISNEPP) Fort Lauderdale Florida, US
 Werkstatt Ernährung & Gentechnologie: vom Gegeneinander zum Miteinander, Eidg.
 Dep. Des Innern, Bern, CH
 ESF-EMBO Symposium: Probing Interactions between nanoparticles / biomaterials and
 biological systems: Alternative approaches to bio- and Nano-toxicity, Spanien, ES

- Workshop ‚Eigenschaften und Verhalten von Feinstäuben und ultrafeinen Aerosolpartikel‘
Bozen, IT
- 2006 2nd Vienna International Conference in Mirco- and Nano-Technology, Wien, AT
EuroForum: Nanotechnologie Revolution für Lebensmittel und Verpackung? Rüşchlikon,
CH
International Conference on Nanoscience and Technology NANO9 meets STM’06,
Basel, CH
4th MSTI Nanotechnology and Business Congress & Exhibition: NanoTrends06 Berlin,
DE
- 2005 Deutsches Bundesamt für Risikobewertung Expertengespräch, Berlin, DE
NanoFood: Workshop der Innovationsgesellschaft GmbH, St. Gallen, CH
- 2001 3th Symposia of the Swiss Society of Phytopathology, Lausanne, CH
- 2000 ISPMB International Congress of Plant Molecular Biology, Quebec, CA
BENEFRI – Meeting Fribourg, CH

Group presentations (posters):

- 2020 SETAC SciCon, Setac Europe 30th Annual Meeting, virtual, Belgium BE
13th Clinam, virtual, Basel, CH
13th European Placenta Perfusion Workshop, virtual, United Kingdom, GB
9th NANO Conference, virtual, United States, US
- 2019 12th Clinam, Clinical Nanomedicine & Targeted Medicine, Basel, CH
Eurotox 2019, Helsinki, FI
Cancer Nanotechnology Gordon Research, Mount Snow, USA
23rd ETH Conference on Combustion Generated Nanoparticles, Zürich, CH
12th Ex vivo Perfusion Workshop, Nijmegen, NL
Swiss Nanoconvention, EPFL Lausanne, Lausanne, CH
American Institute of Chemical Engineers (AIChE) Annual Meeting 2019, Orlando, USA
- 2018 Swiss Nanoconvention, ETH Zürich, Zürich, CH
Nanotoxicology 2018, Neuss, D
BioBarriers, Saarbrücken, D
11th Clinam, Clinical Nanomedicine & Targeted Medicine, Basel, CH
Bioanalytical Sensors (GRS) and Bioanalytical Sensors, Newport, USA
Gordon Research Conference GRC Personalized Medicine, Hong Kong, HK
Biointerfaces International, Zürich, CH
- 2017 10th Clinam, Clinical Nanomedicine & Targeted Medicine, Basel, CH
Society of Toxicology SOT Conference 2017, Baltimore, USA
EuroNanoForum 2017, Valetta, MT
Gordon Research Conference GRC on Nano-Mechanical Interfaces, Hong Kong, HK
Swiss Society of Toxicology SST Annual Meeting, Basel, CH
10th European Placenta Perfusion Workshop, St.Gallen, CH
- 2016 9th Clinam, Clinical Nanomedicine & Targeted Medicine, Basel, CH
Biobarriers, Saarbrücken, D
Eurotox 2016, Sevilla, E
Nanotoxicology, Boston, USA
Graphene 2016, Genova, IT
- 2015 8th CLINAM, Clinical Nanomedicine & Targeted Medicine, Basel, CH
CCMX Annual Meeting Bern, CH
5th Zing Bionanomaterials Conference Carvoeiro, P
SENN2015, International Congress on Safety of Engineered Nanoparticles and
Nanotechnologies, Helsinki, FI
NanoVision2015 Science-Industry-Symposium, Stuttgart, D
- 2014 Empa PhD Symposium, Dübendorf, CH
7th CLINAM, Clinical Nanomedicine & Targeted Medicine, Basel, CH
Graphene Week, Goteborg, SE
World congress Prague, T
Fibre Tox Conf Cranfield, UK
NN2014
Wood meetings Chiara
- 2013 7th International Nanotoxicology Congress, Antalya, TR
FEBS Workshop ‘Biological Surface and Interface’ Sant Felu de Guixols, ES
12th FELASA SECAL Congress, Barcelona, ES
41st Conference of the European Teratology Society, Stresa, IT

- Swiss Nanoconvention 2013, Basel, CH
 Clinam Clinical Nanomedicine & Targeted Medicine, Basel, CH
 Systems Toxicology, Ascona, CH
 2nd QNano International Conference, Quality in nanosafety assessment – driving best practice and innovation, Prague, CZ
 10th International Particle Toxicology Conference, Düsseldorf, DE
- 2012 Eurotox Congress, Interlaken, CH
 CCMX 2012 Annual Meeting, Bern, CH
 Jahreskongress der Schweizerische Gesellschaft für Gynäkologie und Geburtshilfe, Interlaken, CH
 5th Annual Meeting of the Swiss Association of Perinatal Pharmacology, Zurich, CH
 Empa PhD Symposium, Dübendorf, CH
 DECHEMA Symposium 3D Cell Culture 2012, Zürich, CH
 4th NanoImpactet Integrating Conference and 1st QNano Integrating Conference, Dublin, IR
- 2011 PhD students' Symposium 2011, Empa St. Gallen, CH
 50th anniversary Meeting of SOT, Washington DC, US
 CCMX 2011 Annual Meeting, Bern, CH
 Swiss Society of Biomaterials annual Meeting, Yverdon les Bains, CH
 New developments in Cell-Based In-Vitro Testing & 3rd Annual Quasi-vivo User Group meeting Saarbrücken, DE
 3rd NanoImpactNet Building a bridge from NanoImpactNet to nanomedical research, Lausanne, CH
- 2010 Nanosafe Meeting, Grenoble, FR
 Swiss Societa of Biomaterials annual Meeting, Dübendorf, CH
 3rd Nanotoxicology2010, Edinburgh UK
 PhD students' Symposium 2010, Empa Dübendorf, CH
 3rd International NanoBio Conference, Zürich, CH
 8th International Conference and Workshops on Biological Barriers – in vitro tools, Nanotoxicology and Nanomedicine, Saarbrücken, DE
 2nd NanoImpactNet Conference for a healthy environment in a future with nanotechnology, Lausanne, CH
- 2009 1st NanoImpactNet Conference for a healthy environment in a future with nanotechnology, Lausanne, CH
 2nd ESF / UB European Summer School in Nanomedicine, Lissabon, PT
 PhD students' Symposium 2009, St. Gallen, CH
 13th ETH Conference on Combustion Generated nanoparticles, Zurich, CH
 18th Annual congress of the ERS Wien, AT
 Nanotoxicology: Health & Environmental Impacts Hertfordshire, UK
 17th Conference of European Society for Neurochemistry Leipzig, DE
- 2008 NanoSafe2008 Meeting Grenoble, FR
 NanoEurope St. Gallen, CH
 Nanotoxicology2008 Zürich, CH
 World Biomaterials Congress Amsterdam, NL
 Meeting of the European Society of Biomaterials Lausanne, CH
 14th Meeting of the International-Federation-of-Placental-Associations / 12th Meeting of the European-Placenta-Group (IFPA/EPG) Seggau, AT
 Swiss workshop on basic research in Nanoscience Davos, CH
 NanoEco Ascona, CH
 USGEB Lausanne, CH
- 2007 NanoEurope St. Gallen, CH
 ESF-EMBO Conference Sant Feliu de Guixols, ES
 European Cell Materials VIII Congress Davos, CH
 2nd Vienna International Conference in Mirco- and Nano-Technology
 ISNEPP Florida, US
- 2006 33rd European Symposium on Calcified Tissues ECTS Prague, CZ
 Annual Meeting of the European Society Biomatierals Nantes, FR
 2nd International Conference Strategies in Tissue Engineering Würzburg, DE
 International Conference on Nanoscience and Technology Basel, CH
 NanoTrends Berlin, DE
- 2005 EuroNanoForum Edinburgh, UK
 2nd Joint Meeting of European Calcified Tissue Society and International Bone and Mineral Society Genf, CH
 Meeting of European Society for Biomaterials Sorrento, IT

- 2004 USGEB Meeting Zürich, CH
ECM V The Cell Biomaterial Reaction Joint Meeting mit SSB Davos, CH
Joint Meeting of European Tissue Engineering Society and Tissue Engineering Society International, Lausanne, CH
7th Interdisciplinary Essen-Symposium Biomaterials and Tissue Compatibility Essen, DE
USGEB Meeting Fribourg, CH
- 2003 18th European Society for Biomaterials Meeting Stuttgart, DE
International Symposium Interface Biology of Implants Rostock, DE
- 1999 USGEB Meeting Basel, CH
International Meeting on Transport of Proteins and Membranes in Eucaryotic Cells in Göttingen, DE

Conference and workshop organization:

- 2021 Chair and Scientific and organization committee of the 16th annual event of ETPN and the 4th NanoMedEurope, St. Gallen, CH
- 2020 Scientific and organization committee CCMX Winterschool, Kandersteg, CH
- 2019 Chair at SwissNanoconvention 2019
Session Chair Annual Meeting of Swiss Society of Toxicology Basel, CH
- 2018 Scientific board and Session Chair; 9th Intern. Nanotoxicology Conference, Neuss, DE
Session Chair Annual Meeting of Swiss Society of Toxicology, Basel CH
- 2017 Scientific committee; SwissNanoconvention, Fribourg, CH
- 2016 Scientific committee: NanoMat2016 2D Nanomaterials, Empa, Dübendorf, CH
- 2013 Scientific committee; Technologie Briefing: Nanomaterialien in Fassaden-beschichtungen, 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, 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 committee; 3rd NanoImpactNet Conference 'Building a bridge from NanoImpactNet to nanomedical research', Lausanne, 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 Nanotoxicology Conference, Zürich, CH

Teaching activities:

since 2018	MS	Lecturer D-HEST, ETHZ, 'Nanostructured Material Safety' and 'Nanomaterials for Health'
2013 - 2020	MS	Lecturer D-BAUG, ETHZ, Air Quality and Human Health
2010 - 2013	Open	Lecturer University of Berne, Climate, Environment and Human Health
2009 - 2013	BS	Lecturer University of Applied Science Winterthur, Biomaterials
2009 - 2013	MS	Lecturer University of Applied Science Vorarlberg, Micro- and Nanotechnology
2007		Lecturer D-HEST, ETHZ /replacement for K. Maniura, Biomaterials

Mentoring since 2010:

The current group consists of three scientific group leaders (where one is a non-tenured Assistant Prof), five senior researchers, five PostDocs, three scientists MSc, 13 PhD's, two technicians and an administrative assistance. During the semester, the leading team supervised several masters and bachelors students in their work on a research project.

Group leaders

since 2012	Dr. Tina Bürki-Thurnherr
since 2015	Prof. Inge Herrmann (D-MAVT, ETHZ)
since 2019	Dr. Marija Buljan

Senior - scientists

since 2010	Dr. Matthias Rösslein
since 2017	Dr. Alexander Gogos
since 2021	Dr. Vanesa Ayala
since 2022	Dr. Giacomo Reina
2020 - 2022	Dr. Savvina Chortarea (CSL Behring)
2017 – 2021	Dr. Cordula Hirsch (Science Communication)
2007 – 2012	Dr. Tina Bürki-Thurnherr (group leader)
2010 – 2019	Dr. Jean-Pierre Kaiser (retired)
2013 – 2015	Dr. Anna Louw-Gaume (scientist at PSI)
2016 – 2018	Dr. Juan Carlos Cassano (scientist KSSG)

PostDoc's

since 2021	Dr. Vera Kissling
since 2022	Dr. Govind Gupta
2018 - 2023	Dr. Fabian Starsich
2019 - 2022	Dr. Elena Tsolaki
2020 - 2022	Dr. Alice Balfourier (Teaching Professor CNRS)
2022 - 2022	Dr. Chrysovalanto Louka (regulatory office in UK)
2018 – 2021	Dr. Leonie Aengenheister (Scientist)
2017 – 2020	Dr. Niusha Nikravesch (bioengineer upstream scientist, Mosa Meat B.V.)
2018 – 2020	Dr. Ana Milosevic (consultant for regulatory affairs)
2018 – 2020	Dr. Jian-Hao Li (employer at Taiwan State)
2015 – 2018	Dr. Nils Bohmer (scientist at Dechema)
2013 – 2018	Dr. Melanie Kucki (consultant for regulatory affairs)
2011 – 2014	Dr. Magda Obarzanek-Fojt (scientist Novartis)

Scientists MSc

Since 2023	Sina Ruhstaller
Since 2023	Stephanie Eitner
2021 - 2022	Philipp Meier (PhD TU Berlin)
2021 - 2022	Tobias Hoch (PhD at UZH)
2020 - 2022	Pietro Clement (Travel and tour guide Himalaya)

Supervision of young researchers (PhD)

Since 2024 Haihan Chen (Empa)
Since 2023 Ziting Wang (Empa)
Since 2023 Su Liu (Empa & Prof S. Sturla D-HEST, EETHZ)
Since 2023 Selina Camenisch (Empa & Prof S. Sturla D-HEST, ETHZ)
Since 2022 Philip Meier (Empa & Prof P. Neubauer TU-Berlin)
Since 2022 Jimeng Wu (Empa & Prof B. Nowack D-USYS, ETHZ)
Since 2021 Leonard Krupnik (Empa & Prof A. Neels Empa & Uni Fribourg)
2020 - 2023 Anna Lena Neuer (Empa & Prof I. Herrmann D-MAVT, ETHZ)
2018 - 2022 Daina Romeo (Empa & Prof B. Nowack D-USYS, ETHZ) (LCA Office, industry)
2018 - 2022 Lea Furer (Empa & Prof S. Schürle, D-HEST, ETHZ) (PostDoc, Trondheim)
2018 - 2022 Subas Scheibler (Empa & Prof IK Herrmann, D-MAVT, ETHZ)
2017 - 2021 Neda Iranpour Anaraki (Empa & Prof A. Neels, Uni Fribourg)(Family time)
2017 - 2021 Daria Korejwo (Empa & Prof B. Rothen-Rutishauser, AMI Uni Fribourg) (Family time)
2017 - 2021 Woranan Nethueakul (Empa & Prof J. Wang D-BAUG, ETHZ) (PostDoc Nanotech Thai)
2016 - 2019 Claudia Hempt (Empa & Prof S. Sturla D-HEST, ETHZ) (Scientist Evonik)
2015 - 2018 Sarah May (Empa & Prof A. Bürkle, Uni Konstanz D) (Family time)
2014 - 2018 Leonie Aengenheister (Empa & Prof S. Sturla, D-HEST, ETHZ) (Post Doc Empa)
2012 - 2016 Carina Muoth (Empa & Prof HP Nägeli, USZ and D-HEST, ETHZ) (Biotech Company)
2012 - 2016 Chiara Civardi (Empa & Prof I. Burgert D-BAUG, ETHZ) (Scientific writer)
2011 - 2014 Stefanie Grafmüller (Empa & Prof B. Rothen-Rutishauser, Uni Bern) (QM Novartis)
2008 - 2012 Michael Gasser (Empa & Prof P. Gehr Institute for Anatomy, Uni Bern) (Quality time)

As external expert:

2023 Claudio Alter (Prof J. Huwyler, University of Basel)
2023 Cinthia Marques (Prof G. Borchard, University of Geneva)
2022 Anh Tran-Ly (Prof I. Burgert, ETHZ D-BAUG)
2021 Tobias Hammer (Prof J. Wang ETHZ D- BAUG)
2015 Lukas Schlagenhaut (Prof J. Wang ETHZ D-BAUG)
2013 Usawadee Sakulkhu (Prof H. Hofmann, EPFL)
2012 David Raemy (Prof B. Rothen-Rutishauser AMI University of Fribourg)
2012 Lenke Horvath (Prof L. Forro, EPFL)
2012 Lukas Richter (PD P. Ertl University Wien, AIT)

Technicians

since 2021 Sarah Böntges
since 2019 Yvette Hannig
since 2018 Alexandra Rippl

2010 – 2020 Liliane Diener (retired)
2010 – 2019 Pius Manser (retired)
2010 – 2017 Xenia Mäder-Althaus (Biotech company)

Administrative Assistant

since 2013 Kyrena Schäpper

MS students

2022 Lisa Mathews (university of Geneva)
Burlachenk Kateryna (University of Kiev)
2021 Alexandre Jessernig (D-MAVT, ETHZ)
Xia Feifei (University of Zurich)
2020 Eric Rüttimann (D-MAVT, ETHZ)
Benoit Hohl (EPFL)
Angela Diaz (Universidad de Castilla- La Mancha)
Emile Bourban (EPFL)
2019 Meagan Doppegieter (Universität Amsterdam)
Ogul Can Kuru (Politecnico di Milano)
Xueqian Hu (Uni Darmstadt)
2018 Lea Furer (D-HEST, ETHZ)

Leonida Maliqi (Uni Genf)
 Saranya Muthusamy (TU Dresden)
 Pauline Franz (Uni Konstanz)
 2017 Erminio Di Renzo (D_MAVT, ETHZ)
 Lukas Gerken (TU Wien)
 Bruno Hadengue (EPFL)
 2016 Nino Demarmels (D-MAVT, ETHZ)
 Anna-Lena Neuer (Universität Konstanz)
 Louis Didierlaurent (Ecole Supérieure CPE Lyon)
 2015 Marie Lemesle (Université de Strassbourg, France)
 2009 Christoph Wettstein (Karlsruhe Institute of Technology KIT)

BS students

2021 Maren Gerdes (D-MAVT, ETHZ)
 Arzu Ayyildiz (University of Zurich)
 2020 Juri Nowak (D-HEST, ETHZ)
 Thu Hien Le (LMU München)
 2019 Eric Rüttimann (ETHZ)
 Lea Pompizii (ETHZ)
 2018 Henry Korhonen (ETHZ)
 Roman Krummenacher (ETHZ)
 2013 Miriam Jordi (University of applied science Nordwestschweiz)
 2012 Carina Mouth (D-HEST, ETHZ)

Synergistic activities:

2
 023 Guest Editor NanoImpact 2D Material Safety Special Issue
 2021 Appointments committee for Assistant Prof University of Basel, Institute of Pharmaceutical Science
 2020 Co-Guest Editor Frontier Bioengineering and Biotechnology Special Issue
 since 2019 Member of EDQM working party Non-Biological Complexes (NBC)
 since 2017 Member of Accompanying working group Vifor Pharma
 since 2015 Associated Editor NanoImpact journal
 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
 since 2011 Editorial Board Member Nanotoxicology journal
 2009 - 2020 Member of the accompanying group of the Swiss Action plan for Synthetic Nanomaterials
 since 2008 Member of the supporting group of the Swiss Precautionary Matrix for Synthetic Nanomaterials

Memberships

since 2019 American Society of Chemistry
 since 2017 BioNanoNet
 since 2016 European Technology Platform Nanomedicine
 since 2008 International Society for Aerosols in Medicine ISAM
 since 2006 Swiss Society of Biomaterials and Regenerative Medicine
 since 2000 Life Sciences Switzerland – LS2

Reviewer of peer-reviewed journals:

ACS Nano	Environmental Health	Journal of Physical
Angewandte Chemie	Perspective	Chemistry
Biomaterials	Environmental Pollution	Journal of Hazardous
BioNanomaterials	Environmental Science and	Materials
Carbon	Technology	NanoImpact
Chemical Research in	Journal of Nanoparticle	NanoLetters
Toxicology	Research	Nature Nanotechnology

Nanomedicine
Nanotoxicology
Neuroscience Research
Particle & Fibre Toxicology

Toxicological Science
Toxicology
Toxicology and Applied
Pharmacology

Toxicology in vitro
Toxicology Letters

Swiss Military Service:

2007 - 2013 Reservist
2001 - 2007 NBC Adviser, Captain
1992 - 1993 Officer training