

Curriculum Vitae

Prof. Dr. Nico Eisenhauer



Contact details

Position Full Professor for Experimental Interaction Ecology
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Links

experimental
interaction
ecology



ORCID

publons

Scientific career

- Since 2014 **Full Professor (W3) for *Experimental Interaction Ecology***, German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig and Leipzig University
- 2013 Offer of Full Professor (W3) for *Animal Evolution and Ecology*, Technical University München, rejected
- 2012 – 2014 Associate Professor (W2) for *Terrestrial Ecology*, Friedrich Schiller University Jena
- 2012 Habilitation (***Venia Legendi in Ecology and Zoology***), Georg August University Göttingen
- 2012 Emmy Noether group leader (funded by DFG), Technical University München
- 2012 Postdoc in the lab of Prof. Wolfgang W. Weisser, Technical University München
- 2010 – 2012 Postdoc in the lab of Prof. Peter B. Reich, University of Minnesota (funded by DFG): *Aboveground–belowground interactions in a changing world*
- 2008 – 2010 Postdoc in the Jena Experiment, Darmstadt University of Technology and Georg August University Göttingen. Subproject *Decomposer Interaction Webs*
- 2005 – 2008 PhD at the Darmstadt University of Technology under the supervision of Prof. Dr. S. Scheu. Title: *Earthworms in a plant diversity gradient: Direct and indirect effects on plant competition and establishment* in the Jena Experiment funded by the German Research Foundation (DFG, FOR 456) (***summa cum laude***)
- 2004 – 2005 Diploma thesis: *Invasion of a deciduous forest by earthworms: Changes in soil chemistry, microflora, microarthropods and vegetation*, supervised by Prof. Dr. S. Scheu at the TU Darmstadt, Germany and Prof. Dr. D. Parkinson at the University of Calgary, Canada (***certified biologist with distinction***)
- 2000 – 2004 Study of Biology at the Darmstadt University of Technology
- 1999 Abitur at the Martin-Luther Gymnasium Rimbach (final grade 1.0; ***with distinction***)

Prizes, awards, recognition

2021	Reuters list of the world's top climate scientists , Reuters
2021	Gottfried Wilhelm Leibniz Prize , German Research Foundation
2020	Selected Alexander von Humboldt Scout of the Henriette Herz Scouting Programme
2020	Highly Cited Researcher 2020 , Clarivate
2016	ERC Starting Grant , European Research Council
2014	"Top 40 under 40" , magazine Capital (" <i>Best of Germany</i> ")
2014	Heinz Maier Leibniz Prize , German Research Foundation
2012	Emmy-Noether scholarship , German Research Foundation
2010	Postdoc research scholarship , German Research Foundation
2004	Research scholarship , German Academic Exchange Service (DAAD)



Commission of trust

2020 – 2021	Chair of the Science Strategy Board at iDiv, 6 months
2020	Member of the iDiv Speaker Board (Leipzig University Representative, on behalf of Prof. Christian Wirth), 6 months
2019 – 2020	Co-Chair of the Science Strategy Board at iDiv, 6 months
2018 –	Permanent member of the Science Strategy Board at iDiv
2018 –	Elected member of the Faculty of Life Sciences, Leipzig University
2015 –	Speaker of the Research Unit of the Jena Experiment
2015 –	Head of the MyDiv Experiment
2014 –	Head of the iDiv Ecotron
2014 – 2019	yDiv Board member (graduate school of iDiv)

Since 2012 member of the *Advisory Board* of [TUMmesa](#); since 2019 member of the *Advisory Board* for the [Netherlands Plant Eco-phenotyping Centre](#) (NPEC); since 2019 member of the Steering Board of the UFZ [Global Change Experimental Facility](#) (GCEF); since 2020 Chair of the Science Prizes Committee; since 2021 member of the iDiv Greenhouse Committee.

Editorial boards

- 2021 – **Advisory Editorial Board** at [Journal of Sustainable Agriculture and Environment](#)
- 2019 – **Editor-in-Chief** at [Soil Organisms](#)
- 2014 – 2018 Editor-in-Chief at *Pedobiologia – Journal of Soil Ecology*
- 2012 – 2013 Subject Editor at *Plant and Soil*
- 2011 – 2013 Subject Editor at *Biodiversity and Conservation*

Reviewer for scientific journals and foundations



Reviewer/editor of >500 scientific papers and project proposals

Scientific journals: Applied Soil Ecology, Basic and Applied Ecology, Catena, Current Biology, Diversity, Ecology, Ecography, Ecology Letters, Écoscience, Ecosystems, eLife, European Journal of Soil Biology, FEMS Microbiology Letters, Functional Ecology, Global Ecology and Biogeography, ISME Journal, Journal of Applied Ecology, Journal of Ecology, Journal of Vegetation Science, Nature, Nature Climate Change, Nature Communications, Nature Ecology and Evolution, Nature Plants, Oecologia, Oikos, Pedobiologia, Pedosphere, Plant Biology, Plant and Soil, PLoS ONE, Philosophical Transactions of the Royal Society B, Proceedings of the National Academy of Sciences USA, Proceedings of the Royal Society B, Science, Science Advances, Science of the Total Environment, Scientific Reports, Soil Biology and Biochemistry, Soil Organisms, Trends in Plant Science

Foundations: Alexander von Humboldt Foundation, Czech Science Foundation, European Research Council, German Research Foundation, Helmholtz Impulse Fond, National Science Foundation USA, Swiss National Science Foundation

Memberships



Deutscher Hochschulverband (DHV), Ecological Society of America (ESA), Ecological Society of Germany, Austria and Switzerland (GfÖ), German Centre for Integrative Biodiversity Research (iDiv).

Since 2019 Founding member of [Soil BON](#)

Since 2014 Full iDiv member, Member of [Nutrient Network](#) (PI of site **BadNut** in Bad Lauchstädt, with Sylvia Haider), since 2015 Member of [TreeDivNet](#) (PI of the **MyDiv** experiment), and [Drought-Net](#) (PI of site **BadDrought** in Bad Lauchstädt, with Harald Auge)

Outreach & public relations



Since 2014, the Experimental Interaction Ecology group appeared in 18 TV shows, 21 radio interviews, 195 print articles, 351 online articles, 12 public talks, and 55 other outreach activities (like open days, public tours etc.). For detailed list of activities, see [here](#).

Papers in peer-reviewed journals (chronologically, date of acceptance)



August 28, 2021: **352 publications in peer-reviewed journals; 28 other publications (publications total: 380); 16,314 citations; Google Scholar H-index 69; i10-index 228**

2021 [51 papers]

- 352** Sünemann M, Alt C, Kostin J, Lochner A, Reitz T, Siebert J, Schädler M, & **Eisenhauer N** (2021) *Low-intensity land-use enhances soil microbial activity, biomass and fungal-to-bacterial ratio in current and future climates. **Journal of Applied Ecology***, accepted.
- 351** Gottschall F, Cesarz S, Auge H, Kovach KR, Mori AS, Nock CA, & **Eisenhauer N** (2021) *Spatio-temporal dynamics of abiotic and biotic properties explain biodiversity-ecosystem functioning relationships. **Ecological Monographs***, accepted.
- 350** Guerra CA, Wall DH, & **Eisenhauer N** (2021) *Unearthing soil ecological observations. **Soil Organisms** 91: 33-35, <https://doi.org/10.25674/so93iss2id164>*.
- 349** Jochum M, Barnes AD, Brose U, Gauzens B, Sünemann M, Amyntas A, & **Eisenhauer N** (2021) *For flux's sake: general considerations for energy-flux calculations in ecological communities. **Ecology & Evolution***, accepted.
- 348** Beugnon R, Du J, Cesarz S, Jurburg SD, Pang Z, Singavarapu B, Wubet T, Xue K, Wang Y, & **Eisenhauer N** (2021) *Tree diversity and soil chemical properties*

drive the linkages between soil microbial community and ecosystem functioning. *ISME Communications* 1: article number 41, <https://doi.org/10.1038/s43705-021-00040>.

- 347 Singavarapu B, Beugnon R, Bruelheide H, Cesarz S, Du J, **Eisenhauer N**, Guo L-D, Nawaz A, Wang Y, Xue K, & Wubet T (2021) *Tree mycorrhizal type and tree diversity shape the forest soil microbiota*. *Environmental Microbiology*, <https://doi.org/10.1111/1462-2920.15690>.
- 346 Jochum M & **Eisenhauer N** (2021) *Out of the dark: using energy flux to connect above- and belowground communities and ecosystem functioning*. *European Journal of Soil Science*, <https://doi.org/10.1111/ejss.13154>.
- 345 Ferlian O, Goldmann K, **Eisenhauer N**, Tarkka MT, Buscot F, & Heintz-Buschart A (2021) *Distinct effects of host and neighbour tree identity on arbuscular and ectomycorrhizal fungi along a tree diversity gradient*. *ISME Communications* 1: article number 40, <https://www.nature.com/articles/s43705-021-00042-y>.
- 344 Smith L, Orgiazzi A, **Eisenhauer N**, Cesarz S, Lochner A, Jones A, Bastida F, Patoine G, Reitz T, Buscot F, Rillig MC, Heintz-Buschart A, Lehmann A, & Guerra CA (2021) *Large-scale drivers of relationships between soil microbial properties and organic carbon across Europe*. *Global Ecology & Biogeography*, <https://doi.org/10.1111/geb.13371>.
- 343 Messier C, Bauhus J, Sousa-Silva R, Auge H, Baeten L, Barsoum N, Bruelheide H, Caldwell B, Cavender-Bares J, Dhiedt E, **Eisenhauer N**, Ganade G, Gravel D, Guillemot J, Hall JS, Hector A, Hérault B, Jactel H, Koricheva J, Kreft H, Mereu S, Muys B, Nock CA, Paquette A, Parker JD, Perring MP, Ponette Q, Potvin C, Reich PB, Scherer-Lorenzen M, Schnabel F, Verheyen K, Weih M, Wollni M, & Zemp DC (2021) *For the sake of resilience and multifunctionality, let's diversify planted forests!* *Conservation Letters* 2021: e12829, <https://doi.org/10.1111/conl.12829>.
- 342 **Eisenhauer N** (2021) *Post-2020 aspirations for biodiversity - Protect the Earth's thin skin*. *One Earth* 4: 894.
- 341 Archidona-Yuste A, Wiegand T, **Eisenhauer N**, Cantalapiedra-Navarrete C, Palomares-Rius JE, & Castillo P (2021) *Agriculture causes homogenization of soil nematode communities at the regional scale*. *Journal of Applied Ecology*, accepted.

- 340 Kwon T, Shibata H, Kepfer-Rojas S, Schmidt IK, Larsen KS, Beier C, Berg B, Verheyen K, Lamarque JF, Hagedorn F, **Eisenhauer N**, Djukic I, & TeaComposition Network (2021) *Effects of climate and atmospheric nitrogen deposition on early to mid-term stage litter decomposition across biomes. **Frontiers in Forests and Global Change***, doi: 10.3389/ffgc.2021.678480.
- 339 Hines J & **Eisenhauer N** (2021) *Species identity and the functioning of ecosystems: the role of detritivore traits and trophic interactions in connecting of multiple ecosystem responses. **Oikos***, accepted.
- 338 Junker RR, **Eisenhauer N**, Schmidt A, & Türke M (2021) *Invertebrate decline reduces bacterial diversity associated with leaves and flowers. **FEMS Microbiology Ecology***, accepted.
- 337 Grenzer J, Kulmatiski A, Forero L, Ebeling A, **Eisenhauer N**, & Norton J (2021) *Placing plant-soil feedbacks in the context of plant community growth. **Ecology & Evolution***, accepted.
- 336 Hutengs C, **Eisenhauer N**, Schädler M, Lochner A, Seidel M, & Vohland M (2021) *Soil spectroscopy with handheld VNIR and MIR instruments to analyse PLFA-derived soil microbial properties and associated physicochemical soil characteristics in an experimental plant diversity gradient. **Soil Biology & Biochemistry***, accepted.
- 335 Dietrich P, Cesarz S, Liu T, Roscher C, & **Eisenhauer N** (2021) *Effects of plant species diversity on nematode community composition and diversity in a long-term biodiversity experiment. **Oecologia***, <http://orcid.org/0000-0002-7742-6064>
- 334 Oelmann Y, Lange M, Leimer S, Roscher C, Aburto F, Alt F, Bange N, Berner D, Boch S, Boeddinghaus RS, Buscot F, Dassen S, De Deyn G, **Eisenhauer N**, Gleixner G, Goldmann K, Hölzel N, Jochum M, Kandeler E, Klaus VH, Kleinebecker T, Le Provost G, Manning P, Marhan S, Prati D, Schäfer D, Schöning I, Schrumpf M, Schurig E, Wagg C, Wubet T, & Wilcke W (2021) *Above- and belowground biodiversity jointly tighten the P cycle. **Nature Communications** 12: 4431*, <https://doi.org/10.1038/s41467-021-24714-4>.
- 333 Seabloom EW, Batzer E, Chase JM, Harpole WS, Adler PB, Bagchi S, Bakker JD, Barrio IC, Biederman L, Boughton EH, Bugalho MN, Caldeira MC, Catford JA, Daleo P, **Eisenhauer N**, Eskelinen A, Haider S, Hallett LM, Svala Jónsdóttir I, Kimmel K, Kuhlman M, MacDougall A, Molina CD, Moore JL, Morgan JW, Muthukrishnan R, Ohlert T, Risch AC, Roscher C, Schütz M, Sonnier G, Tognetti

- PM, Virtanen R, Wilfahrt PA, & Borer ET (2021) *Species loss due to nutrient addition increases with spatial scale in global grasslands*. **Ecology Letters**, accepted.
- 332** Sünemann M, Siebert J, Reitz T, Schädler M, Yin R, & **Eisenhauer N** (2021) *Combined effects of land-use type and climate change on soil microbial activity and invertebrate decomposer activity*. **Agriculture, Ecosystems and Environment** 318: 107490, <https://doi.org/10.1016/j.agee.2021.107490>.
- 331** Dietrich P, **Eisenhauer N**, Otto P, & Roscher C (2021) *Plant and soil community jointly influence the selection environment for plant species in a long-term grassland biodiversity experiment*. **Ecology & Evolution**, <https://doi.org/10.1002/ece3.7647>.
- 330** **Eisenhauer N** & Hines J (2021) *Invertebrate biodiversity and conservation*. **Current Biology**, accepted.
- 329** Potapov A, Schaefer I, Jochum M, Widyastuti R, **Eisenhauer N**, & Scheu S (2021) *Oil palm and rubber plantation facilitates earthworm invasion in Indonesia*. **Biological Invasions**, <https://doi.org/10.1007/s10530-021-02539-y>.
- 328** Reuter R, Ferlian O, Tarkka M, **Eisenhauer N**, Pritsch K, & Simon J (2021) *Tree species rather than type of mycorrhizal association drives inorganic and organic nitrogen acquisition in tree-tree interactions*. **Tree Physiology**, <https://doi.org/10.1093/treephys/tpab059>.
- 327** Djukic I, Kepfer-Rojas S, Kappel Schmidt I, Steenberg Larsen K, Beier C, Berg B, Verheyen K, Trevathan-Tackett SM, Macreadie PI, Bierbaumer M, Patoine G, **Eisenhauer N**, Guerra CA, Maestre FT, Hagedorn F, Oggioni A, Bergami C, Magagna B, Kwon T, Shibata H, & TeaComposition Initiative (2021) *The TeaComposition initiative: Unleashing the power of international collaboration to understand litter decomposition*. **Soil Organisms** 93: 73-78, <https://doi.org/10.25674/so93iss1pp73>.
- 326** Roeder A, Schweingruber FH, Ebeling A, **Eisenhauer N**, Fischer M, & Roscher C (2021) *Plant diversity effects on plant longevity and their relationships to population stability in experimental grasslands*. **Journal of Ecology**, <https://doi.org/10.1111/1365-2745.13661>.
- 325** Heklau H, Schindler N, Buscot F, **Eisenhauer N**, Ferlian O, Salcedo P, Bruelheide H (2021) *Mixing tree species associated with arbuscular or ectotrophic mycorrhizae reveals dual mycorrhization and interactive effects on*

the fungal partners. **Ecology & Evolution** 11: 5424-5440, <https://doi.org/10.1002/ece3.7437>.

- 324** van Sundert K, Arfin Khan MAS, Bharath S, Buckley YM, Caldeira MC, Donohue I, Dubbert M, Ebeling A, **Eisenhauer N**, Eskelinen A, Finn A, Gebauer T, Haider S, Hansart A, Jentsch A, Kübert A, Nijs I, Nock CA, Nogueira C, Porath-Krause AJ, Radujković D, Raynaud X, Risch AC, Roscher C, Scherer-Lorenzen M, Schuchardt MA, Schütz M, Siebert J, Sitters J, Spohn M, Virtanen R, Werner C, Wilfahrt P, Vicca S (2021) *Fertilized graminoids intensify negative drought effects on grassland productivity.* **Global Change Biology** 27: 2441-2457, <https://doi.org/10.1111/gcb.15583>.
- 323** Thouvenot L, Ferlian O, Beugnon R, Künne T, Lochner A, Thakur MP, Türke M, **Eisenhauer N** (2021) *Do invasive earthworms affect the functional traits of native plants?* **Frontiers in Plant Science** 12: article 627573, <https://doi.org/10.3389/fpls.2021.627573>.
- 322** Phillips HRP, 155 co-authors, Cameron EK*, **Eisenhauer N*** (2021) *Global data on earthworm abundance, biomass, diversity and corresponding environmental properties.* **Scientific Data** 8: 136, <https://doi.org/10.1038/s41597-021-00912-z>.
* shared senior authorship.
- 321** Trogisch S, Liu X, Rutten G, Xue K, Bauhus J, Brose U, Bu W, Cesarz S, Chesters D, Connolly J, Cui X, **Eisenhauer N**, Guo L, Haider S, Härdtle W, Kunz M, Liu L, Ma Z, Neumann S, Sang W, Schuldt A, Tang Z, van Dam NM, von Oheimb G, Wang M-Q, Wang S, Weinhold A, Wirth C, Wubet T, Xu X, Yang B, Zhang N, Zhu C-D, Ma K, Wang Y, Bruehlheide H (2021) *The significance of tree-tree interactions for forest ecosystem functioning.* **Basic & Applied Ecology**, <https://doi.org/10.1016/j.baae.2021.02.003>.
- 320** Xu S, Sayer E, **Eisenhauer N**, Lu X, Wang J, Liu C (2021) *Aboveground litter inputs determine carbon storage across soil profiles: a meta-analysis.* **Plant & Soil**, <https://doi.org/10.1007/s11104-021-04881-5>.
- 319** Jochum M, Ferlian O, Thakur MP, Ciobanu M, Klarner B, Salamon JA, Frelich LE, Johnson EA, **Eisenhauer N** (2021) *Earthworm invasion causes declines across soil fauna size classes and biodiversity facets in northern North American forests.* **Oikos**, doi: 10.1111/oik.07867.
- 318** Singh J, **Eisenhauer N**, Schädler M, Cesarz S (2021) *Earthworm gut passage reinforces land-use effects on soil microbial communities across climate*

treatments. **Applied Soil Ecology** 164: 103919.
<https://doi.org/10.1016/j.apsoil.2021.103919>.

- 317** Guimarães-Steinicke C, Weigelt A, Proulx R, Lanners T, **Eisenhauer N**, Duque-Lazo J, Reu B, Roscher C, Wagg C, Buchmann N, Wirth C (2021) *Biodiversity facets affect community surface temperature via 3D canopy structure in grassland communities*. **Journal of Ecology**, <https://doi.org/10.1111/1365-2745.13631>.
- 316** Beaumelle L, Thouvenot L, Hines J, Jochum M, **Eisenhauer N**, Phillips HRP (2021) *Soil fauna diversity and chemical stressors: a review of knowledge gaps and roadmap for future research*. **Ecography**, <https://doi.org/10.1111/ecog.05627>.
- 315** Strecker T, Jesch A, Bachmann D, **Eisenhauer N**, Jüds M, Karbstein K, Ravenek J, Roscher C, Weigelt A, Scheu S (2021) *Incorporation of mineral nitrogen into the soil food web as affected by plant community composition*. **Ecology & Evolution**, accepted.
- 314** Wang S, Loreau M, de Mazancourt C, Isbell F, Beierkuhnlein C, Connolly J, Deutschman DH, Doležal J, **Eisenhauer N**, Hector A, Jentsch A, Kreyling J, Lanta V, Lepš J, Polley HW, Reich PB, van Ruijven J, Schmid B, Tilman B, Wilsey B, Craven D (2021) *Biotic homogenization destabilizes ecosystem functioning by decreasing spatial asynchrony*. **Ecology**, in press.
- 313** Guerra CA, Delgado-Baquerizo M, Duarte E, Marigliano O, Görgen C, Maestre FT, **Eisenhauer N** (2021) *Global projections of the soil microbiome in the Anthropocene*. **Global Ecology & Biogeography**, <https://doi.org/10.1111/geb.13273>.
- 312** Guerra CA, Bardgett RD, Caon L, Crowther TW, Delgado-Baquerizo M, Montanarella L, Navarro LM, Orgiazzi A, Singh BK, Tedersoo L, Vargas-Rojas R, Briones MJL, Buscot F, Cameron EK, Cesarz S, Chatzinotas A, Cowman DA, Djukic I, van den Hoogen J, Lehmann A, Maestre FT, Marín C, Reitz T, Rillig MC, Smith LC, de Vries FT, Weigelt A, Wall DH*, **Eisenhauer N*** (2021) *Tracking, targeting, and conserving soil biodiversity*. **Science** 371: 239-241. <http://science.sciencemag.org/content/371/6526/239>. * shared senior authorship.
- 311** Roy J, Rineau F, De Boeck HJ, Nijs I, Pütz T, Abiven S, Arnone III JA, Barton CVM, Beenaerts N, Brüggemann N, Dainese M, Domisch T, **Eisenhauer N**, Garré S, Gebler A, Ghirardo A, Jasoni RL, Kowalchuk G, Landais D, Le Galliard

J-F, Larsen SH, Leemans V, Longdoz B, Massol F, Mikkelsen TN, Niedrist G, Piel C, Ravel O, Sauze J, Schmidt A, Schnitzler J-P, Teixeira LH, Tjoelker MG, Weisser WW, Winkler JB, Milcu A (2021) *Ecotrons: powerful and versatile ecosystem analysers for ecology, agronomy and environmental science*. **Global Change Biology**, <https://doi.org/10.1111/gcb.15471>.

310 Phillips HRP, Briones MJJ, Brown GG, Decaëns T, Cameron E, **Eisenhauer N** (2021) *Response to Comment on “Global distribution of earthworm diversity”*. **Science** 371: eabe4744.

<https://science.sciencemag.org/content/371/6525/eabe4744> .

309 Lange M, Roth V-N, **Eisenhauer N**, Roscher C, Dittmar T, Fischer C, González Macé O, Hildebrandt A, Milcu A, Mommer L, Oram NJ, Ravenek J, Scheu S, Schmid B, Strecker T, Wagg C, Weigelt A, & Gleixner G (2021) *Plant diversity enhances production and downward transport of biodegradable dissolved organic matter*. **Journal of Ecology**, <https://doi.org/10.1111/1365-2745.13556>.

308 Kostin JE, Cesarz S, Lochner A, Schädler M, Macdonald CA, & **Eisenhauer N** (2021) *Effects of climate change on soil microbial communities and functions are modulated by land-use*. **Ecological Applications**, accepted.

307 Eisenhauer N, Buscot F, Heintz-Buschart A, Jurburg SD, Küsel K, Sirkorski J, Vogel H-J, Guerra CA (2021) *The multidimensionality of soil macroecology*. **Global Ecology & Biogeography** 30(1): 4-10. <https://doi.org/10.1111/geb.13211>.

306 Poeydebat C, Jactel H, Moreira X, Koricheva J, Barsoum N, Bauhus J, **Eisenhauer N**, Ferlian O, Francisco M, Gottschall F, Gravel D, Mason B, Muiruri E, Muys B, Nock C, Paquette A, Ponette Q, Scherer-Lorenzen M, Stokes M, Staab M, Verheyen K, Castagneyrol B (2020) *Climate affects neighbour-induced changes in leaf chemical defences and tree diversity-herbivory relationships*. **Functional Ecology** 35(1): 67-81. <https://doi.org/10.1111/1365-2435.13700>.

305 Ferlian O, Lintzel E-M, Bruelheide H, Guerra CA, Heklau H, Jurburg S, Kühn P, Martinez-Medina A, Unsicker SB, **Eisenhauer N***, Schädler M* (2021) *Nutrient status not secondary metabolites drives herbivory and pathogen infestation across differently mycorrhized tree monocultures and mixtures*. **Basic and Applied Ecology**, <https://doi.org/10.1016/j.baae.2020.09.009>. * joint senior authorship.

- 304** Thakur MP, Künne T, Unsicker SB, Biere A, Ferlian O, Pruschitzki U, Thouvenot L, Türke M, **Eisenhauer N** (2021) *Invasive earthworms reduce chemical defense and increase herbivory and pathogen infection in native trees*. **Journal of Ecology** 109(2): 763-775. <https://doi.org/10.1111/1365-2745.13504>.
- 303** van Moorsel SJ, Hahl T, Petchey OL, Ebeling A, **Eisenhauer N**, Schmid B, Wagg C (2021) *A history of co-occurrence increases ecosystem temporal stability and recovery from a flood in experimental grassland communities*. **Ecology** 102(1): e03205. <https://doi.org/10.1002/ecy.3205>.
- 302** Singh J, Cameron E, Schädler M, **Eisenhauer N** (2021) *Grassland management effects on earthworm communities under ambient and future climatic conditions*. **European Journal of Soil Science** 72(1): 343-355. <https://doi.org/10.1111/ejss.12942>.

2020 [42 papers]

- 301** Xu S, **Eisenhauer N**, Ferlian O, Zhang J, Zhou G, Lu X, Liu C, Zhang D (2020) *Species richness promotes ecosystem carbon storage: evidence from biodiversity-ecosystem functioning experiments*. **Proceedings of the Royal Society B** 287: 20202063. <http://dx.doi.org/10.1098/rspb.2020.2063>.
- 300** Hautier Y, Zhang P, Loreau M, Wilcox KR, Seabloom EW, Borer ET, Byrnes JEK, Koerner SE, Komatsu KJ, Lefcheck JS, Hector A, Adler PB, Alberti J, Arnillas CA, Bakker JD, Brudvig LA, Bugalho MN, Cadotte M, Caldeira MC, Carroll O, Crawley M, Collins SL, Daleo P, Dee LE, **Eisenhauer N**, Eskelinen A, Fay PA, Gilbert B, Hansar A, Isbell F, Knops JMH, MacDougall AS, McCulley RL, Moore JL, Morgan JW, Mori AS, Peri PL, Pos ET, Power SA, Price JN, Reich PB, Risch AC, Roscher C, Sankaran M, Schütz M, Smith M, Stevens C, Tognetti PM, Virtanen R, Wardle GM, Wilfahrt PA, Wang S (2020) *General destabilizing effects of eutrophication on grassland productivity at multiple spatial scales*. **Nature Communications** 11: Article number: 5375. <https://www.nature.com/articles/s41467-020-19252-4>.
- 299** Kühl HS, Bowler DE, Bösch L, Bruehlheide H, Dauber J, Eichenberg D, **Eisenhauer N**, Fernandez N, Guerra CA, Henle K, Herbinger I, Isaac NJB, Jansen F, König-Ries B, Kühn I, Nilsen EB, Pe'er G, Richter A, Schulte R, Settele J, van Dam NM, Voigt M, Wägele JW, Wirth C, Bonn A (2020) *Effective*

biodiversity monitoring needs a culture of integration. **One Earth** 3: 462-474.
<https://doi.org/10.1016/j.oneear.2020.09.010>.

- 298** van der Plas F, Schröder-Georgi T, Weigelt A, Barry K, Meyer S, Alzate A, Barnard RL, Buchmann N, de Kroon H, Ebeling A, **Eisenhauer N**, Engels C, Fischer M, Gleixner G, Hildebrandt A, Koller-France E, Leimer S, Milcu A, Mommer L, Niklaus PA, Oelmann Y, Roscher C, Scherber C, Scherer-Lorenzen M, Scheu S, Schmid B, Schulze E-D, Temperton V, Tschamntke T, Voigt W, Weisser WW, Wilcke W, Wirth C (2020) *Plant traits alone are poor predictors of ecosystem properties and long-term ecosystem functioning.* **Nature Ecology & Evolution** 4: 1602–1611. <https://www.nature.com/articles/s41559-020-01316-9>.
- 297** Ulrich J, Bucher SF, **Eisenhauer N**, Schmidt A, Türke M, Gebler A, Barry K, Römermann C (2020) *Invertebrate decline leads to shifts in plant species abundance and phenology.* **Frontiers in Plant Science** 11: Article 542125. <https://doi.org/10.3389/fpls.2020.542125>.
- 296** Phillips HRP, Guerra CA, 138 co-authors, Cameron EK*, **Eisenhauer N*** (2020) *Erratum for the Report “Global distribution of earthworm diversity”.* **Science** 369(6503): eabd9834. <https://doi.org/10.1126/science.abd9834>.
- 295** Barnes AD, Scherber C*, Brose U, Borer ET, Ebeling A, Gauzens B, Giling D, Hines J, Isbell F, Ristok C, Tilman D, Weisser WW, **Eisenhauer N*** (2020) *Biodiversity enhances the multi-trophic control of herbivory.* **Science Advances** 6: eabb6603. <https://advances.sciencemag.org/content/6/45/eabb6603>. * shared senior authorship.
- 294** Jurburg SD, Konzack M, **Eisenhauer N**, Heintz-Buschart A (2020) *The archives are half-empty: an assessment of the availability of microbial community sequencing data.* **Communications Biology** 3: Article number: 474. <https://doi.org/10.1038/s42003-020-01204-9>.
- 293** Risch AC, Zimmermann S, Moser B, Schütz M, Firn J, Fay PA, Adler PB, Biedermann LA, Blair JM, Borer ET, Broadbent AAD, Brown CS, Cadotte MW, Caldeira MC, Davies KF, di Virgilio A, **Eisenhauer N**, Eseklinen A, Knops JMH, MacDougall AS, McCulley RL, Melbourne BA, Moore JL, Power SA, Prober SM, Seabloom EW, Siebert J, Silveira ML, Speziale KL, Stevens CJ, Tognetti PM, Virtanen R, Yahdjian L, Ochoa-Hueso R (2020) *Global impacts of fertilization and herbivore removal on soil net nitrogen mineralization are modulated by local*

climate and soil properties. **Global Change Biology** 26(12): 7173-7185.
<https://doi.org/10.1111/gcb.15308>.

- 292 Yin R, Siebert J, **Eisenhauer N***, Schädler M* (2020) *Climate change and intensive land use reduce soil animal biomass throughin dissimilar pathways*. **eLife** 9: e54749. DOI: [10.7554/eLife.54749](https://doi.org/10.7554/eLife.54749). * shared senior authorship.
- 291 Guerra CA, Heintz-Buschart A, Sikorski J, Chatzinotas A, Guerrero-Ramírez N, Cesarz S, Beaumelle L, Rillig M, Maestre FT, Delgado-Baquerizo M, Buscot F, Overmann J, Patoine G, Phillips HRP, Winter M, Wubet T, Küsel K, Bardgett R, Cameron E, Cowan D, Grebenc T, Marín C, Orgiazzi A, Singh BK, Wall DH, **Eisenhauer N** (2020) *Blind spots in global soil biodiversity and ecosystem function research*. **Nature Communications** 11: 3870.
<https://doi.org/10.1038/s41467-020-17688-2>.
- 290 Phillips HRP, Beaumelle L, **Eisenhauer N**, Hines J, Smith LC (2020) *Lessons from the WBF2020: extrinsic and intrinsic value of soil organisms*. **Soil Organisms** 92(2): 121–127. <https://doi.org/10.25674/so92iss2pp121>.
- 289 Lama S, Velescu A, Leimer S, Weigelt A, Chen H, **Eisenhauer N**, Scheu S, Oelmann Y, Wilcke W (2020) *Plant diversity influenced gross nitrogen mineralization, microbial ammonium consumption and gross inorganic N immobilization in a grassland experiment*. **Oecologia** 193: 731-748.
<https://doi.org/10.1007/s00442-020-04717-6>.
- 288 Beaumelle L, De Laender F, **Eisenhauer N** (2020) *Biodiversity mediates the effects of stressors but not nutrients on litter decomposition*. **eLife** 9: e55659, DOI: [10.7554/eLife.55659](https://doi.org/10.7554/eLife.55659).
- 287 Dietrich P, Cesarz S, **Eisenhauer N**, Roscher C (2020) *Effects of steam sterilization on soil abiotic and biotic properties*. **Soil Organisms** 92(2): 99–108.
<https://doi.org/10.25674/so92iss2pp99>.
- 286 Dietrich P, Roscher C, Clark AT, **Eisenhauer N**, Schmid B, Wagg C (2020) *Diverse plant mixtures sustain a greater arbuscular mycorrhizal fungi spore viability than monocultures after 12 years*. **Journal of Plant Ecology** 13(4): 478-488. <https://doi.org/10.1093/jpe/rtaa037>.
- 285 Lama S, Kuhn T, Lehmann MF, Müller C, Gonzalez O, **Eisenhauer N**, Lange M, Scheu S, Oelmann Y, Wilcke W (2020) *The biodiversity - N cycle relationship: a ¹⁵N tracer experiment with soil from plant mixtures of varying diversity to model*

N pool sizes and transformation rates. **Biology & Fertility of Soils** 56: 1047–1061. <https://doi.org/10.1007/s00374-020-01480-x>.

- 284** Patoine G, Bruelheide H, Haase J, Nock C, Ohlmann N, Schwarz B, Scherer-Lorenzen M, **Eisenhauer N** (2020) *Tree litter functional diversity and nitrogen concentration enhance litter decomposition via changes in earthworm communities.* **Ecology & Evolution** 10(13): 6752-6768. <https://doi.org/10.1002/ece3.6474>.
- 283** Jochum M, Fischer M, Isbell F, Roscher C, van der Plas F, Boch S, Boenisch G, Buchmann N, Catford JA, Cavender-Bares J, Ebeling A, **Eisenhauer N**, Gleixner G, Hölzel N, Kattge J, Klaus VH, Kleinebecker T, Lange M, Le Provost G, Meyer ST, Molina-Vegas R, Mommer L, Oelmann Y, Penone C, Prati D, Reich PB, Rindisbacher A, Schäfer D, Scheu S, Schmid B, Tilman D, Tscharrntke T, Vogel A, Wagg C, Weigelt A, Weisser WW, Wilcke W, Manning P (2020) *The results of biodiversity-ecosystem functioning experiments are realistic.* **Nature Ecology & Evolution** 4: 1485-1494. <https://www.nature.com/articles/s41559-020-1280-9>.
- 282** Yin R, Kardol P, Thakur MP, Gruss I, Wu G-L, **Eisenhauer N***, Schädler M* (2020) *Soil functional biodiversity and biological quality under threat: intensive land use outweighs climate change.* **Soil Biology & Biochemistry** 147: 107847. <https://doi.org/10.1016/j.soilbio.2020.107847>. * shared senior authorship.
- 281** Ochoa-Hueso R, Borer E, Seabloom EW, Hobbie SE, Risch AC, Collins SL, Alberti J, Bahamonde HA, Brown CS, Caldeira MC, Daleo P, Dickman CR, Ebeling A, **Eisenhauer N**, Esch EH, Eskelinen A, Fernández V, Güsewell S, Gutierrez-Larruga B, Hofmockel K, Laungani R, Lind E, López A, McCulley RL, Moore JL, Peri P, Power SA, Price JN, Prober SM, Roscher C, Sarneel JM, Schütz M, Siebert J, Standish RJ, Velasco Ayuso S, Virtanen R, Wardle GM, Wiehl G, Yahdjian L, Zamin T (2020) *Microbial processing of plant remains is co-limited by multiple nutrients in global grasslands.* **Global Change Biology** 26 (8): 4572-4582. <https://doi.org/10.1111/gcb.15146>.
- 280** Lembrechts JJ, ... **Eisenhauer N**, ... Nijs I (2020) *SoilTemp: a global database of near-surface temperature.* **Global Change Biology** 26(11): 6616-6629. <https://doi.org/10.1111/gcb.15123>.
- 279** Ochoa-Hueso R, Risch AC, Collins SL, **Eisenhauer N**, van der Putten WH (2020) *Ecosystem and biogeochemical coupling in terrestrial ecosystems under*

*global change: A roadmap for synthesis and call for data. **Soil Organisms** 92(1): 8-12. <https://doi.org/10.25674/so92iss1pp8>.*

- 278** Heintz-Buschart A, Guerra C, Djukic I, Cesarz S, Chatzinotas A, Patoine G, Sikorski J, Buscot F, Küsel K, Wegner C-E, **Eisenhauer N** (2020) *Microbial diversity-ecosystem function relationships across environmental gradients. **Research Ideas and Outcomes** 6: e52217. <https://doi.org/10.3897/rio.6.e52217>.*
- 277** Firn J, McGree J, Harvey E, Flores-Moreno H, Schuetz M, Buckley Y, Borer E, Seabloom E, La Pierre K, MacDougall AS, Prober S, Stevens C, Sullivan L, Porter E, Ladouceur E, Allen C, Moromizato KH, Morgan J, Harpole WS, Hautier Y, **Eisenhauer N**, Wright J, Adler P, Arnillas C, Bakker J, Biederman L, Broadbent A, Brown C, Bugalho M, Caldeira M, Cleland E, Ebeling A, Fay P, Hagenah N, Kleinhesselink A, Mitchell R, Moore J, Nogueira C, Peri P, Roscher C, Smith M, Wragg P, Risch A (2019) *Author Correction: Leaf nutrients, not specific leaf area, are consistent indicators of elevated nutrient inputs. **Nature Ecology and Evolution** 4: 886-891. <https://doi.org/10.1038/s41559-020-1213-7>.*
- 276** Delgado-Baquerizo M, Guerra CA, Cano-Díaz C, Egidi E, Wang J-T, **Eisenhauer N**, Singh BK, Maestre FT (2020) *The proportion of soil-borne pathogens increases with warming at the global scale. **Nature Climate Change** 10: 550-554. <https://doi.org/10.1038/s41558-020-0759-3>.*
- 275** Broadbent AAD, Firn J, McGree JM, Borer ET, Buckley YM, Harpole WS, Komatsu KJ, MacDougall AS, Orwin KH, Ostle NJ, Seabloom EW, Bakker JD, Biedermann L, Caldeira MC, **Eisenhauer N**, Hagenah N, Hautier Y, Moore JL, Nogueira C, Peri PL, Risch AC, Roscher C, Schütz M, Stevens CJ (2020) *Dominant native and non-native graminoids differ in key leaf traits irrespective of nutrient availability. **Global Ecology and Biogeography** 29(7): 1126-1138. <https://doi.org/10.1111/geb.13092>.*
- 274** Guerra CA, Rosa IMD, Valentini E, Wolf F, Filipponi F, Karger DN, Xuan AN, Mathieu J, Lavelle P, **Eisenhauer N** (2020) *Global vulnerability of soil ecosystems to erosion. **Landscape Ecology** 35: 823-842. <https://doi.org/10.1007/s10980-020-00984-z>.*
- 273** Pe'er G, Bonn A, Bruelheide H, Dieker P, **Eisenhauer N**, Feindt PH, Hagedorn G, Hansjürgens B, Herzog I, Lomba A, Marquard E, Moreira F, Nitsch H, Oppermann R, Perino A, Röder N, Schleyer C, Schindler S, Wolf C, Zinngrebe

- Y, Lakner S, and 3233 additional signatories (2020) *Action needed for the EU Common Agricultural Policy to address sustainability challenges*. **People & Nature** 2(2): 305-316. <https://doi.org/10.1002/pan3.10080>.
- 272 Ebeling A, Lind EW, Meyer ST, Barnes AD, Borer ET, **Eisenhauer N**, Weisser WW (2020) *Contrasting effects of plant diversity on β -, and γ -diversity of grassland invertebrates*. **Ecology** 101(7): e03057. <https://doi.org/10.1002/ecy.3057>.
- 271 Liu T, Mao P, Shi L, **Eisenhauer N**, Liu S, Wang X, He X, Wang Z, Zhang W, Liu Z, Zhou L, Shao Y, Fu S (2020) *Forest canopy maintains the soil community composition under elevated N nitrogen deposition*. **Soil Biology & Biochemistry** 143: 107733. <https://doi.org/10.1016/j.soilbio.2020.107733>.
- 270 Phillips HRP, Heintz-Buschart A, **Eisenhauer N** (2020) *Putting soil invertebrate diversity on the map*. **Molecular Ecology** 29: 655-657. <https://doi.org/10.1111/mec.15371>.
- 269 Sitters J, Wubs, Jasper ER, Bakker L, Crowther T, Adler P, Bagchi S, Bakker J, Biederman L, Borer E, Cleland E, **Eisenhauer N**, Firn J, Gherardi L, Hagenah N, Hautier Y, Hobbie S, Knops J, MacDougall A, McCulley B, Moore J, Mortensen B, Peri P, Prober S, Riggs C, Risch A, Schuetz M, Seabloom E, Siebert J, Stevens C, Veen GFC (2020) *Nutrient availability controls the impact of mammalian herbivores on soil carbon and nitrogen pools in grasslands*. **Global Change Biology** 26: 2060-2071. <https://doi.org/10.1111/gcb.15023>.
- 268 Buzhdygan OY, Meyer ST, Weisser WW, **Eisenhauer N**, Ebeling A, Borrett SR, Buchmann N, Cortois R, De Deyn GB, de Kroon H, Gleixner G, Hertzog L, Hines J, Lange M, Mommer L, Ravenek J, Scherber C, Scherer-Lorenzen M, Scheu S, Schmid B, Steinauer K, Strecker T, Tietjen B, Vogel A, Wright A, Petermann JS (2020) *Biodiversity increases multitrophic energy use efficiency, flow, and storage in grasslands*. **Nature Ecology & Evolution** 4: 393–405. <https://doi.org/10.1038/s41559-020-1123-8>.
- 267 Dietrich P, Roeder A, Cesarz S, **Eisenhauer N**, Ebeling A, Schmid B, Schulze E-D, Wagg C, Weigelt A, Roscher C (2020) *Nematode communities, nutrient economy and life-cycle characteristics jointly determine plant monoculture performance over 12-years*. **Oikos** 129(4): 466-479. <https://doi.org/10.1111/oik.06989>

- 266 Siebert J, Ciobanu M, Schädler M, **Eisenhauer N** (2020) *Climate change and land use induce functional shifts in soil nematode communities*. **Oecologia** 192: 281-294. <https://doi.org/10.1007/s00442-019-04560-4>.
- 265 Feng Y, Soliveres S, Allan E, Rosenbaum E, Wagg C, Tabi A, De Luca E, **Eisenhauer N**, Schmid B, Weigelt A, Weisser WW, Roscher C, Fischer M (2020) *Inferring competitive outcomes, ranks and intransitivity from empirical data: a comparison of different methods*. **Methods in Ecology & Evolution** 11(1): 117-128. <https://doi.org/10.1111/2041-210X.13326>.
- 264 Ferlian O, Thakur MP, González AC, San Emeterio LM, Marr S, da Silva Rocha B, **Eisenhauer N** (2020) *Soil chemistry turned upside down: a meta-analysis of invasive earthworm effects on soil chemical properties*. **Ecology** 101(3): e02936. <https://doi.org/10.1002/ecy.2936>.
- 263 Clark AT, Turnbull LA, Tredennick A, Allan E, Harpole WS, Mayfield MM, Soliveres S, Barry K, **Eisenhauer N**, de Kroon H, Rosenbaum B, Wagg C, Weigelt A, Feng Y, Roscher C, Schmid B (2020) *Predicting species abundances in a grassland biodiversity experiment: Trade-offs between model complexity and generality*. **Journal of Ecology** 108(2): 774-787. <https://doi.org/10.1111/1365-2745.13316>.
- 262 Thakur MP, Phillips HRP, Brose U, De Vries FT, Lavelle P, Loreau M, Mathieu J, Mulder C, van der Putten WH, Rillig MC, Wardle DA, Bach E, Bartz M, Bennett JM, Briones MJI, Brown G, Decaëns T, **Eisenhauer N**, Ferlian O, Guerra CA, König-Ries B, Orgiazzi A, Ramirez KS, Russell DJ, Rutgers M, Wall DH, Cameron EK (2020) *Towards an integrative understanding of soil biodiversity*. **Biological Reviews** 95(2): 350-364. <https://doi.org/10.1111/brv.12567>.
- 261 Barry KE, van Ruijven J, Mommer L, Bai Y, Beierkuhnlein C, Buchmann N, de Kroon H, Ebeling A, **Eisenhauer N**, Guimaraes-Steinicke C, Hildebrandt A, Isbell F, Milcu A, Neßhöver C, Reich PB, Roscher C, Sauheitl L, Scherer-Lorenzen M, Schmid B, Tilman D, von Felten S, Weigelt A (2020) *Limited evidence for spatial resource partitioning across temperate grassland biodiversity experiments*. **Ecology** 101(1): e02905. <https://doi.org/10.1002/ecy.2905>.
- 260 Klein A, **Eisenhauer N**, Schaefer I (2020) *Invasive lumbricid earthworms in North America – different life-histories but common dispersal?* **Journal of Biogeography** 47: 674-685. <https://doi.org/10.1111/jbi.13744>.

- 259 Kehoe L, Reis T, Virah-Sawmy M, Balmford A, Kuemmerle T, and 604 signatories, including **Eisenhauer N** (2019) *Make EU trade with Brazil sustainable*. **Science** 364: 341. Doi 10.1126/science.aaw8276.
- 258 Guerrero-Ramírez NR, Craven D, Reich PB, Ewel JJ, Isbell F, Koricheva J, Parrotta JA, Auge H, Erickson HE, Forrester DI, Hector A, Joshi J, Montagnini F, Palmborg C, Piotto D, Potvin C, Roscher C, van Ruijven J, Tilman D, Wilsey B, **Eisenhauer N** (2019) *Author Correction: Diversity-dependent temporal divergence of ecosystem functioning in experimental ecosystems*. **Nature Ecology & Evolution** 3: 1365–1366. <https://doi.org/10.1038/s41559-019-0973-4>.
- 257 Singh J, Schädler M, Demetrio W, Brown GG, **Eisenhauer N** (2019) *Climate change effects on earthworms - a review*. **Soil Organisms** 91: 114-138. <https://doi.org/10.25674/so91iss3pp114>.
- 256 Smith GR, Crowther TW, **Eisenhauer N**, van den Hoogen J (2019) *Building a global database of soil microbial biomass and function: a call for collaboration*. **Soil Organisms** 91: 140-143. <https://doi.org/10.25674/so91iss3pp140>.
- 255 Risch AC, Zimmermann S, Ochoa-Hueso R, Schütz M, Frey B, Firn JL, Fay PA, Hagedorn F, Borer ET, Seabloom EW, Harpole WS, Knops JMH, McCulley RL, Broadbent AAD, Stevens CJ, Silveira ML, Adler PB, Báez S, Biedermann LA, Blair JM, Brown CS, Caldeira MC, Collins SL, Daleo P, di Virgilio A, Ebeling A, **Eisenhauer N**, Esch E, Eskelinen A, Hagenah N, Hautier Y, Kirkman KP, MacDougall AS, Moore JL, Power SA, Prober SM, Roscher C, Sankaran M, Siebert J, Speziale KL, Tognetti PM, Virtanen R, Yahdjian L Moser B (2019) *Soil net nitrogen mineralization across global grasslands*. **Nature Communications** 10: 4981. <https://doi.org/10.1038/s41467-019-12948-2>.
- 254 Fernando T Maestre and **Eisenhauer N** (2019) *Recommendations for establishing global collaborative networks in ecology*. **Soil Organisms** 91: 73-83. <https://doi.org/10.25674/so91iss3pp73>.
- 253 **Eisenhauer N**, Bonkowski M, Brose U, Buscot F, Durka W, Ebeling A, Fischer M, Gleixner G, Heintz-Buschart A, Hines J, Jesch A, Lange M, Meyer S, Roscher C, Scheu S, Schielzeth H, Schloter M, Schulz S, Unsicker S, van Dam NM, Weigelt A, Weisser WW, Wirth C, Wolf J, Schmid B (2019) *Biotic interactions, community assembly, and eco-evolutionary dynamics as drivers of long-term*

- biodiversity–ecosystem functioning relationships. **Research Ideas and Outcomes** 5: e47042. <https://doi.org/10.3897/rio.5.e47042>.*
- 252** Yin R, Gruss I, **Eisenhauer N**, Kardol P, Thakur MP, Schmidt A, Xu Z, Siebert J, Zhang C, Wu G-L, Schädler M (2019) *Land use modulates the effects of climate change on density but not community composition of Collembola. **Soil Biology and Biochemistry** 138: 107598. <https://doi.org/10.1016/j.soilbio.2019.107598>.*
- 251** Phillips HRP, Guerra CA, 137 co-authors, Cameron EK*, **Eisenhauer N*** (2019) *Global distribution of earthworm diversity. **Science** 366: 480-485; DOI: 10.1126/science.aax4851. *shared senior authorship.*
- 250** Gottschall F, Davids S, Newiger-Dous TE, Auge H, Cesarz S, **Eisenhauer N** (2019) *Tree species identity determines wood decomposition via microclimatic effects. **Ecology & Evolution** 9: 12113-12127; <https://doi.org/10.1002/ece3.5665>.*
- 249** Cesarz S, Schulz AE, Beugnon R, **Eisenhauer N** (2019) *Testing soil nematode extraction efficiency using different variations of the Baermann-funnel method. **Soil Organisms** 91: 61-72. <https://doi.org/10.25674/so91201>.*
- 248** Phillips HRP, Beaumelle L, Tyndall K, Burton VJ, Cameron EK, **Eisenhauer N**, Ferlian O (2019) *The effects of global change on soil faunal communities: a meta-analytic approach. **Research Ideas and Outcomes** 5: e36427. <https://doi.org/10.3897/rio.5.e36427>.*
- 247** González Macé O, Ebeling A, **Eisenhauer N**, Cesarz S, Scheu S (2019) *Variations in trophic niches of generalist predators with plant community composition as indicated by stable isotopes and fatty acids. **Soil Organisms** 91: 45-59. <https://doi.org/10.25674/so91204>.*
- 246** **Eisenhauer N** and Guerra CA (2019) *Global maps of soil nematode worms. **Nature** 572: 187-188, DOI: 10.1038/d41586-019-02197-0.*
- 245** **Eisenhauer N** and Xylander WER (2019) *Soil Organisms – an international open access journal on the taxonomic and functional biodiversity in the soil. **Soil Organisms** 91: 33-35. <https://doi.org/10.25674/so91200>.*
- 244** Wagg C, Barry KE, O'Brien MJ, McKenzie-Gopsill A, Roscher C, **Eisenhauer N**, Schmid B (2019) *Not even wrong: comment. **Ecology** 100: e02805. <https://doi.org/10.1002/ecy.2805>.*

- 243 Sendek A, Karakoç C, Wagg C, Domínguez-Begines J, do Couto GM, van der Heijden MGA, Naz AA, Lochner A, Chatzinotas A, Klotz S, Gómez-Aparicio L, **Eisenhauer N** (2019) *Drought modulates interactions between arbuscular mycorrhizal fungal diversity and barley genotype diversity*. **Scientific Reports** 9: 9659. <https://doi.org/10.1038/s41598-019-45702-1>.
- 242 Guimarães-Steinicke C, Weigelt A, Ebeling A, **Eisenhauer N**, Duque-Lazo J, Reu B, Roscher C, Schumacher J, Wagg C, Wirth C (2019) *Terrestrial laser scanning reveals temporal changes in biodiversity mechanisms driving grassland productivity*. **Advances in Ecological Research** 61: 133-161. <https://doi.org/10.1016/bs.aecr.2019.06.003>.
- 241 **Eisenhauer N**, Bohan DA, Dumbrell AJ (2019) *Preface: Mechanistic links between biodiversity and ecosystem functioning*. **Advances in Ecological Research** 61: xix-xxviii. [https://doi.org/10.1016/S0065-2504\(19\)30044-3](https://doi.org/10.1016/S0065-2504(19)30044-3).
- 240 Beugnon R, Steinauer K, Barnes AD, Ebeling A, Roscher C, **Eisenhauer N** (2019) *Plant functional trait identity and diversity effects on soil meso- and macrofauna in an experimental grassland*. **Advances in Ecological Research** 61: 163-184. <https://doi.org/10.1016/bs.aecr.2019.06.004>.
- 239 Vogel A, Manning P, Cadotte MW, Cowles J, Isbell F, Jousset ALC, Kimmel K, Meyer ST, Reich PB, Roscher C, Scherer-Lorenzen M, Tilman D, Weigelt A, Wright AJ, **Eisenhauer N**, Wagg C (2019) *Lost in trait space: species-poor communities are inflexible in properties that drive ecosystem functioning*. **Advances in Ecological Research** 61: 91-131. <https://doi.org/10.1016/bs.aecr.2019.06.002>.
- 238 Vogel A, Ebeling A, Gleixner G, Roscher C, Scheu S, Ciobanu M, Koller-France E, Lange M, Lochner A, Meyer ST, Oelmann Y, Wilcke W, Schmid B, **Eisenhauer N** (2019) *A new experimental approach to test why biodiversity effects strengthen as ecosystems age*. **Advances in Ecological Research** 61: 221-264. <https://doi.org/10.1016/bs.aecr.2019.06.006>.
- 237 Hines J, Ebeling A, Barnes AD, Brose U, Scherber C, Scheu S, Tscharrntke T, Weisser WW, Giling DP, Klein A-M, **Eisenhauer N** (2019) *Mapping change in biodiversity and ecosystem function research: Food webs foster integration of experiments and science policy*. **Advances in Ecological Research** 61: 297-322. <https://doi.org/10.1016/bs.aecr.2019.06.008>.

- 236 Manning P, Loos J, Barnes AD, Batáry P, Bianchi FJJA, Buchmann N, De Deyn GB, Ebeling A, **Eisenhauer N**, Fischer M, Fründ J, Grass I, Isselstein J, Jochum M, Klein A-M, Klingenberg EOF, Landis DA, Lepš J, Lindborg R, Meyer ST, Temperton V, Westphal C, Tscharrntke T (2019) *Transferring biodiversity-ecosystem function research to the management of 'real-world' ecosystems. **Advances in Ecological Research** 61: 323-356. <https://doi.org/10.1016/bs.aecr.2019.06.009>.*
- 235 Frelich LE, Blossey B, Cameron EK, Dávalos A, **Eisenhauer N**, Fahey T, Ferlian O, Groffman PM, Larson E, Loss SR, Maerz JC, Nuzzo V, Yoo K, Reich PB (2019) *Side-swiped: Ecological cascades emanating from earthworm invasion. **Frontiers in Ecology and the Environment** 17: 502-510. <https://doi.org/10.1002/fee.2099>.*
- 234 **Eisenhauer N**, Schielzeth H, Barnes AD, Barry KE, Bonn A, Brose U, Bruelheide H, Buchmann N, Buscot F, Ebeling A, Ferlian O, Freschet GT, Giling DP, Hättenschwiler S, Hillebrand H, Hines J, Isbell F, Koller-France E, König-Ries B, de Kroon H, Meyer ST, Milcu A, Müller J, Nock CA, Petermann JS, Roscher C, Scherber C, Scherer-Lorenzen M, Schmid B, Schnitzer SA, Schuldt A, Tscharrntke T, Türke M, van Dam NM, van der Plas F, Vogel A, Wagg C, Wardle DA, Weigelt A, Weisser WW, Wirth C, Jochum M (2019) *A multitrophic perspective on biodiversity–ecosystem functioning research. **Advances in Ecological Research** 61: 1-54. <https://doi.org/10.1016/bs.aecr.2019.06.001>.*
- 233 Barry KE, Weigelt A, van Ruijven J, de Kroon H, Ebeling A, **Eisenhauer N**, Gessler A, Ravenek JM, Scherer-Lorenzen M, Oram NJ, Vogel A, Wagg C, Mommer L (2019) *Above- and belowground overyielding are related at the community and species level in a grassland biodiversity experiment. **Advances in Ecological Research** 61: 55-89. <https://doi.org/10.1016/bs.aecr.2019.05.001>.*
- 232 Thakur MP, Del Real IM, Cesarz S, Steinauer K, Reich PB, Hobbie S, Ciobanu M, Rich R, Worm K, **Eisenhauer N** (2019) *Soil microbial, nematode, and enzymatic responses to elevated CO₂, N fertilization, warming, and reduced precipitation. **Soil Biology and Biochemistry** 135: 184-193. <https://doi.org/10.1016/j.soilbio.2019.04.020>.*
- 231 Craven D, Winter M, Hotzel K, Gaikwad J, **Eisenhauer N**, Hohmuth M, König-Ries B, Wirth C (2019) *Evolution of integration and interdisciplinarity in*

biodiversity science. Ecology and Evolution 9: 6744-6755.
<https://doi.org/10.1002/ece3.5244>.

- 230 Eisenhauer N**, Ferlian O, Craven D, Hines J, Jochum M (2019) *Ecosystem responses to exotic earthworm invasion in northern North American forests. Research Ideas and Outcomes* 5: e34564.
<https://doi.org/10.3897/rio.5.e34564>.
- 229 Yin R, Eisenhauer N**, Gruss I, Purahong W, Schmidt A, Siebert J, Schädler M (2019) *Climate change does not alter land-use effects on soil fauna communities. Applied Soil Ecology* 140: 1-10. <https://doi.org/10.1016/j.apsoil.2019.03.026>.
- 228 Ristok C**, Poeschl Y, Dudenhöffer J-H, Ebeling A, **Eisenhauer N**, Vergara F, Wagg C, van Dam NM and Weinhold A (2019) *Plant species richness elicits changes in the metabolome of grassland species via soil biotic legacy. Journal of Ecology* 107: 2240-2254. <https://doi.org/10.1111/1365-2745.13185>.
- 227 Guerrero-Ramírez NR**, Reich PB, Wagg C, Ciobanu M and **Eisenhauer N** (2019) *Diversity-dependent plant-soil feedbacks underlie long-term plant diversity effects on primary productivity. Ecosphere* 10: e02704.
<https://doi.org/10.1002/ecs2.2704>.
- 226 Siebert J, Eisenhauer N***, Poll C, Marhan S, Bonkowski M, Hines J, Koller R, Ruess L, Thakur MP* (2019) *Earthworms modulate the effects of climate warming on the taxon richness of soil meso- and macrofauna in an agricultural system. Agriculture, Ecosystems and Environment* 278: 72-80.
<https://doi.org/10.1016/j.agee.2019.03.004>. *shared senior authorship
- 225 Cameron EK**, Martins IS, Lavelle P, Mathieu J, Tedersoo J, Bahram M, Gottschall F, Guerra CA, Hines J, Patoine G, Siebert J, Winter M, Cesarz S, Ferlian O, Kreft H, Lovejoy TE, Montanarella L, Orgiazzi A, Pereira HM, Phillips HRP, Settele J, Wall DH and **Eisenhauer N** (2019) *Global mismatches in aboveground and belowground biodiversity. Conservation Biology* 33: 1187–1192. <https://doi.org/10.1111/cobi.13311>.
- 224 Schuldt A**, Ebeling A, Kunz M, Staab M, Guimarães-Steinicke C, Bachmann D, Buchmann N, Durka W, Fichtner A, Fornoff F, Härdtle W, Hertzog L, Klein A-M, Roscher C, Schaller J, von Oheimb G, Weigelt A, Weisser W, Wirth C, Zhang J, Bruehlheide H and **Eisenhauer N** (2019) *Multiple plant diversity components drive consumer communities across ecosystems. Nature Communications* 10: Article number: 1460. <https://doi.org/10.1038/s41467-019-09448-8>.

- 223** Thakur MP, Quast V, van Dam NM, **Eisenhauer N**, Roscher C, Biere A, Martinez-Medina A (2019) *Interactions between functionally diverse fungal mutualists inconsistently affect plant performance and competition.* **Oikos** 128: 1136-1146. <https://doi.org/10.1111/oik.06138>.
- 222** Siebert J, Thakur MP, Reitz T, Schädler M, Schulz E, Yin R, Weigelt A and **Eisenhauer N** (2019) *Extensive grassland-use sustains high levels of soil biological activity, but does not alleviate detrimental climate change effects.* **Advances in Ecological Research** 60: 25-58. <https://doi.org/10.1016/bs.aecr.2019.02.002>.
- 221** Shao Y, Zhang W, **Eisenhauer N**, Liu T, Ferlian O, Wang X, Xiong Y, Liang C, Fu S (2019) *Exotic earthworms maintain soil biodiversity by altering bottom-up effects of plants on the composition of main soil microbial and nematode communities.* **Biology and Fertility of Soils** 55: 213-227. <https://doi.org/10.1007/s00374-019-01343-0>.
- 220** Giling DP, Ebeling A, **Eisenhauer N**, Meyer ST, Roscher C, Rzanny M, Voigt W, Weisser WW, Hines J (2019) *Plant diversity alters the representation of motifs in food webs.* **Nature Communications** 10, Article number: 1226. <https://doi.org/10.1038/s41467-019-08856-0>.
- 219** Yin R, **Eisenhauer N**, Auge H, Purahong W, Schmidt A, Schädler M (2019) *Additive effects of experimental climate change and land use on faunal contribution to litter decomposition.* **Soil Biology and Biochemistry** 131: 141-148. <https://doi.org/10.1016/j.soilbio.2019.01.009>.
- 218** Hines J, Giling D, Rzanny M, Voigt W, Meyer ST, Weisser WW, **Eisenhauer N**, Ebeling (2019) *A meta food web for invertebrate species collected in an experimental grassland.* **Ecology** 100: e02679. <https://doi.org/10.1002/ecy.2679>.
- 217** Firn J, McGree J, Harvey E, Flores-Moreno H, Schuetz M, Buckley Y, Borer E, Seabloom E, La Pierre K, MacDougall AS, Prober S, Stevens C, Sullivan L, Porter E, Ladouceur E, Allen C, Moromizato KH, Morgan J, Harpole WS, Hautier Y, **Eisenhauer N**, Wright J, Adler P, Arnillas C, Bakker J, Biederman L, Broadbent A, Brown C, Bugalho M, Caldeira M, Cleland E, Ebeling A, Fay P, Hagenah N, Kleinhesselink A, Mitchell R, Moore J, Nogueira C, Peri P, Roscher C, Smith M, Wragg P, Risch A (2019) *Leaf nutrients not specific leaf area are consistent indicators of elevated nutrient inputs.* **Nature Ecology and Evolution** 3: 400-406. <https://doi.org/10.1038/s41559-018-0790-1>.

- 216 Schulze ED, Craven D, Durso AM, Reif J, Guderle M, Kroiher F, Hennig P, Weiserbs A, Schall P, Ammer C, **Eisenhauer N** (2019) *Positive association between forest management, environmental change, and forest bird abundance. **Forest Ecosystems** 6: 3. <https://doi.org/10.1186/s40663-019-0160-8>.*
- 215 Ciobanu M, **Eisenhauer N**, Stoica I-A, Cesarz S (2019) *Natura 2000 priority and non-priority habitats do not differ in soil nematode diversity. **Applied Soil Ecology** 135: 166-173. <https://doi.org/10.1016/j.apsoil.2018.12.009>.*
- 214 **Eisenhauer N**, Bonn A, Guerra CA (2019) *Recognizing the quiet extinction of invertebrates. **Nature Communications** 10: Article number 50. <https://doi.org/10.1038/s41467-018-07916-1>.*
- 213 Bandowe BAM, Leimer S, Meusel H, Velescu A, Dassen S, **Eisenhauer N**, Hoffmann T, Oelmann Y, Wilcke W (2019) *Plant diversity enhances the natural attenuation of polycyclic aromatic compounds (PAHs and oxygenated PAHs) in grassland soils. **Soil Biology and Biochemistry** 129: 60-70. <https://doi.org/10.1016/j.soilbio.2018.10.017>.*
- 212 Siebert J, Sünemann M, Auge H, Berger S, Cesarz S, Ciobanu M, Guerrero-Ramírez, **Eisenhauer N** (2019) *The effects of drought and nutrient addition on soil organisms vary across taxonomic groups, but are constant across seasons. **Scientific Reports** 9: Article number 639. <https://doi.org/10.1038/s41598-018-36777-3>.*
- 211 Domínguez-Beginesa J, De Deyn GB, García LV, **Eisenhauer N**, Gómez-Aparicio L (2019) *Cascading spatial and trophic impacts of oak decline on the soil food web. **Journal of Ecology** 107: 1199-1214. <https://doi.org/10.1111/1365-2745.13091>.*
- 210 Giling DP, Beaumelle L, Phillips HR, Cesarz S, **Eisenhauer N**, Ferlian O, Gottschall F, Guerra C, Hines J, Sendek A, Siebert J, Thakur MP, Barnes A (2019) *A niche for ecosystem multifunctionality in global change research. **Global Change Biology** 25: 763-774. <https://doi.org/10.1111/gcb.14528>.*
- 209 Dunn RR, Reese A, **Eisenhauer N** (2019) *Biodiversity-ecosystem function relationships on bodies and in buildings. **Nature Ecology and Evolution** 3: 7–9. <https://doi.org/10.1038/s41559-018-0750-9>.*
- 208 Fischer C, Leimer S, Roscher C, Ravenek J, de Kroon H, Kreuziger Y, Baade J, Bessler H, **Eisenhauer N**, Weigelt A, Mommer L, Lange M, Gleixner G, Wilcke W, Schröder B, Hildebrandt A (2019) *Plant species richness and functional*

groups have different effects on soil water content in a decade-long grassland experiment. *Journal of Ecology* 107: 127-141. <https://doi.org/10.1111/1365-2745.13046>.

2018 [33 papers]

- 207** Meyer ST, **Eisenhauer N**, Jochum M, Jena Experiment Consortium, Weisser WW (2018) *Effects of biodiversity on ecosystem functioning in a grassland experiment and implications for management*. In Sustainable meat and milk production from grasslands. **Proceedings of the 27th General Meeting of the European Grassland Federation**, Cork, Ireland, 17-21 June 2018 (pp. 816-818). Teagasc, Animal & Grassland Research and Innovation Centre.
- 206** Thakur MP, Griffin JN, Künne T, Dunker S, Fanesi A, **Eisenhauer N** (2018) *Temperature effects on basal resources exceed that of predators in an experimental community*. **Ecology and Evolution** 8: 12670–12680. <https://doi.org/10.1002/ece3.4695>.
- 205** **Eisenhauer N***, Hines J*, Isbell F, van der Plas F, Hobbie SE, Kazanski CE, Lehmann A, Liu M, Lochner A, Rillig MC, Vogel A, Worm K, Reich PB (2018) *Plant diversity maintains multiple soil functions in future environments*. **eLife** 7: e41228. <https://doi.org/10.7554/eLife.41228>. *shared first authorship
- 204** **Eisenhauer N**, Vogel A, Jensen B, Scheu S (2018) *Decomposer diversity increases biomass production and shifts aboveground-belowground biomass allocation of common wheat*. **Scientific Reports** 8: 17894. <https://doi.org/10.1038/s41598-018-36294-3>.
- 203** Shao Y, Liu T, **Eisenhauer N**, Zhang W, Wang X, Xiong Y, Liang C, Fu S (2018) *Plants mitigate detrimental nitrogen deposition effects on soil biodiversity*. **Soil Biology and Biochemistry** 127: 178-186. <https://doi.org/10.1016/j.soilbio.2018.09.022>.
- 202** **Eisenhauer N**, Herrmann S, Hines J, Buscot F, Siebert J, Thakur MP (2018) *The dark side of animal phenology*. **Trends in Ecology and Evolution** 33: 898-901. <https://doi.org/10.1016/j.tree.2018.09.010>.
- 201** Ferlian O, Biere A, Bonfante P, Buscot B, **Eisenhauer N**, Fernandez I, Hause B, Herrmann S, Krajinski-Barth F, Meier IC, Pozo MJ, Rasmann S, Rillig MC, Tarkka MT, van Dam NM, Wagg C, Martinez-Medina A (2018) *Growing Research*

Networks on Mycorrhizae for Mutual Benefits. Trends in Plant Science 23: 975-984. <https://doi.org/10.1016/j.tplants.2018.08.008>.

- 200** Craven D, **Eisenhauer N**, Pearse WD, Hautier Y, Isbell F, Roscher C, Bahn M, Beierkuhnlein C, Bönisch G, Buchmann N, Byun C, Catford JA, Cerabolini BEL, Cornelissen JHC, Craine JM, De Luca E, Ebeling A, Griffin JN, Hector A, Hines J, Jentsch A, Kattge J, Kreyling J, Lanta V, Lemoine N, Meyer ST, Minden V, Onipchenko V, Polley HW, Reich PR, van Ruijven J, Schamp B, Smith MD, Soudzilovskaia NA, Tilman D, Weigelt A, Wilsey B, Manning P (2018) *Multiple facets of biodiversity drive the diversity-stability relationship. Nature Ecology and Evolution* 2: 1579–1587. <https://doi.org/10.1038/s41559-018-0647-7>.
- 199** Buchmann T, Schumacher J, Ebeling A, **Eisenhauer N**, Fischer M, Gleixner G, Hacker N, Lange M, Oelmann Y, Schulze E-D, Weigelt A, Weisser WW, Wilcke W, Roscher C (2018) *Connecting experimental biodiversity research to real-world grasslands. Perspectives in Plant Ecology, Evolution and Systematics* 33: 78-88. <https://doi.org/10.1016/j.ppees.2018.06.002>.
- 198** Kuřáková E, Cesarz S, Münzbergová Z, **Eisenhauer N** (2018) *Soil microarthropods alter the outcome of plant-soil feedback experiments. Scientific Reports* 8: 11898. <https://doi.org/10.1038/s41598-018-30340-w>.
- 197** Wei X, Cao R, Wu X, **Eisenhauer N**, Sun S (2018) *Effect of water table decline on the abundances of soil mites, springtails, and nematodes in the Zoige peatland of eastern Tibetan Plateau. Applied Soil Ecology* 129: 77-83. <https://doi.org/10.1016/j.apsoil.2018.05.006>.
- 196** Brüning LZ, Krieger M, Meneses-Pelayo E, **Eisenhauer N**, Ramirez Pinilla MP, Reu B, Ernst R (2018) *Land-use heterogeneity by small-scale agriculture promotes amphibian diversity in montane agroforestry systems of northeast Colombia. Agriculture, Ecosystems and Environment* 264: 15-23. <https://doi.org/10.1016/j.agee.2018.05.011>.
- 195** Cameron EK, Martins IS, Lavelle P, Mathieu J, Tedersoo L, Gottschall F, Guerra CA, Hines J, Patoine G, Siebert J, Winter M, Cesarz S, Delgado-Baquerizo M, Ferlian O, Fierer N, Kreft H, Lovejoy TE, Montanarella L, Orgiazzi A, Pereira HM, Phillips HRP, Settele J, Wall DH, **Eisenhauer N** (2018) *Global gaps in soil biodiversity data. Nature Ecology and Evolution* 2: 1042–1043. <https://doi.org/10.1038/s41559-018-0573-8>.

- 194 Baert JM, **Eisenhauer N**, Janssen CR, De Laender F (2018) *Biodiversity effects on ecosystem functioning respond unimodally to environmental stress*. **Ecology Letters** 21: 1191-1199. <https://doi.org/10.1111/ele.13088>.
- 193 Ferlian O, Cesarz S, Craven D, Hines J, Barry KE, Bruelheide H, Buscot F, Haider S, Heklau S, Herrmann S, Kühn P, Pruschitzki U, Schädler M, Wagg C, Weigelt A, Wubet T, **Eisenhauer N** (2018) *Mycorrhiza in tree diversity–ecosystem function relationships: conceptual framework and experimental implementation*. **Ecosphere** 9: e02226. <https://doi.org/10.1002/ecs2.2226>.
- 192 Ai F, **Eisenhauer N**, Xie Y, Zhu J, Jousset A, Du W, Yin Y, Zhang X, Ji R, Guo H (2018) *Elevated CO₂ accelerates polycyclic aromatic hydrocarbon accumulation in a paddy soil grown with rice*. **Plos One** 13: e0196439. <https://doi.org/10.1371/journal.pone.0196439>.
- 191 **Eisenhauer N** (2018) *Impacts of free-ranging cats on invertebrates*. **Frontiers in Ecology and the Environment** 16: 262-263. <https://doi.org/10.1002/fee.1805>.
- 190 Ai F, **Eisenhauer N**, Jousset A, Butenschoen O, Ji R, Guo H (2018) *Elevated tropospheric CO₂ and O₃ concentrations impair organic pollutant removal from grassland soil*. **Scientific Reports** 8: 5519. <https://doi.org/10.1038/s41598-018-23522-z>.
- 189 Paquette A, Hector A, Castagneyrol B, Vanhellefont M, Koricheva J, Scherer-Lorenzen M, Verheyen K, and TreeDivNet including **Eisenhauer N** et al. *A million and more trees for science*. **Nature Ecology & Evolution** 2: 763-766. <https://doi.org/10.1038/s41559-018-0544-0>.
- 188 **Eisenhauer N** (2018) *Aboveground-belowground interactions drive the relationship between plant diversity and ecosystem function*. **Research Ideas and Outcomes** 4: e23688. <https://doi.org/10.3897/rio.4.e23688>.
- 187 Li Y, Xi Chen, Veen GF (Ciska), **Eisenhauer N**, Liang Y, Zhou X, Zhang N, Ma K (2018) *Negative effects of litter richness on root decomposition in the presence of detritivores*. **Functional Ecology** 32: 1079-1090. <https://doi.org/10.1111/1365-2435.13057>.
- 186 Djukic I, Kepfer-Rojas S, Kappel Schmidt I, Steenberg Larsen K, Beier C, Berg B, Verheyen K, [...] **Eisenhauer N**, [...] (2018) *Early stage litter decomposition across biomes*. **Science of the Total Environment** 628–629: 1369–1394. <https://doi.org/10.1016/j.scitotenv.2018.01.012>.

- 185 Türke M, Lange M, **Eisenhauer N** (2018) *Gut shuttle service: endozoochory of dispersal-limited soil fauna by gastropods*. **Oecologia** 186: 655-664, doi: 10.1007/s00442-018-4058-x. <https://doi.org/10.1007/s00442-018-4058-x>.
Highlighted in Science by Yao-Hua Law “This mite’s method of hitchhiking is not recommended”.
- 184 Guiz J, Ebeling A, **Eisenhauer N**, Hacker N, Hertzog L, Oelmann Y, Roscher C, Wagg C, Hillebrand H (2018) *Interspecific competition alters leaf stoichiometry in 20 grassland species*. **Oikos** 127: 903-914. <https://doi.org/10.1111/oik.04907>.
- 183 **Eisenhauer N**, Türke M (2018) *From climate chambers to biodiversity chambers*. **Frontiers in Ecology and the Environment** 16: 136-137. <https://doi.org/10.1002/fee.1784>.
- 182 Grossman JJ, Vanhellefont M, Barsoum N, Bauhus J, Bruelheide H, Castagneyrol B, Cavender-Bares J, **Eisenhauer N**, Ferlian O, Gravel D, Hector A, Jactel H, Kreft H, Mereu S, Messier C, Muys B, Nock C, Paquette A, Parker J, Perring MP, Ponette Q, Reich PB, Schuldt A, Staab M, Weih M, Zemp DC, Scherer-Lorenzen M, Verheyen K (2018) *Synthesis and future research directions linking tree diversity to growth, survival, and damage in a global network of tree diversity experiments*. **Environmental and Experimental Botany** 152: 68-89. <https://doi.org/10.1016/j.envexpbot.2017.12.015>.
- 181 Barnes AD, Jochum M, Lefcheck JS, **Eisenhauer N**, Scherber C, O’Connor MI, de Ruiter P, Brose U (2018) *Energy flux: The link between multitrophic biodiversity and ecosystem functioning*. **Trends in Ecology and Evolution** 33: 186-197. <https://doi.org/10.1016/j.tree.2017.12.007>.
- 180 Bannar-Martin KH, Kremer CT, Ernest SKM, Leibold MA, Auge H, Chase J, Decklerck SAJ, **Eisenhauer N**, Harpole S, Hillebrand H, Isbell F, Koffel T, Larsen S, Narwani A, Petermann J, Roscher C, Sarmenta Cabral J, Supp S (2018) *Integrating community assembly and biodiversity to better understand ecosystem function: the Community Assembly and the Functioning of Ecosystems (CAFE) approach*. **Ecology Letters** 21: 167-180. <https://doi.org/10.1111/ele.12895>.
- 179 Milcu A, Puga-Freitas R, Ellison AM, Blouin M, Scheu S, Girin T, Frechet G, Rose L, Scherer-Lorenzen M, Barot S, Lata J-C, Cesarz S, **Eisenhauer N**, Gigon A, Weigelt A, Hansart A, Greiner A, Pando A, Gessler A, Grignani C, Assandri D, Gleixner G, Le Galliard J-F, Urban-Mead K, Zavattaro L, Muller MEH, Lange M, Lukac M, Bonkowski M, Mannerheim N, Buchmann N, Butenschoen O, Rotter P,

- Seyhun R, Devidal S, Kayler Z, Roy J (2018) *Genotypic variability enhances the reproducibility of an ecological study*. **Nature Ecology & Evolution** 2: 279–287. <https://doi.org/10.1038/s41559-017-0434-x>. **Highlighted in Nature by Ewen Callaway “Why 14 ecology labs teamed up to watch grass grow”**.
- 178 Thakur MP, Reich PB, Hobbie SE, Stefanski A, Rich R, Rice KE, Eddy WC, **Eisenhauer N** (2018) *Reduced feeding activity of soil detritivores under warmer and drier conditions*. **Nature Climate Change** 8: 75-78, DOI: 10.1038/s41558-017-0032-6. <https://doi.org/10.1038/s41558-017-0032-6>.
- 177 Ferlian O, **Eisenhauer N**, Aguirrebengoa M, Camara M, Ramirez-Rojas I, Santos F, Tanalgo K and Thakur MP (2018) *Invasive earthworms erode soil biodiversity: A meta-analysis*. **Journal of Animal Ecology** 87: 162-172. <https://doi.org/10.1111/1365-2656.12746>.
- 176 Ebeling A, Rzanny M, Lange M, **Eisenhauer N**, Hertzog LR, Meyer ST, Weisser WW (2017) *Plant diversity induces shifts in the functional structure and diversity across trophic levels*. **Oikos** 127: 208-219. <https://doi.org/10.1111/oik.04210>.
- 175 Meyer ST, Ptacnik R, Hillebrand H, Bessler H, Buchmann N, Ebeling A, **Eisenhauer N**, Engels C, Fischer M, Halle S, Klein AM, Oelmann Y, Roscher C, Rottstock T, Scherber C, Scheu S, Schmid B, Schulze ED, Temperton VM, Tscharrntke T, Voigt W, Weigelt A, Wilcke W, Weisser WW (2018) *Biodiversity–multifunctionality relationships depend on identity and number of measured functions*. **Nature Ecology & Evolution** 2: 44-49. <https://doi.org/10.1038/s41559-017-0391-4>.

2017 [34 papers]

- 174 **Eisenhauer N**, Kratz W, Neinaß J, Powell JR (2017) *Resolution of respect for Ekkehard von Törne (1925 – 2017)*. **Pedobiologia** 64: 40-41. <https://doi.org/10.1016/j.pedobi.2017.05.002>.
- 173 Xi X, Yang, Y, Yang, X, Nylín S, **Eisenhauer N**, Sun S (2017) *Differential responses of body growth to artificial warming between parasitoids and hosts and the consequences for plant seed damage*. **Scientific Reports** 7, 15472. <https://doi.org/10.1038/s41598-017-15453-y>.

- 172 Hines J, Pabst S, Blumenthal DM, Cesarz S, Mueller KE and **Eisenhauer N** (2017) *Soil-mediated effects of global change on plants communities depend on plant growth form*. **Ecosphere** 8: e01996. <https://doi.org/10.1002/ecs2.1996>.
- 171 Schwarz B, Barnes AD, Thakur MP, Brose U, Ciobanu M, Reich PB, Rich RL, Rosenbaum B, Stefanski A and **Eisenhauer N** (2017) *Warming alters energetic structure and function but not resilience of soil food webs*. **Nature Climate Change** 7: 895-900. <https://doi.org/10.1038/s41558-017-0002-z>.
- 170 **Eisenhauer N** (2017) *Consumers control carbon*. **Nature Ecology & Evolution** 1: 1596-1597. <https://doi.org/10.1038/s41559-017-0352-y>.
- 169 Chen H, Oram NJ, Barry KE, Mommer L, van Ruijven J, de Kroon H, Ebeling A, **Eisenhauer N**, Fischer C, Gleixner G, Gessler A, González Macé O, Hacker N, Hildebrandt A, Lange M, Scherer-Lorenzen M, Scheu S, Oelmann Y, Wagg C, Wilcke W, Wirth C and Weigelt A (2017) *Root chemistry and soil fauna, but not soil abiotic conditions explain the effects of plant diversity on root decomposition*. **Oecologia** 185: 499-511. <https://doi.org/10.1007/s00442-017-3962-9>.
- 168 Wagg C, O'Brien MJ, Vogel A, Scherer-Lorenzen M, **Eisenhauer N**, Schmid B and Weigelt A (2017) *Plant diversity maintains long-term ecosystem productivity under frequent drought by increasing short-term variation*. **Ecology** 98: 2952-2961. <https://doi.org/10.1002/ecy.2003>.
- 167 Klein A, Cameron EK, Heimbürger B, **Eisenhauer N**, Scheu S and Schaefer I (2017) *Changes in the genetic structure of an invasive earthworm species (Lumbricus terrestris, Lumbricidae) along an urban–rural gradient in North America*. **Applied Soil Ecology** 120: 265-272. <https://doi.org/10.1016/j.apsoil.2017.08.009>.
- 166 **Eisenhauer N** and Powell JR (2017) *Plant trait effects on soil organisms and functions*. **Pedobiologia** 65: 1-4. <https://doi.org/10.1016/j.pedobi.2017.11.001>.
- 165 Guerrero-Ramirez NR, Craven D, Reich PB, Ewel JJ, Isbell F, Koricheva J, Parrotta JA, Auge H, Erickson HE, Forrester DI, Hector H, Joshi J, Montagnini F, Palmborg C, Piotta D, Potvin C, Roscher C, van Ruijven J, Tilman D, Wilsey B and **Eisenhauer N** (2017) *Diversity-dependent temporal divergence of ecosystem functioning in experimental ecosystems*. **Nature Ecology & Evolution** 1, 1639-1642. <https://doi.org/10.1038/s41559-017-0325-1>.
- 164 Steinauer K, Fischer FM, Roscher C, Scheu S, **Eisenhauer N** (2017) *Spatial plant resource acquisition traits explain plant community effects on soil microbial*

properties. *Pedobiologia* 65: 50-57.

<https://doi.org/10.1016/j.pedobi.2017.07.005>.

- 163 Spaak JW, Baert JM, Baird DJ, **Eisenhauer N**, Maltby L, Pomati F, Radchuk V, Rohr JR, van den Brink PJ, De Laender F (2017) *Shifts of community composition and population density substantially affect ecosystem function despite invariant richness*. *Ecology Letters* 20: 1315-1324. <https://doi.org/10.1111/ele.12828>.
- 162 Patoine G, Thakur MP, Friese J, Nock C, Hönig L, Haase J, Scherer-Lorenzen M, **Eisenhauer N** (2017) *Plant litter functional diversity effects on litter mass loss depend on the macro-detritivore community*. *Pedobiologia* 65: 29-42. <https://doi.org/10.1016/j.pedobi.2017.07.003>.
- 161 Dietrich P, Buchmann T, Cesarz S, **Eisenhauer N**, Roscher C (2017) *Fertilization, soil and plant community characteristics determine soil microbial activity in managed temperate grasslands*. *Plant and Soil* 419: 189-199. <https://doi.org/10.1007/s11104-017-3328-4>.
- 160 Ferlian O, Wirth C, **Eisenhauer N** (2017) *Leaf and root C-to-N ratios are poor predictors of soil microbial biomass C and activity across 32 tree species*. *Pedobiologia* 65: 1623. <https://doi.org/10.1016/j.pedobi.2017.06.005>.
- 159 Wagg C, Ebeling A, Roscher C, Ravenek J, Bachmann D, **Eisenhauer N**, Mommer L, Buchmann N, Hillebrand H, Schmid B, Weisser WW (2017) *Functional trait dissimilarity drives both species complementarity and competitive disparity*. *Functional Ecology* 12: 2320-2329. <https://doi.org/10.1111/1365-2435.12945>.
- 158 Weisser WW, Roscher C, Meyer S, Ebeling A, Luo G, Allan E, Beßler H, Barnard R, Buchmann N, Buscot F, Engels C, Fischer C, Fischer M, Gessler A, Gleixner G, Halle S, Hildebrandt A, Hillebrand H, de Kroon H, Lange M, Leimer S, Le Roux X, Milcu A, Mommer L, Niklaus P, Oelmann Y, Proulx R, Roy J, Scherber C, Scherer-Lorenzen, Scheu S, Tschardt T, Wachendorf M, Wagg C, Weigelt A, Wilcke W, Wirth C, Schulze E-D, Schmid B, **Eisenhauer N** (2017) *Biodiversity effects on ecosystem functioning in a 15-year grassland experiment: Patterns, mechanisms, and open questions*. *Basic and Applied Ecology* 23: 1-73. <https://doi.org/10.1016/j.baae.2017.06.002>. **Basic and Applied Ecology best research paper award 2020**.
- 157 Cesarz S, Ciobanu M, Wright JW, Ebeling E, Vogel A, Weisser W, **Eisenhauer N** (2017) *Plant species richness sustains higher trophic levels of soil nematode*

- communities after consecutive environmental perturbations. **Oecologia** 184: 715-728. <https://doi.org/10.1007/s00442-017-3893-5>.*
- 156** Thakur MP, Tilman D, Purschke O, Ciobanu M, Cowles J, Isbell F, Wragg PD, **Eisenhauer N** (2017) *Climate warming promotes species diversity but also taxonomic redundancy in complex environments. **Science Advances** 3: e1700866. DOI: 10.1126/sciadv.1700866.*
- 155** Liu M, Xia H, Fu S, **Eisenhauer N** (2017) *Tree diversity regulates soil respiration through accelerated tree growth in a mesocosm experiment. **Pedobiologia** 65: 24-28. <https://doi.org/10.1016/j.pedobi.2017.05.005>.*
- 154** **Eisenhauer N**, Antunes PM, Bennett AE, Birkhofer K, Bissett A, Bowker MA, Caruso T, Chen B, Coleman DC, de Boer W, de Ruiter P, DeLuca TH, Frati F, Griffiths BS, Hart MM, Hättenschwiler S, Haimi J, Heethoff M, Kaneko N, Kelly LC, Leinaas HP, Lindo Z, Macdonald C, Rillig MC, Ruess L, Scheu S, Schmidt O, Seastedt TR, van Straalen NM, Tiunov AV, Zimmer M, Powell JR (2017) *Priorities for research in soil ecology. **Pedobiologia** 63: 1-7. DOI: 10.1016/j.pedobi.2017.05.003. <https://doi.org/10.1016/j.pedobi.2017.05.003>.*
- 153** Guerrero-Ramirez NR, **Eisenhauer N** (2017) *Trophic and non-trophic interactions influence the mechanisms underlying biodiversity–ecosystem functioning relationships under different abiotic conditions. **Oikos** 126: 1748-1759. <https://doi.org/10.1111/oik.04190>.*
- 152** Thakur MP, Künne T, Griffin JN, **Eisenhauer N** (2017) *Warming magnifies predation and reduces prey coexistence in a model litter arthropod system. **Proceedings of the Royal Society B** 284: 20162570. <https://doi.org/10.1098/rspb.2016.2570>.*
- 151** Yang Y, Xi Y, Zhong X, **Eisenhauer N**, Sun S (2017) *N addition suppresses the performance of grassland caterpillars (*Gynaephora alpherakjii*) by decreasing ground temperature. **Ecosphere** 8: e01755. <https://doi.org/10.1002/ecs2.1755>.*
- 150** Wu X, Cao R, Wei X, Xi X, Shi P, **Eisenhauer N**, Sun S (2017) *Soil drainage facilitates earthworm invasion and subsequent carbon loss from peatland soil. **Journal of Applied Ecology** 54: 1291-1300. <https://doi.org/10.1111/1365-2664.12894>.*
- 149** Shao Y, Zhang W, **Eisenhauer N**, Liu T, Xiong Y, Liang C, Fu S (2017) *Nitrogen deposition cancels out exotic earthworm effects on plant-feeding nematode*

communities. **Journal of Animal Ecology** 86: 708-717.
<https://doi.org/10.1111/1365-2656.12660>.

- 148 Isbell F, Adler PR, **Eisenhauer N**, Fornara D, Kimmel K, Kremen C, Letourneau DK, Liebman M, Polley HW, Quijas S, Scherer-Lorenzen M (2017) *Benefits of increasing plant diversity in sustainable agroecosystems*. **Journal of Ecology** 105: 871-879. <https://doi.org/10.1111/1365-2745.12789>.
- 147 **Eisenhauer N**, Lanoue A, Strecker T, Scheu S, Steinauer K, Thakur MP, Mommer L (2017) *Root biomass and exudates link plant diversity with soil bacterial and fungal biomass*. **Scientific Reports** 7: 44641. <https://doi.org/10.1038/srep44641>.
- 146 Phillips HRP, Cameron EK, Ferlian O, Türke M, Winter M, **Eisenhauer N** (2017) *Red list of a black box*. **Nature Ecology and Evolution** 1: article no 0103. <https://doi.org/10.1038/s41559-017-0103>.
- 145 Cortois R, Veen GFC, Duyts H, Abbas M, Strecker T, **Eisenhauer N**, Scheu S, Gleixner G, De Deyn G, van der Putten W (2017) *Possible mechanisms underlying abundance and diversity responses of nematode communities to plant diversity*. **Ecosphere** 8: e01719. <https://doi.org/10.1002/ecs2.1719>.
- 144 Clause J, Forey E, **Eisenhauer N**, Seal CE, Soudey A, Colville L, Barot S (2017) *Seed selection by earthworms: chemical seed properties matter more than morphological traits*. **Plant and Soil** 413: 97-110. <https://doi.org/10.1007/s11104-016-3085-9>.
- 143 Wright AJ, de Kroon H, Visser EJW, Buchmann T, Ebeling A, **Eisenhauer N**, Fischer C, Hildebrandt A, Ravenek J, Roscher C, Weigelt A, Weisser WW, Voosenek LACJ, Mommer L (2017) *Plants are less negatively affected by flooding when growing in species-rich plant communities*. **New Phytologist** 213: 645–656. <https://doi.org/10.1111/nph.14185>.
- 142 Craven D, Thakur MP, Cameron EK, Frelich LE, Beausejour R, Blair RB, Blossey B, Burtis J, Choi A, Dávalos A, Fahey TJ, Fisichelli NA, Gibson K, Handa IT, Hopfensperger K, Loss SR, Nuzzo V, Maerz JC, Sackett T, Scharenboch BC, Smith SM, Vellend M, Umek LG, **Eisenhauer N** (2017) *The unseen invaders: introduced earthworms as drivers of change in plant communities in North American forests (a meta-analysis)*. **Global Change Biology** 23: 1065-1074. <https://doi.org/10.1111/gcb.13446>.

141 Thakur MP, Reich PB, Wagg C, Fisichelli NA, Ciobanu M, Hobbie SE, Rich RL, Stefanski A, **Eisenhauer N** (2017) *Effects of soil warming history on the performances of congeneric temperate and boreal herbaceous plant species and their associations with soil biota.* **Journal of Plant Ecology** 10: 670-680. <https://doi.org/10.1093/jpe/rtw066>.

2016 [24 papers]

140 Leimer S, Oelmann Y, **Eisenhauer N**, Milcu A, Roscher C, Scheu S, Weigelt A, Wirth C, Wilcke W (2016) *Mechanisms behind plant diversity effects on inorganic and organic N leaching from temperate grassland.* **Biogeochemistry** 131: 339-353. <https://doi.org/10.1007/s10533-016-0283-8>.

139 Hu J, Wei Z, Friman V-P, Gu S-H, Wang X-F, **Eisenhauer N**, Yang T-J, Ma J, Shen Q-R, Xu Y-C, Jousset A (2016) *Probiotic diversity enhances rhizosphere microbiome function and plant disease suppression.* **mBio** 6: e01790-16. DOI: 10.1128/mBio.01790-16.

138 Macé OG, Steinauer K, Jousset A, **Eisenhauer N**, Scheu S (2016) *Flood-induced changes in soil microbial functions as modified by plant diversity.* **Plos One** 11: e0166349. <https://doi.org/10.1371/journal.pone.0166349>.

137 Meyer ST, Ebeling A, **Eisenhauer N**, Hertzog L, Hillebrand H, Milcu A, Pompe S, Abbas M, Bessler H, Buchmann N, De Luca E, Engels C, Fischer M, Gleixner G, Hundewenz A, Klein A-M, de Kroon H, Leimer S, Loranger H, Mommer Y, Oelmann Y, Ravenek JM, Roscher C, Rottstock T, Scherber C, Scherer-Lorenzen M, Scheu S, Schmid B, Schulze E-D, Staudler A, Strecker T, Temperton V, Tschardt T, Vogel A, Voigt W, Weigelt A, Wilcke W, Weisser WW (2016) *Effects of biodiversity strengthen over time as ecosystem functioning declines at low and increases at high biodiversity.* **Ecosphere** 7: e01619. <https://doi.org/10.1002/ecs2.1619>.

136 De Laender F, Rohr JR, Ashauer R, Baird DJ, Berger U, **Eisenhauer N**, Grimm V, Hommen U, Maltby L, Melià CJ, Pomati F, Roessink I, Radchuck V, Van den Brink PJ (2016) *Reintroducing environmental change drivers in biodiversity–ecosystem functioning research.* **Trends in Ecology and Evolution** 31: 905-915. <https://doi.org/10.1016/j.tree.2016.09.007>.

- 135 Cesarz S, Craven D, Dietrich C, **Eisenhauer N** (2016) *Effects of soil and leaf litter quality on the biomass of two endogeic earthworm species.* **European Journal of Soil Biology** 77: 9-16. <https://doi.org/10.1016/j.eisobi.2016.09.002>.
- 134 Xi X, Li D, Peng Y, **Eisenhauer N**, Sun S (2016) *Experimental warming and precipitation interactively modulate the mortality rate and timing of spring emergence of a gallmaking Tephritid fly.* **Scientific Reports** 6: 32284. <https://doi.org/10.1038/srep32284>.
- 133 Steinauer K, Chatzinotas A, **Eisenhauer N** (2016) *Root exudate cocktails: the link between plant diversity and soil microorganisms?* **Ecology and Evolution** 6: 7387-7396. <https://doi.org/10.1002/ece3.2454>.
- 132 Mueller KE, Blumenthal DM, Carrillo Y, Cesarz S, Ciobanu M, Hines J, Pabst S, Pendall E, de Tomasel CM, Wall DH, **Eisenhauer N** (2016) *Elevated CO₂ and warming shift the functional composition of soil nematode communities in a semiarid grassland.* **Soil Biology and Biochemistry** 103: 46-51. <https://doi.org/10.1016/j.soilbio.2016.08.005>.
- 131 Jousset A, **Eisenhauer N**, Merker M, Mouquet N, Scheu S (2016) *High functional diversity stimulates diversification in experimental microbial communities.* **Science Advances** 2: e1600124. DOI: 10.1126/sciadv.1600124.
- 130 **Eisenhauer N**, Barnes AD, Cesarz S, Craven D, Ferlian O, Gottschall F, Hines J, Sendek A, Siebert J, Thakur MP, Türke M (2016) *Biodiversity–ecosystem function experiments reveal the mechanisms underlying the consequences of biodiversity change in real world ecosystems.* **Journal of Vegetation Science** 27: 1061-1070. <https://doi.org/10.1111/jvs.12435>.
- 129 **Eisenhauer N** (2016) *Plant diversity effects on soil microorganisms: spatial and temporal heterogeneity of plant inputs increase soil biodiversity.* **Pedobiologia** 59: 175-177. <https://doi.org/10.1016/j.pedobi.2016.04.004>.
- 128 Hertzog LR, Ebeling A, Meyer ST, Wagg C, **Eisenhauer N**, Weisser WW (2016) *High survival of *Lasius niger* during Summer Flooding in a European grassland.* **Plos One**, 11: e0152777. <https://doi.org/10.1371/journal.pone.0152777>.
- 127 Strecker T, González Macé O, Scheu S, **Eisenhauer N** (2016) *Functional composition of plant communities determines the spatial and temporal stability of soil microbial properties in a long-term plant diversity experiment.* **Oikos** 125: 1743-1754. <https://doi.org/10.1111/oik.03181>.

- 126 Latz E, **Eisenhauer N**, Rall BC, Scheu S, Jousset A (2016) *Unravelling linkages between plant community composition and the pathogen-suppressive potential of soils*. **Scientific Reports** 6: 23584. <https://doi.org/10.1038/srep23584>.
- 125 Steinauer K, Jensen B, Strecker T, de Luca E, Scheu S, **Eisenhauer N** (2016) *Convergence of soil microbial properties after plant colonization of an experimental plant diversity gradient*. **BMC Ecology** 16: 19. <https://doi.org/10.1186/s12898-016-0073-0>. **BMC Ecology Featured Article**.
- 124 Do Couto GM, **Eisenhauer N**, de Oliveira EB, Cesarz S, Feliciano ALP, Marangon LC (2016) *Response of soil microbial biomass and activity in early restored lands in the northeastern Brazilian Atlantic Forest*. **Restoration Ecology** 24: 609-616. <https://doi.org/10.1111/rec.12356>.
- 123 Fischer FM, Wright AJ, **Eisenhauer N**, Ebeling A, Roscher C, Wagg C, Weigelt A, Weisser WW, Pillar VD (2016) *Plant species richness and functional traits affect community stability after a flood event*. **Philosophical Transactions of the Royal Society B** 371: 20150276. <https://doi.org/10.1098/rstb.2015.0276>.
- 122 Craven D, Isbell F, Manning P, Connolly J, Bruelheide H, Ebeling A, Roscher C, van Ruijven J, Weigelt A, Wilsey B, Beierkuhnlein C, de Luca E, Griffin JN, Hautier Y, Hector A, Jentsch A, Kreyling J, Lanta V, Loreau M, Meyer ST, Mori AS, Naeem S, Palmborg C, Polley HW, Reich PB, Schmid B, Siebenkäs A, Seabloom E, Thakur MP, Tilman D, Vogel A, **Eisenhauer N** (2016) *Plant diversity effects on grassland productivity are robust to both nutrient enrichment and drought*. **Philosophical Transactions of the Royal Society B** 371: 20150277. <https://doi.org/10.1098/rstb.2015.0277>.
- 121 Mariotte P, LeBayon R-C, **Eisenhauer N**, Guenat C, Buttler A (2016) *Subordinate plant species moderate drought effects on earthworm communities in grasslands*. **Soil Biology and Biochemistry** 96: 119-127. <https://doi.org/10.1016/j.soilbio.2016.01.020>.
- 120 Bohan DA, Landuyt D, Ma A, Macfadyen S, Martinet V, Massol F, McInerny G, Montoya JM, Mulder C, Pascual U, Pockock MJO, White P, Blanchemanche S, Bonkowski M, Bretagnolle V, Brönmark C, Dicks L, Dumbrell A, **Eisenhauer N**, Friberg N, Gessner MO, Gill RG, Gray C, Haughton A, Ibanez S, Jensen J, Jeppesen E, Jokela J, Lacroix G, Lannou C, Lavorel S, Le Galliard J-F, Lescourret F, Liu S, Loeuille N, McLaughlin O, Muggleton S, Peñuelas J, Petanidou T, Petit S, Pomati F, Raffaelli D, Rasmussen J, Raybould A, Reboud

X, Richard G, Scherber C, Scheu S, Sutherland WJ, Tamaddoni-Nezhad A, ter Braak C, Termansen M, Thompson MSA, Tscharrntke T, Vacher C, van der Geest H, Voigt W, Vonk JA, Zhou X, Woodward G (2016) *Networking Our Way to Better Ecosystem Service Provision*. **Trends in Ecology and Evolution** 31: 105-115. <https://doi.org/10.1016/j.tree.2015.12.003>.

119 Cameron E, Decaens T, Lapied E, Porco D, **Eisenhauer N** (2016) *Earthworm databases and ecological theory: Synthesis of current initiatives and main research directions*. **Applied Soil Ecology** 104: 85-90. <https://doi.org/10.1016/j.apsoil.2015.11.012>.

118 Mueller KE, **Eisenhauer N**, Reich PB, Hobbie SE, Chadwick OA, Chorover J, Dobies T, Hale CM, Jagodziński AM, Kałucka I, Kasproicz M, Kieliszewska-Rokicka B, Modrzyński J, Rožen A, Skorupski M, Sobczyk Ł, Stasińska M, Trocha LK, Weiner J, Wierzbicka A, Oleksyn J (2016) *Light, earthworms, and soil resources as predictors of diversity of 10 soil invertebrate groups across monocultures of 14 tree species*. **Soil Biology and Biochemistry** 92: 184-198. <https://doi.org/10.1016/j.soilbio.2015.10.010>.

117 Ferreira ACC, Leite LFC, de Araújo ASF, **Eisenhauer N** (2016) *Land-use type effects on soil organic carbon and microbial properties in a semiarid region of Northeast Brazil*. **Land Degradation and Development** 27: 171-178. <https://doi.org/10.1002/ldr.2282>.

2015 [31 papers]

116 Hines J, van der Putten WH, De Deyn GB, Wagg C, Voigt W, Mulder C, Weisser WW, Engel J, Melian C, Scheu S, Birkhofer K, Ebeling A, Scherber C, **Eisenhauer N** (2015) *Towards an integration of biodiversity–ecosystem functioning and food web theory to evaluate relationships between multiple ecosystem services*. **Advances in Ecological Research** 53: 161-200. <https://doi.org/10.1016/bs.aecr.2015.09.001>.

115 Mulder C, Bennett EM, Bohan DA, Bonkowski M, Carpenter SR, Chalmers R, Cramer W, Durance I, **Eisenhauer N**, Fontaine C, Haughton AJ, Hettelingh JP, Hines J, Ibanez S, Jeppesen E, Krumins Adams J, Ma A, Mancinelli G, Massol F, McLaughlin Ó, Naeem S, Pascual U, Peñuelas J, Pettorelli N, Pockock MJO, Raffaelli D, Rasmussen JJ, Rusch GM, Scherber C, Setälä H, Sutherland WJ, Vacher C, Voigt W, Vonk JA, Wood SA, Woodward G (2015) *10 years later:*

*revisiting priorities for science and society a decade after the Millenium Ecosystem Assessment. **Advances in Ecological Research** 53: 1-53.*
<https://doi.org/10.1016/bs.aecr.2015.10.005>.

- 114 Hacker N, Ebeling A, Gessler A, Gleixner G, González Macé O, de Kroon H, Lange M, Mommer L, **Eisenhauer N**, Ravenek J, Scheu S, Weigelt A, Wagg C, Wilcke W, Oelmann Y (2015) *Plant diversity shapes microbe-rhizosphere effects on P mobilization from organic matter in soil. **Ecology Letters** 18: 1356-1365.*
<https://doi.org/10.1111/ele.12530>.
- 113 Huang J, Zhang W, Liu M, **Eisenhauer N**, Briones MJL, Shao Y, Cai X, Fu S, Xia H (2015) *Different impacts of native and exotic earthworms on rhizodeposit carbon sequestration in a subtropical soil. **Soil Biology and Biochemistry** 90: 152-160.* <https://doi.org/10.1016/j.soilbio.2015.08.011>.
- 112 Isbell F, Craven D, Connolly J, Loreau M, Schmid B, Beierkuhnlein H, Bezemer TM, Bonin C, Bruelheide H, de Luca E, Ebeling A, Griffin J, Guo Q, Hautier Y, Hector A, Jentsch A, Kreyling J, Lanta V, Manning P, Meyer ST, Mori AS, Naeem S, Niklaus PA, Polley HW, Reich PB, Roscher C, Seabloom EW, Smith MD, Thakur MP, Tilman D, Tracy BF, van der Putten WH, van Ruijven J, Weigelt A, Weisser WW, Wilsey B, **Eisenhauer N** (2015) *Biodiversity increases the resistance of ecosystem productivity to climate extremes. **Nature** 526: 574-577.*
<https://doi.org/10.1038/nature15374>.
- 111 Ramirez KS, Döring M, **Eisenhauer N**, Gardi C, Ladau J, Leff JW, Letendu G, Lindo Z, Rillig MC, Russel D, Scheu S, St. John MG, de Vries FT, Wubet T, van der Putten WH, Wall DH (2015) *Toward a global platform for linking soil biodiversity data. **Frontiers in Ecology and Evolution** 3: 91.*
<https://doi.org/10.3389/fevo.2015.00091>.
- 110 Wagner D, **Eisenhauer N**, Cesarz S (2015) *Plant species richness does not attenuate responses of soil microbial and nematode communities to a flood event. **Soil Biology and Biochemistry** 89: 135-149.*
<https://doi.org/10.1016/j.soilbio.2015.07.001>.
- 109 Thakur MP, Milcu A, Manning P, Niklaus PA, Roscher C, Power S, Reich PB, Scheu S, Tilman D, Ai F, Guo H, Ji R, Pierce S, Guerrero Ramirez N, Richter AN, Steinauer K, Strecker T, Vogel A, **Eisenhauer N** (2015) *Plant diversity drives soil microbial biomass carbon in grasslands irrespective of global environmental*

change factors. **Global Change Biology** 21: 4076-4085.
<https://doi.org/10.1111/gcb.13011>.

- 108 Powell JR and **Eisenhauer N** (2015) Editorial: *Pedobiologia in 2015: The International Year of Soils*. **Pedobiologia** 58: 57-58.
<https://doi.org/10.1016/j.pedobi.2015.04.001>.
- 107 Shao Y, Bao W, Chen D, **Eisenhauer N**, Zhang W, Pang X, Xu G, Fu S (2015) *Using structural equation modeling to test established theory and develop novel hypotheses for the structuring forces in soil food webs*. **Pedobiologia** 58: 137-145. <https://doi.org/10.1016/j.pedobi.2015.06.001>.
- 106 Thakur MP, Herrmann M, Steinauer K, Rennoch S, Cesarz S, **Eisenhauer N** (2015) *Cascading effects of belowground predators on plant communities are density-dependent*. **Ecology and Evolution** 5: 4300-4314, DOI: 10.1002/ece3.1597. **Editor's Choice**. <https://doi.org/10.1002/ece3.1597>.
- 105 Hines J, **Eisenhauer N**, Drake BG (2015) *Inter-annual changes in detritus-based food chains can enhance plant growth response to elevated atmospheric CO₂*. **Global Change Biology** 21: 4642-4650.
<https://doi.org/10.1111/gcb.12965>.
- 104 Strecker T, Barnard RL, Niklaus PA, Scherer-Lorenzen M, Weigelt A, Scheu S, **Eisenhauer N** (2015) *Effects of plant diversity, functional group composition, and fertilization on soil microbial properties in experimental grassland*. **Plos One** 10(5): e0125678. <https://doi.org/10.1371/journal.pone.0125678>.
- 103 **Eisenhauer N**, Bowker MA, Grace JB, Powell JR (2015) *From patterns to causal understanding: Structural equation modeling (SEM) in soil ecology*. **Pedobiologia** 58: 65-72. <https://doi.org/10.1016/j.pedobi.2015.03.002b>.
- 102 Kirchberger J, **Eisenhauer N**, Weisser WW, Türke M (2015) *Experimental evaluation of herbivory on live plant seedlings by the earthworm Lumbricus terrestris L. in the presence and absence of soil surface litter*. **Plos One** 10(4): e0123465. <https://doi.org/10.1371/journal.pone.0123465>.
- 101 Thakur MP and **Eisenhauer N** (2015) *Plant community composition determines the strength of top-down control in a soil food web motif*. **Scientific Reports** 5: 9134. <https://doi.org/10.1038/srep09134>.
- 100 Xi X, **Eisenhauer N**, Sun S (2015) *Parasitoid wasps indirectly suppress seed production by stimulating consumption rates of their seed-feeding hosts*. **Journal of Animal Ecology** 84: 1103-1111. <https://doi.org/10.1111/1365-2656.12361>.

- 099** Xi X, Mu J, Peng Y, **Eisenhauer N**, Sun S (2015) *Capitulum density-dependent effects generate peak seed yield at an intermediate density of a Tibetan lotus.* **Journal of Plant Ecology** 9(1): 100-106. <https://doi.org/10.1093/jpe/rtv025>.
- 098** Mueller KE, Hobbie SE, Chorover J, Reich PB, **Eisenhauer N**, Castellano MJ, Chadwick OA, Dobies T, Hale CM, Jagodziński AM, Kałucka I, Kieliszewska-Rokicka B, Modrzyński J, Rožen A, Skorupski M, Sobczyk L, Stasińska M, Trocha LK, Weiner J, Wierzbicka A, Oleksyn J (2015) *Effects of litter traits, soil biota, and soil chemistry on soil carbon stocks at a common garden with 14 tree species.* **Biogeochemistry** 123: 313-327. <https://doi.org/10.1007/s10533-015-0083-6>.
- 097** Lefcheck JS, Byrnes JEK, Isbell F, Gamfeldt F, Griffin JN, **Eisenhauer N**, Hensel MJS, Hector A, Cardinale BJ, Duffy JE (2015) *Biodiversity enhances ecosystem multifunctionality across trophic levels and habitats.* **Nature Communications** 6: 6936. <https://doi.org/10.1038/ncomms7936>.
- 096** Latz E, **Eisenhauer N**, Scheu S, Jousset A (2015) *Plant identity drives the expression of biocontrol factors in a rhizosphere bacterium across a plant diversity gradient.* **Functional Ecology** 29: 1225-1234. <https://doi.org/10.1111/1365-2435.12417>.
- 095** Lange M, **Eisenhauer N**, Sierra CA, Bessler H, Engels C, Griffiths RI, Mellado-Vázquez PG, Malik A, Roy J, Scheu S, Steinbeiss S, Thomson BC, Trumbore SE, Gleixner G (2015) *Plant diversity drives soil carbon storage by increased soil microbial activity.* **Nature Communications** 6: 6707. <https://doi.org/10.1038/ncomms7707>.
- 094** Schwarz B, Dietrich C, Cesarz L, Scherer-Lorenzen M, Auge H, Schulz E, **Eisenhauer N** (2015) *Non-significant tree diversity but significant identity effects on earthworm communities in three tree diversity experiments.* **European Journal of Soil Biology** 67: 17-26. <https://doi.org/10.1016/j.ejsobi.2015.01.001>.
- 093** Cesarz S, Reich PB, Scheu S, Ruess L, Schaefer M, **Eisenhauer N** (2015) *Nematode functional guilds, not trophic groups, reflect shifts in soil food webs and processes in response to interacting global change factors.* **Pedobiologia** 58: 23-32. <https://doi.org/10.1016/j.pedobi.2015.01.001>.
- 092** Fischer C, Tischer J, Roscher C, **Eisenhauer N**, Ravenek J, Gleixner G, Attinger S, Jensen B, de Kroon H, Mommer L, Scheu S, Hildebrandt A (2015) *Plant species diversity affects infiltration capacity in an experimental grassland*

through changes in soil properties. **Plant and Soil** 397: 1-16.
<https://doi.org/10.1007/s11104-014-2373-5>.

- 091** Wright AJ, Ebeling A, de Kroon H, Roscher C, Weigelt A, Buchmann N, Buchmann T, Fischer C, Hacker N, Hildebrandt A, Leimer S, Mommer L, Oelmann Y, Scheu S, Steinauer K, Strecker T, Weisser WW, Wilcke W, **Eisenhauer N** (2015) *Flooding disturbances increase resource availability and productivity, but reduce stability in diverse plant communities*. **Nature Communications** 6: 6092. <https://doi.org/10.1038/ncomms7092>.
- 090** Schwarzmüller F, **Eisenhauer N**, Brose U (2015) *'Trophic whales' as biotic buffers: weak interactions stabilize ecosystems against nutrient enrichment*. **Journal of Animal Ecology** 84: 680-691. <https://doi.org/10.1111/1365-2656.12324>.
- 089** Roth AM, Whitfeld TJS, Lodge AG, **Eisenhauer N**, Frelich LE, Reich PB (2015) *Invasive earthworms interact with abiotic conditions to influence the invasion of common buckthorn (Rhamnus cathartica)*. **Oecologia** 178(1): 219-30. DOI: 10.1007/s00442-014-3175-4. <https://doi.org/10.1007/s00442-014-3175-4>.
- 088** Steinauer K, Tilman D, Wragg PD, Cesarz S, Cowles JM, Pritsch K, Reich PB, Weisser WW, **Eisenhauer N** (2015) *Plant diversity effects on soil microbial functions and enzymes are stronger than, but do not buffer, warming effects in a grassland experiment*. **Ecology** 96: 99–112. <https://doi.org/10.1890/14-0088.1>.
- 087** Nitschke N, Wiesner K, Hilke I, **Eisenhauer N**, Oelmann Y, Weisser WW (2015) *Increase of fast nutrient cycling in grassland microcosms through insect herbivory on plant functional group composition and species diversity*. **Oikos** 124: 161-173. <https://doi.org/10.1111/oik.01476>.
- 086** De Araújo ASF, **Eisenhauer N**, Nunes LAPL, Leite LFC, Cesarz S (2015) *Soil surface-active fauna in degraded and restored lands of Northeast Brazil*. **Land Degradation & Development** 26: 1-8. <https://doi.org/10.1002/ldr.2247>.

2014 [19 papers]

- 085** Schulze E-D, Bouriaud O, Wäldchen J, **Eisenhauer N**, Walentowski H, Seele C, Heinze E, Pruschitzki U, Dănilă G, Marin G, Hessenmöller D, Bouriaud L, Teodosiu M (2014) *Ungulate browsing causes species loss in deciduous forests independent of community dynamics and silvicultural management in Central and*

Southeastern Europe. **Annals of Forest Research** 57: 267-288.
DOI:10.15287/afr.2014.273.

- 084** Grabmaier A, Heigl F, **Eisenhauer N**, van der Heijden M, Zaller JG (2014) *Stable isotope labelling of earthworms can help deciphering belowground–aboveground interactions involving earthworms, mycorrhizal fungi, plants and aphids.* **Pedobiologia** 57: 197-203.
<https://doi.org/10.1016/j.pedobi.2014.10.002>.
- 083** **Eisenhauer N**, Stefanski A, Fisichelli NA, Rice K, Rich R, Reich PB (2014) *Warming shifts ‘worming’: effects of experimental warming on invasive earthworms in northern North America.* **Scientific Reports** 4: 6890.
<https://doi.org/10.1038/srep06890>.
- 082** Cortez CT, Nunes LAPL, Rodrigues LB, **Eisenhauer N**, Araújo ASF (2014) *Soil microbial properties in Eucalyptus grandis plantations of different ages.* **Journal of Plant Nutrition and Soil Science** 14: 734-742.
<http://dx.doi.org/10.4067/S0718-95162014005000059>.
- 081** Araújo ASF, Borges CD, Tsai SM, Cesarz S, **Eisenhauer N** (2014) *Soil bacterial diversity in degraded and restored lands of Northeast Brazil.* **Antonie van Leeuwenhoek** 106: 891-899. <https://doi.org/10.1007/s10482-014-0258-5>.
- 080** Ebeling A, Meyer ST, Abbas M, **Eisenhauer N**, Hillebrand H, Lange M, Scherber C, Vogel A, Weigelt A, Weisser WW (2014) *Plant diversity impacts decomposition and herbivory via changes in aboveground arthropods.* **Plos One** 9: e106529. <https://doi.org/10.1371/journal.pone.0106529>.
- 079** Thakur MP, Berg MP, **Eisenhauer N**, van Langevelde F (2014) *Disturbance–diversity relationships for soil fauna explained by faunal community biomass in a salt marsh.* **Soil Biology and Biochemistry** 78: 30-37.
<https://doi.org/10.1016/j.soilbio.2014.06.021>.
- 078** **Eisenhauer N**, Wirsch D, Cesarz S, Craven D, Dietrich P, Friese J, Helm J, Hines J, Schellenberg M, Scherreiks P, Schwarz B, Uhe C, Wagner K, Steinauer K (2014) *Organic textile dye improves the visual assessment of the bait lamina test.* **Applied Soil Ecology** 82: 78-81.
<https://doi.org/10.1016/j.apsoil.2014.05.008>.
- 077** Lange M, Habekost M, **Eisenhauer N**, Roscher C, Bessler H, Engels C, Oelmann Y, Scheu S, Wilcke W, Schulze E-D, Gleixner G (2014) *Biotic and abiotic properties mediating plant diversity effects on soil microbial communities*

in experimental grassland. **Plos One** 9: e96182.
<https://doi.org/10.1371/journal.pone.0096182>.

- 076** Fischer C, Roscher C, Jensen B, **Eisenhauer N**, Baade J, Attinger S, Scheu S, Weisser WW, Schumacher J, Hildebrandt A (2014) How do earthworms, soil texture and plant composition affect infiltration along an experimental plant diversity gradient in grassland? **Plos One** 9: e98987.
<https://doi.org/10.1371/journal.pone.0098987>.
- 075** Wright AJ, Bernhardt-Römermann M, Craven D, Ebeling A, Engel J, Hines J, **Eisenhauer N** (2014) Local-scale changes in plant diversity: reassessments and implications for biodiversity–ecosystem function experiments. **Proceedings of Peerage of Science** 1. DOI: 10.14726/procpos.2014.e6.
- 074** Thakur MP, Reich PB, Fisichelli NA, Stefanski A, Cesarz S, Dobies T, Rich R, Hobbie S, **Eisenhauer N** (2014) Nematode community shifts in response to experimental warming and canopy conditions are associated with plant community changes in the temperate-boreal forest ecotone. **Oecologia** 175: 713-723. <https://doi.org/10.1007/s00442-014-2927-5>.
- 073** Ebeling A, Pompe S, Baade J, **Eisenhauer N**, Hillebrand H, Proulx R, Roscher C, Schmid B, Wirth C, Weisser WW (2014) A trait-based experimental approach to understand the mechanisms underlying biodiversity–ecosystem functioning relationships. **Basic and Applied Ecology** 15: 229-240.
<https://doi.org/10.1016/j.baae.2014.02.003>.
- 072** Steinauer K, Zytynska S, Weisser WW, **Eisenhauer N** (2014) Changes in plant community structure and soil biota along soil nitrate gradients in two deciduous forests. **Pedobiologia** 57: 139-145.
<https://doi.org/10.1016/j.pedobi.2014.01.007>.
- 071** Whitfeld TJS, Roth AM, Lodge AG, **Eisenhauer N**, Frelich LE, Reich PB (2014) Resident plant diversity and introduced earthworms have contrasting effects on the success of invasive plants. **Biological Invasions** 16: 2181-2193.
<https://doi.org/10.1007/s10530-014-0657-6>.
- 070** Powell JR, Craven D, **Eisenhauer N** (2014) Recent trends and future strategies in soil ecological research – integrative approaches at Pedobiologia. **Pedobiologia** 57: 1-3. <https://doi.org/10.1016/j.pedobi.2014.01.001>.
- 069** Thakur MP, Reich PB, Eddy WC, Stefanski A, Rich R, Hobbie S, **Eisenhauer N** (2014) Some plants like it warmer: increased growth of three selected invasive

plant species in soils with history of experimental warming. *Pedobiologia* 57: 57-60. <https://doi.org/10.1016/j.pedobi.2013.12.002>.

- 068 Jousset A, Becker J, Chatterjee S, Karlovsky P, Scheu S, **Eisenhauer N** (2014) *Biodiversity and species identity drive antifungal activity of bacterial communities. Ecology* 95: 1184-1190. <https://doi.org/10.1890/13-1215.1>.
- 067 Schläghamerský J, **Eisenhauer N**, Frelich LE (2014) *Earthworm invasion alters enchytraeid community composition and individual biomass in Northern Hardwood Forests of North America. Applied Soil Ecology* 83: 159-169. <https://doi.org/10.1016/j.apsoil.2013.09.005>.

2013 [13 papers]

- 066 Jousset A, **Eisenhauer N**, Materne E, Scheu S (2013) *Evolutionary history predicts the stability of cooperation in microbial communities. Nature Communications* 4: 2573. <https://doi.org/10.1038/ncomms3573>.
- 065 De Araújo ASF, Cesarz S, Leite LFC, Daniel CB, Tsai SM, **Eisenhauer N** (2013) *Soil microbial properties and temporal stability in degraded and restored lands of Northeast Brazil. Soil Biology and Biochemistry* 66: 175-181. <https://doi.org/10.1016/j.soilbio.2013.07.013>.
- 064 Vogel A, Fester T, **Eisenhauer N**, Scherer-Lorenzen M, Schmid B, Weisser WW, Weigelt A (2013) *Separating drought effects from roof artifacts on ecosystem processes in a grassland drought experiment. Plos One* 8, e70997. <https://doi.org/10.1371/journal.pone.0070997>.
- 063 Pérès G, Cluzeau D, Menasseri S, Soussana JF, Bessler H, Engels H, Habekost M, Gleixner G, Weigelt A, Weisser WW, Scheu S, **Eisenhauer N** (2013) *Mechanisms linking plant community properties to soil aggregate stability in an experimental grassland plant diversity gradient. Plant and Soil* 373: 285-299. <https://doi.org/10.1007/s11104-013-1791-0>.
- 062 Vogel A, **Eisenhauer N**, Weigelt A, Scherer-Lorenzen M (2013) *Plant diversity does not buffer drought effects on early-stage mass loss rate and microbial processes. Global Change Biology* 19: 2795-2803. <https://doi.org/10.1111/gcb.12225>.
- 061 **Eisenhauer N**, Dobies T, Cesarz S, Hobbie SE, Meyer RJ, Worm K, Reich PB (2013) *Plant diversity effects on soil food webs are stronger than those of elevated CO₂ and N deposition in a long-term grassland experiment.*

Proceedings of the National Academy of Sciences USA 110: 6889-6894.
<https://doi.org/10.1073/pnas.1217382110>.

- 060** Milcu A, Allan E, Roscher C, Jenkins T, Meyer S, Flynn D, Bessler H, Buscot F, Engels C, Gubsch M, König S, Lipowsky A, Loranger J, Renker C, Scherber C, Schmid B, Thébault E, Wubet T, Weisser WW, Scheu S, **Eisenhauer N** (2013) *Functionally and phylogenetically diverse plant communities key to soil biota. Ecology* 94: 1878-1885. <https://doi.org/10.1890/12-1936.1>.
- 059** Guenay Y, Ebeling A, Steinauer K, Weisser WW, **Eisenhauer N** (2013) *Transgressive overyielding of soil microbial biomass in a grassland plant diversity gradient. Soil Biology and Biochemistry* 60: 122-124. <https://doi.org/10.1016/j.soilbio.2013.01.015>.
- 058** Allan E, Weisser WW, Fischer M, Schulze E-D, Weigelt A, Roscher C, Baade J, Barnard RL, Beßler H, Buchmann N, Ebeling A, **Eisenhauer N**, Engels C, Fergus AJF, Gleixner G, Gubsch M, Halle S, Klein AM, Kertscher I, Kuu A, Lange M, Le Roux X, Meyer S, Migunova VD, Milcu A, Niklaus PA, Oelmann Y, Pašalić E, Petermann JS, Poly F, Rottstock T, Sabais ACW, Scherber C, Scherer-Lorenzen M, Scheu S, Steinbeiss S, Schwichtenberg G, Temperton V, Tschardt T, Voigt W, Wilcke W, Wirth C, Schmid B (2013) *A comparison of the strength of biodiversity effects across multiple functions. Oecologia* 173: 223-237. <https://doi.org/10.1007/s00442-012-2589-0>.
- 057** Griffith B, Türke M, Weisser WW, **Eisenhauer N** (2013) *Herbivore behavior in the anecic earthworm species Lumbricus terrestris L.? European Journal of Soil Biology* 55: 62-65. <https://doi.org/10.1016/j.ejsobi.2012.12.002>.
- 056** Türke M, Blattmann T, Knop E, Kindermann A, Prestele J, Marquez L, **Eisenhauer N**, Fischer C (2013) *Weeds and endangered herbs have unforeseen dispersal helpers in the agri-environment: gastropods and earthworms. Renewable Agriculture and Food Systems* 28: 380-383. <https://doi.org/10.1017/S1742170512000415>.
- 055** Fisichelli NA, Frelich LE, Reich PB, **Eisenhauer N** (2013) *Linking direct and indirect pathways mediating earthworms, deer, and understory composition in Great Lakes. Biological Invasions* 15: 1057-1066. <https://doi.org/10.1007/s10530-012-0350-6>.
- 054** **Eisenhauer N**, Schulz W, Scheu S and Jousset A (2013) *Niche dimensionality links biodiversity and invasibility of microbial communities. Functional Ecology*

27: 282-288. <https://doi.org/10.1111/j.1365-2435.2012.02060.x>. **Highlighted by Functional Ecology Spotlight (Clark 2013, Functional Ecology 27, 5-6).**

2012 [13 papers]

- 053 Eisenhauer N**, Reich PB, Scheu S (2012) *Increasing plant diversity effects on productivity with time due to delayed soil biota effects on plants.* **Basic and Applied Ecology** 13: 571-578. <https://doi.org/10.1016/j.baae.2012.09.002>.
- 052 Frelich LE**, Peterson RO, Dovčiak M, Reich PB, Vucetich JA and **Eisenhauer N** (2012) *Trophic cascades, invasive species, and body-size hierarchies interactively modulate climate change responses of ecotonal temperate-boreal forests.* **Philosophical Transactions of the Royal Society B** 367: 2955-2961. <https://doi.org/10.1098/rstb.2012.0235>.
- 051 Sabais ACW**, **Eisenhauer N**, König S, Renker C, Buscot F and Scheu S (2012) *Soil organisms shape the competition between grassland plant species.* **Oecologia** 170: 1021-1032. <https://doi.org/10.1007/s00442-012-2375-z>.
- 050 Eisenhauer N**, Reich PB and Isbell F (2012) *Decomposer diversity and identity influence plant diversity effects on ecosystem functioning.* **Ecology** 93: 2227-2240. <https://doi.org/10.1890/11-2266.1>.
- 049 Eisenhauer N**, Scheu S and Jousset A (2012) *Bacterial diversity stabilizes community productivity.* **PLoS ONE** 7: e.34517. <https://doi.org/10.1371/journal.pone.0034517>.
- 048 Reich PB**, Tilman D, Isbell F, Mueller K, Hobbie SE, Flynn DFB and **Eisenhauer N** (2012) *Impacts of biodiversity loss escalate through time as redundancy fades.* **Science** 336: 589-592. DOI: 10.1126/science.1217909. **Recommended by F1000.**
- 047 Becker J**, **Eisenhauer N**, Scheu S and Jousset A (2012) *Increasing antagonistic interactions cause bacterial communities to collapse at high diversity.* **Ecology Letters** 15: 468-474. <https://doi.org/10.1111/j.1461-0248.2012.01759.x>.
- 046 Rosenkranz S**, Wilcke W, **Eisenhauer N** and Oelmann Y (2012) *Net ammonification as influenced by plant diversity in experimental grasslands.* **Soil Biology and Biochemistry** 48: 78-87. <https://doi.org/10.1016/j.soilbio.2012.01.008>.
- 045 Latz E**, **Eisenhauer N**, Rall BC, Allan E, Roscher C, Scheu S and Jousset A (2012) *Plant diversity improves protection against soil-borne pathogens by*

fostering antagonistic bacterial communities. **Journal of Ecology** 100: 597-604.

<https://doi.org/10.1111/j.1365-2745.2011.01940.x>. **Highlighted in The Scientist.**

044 Eisenhauer N and Reich PB (2012) *Above- and belowground inputs both fuel soil food webs.* **Soil Biology and Biochemistry** 45: 156-160.

<https://doi.org/10.1016/j.soilbio.2011.10.019>.

043 Eisenhauer N (2012) *Aboveground-belowground interactions as a source of complementarity effects in biodiversity experiments.* **Plant and Soil** 351: 1-22.

<https://doi.org/10.1007/s11104-011-1027-0>.

042 Eisenhauer N, Cesarz S, Koller R, Worm K and Reich PB (2012) *Global change below ground: impacts of elevated CO₂, nitrogen and summer drought on soil food webs and biodiversity.* **Global Change Biology** 18: 435-447.

<https://doi.org/10.1111/j.1365-2486.2011.02555.x>.

041 Eisenhauer N, Fisichelli NA, Frelich LE and Reich PB (2012) *Interactive effects of global warming and 'global worming' on the initial establishment of native and exotic herbaceous plant species.* **Oikos** 121: 1121-1133.

<https://doi.org/10.1111/j.1600-0706.2011.19807.x>.

2011 [13 papers]

040 Eisenhauer N (2011) *Aboveground–Belowground Linkages: Biotic Interactions, Ecosystem Processes and Global Change*, Bardgett RD and Wardle DA. Oxford University Press, Oxford (2010). *Book review.* **Basic and Applied Ecology** 12: 478-479.

039 Eisenhauer N, Migunova VD, Ackermann M, Ruess L and Scheu S (2011) *Changes in plant species richness induce functional shifts in soil nematode communities in experimental grassland.* **PLoS ONE** 6: e24087.

<https://doi.org/10.1371/journal.pone.0024087>.

038 Eisenhauer N, Schlaghamerský J, Reich PB and Frelich LE (2011) *The wave towards a new steady state: effects of earthworm invasion on soil microbial functions.* **Biological Invasions** 13: 2191-2196. <https://doi.org/10.1007/s10530-011-0053-4>.

037 Butenschoen O, Scheu S and **Eisenhauer N** (2011) *Interactive effects of warming, soil humidity and plant diversity on litter decomposition and microbial functioning.* **Soil Biology and Biochemistry** 43: 1902-1907.

<https://doi.org/10.1016/j.soilbio.2011.05.011>.

- 036 Eisenhauer N**, Sabais ACW and Scheu S (2011) *Collembola species composition and diversity effects on ecosystem functioning vary with plant functional group*. **Soil Biology and Biochemistry** 43: 1697-1704. <https://doi.org/10.1016/j.soilbio.2011.04.015>.
- 035 Forey E**, Barot S, Decaëns T, Langlois E, Laossi K-L, Margerie P, Scheu S and **Eisenhauer N** (2011) *Importance of earthworm–seed interactions for the structure and composition of plant communities: a review*. **Acta Oecologica** 37: 594-603. <https://doi.org/10.1016/j.actao.2011.03.001>.
- 034 Jousset A**, Schmid B, Scheu S and **Eisenhauer N** (2011) *Genotypic richness and dissimilarity opposingly affect ecosystem functioning*. **Ecology Letters** 14: 537-545. <https://doi.org/10.1111/j.1461-0248.2011.01613.x>.
- 033 Sabais ACW**, Scheu S and **Eisenhauer N** (2011) *Plant species richness drives the density and diversity of Collembola in temperate grassland*. **Acta Oecologica** 37: 195-202. <https://doi.org/10.1016/j.actao.2011.02.002>.
- 032 Jousset A**, Schulz W, Scheu S and **Eisenhauer N** (2011) *Intraspecific genotypic richness and relatedness predict the invasibility of microbial communities*. **ISME Journal** 5: 1108-1114. <https://doi.org/10.1038/ismej.2011.9>. **Research highlight in Nature Reviews Microbiology 9: 312-313; Highlighted in The Scientist.**
- 031 Eisenhauer N**, Milcu A, Allan E, Nitschke N, Scherber C, Temperton V, Weigelt A, Weisser WW and Scheu S (2011) *Impact of above- and below-ground invertebrates on temporal and spatial stability of grassland of different diversity*. **Journal of Ecology** 99: 572-582. <https://doi.org/10.1111/j.1365-2745.2010.01783.x>.
- 030 Eisenhauer N**, Milcu A, Sabais ACW, Bessler H, Brenner J, Engels C, Klärner B, Maraun M, Partsch S, Roscher C, Schonert F, Temperton V, Thomisch K, Weigelt A, Weisser WW and Scheu S (2011) *Plant diversity surpasses plant functional groups and plant productivity as driver of soil biota in the long term*. **PLoS ONE** 6: e16055. <https://doi.org/10.1371/journal.pone.0016055>.
- 029 Eisenhauer N**, Yee K, Johnson EA, Maraun M, Parkinson D, Straube D and Scheu S (2011) *Positive relationship between herbaceous layer diversity and the performance of soil biota in a temperate forest*. **Soil Biology and Biochemistry** 43: 462-465. <https://doi.org/10.1016/j.soilbio.2010.10.018>.

028 Eisenhauer N and Schädler M (2011) *Inconsistent impacts of decomposer diversity on the stability of aboveground and belowground ecosystem functions.* **Oecologia** 165: 403-415. <https://doi.org/10.1007/s00442-010-1784-0>.

2010 [12 papers]

027 Proulx R, Wirth C, Voigt W, Weigelt A, Roscher C, Attinger S, Baade J, Barnard RL, Buchmann N, Buscot F, **Eisenhauer N**, Fischer M, Gleixner G, Halle S, Hildebrandt A, Kowalski E, Kuu A, Lange M, Milcu A, Niklaus PA, Oelmann Y, Rosenkranz S, Sabais ACW, Scherber C, Scherer-Lorenzen M, Scheu S, Schulze E-D, Schumacher J, Schwichtenberg G, Soussana J-F, Temperton V, Weisser WW, Wilcke W and Schmid B (2010) *Diversity promotes temporal stability across levels of ecosystem organization in experimental grasslands.* **PLoS ONE** 5: e13382. <https://doi.org/10.1371/journal.pone.0013382>.

026 Scherber C, **Eisenhauer N**, Weisser WW, Schmid B, Voigt W, Schulze E-D, Roscher C, Weigelt A, Allan E, Beßler H, Bonkowski M, Buchmann N, Buscot F, Clement LW, Ebeling A, Engels C, Fischer M, Halle S, Kertscher I, Klein A-M, Koller R, König S, Kowalski E, Kummer V, Kuu A, Lange M, Lauterbach D, Middelhoff C, Migunova VD, Milcu A, Müller R, Partsch S, Petermann JS, Renker C, Rottstock T, Sabais ACW, Scheu S, Schumacher J, Temperton VM and Tscharnke T (2010) *Bottom-up effects of plant diversity on biotic interactions in a biodiversity experiment.* **Nature** 468: 553-556. <https://doi.org/10.5167/uzh-39737>. **Recommended by F1000.**

025 Milcu A, Thebault E, Scheu S and **Eisenhauer N** (2010) *Plant diversity enhances the reliability of belowground processes.* **Soil Biology and Biochemistry** 42: 2102-2110. <https://doi.org/10.1016/j.soilbio.2010.08.005>.

024 Eisenhauer N, Ackermann M, Gass S, Klier M, Migunova VD, Nitschke N, Ruess L, Sabais A, Weisser WW and Scheu S (2010) *Nematicide impacts on nematodes and feedbacks on plant productivity in a plant diversity gradient.* **Acta Oecologica** 36: 477-483. <https://doi.org/10.1016/j.actao.2010.06.004>.

023 Asshoff R, Scheu S and **Eisenhauer N** (2010) *Different earthworm ecological groups interactively impact plant seedling establishment.* **European Journal of Soil Biology** 46: 330-334. <https://doi.org/10.1016/j.ejsobi.2010.06.005>.

022 Eisenhauer N (2010) *The action of an animal ecosystem engineer: Identification of the main mechanisms of earthworm impacts on soil*

microarthropods. *Pedobiologia* 53: 343-352.

<https://doi.org/10.1016/j.pedobi.2010.04.003>.

021 Eisenhauer N, Sabais A, Schonert F and Scheu S (2010) *Soil arthropods beneficially rather than detrimentally impact plant performance in experimental grassland systems of different diversity*. ***Soil Biology and Biochemistry*** 42: 1418-1424. <https://doi.org/10.1016/j.soilbio.2010.05.001>.

020 Eisenhauer N, Butenschoen O, Radsick S and Scheu S (2010) *Earthworms as seedling predators: Importance of seeds and seedlings for earthworm nutrition*. ***Soil Biology and Biochemistry*** 42: 1245-1252. <https://doi.org/10.1016/j.soilbio.2010.04.012>. **Highlighted in BBC News, BBC Magazine, and Spektrum der Wissenschaft.**

019 Scherber C, Mwangi P, Schmitz M, Scherer-Lorenzen M, Bessler H, Engels C, **Eisenhauer N**, Migunova V, Scheu S, Weisser WW, Schulze E-D and Schmid B (2010) *Biodiversity and belowground interactions mediate community invasion resistance against a tall herb invader*. ***Journal of Plant Ecology*** 3: 99-108. <https://doi.org/10.1093/jpe/rtq003>.

018 Eisenhauer N, Bessler H, Engels C, Gleixner G, Habekost M, Milcu A, Partsch S, Sabais ACW, Scherber C, Steinbeiss S, Weigelt A, Weisser WW and Scheu S (2010) *Plant diversity effects on soil microorganisms support the singular hypothesis*. ***Ecology*** 91: 485-496. <https://doi.org/10.1890/08-2338.1>.

017 Eisenhauer N, Hörsch V, Moeser J and Scheu S (2010) *Synergistic effects of microbial and animal decomposers on plant and herbivore performance*. ***Basic and Applied Ecology*** 11: 23-34. <https://doi.org/10.1016/j.baae.2009.11.001>.

016 Fründ H-C, Butt K, Capowiez Y, **Eisenhauer N**, Emmerling C, Ernst G, Potthoff M, Schädler M and Schrader S (2010) *Using earthworms as model organisms in the laboratory: Recommendations for experimental implementations*. ***Pedobiologia*** 53: 119-125. <https://doi.org/10.1016/j.pedobi.2009.07.002>.

2009 [8 papers]

015 Eisenhauer N, Milcu A, Sabais ACW, Bessler H, Weigelt A, Engels C and Scheu S (2009) *Plant community impacts on the structure of earthworm communities depend on season and change with time*. ***Soil Biology and Biochemistry*** 41: 2430-2443. <https://doi.org/10.1016/j.soilbio.2009.09.001>.

- 014 Eisenhauer N**, Milcu A, Sabais ACW and Scheu S (2009) *Earthworms enhance plant regrowth in a grassland plant diversity gradient*. **European Journal of Soil Biology** 45: 455-458. <https://doi.org/10.1016/j.ejsobi.2009.06.001>.
- 013 Eisenhauer N**, Straube S, Johnson EA, Parkinson D and Scheu S (2009) *Exotic ecosystem engineers change the emergence of plants from the seed bank of a deciduous forest*. **Ecosystems** 12: 1008-1016. <https://doi.org/10.1007/s10021-009-9275-z>.
- 012 Eisenhauer N**, Milcu A, Nitschke N, Sabais ACW, Scherber C and Scheu S (2009) *Earthworm and belowground competition effects on plant productivity in a plant diversity gradient*. **Oecologia** 161: 291-301. <https://doi.org/10.1007/s00442-009-1374-1>.
- 011** Straube D, Johnson EA, Parkinson D, Scheu S and **Eisenhauer N** (2009) *Nonlinearity of effects of invasive ecosystem engineers on abiotic soil properties and soil biota*. **Oikos** 118: 885-896. <https://doi.org/10.1111/j.1600-0706.2009.17405.x>.
- 010 Eisenhauer N**, Klier M, Partsch S, Sabais ACW, Scherber C, Weisser W and Scheu S (2009) *No interactive effects of pesticides and plant diversity on soil microbial biomass and respiration*. **Applied Soil Ecology** 42: 31-36. <https://doi.org/10.1016/j.apsoil.2009.01.005>.
- 009 Eisenhauer N**, König S, Sabais ACW, Renker C, Buscot F and Scheu S (2009) *Impacts of earthworms and arbuscular mycorrhizal fungi (Glomus intraradices) on plant performance are not interrelated*. **Soil Biology and Biochemistry** 41: 561-567. <https://doi.org/10.1016/j.soilbio.2008.12.017>.
- 008 Eisenhauer N**, Schuy M, Butenschoen O and Scheu S (2009) *Direct and indirect effects of endogeic earthworms on plant seeds*. **Pedobiologia** 52: 151-162. <https://doi.org/10.1016/j.pedobi.2008.07.002>.

2008 [6 papers]

- 007 Eisenhauer N**, Milcu A, Sabais ACW and Scheu S (2008) *Animal ecosystem engineers modulate the diversity-invasibility relationship*. **PLoS ONE** 3: e3489. <https://doi.org/10.1371/journal.pone.0003489>.
- 006 Eisenhauer N** and Scheu S (2008) *Earthworms as drivers of the competition between grasses and legumes*. **Soil Biology and Biochemistry** 40: 2650-2659. <https://doi.org/10.1016/j.soilbio.2008.07.010>. **Recommended by F1000**.

- 005** Habekost M, **Eisenhauer N**, Scheu S, Steinbeiss S, Weigelt A and Gleixner G (2008) *Seasonal changes in the soil microbial community in a grassland plant diversity gradient four years after establishment*. **Soil Biology and Biochemistry** 40: 2588-2595. <https://doi.org/10.1016/j.soilbio.2008.06.019>.
- 004 Eisenhauer N** and Scheu S (2008) *Invasibility of experimental grassland communities: The role of earthworms, plant functional group identity, and seed size*. **Oikos** 117: 1026-1036. <https://doi.org/10.1111/j.0030-1299.2008.16812.x>.
- 003 Eisenhauer N**, Straube D and Scheu S (2008) *Efficiency of two widespread non-destructive extraction methods under dry soil conditions for different ecological earthworm groups*. **European Journal of Soil Biology** 44: 141-145. <https://doi.org/10.1016/j.ejsobi.2007.10.002>.
- 002 Eisenhauer N**, Marhan S and Scheu S (2008) *Assessment of anecic behavior in selected earthworm species: Effects on wheat seed burial, seedling establishment, wheat growth and litter incorporation*. **Applied Soil Ecology** 38: 79-82. <https://doi.org/10.1016/j.apsoil.2007.07.002>.

2007 [1 paper]

- 001 Eisenhauer N**, Partsch S, Parkinson D and Scheu S (2007) *Invasion of a deciduous forest by earthworms: Changes in soil chemistry, microflora, microarthropods and vegetation*. **Soil Biology and Biochemistry** 39: 1099-1110. <https://doi.org/10.1016/j.soilbio.2006.12.019>.

Books, book chapters, and other publications [28]

- (X028)** Pörtner HO, Scholes RJ, Agard J, Archer E, Arneith A, Bai X, Barnes D, Burrows M, Chan L, Cheung WL, Diamond S, Donatti C, Duarte C, **Eisenhauer N**, Foden W, Gasalla MA, Handa C, Hickler T, Hoegh-Guldberg O, Ichii K, Jacob U, Insarov G, Kiessling W, Leadley P, Leemans R, Levin L, Lim M, Maharaj S, Managi S, Marquet PA, McElwee P, Midgley G, Oberdorff T, Obura D, Osman E, Pandit R, Pascual U, Pires APF, Popp A, Reyes-García V, Sankaran M, Settele J, Shin YJ, Sintayehu DW, Smith P, Steiner N, Strassburg B, Sukumar R, Trisos C, Val AL, Wu J, Aldrian E, Parmesan C, Pichs-Madruga R, Roberts DC, Rogers AD, Díaz S, Fischer M, Hashimoto S, Lavorel S, Wu N, Ngo HT (2021) *IPBES-*

IPCC co-sponsored workshop report synopsis on biodiversity and climate change; IPBES and IPCC, DOI:10.5281/zenodo.4782538.

- (X027) Pe'er G, Lakner S, Seppelt R, Bezák P, Bonn A, Concepción ED, Creutzig F, Daub C-H, Díaz M, Dieker P, Eisenhauer N, Hagedorn G, Hansjürgens B, Harrer-Puchner G, Herzon I, Hickler T, Jetzkowitz J, Kazakova Y, Kindlmann P, Kirchner M, Klein A-M, Linow S, Lomba Â, López-Bao JV, Metta M, Morales MB, Moreira F, Mupepele A-C, Navarro A, Oppermann R, Rac I, Röder N, Schäfer M, Sirami C, Streck C, Šumrada T, Tielbörger K, Underberg E, Wagener-Lohse G, & Baumann F (2020) The EU's Common Agriculture Policy and Sustainable Farming: A statement by scientists. Zenodo, <http://doi.org/10.5281/zenodo.4311314>.
- (X026) Jochum M & Eisenhauer N (2020) *Biodiversität im Untergrund – Forschung trifft auf Jugend. Nachrichten der GfÖ* 50: 13-14.
- (X025) FAO, ITPS, GSBI, SCBD and EC. 2020. *State of knowledge of soil biodiversity - Status, challenges and potentialities*, Report 2020. Rome, FAO. <https://doi.org/10.4060/cb1928en> (Eisenhauer N Coordinating Lead Author; Lead Author of Chapter 2. *Global diversity & distribution of soil biodiversity*; Contributing Author of Chapter 4. *Threats to soil biodiversity - global and regional trends*).
- (X024) Phillips HRP, Cameron EK, Eisenhauer N (2020) *Earthworms of the world. Frontiers for Young Minds*, in press.
- (X023) Eisenhauer N & Wirth C (2020) *Die Facetten und Bedeutung der Biodiversität. Natur Magazin* 34: 4-7.
- (X022) Eisenhauer N (2020) *Das Jena Experiment – Fragestellung, Ansatz, Erkenntnisse und Ausblick. Natur Magazin* 34: 8-9.
- (X021) Jochum M & Eisenhauer N (2020) *How introduced earthworms alter ecosystems. Frontiers for Young Minds* 8: article 534345. doi: 10.3389/frym.2020.534345.
- (X020) Sünemann M, Siebert J, Eisenhauer N (2020) *Double whammy for life in soil? The effects of drought and fertilizer use. Frontiers for Young Minds* 8: article 547630, doi: 10.3389/frym.2020.547630.
- (X019) Gottschall F, Cameron EK, Martins IS, Siebert J, Eisenhauer N (2020) *Can we save the beast by conserving the beauty? Frontiers for Young Minds* 8: 547740. doi: 10.3389/frym.2020.547740.

- (X018) Meyer S and **Eisenhauer N** (2020) *Artenverlust schmälert Ökosystemleistungen – Ökologische Experimente zeigen die Bedeutung von Artenvielfalt für Ökosystemleistungen*. **Zoll+** 36: 64-67.
- (X017) **Eisenhauer N** and Eisenhauer E (2020) *The “intestines of the soil”: the taxonomic and functional diversity of earthworms – a review for young ecologists*. **EcoEvoRxiv**, [doi:10.32942/osf.io/tfm5y](https://doi.org/10.32942/osf.io/tfm5y).
- (X016) **Eisenhauer N**, Bohan D, Dumbrell AJ (2019) *Mechanisms underlying the relationship between biodiversity and ecosystem function*. Advances in Ecological Research, Volume 61, Academic Press Elsevier.
- (X015) **Eisenhauer N** and Guerra CA (2019) *Mapa mundial de los nematodos del suelo*. Investigación y Ciencia (spanish version of Scientific American and part of Springer Nature Group).
- (X014) Gottschall F and **Eisenhauer N** (2019) *Der Blick unter den Tellerrand: Reicht es nur zu schützen, was wir sehen?* **Gesellschaft für Biologische Systematik Newsletter** 36: 22-23.
- (X013) **Eisenhauer N** and Vogel A (2018) *Artenvielfalt verbessert die Funktionsweise von Ökosystemen*. **bioNachrichten**, Ausgabe: August 2018, 36-37.
- (X012) Türke M and **Eisenhauer N** (2018) *Paradigmenwechsel: Von Klimakammern zu Biodiversitätskammern*. **Nachrichten der GfÖ**, Juni 2018, 9-11.
- (X011) **Eisenhauer N** (2018) *Artenverlust schmälert Ökosystemleistungen*. **Ökologie & Landbau** 2|2018: 50-51.
- (X010) Türke M, Feldmann R, Fürst B, Hartmann H, Herrmann M, Klotz S, Mathias G, Meldau S, Ottenbreit M, Reth S, Schädler M, Trogisch S, Buscot F, **Eisenhauer N** (2017) *Multitrophische Biodiversitätsmanipulation unter kontrollierten Umweltbedingungen im iDiv Ecotron*. **17. Gumpensteiner Lysimetertagung** 2017: 107-114.
- (X009) Cesarz S and **Eisenhauer N** (2016) *Oberirdisch-unterirdische Interaktionen*. **Acta Academiae Scientiarum** 15: 145-148.
- (X008) Kulmatiski A, Hines J, **Eisenhauer N** (2014) *Soil organism effects on grassland production and diversity*. In: Grasslands: Habitat Management, Impact of Plant Diversity and Conservation Strategies (Editors: Mariotte P and Kardol P), NOVA Publisher, New York.

- (X007) Eisenhauer N and Stefan Hotes (2012) *DAAD Science Tour zu Biodiversität und Klimawandel. Nachrichten der GfÖ*, Dezember 2012, 16-19.
- (X006) Eisenhauer N (2011) *Aboveground–belowground interactions in a changing world*. Habilitation thesis, Georg-August-University Göttingen, Germany.
- (X005) Asshoff R, Fricke A and Eisenhauer N (2010) *Regenwurm ist nicht gleich Regenwurm – Ein Experiment zur Verdeutlichung der unterschiedlichen Ökologie von Regenwürmern. Praxis der Naturwissenschaften Biologie in der Schule*.
- (X004) Eisenhauer N and Scheu S (2009) *Experimenting with earthworms in the field: The method and impacts of earthworms on the diversity-ecosystem functioning relationship. Berichte der Deutschen Bodenkundlichen Gesellschaft*, Tagungsbeitrag zu: Workshop Kommission III „Bodenökologie und Bodenbiologie“ der DBG; Titel der Tagung: Experimenting with earthworms (Trier), <http://www.dbges.de>.
- (X003) Eisenhauer N (2008) *Earthworms in a plant diversity gradient: Direct and indirect effects on plant competition and establishment*. PhD thesis (**summa cum laude**), Darmstadt University of Technology, Germany.
- (X002) Eisenhauer N and Scheu S (2005) *Invasion europäischer Lumbriciden in einen kanadischen Espenwald: Auswirkungen auf Bodenchemie, Mikroflora, Bodenmesofauna und Vegetation. Mitteilungen der Deutschen Bodenkundlichen Gesellschaft* 107: 7-8.
- (X001) Eisenhauer N (2005) *Invasion europäischer Lumbriciden in einen kanadischen Espenwald: Auswirkungen auf Vegetation, Bodenmesofauna, Mikroflora und Bodenchemie*. Diploma thesis (**with distinction**), Darmstadt University of Technology, Germany.

Grants

- | | |
|------|--|
| 2021 | PI in the German Centre for Integrative Biodiversity Research (iDiv) (3 years); with other 24 PIs, funded by the German Research Foundation (FTZ 118; 34,158,300 €) |
| 2021 | PI of the project <i>Illuminating biodiversity changes in the 'Black Box'</i> , funded by the German Research Foundation, Ei 862/31-1 (268,449 €; 3-year postdoc position) |
| 2021 | Gottfried Wilhelm Leibniz Prize 2021 by the German Research Foundation (2,500,000 €) |

- 2020 Co-PI in the project *Detection and attribution of changes in soil moisture and temperature as affected by plant diversity and climate*, funded by the iDiv Flexpool (~166,400 €; lead PI: Joachim Denzler, other co-PIs involved: Maha Shadaydeh, Anne Ebeling, Yuanyuan Huang; 3-year PhD position)
- 2020 Co-PI in the project *Diversity and scenario modelling of molecular markers of plant pathogens in plant, litter and soil metagenomes*, funded by the iDiv Flexpool (~168,000 €; lead PI: François Buscot; other co-PIs involved: Anna Heintz-Buschart, Carlos Guerra, Kirsten Küsel; 2-year postdoc position)
- 2020 Co-PI in the project *Using the new functional framework for root traits (Root Economics Space) to predict soil-borne fungal communities in grasslands (RESfun)*, funded by the iDiv Flexpool (~167,000 €; lead PIs: Alexandra Weigelt, Liesje Mommer; other co-PIs involved; 4-year PhD position)
- 2020 PI in the German Centre for Integrative Biodiversity Research (iDiv) (1 year); with other 24 PIs, funded by the German Research Foundation (FTZ 118, 11,110,000 €)
- 2019 PI in the project *Microbial diversity-ecosystem function relationships across environmental gradients*, funded by the German Research Foundation, Ei 862/27-1 (40,434 €; with Anna Heintz-Buschart, François Buscot, Kirsten Küsel & Carl-Eric Wegner; total amount funded: 202,170 €)
- 2019 Co-PI in the Jena Experiment (FOR 5000), *Subproject 06: Multi-trophic energy fluxes in soil food webs along plant diversity-productivity gradients*, funded by the German Research Foundation, Ei 862/26-1 (64,260 €; with Ulrich Brose & Stefan Scheu)
- 2019 PI in the Jena Experiment (FOR 5000), *Subproject Z: Central Coordination*, funded by the German Research Foundation, Ei 862/25-1 (470,639 €; with Anne Ebeling, Gerd Gleixner, Christiane Roscher & Alexandra Weigelt)
- 2019 PI in the Jena Experiment (FOR 5000), *Subproject 04: Plant diversity, plant history, and soil history effects on the temporal*

- dynamics of plant and soil activity*, funded by the German Research Foundation, Ei 862/24-1 (117,540 €; with Jes Hines & Christian Wirth)
- 2019 **Speaker of the Jena Experiment (FOR 5000)**, Coordination funds, funded by the German Research Foundation, Ei 862/23-1 (288,950 €)
- 2019 Co-PI in the project *Illuminating the dark side of restoration: Soil food web reassembly in regenerating forests* (with Dr. Andrew Barnes and others), funded by The Marsden Fund Council, New Zealand, Proposal No.: 18-UOW-087; Contract No.(s): UOW1803 (\$ 300,000 for 2019-2022)
- 2019 PI of the project *Invasive earthworm effects on plant functional traits and diversity*; funded by the German Research Foundation, Ei 862/18-1 (234,926 €)
- 2018 PI in the project *Global soil biodiversity and ecosystem function dynamics* in the Postdoc Flexible Pool Call 2018 of the German Centre for Integrative Biodiversity Research (iDiv); ~160,000 € for a 2-year postdoc position)
- 2018 Co-PI in the project *Global soil biodiversity and ecosystem function dynamics* in the Fast-track Flexible Pool Call 2018 of the German Centre for Integrative Biodiversity Research (iDiv); 7,500 €)
- 2018 PI in the project *Functional diversity of soil organisms* in the International Research Training Group TreeDi *Tree Diversity Interactions: The role of tree-tree interactions in local neighbourhoods in Chinese subtropical forests* (with Dr. Simone Cesarz; German Research Foundation; 260,045 €)
- 2016 Co-PI in the project *Soil microbial community assessment with portable mid-infrared and visible near-infrared spectroscopy* (PI: Prof. Michael Vohland; FlexPool funding in the German Centre for Integrative Biodiversity Research (iDiv); ~110,000 €)
- 2016 Experimental infrastructure funding for the MyDiv experiment; funded by German Centre for Integrative Biodiversity Research ((iDiv); ~30,000 €)

- 2016 Experimental infrastructure funding for the iDiv Ecotron facility; funded by the German Centre for Integrative Biodiversity Research (iDiv); ~93,000 €)
- 2016 PI in the German Centre for Integrative Biodiversity Research (iDiv) (4 years); with other 24 PIs, funded by the German Research Foundation (FTZ 118, ~35,500,000 €)
- 2016 sDiv workshop in German Centre for Integrative Biodiversity Research (iDiv) and position for synthesis postdoc (2 years), *sWorm*, Workshop Organizer, with Dr. Erin Cameron (~165,000 €)
- 2016 **ERC Starting Grant** funded by the European Research Council, Ecosystem responses to exotic earthworm invasion in northern North American forests (~1,500,000 €)
- 2015 PI in the Jena Experiment (FOR 1451), *Subproject Z: Coordination*, funded by the German Research Foundation, Ei 862/5-3 (196,929 €)
- 2015 **Speaker of the Jena Experiment (FOR 1451)**, *Coordination funds*, funded by the German Research Foundation, Ei 862/10-1 (136,569 €)
- 2015 PI in the Jena Experiment (FOR 1451), *Subproject 6: Consumer community structure and ecosystem functioning*, funded by the German Research Foundation, Ei 862/12-1 (97,310 €)
- 2015 PI in the Jena Experiment (FOR 1451), *Subproject 7: Context-dependence of biodiversity effects and real-world perspective*, funded by the German Research Foundation, Ei 862/13-1 (24,237 €)
- 2015 Postdoc funding (1 year) for scientific coordination of the Ecotron facility; funded by German Centre for Integrative Biodiversity Research (iDiv); ~64,000 €)
- 2014 **Heinz Maier Leibnitz Prize** by the German Research Foundation (20,000 €)
- 2014 sDiv workshop at the German Centre for Integrative Biodiversity Research (iDiv) *Biodiversity Changes*, Workshop Organizer, with Prof. Dr. Forest Isbell (travel funds; ~20,000 €)

- 2014 PI in *Tracing the spread of European earthworms into North America using molecular markers and field experiments* with Dr. Ina Schaefer; funded by the German Research Foundation, Ei 862/9-1 (~60,000 €)
- 2013 Postdoc funding (1 year) for synthesis work on the consequences of flood on plant communities differing in diversity; funded by the German Centre for Integrative Biodiversity Research (iDiv); postdoc funding plus travel funds; ~68,000 €)
- 2013 sDiv workshop at the German Centre for Integrative Biodiversity Research (iDiv), *Plant diversity effects on ecosystem resilience and recovery from perturbations*, PI with Dr. Forest Isbell (travel funds plus 9 months postdoc funding; ~66,000 €)
- 2013 PI in the Jena Experiment, *Subproject Z: Coordination*, funded by the German Research Foundation, Ei 862/5-2 (1,579,655 €)
- 2013 PI in the Jena Experiment, *Subproject 2: Plant–soil fauna interactions*, funded by the German Research Foundation, Ei 862/3-2 (155,453 €); Co-PI with Prof. S. Scheu (~150,000 €)
- 2012 **Emmy Noether group** funded by the German Science Foundation, Ei 862/2, *Aboveground–belowground interactions drive the relationship between plant diversity and ecosystem function* (877,440 €; for 5 years, 3 PhDs)
- 2011 National Science Foundation, USA, *The complexity of global change- interactive effects of warming, water availability, CO₂ and N on grassland ecosystem function* (US\$ 950,839; with Prof. P.B. Reich, Prof. Dr. S. Hobbie, Prof. Dr. R. Montgomery, Dr. R. Rich)
- 2011 Department of Energy, USA, *Climate change impacts at the temperate-boreal ecotone: interactions between warming and precipitation*, (~ US\$ 2,500,000; with Prof. P.B. Reich, Prof. Dr. S. Hobbie, Prof. Dr. R. Montgomery, Dr. R. Rich)
- 2011 German Academic Exchange Foundation, Travel expenses for the Annual Meeting of the Ecological Society of America in Austin, TX, USA (~800 €)
- 2011 Co-PI (with Dr. Alexandre Jousset) in *The role of plant diversity for the promotion of bacterial communities responsible for soil*

- suppressiveness against phytopathogens* (JO 935/2), funded by the German Research Foundation (168,600 €)
- 2011 Co-PI (with Dr. Olaf Butenschoen) in *A biodiversity approach to improve bioremediation strategies for PAH contaminated soils*, funded by the Federal Ministry of Education and Research, Germany (21,312 €)
- 2010 Post-Doc Scholarship by the German Research Foundation, Ei 862/1 (~100,000 €)
- 2010 PI in the Jena Experiment (with Prof. Dr. Stefan Scheu), *SP4: Plant – soil fauna interactions*, funded by the German Research Foundation (~280,000 €)
- 2004 Scholarship by the German Academic Exchange Foundation (~3,000 €)

Visiting scientists

- 2021 Marcel Ciobanu (Institute of Biological Research, Cluj-Napoca, Romania; 1 month)
- 2021 Jamie Leonard (Stanford University, CA, USA; 3 months)
- 2021 – Rine Christopher Reuben (Jashore University of Science and Technology: Jashore, Kulna, Bangladesh; 2 years); funded by the Alexander von Humboldt Foundation
- 2020 – 2021 Tianmiao Liu (Harbin Institute of Technology (HIT), China; 12 months); funded by China Scholarship Council (CSC)
- 2020 Marcel Ciobanu (Institute of Biological Research, Cluj-Napoca, Romania; 2 months)
- 2019 Marcel Ciobanu (Institute of Biological Research, Cluj-Napoca, Romania; 1 month)
- 2019 Catriona Macdonald (Hawkesbury Institute for the Environment, Western Sydney University, Penrith, Australia, 4 months)
- 2019 Brajesh Singh (Hawkesbury Institute for the Environment, Western Sydney University, Penrith, Australia, 4 months); funded by the Alexander von Humboldt Foundation

- 2019 – 2021 Antonio Archidona-Yuste (Institute for Sustainable Agriculture, CSIC, Córdoba, Spain; 2 years); funded by the Alexander von Humboldt Foundation
- 2019 Fernando Maestre (University of Alicante, Alicante, Spain, 1 month); funded by the sDiv sabbatical program
- 2019 George Brown (Embrapa Soja, C.P., Brazil, 1 month); funded by the ERC
- 2019 Concepción Cano Díaz (Universidad Rey Juan Carlos Madrid, Spain, 3 months); funded by the DAAD
- 2018 Fernando Maestre (Universidad Rey Juan Carlos Madrid, Spain, 1 month); funded by the sDiv sabbatical program
- 2018 – 2019 Darren Giling (Friedrich Schiller University Jena, Germany, 12 months)
- 2017 Tao Liu (University of the Chinese Academy of Sciences, China, 12 months)
- 2017 Cameron Wagg (Department of Evolutionary Biology and Environmental Studies, University of Zürich, Switzerland, 1 month)
- 2017 Erin Cameron (Metapopulation Research Centre, Department of Biosciences, University of Helsinki, Finland and Center for Macroecology, Evolution and Climate Change, University of Copenhagen, Denmark; 6 months).
- 2016 Alexandra Wright (Fashion Institute of Technology, Manhattan, USA; 1 month).
- 2016 Marcel Ciobanu (Institute of Biological Research, Cluj-Napoca, Romania; two times for 1.5 months each).
- 2015 Jara Domínguez (Instituto de Recursos Naturales y Agrobiología de Sevilla (IRNAS), Spain): Spatial relationships between trees and soil communities (4 months).
- 2015 Marcel Ciobanu (Institute of Biological Research, Cluj-Napoca, Romania): *Soil nematodes in plant-soil feedback effects* (1 month).
- 2014 – 2015 Gabriela Martucci do Couto (Universidade Federal Rural de Pernambuco, Recife, Brazil): *Soil biodiversity effects on*

- ecosystem functioning (12 months). Postdoc scholarship by the Brazilian Research Foundation.
- 2014 Perla Mellado (MPI for Biogeochemistry, Jena, Germany): *Linking plant diversity effects on soil processes by shifts in microbial communities* (2 months).
- 2014 Marcel Ciobanu (Institute of Biological Research, Cluj-Napoca, Romania): *Plant diversity effects on free-living soil nematodes* (3 months).
- 2014 Eliška Kuťáková (Department of Botany, Faculty of Science, Charles University Prague, Czech Republic): *Soil feedback effects as modified by decomposers* (2 months).
- 2013 – 2015 Mengyun Liu (South China Botanical Garden, the Chinese Academy of Sciences, Guangzhou, China): *Tree and decomposer diversity effects on soil carbon dynamics*. Funded by the University of Chinese Academy of Sciences.
- 2013 Marcel Ciobanu (Institute of Biological Research, Cluj-Napoca, Romania): *Impact of summer drought and plant diversity on free-living soil nematodes* (3 months). Funded by ExpeER.
- 2013 Ademir S. F. Araújo (Federal University of Piauí, Agricultural Science Center, Soil Quality Laboratory, Teresina, Brazil): *Impact of land degradation and restoration on soil organisms* (1 week). Funded by CNPq Brazil.
- 2012 – 2013 Gabriela Martucci do Couto (Universidade Federal Rural de Pernambuco, Recife, Brazil): *Soil microbial properties in different land renaturation treatments in Brazilian riparian ecosystems* (7 months). Funded by the Brazilian Sandwich Program.

Supervised postdocs and senior scientists (total number: 21)

Dr. Andrew Barnes (2016-2018), Dr. Léa Beaumelle (2017-2019), Dr. Simone Cesarz (2012-ongoing), Dr. Dylan Craven (2013-2018), Dr. Peter Dietrich (2021-ongoing), Dr. Anne Ebeling (2012-2014), Dr. Olga Ferlian (2014-ongoing), Dr. Darren Giling (2016-2019), Dr. Carlos António Guerra (2018-ongoing), Dr. Jes Hines (2013-ongoing), Dr. Yuanyuan Huang (2020-ongoing), Dr. Annette Jesch (2019-ongoing), Dr. Malte Jochum (2018-ongoing), Dr. Stephanie Jurburg (2018-ongoing), Dr. Helen Phillips

(2016-2020), Dr. Rine Christopher Reuben (2021-ongoing), Dr. Anja Schmidt (2018-2020), Dr. Madhav Prakash Thakur (2016-2017), Dr. Lise Thouvenot (2017-ongoing), Dr. Manfred Türke (2014-2018), Dr. Alexandra Wright (2016), Dr. Anja Vogel (2016-2019), Dr. Cameron Wagg (2013-2016)

Supervised theses



Supervisor / co-supervisor of 15 PhD theses

- 2021 – Huimin Yi: *Tree diversity effects on multitrophic energy fluxes* (Leipzig University)
- 2021 – Elisabeth Bönisch: *The role of mycorrhizal fungi in nutrient dynamics and plant-soil interactions* (Leipzig University)
- 2021 – Xiaoli Yang: *Effects of climate change and land use on soil nematode communities* (Leipzig University; with Martin Schädler)
- 2020 – Ana Elizabeth Bonato Asato: *Plant diversity, plant history, and soil history effects on the temporal dynamics of plant and soil activity* (Leipzig University)
- 2019 – Marie Sünemann: *Auswirkungen von Landnutzungseffekten auf die Funktionsweise von Böden im Klimawandel* (Leipzig University)
- 2018 – Guillaume Patoine: *Global patterns in soil microbial biomass* (Leipzig University)
- 2018 – Rémy Beugnon: *Functional diversity of soil organisms*, In: *Tree Diversity Interactions: The role of tree-tree interactions in local neighbourhoods in Chinese subtropical forests* (Leipzig University, with Simone Cesarz)
- 2017 – Christopher Hutengs: *Soil microbial community assessment with portable mid-infrared and visible to near-infrared spectroscopy* (Leipzig University, with Michael Vohland)
- 2016 – Felix Gottschall: *Tree diversity effects on the spatial and temporal variability of belowground processes* (Leipzig University)

- 2015 – Christian Ristok: *Plant and soil biodiversity effects on the plant metabolome* (Jena/Leipzig, with Nicole van Dam)
- 2015 – 2019 Rui Yin: *Effects of climate change and land use on the structure and function of soil fauna communities* (Leipzig University; with Martin Schädler)
- 2014 – 2020 Julia Siebert: *Global change effects on the activity and functional diversity of soil organisms* (Leipzig University; **awarded by Leipzig University: “Prize for outstanding PhD thesis”**)
- 2014 – 2018 Andreas Klein: *Tracing the spread of European earthworms into North America using molecular markers and field experiments* (Göttingen/Leipzig, with Ina Schaefer)
- 2013 – 2017 Katja Steinauer: *The role of plant traits in the relationship between plant diversity and the performance of soil organisms* (Leipzig University)
- 2013 – 2018 Nathaly Guerrero-Ramírez: *Good polycultures or bad monocultures – which mechanisms are driven positive biodiversity–ecosystem functioning relationships?* (Leipzig University)
- 2012 – 2016 Madhav Thakur: *Does global change intensify plant diversity effects on soil biota and subsequent feedback effects?* (Leipzig University)
- 2011 – 2015 Ellen Latz: *Effect of plant diversity on soil bacterial communities responsible for soil suppressiveness against phytopathogens* (Georg August University Göttingen, with Alexandre Jousset)
- 2010 – 2020 Tanja Strecker: *Plant – soil fauna interactions in a plant diversity gradient: the functional composition of soil food webs* (Georg August University Göttingen, with Stefan Scheu)



Supervisor of 64 diploma theses, master theses, bachelor theses, research practicals etc.

- 2020 – 2021 Romy Zeiss: *How (well) does European policy protect soil organisms? Challenges of protecting European belowground biodiversity beyond productive systems*
- 2019 – 2020 Christina Alt: *Belowground ecosystems in a changing environment – Soil microorganisms and soil structure under different land-use strategies and climate change*
- 2019 – 2020 Georg Hähn: *Litter quality and tree species richness effects on litter decomposition in subtropical forest*
- 2019 – 2020 Juliane Bormann: *Effects of aboveground invertebrate decline on soil food webs*
- 2019 – 2020 Sophia Findeisen: *The effects of invasive earthworms on belowground invertebrate communities and ecosystem functioning in North American forest ecosystems*
- 2019 – 2020 Lotte Horn: *Impacts of invasive earthworms on plant communities in North American forest ecosystems*
- 2019 Daniel Kähl: *Einfluss von Klimawandel und Landnutzung auf Spinnen*
- 2019 Selina Mehnert: *Bodenqualitäts- und Klimaeffekte auf Bodenökosystemfunktionen – Entzerrung mit Hilfe eines Phytometers*
- 2019 Romy Zeiss: *Impacts of earthworm invasion on aboveground invertebrate communities in North American forest ecosystems*
- 2019 Sabine Fürst: *Effects of aridity and herbivory on soil microbial properties in global drylands*
- 2019 Friederike Wölke: *Effects of aridity, herbivory, and plant communities on soil microbial properties in global drylands*
- 2018 – Jannis Beyer: *Attraction of soil nematodes by plant volatiles in the rhizosphere*
- 2018 – 2019 Esther-Marie Lintzel: *Effects of arbuscular mycorrhizal fungi and Trichoderma on plant-herbivore interactions on different maize genotypes*
- 2018 – 2019 Julia Kostin: *Land use and climate change effects on the stability of soil functions*

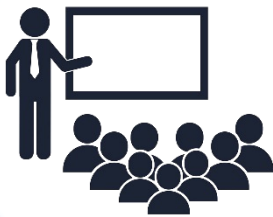
- 2017 – 2018 Till Enrique Newiger-Dous: *Tree diversity effects on decomposition and links to the functional diversity of soil microorganisms*
- 2017 – 2018 Sophie Davids: *Tree diversity effects on the functional diversity of soil microorganisms*
- 2017 – 2018 Anna-Lisa Schween: *Plant diversity and drought effects on plant phenology*
- 2017 – 2018 Manuela von Malotki: *Effects of invasive earthworms on Collembola populations and traits*
- 2017 Karl Andrzejek: *Der Einfluss der Baumhöhe auf die Dichte und Zusammensetzung von Nematoden in den Baumkronen von Eichen und Eschen des Leipziger Auwaldes*
- 2017 Domenica Reichert: *Anwendung von Schneckenkot als biologischer Pflanzenschutz vor Herbivoren im Feld*
- 2017 – 2018 Marie Sünneemann: *The effects of drought and nutrient addition on the activity and functional diversity of soil organisms*
- 2017 Justus Hennecke: *Plant invasions: experimental test of the enemy release hypothesis*
- 2017 Lilith Zoe Brüning: *Effects of management and habitat heterogeneity on amphibian communities in agroforestry systems in Colombia*
- 2017 – 2018 Tom Künne: *Effects of exotic earthworms on tree herbivory in two aspen species*
- 2016 – 2017 Vera Quast: *The role of mutualists in plant co-existence*
- 2016 Sascha Spalek: *Schneckenkot als biologischer Pflanzenschutz vor Herbivoren*
- 2016 – 2018 Guillaume Patoine: *Tree diversity effects on soil animal communities*
- 2015 – 2016 Inés Martin: *Interactive effects of warming, drought, CO₂, and N deposition on soil communities*
- 2015 – 2016 Maria Feustel: *Ausbreitung von Hornmilben (Oribatida) durch Schnecken im Auwald*

- 2015 – 2016 Katharina Stolze: *Einfluss von anözischen Regenwürmern auf mikrobielle Gemeinschaften in der Drilosphäre und hydrophobe Eigenschaften der Gangwände*
- 2015 – 2016 Peter Dietrich: *Underlying mechanisms of deteriorating plant monocultures over time*
- 2015 – 2016 Benjamin Schwarz: *Effects of warming on soil food web structure*
- 2015 Tom Künne: *Temperature and predation effects on the interaction between two Collembola species*
- 2014 – 2015 Anne Helling: *How does decomposer diversity affect mass loss of standardized root litter?*
- 2014 Annika Eva Schulz: *Comparing different nematode extraction techniques*
- 2014 Nicolas Philip Betsche: *Side effects of mustard solution for earthworm extraction on plant competition*
- 2014 Annabell Richter: *Plant diversity and soil animal effects on soil microbial communities and functions*
- 2013 – 2015 Susann Pabst: *The effect of elevated CO₂ and temperature on soil biota and the success of native vs invasive plants*
- 2013 – 2014 Daniela Wirsch: *Optimizing the bait lamina method*
- 2013 – 2015 Daniela Wagner: *Does plant diversity buffer effects of flooding on soil nematode communities?*
- 2013 Benjamin Schwarz: *Tree diversity and identity effects on earthworm communities*
- 2013 – 2014 Saskia Rennoch: *Effects of soil food web complexity on plant community composition and productivity*
- 2013 – 2014 Julia Siebert: *Effects of elevated temperature and altered precipitation regimes on soil food web structure*
- 2013 Julia Friese: *Litter decomposition as affected by the functional diversity of trees and decomposers*
- 2013 Ariane Zander: *Getting to the bottom: how deep go plant diversity effects on soil microorganisms?*
- 2013 Kristin Wagner: *Efficiency of different earthworm extraction methods*

- 2012 – 2014 Josephine Grenzer: *Collembola identity and diversity effects on soil microbial communities and ecosystem multifunctionality*
- 2012 – 2013 Katja Steinauer: *Interactive effects of warming and plant diversity on soil microbial community structure and functions*
- 2012 Yasemin Günay: *Transgressive overyielding of soil microbial biomass in a grassland plant diversity gradient*
- 2012 Katja Steinauer: *Effects of N deposition on soil organisms and functions in two deciduous forests*
- 2010 Wiebke Schulz: *Influence of biodiversity and resource complexity on the invasibility of bacterial communities*
- 2010 Karolin Thomisch: *Struktur des Bodennahrungsnetzes in einem Pflanzendiversitätsgradienten*
- 2009 – 2010 Florian Andreas Schwarzmüller: *Dynamic stability and interaction strengths in soil food-web motifs*
- 2009 – 2010 Ellen Latz: *Correlation between plant diversity and soil suppressiveness*
- 2009 Johanna Brenner: *Einfluss von Pflanzendiversität auf Abundanzen, Diversität und zeitliche Stabilität der Bodenmakrofauna einer experimentell angelegten Graslandgesellschaft*
- 2009 Stefan Radsick: *Haben Regenwürmer nährstoffreiche Nahrungsquellen? Der Fraß an Pflanzensamen und Keimlingen*
- 2008 Matthias Klier: *Nematoden in einem Pflanzendiversitätsgradienten: Einfluss auf Mikroorganismen und Pflanzenwachstum*
- 2008 Felix Schonert: *Einfluss von Pflanzendiversität auf die Bodenfauna einer experimentell angelegten Graslandgemeinschaft (awarded by the state of Hesse: „Best teachers‘ thesis in 2008“)*
- 2008 Svenja Gass: *Einfluss von Pflanzendiversität und funktioneller Identität auf Nematodengemeinschaften*
- 2007 – 2008 Daniela Straube: *Nonlinearity of effects of invasive ecosystem engineers on abiotic soil properties and soil biota*

- 2007 Christiane Schmidt: *Einfluss von funktionellen Pflanzengruppen und ausgesäeter Diversität, sowie Insektizidapplikation auf die Myriapodagruppen Chilopoda und Symphyla*
- 2007 Daniela Straube: *Efficiency of two widespread non-destructive extraction methods under dry soil conditions for different ecological earthworm groups*
- 2006 – 2008 Volker Hörsch: *Wechselwirkungen zwischen Zersettern (Lumbricidae: Aporetodea caliginosa und Lumbricus terrestris) und phytopathogenen Pilzen (Fusarium graminearum): Einfluss auf das Wachstum und den Befall von Weizen (Triticum aestivum) durch Pflanzenfresser (Rhopalosiphum padi)*
- 2006 – 2007 Martin Schuy: *Direkte und indirekte Wirkung von Regenwürmern auf die Keimung von Pflanzensamen*

Organized sessions / workshops



Organizer / chair of 22 conferences, sessions, workshops etc.

- 2021** ► Organization of the *Jena Experiment Retreat*, March 2021, Jena, Germany (with Anne Ebeling, online).
- 2021** ► Member of the Executive Defense Committee of the evaluation of iDiv's third funding phase, March 2021 (online).
- 2020** ► Organization of the *Jena Experiment Retreat*, October 2020, Jena, Germany (with Anne Ebeling).
- 2019** ► Head of the iDiv Annual Conference, Leipzig, Germany (with Rebecca Thier-Lange and the organizing committee).
- 2019** ► Organization of the on-site review of the proposed DFG Research Unit in the Jena Experiment *Biotic interactions, community assembly, and eco-evolutionary dynamics as drivers of long-term biodiversity–ecosystem functioning relationships*, Jena & Dornburg, Germany (with Anne Ebeling & Kathrin Greyer).

- 2018** ► Organization of the workshop *From predictive modelling to global scale monitoring of soil biodiversity and ecosystem function dynamics*, Leipzig, Germany (with Carlos Guerra).
- 2017** ► Organization of the *iDiv Summer School on Synthesizing and modelling biodiversity data*, Leipzig, Germany.
- 2017** ► Organization of the workshop *sWORM - A global soil biodiversity database and its application to data synthesis and theory development*, Leipzig, Germany.
- 2017** ► Organization of the workshop *Community assembly in BEF experiments*, Leipzig, Germany.
- 2017** ► Organization of the workshop *The Future of Biodiversity–Ecosystem Functioning Research*, Jena, Germany.
- 2017** ► Organization of the Symposium *15 Years of the Jena Experiment: the Past, the Present, and the Future*, Jena, Germany.
- 2015** ► Organization of the on-site review of the Research Unit of the Jena Experiment (FOR 1451), Jena, Germany.
- 2015** ► Organization of the session *Illuminating the black box: causes, consequences, and capture of interactions in soil* at the Annual Meeting of the GfÖ (Gesellschaft für Ökologie), Göttingen, Germany.
- 2014** ► Organization of the sDiv workshop *Biodiversity Changes* in Leipzig, Germany (with Forest Isbell).
- 2014** ► Organization of the sDiv workshop *Plant diversity effects on ecosystem resistance to and recovery from perturbations – workshop II* in Leipzig, Germany (with Dylan Craven and Forest Isbell).
- 2014** ► Organization of the session *Novel Soils: Aboveground-belowground interactions in a changing world* at the Annual meeting of the GfÖ (Gesellschaft für Ökologie), Hildesheim, Germany.
- 2014** ► Organization of the ‘*Network*’ workshop in Jena, Germany (with Jes Hines and Wolfgang Weisser).

- 2013** ► Organization of the sDiv workshop *Plant diversity effects on ecosystem resistance to and recovery from perturbations* in Leipzig, Germany (with Forest Isbell).
- 2013** ► Organization of the session *Microorganisms in biodiversity–ecosystem functioning research* at the Annual meeting of the GfÖ (Gesellschaft für Ökologie), Potsdam, Germany (with Kirsten Küsel).
- 2012** ► Organization of the session *The Jena Experiment* of the DAAD Science Tour 2012, Understanding Biodiversity and Climate Change, Jena, Germany (with Anne Ebeling).
- 2012** ► Organization of the session *Soil Ecology in a Changing World* at the Annual meeting of the GfÖ (Gesellschaft für Ökologie), Lüneburg, Germany (with Liliane Ruess).
- 2011** ► Organization of the session *Effects of invasive earthworms on biogeoscience processes* at the Annual meeting of the Canadian Geophysical Union, Banff, Kanada (with Edward A Johnson).

Talks



132 talks presented in seminars, conferences, & workshops

2021 (6 talks)

- *Linking global soil biodiversity to ecosystem functioning*. Global Soil Biodiversity Inspire Session at the Annual Meeting of the Ecological Society of America (ESA), virtual conference, USA (invited).
- *The MyDiv Experiment – Rationale & Design*. TreeDi PI meeting, Webinar.
- *Biodiversity–ecosystem functioning relationships in terrestrial ecosystems and the dark side of biodiversity*. Ecological principles underlying ecosystem function on land and in the ocean, Paris, France, Webinar (invited).

- ▶ *Bodenbiodiversität. 2. Faktencheck* Leitungstreffen, Leipzig, Germany, Webinar.
- ▶ *Plans in BioCoDe*. Science Strategy Board Meeting, Leipzig, Germany, Webinar.
- ▶ *Welcome Note*. Jena Experiment Retreat, Jena, Germany, Webinar.

2020 (15 talks)

- ▶ *The dark side of biodiversity*. Soil Ecology Seminar, Institute of Urban Environment, Chinese Academy of Sciences, Xiamen, China, Webinar (invited talk).
- ▶ *Soil biodiversity research at iDiv*. UFZ Local Committee Meeting, Webinar (invited talk).
- ▶ *Integrative research in the Jena Experiment*. Jena Experiment Lecture Series, Webinar.
- ▶ *The dark side of biodiversity*. Ecology Department Tamm Seminar, Tammsalen, Department of Ecology, Swedish University of Agricultural Sciences (SLU), Uppsala, Sweden, Webinar (invited talk).
- ▶ *Biodiversity Functions*. 5th iDiv Annual Conference, Webinar (**Keynote Talk**).
- ▶ *Welcome Note*. Jena Experiment Retreat, October 2020, Jena, Germany.
- ▶ *Plans in the MyDiv Project*. 10th TreeDivNet Meeting, Webinar.
- ▶ *Mycorrhizal Fungi as Mediators of Tree Diversity–Ecosystem Functioning Relationships (MyDiv)*. Interview by the European Research Council for an ERC Consolidator Grant (Ecology, Evolution and Environmental Biology (LS8)), Brussels, Belgium (invited; Webinar).
- ▶ *Plans in the MyDiv Project*. Experimental Interaction Ecology lab group seminar, Webinar.
- ▶ *The Rationale of the MyDiv Experiment*. Experimental Interaction Ecology lab group seminar, Webinar.
- ▶ *The dark side of biodiversity*. Triple E Lectures (Ecology, Energy, Environment), Institute of Environmental Sciences Leiden and the Centre for Sustainability, University of Leiden, The Netherlands, Webinar (invited talk).

- ▶ *FOR 5000 – Biotic interactions, community assembly, and eco-evolutionary dynamics as drivers of long-term BEF relationships.* Jena Experiment Retreat, Webinar.
- ▶ *Temporal trends in nematode diversity and the role of climate change - a paper idea.* Experimental Interaction Ecology lab group seminar, Webinar.
- ▶ *Land-use effects on soil organisms and processes in a future climate.* World Biodiversity Forum 2020, Davos, Switzerland (invited talk).
- ▶ *To be or not to be – authorship guidelines in the Experimental Interaction Ecology group.* EIE lab group seminar, iDiv, Leipzig, Germany.

2019 (12 talks)

- ▶ *Land-use effects on soil organisms and processes in a future climate.* Symposium: Above- and Belowground Biodiversity for Sustainable Ecosystems, Agroscope, Zurich, Switzerland (**Keynote Talk**).
- ▶ *Biotic interactions, community assembly, and eco-evolutionary dynamics as drivers of long-term BEF relationships.* Experimental Interaction Ecology Lab Group Seminar, Leipzig, Germany.
- ▶ *Biotic interactions, community assembly, and eco-evolutionary dynamics as drivers of long-term BEF relationships.* 4th iDiv Annual Conference, Leipzig, Germany.
- ▶ *Welcome Note.* iDiv Annual Conference, Leipzig, Germany.
- ▶ *Jena Experiment und iDiv Ecotron.* Ceremony of signing the Memorandum of Understanding by the science ministers of Saxony, Saxony-Anhalt, and Thuringia on the long-term funding of iDiv, Leipzig, Germany.
- ▶ *Biotic interactions, community assembly, and eco-evolutionary dynamics as drivers of long-term BEF relationships.* On-site review of the proposed DFG Research Unit in the Jena Experiment, Dornburg, Germany.
- ▶ *Research Area 3: Biodiversity and Ecosystem Functioning.* Visit of the Scientific Advisory Board of iDiv, Leipzig, Germany.
- ▶ *Insektensterben überall... auch unter unseren Füßen?* Leipziger Naturschutzwoche, Umweltbibliothek, Leipzig, Germany.

- ▶ *Biodiversitätsfunktionen – Was folgt für Ökosysteme.* Workshop BMBF representatives, Leipzig, Germany.
- ▶ *Functional biodiversity research in the Jena Experiment and beyond.* 1st Annual TreeDì PhD Conference, University of Chinese Academy of Sciences, Yanqi Lake Campus, Beijing, China (**Keynote Lecture**).
- ▶ *Da ist der Wurm drin.* Leipzig Book Fair, Leipzig, Germany.
- ▶ *Funktionelle Biodiversitätsforschung im Jena Experiment.* Öffentliche Ringvorlesung des Naturwissenschaftlichen Vereins zu Bremen zusammen mit der Universität Bremen, der Hochschule Bremen und dem Übersee-Museum zum Rahmenthema *Biodiversitätsforschung: ein Auslaufmodell?* Bremen, Germany

2018 (9 talks)

- ▶ *Ecosystem responses to exotic earthworm invasion.* 3rd iDiv Annual Conference, Leipzig, Germany.
- ▶ *Die dunkle Seite der Biodiversität.* Seniorenakademie, BBZ, Leipzig, Germany.
- ▶ *Global soil biodiversity and ecosystem function dynamics.* Soil Biodiversity Workshop, Leipzig, Germany.
- ▶ *Ecosystem responses to exotic earthworm invasion.* NEOBIOTA 2018; 10th International Conference on Biological Invasions: New Directions in Invasion Biology, Dublin, Ireland (**Keynote Talk**).
- ▶ *Insektensterben überall... auch unter unseren Füßen?* Öffentliche Vorträge von Wissenschaft und Naturschutz zur Eröffnung einer Ausstellung der UN-Dekade Biologische Vielfalt, Leipzig, Germany.
- ▶ *Ecosystem responses to exotic earthworm invasion.* 1st International Earthworm Congress, Shanghai, China.
- ▶ *Global soil biodiversity and ecosystem function dynamics.* Flexpool Evaluation Symposium, oral defence for postdoctoral research projects, German Centre for Integrative Biodiversity Research (iDiv), Leipzig, Germany
- ▶ *Land-use intensity alters climate change effects on the magnitude and phenology of soil biological activity.* BONARES Conference 2018 “Soil as a Sustainable Resource”, Berlin, Germany.

▶ *The dark side of biodiversity*. Seminar series BILL (Biomedical Lectures Leipzig), Leipzig, Germany (invited talk).

2017 (6 talks)

▶ *Effects of invasive earthworms on biogeochemical soil characteristics* at iDiv Summer School, Leipzig, Germany.

▶ *iDiv Summer School 2017 – Synthesising and modelling biodiversity data* at iDiv Summer School, Leipzig, Germany.

▶ *Das iDiv-Ecotron: Integration von Experiment und Theorie*. Plenary talk at the iDiv Ecotron inauguration, Bad Lauchstädt, Germany.

▶ *Community Assembly in Biodiversity–Ecosystem Experiments*. Opening talk at the workshop “Community assembly in BEF experiments”, Leipzig, Germany.

▶ *15 Years Jena Experiment: the Past, the Present, and the Future*. Opening talk at the Symposium “15 Years Jena Experiment: the Past, the Present, and the Future”, Jena, Germany.

▶ *The dark site of biodiversity*. Ökologisches Kolloquium des Instituts für Zoologie, Universität zu Köln, Köln, Germany (invited talk).

2016 (8 talks)

▶ *Embracing the complexity of aboveground-belowground networks and links to ecosystem functioning*. Wissenschaftliches Festkolloquium zu Ehren von Herrn Prof. Dr. François Buscot, Halle, Germany (invited talk).

▶ *The Jena Experiment 2016–2018*. Kick-off meeting Jena Experiment postdocs, Jena, Germany.

▶ *Da ist der Wurm drin!?* Science Notes, Leipzig, Germany.

▶ *Die dunkle Seite der Biodiversität*. Stipendiatentreffen DAAD (German Academic Exchange Service), Leipzig, Germany (invited talk).

▶ *Bridging iDiv and BIBS*. Kick-off meeting „Bridging in Biodiversity Science“ at Berlin-Brandenburg Institute of Advanced Biodiversity Research, Berlin, Germany (invited talk).

- ▶ *Die dunkle Seite der Biodiversität*. Bundeskongress des Verbands zur Förderung des MINT-Unterrichts (MNU), Leipzig, Germany (invited talk).
- ▶ *What happens after the submission of my paper?* yDiv Editors Workshop, Leipzig, Germany (invited talk).
- ▶ *The dark site of biodiversity*. Dresdner Zoologische Kolloquien, Senckenberg Naturhistorische Sammlungen Dresden, Dresden, Germany (invited talk).

2015 (11 talks)

- ▶ *iDiv – Wissenschaftliche Glanzlichter*. Festakt zum 3. Geburtstag von iDiv, Leipzig, Germany.
- ▶ *Biodiversity–ecosystem functioning relationships in a changing world*. 1st iDiv Annual Conference, Session Functions, Leipzig, Germany (**Keynote Talk**).
- ▶ *Aboveground–belowground interactions as drivers of biodiversity effects on ecosystem functions and services*. Symposium: Soils and Human Health: Linking Soil, Plants, and the Environment to Human and Animal Health. Annual meetings of the American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America with the Entomological Society of America with the title “*Synergy in Science: Partnering for Solutions*”. Minneapolis, MN, USA (invited symposium talk).
- ▶ *Plant–soil fauna interactions*. Workshop of the Research Unit of the Jena Experiment, Jena, Germany.
- ▶ *The dark side of biodiversity*. Inaugural lecture at Leipzig University, Leipzig, Germany.
- ▶ *Ecosystem Responses to Exotic Earthworm Invasion in Northern North American Forests*. Interview by the European Research Council for an ERC Starting Grant (Panel Evolutionary, Population and Environmental Biology), Brussels, Belgium (invited).
- ▶ *The Jena Experiment – General Introduction*. On-site review of the Research Unit of the Jena Experiment, Jena, Germany.
- ▶ *The design of the Jena Experiment*. yDiv Summer School on Synthesis, Leipzig, Germany.

- ▶ *Within-experiment synthesis in the Jena Experiment*. yDiv Summer School on Synthesis, Leipzig, Germany.
- ▶ *Experimental Interaction Ecology*. Scientific Advisory Board workshop, German Centre for Integrative Biodiversity Research (iDiv), Germany.
- ▶ *Structure and functioning of soil food webs*. Global Change Experimental Facility strategy workshop, UFZ Halle, Germany.

2014 (10 talks)

- ▶ *Die dunkle Seite der Biodiversität*. Science Notes, Tübingen, Germany (invited talk).
- ▶ *Plant diversity effects on the stability of plant biomass production*. sDiv workshop Plant diversity effects on ecosystem resistance to and recovery from perturbations – workshop II in Leipzig, Germany.
- ▶ *Pervasive effects of exotic earthworm invasion on the biodiversity of North American forests: a meta-analysis*. 10th International Symposium on Earthworm Ecology, Athens, GA, USA (**Plenary Talk**).
- ▶ *Aboveground–belowground interactions in a changing world*. Department of Plant Biology Seminar, University of Georgia, Athens, GA, USA (invited).
- ▶ *How to integrate new visions – Experimental Interaction Ecology*. iDiv workshop ‘How to integrate new visions at iDiv’, German Centre for Integrative Biodiversity Research (iDiv), Leipzig, Germany.
- ▶ *Plant diversity effects on soil microbial communities*. Workshop on forest diversity effects on ecosystem functioning, Royal Holloway University of London, Egham, UK (invited).
- ▶ *Identifying the drivers of belowground communities using structural equation modelling*. sDiv Workshop: ‘A framework to improve our understanding of the distribution of global soil biodiversity: establishing the first quantitative synthesis (sOILDIV)’, German Centre for Integrative Biodiversity Research (iDiv), Leipzig, Germany.
- ▶ *Flood effects on belowground consumers*. Workshop of the Research Consortium of the Jena Experiment, Jena, Germany.

▶ *Scaling of aboveground–belowground networks*. ‘Networks Workshop’, Friedrich Schiller University Jena, Germany.

▶ *The design of the Jena Experiment*. ‘Networks Workshop’, Friedrich Schiller University Jena, Germany.

2013 (13 talks)

▶ *Soil biodiversity – too redundant to be true?* Oberseminar Allgemeine Botanik und Pflanzenphysiologie, Friedrich Schiller University Jena, Germany (invited).

▶ *Stoichiometric responses of soil organisms to forest management*. Biodiversity Exploratories on-site review, Potsdam, Germany.

▶ *Unraveling the mechanisms underlying biodiversity–ecosystem functioning relationships using path analysis*. Biodiversity Exploratories workshop “Ecosystem Processes”, MPI-BGC Jena, Germany (invited **Keynote Talk**).

▶ *Plant diversity effects on soil food webs are stronger than those of elevated CO₂ and N deposition in a long-term grassland experiment*. Annual meeting of the GfÖ (Gesellschaft für Ökologie), Potsdam, Germany.

▶ *Plant diversity effects on soil food webs are stronger than those of elevated CO₂ and N deposition in a long-term grassland experiment*. Annual meeting of the Ecological Society of America (ESA), Minneapolis, USA.

▶ *Soil animals and some major processes they drive*. Ph.D. course at International Max Planck Research School for Global Biogeochemical Cycles, MPI for Biogeochemistry, Jena, Germany (invited).

▶ *Soil biodiversity – too redundant to be true?* Faculty Colloquium, Friedrich Schiller University Jena, Germany (invited).

▶ *Soil biodiversity – too redundant to be true?* POPBIO meeting, 26th Plant Population Biology Conference, Tartu, Estonia (invited **Keynote Talk**).

▶ *Aboveground – belowground interactions in a changing world and iDiv*. Symposium on ‘Integrative Biodiversity Research’, Full Professorship ‘Experimental Interaction Ecology’, German Centre for Integrative Biodiversity Research (iDiv), Germany.

- ▶ *Licht in den dunklen Boden: Steuergrößen und funktionelle Wichtigkeit von Biodiversität im Boden.* Leipzig Book Fair 2013, Leipzig, Germany (invited).
- ▶ *TreeDivNet going belowground?* Annual meeting of the TreeDivNet, Florence, Italy.
- ▶ *Soil biodiversity – too redundant to be true?* Seminar, UFZ Halle, Germany (invited).
- ▶ *Plant diversity effects on soil organisms and functions – putting the story into perspective.* Institute Seminar, Max-Planck-Institute for Chemical Ecology, Jena, Germany (invited).

2012 (7 talks)

- ▶ *The Jena Experiment – Results.* DAAD Science Tour 2012, Understanding Biodiversity and Climate Change, Jena, Germany (invited).
- ▶ *The Jena Experiment – Experimental design.* DAAD Science Tour 2012, Understanding Biodiversity and Climate Change, Jena, Germany (invited).
- ▶ *Aboveground–belowground interactions in a changing world.* Symposium W3 Professor for Ecology and Evolution of Animals, Technical University of Munich, Freising, Germany (invited).
- ▶ *Plant diversity effects on ecosystem functioning depend on decomposer diversity and identity.* Annual meeting of the GfÖ (Gesellschaft für Ökologie), Lüneburg, Germany.
- ▶ *Plant diversity effects on soil organisms and resulting feedback effects: the longer you look, the more you see.* Workshop 10 years Jena Experiment, Jena, Germany.
- ▶ *Soil biota and processes in a changing world.* Forest Ecology Seminar, University of Minnesota, MN, USA.
- ▶ *Effects of warming on soil biota in the B4WarmED experiment.* B4WarmED Workshop 2012, University of Minnesota, MN, USA.

2011 (8 talks)

- ▶ *Plant diversity effects on ecosystem functioning depend on decomposer diversity and identity.* Forest Ecology Seminar, University of Minnesota, MN, USA.
- ▶ *Aboveground–belowground interactions in a changing world.* Symposium W2 Professor for Terrestrial Ecology, Friedrich Schiller University Jena, Germany (invited).
- ▶ *Aboveground–belowground interactions as a source of complementarity effects in biodiversity experiments.* Annual Meeting of the Ecological Society of America, Austin, TX, USA (invited).
- ▶ *Global change below ground: impacts of elevated CO₂, N and summer drought on soil food webs and biodiversity.* Cedar Creek Summer Symposium, Cedar Creek Ecosystem Science Reserve, MN, USA (invited).
- ▶ *Interactive effects of global warming and “global worming”.* Annual Meeting of the Canadian Geophysical Union, Banff, Kanada.
- ▶ *Impacts of aboveground diversity loss on belowground processes.* B4WarmED Workshop, Cloquet Forestry Centre, MN, USA (invited).
- ▶ *Aboveground – belowground interactions in a changing world.* Forest Ecology Outburst, University of Minnesota, MN, USA (invited).
- ▶ *Belowground functional shifts.* B4WarmED Symposium, University of Minnesota, MN, USA.

2010 (7 talks)

- ▶ *Aboveground – belowground interactions in a changing world.* Forest Ecology Seminar, University of Minnesota, MN, USA.
- ▶ *Aboveground – belowground interactions in a changing world.* Prof. S. Hobbie’s lab group seminar, University of Minnesota, MN, USA (invited).
- ▶ *Importance of earthworm-seed interactions for the composition of plant communities: a review.* 5th International Symposium-Workshop on Frugivores and Seed Dispersal, Montpellier, France (invited **Plenary Talk**).
- ▶ *Impacts of aboveground diversity loss on belowground processes.* Soil Science Seminar, University of Nanjing, China (invited).
- ▶ *Linkage between aboveground and belowground diversity.* Colloquium of Soil Science, University of Hohenheim, Germany (invited).

▶ *Plant– soil fauna interactions*. Workshop of the Research Consortium of the Jena Experiment, Jena, Germany.

▶ *The role of soil fauna for plant performance and ecosystem functioning in a plant diversity gradient*. Workshop of the Research Consortium of the Jena Experiment, Jena, Germany.

2009 (5 talks)

▶ *Soil animals affect the diversity-ecosystem function relationship*. Oberseminar Biodiversität, University of Göttingen, Germany.

▶ *Soil animals affect the diversity-ecosystem function relationship*. Lunchtime Seminar, Imperial College London, Silwood Park, London, England (invited).

▶ *Additive Effekte primärer und sekundärer Zersetzer auf Winterweizen beeinflussen oberirdische Herbivore*. GfÖ Workshop: Biodiversität im Boden, Berlin, Germany.

▶ *Experimenting with earthworms in the field: The method and impacts of earthworms on the diversity-ecosystem functioning relationship*. DBG Workshop: Experimenting with earthworms, Trier, Germany (invited).

▶ *Do animals alter the diversity-stability relationship?* Workshop of the Research Consortium of the Jena Experiment, Jena, Germany.

2008 (7 talks)

▶ *Invasibility of experimental grassland communities: The role of plant diversity, plant functional group identity and earthworms*. EURECO-GfÖ meeting: Biodiversity in an ecosystem context, Leipzig, Germany.

▶ *Invasibility of experimental grassland communities: The role of plant diversity, plant functional group identity and earthworms*. GfÖ Workshop: Multitrophic Interactions, Göttingen, Germany.

▶ *Earthworms in a plant diversity gradient: Direct and indirect effects on plant competition and establishment*. PhD disputation, Darmstadt, Germany.

▶ *Direct effects of earthworms on plant communities*. Seminar: Probleme der Freilandökologie, Gießen, Germany (invited).

▶ *Split plot analysis*. Weekly Seminar, Darmstadt University of Technology.

▶ *Decomposers in the Jena Experiment*. Workshop of the Research Consortium of the Jena Experiment, Jena, Germany.

▶ *Multilevel stability in a plant diversity gradient*. Workshop of the Research Consortium of the Jena Experiment, Jena, Germany.

2007 (4 talks)

▶ *Earthworms as drivers of the competition between grasses and legumes*. 37th Annual Conference Ecological Society of Germany, Austria and Switzerland, Marburg, Germany.

▶ *Earthworms as drivers of the competition between grasses and legumes*. ESA/SER Joint Meeting, San José, California, USA.

▶ *The role of soil fauna for plant performance and ecosystem functioning in a plant diversity gradient*. Workshop of the Research Consortium of the Jena Experiment, Jena, Germany.

▶ *Soil fauna in the Jena Experiment*. Workshop of the Research Consortium of the Jena Experiment, Jena, Germany.

2006 (3 talks)

▶ *Invasion of European earthworms into a North American aspen forest: Effects on soil chemistry, microflora, fauna and vegetation*. The 8th International Symposium on Earthworm Ecology, Kraków, Poland.

▶ *The role of soil fauna for plant performance and ecosystem functioning in a plant diversity gradient*. Workshop of the Research Consortium of the Jena Experiment, Jena, Germany.

▶ *Earthworms as drivers of the competition between grasses and legumes*. Workshop of the Research Consortium of the Jena Experiment, Jena, Germany.

2005 (2 talks)

▶ *Invasion of European earthworms in a North American aspen forest: Effects on soil chemistry, microflora, fauna, and vegetation*. Workshop above ground and below ground: Decomposer and primary producer interactions, Joint Meeting of the GfÖ and DBG, Witzenhausen, Germany.

► *The role of soil fauna for plant performance and ecosystem functioning in a plant diversity gradient.* Workshop of the Research Consortium of the Jena Experiment, Jena, Germany.

Teaching



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| 2021 | Lecture “ <i>Introduction to scientific writing – structure & important elements</i> ” in the lecture series in the context of the “EIE Stats Course” for Bachelor and Master students (with many members of the Experimental Interaction Ecology group) |
| 2021 | Lecture “ <i>To be or not to be... an author of a scientific publication</i> ” in the lecture series in the context of the “Theoreticum” (BIO-219 & BCH-0903) for Master students (with many professors at Leipzig University) |
| 2020 | Lecture series “ <i>Integrative Biodiversity-Ecosystem Functioning Research and Data Handling Implications</i> ” for PhD students in the Jena Experiment (lead teacher; lecture with many researchers in the Jena Experiment) |
| 2020 – | Master module “ <i>Biodiversity and Ecosystem Functioning in Terrestrial Ecosystems</i> ” (11-BIO-209) (lecture with Prof. Dr. Alexandra Weigelt and Prof. Dr. Christian Wirth; practical with Prof. Dr. Alexandra Weigelt, Dr. Simone Cesarz, Dr. Katie Barry), 8 SWS |
| 2019 – | yDiv course „ <i>Introduction to Integrative Biodiversity Science</i> “ (lecture and seminar), 1 CP (2x in 2019, 1x in 2020) |
| 2019 – | Lecture and seminar in “ <i>Aktuelle Fragen in den Lebenswissenschaften I</i> ” (annual, every winter semester) |
| 2017 | Effects of invasive earthworms on biogeochemical soil characteristics – a meta-analysis, iDiv Summer School, 2 weeks |

- 2017 – *Einführung in die Methoden der wissenschaftlichen Arbeit*, practical and seminar for bachelor students (annual, every winter semester)
- 2016 – *Einführung in die Ökologie*, lecture 3 SWS for bachelor students (with Prof. Dr. Christian Wirth; annual, every winter semester)
- 2016 *Biodiversity Experiments*, yDiv graduate short course, 2 ECPS
- 2016 *Effects of invasive earthworms on soil biodiversity – a meta-analysis*, yDiv Summer School, 1 week
- 2015 *Tierökologie* at Leipzig University, lecture 2 SWS
- 2015 *Within and across-experiment synthesis*, yDiv Summer School, full-day course
- 2014 *Biodiversity Experiments*, yDiv graduate short course, 2 ECPS
- 2014 *Writing a scientific paper*, lecture, 1 SWS
- 2014 *Writing a scientific paper*, practical, 2 SWS
- 2013 *Ecological Experiments* at the FSU Jena, practical, 2 SWS
- 2013 *Experiments in Ecology* at the FSU Jena, seminar, 1 SWS
- 2013 *Experimental Ecology* at the FSU Jena, lecture, 2 SWS
- 2013 *How to write a paper* at the FSU Jena, practical, 2 SWS
- 2013 *Einführung in die Bodenökologie* at the FSU Jena, lecture 2 SWS
- 2013 *Grundpraktikum Ökologie*, 3 SWS
- 2013 *Vertiefungspraktikum Ökologie* at the FSU Jena
- 2013 *Kleine Ökologische Exkursionen* at the FSU Jena
- 2013 *Classic Papers in Ecology Seminar* at the FSU Jena, 2 SWS
- 2012 – 2014 *Methods in Field Ecology* at the FSU Jena
- 2012 – 2014 *Institute Seminar* at the FSU Jena, 1 SWS
- 2012 *Advanced Ecological Seminar* at the FSU Jena, 2 SWS
- 2012 Lecture/Project *Biodiversität* at the TUM, 4 SWS
- 2012 *Terrestrial Practical* (basic practical) at the TUM, 4 SWS
- 2012 *Research Practical in Terrestrial Ecology* at the TUM, 16 SWS
- 2008, 2012 Guest lectures on *Split-plot analysis*
- 2004 – 2009 Leader of fourteen zoological expeditions at the Darmstadt University of Technology and at the University of Göttingen

Miscellaneous

2011	Parental leave, 6 months
2009	Parental leave, 3 months
1986 –	I love soccer