

**Prof. Inger Odnevall (previously Odnevall Wallinder), Ph.D., Div. Surface and Corrosion Science, KTH**

**203 Peer-reviewed scientific papers 1991-2022**

h-index: 53 (google scholar), Citations: 10154 (Jan., 2022); RG (Research gate): Score 43.73

(Jan. -22), <https://orcid.org/0000-0003-2206-0082>

Fractionalized field normalized citations (3-year moving average): 2.17

1. *Influence of natural organic matter on the transformation/dissolution of metal and metal oxide nanoparticles and their ecotoxic potency on a piscine cell line at simulated freshwater conditions – a short-term laboratory study.* A. Khort, M. Brookman-Amisshah, J. Hedberg, T. Chang, N. Mei, A. Lundberg, J. Sturve, E. Blomberg, I. Odnevall, **Nanoimpact**, in press (2022)
2. *Toxicity evaluation of particles formed during 3D-printing: cytotoxic, genotoxic, and inflammatory response in lung- and macrophage models.* N.V. S. Vallabani, A. Alijagic, A. Persson, I. Odnevall, E. Särndahl, H. L. Karlsson **Toxicology**, 467, 153100 <https://doi.org/10.1016/j.tox.2022.153100> (2022)
3. *Importance of atmospheric aerosol pollutants on the degradation of Al<sub>2</sub>O<sub>3</sub> encapsulated Al-doped zinc oxide window layers in solar cells.* S.-T. Zhang, A. Maltseva, G. Herting, J.- F. Guillemoles, N. Schneider, I. Odnevall, P. Volovitch, **Progress in Photovoltaics: Research and Applications**, <http://doi.org/10.1002/pip.3527> (2021)
4. *Initial indoor atmospheric corrosion studies of copper from macroscale to nanoscale – a laboratory study in the presence of formic acid.* Weijie Zhao, R. Prasath Babu, Tingru Chang, Inger Odnevall, Peter Hedström, C. Magnus Johnson, Christofer Leygraf, **Corrosion Science**, <https://doi.org/10.1016/j.corsci.2021.109995> (2021)
5. *Progress in additive manufacturing of MoS<sub>2</sub>-based structures for energy storage applications – a review.* N. Alinejadian, L. Kollo, I. Odnevall, **Materials Science and Semiconductor Processing**, <https://doi.org/10.1016/j.mssp.2021.106331> (2021)
6. *High resolution microscopical studies of contact killing mechanisms on copper-based surfaces.* T. Chang, R. Prasath Babu, W. Zhao, C. M. Johnson, P. Hedström, E. Blomberg, I. Odnevall, C. Leygraf, **ACS Applied Materials & Interfaces**, 13, 41, 49402–49413 <https://doi.org/10.1021/acsami.1c11236> (2021)
7. *New weldable 316L stainless flux-cored wires with reduced Cr(VI) fume emissions Part 1 – Health aspects of particle composition and release of metals.* E.M. Westin, S. McCarrick, Z. Wei, V. Romanovski, R. Wagner, K.-A. Persson, K. Trydell, I. Odnevall, H.L. Karlsson, Y.S. Hedberg, **Welding in the World**, <https://doi.org/10.1007/s40194-021-01196-y> (2021)
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9. *Bioaccessibility and reactivity of alloy powders used in powder bed fusion additive manufacturing.* X. Wang, N. V. Srikanth Vallabani, A. Giboin, H.L. Karlsson, Y. S. Hedberg, I. Odnevall, **Materialia**, 19, 101196, <https://doi.org/10.1016/j.mtla.2021.101196> (2021)
10. *Transfer of cobalt nanoparticles in simplified food web: from algae to zooplankton to fish.* N. Mei, J. Hedberg, M. Ekvall, E. Kelpsiene, L.-A. Hansson, T. Cedervall, E. Blomberg, I. Odnevall, **Applied Nano**, 2021, 2, 184–205. <https://doi.org/10.3390/applnano2030014>, Feature paper - [https://www.mdpi.com/journal/applnano/special\\_issues/Feature\\_Papers\\_Applied\\_Nano](https://www.mdpi.com/journal/applnano/special_issues/Feature_Papers_Applied_Nano) (2021) <https://www.youtube.com/watch?v=UU8LZVoj4rE>
11. *Genotoxicity and inflammatory potential of stainless steel welding fume particles – an in vitro study on standard vs Cr(VI)-reduced flux-cored wires and the role of released metals.* S. McCarrick, V. Romanovski, Z. Wei, E. Westin, K.-A. Persson, K. Trydell, R. Wagner, I. Odnevall, Y. S. Hedberg, H. L. Karlsson, **Archives of Toxicology**, <https://doi.org/10.1007/s00204-021-03116-x> (2021)
12. *Adsorption of bio-organic eco-corona molecules reduces the toxic response to metallic nanoparticles in Daphnia magna.* M. T. Ekvall, J. Hedberg, I. Odnevall Wallinder, A. Malmendal, L.-

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13. *Corrosion of aluminium and zinc in concrete at simulated conditions for the repository of low active waste in Sweden*. G. Herting, I. Odnevall Wallinder, **Corrosion and Materials Degradation**, 2, 150-162. <https://doi.org/10.3390/cmd2020009> (2021)
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  16. *Corrosion and Transformation of Solution Combustion Synthesized Co, Ni and CoNi Nanoparticles in Synthetic Freshwater with and without Natural Organic Matter*. A. Khort, J. Hedberg, N. Mei, V. Romanovski, E. Blomberg, I. Odnevall Wallinder, **Scientific Reports**, <https://doi.org/10.1038/s41598-021-87250-7> (2021)
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  22. *Health hazard assessment of ferrosilicon alloys: role of surface composition and elemental release data*. P. Taxell, G. Herting, I. Odnevall Wallinder, H. Stockman Juvala, MS in preparation
  23. *Stainless steel as a biomaterial*. G. Herting, I. Odnevall, Chapter on Stainless Steel, Biomaterials Handbook, in print
  24. *Location of cobalt impurities in stainless steel 316L and changes in composition and thickness of the surface oxide in relation to metal release in synthetic biological fluids.*. Xuying Wang, Jonas Hedberg, Heng-Yong Nie, Mark C. Biesinger, Inger Odnevall, Yolanda S. Hedberg, MS submitted
  25. *SLM-processed Mo-(2H/1T)MoS<sub>2</sub> nanocomposite for energy storage applications*. Navid Alinejadian, Inger Odnevall, Prashanth Konda Gokuldoss, MS submitted
  26. *Selective laser melting of Mo(x)S(x+1)-incorporated Mo micro-lattice composite structure*. N. Alinejadian, L. Kollo, P. Konda Gokuldoss, M. Grossberg, I. Odnevall, MS in preparation
  27. *Simulated rain exposures can mimic long-term metal runoff at atmospheric conditions – a case study on naturally and pre-patinated zinc sheet*. G. Herting, I. Odnevall, MS in preparation

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**Main supervisor of the following PhD (10) and Licentiate (8) theses (+5 co-supervisor)**

X. Wang, Doctoral Thesis, "Bioaccessibility, corrosion and surface properties of metals, alloys and metallic powder in biological fluids of relevance for occupational and consumer health hazard assessment", Dec. 13, 2021

T. Chang, Doctoral Thesis, "Atmospheric corrosion of copper and copper-based alloys in architecture. From native surface oxides to fully developed patinas", Nov 30, 2018

S. Pradhan, Licentiate Thesis, "Surface reactivity, stability, and mobility of metal nanoparticles in aqueous solutions -Influence of natural organic matter and implications of particle dispersion preparation, Sep. 21, 2017

S. Skoglund, Doctoral Thesis, "Surface reactivity of metal nanoparticles – importance of surface active agents and biomolecules from a transformation, mobility and toxicity perspective, Feb. 2, 2017

N. Mazinanian, Doctoral Thesis, "Metal release and corrosion of stainless steel in simulated food contact", Sep. 22, 2016

X. Zhang, Doctoral Thesis, "Atmospheric corrosion of zinc-aluminum and copper-based alloys in chloride-rich environments - Microstructure, corrosion initiation, patina evolution and metal release", Sep. 26, 2014.

Y. Hedberg, Doctoral Thesis, "Stainless Steel in Biological Environments – Relation between Material Characteristics, Surface Chemistry and Toxicity", Dec 14, 2012.  
*(receiver of the ECS Morris Cohen Award 2014, established by the Electrochemical Society, US, for the best doctoral thesis in corrosion science world-wide) and the AkzoNobel Nordic award for surface and colloid chemistry 2014 due to accomplishments during PhD-project).*

D. Lindström, Licentiate Thesis, "Galvanized steel in outdoor constructions – metal runoff, corrosion and patina formation" Dec 20, 2010.

Y. Hedberg, Licentiate Thesis, "Environmental and health aspects of corrosion – importance of chemical speciation", Oct 28, 2010.

K. Midander, Doctoral Thesis, "Metal particles – hazard or risk? Elaboration and implementation of a research strategy from a surface and corrosion perspective", Dec. 14, 2009.

G. Herting, Doctoral Thesis, "Bioaccessibility of Stainless Steels– Importance of Bulk and Surface Features", June 3, 2008.

K. Midander, Licentiate Thesis (co-supervisor), "Metal release from powder particles in synthetic biological media", May 31, 2006.

J. Sandberg, Licentiate Thesis, "Corrosion-induced release of zinc and copper in marine environments", May 31, 2006.

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G. Herting, Licentiate Thesis, "Metal release from stainless steels and the pure metals in different media", Dec. 16, 2004.

W. He, Doctoral Thesis, "Atmospheric Corrosion and Runoff Processes on Copper and Zinc as Roofing Materials", May 16, 2002.

C. Karlén, Licentiate Thesis, "Atmospheric corrosion of copper and zinc-based materials: runoff rates, chemical speciation and ecotoxicity effects", Dec. 17, 2001.

W. He, Licentiate Thesis, "Corrosion rates and runoff rates of copper and zinc as roofing materials. - A combined field and laboratory study", March 17, 2000.

### **Co-supervisor of the following PhD theses (5)**

N. Fuertes, Doctoral thesis, "Use of localized techniques to elucidate the influence of process variables on the corrosion of stainless steel", ISBN 978-91-7873-991-2, Nov. 12, 2021

N. Mei, Doctoral thesis, "Transformation/dissolution characteristics of cobalt and welding fume nanoparticles in physiological and environmental media: surface interactions and trophic transfer", Nov 4, 2020

A. Gliga, Doctoral thesis-KI (Karolinska Institutet), "Nanotoxicology on the Right Track: Focus on Metal and Metal Oxide Nanoparticles", Nov 4, 2016

X. Wang, Doctoral thesis, "Protein Interactions with Metal Surfaces - Adsorption and Metal Release", April 21, 2015

P. Qiu, Doctoral thesis, "Quantified In Situ Analysis of Initial Atmospheric Corrosion : Surface heterogeneity, galvanic effects and corrosion product distribution on zinc, brass and Galvalume", June 14, 2011

### **2) Selected conference proceedings and reports (2002-2021)**

1. *Adsorption of horseradish peroxidase on metallic nanoparticles – effects on reactive oxygen species detection using 2'-7'-dichlorofluorescein diacetate*, A. Kessler, J. Hedber, E. Blomberg, I. Odnevall, poster P23-06, P23 Risk prediction and assessment /risk assessment using new approach methodologies., **EUROTOX 2021**, virtual congress, 27 Sept. – 1 Oct. 2021
2. *New weldable 316L stainless flux-cored wire with reduced Cr(VI) fume emissions*, E.M. Westin, S. McCarrick, Z. Wei, V. Romanovski, R. Wagner, K.-A. Persson, K. Trydell, I. Odnevall, H.L. Karlsson, Y.S. Hedberg, **International welding commission, IIW Annual Assembly, joint meeting Commission II and VIII, IIW Doc. VIII-2319-2021, IIW Doc. II-2179-2021**, Sept. 2021
3. *The interplay between bacteria, biomolecules and metallic surfaces*, Inger Odnevall invited speaker, **NanoMed North Focus Seminar**, June 10, 2021
4. *Material-and surface characteristics, reactivity, degradation stability and toxicity of metallic powder particles*, I. Odnevall, Invited speaker, R&D project Health and Environmental



- Aspects of Additive Manufacturing and Challenges for a Sustainable Product 2 (HÄMAT2), **Sandvik Additive Manufacturing**, June 4, 2021
5. *The interplay between atmospheric corrosion and antimicrobial properties of copper and copper-based alloys used for indoor high touch applications*, I. Odnevall, Invited speaker, **1<sup>st</sup> Corrosion and Materials Degradation Web Conference**, May 18, 2021 ([https://cmdwc2021.sciforum.net/#detailed\\_program](https://cmdwc2021.sciforum.net/#detailed_program)), [https://www.youtube.com/watch?v=XD\\_zULEXFz4](https://www.youtube.com/watch?v=XD_zULEXFz4)
  6. *Corrosion of metallic surfaces from an environmental and health perspective – a selection of on-going activities*, I. Odnevall, invited speaker, **Corrosion Awareness day**, Swerim, on-line, April 23, 2021
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  8. *The interplay between atmospheric corrosion and antimicrobial functionality of golden alloy (Cu<sub>5</sub>Zn<sub>5</sub>Al<sub>1</sub>Sn) and Cu metal*, T. Chang, C. Leygraf, G. Herting, E. Blomberg, I. Odnevall Wallinder, **Eurocorr** 2021
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  10. *Al<sub>2</sub>O<sub>3</sub> barrier film by atomic layer deposition: is it an effective encapsulation layer for flexible Cu(In,Ga)Se<sub>2</sub> solar cell under “realistic” operating condition?*, Shan-Ting Zhang, Maxim Guc, Oliver Salomon, Roland Wuerz, Alina Maltseva, Gunilla Herting, Inger Odnevall Wallinder, Victor Izquierdo-Roca, Polina Volovitch, Thibaud Hildebrandt, Nathanaelle Schneider, Virtual Chalcogenide PV Conference (vCPVC 2020) from 25th to 28th May 2020.
  11. *Corrosion & Solar Panels*, Polina Volovitch, Jean-François Guillemoles, Shanting Zhang, Alina Maltseva, Nathanaelle Schneider, Gunilla Herting, Inger Odnevall Wallinder, Webinar on Corrosion in Green Energy solutions for the Corrosion Awareness Day, The World Corrosion organization, April 24, 2020
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  14. *MINTox: Assessment of metal toxicity in life cycle assessment*, J. Hedberg, C. Jönsson, J. Larsson, M.W. Lundberg, H. Bergqvist, R. Pettersson, R. Odnevall Wallinder, S. Roos, S. Soltanieh, K. Östman, C. Kaplin, Jernkontorets forskning, Rapport TO41-48, Project no. 41021, 2019
  15. *On the importance of chemical aspects for durability evaluation in photovoltaics.*, P. Volovitch, A. Maltseva, S. Zhang, N. Schneider, G. Herting, I. Odnevall Wallinder, **Journées Nationales du PhotoVoltaire**, JNPV 2019, Dec. 3-6, 2019, Dourdan, France
  16. *Bioaccessibility and reactivity of alloy powders used in additive manufacturing* (Poster) X. Wang, A. Giboin, S. McCarrick, M. Baricicova, H.L. Karlsson, Y. Hedberg, I. Odnevall Wallinder, ASMCS 2019, A symposium on surface chemistry and materials science- Materials and Formulations at Bionterfaces, Malmö, Sweden, 23-25 October 2019
  17. *Minimized risk for exposure and release of harmful substances when welding stainless steels*, Z. Wei, S. MacCarrick, V. Romanovski, J. Theodore, N. Mei, K.-A. Persson, O. Runnerstam, H.L. Karlsson, I. Odnevall Wallinder, Y. Hedberg, ASMCS 2019, A symposium on surface chemistry and materials science- Materials and Formulations at Bionterfaces, Malmö, Sweden, 23-25 October 2019

18. Transformation/dissolution of cobalt nanoparticles in biological media – effects of adsorbed biocoronas of amino acids, polypeptides or proteins, N. Mei, J. Hedberg, E. Blomberg, I. Odnevall Wallinder, Poster – WE108, **SETAC Europe, 29<sup>th</sup> Annual Meeting**, 26–30 May 2019, Helsinki, Finland
19. Improving the life cycle impact assessment of metals in slags: importance of chromium speciation, water chemistry and metal release, J. Hedberg, K. Fransson, S. Prideaux, S. Roos, C. Jönsson, I. Odnevall Wallinder, Poster – TU213, **SETAC Europe, 29<sup>th</sup> Annual Meeting**, 26–30 May 2019, Helsinki, Finland
20. Cobalt-impregnated tungsten nanoparticles and cobalt ions trigger toxicity in differentiating neuronal cells: potential link to parkinsonian neurodegeneration, G. Gupta, A. Gliga, J. Hedberg, A. Serra, D. Greco, I. Odnevall Wallinder, B. Fadeel, **EUROTOX 2019**, Sep. 8-11 Helsinki, Finland
21. A mechanistic study of the role of Sn on atmospheric corrosion of Sn-bronze at chloride-rich conditions, T. Chang, C. Leygraf, I. Odnevall Wallinder, **EUROCORR 2019**, Sevilla, Spain
22. Atmospheric corrosion and environmental aspects of metals and alloys in outdoor architecture: a 25-year perspective, I. Odnevall Wallinder, C. Leygraf, **EUROCORR 2019**, Sevilla, Spain
23. A Systematic Exploration of Copper Patina Colour. C. Leygraf, G. Herting, T. Chang, I. Odnevall Wallinder, **EUROCORR 2019**, Sevilla, Spain
24. Application of bioelution on metals and alloys – research findings, I. Odnevall Wallinder, invited speaker, Workshop on **Refining the classification of metals and alloys to enable non-toxic society and circular economy**, Finnish Innovation Fund SITRA, Technology Industries of Finland, Helsinki, Oct 3, 2018 (<https://teknologiateollisuus.fi/en/news/solid-metal-and-metal-alloy-risks-must-be-tested-actual-conditions>)
25. Results from > 20 years research: Cu in outdoor architecture – possibilities and challenges, Invited Key note speaker, I. Odnevall Wallinder, **Copper Alloys 2018**, April 11-12, Milan, Italy, 2018 (<https://youtu.be/Txrjyuq1XWQ>)
26. Silver nanoparticles modulate LPS-induced secretion of pro-inflammatory cytokines in human lung and macrophage-like cells, Anda R. Gliga, Jessica de Loma Olson, Sebastiano Di Bucchianico, Sara Skoglund, Inger Odnevall-Wallinder, Bengt Fadeel, Hanna L. Karlsson, **NanoTox18**, Sept. 18-22, Germany
27. Characterization of a Multi-oxide Film on the Golden Alloy Cu5Zn5Al1Sn based on Selective Oxide Stripping and Surface Analysis, C. Leygraf, T. Chang, Y. Jin, I. Odnevall Wallinder, **69<sup>th</sup> International Society of Electrochemistry Meeting**, Bologna, Italy, Sept. 2018
28. Multianalysis of Atmospheric Corrosion of the Golden Alloy Cu5Zn5Al1Sn. C. Leygraf, T. Chang Y. Jin, G. Herting, I. Odnevall Wallinder, **Eurocorr 2018**
29. Bioelution testing and surface reactivity of metals and alloys – research findings, I. Odnevall Wallinder, invited speaker, Workshop on **Classification of metals and alloys and its implications on the non-toxic society**, WS MITF Metal Information, Jernkontoret, Stockholm, Sweden, Oct 31, 2017
30. Micelle clusters of surfactants stabilize silver nanoparticles in surfactant-containing solutions S. Skoglund, E. Blomberg, I. Odnevall Wallinder, I. Grillo, J.-S. Pedersen, M. Bergström, **Poster, Annual Surface Chemistry and Materials Symposium, ASCMS 2017**, Materials and Interfaces – Smart, Functional, Sustainable? Stockholm, Sweden, Oct. 24-26, 2017 (Price for the best poster)
31. Metallic nanoparticles: The link between toxicity, surface and materials properties, I. Odnevall Wallinder, E. Blomberg, Y. Hedberg, J. Hedberg, H.L. Karlsson, **Annual Surface Chemistry and Materials Symposium, ASCMS 2017**, Materials and Interfaces – Smart, Functional, Sustainable?, Stockholm, Sweden, Oct. 24-26, 2017
32. Analysis of historic copper patinas 2: Characterization of 400 year old patina from Royal summer palace in Prague. Chico, B., De la Fuente, D., Jiménez, J.A. Chang, T., Odnevall Wallinder, I., Leygraf, C., Morcillo, M, **Eurocorr 2017**, Prague, the Czech Republic

33. *A Predictive Model for Zinc Runoff Rates from Zinc sheet and Galvanized steel used in outdoor construction*, I. Odnevall Wallinder and C. Leygraf, **Electrochemical Society Prime Meeting**, Oct. 2-7, Honolulu, Hawaii, 2016
34. *Exploration of microstructure and surface composition on corrosion initiation of a Cu-Al-Zn alloy*, Tingru Chang, Ying Jin, Christofer Leygraf, Inger Odnevall Wallinder, **Eurocorr**, Sept. 11 – 15, Montpellier, France, 2016
35. *Can organic degradation products stabilize metal nanoparticles in solution?*, S. Pradhan, J. Hedberg, E. Blomberg, I. Odnevall Wallinder, S. Wold, **2<sup>nd</sup> NanoSafety Forum for Young Scientist**, Nanosafety Cluster, Poster, Sep.15-16, Visby, Sweden (2016) – *awarded as best poster presentation*
36. *Common pitfalls when preparing nanoparticle dispersions – influence of delivered acoustic energy and sonication method on sedimentation and dissolution rates*, J.Hedberg, S. Pradhan, E. Blomberg, S. Wold, I. Odnevall Wallinder, **2<sup>nd</sup> NanoSafety Forum for Young Scientist**, Nanosafety Cluster, oral presentation (J. Hedberg) Sep. 15-16, Visby, Sweden (2016)
37. *Atmospheric corrosion of architectural brass – corrosion rates, metal dispersion and patina evolution*, G. Herting, S. Goidanich, I. Odnevall Wallinder, **Brass Alloys 2016**, Stockholm, Sweden May 25-27, 2016
38. *Visual surface appearance of brass – is it showing the true colour?*, G. Herting, S. Goidanich and I. Odnevall Wallinder, **Brass Alloys 2016**, Stockholm, Sweden May 25-27, 2016
39. *Corrosion initiation and patina formation of brass alloys at atmospheric exposure conditions*, T. Chang, G. Herting, C. Leygraf, Y. Jin and I. Odnevall Wallinder, **Brass Alloys 2016**, Stockholm, Sweden May 25-27, 2016
40. *The importance of chemical speciation, surface properties and corrosion of copper, manganese and aluminum metal nanoparticles on lung cell toxicity*, J. Hedberg, H.L. Karlsson, Y. Hedberg, F. Cappellini, E. Blomberg, I. Odnevall Wallinder, **10th International Conference on the Environmental Effects of Nanoparticles and Nanomaterials**, Vienna, June 3rd, 2015
41. *A fundamental study of the protective role of hydrozincite formed on brass in chloride-containing atmospheres*, Xian Zhang, Inger Odnevall Wallinder and Christofer Leygraf, **Eurocorr 2015**, Graz, Austria , Sept 6-10, 2015
42. *Toxicity of metals in the framework of LCA – WP2 in Sustain*, C. Jönsson, J. Hedberg, C. Kaplin, S. Roos, I. Odnevall Wallinder, A.-K. Jönbrink, **Jernkontorets forskning**, TO 41-13, 2015
43. *Integrating real metal runoff data to the life cycle assessment of alloys*, S. Roos, C. Jönsson, J. Hedberg, C. Kaplin, I. Odnevall Wallinder, **SETAC Europe 25<sup>th</sup> Annual Meeting**, Barcelona, Spain, 3-7 May, 2015
44. *Interactions of silver nanoparticles with sewage-sludge treated soils*, J. Hedberg, A. Geranmayeh Oromieh, **I. Odnevall Wallinder**, D. Berggren Kleja, **Nordrocs**, Stockholm, Sweden, 2015.
45. *Surface changes and metal release in the presence of citric acid for food applications Stainless steel grades 201, 304, 204, 2101, 316L, 430, and EN1.4003*, N. Mazinianian, I. Odnevall Wallinder, Y. Hedberg, **Technical report, commissioned by Team Stainless**, August 2014.
46. *Inter-Laboratory Validation of Bioaccessibility Test for Metals*, R. Henderson, V. Verougstraete, K. Anderson, J. Arbildua, T. Brock, T. Brouwers, D. Cappellini, K. Delbeke, G. Herting, G. Hixon, I. Odnevall Wallinder, PH.Rodriguez, F. Van Assche, P. Wilrich, AR. Oller, Poster, **Society of Toxicology (SOT), 53rd Annual Meeting**, Phoenix Arizona (2014)
47. *Interactions of AgNPs with sewage-sludge treated soils*, J. Hedberg, A. Geranmayeh Oromieh, I. Odnevall Wallinder, D.Berggren Kleja, **NORDROCS 2014, 5th Joint Nordic Meeting on Remediation of Contaminated Sites**, Sep. 15-18, Stockholm, Sweden.
48. *The role of microstructure on initial corrosion and metal release of Cu-Zn alloys in a chloride-containing laboratory atmosphere*, X. Zhang, I. Odnevall Wallinder, C. Leygraf, **Eurocorr 2014**, Sep. 8-12, Pisa, Italy, 2014
49. *The ToxTracker reporter system provides rapid screening of metal- and metal oxide nanoparticles*, H. L. Karlsson, A.R. Gliga, F. Calléja, C.Gonçalves, I. Odnevall Wallinder, H. Vrieling, B. Fadeel, G. Hendriks, **NANOTOX 2014, 7th International Nanotoxicology Congress**" April 23-26, Antalya 2014

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51. Undersökning av risker med spridning av silvernpartiklar från avloppsslam till åkermark J. Hedberg, (IVL), I. Odnevall Wallinder, D. Berggren Kleja, **slutrappport till Kungliga Skogs- och Lantbruksakademin**, IVL rapport, Okt. 2013
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3. *Surface changes and metal release in the presence of citric acid for food applications Stainless steel grades 201, 304, 204, 2101, 316L, 430, and EN1.4003*, N. Mazinianian, I. Odnevall Wallinder, Y. Hedberg, technical report, commissioned by Team Stainless (2014). Online available at [http://www.worldstainless.org/Files/issf/non-image-files/PDF/KTH/Surface changes and metal release in the presence of citric acid for food applications.pdf](http://www.worldstainless.org/Files/issf/non-image-files/PDF/KTH/Surface%20changes%20and%20metal%20release%20in%20the%20presence%20of%20citric%20acid%20for%20food%20applications.pdf)
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**Review papers, book chapters, books (2002-2015)**



- 1 Atmospheric Corrosion, 2<sup>nd</sup> edition, C. Leygraf, I. Odnevall Wallinder, J. Tidblad, T.E. Graedel, John Wiley & Sons (June 2016)
- 2 Contributed with data and figures in Outokumpu Corrosion Handbook, 11<sup>th</sup> Edition, 2015.
- 3 Odnevall Wallinder, I., Herting, G. (2010) Chapter on alloys, HERAG (Health Risk Assessment Guidance for Metals) Document, Invitation from EuroMetaux, Eurofer (European Confederation of Iron and Steel Industries) and ICMM (International Council of Mining and Metals)
- 4 Establishment of the ISO 17752:2012 standard: Corrosion of metals and alloys — Procedures to determine and estimate runoff rates of metals from materials as a result of atmospheric corrosion, ISO (2012)
- 5 Providing the underlying data set for the establishment of the ISO 21207 International standard, Corrosion tests in artificial atmospheres — Accelerated corrosion, tests involving alternate exposure to corrosion-promoting gases, neutral salt-spray and drying (2004-06-01)
- 6 Release of chromium, nickel and iron from stainless steel exposed under atmospheric conditions and the environmental interaction of these metals. A combined field and laboratory investigation, D. Berggren, S. Bertling, D. Heijerick, G. Herting, P. Koundakjian, C. Leygraf, I. Odnevall Wallinder, European Confederation of Iron and Steel Industries (Eurofer) Report, Oct. 2004 ([http://www.edelstahl-rostoffrei.de/downloads/iser/ReleaseCrNiFeStSt\\_EN.pdf](http://www.edelstahl-rostoffrei.de/downloads/iser/ReleaseCrNiFeStSt_EN.pdf))

### **Popular science papers, presentations, impact (2002-2020)**

1. *Health and Environmental Aspects of Metal Powder Based Additive Manufacturing (AM)*, Sareh Götelid, Pelle Mellin, Yolanda Hedberg, Ann-Charlotte Almstrand, Benny Lyvén, Hanna Karlsson, Helen Karlsson, Eva Särndal, Inger Odnevall Wallinder, Maria Assenhöj, Anna Bredberg, Amine Yousfi, Markus Uhlirsch, 5<sup>th</sup> ESTAD (European Steel Technology and Application Days), Stockholm, Sweden, Aug 30 – Sept. 2 2021
2. Korrosion och ytkemi-studier av metalliska material kopplat till hälso och miljöeffekter – ett axplock av pågående tvärvetenskapliga aktiviteter”. I. Odnevall, Occupational and Environmental Medicine, Linköping University Hospital, 4 mars, 2021
3. Forskning om skadliga metaller i svetsrök. Nya rörelektroder avger mindre sexvärt krom, Y. Hedberg, H L. Karlsson, R. A. Wagner, P. Bengtsson, I. Odnevall Wallinder, K.-A. Persson, K. Trydell, E. Westin, M. Lundin, **Svetsen** 3, 2020
4. Interview\_MistraEnvironmentalNanosafety\_I\_OdnevallWallinder: <https://www.mistraenvironmentalnanosafety.org/news/25-years-of-research-on-nanosafety-and-the-impact-of-small-tiny-particles-on-nature>
5. IHMEC – project: <https://www.linkedin.com/posts/ihmec-coronavirus-indoorhygiene-infectionprevention-activity-6638359612179521536-v2iz>
6. Women in Corrosion - <https://corrosionjournal.org/page/womenincorrosion>
7. N. Mei, E. Blomberg, J. Hedberg, I. Odnevall Wallinder, The interplay between biomolecules and reactive metallic surfaces, Pitch poster, **Swetox Academy Workshop**, Aug 21.-22, 2018.
8. Corrosion and metal runoff from outdoor surfaces, I. Odnevall Wallinder, invited speaker, **Plåt 2018**, <https://plat18.se/plat18-2/>, Slagthuset, Malmö, Sweden, March 8, 2018
9. *Corrosion and surface reactivity of metallic surfaces at food-relevant conditions*, Seminar on Health, food, and the biotechnology between them, Technion-Sweden, **Swedish Technion Society**, Feb. 12, 2018
10. *How copper & copper alloy surface appearances evolve*, Copper in Architecture, copperconcept.org, <http://copperconcept.org/en/publications/how-copper-and-copper-alloy-surface-appearances-evolve> pp. 14-15, 2017
11. *Pilotstudie: sexvärt krom*, Y. Hedberg, K.-A. Persson, I. Odnevall Wallinder, **Svetsen** 2017, 2, 35
12. *Metalliska (nano)partiklar i vår miljö*, Presentation för studenter från Åva Gymnasium (rekryteringsaktivitet), Nov 8, 2016

13. *Metal surfaces and bioelution – the KTH approach*, I. Odnevall Wallinder and G. Herting, Invited speaker, **8<sup>th</sup> International meeting of the Task Force on Exposure Assessment**, OECS, Dortmund, Sep. 1, 2016
14. *Rost kan skydda mot rost*, I. Odnevall Wallinder, G. Herting, **Forskning & Framsteg.**, 58, 6/2016, <http://fof.se/tidning/2016/6/artikel/rost-kan-skydda-mot-rost> (2016)
15. *Compliance tests of stainless steel as a food contact material using the CoE test guideline*, Y. Hedberg, N. Mazinianian, I. Odnevall Wallinder, Technical report for webpage publication, [https://www.edelstahl-rostfrei.de/downloads/iser/Food Contact KTH report EN.pdf](https://www.edelstahl-rostfrei.de/downloads/iser/Food%20Contact%20KTH%20report%20EN.pdf), commissioned by **Team Stainless**, Dec. (2014).
16. *Stainless steel in food contact - How does citric acid interact with the surface?* N. Mazinianian, I. Odnevall Wallinder, Y. Hedberg, Poster presentation at the **Symposium on surface and materials chemistry, Realizing reformulation**, Oct. 22-24, 2014, Lund, Sweden. Poster available as pdf on: [https://www.researchgate.net/profile/Yolanda\\_Hedberg/publication/268279489\\_STAINLESS\\_STEEL\\_IN\\_FOOD\\_CONTACT\\_-\\_How\\_does\\_citric\\_acid\\_interact\\_with\\_the\\_surface/links/5467c5540cf2f5eb18036e61.pdf](https://www.researchgate.net/profile/Yolanda_Hedberg/publication/268279489_STAINLESS_STEEL_IN_FOOD_CONTACT_-_How_does_citric_acid_interact_with_the_surface/links/5467c5540cf2f5eb18036e61.pdf)
17. *Micelle clusters of surfactant stabilise silver nanoparticles in solution*, S. Skoglund, E. Blomberg, J. Hedberg, I. Odnevall Wallinder, M. Bergström, 13th Nordic workshop on Scattering from Soft Matter, Ångströmlaboratoriet, Uppsala University, Jan 20-21, 2016
18. *Safe Food Preparation Using Stainless Steel*, [http://www.worldstainless.org/Files/issf/non-image-files/PDF/KTH/Safe Food Preparation Using Stainless Steel.pdf](http://www.worldstainless.org/Files/issf/non-image-files/PDF/KTH/Safe_Food_Preparation_Using_Stainless_Steel.pdf)
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20. *Rosttröga stål- korrosionsaspekter*, G. Herting, I. Odnevall Wallinder, **NYHETER OM STÅLBYGGNAD**, Fokus Arkitekter, Nr.2, 33-34, 2015
21. *Compliance tests or stainless steel as a food contact material using the CoE test guideline*, Y. Hedberg, N. Mazinianian, I. Odnevall Wallinder, **International Stainless Steel Forum, ISSF, internal webpage**, 2015
22. *Surface properties of metal particles, Key note speaker*, I. Odnevall Wallinder, **Höganäs Powder Symposium**, Örenäs Slott, Nov 17-18, 2014
23. *Chromium allergy due to contact with leather: mechanisms and recommendations for prevention, poster*, Y. Hedberg, I. Odnevall Wallinder, C. Lidén, **ForTe Talks**, Nacka, Stockholm, 2014
24. *Metaller, miljö och myter*: Invited lecturer at the Norwegian conference for 350 architects and building constructors, **Metall 13**, Oslo, Nov 6, 2013
25. *Metaller, miljö och myter*: Invited lecturer at the national conference for 350 architects and building constructors, **PLÅT 13**, Lindholmen Conf. Centre, Göteborg, Mars 7, 2013
26. *Spridning av metaller och nanopartiklar från utomhuskonstruktioner och konsumentprodukter*, Presentation, **Fredagsforum – Länsstyrelsen**, Stockholm, 8 dec., 2012
27. *Vackra, hållbara och miljövänliga metaller*, Intervju och artikel, **Plåt & Vent**, 2, 24-27, 2012
28. *Vad tar den koppar som frigörs från kopparkoppar vägen?*, G. Herting, I. Odnevall Wallinder, **Bygg och Teknik**, 4, 46-48 (2012).
29. *Spridning av metaller och nanopartiklar från konsumentprodukter*, Invited lecturer at the national workshop on Nanopartiklar i miljön - riskerna med belastningen av nanopartiklar från konsumentprodukter och vägtransporter, IVL Svenska Miljöinstitutet, 3 maj 2012
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31. *Copper architecture and the environment*, Interview of Prof. Odnevall Wallinder by Chris Hodson, **Copper Architecture Forum**, 31, 32-33, 2011
32. *Protective green patinas on copper in outdoor constructions*, Y. Hedberg and I. Odnevall Wallinder, *Journal of Environmental Protection*, JEP, doi: 10.4236/jep.2011.27109, Vol. 2 No. 7, 956-959 (2011)- open access
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34. Health effects of metal particles – research at the Stockholm Particle group, KTH, Oral presentation at YKI in connection to "Integrating Nanomaterials in Formulations" – NanoFormulation 2010, June 9, 2010
35. Die Bindekapazität von Entwässerungssystemen für Kupfer von Kupferdächern - Vergleich von Regenwasserkupferkonzentrationen in einem Kupferdachentwässerungssystem und einem Parkplatz, Y. Hedberg, P. Dromberg, I. Odnevall Wallinder, **Wasser- /Abwassertechnik**, 3/2010, 22-23, (2010)
36. Vad tar den koppar som frigörs från koppertak vägen?, I. Odnevall Wallinder, Y. Ullmann, P. Dromberg, **Bygg och Teknik**, 4/09, 28, (2009).
37. Metals and alloys in external constructions – environmental interactions, Nacka Kommun, March 27, 2009
38. Metals and alloys in external constructions – changes in speciation and bioavailability of corrosion-induced metal runoff upon environmental entry, Statens Fastighetsverks Kulturarvsenhet, March 2, 2009
39. Corrosion- not only a material-related topic, Open lecture, Seminar Series: Chemical Science and Engineering, Jan 30, 2009
40. Varmförzinkat stål i samhället, I. Odnevall Wallinder, D. Lindström, G. Herting, C. Leygraf, **Bygg och Teknik**, Maj, 2008
41. Varmförzinkat stål i samhället, A. Hirn, I. Odnevall Wallinder, **Ytforum**, 3, 17, 2008
42. Bioaccessibility and surface reactivity of nano- and micron-sized particles, Course on "the health risk assessment of metals, their alloys and compounds under REACH, Finnish Institute of Occupational Health, Helsinki, Sept. 29, 2008
43. Metal release from particles and potential health effects, Open lecture, Royal Institute of Technology, April 23, 2008
44. Metals and alloys in external constructions – changes in speciation and bioavailability of corrosion-induced metal runoff upon environmental entry, Metals Task force, Seminar on metal bioavailability - results and practical applications, Oct. 18, 2007
45. Modelling of copper flows into soil and water, Meeting of the Roofing Environmental Affairs task force-European copper institute, Budapest, June 4, 2007
46. Metallutlösning från rena metaller och legeringar, Seminarium om materialkompetens inom medicinsk teknik, KorrosionsCentrum, KIMAB/ KTH, March 8, 2007.
47. Passive films on stainless steel – recent nano-range research, C. Olsson, G. Herting, I. Odnevall Wallinder, **Acom** (Outokumpu's Scientific magazine about Stainless), 2, 15, 2006
48. Vilken inverkan på miljön har metallavrinning från utomhuskonstruktioner, Sunda Hus, Miljöarbete i praktiken, Tyrénshuset, Stockholm, Nov. 22, 2006.
49. Release of main metal constituents from alloys and the pure metals, Poster, Towards the city surface of tomorrow", Institute for Water Quality, Resources, and Waste Management, Vienna University of Technology, Federal Ministry of Agriculture, Forestry, Environment and Water Management, June 8-9, Vienna, Austria, 2006
50. Release of main metal constituents from alloys and the pure metals, Poster, Towards the city surface of tomorrow", Institute for Water Quality, Resources, and Waste Management, Vienna University of Technology, Federal Ministry of Agriculture, Forestry, Environment and Water Management, June 8-9, Vienna, Austria, 2006
51. Corrosion-induced release of zinc from various zinc-based construction materials in a marine environment, - Poster, "Towards the city surface of tomorrow", Institute for Water Quality, Resources, and Waste Management, Vienna University of Technology, Federal Ministry of Agriculture, Forestry, Environment and Water Management, June 8-9, Vienna, Austria, 2006
52. Corrosion-Induced Metal Release from Metals and Alloys, Workshop on an Assessment Methodology for Preparations and Special Preparations, Hotel Metropole, Brussels, Oct. 10-11, 2006.
53. Corrosion-induced copper runoff from building materials, Meeting of the Roofing Environmental Affairs task force – European Copper in Architecture Campaign, European Copper Institute, Barcelona, Spain, June 28, 2006

54. Nygammal nanoteknik-passivfilmer på rostfria stål, C. Olsson, G. Herting, I. Odnevall Wallinder, **Bergsmannen** 6, 16-17, 2005
55. Environmental fate of corrosion-induced metal release from stainless steel, I. Odnevall Wallinder, S. Bertling, G. Herting and C. Leygraf, **Nordic Steel and Mining Review**, 32, 2005
56. Runoff and fate of zinc from outdoor constructions - Selected results from a five-year exposure programme (short summary”), I. Odnevall Wallinder, S. Bertling and C. Leygraf, **Protective Coatings Europe**, Sep., 2-4, 2005
57. Kupfer- und Zinkabschwemmungen von Metaldächern, I. Odnevall Wallinder, S. Bertling, and C. Leygraf, **Wasser- /Abwassertechnik**, 1-2, 2005
58. Frigörelse av koppar och zink från byggnadsmaterial och växelverkan med omgivande miljö, I. Odnevall Wallinder, S. Bertling, C. Leygraf, **Bygg & Teknik**, 4, 2005
59. Modelling of copper flows into soil and water, Meeting of the Roofing Environmental Affairs task force-European copper institute, Luxemburg, June 27, 2005
60. Release of chromium, nickel and iron from pure samples of the metals and 304 and 316 stainless steel induced by atmospheric corrosion. A combined field and laboratory study, I. Odnevall Wallinder, S. Bertling, G. Herting and C. Leygraf, **ACOM** (A corrosion management and applications engineering magazine from Outokumpu Stainless), 2, 2004
61. Kan miljöeffekter påvisas från utomhuskonstruktioner i rostfritt stål?, I. Odnevall Wallinder, S. Bertling, C. Leygraf, **Bygg & Teknik**, 2004
62. Environmental interaction of copper runoff from external structures, Meeting of the Roofing Environmental Affairs task force - European copper institute, Edinburgh, UK, June 8, 2004
63. Påverkar metaller i utomhuskonstruktioner vår miljö, Stål 2004, Borlänge, May 7, Swedish Steel Association, 2004
64. Vad sker med koppar i avrinningsvatten i kontakt med miljön?, I. Odnevall Wallinder and S. Bertling, **Kopparforum** no 15, 2003
65. Korrosion och avrinning av zink från takmaterial, I. Odnevall Wallinder, S. Bertling, C. Leygraf, **Bygg & Teknik**, 2/03, 2003
66. Environmental aspects of metal runoff from external surfaces, Committee of European Environmental Engineering Societies, Technical Advisory Board on Climatic and Atmospheric Pollution Effects on Materials and Equipment, Helsinki, Sept. 18, 2003
67. Environmental aspects of copper runoff, Meeting of the Roofing Environmental Affairs task force - European copper institute, Athens, Greece, June 3, 2003
68. Miljöaspekter vid avrinning från tak, S. Bertling, I. Odnevall Wallinder and C. Leygraf, **Stålbyggnad**, ISBN 91 7127 033 7, 2002
69. Miljöaspekter av metallavrinning från taktytor av zink och rostfritt stål, Stål 2002, Berns Salonger, 16 maj, 2002 “Environmental effects of metals induced by atmospheric corrosion”, Symposium on Nanostructured Materials – focusing on contributions by Women in Materials Science, KTH-175 years, KTH, April 11, 2002

#### Conferences (selected 2002-)

1. N. Mei, J. Hedberg, E. Blomberg, I. Odnevall Wallinder, Transformation/dissolution of cobalt nanoparticles in biological media – effects of adsorbed biocoronas of amino acids, polypeptides or proteins, Poster **SETAC Europe 29th Annual Meeting** in Helsinki, Finland, 26 - 30 May, 2019
2. J. Hedberg, K. Fransson, S. Prideaux, S. Roos, C. Jönsson, I. Odnevall Wallinder, Improving the life cycle impact assessment of metals in slags: importance of chromium speciation, water chemistry, and metal release, Poster, **SETAC Europe 29th Annual Meeting** in Helsinki, Finland, 26 - 30 May, 2019
3. I. Odnevall Wallinder, invited speaker, Finding linkages between toxicity and surface reactivity of metallic (nano)particles, **Mistra Environmental Nanosafety Conference**, Nov. 13-15, 2018
4. J. Hedberg, Y. Hedberg, N. Mei, E. Blomberg, I. Odnevall Wallinder, Influence of electrochemical properties and surface interactions with natural organic matter on environmental fate of a range of metal nanoparticles, **NanoSafe 2018**, 6th International Conference on health and safety issues related to nanomaterials for a socially responsible approach, Nov 5-9, Grenoble, 2018

5. C. Leygraf, T. Chang, I. Odnevall Wallinder, D. de la Fuente, B. Chico, I. Diaz, M. Morcillo, Analysis of historic copper patinas 1: Influence of substrate on patina uniformity, **EUROCORR 2017**, 20th ICC & Process Safety Congress, Prague, the Czech Republic, Sep. 3-7, 2017
6. B. Chico, D. de la Fuente, J. A. Jiménez, T. Chang, I. Odnevall Wallinder, C. Leygraf, M. Morcillo, Analysis of historic copper patinas 2: characterization of 400 year old patina from Royal Summer Palace in Prague, **EUROCORR 2017**, 20th ICC & Process Safety Congress, Prague, the Czech Republic, Sep. 3-7, 2017
7. Tingru Chang, Ying Jin, Christofer Leygraf, Inger Odnevall Wallinder, Exploration of microstructure and surface composition on corrosion initiation of a Cu-Al-Zn alloy, **EUROCORR 2016**, Montpellier, France, Sept 11-15, 2016
8. X. Zhang, I. Odnevall Wallinder and C. Leygraf, A fundamental study of the protective role of hydrozincite formed on brass in chloride-containing atmospheres, **EUROCORR 2015**, Graz, Austria, Sept 6-10, 2015
9. J. Hedberg, H L Karlsson, Y. Hedberg, F. Cappellini, E. Blomberg, I. Odnevall Wallinder, The importance of chemical speciation, surface properties and corrosion of copper, manganese and aluminum metal nanoparticles on lung cell toxicity, International Conference on the Environmental Effects of Nanoparticles and Nanomaterials, Vienna, Austria, Sept. 2015
10. Y. Rodhe, S. Skoglund, I. Odnevall-Wallinder, Z. Potacova, and L. Möller, Toxicity of metal nanoparticles, focusing on copper-based nanoparticles, Poster, NANOTOX 2014, 7th International Nanotoxicology Congress" April 23-26, Antalya, Turkey, 2014
11. S. Roos, C. Jönsson, J. Hedberg, C. Kaplin, I. Odnevall Wallinder, "Integrating real metal runoff data to the life cycle assessment of alloys", SETAC Europe 25<sup>th</sup> Annual Meeting, Barcelona, Spain, 3-7 May, 2015
12. A. Mörsdorf, I. Odnevall Wallinder, Y. Hedberg, 'Bioaccessibility of micron-sized powder particles of molybdenum metal, molybdenum oxides and ferromolybdenum – Importance of surface oxides', poster presentation at the annual meeting of GfKORR, 4-5 November 2014, Frankfurt, Germany.
13. N. Mazinianian, I. Odnevall Wallinder, Y. Hedberg, 'Influence of citric acid on the metal release of stainless steels', proceedings and oral presentation (N. Mazinianian) at the 19th International Corrosion Congress, 2-6 November, 2014, Jeju, Korea.
14. Y. Hedberg, H.L. Karlsson, J. Hedberg, E. Blomberg, I. Odnevall Wallinder, 'Interactions between nanoparticles and biosystems and their importance for toxicity', invited oral presentation at the symposium on surface and materials chemistry, Realizing reformulation, 22-24 October, 2014, Lund, Sweden.
15. "Understanding chromium release from leather that causes contact dermatitis", Y. Hedberg, I. Odnevall Wallinder, C. Lidén, Poster, 12th Congress of the European Society of Contact Dermatitis Barcelona, 25-28 June 2014
16. Release and stability of aluminum metal nanoparticles in surface water – effects of particle loading, E.N. Yunda, G. Herting, I. Odnevall Wallinder, A. Yu. Godymchuk, XI International Conference of Students and Young Scientists "Prospects of Fundamental Sciences Development" Russia, Tomsk, 22d–25th April 2014
17. "Mechanistic studies of corrosion product flaking on copper and copper-based alloys in marine environments", Oral presentation, X. Zhang, C. Leygraf, I. Odnevall Wallinder, 224th Electrochemical Society Meeting, San Francisco, US, Oct. 30, 2013
18. "Dissolution of nanoparticles of Zn metal and ZnO in synthetic alveolar fluid", E Yunda, I Odnevall Wallinder, A Godymchuk, D. Kuznetsov, 2nd QNano Integrating Conference "Quality in nanosafety assessment " driving best practice and innovation#, Feb. 27 – March 1 2013, IMG Conference Centre, Prague, Czech Republic
19. "The fate of silver nanoparticles in municipal wastewater treatment plants" J. Hedberg, I. Odnevall Wallinder, G. Herting, C. Baresela, Nordiwa 2013, 13th Nordic Waste Water Conference, Oct. 8-10, 2013
20. "Mechanistic studies of corrosion product flaking on copper and copper-based alloys in marine environments", X. Zhang, S. Goidanich, C. Leygraf, I. Odnevall Wallinder, 224th ECS Meeting, San Francisco, CA, USA – October 27-November 1, 2013
21. "Surface characteristics, material chemistry and toxicity - in-depth studies on stainless steel in human contact.", Invited plenary speaker, I. Odnevall Wallinder, Materials for Tomorrow, Chalmers annual conference & division of surface chemistry and materials chemistry annual symposium, Gothenburg, Sweden, 23-25 Oct. 2012
22. "Metal release from building materials and its influence on the environment", Invited plenary speaker, I. Odnevall Wallinder, Swerea KIMAB Open House and Inauguration, Electrum, Kista, Oct 23, 2012
23. "Relevance of in vitro studies for in vivo inhalation toxicity of stainless steel powder", POSTER, Y. Hedberg, H. Stockmann-Juvala, N. K. Dhinsac, D. R. Griffiths, A. Zitting, T. Santonen, I. Odnevall Wallinder, Eurotox 2012 Congress of the European Societies of Toxicology, June 17-20, 2012
24. "Interactions of different proteins with metal surfaces", Y. Hedberg, M. Lundin, M. Killian, E. Blomberg, S. Virtanen, I. Odnevall Wallinder. Keystone symposia on Molecular and Cellular Biology Proteomics, Interactomes (F2), Stockholm, May 7-12, 2012

25. *"Hemolysis of silica particles: importance of surface properties and plasma corona"*, J. Shi, Y. Hedberg, M. Lundin, I. Odnevall Wallinder, HL Karlsson, L. Möller, Eurotox 2012 Congress of the European Societies of Toxicology, June 17-20, 2012
26. *"Cellular dose and toxicity of Ag and CuO nanoparticles: the importance of a Trojan horse type mechanism"*, HL Karlsson, P. Cronholm, I. Odnevall Wallinder, L. Möller, Poster – Society of Toxicology's 51st Annual Meeting and ToxExpo, March 11–15, 2012, San Francisco, California
27. *"Nanoparticles and oxidative DNA damage – Trojan horses and assay interactions"*, HL Karlsson, P. Cronholm, J. Kain, T. Lowe, I. Odnevall Wallinder, L. Möller, UKEMS / Dutch EMS-sponsored Workshop on Biomarker of Exposure and Oxidative DNA Damage & 7th GUM 32P-Postlabelling Workshop, Munster, March 28–29, 2011
28. *"Size-dependent toxicity of metal oxide particles"*, HL Karlsson, P. Cronholm, J. Gustafsson, K. Elihn, K. Midander, I. Odnevall Wallinder, L. Möller, 2<sup>nd</sup> Nobel Forum Mini-symposium on Nanotoxicology, KI, Oct 23, 2010
29. *"Use of read-across in the health risk assessment of ferrochromium alloys under REACH"*, T. Santonen, H. Stockmann-Juvala, I. Odnevall Wallinder, G. Darrie, A. Zitting, The 12<sup>th</sup> international ferro alloy congress (INFACON XII), Sustainable future, June 6-9, 2010
30. *"Bioaccessibility of ferro-chromium and ferro-silicon-chromium particles compared to pure metals and stainless steel – aspects of human exposure"*, K. Midander, A. de Frutos, G. Darrie, I. Odnevall Wallinder, The 12<sup>th</sup> international ferro alloy congress (INFACON XII), Sustainable future, June 6-9, 2010
31. *Metal release from iron- and chromium-based particles in artificial sweat and artificial tear fluid*, Y. Ullmann, K. Midander, I. Odnevall Wallinder, 5th Kurt Schwabe Symposium in Electrochemistry, University of Erlangen-Nurnberg, Erlangen, Germany, May 24-28, 2009
32. *"Zinc released from roofing materials and its environmental interaction. Results from a 10-year field exposure in Stockholm"*, I. Odnevall Wallinder and D. Lindström, 12<sup>th</sup> EuCheMS International Conference on Chemistry and the Environment, June 14-17, Stockholm, 2009
33. *"Copper-based alloys in outdoor applications – aspects on patina growth, composition and dissolution at different urban and marine sites in Europe"*, S. Goidanich, D. Lindström, M.A. Arenas, J. de Damborenea, J.M. Sanchez Amaya, F.J. Botana, N. Le Boze, I. Odnevall Wallinder, 12<sup>th</sup> EuCheMS International Conference on Chemistry and the Environment, June 14-17, Stockholm, 2009
34. *"Toxicity induced by nano- and micrometer-sized copper and copper(II)oxide particles – an interdisciplinary study"*, P. Cronholm, K. Midander, H.L. Karlsson, L. Möller, C. Leygraf, I. Odnevall Wallinder, 4<sup>th</sup> International Conference on Nanotechnology, Occupational and environmental health, Aug 26-29, 2009
35. *"Copper nanoparticles are highly cytotoxic and interact with hemoglobin"*, H.L. Karlsson, P. Cronholm, J. Gustafsson, K. Midander, I. Odnevall Wallinder, L. Möller, 4<sup>th</sup> International Conference on Nanotechnology, Occupational and environmental health, Aug 26-29, 2009
36. *"An interdisciplinary study of nano- and micron sized metal particles, their surface properties, metal release and ability to induce toxicity"*, K. Midander, P. Cronholm, H. Karlsson, K. Elihn, L. Möller, C. Leygraf, I. Odnevall Wallinder, Surface and Colloid Science for Advanced Materials – 8<sup>th</sup> Annual Surface and Colloid Symposium" Lund, 19-21 Nov., 2008
37. *"Long-term barrier effects of Cr(III) and Cr(VI) treated zinc surfaces from a metal runoff perspective"*, I. Odnevall Wallinder, D. Lindström, Proc. European General Galvanizers Association, Assembly meeting, Copenhagen, Denmark, June 10, 2008
38. *"Bioaccessibility of nano- and micron-sized metallic particles in simulated lung systems"*, K. Midander, J. Pan, C. Leygraf, I. Odnevall Wallinder, Proc. 17<sup>th</sup> International Corrosion Congress, Oct. 6-10, Las Vegas, US (2008)
39. *"Effect of the environment on the metal release and corrosion behaviour of different copper-based alloys: field exposures at 5 different sites in Europe"*, S. Goidanich, I. Odnevall Wallinder, M.A. Arenas, J. De Damborenea, M. Ormellese, J.M Sánchez Amaya, F.J. Botana, N. Le Bozec, Proc. 17<sup>th</sup> International Corrosion Congress, Oct. 6-10, Las Vegas, US (2008)
40. *"Long-term barrier effects of Cr(III)- and Cr(VI)-treated zinc surfaces on metal release"*, D. Lindström, I. Odnevall Wallinder, Proc. 17<sup>th</sup> International Corrosion Congress, Oct. 6-10, Las Vegas, US (2008)
65. *"Influence of surface finish on stainless steel AISI 304 on the metal release process in synthetic biological media"*. G. Herting, C. Leygraf, I. Odnevall Wallinder, Proc. 17<sup>th</sup> International Corrosion Congress, Oct. 6-10, Las Vegas, US (2008)
66. *"A comparison between corrosion-induced metal release from copper-based alloys at field conditions and at laboratory simulated bulk conditions using the OECD T/D test"*, S. Jafarzadeh, S. Goidanich, I. Odnevall Wallinder, Proc. 17<sup>th</sup> International Corrosion Congress, Oct. 6-10, Las Vegas, US (2008)

67. "Elaboration of a metal release test for massive metal sheet. – effect of different parameters on the copper release rate". Y. Ullmann, S. Jafarzadeh G. Herting, I. Odnevall Wallinder, Proc. 17<sup>th</sup> International Corrosion Congress, Oct. 6-10, Las Vegas, US (2008)
68. "Long-term barrier effects of Cr(III) and Cr(VI)-treated zinc surfaces from a metal release perspective", I. Odnevall and D. Lindström, European General Galvanizers Association, Assembly Meeting, Copenhagen, Denmark, June 10, 2008
69. "Wax Based Antigrffiti Coatings on Artificially Patinated Copper: Effects on Copper Release and Patina Composition", S. Goidanich, I. Odnevall Wallinder, Conservation Science, Politecnico di Milano, Milano, Italy 10-11 May 2007,
70. "Metal release from powder particles in synthetic biological media", K. Midander, J. Pan, I. Odnevall Wallinder, C. Leygraf, 14<sup>th</sup> Nordic Corrosion Congress, NKM14, Copenhagen May, 14-15, 2007
71. "Predictive modelling and mapping of corrosion-induced copper runoff from external buildings", I. Odnevall Wallinder, B. Bahar, C. Leygraf and J. Tidblad, 14<sup>th</sup> Nordic Corrosion Congress, NKM14, Copenhagen May, 14-15, 2007
72. "Corrosion-induced metal release from copper-based alloys compared to their pure elements", S. Goidanich, I. Odnevall Wallinder, G. Herting and C. Leygraf, 14<sup>th</sup> Nordic Corrosion Congress, NKM14, Copenhagen May, 14-15, 2007
73. Wax Based Antigrffiti Coatings on Artificially Patinated Copper: Effects on Copper Release and Patina Composition, S. Goidanich, I. Odnevall Wallinder, , Conservation Science 2007, 10-11 May (2007), Politecnico di Milano, Milano, Italy
74. "Release of main metal constituents from alloys and the pure metals", Poster, Towards the city surface of tomorrow", Institute for Water Quality, Resources, and Waste Management, Vienna University of Technology, Federal Ministry of Agriculture, Forestry, Environment and Water Management, June 8-9, Vienna, Austria, 2006
75. "Corrosion-induced release of zinc from various zinc-based construction materials in a marine environment",- Poster, "Towards the city surface of tomorrow", Institute for Water Quality, Resources, and Waste Management, Vienna University of Technology, Federal Ministry of Agriculture, Forestry, Environment and Water Management, June 8-9, Vienna, Austria, 2006.
76. "Environmental fate of corrosion-induced release of zinc, copper, chromium and nickel from external constructions" "Towards the city surface of tomorrow", Institute for Water Quality, Resources, and Waste Management, Vienna University of Technology, Federal Ministry of Agriculture, Forestry, Environment and Water Management, June 8-9, Vienna, Austria, 2006.
77. "Corrosion-induced metal release from stainless steel and its alloy constituents into different media", Baosteel, BAC, Shanghai, May, 2006.
78. "Long-term corrosion induced copper runoff from natural and artificial patina and its environmental fate in soil" Poster, SETAC Europe, 15th Annual Meeting, 22-26 May, Lille, France, 2005
79. "Environmental impact of copper dispersion from external structures", SETAC Europe 14th Annual Meeting, Prague, Czech Republic, 18-22 April, 2004
80. "Environmental interaction of metals induced by atmospheric corrosion", I. Odnevall Wallinder and C. Leygraf, Proceedings, 13th Scandinavian Corrosion Congress, April 18-24, Iceland, 2004
81. "Release of Cr, Ni and Fe from stainless steel alloys and the pure metals", G. Herting, I. Odnevall Wallinder and C. Leygraf, Proceedings, 13th Scandinavian Corrosion Congress, April 18-24, Iceland, 2004
82. "Environmental aspects of metal runoff", I. Odnevall Wallinder and C. Leygraf, Proceedings, Eurocorr, Budapest, (2003)
83. "A model for predicting copper runoff rates – current activities", UN/ECE Convention on long-range transboundary air pollution, Workshop on Release of heavy metals due to corrosion of materials, Munich Germany, May 12-14, 2003
84. "Immobilization of copper in runoff water from roofing materials by limestone, soil and concrete", UN/ECE Convention on long-range transboundary air pollution, Workshop on Release of heavy metals due to corrosion of materials, Munich Germany, May 12-14, 2003
85. "Miljöspekter av metallavrinning från taktytor av zink och rostfritt stål", Stål 2002, Berns Salonger, May 16, Jernkontoret, 2002
86. "Environmental effects of metals induced by atmospheric corrosion", Symposium on Nanostructured Materials – focusing on contributions by Women in Materials Science, KTH-175 years, KTH, April 11, 2002
87. "The capacity of limestone to immobilize copper in runoff water", S. Bertling, I. Odnevall Wallinder, C. Leygraf, 15<sup>th</sup> International Corrosion Congress, Granada, Spain, 2002

88. *"Immobilization of copper in runoff water from roofing materials by limestone, soil and concrete"*, S. Bertling, I. Odnevall Wallinder, C. Leygraf, 15<sup>th</sup> International Corrosion Congress, Granada, Spain, 2002
89. *Novel accelerated corrosion tests for qualification of electronic components in automotive applications*, B. Carlsson, P. Eriksson, I. Odnevall Wallinder, Proc. 20<sup>th</sup> International Conference of Electrical Contacts, Stockholm June 19-23, 2000