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List of Publications

Scientific Journal Articles

Ruzante JM, Shumaker E, Holt S, Mayer S, Kokotovich A, Cuchiara M, Binder A, Kuzma J, Grieger K. Eliciting Stakeholder Perceptions using a Novel Online Engagement and Elicitation Platform: A case study on Nano-Agrifoods. *RTI Press – In review*.

Kokotovich, A., Kuzma, J., Cummings, C., **Grieger, K.** Responsible innovation definitions, practices, and motivations from nanotechnology researchers in food and agriculture. *NanoEthics – Submitted*.

Huang, Y., Zhi, Y., Gao, J., Wang, F., Yang, W., Han, L., Lin, D., Wei, B., **Grieger, K.**, Li, W., Yao, J. Responses of litter decomposition and nutrient uptake functions to stream hyper-eutrophication. *Environmental Pollution – Accepted, In revision*.

Zhi, Y., Call, D., **Grieger, K.**, Duckworth, O., Jones, J.L., Knappe, D. Influence of Natural Organic Matter and pH on Phosphate Removal by and Lanthanum Release from Lanthanum-Modified Bentonite. *Water Research* – <https://doi.org/10.1016/j.watres.2021.117399>.

Cummings, C.L., Kuzma, J., Kokotovich, A., Glas, D., **Grieger, K.** 2021. Barriers to responsible innovation of nanotechnology applications in food and agriculture: A study of US experts and developers. *NanoImpact*, 23: 100326.

Kuiken, T., Barrangou, R., **Grieger, K.** 2021 (Broken) Promises of Sustainable Food and Ag through New Biotechnologies: The CRISPR Case. *The CRISPR Journal*, 4(1): 25-31.

Huang, Y., Li, W., Gao, J., Wang, F., Yang, W., Han, L., Lin, D., Min, B., Zhi, Y., **Grieger, K.**, Yao, J. 2021. Effect of microplastics on ecosystem function: Microbial nitrogen removal mediated by benthic macroinvertebrates. *Science of the Total Environment*, 754: 142133.

Doydora, S., Gatiboni, L., **Grieger, K.**, Hesterberg, D., Jones, J., McLamore, E., Peters, R., Sozzani, R., Van den Broeck, L., Duckworth O. 2020. Accessing Legacy Phosphorus in Soil. *Soil Systems*, 4(74): doi:10.3390/soilsystems4040074.

Kuzma, J., **Grieger, K.** 2020. Community-led governance for gene-edited crops. *Science*, 370(6519):916-918.

Zhi, Y., Zhang, C., Hjorth, R., Baun, A., Duckworth, O., Call, D., Knappe, D., Jones, J., **Grieger, K.** 2020. Emerging Lanthanum (III)-containing Materials for Phosphate Removal from Water: A Review towards Future Developments. *Environment International*, 145: 106115.

Saia, S., Nelson, N., Huset, A., **Grieger, K.**, Reich, B., 2020. Transitioning Machine Learning from Theory to Practice in Natural Resource Management. *Ecological Modelling*, 435: 109257.

Kuzma, J., **Grieger, K.D.**, Cummings, C.L., Brown, Z. S. 2020. Pandemics Call for Systems Approaches to Research and Funding. *Issues in Science and Technology*, May 4, 2020. Available: <https://issues.org/pandemics-call-for-systems-approaches/>

Grieger, K., Jones, J.L., Hansen, S.F., Hendren, C.O., Jensen, K.A., Kuzma, J., Baun, A. 2019. What are the Key Best Practices from Nanomaterial Risk Analysis That May Be Relevant for Other Emerging Technologies? *Nature Nanotechnology*, 14, 998–1001, doi:10.1038/s41565-

019-0572-1.

Porcarci, A., Borsella, E., Benighaus, C., **Grieger, K.**, Isigonis, P., Chakravarty, S., Kines, P., Jensen, K. A. 2019. From Risk Perception to Risk Governance in Nanotechnology: A Multi-Stakeholder Study. *Journal of Nanoparticle Research*, 21(11), 1-19.

Grieger, K., Felgenhauer, T., Renn, O., Wiener, J., Borsuk. 2019. Emerging Risk Governance for Stratospheric Aerosol Injection as a Climate Management Technology. *Environmental System and Decisions*, 39(4), 371-382.

Isigonis, P., Hristozov, D., Benighaus, C., Giubilato, E., **Grieger, K.**, Pizzol, L., Semenzin, E., Linkov, I., Zabeo, A., Marcomini, A. 2019. Risk Governance of Nanomaterials: Review of Criteria and Tools for Risk Communication, Evaluation, and Mitigation. *Nanomaterials*, 9(696), doi:10.3390/nano9050696

Mortensen, N.P., Johnson, L., **Grieger, K.**, Fennell, T.R. 2019. Biological Interactions between Nanomaterials and Placental Development and Function Following Oral Exposure. *Reproductive Toxicology*- <https://doi.org/10.1016/j.reprotox.2019.08.016>.

Grieger, K., Bossa, N., Levis, J., von Borries, K., Strader, P., Cuchicara, M., Hendren, C.O., Hansen, S.F., Jones, J. 2018. Application and Testing of Risk Screening Tools for Nanomaterial Risk Analysis. *Environmental Science: Nano*, 5:1844-1858.

Hjorth, R., Holden, P.A., Hansen, S.F., Colman, B.P., **Grieger, K.**, Hendren, C.O. 2017. The Role of Alternative Testing Strategies in Environmental Risk Assessment of Engineered Nanomaterials. *Environmental Science: Nano*, 4:292-301.

Ruzante, J., **Grieger, K.**, Woodward, K., Lambertini, E., Kowalcyk, B. 2017. The Use of Multi-Criteria Decision Analysis in Food Safety Risk-Benefit Assessment. *Food Protection Trends*, March/April: 132-139.

Lebov, J., **Grieger K.**, Womack D., Zaccaro, D. Whitehead, N. Kowalcyk, B., Macdonald, P. 2017. A Framework for One Health Research. *One Health*, 3:44-50.

Grieger, K., Harrington, J., Mortensen, N. 2016. Prioritizing Research Needs for Analytical Techniques Suited for Engineered Nanomaterials in Food. *Trends in Food Science & Technology*, 50: 219-229.

Grieger, K., Hansen, S.F., Mortensen, N., Cates, S., Kowalcyk, B. 2016. International Implications of Labeling Foods containing Engineered Nanomaterials. *Journal of Food Protection*, 79(5): 830-842.

Powers, C., **Grieger, K.**, Meacham, C., Lassiter, M., Gift, J., Lehmann, G., Hendren, C., Davis, M., Burgoon, L. 2016. Applying Comprehensive Environmental Assessment to Research Planning for Multiwalled Carbon Nanotubes: Refinements to Inform Future Stakeholder Engagement. *Integrated Environmental Assessment and Management*, 12(1): 96-108.

Grieger, K., Redmon, J., Money, E., Widder, M. Van der Schalie, W., Beaulieu, S., Womack, D. 2015. A Relative Ranking Approach for Nano-Enabled Applications to Improve Risk-Based Decision Making: A Case Study of Army Materiel. *Environment, Systems and Decisions*, 35(1):42-53.

Grieger, K., Sayes, C., Chen, E., Ensor, D., Jayanty, R.K.M. 2015. Safe Handling of Engineered Nanomaterials: Turning Knowledge into Practice. *RTI Press Publication No. OP-0022-1505*. Research Triangle Park, NC: RTI Press.

<http://dx.doi.org/10.3768/rtipress.2015.op.0022.1505>

Bates, M.E., **Grieger, K.D.**, Trump, B.D., Keisler, J.M., Plourde, K.J., Linkov, I. 2015. Emerging Technologies for Environmental Remediation: Integrating Data and Judgment. *Environmental Science & Technology*, 50(1): 349-358.

Powers, C., **Grieger, K.**, Beaudrie, C., Hendren, C., Davis, M., Wang, A., Sayes, C. MacDonell, M., Gift, J. 2015. Data dialogues: critical connections for designing and implementing future nanomaterial research. *Environment, Systems and Decisions*, 35(1):76-87.

Grieger, K., Sayes, C., Hendren, C.O., Rothrock, G., Mansfield, C., Jayanty, R.K.M., Ensor, D. 2013. Multi-stakeholder collaboration is key to solving society's grand challenges: The case of responsible nanomaterial development. *EHS Today – December Issue*; Available: <http://ehstoday.com/training/finding-key-responsible-nanomaterial-development?page=1>.

Powers, C., **Grieger, K.**, Hendren, C., Meacham, C., Lassiter, M.G., Gurevich, G., Money, E., Lloyd, J., Beaulieu, S.M. 2014. A web-based tool to engage stakeholders in informing research planning for future decisions on emerging materials. *Science of the Total Environment*, 470-471:660-668.

Hansen, S.F., Nielsen, K.N., Knudsen, N., **Grieger, K.**, Baun, A. 2013. Operationalization and application of “early warning signs” to screen nanomaterials for harmful properties. *Environmental Science: Processes & Impacts*, 15: 190-203.

Hendren, C., Lowry, M., **Grieger, K.**, Money, E., Johnston, J., Wiesner, M., Beaulieu, S. 2013. Modeling Approaches for Characterizing and Evaluating Exposure to Engineered Nanomaterials: A Critical Review. *Environmental Science & Technology*, 47(3):1190-205.

Renn, O., **Grieger, K.**, Øien, K., Andersen, H.B. 2013. Benefit-Risk Tradeoffs in Retrospect: How major stakeholders perceive the decision making process in the Goliat oil field development in the Barents Sea. *Journal of Risk Research*, 16(9):1163-1185.

Grieger, K., Wickson, F, Andersen, HB, Renn, O. 2012. Improving risk governance of emerging technologies through public engagement: the neglected case of nano-remediation? *International Journal of Emerging Technologies and Society*, 10:61-78.

Grieger, K., Laurent, A., Miseljic, M., Christensen, F., Baun, A. 2012. Analysis of current research addressing complementary use of life-cycle assessment and risk assessment for engineered nanomaterials: have lessons been learned from previous experience with chemicals? *Journal of Nanoparticle Research*, 14(7): 958-981.

Grieger, K., Linkov, I., Hansen, S.F., Baun, A. 2012. Environmental risk analysis for nanomaterials: Review and evaluation of frameworks. *Nanotoxicology*, 6(2):196-212.

Grieger, K., Hansen, S.F., Sørensen, P.B., Baun, A. 2011. Conceptual modeling for identification of worst case conditions in environmental risk assessment of nanomaterials using nZVI and C60 as case studies. *Science of the Total Environment*, 409: 4109-4124.

Grieger, K. 2011. Understanding and assessing potential environmental risks of nanomaterials: Emerging tools for emerging risks - a PhD project. *Miljø og Sundhed*, 17(1): 43-46.

Grieger, K. 2011. Assessing the Potential Risks of Nano-Materials – Emerging Tools for Emerging Risks. *European Safety and Reliability Association*, September: 4-5.

Grieger, K., Fjordbøge, A., Hartmann, N.B., Eriksson, E., Bjerg, P.L., Baun, A. 2010.

Environmental benefits and risks of zero-valent iron nanoparticles (nZVI) for in situ remediation: risk mitigation or trade-off? *Journal of Contaminant Hydrology*, 118: 165-183.

Grieger, K., Baun, A., Owen, R. 2010. Redefining Risk Research Priorities for Nanomaterials. *Journal of Nanoparticle Research*, 2(2): 383–392.

Wickson, F., **Grieger, K.**, Baun, A. 2010. Nature and Nanotechnology: Science, Ideology and Policy. *International Journal of Emerging Technologies and Society*, 8(1): 5-23

Grieger, K., Hansen, S.F., Baun, A. 2009. The known unknowns of nanomaterials: Describing and characterizing uncertainty within environmental, health and safety risks. *Nanotoxicology*, 3(3): 1-12.

Baun, A., Hartmann, N.B., **Grieger, K.**, Hansen, S.F. 2009. Setting the limits for engineered nanoparticles in European surface waters. *Journal of Environmental Monitoring*, 11(10): 1774 - 1781.

Kristensen, J., Vinding, K., **Grieger, K.**, Hansen, S.F. 2009. Adopting eco-innovation in Danish polymer industry working with nanotechnology: drivers, barriers and future strategies. *Nanotechnology Law & Business* 6(416) (Fall 2009): 416-440.

Sørensen, P., Thomsen, M., Assmuth, T., **Grieger, K.**, Baun, A. 2009. Conscious worst case definition for risk assessment, part I: A knowledge mapping approach for defining most critical risk factors in integrative risk management of chemicals and nanomaterials. *Science of the Total Environment*, 408, 3852-3859.

Baun, A., Hartmann, N.B., **Grieger, K.**, Kusk, K.O. 2008. Ecotoxicity of engineered nanoparticles to aquatic invertebrates – a brief review and recommendations for future toxicity testing. *Ecotoxicology*, 17 (5), 387-395.

Baun, A., Hartmann, N.B., **Grieger, K.**, Hansen, S.F. 2010. Risikable nanomaterialer?- øget anvendelse af nanomaterialer sætter nye krav til riskovurdering. *Aktuel Naturvidenskab*, 3: 30-32.

Baun, A., Hartmann, N.B., **Grieger, K.**, Hansen, S.F. 2009. Risikovurdering i nano-dimensioner: Øget anvendelse af nanomaterialer sætter nye krav til riskovurdering. *Dansk Kemi*, 90(3): 14-16.

Book Chapters

Grieger, K., Isigonis, P., Franken, R., Wigger, H., Bossa, N., Janer, G., Rycroft, T., Kennedy, A., Hansen, S.F. 2021. Risk Screening Tools for Nanomaterials. In: *Nano Ethics*, Gunjan Jeswani and Marcel Van de Voorde (Eds), De Gryter. *In Press*.

Grieger, K., Carpenter, A.W., Klaessig, F., Lefevre, E., Gunsch, C., Soratana, K., Landis, A.E., Wickson, F., Hristozov, D., Hjorth, R., Linkov, I. 2019. Chapter 9: Sustainable Environmental Remediation using nZVI by Managing Lifecycle Benefit-Risk Tradeoffs. In: *Nanoscale Zerovalent Iron Particles for Environmental Restoration: From Fundamental Science to Field Scale Engineering Applications*, Gregory Lowry and Tanapon Phenrat (Eds), Springer.

Eisenberg, D., **Grieger, K.**, Hristozov, D., Bates, M., and Linkov, I. 2015. Risk Assessment, Life Cycle Assessment, and Decision Methods for Nanomaterials. *Nanomaterials in the*

Environment: pp. 383-419. doi: 10.1061/9780784414088.ch15; *Awarded American Society of Civil Engineers State-of-the-Art Civil Engineering Award* (2017).

Grieger, K., Hansen, S.F., and Baun, A. Nanoparticles: Uncertainty Risk Analysis. In: *Encyclopedia of Environmental Management*; S.E. Jorgensen, ed. Taylor & Francis: New York, 2013; Vol. III, 1742–1751.

Hansen, S.F., **Grieger, K.**, and Baun, A. Nanomaterials: Regulation and Risk Assessment. In: *Encyclopedia of Environmental Management*; S.E. Jorgensen, ed. Taylor & Francis: New York, 2013; Vol. III, 1722–1732.

Elder, A., Lynch, I., **Grieger, K.**, Chan-Remillard, S., Gatti, A., Gnewuch, H., Kenawy, E., Korenstein, R., Kuhlbusch, T., Linker, F., Matias, S., Monteiro-Riviere, N., Pinto, V.R.S., Rudnitsky, R., Savolainen, K. & Shvedova, A. 2009. Human health risks of engineered nanomaterials: Critical knowledge gaps in nanomaterials risk assessment. In: *Nanotechnology. Risks and Benefits*, Linkov, I. & Steevens, J. (eds.), Springer, Dordrecht, NL, 3-29.

Owen, R., Crane, M., **Grieger, K.**, Handy, R., Linkov, I. & Depledge, M. 2009. Strategic approaches for the management of environmental risk uncertainties posed by nanomaterials. In: Linkov, I. & Steevens, J. (eds.), *Nanotechnology. Risks and Benefits*, pp. 369-384. Springer, Dordrecht, NL.

Grieger, K., Hansen, S.F., Baun, A. 2009. Limitations of current risk assessment of nanomaterials and uncertainty analysis related to nanomaterials. In: Craye, M. (eds), *Governance of Nanotechnologies : Learning from Past Experiences with Risks and Innovative Technologies*, pp. 45-54. Report for FP 6 Co-ordination action: Risk-Bridge - Building Robust, Integrative Inter-Disciplinary Governance Models for Emerging and Existing Risks Riskfield 5 – Nanotechnologies.

Hansen, S.F., **Grieger, K.**, Baun, A. 2009. Limitations of current regulation of nanomaterials. In: Craye, M. (eds), *Governance of Nanotechnologies : Learning from Past Experiences with Risks and Innovative Technologies*, pp. 54-58. Report for FP 6 Co-ordination action: Risk-Bridge - Building Robust, Integrative Inter-Disciplinary Governance Models for Emerging and Existing Risks Riskfield 5 – Nanotechnologies.

Final Technical Reports, Theses, and Other Publications

Jensen, K.A., Porcari, A., Pizzol, L., Kelly, S., Bakker, M., Spurgeon, D., **Grieger, K.**, Chakravarty, S. 2020. *Deliverable 8.1: Complete list of requirements for a nano-specific risk governance framework*. caLIBRAte European project, Horizon 2020 research and innovation program, grant no. 686239.

Grieger, K.D., Kuiken, T. 2019. *Lessons Learned for Risk Governance of Synthetic Biology, Nanomaterials, and Other Emerging Technologies in a Post-2020 World*. Blog prepared for Genetic Engineering and Society Center, NC State.
<https://research.ncsu.edu/ges/2019/12/lessons-learned-risk-governance-synbio-nano-post2020-world/>.

Grieger, K.D., Ruzante, J., Lillys, T., Lambertini, T., Linkov, I. 2018. Decision Analysis Support for Implementing a Risk-Informed Decision-Making System in the FDA Foods and Veterinary Medicine Program: Final Report. Prepared for FDA.

Grieger, K.D., Aceituno, A., Andrews, L., Womack, D., Li, M., Havellar, A. 2017. Develop and Validate Risk Ranking Model v3 to Inform RRM-PT List: Final Report. Prepared for FDA.

Jovanovic, A.; Ahmad, M.; Quintero, F.A.; Porcari, A.; Borsella, E.; Hristozov, D.; **Grieger, K.D.**; Jensen, K. Comprehensive analysis of available tools and methodologies for Horizon Scanning. 2017, Deliverable 1.2 caLIBRAte research project.

Grieger, K.D., Kowalcyk, B., Ruzante, J., Havelaar, A. 2016. Task 2 Deliverable: Review Public Comments and Provide Recommendations Relevant for Animal Feed/Pet Food in RRM-PT. Prepared for FDA.

Grieger, K.D., Kowalcyk, B., Sifleet, S., Aceituno, A. 2016. Task 4 Deliverable: Identify, Collect Data, and Perform Expert Elicitation for New Food-Hazard Pairs involving Human Food. Prepared for FDA.

Grieger, K.D., Kowalcyk, B., Li, M., Havelaar, A. 2016. Task 5 Deliverable: Evaluate Options to Aggregate Risk Scores in RRM-PT. Prepared for FDA.

Grieger, K. D., Tulloch, M.L., Kowalcyk, B., Sifleet, S. 2015. Update and Validate Risk Ranking Model to Inform High Risk Foods List. High-Risk Foods (HRF) Model: Final Report. Prepared for FDA.

Grieger, K., Hjorth, R., Rice, J., Kumar, N., & Bang, J. (2015). Nano-remediation: tiny particles cleaning up big environmental problems. <http://cmsdata.iucn.org/downloads/nanoremediation.pdf>

Grieger, K. D. 2014. Investigating the invisible. Biodiversity, Ecosystems, Science. Gland, Switzerland: The International Union for Conservation of Nature. <https://portals.iucn.org/blog/>

Zhang, J., Bhatt, T., Newsome, R., Fisher, W., **Grieger, K. D.**, Anderson, M. E., Mokhtari, A. H., Woodward, K. P., Tulloch, M. L., & Beaulieu, S. M. 2013. *Implement and Evaluate the High Risk Foods (HRF) Model: For Recordkeeping and Product Tracing -Final Report*. Prepared for FDA.

Grieger, K. D., Tulloch, M. L., Anderson, M. E., Pierson, K. A., Mokhtari, A. H., & Beaulieu, S. M. 2013. *Development of a Risk Ranking Tool for the Determination of High Risk Foods among FDA-regulated Products - Final Report*. Prepared for FDA.

Redmon, J. H., Money, E. S., Tulloch, M. L., **Grieger, K. D.**, Lloyd, J. M., Sayes, C. M., Hendren, C. O., Womack, D. S., & Beaulieu, S. M. 2013. *Identifying army materiel incorporating engineered nanomaterials and associated health risks*. Prepared for U.S. Army Center for Environmental Health Research.

Grieger, K. D., Hendren, C., Smith, K. N., Scruggs, M. D., & Beaulieu, S. M. 2012. *Nanomaterial Case Study Workshop Process: Identifying and Prioritizing Research for Multiwalled Carbon Nanotubes*. Summary Report-Final. Deliverable for US EPA. Available: <http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=244011#Download>

Renn, O., Benighaus, C., Schweizer, P.J., Webler, T., Jovanovic, A., Lim, R., Schneider, R., Klimek, P., **Grieger, K.**, Andersen H.B. 2011. D2.3.7 – Modeling the Perception of Emerging Risks. Deliverable for iNTeg-Risk: Early Recognition, Monitoring and Integrated Management of Emerging, New Technology Related, Risks.

Kozine, I., **Grieger, K.D.** 2011. Task 2.5.2. RP: Uncertainty handling (unknown phenomena). Deliverable for iNTeg-Risk: Early Recognition, Monitoring and Integrated Management of Emerging, New Technology Related, Risks.

Duijm, N.J., **Grieger, K.D.**, Markert, F. 2011. Deliverable D8.4 Occupational safety assessment. Deliverable for PlasmaNice: Plasmas for Nanoscale Industrial Surface Processing.

Grieger, K. 2010. Understanding and assessing environmental risks of nanomaterials: Emerging tools for emerging risks. PhD thesis, Department of Environmental Engineering, Technical University of Denmark.

Grieger, K., Gundersen, A.T. 2010. DTU Environment Green Account Report 2009. Department of Environmental Engineering, Technical University of Denmark

Eilersen, A.M., Gundersen, A.T., Christensen, N., (**Grieger, K.** prepared English version). 2009. DTU Environment Green Account Report 2008. Technical University of Denmark, Kongens Lyngby, Denmark.

Grieger, K. 2006. Pesticide regulations in drinking water versus other beverages: A case of an unjustified discrepancy. MSc thesis, Department of Environmental Engineering, Technical University of Denmark.

Grieger, K. and Murphy, P. 2003. Spatial and temporal patterns in the spread of Austrian pine in four Lake Michigan sand dune habitats. Final report, including brochures, pamphlets, and public information booklets, were submitted to the State of Michigan, Department of Natural Resources.

Grieger, K. 2003. Spatial and temporal patterns of *Pinus nigra* (*Austrian pine*) spread in four Lake Michigan sand dune habitats. Thesis for the Degree of M.S., Michigan State University, East Lansing, MI.

Conference Abstracts

Grieger, K., Marshall, A. 2021. Translating and Transferring Knowledge from Transdisciplinary Research Teams to Non-Academic Partners. International Network for the Science of Team Science (virtual meeting).

Knappe, D., Yue, C., Call, D.F., Duckworth, O., **Grieger, K.**, Jones, J. 2021. Effects of Dissolved Organic Matter and pH on Orthophosphate Removal by Lanthanum-modified Bentonite. American Chemical Society (virtual meeting).

Horgan, M., Hsain, A., **Grieger, K.**, Jones, J. 2021. Risk Screening As an Efficient Approach for Responsible Development of lead-Free HfO₂-Based Piezoelectric Materials, ISAF-ISIF-PFM (virtual meeting).

Grieger, K. 2020. Updating Best Practices for Responsible Innovation of Nanotechnology in Food and Agriculture. Society for Risk Analysis (virtual meeting).

Grieger, K. 2020. Treating eutrophication with advanced materials: Key considerations for the responsible development of lanthanum-based materials? Society for Risk Analysis (virtual meeting).

Grieger, K. 2019. Transferring Knowledge from the Field of Nanomaterial Risk Analysis for Other Emerging Technologies. Society for Risk Analysis, Arlington, VA.

Grieger, K., Kuzma, J. 2019. Responsible Innovation of Nanotechnology in Food and Agriculture Sectors. Society for Risk Analysis, Arlington, VA.

Grieger, K. 2019. Transferring Best Practices from Nano-Risk Analysis to Other Emerging Technologies. NanoSafetyCluster Conference, Copenhagen, DK.

Grieger, K. 2018. Application and testing of risk screening tools for nanomaterial risk analysis. Society for Risk Analysis, New Orleans, LA.

Grieger, K. 2018. Governance strategies for emerging risks of solar radiation management. Society for Risk Analysis, New Orleans, LA.

Grieger, K. 2018. Sustainable development of engineering nanomaterials. Carolina Science Symposium, North Carolina State University, Raleigh, NC.

Grieger, K. 2018. Application and testing of risk screening tools for nanomaterial risk analysis. 13th International Conference on the Environmental Effects of Nanoparticles and Nanomaterials, Durham, NC.

Grieger, K. 2018. Ensuring Sustainable Development of Water Treatment Technologies. NEXUS 2018: Water, Food, Energy and Climate, Chapel Hill, NC.

Grieger, K. 2017. Moving from risk assessment to risk governance and decision support for nanomaterials: Lessons learned from select case studies. Society for Risk Analysis, Arlington, VA.

Grieger, K. 2017. Nanomaterials in Select Consumer and Military Applications. Genetics and Environmental Mutagenesis Society Spring Meeting, Environmental Protection Agency (EPA) headquarters, Research Triangle Park, NC.

Grieger, K., Berube, D., Jones, J. 2017. Ensuring Sustainable Development of Water Treatment Technologies. Water Resources Research Institute (WRI), Raleigh NC.

Grieger, K. 2015. A qualitative risk-benefit assessment for nanomaterials in food. Society of Risk Analysis, Arlington, VA.

Grieger, K. 2015. A Risk Ranking Approach for Nano-Enabled Applications for the US Army. Sustainable Nanotechnology Conference, Venice, Italy.

Grieger, K. 2014. Ensuring the sustainable development and use of nZVI for environmental remediation. 9th International Conference on the Environmental Effects of Nanoparticles and Nanomaterials, Columbia, SC.

Grieger, K., Laurent, A., Miseljic, M., Christensen, F., Baun, A. 2013. Complementary use of life cycle assessment and risk assessment for engineered nanomaterials: Lessons learned from chemicals? Society of Risk Analysis, Baltimore, MD.

Bates, M., **Grieger, K. D.,** Trump, B., & Linkov, I. 2013. Nanoparticles and Health Case studies II. Environmental Health 2013 Science and Policy to Protect Future Generations, Boston, MA.

Grieger, K., Linkov, I., Hansen, S.F., Baun, A. 2011. Assessing the environmental risks of nanomaterials: Critical review of risk analysis frameworks. Society of Environmental Toxicology and Chemistry (SETAC), 14-17 November 2011, Boston, USA.

Grieger, K., Andersen, H.B. 2011. Emerging nanotechnologies and risk perception. Integ-Risk and Society of Risk Analysis (SRA) conference, 6-8 June 2011, Stuttgart, Germany.

Grieger, K., Markert, F. 2011. Practical applications of life cycle assessment and risk analysis: Lessons learned from PlasmaNice. Safety issues of Nanomaterials along their life cycle, 04-05 May 2011, Barcelona, Spain.

Grieger, K., Linkov, I., Hansen, S.F., Baun, A. 2011. Critical analysis of frameworks and approaches to assess the environmental risks of nanomaterials. NanoImpact Net, 14-17 February 2011, Lausanne, Switzerland.

Grieger, K., Hansen, S.F., Linkov, I., Baun, A. 2010. A Review of Frameworks and Approaches for Assessing Environmental Risks of Nanomaterials. Society for Risk Analysis, 5-8 December 2010, Salt Lake City, USA.

Grieger, K., Grieger, K., Baun, A., Owen, R. 2010. Assessing the Environmental Risks of Nanomaterials: A Comparison of Risk Assessment Frameworks. Environmental Decisions: Risks and Uncertainties, 25-29 April 2010, Monte Verita, Switzerland

Grieger, K., Baun, A., Owen, R. 2010. Redefining risk research priorities for nanomaterials. NanoImpact Net, 09-12 March 2010, Lausanne, Switzerland.

Grieger, K., Fjordbøge, A., Hartmann, N.B., Eriksson, E., Bjerg, P.L., Baun, A. 2009. Environmental benefits and risks of zero-valent iron nanoparticles (nZVI) for in situ remediation: risk mitigation or trade-off? American Geophysics Union (AGU), 14-18 December, San Francisco, USA.

Grieger, K., Baun, A., Owen, R. 2009. Redefining risk research priorities for nanomaterials. Environmental Effects of Nanoparticles and Nanomaterials, 06-09 September 2009, Vienna, Austria.

Hansen, S.B., Clausen, A., **Grieger, K.**, Baun, A. 2009. Environmental risks and benefits of cerium oxide nanoparticles. Environmental Effects of Nanoparticles and Nanomaterials, 06-09 September 2009, Vienna, Austria.

Grieger, K., Baun, A., Owen, R. 2009. Nanomaterial risk research needs: Time to re-evaluate? International Workshop "Nanotechnology Governance Compared", 17-18 June 2009, Vienna, Austria.

Grieger, K., Hansen, S.F., Baun, A. 2009. Quality assurance for risk assessment of nanomaterials. NanoImpact Net conference, 24-25 March 2009, Lausanne, Switzerland.

Grieger, K., Hansen, S.F., Baun, A. 2008. Analyzing uncertainty within environmental, health, and safety risks of nanomaterials. Symposium for US Environmental Protection Agency, 11 December 2008, Research Triangle Park, NC, USA.

Grieger, K., Hansen, S.F., Baun, A. 2008. Analyzing uncertainty within environmental, health, and safety risks of nanomaterials. Society for Risk Analysis, 7-10 December 2008, Boston, USA.

Baun, A., Hartmann, N., **Grieger, K.**, Foss Hansen, S. Engineered nanoparticles - environmental contaminants and carriers? NanoDTU Day, December 2008, Technical University of Denmark.

Grieger, K., Hansen, S.F., Baun, A. 2008. Identifying and mapping parameters influencing EHS risks of nanomaterials: Comparing research gaps, recommendations and government funding. NanoRisk 2008, 21-24 October 2008, Paris, France.

Grieger, K., Hansen, S.F., Baun, A. 2008. Uncertainty and Sensitivity Analysis of Environmental and Health Risks of Nanomaterials: Ensuring that EHS Research Prioritization and Efforts Transform into Short-term Decision-making Processes. Risk Trace, 27-30 May 2008, Faro, Portugal.

Grieger, K., Hansen, S.F., Baun, A. 2008. The known “knowns” and known “unknowns”: Mapping uncertainty in regard to the potential human and environmental health risks of manufactured nanoparticles. NanoEco: Nanoparticles in the Environment- Implications and Applications, 2-7 March 2008, Ascona, Switzerland.

Mikkelsen, P.S., **Grieger, K.**, Ledin, A., Rasmussen, B., Revitt, M., Scholes, L., Verdonck, F., Benedetti, L., Castillo, L., Lecloux, A., Kompare, B., Banovec, P., Bessat, C., Trouve, J., Sörme, L., Jonsson, A. & Vanrolleghem, P. 2007. SCOREPP - Source Control Options for Reducing Emissions of Priority Pollutants. Abstract MO PC7-7. SETAC Europe 17th Annual Meeting "Multiple stressors for the environment and human health - present and future challenges and perspectives", 20-24 May 2007, Porto, Portugal.

Grieger, K. and Trapp, S. 2006. Pesticide residues in drinking water versus other beverages: a case of an unjustified discrepancy? Ethics and the politics of food- Preprints of the 6th Congress of the European Society for Agricultural and Food Ethics, EurSAFE 2006, June 22-24 2006, Oslo, Norway.

Grieger, K. and Trapp, S. 2006. Setting standards: water versus wine. Controversies and solutions in environmental sciences, SETAC Europe 16th annual meeting, May 7-11 2006, The Hague, Netherlands.