

List of publications by Christian Körner

2018

- Bramer I, seventeen co-authors, Körner C (2018) Advances in monitoring and modelling climate at ecologically relevant scales. *Advances Ecol Res* 58:101- 161, doi.org/10.1016/bs.aecr.2017.12.005
- Cornwell WK and 22 co-authors (2018) Climate and soils together regulate photosynthetic carbon isotope discrimination within C3 plants worldwide. *Glob Ecol Biogeogr* 27:1056-1067 DOI: 10.1111/geb.12764
- Dietrich L, Hoch G, Kahmen A, Körner C (2018) Losing half the conductive area hardly impacts the water status of mature trees. *Scientific Reports* 8:15006, DOI:10.1038/s41598-018-33465-0
- Hiltbrunner E, Körner C (Hg) (2018) HOTSPOT FURKA - Biologische Vielfalt im Gebirge. Alpine Forschungs- und Ausbildungsstation Furka und Universität Basel. 60 Seiten, ISBN 978-3-033-06701-1
- Körner C (2018) Concepts in empirical plant ecology. *Grubb Review. J Plant Ecol Div* (in press) DOI: 10.1080/17550874.2018.1540021
- Körner C (2018) Comparative, long-term ecosystem monitoring across the Alps: Austrian Hohe Tauern National Park, South-Tyrol and Swiss central Alps. In: Bauch K (ed) *Proc Symp Res Protected Areas. Salzburger Nationalparkfonds, Mittersill, and Austrian Acad Sci, Vienna* p. 331-337
- Körner C (2018) Less is more: defining global mountains. In: Xu, J., Stevenson, A. & Su, Y. (eds) *Mountain Futures: Inspiration and Innovation from the World's Highlands*, Chap. 2. World Agroforestry Centre ICRAF and Kunming Institute of Botany. p 15-17
- Körner C (2018) Mountains as coupled social-ecological systems. In: Xu, J., Stevenson, A. & Su, Y. (eds) *Mountain Futures: Inspiration and Innovation from the World's Highlands*. Chap. 3. World Agroforestry Centre ICRAF and Kunming Institute of Botany. p 19-22
- Körner C (2018) Der Nationalpark Hohe Tauern und die Berge der Welt. *Magazin Nationalpark Hohe Tauern*, Sept. 2018, 8
- Körner C, Hiltbrunner E (2018) the 90 ways to describe plant temperature. *Persp Plant Ecol Evol Syst* 30:16-21
- Möhl P, Mösdorf MA, Dawes MA, Hagedorn F, Bebi P, Viglietti D, Freppaz M, Wipf S, Körner C, Thomas FM, Rixen C (2018) Twelve years of low nutrient input stimulates growth of trees and dwarf shrubs in the treeline ecotone. *J Ecol* (in press) DOI: 10.1111/1365-2745.13073
- Norozi J, Körner C (2018) A bioclimatic characterization of high elevation habitats in the Alborz mountains of Iran. *Alpine Botany* 128:1-11
- Van den Bergh T, Körner C, Hiltbrunner E (2018) *Alnus* shrub expansion increases evapotranspiration in the Swiss Alps. *Reg Env Change* 18:1375-1385

2017

- Bühlmann T, Caprez R, Hiltbrunner E, Körner C, Niklaus PA (2017) Nitrogen fixation by *Alnus* species boosts soil nitrous oxide emissions. *Eur J Soil Sci* 68:740-748
- Körner C (2017) A matter of tree longevity. *Science* 355:130-131
- Körner C (2017) Biologische Kohlenstoffspeicherung - Umsatz und Kapital nicht verwechseln. *Oekoskop* 2:22-25
- Körner C (2017) When meta-analysis fails: a case about stomata. *Glob Change Biol* 23:2533-2534
- Körner C (2017) *Alpine Treelines*, Electronics Industry, Beijing, ISBN 978-7-121-32089-7 (Chinese edition)
- Körner C, Jetz W, Paulsen J, Payne D, Rudmann-Maurer K, Spehn EM (2017) A global inventory of mountains for biogeographical applications. *Alpine Botany* 127:1-15
- Körner C, Paulsen J (2017) A geostatistical and bioclimatological comparison of the Central Great Caucasus and the Central Alps. In: Nakhutsrishvili G et al (eds) *Plant Diversity in the Central Great Caucasus: A quantitative assessment*. Springer International Publishing, Switzerland p. 1-9
- Nagelmüller S, Hiltbrunner E, Körner C (2017) Low temperature limits for root growth in alpine species are set by cell differentiation. *AoB Plants* 9, plx 054 doi: 10.1093/aobpla/plx054
- Spehn E, Körner C (2017) Climate change impacts on alpine nature. *Natur und Landschaft* 92:407-411

2016

- Bader MKF, Mildner M, Baumann C, Leuzinger S, Körner C (2016) Photosynthetic enhancement and diurnal stem and soil carbon fluxes in a mature Norway spruce stand under elevated CO₂. *Environmental and Experimental Botany* 124: 110-119
- Bühlmann T, Körner C, Hiltbrunner E (2016) Shrub expansion of *Alnus viridis* drives former montane grassland into nitrogen saturation. *Ecosystems* 19: 968-985
- Cornwell WK, Wright I, Turner J et al. (2016) A global dataset of leaf ¹³C values. *Dryad Digital Repository*: 10.5061/dryad.3jh61
- Klein T, Bader MKF, Leuzinger S, Mildner M, Schleppei P, Siegwolf RTW, Körner C (2016) Growth and carbon relations of mature *Picea abies* trees under 5 years of free-air CO₂ enrichment. *Journal of Ecology* 104:1720-1733
- Klein T, Siegwolf RTW, Körner C (2016) Belowground carbon trade among tall trees in a temperate forest. *Science* 352:342-344
- Körner C (2016) When it gets cold, plant size matters - a comment on tree line. *J Veg Sci* 27:6-7

Körner C (2016) Die Baumgrenze im Gebirge, der alpine Lebensraum und der Wert von Alpengärten für die biologische Forschung. Nationalparkverwaltung Harz (2016): 125 Jahre Brockengarten. Schriftenreihe aus dem Nationalpark Harz 14:14-20

Körner C, Basler D, Hoch G, Kollas C, Lenz A, Randin CF, Vitasse Y, Zimmermann NE (2016) Where, why and how? Explaining the low-temperature range limits of temperate tree species. *Journal of Ecology* 104:1076-1088

Körner C, Leuzinger S, Riedl S, Siegwolf RT, Streule L (2016) Carbon and nitrogen stable isotope signals for an entire alpine flora, based on herbarium samples. *Alpine Botany* 126:153-166

Lenz A, Hoch G, Körner C, Vitasse Y (2016) Convergence of leaf-out towards minimum risk of freezing damage in temperate trees. *Functional Ecology* 30:1480-1490

Nägelmüller S, Hiltbrunner E, Körner C (2016) Critically low soil temperatures for root growth and root morphology in three alpine plant species. *Alpine Botany* 126:11-21

Tang JW, Körner C, Muraoka H, Piao SL, Shen MG, Thackeray SJ, Yang X (2016) Emerging opportunities and challenges in phenology: a review. *Ecosphere* 7: e01436

Voelker SL, Brooks JR, Meinzer FC et al. (2016) A dynamic leaf gas-exchange strategy is conserved in woody plants under changing ambient CO₂: evidence from carbon isotope discrimination in paleo and CO₂ enrichment studies. *Global Change Biology* 22:889-902

2015

Bühlmann T, Hiltbrunner E, Körner C, Rihm B, Achermann B (2015) Induction of indirect N₂O and NO emissions by atmospheric nitrogen deposition in (semi-) natural ecosystems in Switzerland. *Atmos Environ* 103:94-101

Klein T, Randin C, Körner C (2015) Water availability predicts forest canopy height at the global scale. *Ecol Lett* 18:1311–1320

Körner C (2015) Klimagrenzen von Pflanzen. *Proclim-Flash* 63:1-3

Körner C (2015) Paradigm shift in plant growth control. *Curr Opin Plant Biol* 25:107-114

Körner C (2015) Bilder sprechen lassen: Peter Sitte (1929-2015). *BiuZ* 45:279

Körner C, Barnes BM, Callaghan TV (2015) Life on Arctic lands. In: TV Callaghan, H Saleva (eds.) *Interact: Stories of Arctic Science*, pp 102-111

Körner C (2015) Nicht jede Limitierung ist ein Stress – Sprache verrät falsche Konzepte. *BiuZ* 45:68–69

Leuzinger S, Fatichi S, Cusens J, Körner C, Niklaus PA (2015) The 'island effect' in terrestrial global change experiments: a problem with no solution? *AoB PLANTS* 7:plv092, doi: 10.1093/aobpla/plv092

Mildner M, Bader MKF, Baumann C, Körner C (2015) Respiratory fluxes and fine root responses in mature *Picea abies* trees exposed to elevated atmospheric CO₂ concentrations. *Biogeochemistry* 124:95-111

Obojes N, Bahn M, Tasser E, Walde J, Inauen N, Hiltbrunner E, Saccone P, Locht J, Clement JC, Lavorel S, Tappeiner U, Körner C (2015) Vegetation effects on the water balance of mountain grasslands depend on climatic conditions. *Ecohydrol* 8:552-569

Pointing SB, Büdel B, Convey P, Gillman LN, Körner C, Leuzinger S, Vincent WF (2015) Biogeography of photoautotrophs in the high polar biome. *Front Plant Sci* 6, art no. 692

Puri E, Hoch G, Körner C (2015) Defoliation reduces growth but not carbon reserves in Mediterranean *Pinus pinaster* trees. *Trees-Struct Funct* 29:1187-1196

Yang Y, Siegwolf RTW, Körner C (2015) Species specific and environment induced variation of delta-13C and delta-15N in alpine plants. *Front Plant Sci* 6, Article 423

2014

Dietrich L, Körner C (2014) Thermal imaging reveals massive heat accumulation in flowers across a broad spectrum of alpine taxa. *Alp Bot* 124:27-35

Hiltbrunner E, Aerts R, Bühlmann T, Huss-Danell K, Magnusson B, Myrold, DD, Reed SC, Sigurdsson BD, Körner C (2014) Ecological consequences of the expansion of N₂-fixing plants in cold biomes. *Oecologia* 176:11-24

Kadereit JW, Körner C, Kost B, Sonnewald U (2014) *Strasburger Lehrbuch der Pflanzenwissenschaften*. 37. Aufl., Springer, Berlin

Körner C (2014) Grundlagen der Pflanzenökologie. In: Kadereit JW *et al* (eds) *Strasburger Lehrbuch der Pflanzenwissenschaften*. 37. Aufl., Springer, Berlin, pp 741-757

Körner C (2014) Pflanzen im Lebensraum. In: Kadereit JW *et al* (eds) *Strasburger Lehrbuch der Pflanzenwissenschaften*. 37. Aufl., Springer, Berlin, pp 759-810

Körner C (2014) Populations- und Vegetationsökologie. In: Kadereit JW *et al* (eds) *Strasburger Lehrbuch der Pflanzenwissenschaften*. 37. Aufl., Springer, Berlin, pp 811-841

Körner C (2014) Vegetation de Erde. In: Kadereit JW *et al* (eds) *Strasburger Lehrbuch der Pflanzenwissenschaften*. 37. Aufl., Springer, Berlin, pp 843-884

Körner C (2014) Warum gibt es eine Waldgrenze? *BiuZ* 4:250-257

Körner C (2014) Mountain ecosystems in a changing environment. *eco.mont - J Protected Mountain Areas Research* 6:71-77

Klein T, Hoch G, Yakir D, Körner C (2014) Drought stress, growth and nonstructural carbohydrate dynamics of pine trees in a semi-arid forest. *Tree Physiol* 34:981-992

- Kollas C, Körner C, Randin CF (2014) Spring frost and growing season length co-control the cold range limits of broad-leaved trees *J Biogeogr* 41:773-783
- Kollas C, Randin CF, Vitasse Y, Körner C (2014) How accurately can minimum temperatures at the cold limits of tree species be extrapolated from weather station data? *Agr For Meteor* 184:257-266
- Lenz A, Vitasse Y, Hoch G, Körner C (2014) Growth and carbon relations of temperate deciduous tree species at their upper elevation range limit. *J Ecol* 102:1537-1548
- Mildner M, Bader MKF, Leuzinger S, Siegwolf RTW, Körner C (2014) Long-term ¹³C labeling provides evidence for temporal and spatial carbon allocation patterns in mature *Picea abies*. *Oecologia* 175:747-762
- Oehl F, Körner C (2014) Multiple mycorrhization at the coldest place known for Angiosperm plant life. *Alp Bot* 124:193-198
- Palacio S, Hoch G, Sala A, Körner C, Millard P (2014) Does carbon storage limit tree growth? *New Phytol* 201:1096-1100
- Paulsen J, Körner C (2014) A climate-based model to predict potential treeline position around the globe. *Alp Bot* 124:1-12
- Rehm EM, Lenz A, Hoch G, Körner C (2014) Spring patterns of freezing resistance and photosynthesis of two leaf phenotypes of *Hedera helix*. *Basic Appl Ecol* 15:543-550
- Schenker G, Lenz A, Körner C, Hoch G (2014) Physiological minimum temperatures for root growth in seven common European broad-leaved tree species. *Tree Physiol* 34:302-313
- Vitasse Y, Lenz A, Körner C (2014) The interaction between freezing tolerance and phenology in temperate deciduous trees. *Front Plant Sci* 5:541
- Vitasse Y, Lenz A, Hoch G, Körner C (2014) Earlier leaf-out rather than difference in freezing resistance puts juvenile trees at greater risk of freeze damage than adult trees. *J Ecol* 102:981-988

2013

- Arnone JA, Zaller JG, Hofer G, Schmid B, Körner C (2013) Loss of plant biodiversity eliminates stimulatory effect of elevated CO₂ on earthworm activity in grasslands. *Oecologia* 171:613-622
- Bader MFK, Leuzinger S, Keel SG, Siegwolf RTW, Hagedorn F, Schleppei P, Körner C (2013) Central European hardwood trees in a high- CO₂ future: synthesis of an 8-year forest canopy CO₂ enrichment project. *J Ecol* 101:1509-1519
- Bresinsky A, Körner C, Kadereit JW, Neuhaus G, Sonnewald U (2013) *Strasburger's plant sciences*. Springer, Berlin
- Cernusak LA, Winter K, Dalling JW, Holtum JAM, Jaramillo C, Körner C, Leakey ADB, Norby RJ, Poulter B, Turner BL, Wright SJ (2013) Tropical forest responses to increasing atmospheric CO₂: current knowledge and opportunities for future research. *Funct Plant Biol* 40:531-551
- Dawes MA, Hagedorn F, Handa IT, Streit K, Ekblad A, Rixen C, Körner C, Hättenschwiler S (2013) An alpine treeline in a carbon dioxide-rich world: synthesis of a nine-year free-air carbon dioxide enrichment study. *Oecologia* 171:623-637
- Haberl H, Schulze ED, Körner C, Law BE, Holtmark B, Luysaert S (2013) Response: complexities of sustainable forest use. *GCB Bioenergy* 5:1-2
- Hoch G, Siegwolf RTW, Keel SG, Körner C, Han QM (2013) Fruit production in three masting tree species does not rely on stored carbon reserves. *Oecologia* 171:653-662
- Huck C, Körner C, Hiltbrunner E (2013) Plant species dominance shifts across erosion edge-meadow transects in the Swiss Alps. *Oecologia* 171:693-703
- Körner C (2013) A mature forest canopy in a CO₂-rich future: An experiment at the Swiss Canopy Crane Research Site. In: M Lowman *et al* (eds) *Treetops at Risk: Challenges of Global Canopy Ecology and Conservation*, Springer NY. pp 141-145
- Körner C (2013) Alpine ecosystems. In: Levin SA (ed) *Encyclopedia of biodiversity* (2nd edition). Elsevier pp 148-157
- Körner C (2013) Growth controls photosynthesis - mostly. *Nova Acta Leopoldina NF* 114, 391:273-283
- Körner C (2013) Basics of plant ecology. In: Bresinsky A *et al* (eds) *Strasburger's plant sciences*. Springer, Berlin, pp 1043-1064
- Körner C (2013) Plant-environment interactions. In: Bresinsky A *et al* (eds) *Strasburger's plant sciences*. Springer, Berlin, pp 1065-1166
- Körner C (2013) Ecology of populations and vegetation. In: Bresinsky A *et al* (eds) *Strasburger's plant sciences*. Springer, Berlin, pp 1167-1215
- Körner C (2013) Vegetation of the earth. In: Bresinsky A *et al* (eds) *Strasburger's plant sciences*. Springer, Berlin, pp 1217-1271
- Körner C (2013) Mountain ecosystems in a changing environment. 5th Symposium for research in protected areas Mittersill (NP Hohe Tauern, Austria) 10 -12 June 2013. *Conf Vol*, pp 409-412
- Lenz A, Hoch G, Körner C (2013) Early season temperature controls cambial activity and total tree ring width at the alpine treeline. *Plant Ecol Divers* 6: 365-375
- Lenz A, Hoch G, Vitasse Y, Körner C (2013) European deciduous trees exhibit similar safety margins against damage by spring freeze events along elevational gradients. *New Phytol* 200:1166-1175
- McVicar TR, Körner C (2013) On the use of elevation, altitude, and height in the ecological and climatological literature. *Oecologia* 171:335-337
- Monteiro JAF, Körner C (2013) Leaf turnover and herbivory in the tall tussock grass *Festuca orthophylla* in the Andean Altiplano. *Alp Bot* 123:13-20

Normand S, Randin CF, Ohlemüller R, Bay C, Høye TT, Kjær, ED, Körner C, Lischke H, Maiorano L, Paulsen J, Pearman PB, Psomas, A, Treier UA, Zimmermann NE, Svenning JC (2013) A greener Greenland? Climatic potential and long-term constraints on the future expansion of trees and shrubs across a large Arctic region. *Philos Trans R Soc B-Biol Sci* 368: UNSP 20120479

Randin CF, Paulsen J, Vitasse, Kollas C, Wohlgemuth T, Zimmermann NE, Körner C (2013) Do the elevational limits of deciduous tree species match their thermal latitudinal limits? *Glob Ecol Biogeogr* 22:913-923

Sarris D, Siegwolf R, Körner C (2013) Inter- and intra-annual stable carbon and oxygen isotope signals in response to drought in Mediterranean pines. *Agr For Meteorol* 168:59-68

Vitasse Y, Hoch G, Randin CF, Lenz A, Kollas C, Scheepens JF, Körner C (2013) Elevational adaptation and plasticity in seedling phenology of temperate deciduous tree species. *Oecologia* 171:663-678

2012

Beier C, Beierkuhnlein C, Wohlgemuth T, Penuelas J, Emmett B, Körner C, de Boeck H, Christensen JH, Leuzinger S, Janssens IA, Hansen K (2012) Precipitation manipulation experiments – challenges and recommendations for the future. *Ecol Lett* 15:899-911

Caprez R, Niklaus PA, Körner C (2012) Forest soil respiration reflects plant productivity across a temperature gradient in the Alps. *Oecologia* 170:1143-54

Caprez R, Spehn E, Nakhutsrishvili G, Körner C (2012) Drought at erosion edges selects for a 'hidden' keystone species. *Plant Ecol Divers* 4:303-311

Fajardo A, Piper FI, Pfund L, Körner C, Hoch G (2012) Variation of mobile carbon reserves in trees at the alpine treeline ecotone is under environmental control. *New Phytol* 195:794-802

Haberl H, Körner C, Lauk C, Schmid-Staiger U, Smetacek V, Schulze ED, Thauer RK, Weiland P, Wilson K (2012) The availability and sustainability of biomass as an energy source. In: Anton C, Steinicke H (eds) *Bioenergy - Chances and limits*. German National Academy of Sciences Leopoldina, Halle, pp 9-42

Hoch G, Körner C (2012) Global patterns of mobile carbon stores in trees at the high-elevation tree line. *Global Ecol Biogeogr* 21:861-871

Inauen N, Körner C, Hiltbrunner E (2012) No growth stimulation by CO₂ enrichment in alpine glacier forefield plants. *Glob Change Biol* 18:985-999

Körner C (2012) *Alpine treelines: functional ecology of the global high elevation tree limits*. Springer, Basel

Körner C (2012) Biodiversität – Fundament für Leben und Ökosysteme. *Naturwiss Rundschau* 65:169-174

Körner C (2012) Biological diversity – the essence of life and ecosystem functioning. *Nova Acta Leopoldina* 116:147-159

Körner C (2012) Treelines will be understood once the functional difference between a tree and a shrub is. *Ambio* 41:197-206

Körner C (2012) Angebot oder Nachfrage: Was steuert das Pflanzenwachstum? *BiuZ* 42:238-243

Kollas C, Vitasse Y, Randin CF, Hoch G, Körner C (2012) Unrestricted quality of seeds in European broad-leaved tree species growing at the cold boundary of their distribution. *Ann Bot* 109:473-480

Schleppi P, Bucher-Wallin I, Hagedorn F, Körner C (2012) Increased nitrate availability in the soil of a mixed mature temperate forest subjected to elevated CO₂ concentration (canopy FACE). *Glob Change Biol* 18:757-768

Schulze ED, Körner C, Law BE, Haberl H, Luyssaert S (2012) Large-scale bioenergy from additional harvest of forest biomass is neither sustainable nor greenhouse gas neutral. *Glob Change Biol* 4:611-616

Schulze ED, Körner C (2012) Nettoprimärproduktion und Bioenergie. In: Anton C, Steinicke H (eds) *Bioenergy - Chances and limits*. German National Academy of Sciences Leopoldina, Halle, pp 90-101

Vitasse Y, Hoch G, Randin CF, Lenz A, Kollas C, Körner C (2012) Tree recruitment of European tree species at their current upper elevational limits in the Swiss Alps. *J Biogeogr* 39:1439-1449

2011

Alvarez-Uria P, Körner C (2011) Fine root traits in adult trees of evergreen and deciduous taxa from low and high elevation in the Alps. *Alp Bot* 121:107-112

Han Q, Kabeya D, Körner C, Hoch G (2011) Leaf traits, shoot growth and seed production in mature *Fagus sylvatica* trees after eight years' CO₂ enrichment. *Ann Bot* 107:1405-1411

Körner C (2011) Coldest places on earth with angiosperm plant life. *Alp Bot* 121:11-22

Körner C (2011) The grand challenges in functional plant ecology. *Front Plant Sci* 2, art no. 1

Körner C (2011) Leben auf dem Dom. *Die Alpen* 4:60

Körner C (2011) Survivre sur le Dom. *Les Alpes* 4:60

Körner C, Paulsen J, Spehn EM (2011) A definition of mountains and their bioclimatic belts for global comparisons of biodiversity data. *Alp Bot* 121:73-78

Leuzinger S, Hartmann A, Körner C (2011) Water relations of climbing ivy in a temperate forest. *Planta* 233:1087-1096

Leuzinger S, Luo Y, Beier C, Dieleman W, Vicca S, Körner C (2011) Do global change experiments overestimate impacts on terrestrial ecosystems? *TREE* 26:236-241

Monteiro JAF, Hiltbrunner E, Körner C (2011) Functional morphology and microclimate of *Festuca orthophylla*, the dominant tall tussock grass in the Andean Altiplano. *Flora* 206:387-396

Sarris D, Christodoulakis D, Körner C (2011) Impact of recent climatic change on growth of low elevation eastern Mediterranean forest trees. *Climatic Change* 106:203-223

Scherrer D, Bader MKF, Körner C (2011) Drought-sensitivity ranking of deciduous tree species based on thermal imaging of forest canopies. *Agr For Meteor* 151:1632-1640

Scherrer D, Körner C (2011) Topographically controlled thermal-habitat differentiation buffers alpine plant diversity against climate warming. *J Biogeogr* 38:406-416

2010

Bader MKF, Körner C (2010) No overall stimulation of soil respiration under mature deciduous forest trees after 7 years of CO₂ enrichment. *Glob Change Biol* 16:2830-2843

Bader MKF, Siegwolf R, Körner C (2010) Sustained enhancement of photosynthesis in mature deciduous forest trees after 8 years of free air CO₂ enrichment. *Planta* 232:1115-1125

Bignucolo O, Körner C (2010) Leaf miner activity and its effects on leaf chemistry in adult beech under elevated CO₂. *Basic Appl Ecol* 11:251-256

Calfapietra C, Ainsworth EA, Beier C, De Angelis P, Ellsworth DS, Godbold D, Hendrey GR, Hickler T, Hoosbeek MR, Karnosky DF, King J, Körner C, Leakey ADB, Lewin KF, Liberloo M, Long SP, Lukac M, Matyssek R, Miglietta F, Nagy J, Norby RJ, Oren R, Percy KE, Rogers A, Mugnozza GS, Stitt M, Taylor G, Ceulemans R (2010) Challenges in elevated CO₂ experiments on forests. *Trends Plant Sci* 15:5-10

Körner C (2010) Die Wirkung der Sonnenstrahlung auf das Leben in den Alpen. *Cratschla* 2:4-5

Körner C, Bader M (2010) *Der Wald in einer CO₂-reichen Welt*. Lehrmittelverlag Kanton Solothurn, Solothurn, ISBN 978-3-905470-50-5

Körner C, Basler D (2010) Phenology under global warming. *Science* 327:1461-1462

Leuzinger S, Körner C (2010) Rainfall distribution is the main driver of runoff under future CO₂-concentration in a temperate deciduous forest *Global Change Biol* 16:246-254

Leuzinger S, Vogt R, Körner C (2010) Tree surface temperature in an urban environment. *Agr For Meteor* 150:56-62

Martin C, Pohl M, Alewell C, Körner C, Rixen C (2010) Interrill erosion at disturbed alpine sites: Effects of plant functional diversity and vegetation cover. *Basic Appl Ecol* 11:619-626

Martin M, Gavazov K, Körner C, Hättenschwiler S, Rixen C (2010) Reduced early growing season freezing resistance in alpine treeline plants under elevated atmospheric CO₂. *Glob Change Biol* 16:1057-1070

Patty L, Halloy SRP, Hiltbrunner E, Körner C (2010) Biomass allocation in herbaceous plants under grazing impact in the high semi-arid Andes. *Flora* 205:695-703

Scherrer D, Körner C (2010) Infra-red thermometry of alpine landscapes challenges climatic warming projections. *Global Change Biol* 16:2602-2613

Scherrer D, Schmid S, Körner C (2010) Elevational species shifts in a warmer climate are overestimated when based on weather station data. *Int J Biometeorol* 55:645-654

2009

Bader M, Hiltbrunner E, Körner C (2009) Fine root responses of mature deciduous forest trees to free air carbon dioxide enrichment (FACE). *Funct Ecol* 23:913-921

Birmann K, Körner C (2009) Nitrogen status of conifer needles at the alpine treeline. *Plant Ecol Divers* 2:233-241

Hoch G, Körner C (2009) Growth and carbon relations of treeline forming conifers at constant vs. variable low temperatures. *J Ecol* 97:57-66

Körner C (2009) Biologische Kohlenstoffsinken: Umsatz und Kapital nicht verwechseln! *GAIA* 18:288-293

Körner C (2009) Global statistics of "mountain" and "alpine" research. *Mt Res Dev* 29:97-102

Körner C (2009) Mountain vegetation under environmental change. In: Jandl R, Borsdorf A, Van Miegroet H, Lackner R, Psenner R (eds) *Alpine Space — Man and Environment*, vol 7: Global change and sustainable development in mountain regions. Innsbruck Univ Press, Innsbruck, pp 25-30

Körner C (2009) Responses of humid tropical trees to rising CO₂. *Ann Rev Ecol Evol Syst* 40:61-79

Körner C, Alsos IG (2009) Freezing resistance in high arctic plant species of Svalbard in midsummer. *Bauhinia* 21:25-32

Monteiro JAF, Zotz G, Körner C (2009) Tropical epiphytes in a CO₂-rich world. *Acta Oecol* 35:60-68

Zhu Y, Siegwolf R, Durka W, Körner C (2009) Phylogenetically balanced evidence for structural and carbon isotope responses in plants along elevational gradients. *Oecologia* 162:853-863

2008

Ainsworth EA, Beier C, Calfapietra C, Ceulemans R, Durand-Tardif M, Farquhar GD, Godbold DL, Hendrey GR, Hickler T, Kaduk J, Karnosky DF, Kimball BA, Körner C, Koornneef M, Lafarge T, Leakey ADB, Lewin KF, Long SP, Manderscheid R, Mcneil DL, Mies TA, Miglietta F, Morgan JA, Nagy J, Norby RJ, Asshoff R, Keel SG, Siegwolf RTW, Körner C (2008) Tracing arthropod movement

in a deciduous forest canopy using stable isotopes. In: Floren A, Schmidl J (eds) Canopy arthropod research in Europe, Bioform, Nürnberg, pp 327-338

Bresinsky A, Körner C, Kadereit JW, Neuhaus G, Sonnewald U (2008) Strasburger - Lehrbuch der Botanik für Hochschulen. 36. Aufl, Spektrum, Heidelberg

Fourcaud T, Zhang X, Stokes A, Lambers H, Körner C (2008) Plant growth modelling and applications: The increasing importance of plant architecture in growth models. *Ann Bot* 101:1053-1063

Körner C (2008) Alpine ecosystems and the high-elevation treeline. In: Jørgensen SE, Fath BD (eds) *Ecosystems*, Vol 1 of *Encyclopedia of Ecology*. Elsevier, Oxford, pp 138-144

Körner C (2008) *Alpine plant life*. Chinese edition, Science Press, Beijing

Körner C (2008) *Alpine plant life*. Georgian edition, Ilia Chavchavadze State University Publishing, Tbilisi

Körner C (2008) Beyond counting: Biodiversity drives system Earth. *ESSP newsletter* 21:90-97

Körner C (2008) Global change affects ecosystems through biodiversity responses. *South African J Bot* 74:358-358

Körner C (2008) Winter crop growth at low temperature may hold the answer for alpine treeline formation. *Plant Ecol Divers* 1:3-11

Körner C, Stöcklin J, Reuther-Thiébaud L, Peláez-Riedl S (2008) Small differences in arrival time influence composition and productivity of plant communities. *New Phytol* 177:698-705

Lee YP, Fleming AJ, Körner C, Meins Jr F (2008) Differential expression of the CBF pathway and cell cycle-related genes in *Arabidopsis* accessions in response to chronic low-temperature exposure. *Plant Biol* 11:273-283

Norton RM, Percy KE, Rogers A, Soussana JF, Stitt M, Weigel HJ, White JW (2008) Next generation of elevated CO₂ experiments with crops: a critical investment for feeding the future world. *Plant Cell Environ* 31:1317-1324

Shi P, Hoch G, Körner C (2008) A test of the growth-limitation theory for alpine treeline formation in evergreen and deciduous taxa of the Eastern Himalayas. *Funct Ecol* 22:213-220

Yang Y, Körner C, Sun H (2008) The ecological significance of pubescence in *Saussurea medusa*, a high-elevation Himalayan "woolly plant". *Arct Antarct Alp Res* 40:250-255

2007

Alvarez-Uria P, Körner C (2007) Low temperature limits of root growth in deciduous and evergreen temperate tree species. *Funct Ecol* 21:211-218

Becker A, Körner C, Björnsen Gurung A, Haeberli W (2007) Selected issues from the Samedan GLOCHAMORE Workshop on altitudinal gradient studies. *Mt Res Dev* 27:82-86

Becker A, Körner C, Brun JJ, Guisan A, Tappeiner U (2007) Ecological and land use studies along elevational gradients. *Mt Res Dev* 27:58-65

Guisan A, Spehn E, Körner C (2007) Georeferenced biological databases – A tool for understanding mountain biodiversity. *MRI Newsletter* 8. *Mt Res Dev* 27:80-81

Keel SG, Pepin S, Leuzinger S, Körner C (2007) Stomatal conductance in mature deciduous forest trees exposed to elevated CO₂. *Trees* 21:151-159

Keel SG, Siegwolf RTW, Jäggi M, Körner C (2007) Rapid mixing between old and new C pools in the canopy of mature forest trees. *Plant Cell Environ* 30:963-972

Körner C (2007) *Alpine ecosystems*. *Encyclopedia of Life Sciences*, John Wiley

Körner C (2007) Climatic treelines: conventions, global patterns, causes. *Erdkunde* 61:316-324

Körner C (2007) Die Naturwissenschaft im Spannungsfeld zwischen individueller Kreativität und institutionellen Netzen. In: Berka W, Schmidinger H (eds): *Vom Nutzen der Wissenschaften*, Böhlau, Vienna, pp 169-181

Körner C (2007) The use of "altitude" in ecological research. *TREE* 22:569-574

Körner C, Donoghue M, Fabbro T, Häuser Ch, Nogues-Bravo D, Kalin Arroyo MT, Soberon J, Speers L, Spehn EM, Sun H, Tribsch A, Tykarski P, Zbinden N (2007) Creative use of mountain biodiversity databases: The Kazbegi Research Agenda of GMBA-DIVERSITAS. *Mt Res Dev* 27:276-281

Körner C, Morgan J, Norby R (2007) CO₂ fertilization: when, where, how much? In: Canadell JG, Pataki D, Pitelka L (eds) *Terrestrial ecosystems in a changing world series: Global change – The IGBP series*. Springer, Berlin, pp 9-21

Monson R, Brandl R, Gross K, Körner C, Osenberg C, Ylonen H (2007) *Oecologia* enters a new era. *Oecologia* 153:207-208

Pollierer MM, Langel R, Körner C, Maraun M, Scheu S (2007) The underestimated importance of belowground carbon input for forest soil animal food webs. *Ecol Lett* 10:729-736

Sarris D, Christodoulakis D, Körner C (2007) Recent decline in precipitation and tree growth in the eastern Mediterranean. *Glob Change Biol* 13:1187-1200

Sitte P, Weiler EW, Kadereit JW, Bresinsky A, Körner C (2007) 'Strasburger' (35. ed) Russian edition, Academia, Moscow

2006

Asshoff R, Zotz G, Körner C (2006) Growth and phenology of mature temperate forest trees in elevated CO₂. *Glob Change Biol* 12:1-14

- Asshoff R, Zotz G, Körner C (2006) No growth response of mature forest trees after long-term exposure to elevated CO₂. *Glob Change Biol* 12:848-861
- Handa T, Körner C, Hättenschwiler S (2006) Conifer stem growth at the altitudinal treeline in response to four years of CO₂ enrichment. *Glob Change Biol* 12:2417-2430
- Körner C (2006) CO₂-Anreicherung in der Luft – Sind Wald- und Holzwirtschaft mit betroffen? *Wald und Holz* 6:51-53
- Körner C (2006) Forests, biodiversity and CO₂: surprises are certain. *Biologist* 53:82-90
- Körner C (2006) Plant CO₂ responses: an issue of definition, time and resource supply. *New Phytol* 172:393-411
- Körner C (2006) The significance of temperature in plant life. In: Morrison JIL, Morecroft MD (eds) *Plant growth and climate change*, Blackwell, Oxford, pp 48-69
- Körner C, Hoch G (2006) A test of treeline theory on a montane permafrost island. *Arct Antarct Alp Res* 38:113-119
- Körner C, Nakhutsrishvili G, Spehn E (2006) High elevation land use, biodiversity, and ecosystem functioning. In: Spehn EM, Körner C (eds) *Land use change and mountain biodiversity*. CRC Publishers, Boca Raton, pp 3-21
- Körner C, Ohsawa M (2006) Mountain systems. In: Hassan R, Scholes R, Ash N (eds) *Ecosystem and human well-being: current state and trends*, vol. 1, Millennium Ecosystem Assessment, Island Press, Washington, pp 681-716
- Keel SG, Siegwolf TW, Körner C (2006) Canopy CO₂ enrichment permits tracing the fate of recently assimilated carbon in a mature deciduous forest. *New Phytol* 172:319-329
- Peili S, Körner C, Hoch G (2006) End of season carbon supply status of woody species near the treeline in western China. *Basic Appl Ecol* 7:370-377
- Poorter H, Pepin S, Rijkers T, Jong de Y, Evans JR, Körner C (2006) Construction costs, chemical composition and payback time of high- and low-irradiance leaves. *J Exp Bot* 57:355-371
- Shi P, Körner C, Hoch G (2006) End of season carbon supply status of woody species near the treeline in western China. *Basic Appl Ecol* 7:370-377
- Spehn EM, Liberman M, Körner C (eds) (2006) *Land use change and mountain biodiversity*. CRC Publishers, Boca Raton
- Spehn EM, Liberman M, Körner C (2006) Fire and grazing – a synthesis of human impacts on highland biodiversity. In: Spehn EM, Liberman M, Körner C (eds) *Land use change and mountain biodiversity*. CRC Publishers, Boca Raton, pp 337-347
- Zotz G, Cueni N, Körner C (2006) In situ growth stimulation of a temperate zone liana (*Hedera helix*) in elevated CO₂. *Funct Ecol* 20:763-769

2005

- Berner D, Blanckenhorn WU, Körner C (2005) Grasshoppers cope with low host plant quality by compensating feeding and food selection: N limitation challenged. *Oikos* 111:525-533
- Hoch G, Koerner C (2005) Growth, demography and carbon relations of *Polylophus* trees at the world's highest treeline. *Funct Ecol* 19: 941-951
- Chevillat VS, Siegwolf RTW, Pepin S, Körner C (2005) Tissue-specific variation of $\delta^{13}C$ in mature canopy trees in a temperate forest in central Europe. *Basic Appl Ecol* 6:519-534
- Handa IT, Körner C, Hättenschwiler S (2005) A test of treeline carbon limitation hypothesis by in situ CO₂ enrichment and defoliation. *Ecology* 86:1288-1300
- Hiltbrunner E, Schwikowski M, Körner C (2005) Inorganic nitrogen storage in alpine snow pack in the Central Alps (Switzerland). *Atmos Environ* 39:2249-2259
- Körner C (2005) An introduction to the functional diversity of temperate forest trees. In: Scherer-Lorenzen M, Körner C, Schulze ED (eds) *Forest diversity and function. Temperate and boreal systems*. *Ecol Studies* 176, Springer, Berlin, pp 13-37
- Körner C (2005) Les changements atmosphériques affectent la biodiversité. In: Barbault R, Le Maho Y (eds) *Biodiversité, science et gouvernance*. Muséum national d'Histoire naturelle, Paris, pp 131-137
- Körner C (2005) The green cover of mountains in a changing environment. In: Huber UM, Bugmann HKM, Reaser MA (eds) *Global change and mountain regions. An overview of current knowledge*. Springer, Berlin, pp 367-375
- Körner C (2005) Wald, Biodiversität und CO₂ - Überraschungen sind sicher. *Naturwiss Rundschau* 58:61-69
- Körner C, Asshoff R, Bignucolo O, Hättenschwiler S, Keel SG, Peláez-Riedl S, Pepin S, Siegwolf RTW, Zotz G (2005) Carbon Flux and Growth in Mature Deciduous Forest Trees Exposed to Elevated CO₂. *Science* 309:1360-1362
- Körner C, Sarris D, Christodoulakis D (2005) Long-term increase in climatic dryness in the East-Mediterranean as evidenced for the Island of Samos. *Reg Environ Change* 5:27-36
- Leuzinger S, Zotz G, Asshoff R, Körner C (2005) Responses of deciduous forest trees to severe drought in Central Europe. *Tree Physiol* 25:641-650
- Scherer-Lorenzen M, Körner C, Schulze ED (eds) (2005) *Forest diversity and function. Temperate and boreal systems*. *Ecol Studies* 176, Springer, Berlin
- Scherer-Lorenzen M, Körner C, Schulze ED (2005) The functional significance of forest diversity: the starting point. In: Scherer-Lorenzen M, Körner C, Schulze ED (eds) *Forest diversity and function. Temperate and boreal systems*. *Ecological Studies* 176, Springer, Berlin, pp 3-12

Sitte P, Weiler EW, Kadereit JW, Bresinsky A, Körner C (2005) Strasburger: Tratado de Botanica (35th ed). Spanish edition, Omega, Barcelona

Spehn EM, Körner C (2005) A global assessment of mountain biodiversity and its function. In: Huber UM, Bugmann HKM, Reasober MA (eds) Global change and mountain regions. An overview of current knowledge. Springer, Berlin, pp 393-400

Würth MKR, Peláez-Riedl S, Wright SJ, Körner C (2005) Non-structural carbohydrate pools in a tropical forest. *Oecologia* 143:11-24

Zotz G, Pepin S, Körner C (2005) No down-regulation of leaf photosynthesis in mature forest trees after long-term exposure to elevated CO₂. *Plant Biol* 7:369-374.

2004

Fabbro T, Körner C (2004) Altitudinal differences in flower traits and reproductive allocation. *Flora* 199:70-81

Häring DA, Körner C (2004) CO₂ enrichment reduces the relative contribution of latex and latex-related hydrocarbons to biomass in *Euphorbia lathyris*. *Plant Cell Environ* 27:209-217

Körner C (2004) CO₂-Zunahme und der Stoffwechsel von Pflanzen. *Naturwiss Rundschau* 57:17-18

Körner C (2004) Individuals have limitations, not communities – A response to Marrs, Weiher and Lortie *et al.* *J Veg Sci* 15:581-582

Körner C (2004) Mountain biodiversity, its causes and function. *Ambio*, Special Report 13:11-17

Körner C (2004) Through enhanced tree dynamics carbon dioxide enrichment may cause tropical forests to lose carbon. *Phil Trans R Soc Lond Ser B-Biol Sci* 359:493-498

Niklaus PA, Körner C (2004) Synthesis of a six-year study of calcareous grassland responses to in situ CO₂ enrichment. *Ecol Monogr* 74:491-511

Körner C, Paulsen J (2004) A world-wide study of high altitude treeline temperatures. *J Biogeogr* 31:713-732

Morgan JA, Pataki DE, Körner C, Clark H, Del Grosso SJ, Grünzweig JM, Knapp AK, Mosier AR, Newton PCD, Niklaus PA, Nippert JB, Nowak RS, Parton WJ, Polley HW, Shaw MR (2004) Water relations in grassland and desert ecosystems exposed to elevated atmospheric CO₂. *Oecologia* 140:11-25

Niklaus PA, Körner C (2004) Synthesis of a six-year study of calcareous grassland responses to in situ CO₂ enrichment. *Ecol Monogr* 74: 491-511

Steinmann K, Siegwolf RTW, Saurer M, Körner C (2004) Carbon fluxes to the soil in a mature temperate forest assessed by ¹³C isotope tracing. *Oecologia* 141:489-501

2003

Bahn M, Körner C (2003) Recent increases in summit flora caused by warming in the Alps. In: Nagy L, Grabherr G, Körner C, Thompson DBA (eds) Alpine biodiversity in Europe. Springer, Berlin. pp 437-441

Cech PG, Pepin S, Körner C (2003) Elevated CO₂ reduces sap flux in mature deciduous forest trees. *Oecologia* 137:258-268

Grünzweig JM, Körner C (2003) Differential phosphorus and nitrogen effects drive species and community responses to elevated CO₂ in semi-arid grassland. *Funct Ecol* 17:766-777

Hättenschwiler S, Körner C (2003) Does elevated CO₂ facilitate naturalization of the non-indigenous *Prunus laurocerasus* in Swiss temperate forests? *Funct Ecol* 17:778-785

Hoch G, Körner C (2003) The carbon charging of pines at the climatic treeline: a global comparison. *Oecologia* 135:10-21

Hoch G, Richter A, Körner C (2003) Non-structural carbon compounds in temperate forest trees. *Plant Cell Environ* 26:1067-1081

Körner C (2003) Alpine plant life: functional plant ecology of high mountain ecosystems. 2nd edition, Springer, Heidelberg

Körner C (2003) Analyzing carbon flux measurements. *Response. Science* 301:916-917

Körner C (2003) Carbon limitation in trees. Tansley lecture. *J Ecol* 91:4-17

Körner C (2003) Ecological impacts of atmospheric CO₂ enrichment on terrestrial ecosystems. *Phil Trans R Soc Lond* 361:2023-2041

Körner C (2003) Ein morphologiebedingter Wärmemangel bestimmt die Waldgrenze. *Coll Geogr* 26:114-119

Körner C (2003) Limitation and stress - always or never? *J Veg Sci* 14:141-143

Körner C (2003) Nutrients and sink activity drive plant CO₂ responses - caution with literature-based analysis. *New Phytol* 159:537-538

Körner C (2003) Slow in, rapid out - carbon flux studies and Kyoto targets. *Science* 300:1242-1243

Körner C, Paulsen J, Peláez-Riedl S (2003) A bioclimatic characterisation of Europe's alpine areas. In: Nagy L, Grabherr G, Körner C, Thompson DBA (eds) Alpine biodiversity in Europe. Springer, Berlin, pp 13-28

Körner C, Zotz G (2003) Cranes in temperate forests; Basel, Switzerland. In: Y Basset, V Horlyck, SJ Wright (eds) Studying forest canopies from above: The International Canopy Crane Network. Smithsonian Tropical Research Institute and UNEP, Panama. pp 67-70

Keller F, Körner C (2003) The role of photoperiodism in alpine plant development. *Arct Antarct Alp Res* 35:361-368

Nagy L, Grabherr G, Körner C, Thompson DBA (2003) Alpine biodiversity in Europe. *Ecol Studies* vol 167, 577 pp. Springer, Berlin

Ozanne, CMP, Anhof D, Boulter L, Keller M, Kitching RL, Körner C, Meinzer FC, Mitchell AW, Nakashizuka T, Silva Dias PL, Stork NE, Wright SJ, Yoshimura M (2003) Biodiversity meets the atmosphere: a global view of forest canopies. *Science* 301:183-186

Spinnler D, Egli Ph, Körner C (2003) Provenance effects and allometry in beech and spruce under elevated CO₂ and nitrogen on two different forest soils. *Basic Appl Ecol* 4:467-478

Thürig B, Körner C, Stöcklin J (2003) Seed production and seed quality in a calcareous grassland in elevated CO₂. *Glob Change Biol* 9:873-884

Zimmer W, Steinbrecher R, Körner C, Schnitzler JP (2003) The process-based SIM-BIM model: towards more realistic prediction of isoprene emissions from adult *Quercus petraea* forest trees. *Atmos Environ* 37:1665-1671

2002

Beismann H, Schweingruber FH, Speck T, Körner C (2002) Mechanical properties of spruce and beech wood grown in elevated CO₂. *Trees* 16:511-518

Granados J, Körner C (2002) In deep shade, elevated CO₂ increases the vigor of tropical climbing plants. *Global Change Biol* 8:1109-1117

Hättenschwiler S, Handa IT, Egli L, Asshoff R, Ammann W, Körner C (2002) Atmospheric CO₂ enrichment of alpine treeline conifers. *New Phytol* 156:363-375

Heer C, Körner C (2002) High elevation pioneer plants are sensitive to mineral nutrient addition. *Basic Appl Ecol* 3:39-47

Hoch G, Popp M, Körner C (2002) Altitudinal increase of mobile carbon pools in *Pinus cembra* suggests sink limitation of growth at the Swiss treeline. *Oikos* 98:361-374

Körner C (2002) Basel canopy crane, Switzerland. In: Mitchell AW, Secoy K, Jackson T (eds) *Global canopy handbook*. Global Canopy Foundation, Oxford, pp 42-46

Körner C (2002) CO₂ Enrichment: Effects on Ecosystems. In: Munn T (ed) *Encyclopedia of Global Environmental Change*, Vol 2. John Wiley & Sons, Ltd p. 215-224

Körner C (2002) Grassland in a CO₂-enriched world. In: Durand JL et al. (eds) *Multi-function grasslands. Quality forages, animal products and landscapes*. Proc 19th Meeting EGF, La Rochelle, AFPP, Versailles, pp 611-624

Körner C (2002) Mountain biodiversity, its causes and function: an overview. In: Körner C, Spehn EM (eds) *Mountain biodiversity. A global assessment*. Parthenon, Boca Raton, pp 3-20

Körner C (2002) Umweltforschung: zwischen exakter Kuriosität und verschwommener Realität. *GAIA* 11:48

Körner C (2002) Alpine ecosystems. In: *Encyclop Life Sci*, Vol 1. Nature Publ Group, London, pp 392-396

Körner C (2002) Erhöhtes CO₂-Angebot beeinflusst die Biodiversität. *Schrift Ver Verbr naturwiss Kenntn Wien* 137-140:47-62

Körner C (2002) Hundred years after A.F.W. Schimper - a founder of functional plant ecology. *Verh Ges Ökol* 31:7-9

Körner C (2002) Treelines in a changing world. *Centralbl Forstwes* 119:307-308

Körner C, Spehn EM (eds) (2002) *Mountain biodiversity. A global assessment*. Parthenon, Boca Raton

Li MH, Hoch G, Körner C (2002) Source/sink removal affects mobile carbohydrates in *Pinus cembra* at the Swiss treeline. *Trees* 16:331-337

Pepin S, Körner C (2002) Web-FACE: a new canopy free air CO₂ enrichment system for tall forest trees in mature forests. *Oecologia*, 133:1-9

Sitte P, Weiler EW, Kadereit JW, Bresinsky A, Körner C (2002) *Strasburger. Lehrbuch der Botanik* (35th ed). Spektrum, Heidelberg

Spehn EM, Messerli B, Körner C (2002) A global assessment of mountain biodiversity: synthesis. In: Körner C, Spehn EM (eds) *Mountain biodiversity. A global assessment*. Parthenon, Boca Raton, pp 3-20

Spehn EM, Scherer-Lorenzen M, Schmid B, Hector A, Caldeira MC, Dimitrakopoulos P, Finn JA, Jumpponen A, O'Donovan G, Pereira JS, Schulze, ED, Troumbis AY Körner C (2002) The role of legumes as a component of biodiversity in a cross-European study of grassland biomass nitrogen. *Oikos* 98:205-218

Spinnler D, Egli P, Körner C (2002) Four-year growth dynamics of beech-spruce model ecosystems under CO₂ enrichment on two different forest soils. *Trees* 16:423-436

Wacker L, Jacomet S, Körner C (2002) Trends in biomass fractionation in wheat and barley from wild ancestors to modern cultivars. *Plant Biol* 4:258-265

2001

Brunold Ch, Balsiger PW, Bucher J, Körner C (ed) (2001) *Wald und CO₂*. Paul Haupt, Bern, 224p

Egli P, Maurer S, Spinnler D, Landolt W, Günthardt-Goerg MS, Körner C (2001) Downward adjustment of carbon fluxes at the biochemical, leaf, and ecosystem scale in beech-spruce model communities exposed to long-term atmospheric CO₂ enrichment. *Oikos* 92:279-290

Egli Ph, Spinnler D, Hagedorn F, Maurer S, Siegwolf R, Landolt W, Clark A, Strasser R, Körner C (2001) Kohlenstoffflüsse und Biomasseproduktion. In: Brunold C, Balsiger PW, Bucher JB, Körner C (eds) *Wald und CO₂*, Paul Haupt, Bern, pp 97-116

Grünzweig JM, Körner C (2001) Growth, water and nitrogen relations in grassland model ecosystems of the semi-arid Negev of Israel exposed to elevated CO₂. *Oecologia* 128:251-262

Körner C (2001) Alpine ecosystems - In: *Encyclopedia of Biodiversity*. Academic Press, pp 133-144

Körner C (2001) *Experimental plant ecology: some lessons from global change research* - Press MC, Huntly NJ, Levin S (eds.). Blackwell Science, pp 227-247

Körner C (2001) One of nature's most innovative laboratories. *Trends Plant Sci* 6:7-8

Körner C (2001) Die CO₂-Erhöhung in der Atmosphäre aus ökologischer Sicht. In: Larcher W (2001) *Ökophysiologie der Pflanzen*. Ulmer, Stuttgart pp 161-167

Körner C (2001) Nahrung aus der Luft - „überfütterte“ Wälder? In: Brunold C, Balsiger PW, Bucher JB, Körner C (eds) *Wald und CO₂*, Paul Haupt, Bern, pp 81-83

Körner C, Walther GR (2001) Fingerprints of climate change - concluding remarks. In: Walther GR et al. (eds) *Fingerprints of climate change*, Kluwer, New York, pp 305-316

Li M, Hoch G, Körner C (2001) Spatial variability of mobile carbohydrates within *Pinus cembra* trees at the alpine treeline. *Phyton* 41:203-213

Niklaus PA, Glöckler E, Siegwolf R, Körner C (2001) Carbon allocation in calcareous grassland under elevated CO₂: a combined ¹³C pulse-labelling/soil physical fractionation study. *Funct Ecol* 15:43-50

Niklaus PA, Kandeler E, Leadley PW, Schmid B, Tschirko D, Körner C (2001) A link between plant diversity, elevated CO₂ and soil nitrate. *Oecologia* 127:540-548

Niklaus PA, Leadley PW, Schmid B, Körner C (2001) A long-term field study on biodiversity x elevated CO₂ interactions in grassland. *Ecol Monographs* 71:341-356

Niklaus PA, Wohlfender M, Siegwolf R, Körner C (2001) Effects of six years atmospheric CO₂ enrichment on plant, soil, and soil microbial C of a calcareous grassland. *Plant Soil* 233:189-202

Obrist D, Arnone JA, Körner C (2001) In situ effects of elevated atmospheric CO₂ on leaf freezing resistance and carbohydrates in a native temperate grassland. *Ann Bot* 87:839-844

Paulsen J, Körner C (2001) GIS-analysis of tree-line elevation in the Swiss Alps suggest no exposure effect. *J Veg Sci* 12:817-824

Volk M, Körner C (2001) Genotype x elevated CO₂ interaction and allocation in calcareous grassland species. *New Phytol* 151:637-645

2000

Arnone JA, Zaller JG, Spehn EM, Niklaus PA, Wells CE, Körner C (2000) Dynamics of root systems in native grasslands: effects of elevated atmospheric CO₂. *New Phytol* 147:73-85

Grünzweig J, Körner C (2000) Growth and reproductive responses to elevated CO₂ in wild cereals of the northern Negev of Israel. *Glob Change Biol* 6:631-638

Hättenschwiler S, Körner C (2000) Tree seedling responses to in situ CO₂-enrichment differ among species and depend on understorey light availability. *Glob Change Biol* 6:213-226

Körner C (2000) Baumkronenforschung: abgehoben oder von hoher Warte? *Gaia* 9:165-169

Körner C (2000) Biosphere responses to CO₂-enrichment. *Ecol Appl* 10:1590-1619

Körner C (2000) The alpine life zone under global change. *Gayana Bot* 57:1-17

Körner C (2000) Why are there global gradients in species richness? Mountains may hold the answer. *TREE* 15:513

Li M, Uehre P, Körner C, Matschke J (2000) Einfluss der Grünästung auf das kurzfristige Dickenwachstum und die Wachstumsdynamik. *AFZ-Der Wald* 25:1348-1350

Niklaus PA, Stocker R, Körner C, Leadley PW (2000) CO₂ flux estimates tend to overestimate ecosystem C sequestration at elevated CO₂. *Funct Ecol* 14:546-559

Paulsen J, Weber UM, Körner C (2000) Tree growth near treeline: abrupt or gradual reduction with altitude? *Arct Antarct Alp Res* 32:14-20

Peters HA, Baur B, Bazzaz F, Körner C (2000) Consumption rates and food preferences of slugs in a calcareous grassland under current and future CO₂ conditions. *Oecologia* 125:72-81

Spehn EM, Joshi J, Alpehi J, Schmid B, Körner C (2000) Plant diversity effects on soil heterotrophic activity in experimental grassland ecosystems. *Plant & Soil* 224:217-230

Spehn EM, Joshi J, Schmid B, Diemer M, Körner C (2000) Above-ground resource use increases with plant species richness in experimental grassland ecosystems. *Funct Ecol* 14:326-337

Volk M, Niklaus PA, Körner C (2000) Soil moisture effects determine CO₂ responses of grassland species. *Oecologia* 125:380-388

1999

Bernoulli M, Körner C (1999) Dry matter allocation in treeline trees. *Phyton* 39:7-12

Hättenschwiler S, Bühler S, Körner C (1999) Quality, decomposition and isopod consumption of tree litter produced under elevated CO₂. *Oikos* 85:271-281

Hector A, Schmid B, Beierkuhnlein C, Caldeira MC, Diemer M, Dimitrakopoulos PG, Finn JA, Freitas H, Giller PS, Good J, Harris R, Högberg P, Huss-Danell K, Joshi J, Jumpponen A, Körner C, Leadley PW, Loreau M, Minns A, Mulder CPH, O'Donovan G, Otway SJ, Pereira JS, Prinz A, Read DJ, Scherer-Lorenzen M, Schulze E-D, Siamantziouras A-SD, Spehn EM, Terry AC, Troumbis AY, Woodward FI, Yachi S, Lawton JH (1999) Plant diversity and productivity experiments in European grasslands. *Science* 286:1123-1127

Körner C (1999) *Alpine plant life*. Springer, Heidelberg

Körner C (1999) Alpine plants: stressed or adapted? In: Press MC, Scholes JD, Barker MG (eds) *Physiological plant ecology*. British Ecol Soc, Blackwell Science Ltd, Oxford, pp 297-311

Körner C (1999) Biologische Folgen der CO₂-Erhöhung. *BiuZ* 29:353-363

Leadley PW, Niklaus PA, Stocker R, Körner C (1999) A field study of the effects of elevated CO₂ on plant biomass and community structure in a calcareous grassland. *Oecologia* 118:39-49

Mooney HA, Canadell J, Chapin III FS, Ehleringer JR, Körner C, McMurtrie RE, Parton WJ, Pitelka LF, Schulze ED (1999) Ecosystem physiology responses to global change. In: Walker B et al (eds) *The terrestrial biosphere and global change. Implications for natural and managed ecosystems*. Cambridge Univ Press, Cambridge, pp 141-189

Stocker R, Körner C, Schmid B, Niklaus PA, Leadley PW (1999) A field study of the effects of elevated CO₂ and plant species diversity on ecosystem-level gas exchange in a planted calcareous grassland. *Global Change Biol* 5:95-105

Stöcklin J, Körner C (1999) Interactive effects of elevated CO₂, P availability and legume presence on calcareous grassland: results of a glasshouse experiment. *Funct Ecol* 13:200-209

Stöcklin J, Körner C (1999) Recruitment and mortality of *Pinus sylvestris* near the nordic treeline: the role of climatic change and herbivory. *Ecol Bull* 47:168-177

1998

Diemer M, Körner C (1998) Transient enhancement of carbon uptake in an alpine grassland ecosystem under elevated CO₂. *Arct Alp Res* 30:381-387

Diemer M, Körner C (1998) Transient enhancement of carbon uptake in an alpine grassland ecosystem under elevated CO₂. *Arct Alp Res* 30:381-387

Egli P, Maurer S, Günthardt-Goerg MS, Körner C (1998) Effects of elevated CO₂ and soil quality on leaf gas exchange and above-ground growth in beech-spruce model ecosystems. *New Phytol* 140:185-196

Huovinen-Hufschmid C, Körner C (1998) Microscale patterns of plant species distribution, biomass and leaf tissue quality in calcareous grassland. *Botanica Helvetica* 108:69-83

Hättenschwiler S, Körner C (1998) Biomass allocation and canopy development in spruce model ecosystems under elevated CO₂ and increased N deposition. *Oecologia* 113:104-114

Hättenschwiler S, Schweingruber FH, Körner C (1998) Pflanzen des Bergwaldes unter erhöhtem CO₂. In: Körner C, Hättenschwiler S (eds) *Die Alpen und das CO₂ Problem. Biologische Perspektiven*. Vdf Verlag, Zürich, p 65-135

Körner C (1998) A re-assessment of high elevation treeline position and their explanation. *Oecologia* 115:445-459

Körner C (1998) CO₂ - ein Risikofaktor. In: Körner C, Hättenschwiler S (eds) *Die Alpen und das CO₂ Problem. Biologische Perspektiven*. Vdf Verlag, Zürich, p 13-28

Körner C (1998) El CO₂ influencia la biodiversitat. *Medi Ambient Tecnologia i Cultura (Catalonia)* 21:27-31

Körner C (1998) El CO₂ influencia la biodiversitat. *Medi Ambient Tecnologia i Cultura* 21:27-31

Körner C (1998) Tropical forests in a CO₂-rich world. *Climatic Change* 39:397-315

Körner C (1998) Worldwide positions of alpine treelines and their causes. In: Beniston M, Innes JL (eds) *The impacts of climate variability on forests*. Springer, Berlin Heidelberg, pp 221-229

Körner C, Diemer M, Schächli B (1998) Alpenrasen unter erhöhtem CO₂. In: Körner C, Hättenschwiler S (eds) *Die Alpen und das CO₂ Problem. Biologische Perspektiven*. Vdf Verlag, Zürich, p 31-63

Körner C, Hättenschwiler S (1998) *Die Alpen und das CO₂ Problem. Biologische Perspektiven*. Vdf, Zürich.

Miglietta F, Bettarini I, Raschi A, Körner C, Vaccari FP (1998) Isotope discrimination and photosynthesis of vegetation growing in the Bossoleto CO₂ spring. *Chemosphere* 36:771-776

Niklaus PA, Leadley PW, Stöcklin J, Körner C (1998) Nutrient relations in calcareous grassland under elevated CO₂. *Oecologia* 116:67-75

Niklaus PA, Spinnler D, Körner C (1998) Soil moisture dynamics of calcareous grassland under elevated CO₂. *Oecologia* 117:201-208

Schläpfer M, Zoller H, Körner C (1998) Influences of mowing and grazing on plant species composition in calcareous grassland. *Botanica Helvetica* 108:57-67

Steffen W *et al* (1998) The terrestrial carbon cycle: Implications for the Kyoto Protocol. *Science* 280:1393-1394

Stöcklin J, Schweizer K, Körner C (1998) Effects of elevated CO₂ and phosphorous addition on productivity and community composition of intact monoliths from calcareous grassland. *Oecologia* 116:50-56

Würth MKR, Winter K, Körner C (1998) In situ responses to elevated CO₂ in tropical forest understorey plants. *Funct Ecol* 12:886-895

Würth MKR, Winter K, Körner C (1998) Leaf carbohydrate responses to CO₂ enrichment at the top of a tropical forest. *Oecologia* 116:18-25

1997

Arnone JA III, Körner C (1997) Temperature adaptation and acclimation potential of leaf dark respiration in two species of *Ranunculus* from warm and cold habitats. *Arct Alp Res* 29:122-125

Diemer MW, Joshi J, Körner C, Schmid B, Spehn E (1997) An experimental protocol to assess the effects of plant diversity on ecosystem functioning utilized in a European research network. *Bull Geobot Inst ETH* 63:95-107

Egli P, Körner C (1997) Growth responses to elevated CO₂ and soil quality in beech-spruce model ecosystems. *Acta Oecol* 18:343-349

Hirschel G, Körner C, Arnone JA III (1997) Will rising CO₂ atmospheric affect litter quality and in situ decomposition rates in native plant communities? *Oecologia* 110:387-392

Hättenschwiler S, Körner C (1997) Annual CO₂ budget of spruce model ecosystems in the third year of exposure to elevated CO₂. *Acta Oecol* 18:319-325

Hättenschwiler S, Körner C (1997) Growth of autotrophic and root-hemiparasitic understory plants under elevated CO₂ and increased N deposition. *Acta Oecol* 18:327-333

Hättenschwiler S, Miglietta F, Raschi A, Körner C (1997) Morphological adjustments of mature *Quercus ilex* trees to elevated CO₂. *Acta Oecol* 1997:361-365

Hättenschwiler S, Miglietta F, Raschi A, Körner C (1997) Thirty years of in situ tree growth under elevated CO₂: a model for future forest responses? *Glob Change Biol* 3:436-471

Körner C (1997) Die biotische Komponente im Energiehaushalt: Lokale und globale Aspekte. *Verh. Ges. dt. Naturf. u. Ärzte* 119:97-123

Körner C, Diemer M, Schächli B, Niklaus P, Arnone J (1997) The responses of alpine grassland to four seasons of CO₂ enrichment: a synthesis. *Acta Oecol* 18:165-175

Landolt W, Bucher JB, Schulin R, Körner C, Brunold C (1997) Effects of elevated CO₂ concentration and N deposition on spruce-beech model ecosystem In: Mohren GMJ et al (eds) *Impacts of Global Change on Tree Physiology and Forest Ecosystems*. Kluwer Academic Publishers, pp 317-324

Lauber W, Körner C (1997) In situ stomatal response to long-term CO₂ enrichment in calcareous grassland plants. *Acta Oecol* 18:221-229

Leadley PW, Niklaus P, Stocker R, Körner C (1997) Screen-aided CO₂ control (SACC): a middle ground between FACE and open-top chambers. *Acta Oecol* 18:207-219

Rötzel C, Leadley PW, Körner C (1997) Non-destructive assessment of the effects of elevated CO₂ on plant community structure in a calcareous grassland. *Acta Oecol* 18:231-239

Sage RF, Schächli B, Körner C (1997) Effect of atmospheric CO₂ enrichment on Rubisco content in herbaceous species from high and low altitude. *Acta Oecol* 18:183-192

Schächli B, Körner C (1997) In situ effects of elevated CO₂ on the carbon and nitrogen status of alpine plants. *Funct Ecol* 11:290-299

Stocker R, Leadley PW, Körner C (1997) Carbon and water fluxes in a calcareous grassland under elevated CO₂. *Funct Ecol* 11:222-230

Stöcklin J, Leadley PW, Körner C (1997) Community and species level responses to elevated CO₂ in designed calcareous grassland communities. *Acta Oecol* 18:241-248

1996

Chapin FS III, Körner C (1996) Arctic and alpine biodiversity: Its patterns, causes and ecosystem consequences. In: Mooney *et al* (eds) *Functional roles of biodiversity - a global perspective*. John Wiley & Sons, Chichester, pp 7-32

Diemer M, Körner C (1996) Lifetime leaf carbon balances of herbaceous perennial plants from low and high altitudes in the central Alps. *Funct Ecol* 10:33-43

Hättenschwiler S, Körner C (1996) Effects of elevated CO₂ and increased nitrogen deposition on photosynthesis and growth of understory plants in spruce model ecosystems. *Oecologia* 106:172-180

Hättenschwiler S, Körner C (1996) System-level adjustment to elevated CO₂ in model spruce ecosystems. *Global Change Biol* 2:377-387

Hättenschwiler S, Schweingruber FH, Körner C (1996) Tree ring responses to elevated CO₂ and increased N deposition in *Picea abies*. *Plant Cell Environ* 19:1369-1378

Körner C (1996) The response of complex multispecies systems to elevated CO₂. In: Walker BH, Steffen WL (eds) *Global Change and Terrestrial Ecosystems*. Cambridge Univ Press, pp 20-42

Körner C, Bazzaz FA (1996) Carbon dioxide, populations, and communities. Academic Press, San Diego

Körner C, Bazzaz FA, Field CB (1996) The significance of biological variation, organism interactions, and life histories in CO₂ research. In: Körner C, Bazzaz FA (eds) *Carbon dioxide, populations, and communities*. Academic Press, San Diego, pp 443-456

Körner C, Diemer M, Schächli B, Zimmermann L (1996) Response of alpine vegetation to elevated CO₂. In: Koch GW, Mooney HA (eds) Carbon dioxide and terrestrial ecosystems. Physiological Ecology Series, Academic Press, San Diego, pp 177-196

Körner C, Würth M (1996) A simple method for testing leaf responses of tall tropical forest trees to elevated CO₂. *Oecologia* 107:421-425

Leadley PW, Körner C (1996) Effects of elevated CO₂ on plant species dominance in a highly diverse calcareous grassland. In: Körner C, Bazzaz FA (eds) Carbon dioxide, populations, and communities. Academic Press, San Diego, pp 159-175

Niklaus PA, Körner C (1996) Responses of soil microbiota of a late successional alpine grassland to long term CO₂ enrichment. *Plant & Soil* 184:219-229

Prock S, Körner C (1996) A cross-continental comparison of phenology, leaf dynamics and dry matter allocation in arctic and temperate zone herbaceous plants from contrasting altitudes. *Ecol Bull* 45: 93-103

Schächli B, Körner C (1996) Growth responses of an alpine grassland to elevated CO₂. *Oecologia* 105:43-52

Steinger Th, Körner C, Schmid B (1996) Long-term persistence in a changing climate: DNA analysis suggests very old ages of clones of alpine *Carex curvula*. *Oecologia* 105:94-99

1995

Arnone JA III, Körner C (1995) Soil and biomass carbon pools in model communities of tropical plants under elevated CO₂. *Oecologia* 104:61-71

Arnone JA III, Zaller JG, Ziegler C, Zandt H, Körner C (1995) Leaf quality and insect herbivory in model tropical plant communities after long-term exposure to elevated atmospheric CO₂. *Oecologia* 104:72-78

Chapin FS II, Körner C (eds) (1995) Arctic and alpine biodiversity: Patterns, causes and ecosystem consequences. Springer Ecol Studies 113, Berlin, Heidelberg, New York

Christ RA, Körner C (1995) Responses of shoot and root gas exchange, leaf blade expansion and biomass production to pulses of elevated CO₂ in hydroponic wheat. *J Exp Bot* 46:1661-1667

Hättenschwiler S, Körner C (1995) Responses to recent climate warming of *Pinus sylvestris* and *Pinus cembra* within their montane transition zone in the Swiss Alps. *J Veg Sci* 6:357-368

Körner C (1995): Alpine plant diversity: a global survey and functional interpretations. In: Chapin FS III, Körner C (eds) Arctic and alpine biodiversity: Patterns, causes and ecosystem consequences. *Ecol Stud* 113:45-62, Springer, Berlin

Körner C (1995) Impact of atmospheric changes on alpine vegetation: the ecophysiological perspective. In: Guisan A, Holten JI, Spichiger R, Tessier L (eds) Potential Ecological impacts of climate change in the Alps and Fennoscandian Mountains. IPCC 2nd Assessment Report, Working Group II-C. Editions Conservatoire et Jardin botaniques, Genève, pp 113-120

Körner C (1995) Towards a better experimental basis for upscaling plant responses to elevated CO₂ and climate warming. *Plant Cell Environ* 18:1101-1110

Körner C (1995) Biodiversity and CO₂: Global change is under way. *GAIA* 4:234-243

Körner C, Pelaez-Riedl S, van Bel AJE (1995) CO₂ responsiveness of plants: a possible link to phloem loading. *Plant Cell Environ* 18:595-600

Körner C, Perterer J, Altrichter Ch, Meusburger A, Slovik S, Zöschg M (1995) Ein einfaches empirisches Modell zur Berechnung der jährlichen Schadgasaufnahme von Fichten- und Kiefernadeln. *Allg Forst- u J-Ztg* 166:1-9

Larigauderie A, Körner C (1995) Acclimation of leaf dark respiration to temperature in alpine and lowland plant species. *Ann Bot* 76:245-252

Nicolussi K, Bortenschlager S, Körner C (1995) Increase in tree-ring width in subalpine *Pinus cembra* from the central Alps that may be CO₂-related. *Trees* 9:181-189

Chapin FS III, Körner C (1994) Arctic and alpine biodiversity: patterns, causes and ecosystem consequences. *TREE* 9:45-47

1994

Körner C (1994) Leaf diffusive conductances in the major vegetation types of the globe. In: Schulze ED, Caldwell MM (eds) Ecophysiology of photosynthesis. *Ecol Studies* 100:463-490, Springer, Berlin

Körner C (1994) Biomass fractionation in plants: a reconsideration of definitions based on plant functions. In: Roy J, Garnier E (eds) A whole plant perspective on carbon-nitrogen interactions. SPB Acad Publishing, The Hague, The Netherlands, pp 173-185

Körner C (1994) Impact of atmospheric changes on high mountain vegetation. In: Beniston M (ed) Mountain environments in changing climates. Routledge Publ Company, London, New York, pp 155-166

Körner C, Diemer M (1994) Evidence that plants from high altitudes retain their greater photosynthetic efficiency under elevated CO₂. *Funct Ecol* 8:58-68

Körner C, Miglietta F (1994) Long term effects of naturally elevated CO₂ on mediterranean grassland and forest trees. *Oecologia* 99:343-351

Schulze ED, Kelliher FM, Körner C, Lloyd J, Leuning R (1994) Relationships among maximum stomatal conductance, ecosystem surface conductance, carbon assimilation rate, and plant nitrogen nutrition: A global ecology scaling exercise. *Ann Rev Ecol Syst* 25:629-660

1993

Arnone JA III, Körner C (1993) Influence of elevated CO₂ on canopy development and red:far-red ratios in two-storied stands of *Ricinus communis*. *Oecologia* 94:510-515

Körner C (1993) Das "Ökosystem Polsterpflanze": Recycling und Aircondition. *BiuZ* 23:353-355

Körner C, Arnone JA III (1993) Global change: the important difference between lettuce and forests. *Plant Sci Bull* 39:8

Körner C, Arnone JA III, Hilti W (1993) The utility of enclosed artificial ecosystems in CO₂ research. In: Schulze ED, Mooney HA (eds) Design and execution of experiments on CO₂ enrichment. *Ecosystem Res Report 6*, Commission of the European Community, Brussels, pp 185-198

Körner C, Schilcher B, Pelaez-Riedl S (1993) Vegetation und Treibhausproblematik: Eine Beurteilung der Situation in Österreich unter besonderer Berücksichtigung der Kohlenstoff-Bilanz. In: Bestandesaufnahme anthropogener Klimaänderungen: Mögliche Auswirkungen auf Österreich - mögliche Massnahmen in Österreich. *Österr. Akademie d. Wissenschaften, Wien*, pp 46

Körner C (1993) CO₂ fertilization: the great uncertainty in future vegetation development. In: AM Solomon, HH Shugart (eds) *Vegetation Dynamics & Global Change*. Chapman & Hall, New York, London, pp 53-70

Körner C (1993) Scaling from species to vegetation: the usefulness of functional groups. In: E-D Schulze & H Mooney (eds) *Biodiversity and ecosystem function*. *Ecol Studies* 99: 117-140 Springer, Berlin

1992

Diemer M, Körner C, Prock S (1992) Leaf life spans in wild perennial herbaceous plants: a survey and attempts at a functional interpretation. *Oecologia* 89:10-16

Körner C (1992) Response of alpine vegetation to global climate change. *CATENA Suppl* 22:85-96

Körner C, Arnone JA III (1992) Responses to elevated carbon dioxide in artificial tropical ecosystems. *Science* 257:1672-1675

Slovik S, Heber U, Kaiser WM, Kindermann G, Körner C (1992) Quantifizierung der physiologischen Kausalkette von SO₂-Immissionsschäden. (II) Ableitung von SO₂-Immissionsgrenzwerten für chronische Schäden an Fichte. *Allg Forstzeitung* 17:913-920

Slovik S, Kaiser WM, Körner C, Kindermann G, Heber U (1992) Quantifizierung der physiologischen Kausalkette von SO₂-Immissionsschäden. (I) Ableitung von SO₂-Immissionsgrenzwerten für akute Schäden an Fichte. *Allg Forstzeitung* 15:800-805

1991

Körner C (1991) Some often overlooked plant characteristics as determinants of plant growth: a reconsideration. *Funct Ecol* 5:162-173

Körner C, Farquhar GD, Wong SC (1991) Carbon isotope discrimination by plants follows latitudinal and altitudinal trends. *Oecologia* 88:30-40

1990

Körner C (1990) Der "Treibhauseffekt". Eine Herausforderung für die Botanik. *uni nova (Basel)* 56:13-15"

Körner C (1990) Die Kunst der kleinen Frage. *Botanisches Forschen in der Umweltkrise. uni nova (Basel)* 56:11-13

Perterer J, Körner C (1990) Das Problem der Bezugsgrösse bei physiologisch-ökologischen Untersuchungen an Koniferennadeln. *Forstw Cbl* 109:220-241

Sato T, Körner C (1990) Altitudinal variation of leaf venation in four species of Geum in the Austrian Alps. *Flora* 184:137-149

1989-1980

Diemer MW, Körner C, Cernusca A (1989) Response of alpine plants to CO₂-enrichment - application and performance of a prototype climate simulator. *Air Pollution Reserach Report* 26:102-108. *Proc Internat Symp Comm Europ Communities and Ges f Strahlen- u. Umweltforschung, München-Neuherberg, 9-11 Oct 1989*

Körner C (1989) Der CO₂-Gaswechsel verschiedener Pflanzen im alpinen Grasheidegürtel. II. Photosynthetische Kohlenstoffbindung des Bestandes. In: Cernusca A (ed) *Struktur und Funktion von Graslandökosystemen im Nationalpark Hohe Tauern*. Veröffentl Oesterr MaB-Programm 13:357-369, Wagner, Innsbruck

Körner C (1989) Der Flächenanteil unterschiedlicher Vegetationseinheiten in den Hohen Tauern: Eine quantitative Analyse grossmaßstäblicher Vegetationskartierungen in den Ostalpen. In: Cernusca A (ed) *Struktur und Funktion von Graslandökosystemen im Nationalpark Hohe Tauern*. Veröffentl Oesterr MaB-Programm 13:33-47, Wagner, Innsbruck

Körner C (1989) Die CO₂-Problematik aus ökologischer Sicht. In: *Der Treibhauseffekt. Das Problem - Mögliche Folgen Erforderliche Massnahmen*. Tagungsdokumentation Laxenburg/ Oesterr., 16./17.11.1989, pp 51-68

Körner C (1989) Bedeutung der Wälder im Naturhaushalt einer vom Menschen veränderten Welt. In: Franz H (ed) *Die Bedrohung der Wälder*. Veröff Komm Humanökol 1:7-40. Oesterr Akad Wissensch, Wien

Körner C (1989) Die Bedeutung von Wassermangel und winterlicher Schadgasbelastung für das Waldsterben. In: Führer E, Neuhuber F (eds) *FIW-Symposium 1988 Waldsterben in Oesterreich. Theorien, Tendenzen, Therapien*. Bundesminist f Wissensch u Forsch, Wien, pp 127-138

Körner C (1989) The nutritional status of plants from high altitudes. A worldwide comparison. *Oecologia* 81:379-391

Körner C, Neumayer M, Pelaez Menendez-Riedl S, Smeets-Scheel A (1989) Functional morphology of mountain plants. *Flora* 182:353-383

- Körner C, Pelaez Menendez-Riedl S (1989) The significance of developmental aspects in plant growth analysis. In: Lambers H et al (eds) Causes and consequences of variation in growth rate and productivity of higher plants. SPB Acad Publ, The Hague, pp 141-157
- Körner C, Pelaez Menendez-Riedl S, John PCL (1989) Why are Bonsai plants small? A consideration of cell size. Aust J Plant Physiol 16:443-448
- Körner C, Wieser G, Cernusca A (1989) Der Wasserhaushalt waldfreier Gebiete in den österreichischen Alpen zwischen 600 und 2600 m Höhe. In: Cernusca A (ed) Struktur und Funktion von Graslandökosystemen im Nationalpark Hohe Tauern. Veröffentl Oesterr MaB-Programm 13:119-153, Wagner, Innsbruck
- Körner C (1988) Does global increase of CO₂ alter stomatal density? Flora 181:253-257
- Körner C, Farquhar GD, Roksandic Z (1988) A global survey of carbon isotope discrimination in plants from high altitude. Oecologia 74:623-632
- Körner C, Larcher W (1988) Plant life in cold climates. In: Long SF, Woodward FI (eds) Plants and temperature. Symp Soc Exp Biol 42:25-57. The Company of Biol Ltd, Cambridge
- Körner C, Perterer J (1988) Nehmen immergrüne Waldbäume im Winter Schadgase auf? Ber Ges Strahlen- Umweltforschung (GSP) Neuherberg/München, ARGE-ALP Symp Garmisch, pp 1-15
- Renhardt U, Körner C (1988) Hinweise zur Interpretation von Luftbelastungsdaten. Veröffentl Univ Innsbruck 166:71-79
- Bahn M, Körner C (1987) Vegetation und Phänologie der hochalpinen Gipfelflur des Glungezer in Tirol. Ber nat-med Verein Innsbruck 74:61-80
- Körner C (1987): Mechanismen der Standortsbewältigung bei Hochgebirgspflanzen. Ein weltweiter Vergleich. Schriften des Vereines zur Verbreitung naturwiss Kenntnisse, Wien 126:99-128
- Körner C (1987) Überlebensstrategien im Hochgebirge. Internationale Nationalparkforschung. Veröff Univ Ibk 163, Nationalpark Hohe Tauern - Auseinandersetzung mit Natur und Kultur, Symp Univ Ibk 19-20 Nov 1987, pp 37-40
- Körner C, Diemer M (1987) In situ photosynthetic responses to light, temperature and carbon dioxide in herbaceous plants from low and high altitude. Funct Ecol 1:179-194
- Körner C, Nachuzrsvili G (1987) Der Einfluss der Schafbeweidung auf den Wasserhaushalt der Vegetation (russ). In: Rabotnov TA (ed) Ekologitseskie issledowanija wisokogornich lugov Kasbegi (Ökologische Untersuchungen der Hochgebirgsweiden von Kasbegi). Forschungskoooperation UdSSR-Österreich, Academia nauk GSSR, Mezniereba, Tbilissi, pp 99-120
- Körner C, Renhardt U (1987) Dry matter partitioning and root length/leaf area ratios in herbaceous perennial plants with diverse altitudinal distribution. Oecologia 74:411-418
- Körner C, Woodward FI (1987) The dynamics of leaf extension in plants with diverse altitudinal ranges. II. Field studies in *Poa* species between 600 and 3200 m altitude. Oecologia 72:279-283
- Körner C, Bannister P, Mark AF (1986) Altitudinal variation in stomatal conductance, nitrogen content and leaf anatomy in different plant life forms in New Zealand. Oecologia 69:577-588
- Körner C, Meusel H (1986) Zur ökophysiologischen und ökogeographischen Differenzierung nah verwandter *Carlina*-Arten. Flora 178:209-232
- Woodward FI, Körner C, Crabtree R (1986) The dynamics of leaf extension in plants with diverse altitudinal ranges. I. Field observations on temperature response at one altitude. Oecologia 70:222-226
- Körner C (1985) Humidity responses in forest trees: precautions in thermal scanning surveys. Arch Met Geoph Biocl, Ser B 36:83-98
- Körner C, Bannister P (1985) Stomatal responses to humidity in *Nothofagus menziesii*. NZ J Bot 23:425-429
- Körner C, Cochrane PM (1985) Stomatal responses and water relations of *Eucalyptus pauciflora* in summer along an elevational gradient. Oecologia 66:443-455
- Körner C (1984) Auswirkungen von Mineraldünger auf alpine Zwergsträucher. Verhandl Ges Oekol 12:123-136
- Körner C (1984) Stomatareaktionen auf Luftfeuchte bei Waldbäumen und ihre Bedeutung für die vegetationsorientierte Fernerkundung. Proc Int Symp in memory of Dr F Sauberer 1984, Wien, pp 123-124
- Wieser G, Körner C, Cernusca A (1984) Die Wasserbilanz von Graslandökosystemen in den österreichischen Alpen. Verhandl Ges Oekologie, Bern 1982, 12:89-99
- Körner C (1983) Probleme der Berglandnutzung in den Australischen Alpen. Der Alm- und Bergbauer 33:3-11
- Körner C, Allison A, Hilscher H (1983) Altitudinal variation in leaf diffusive conductance and leaf anatomy in heliophytes of montane New Guinea and their interrelation with microclimate. Flora 174:91-135
- Körner C, Cochrane P (1983) Influence of plant physiognomy on leaf temperature on clear midsummer days in the Snowy Mountains, south-eastern Australia. Acta Oecol, Oecol Plant 4:117-124
- Körner C (1982) CO₂ exchange in the alpine sedge *Carex curvula* as influenced by canopy structure, light and temperature. Oecologia 53:98-104
- Nachuzrsvili G, Körner C (1982) Ueber den Wasserhaushalt subalpiner Pflanzen des Zentralkaukasus. Dokladi Akademia Nauk SSSR, 267:243-245 (russisch)
- Körner C (1981) Stomatal behaviour and water potential in apricot with symptoms of wilt disease. Angew Bot 55:469-476

Körner C, Mayr R (1981) Stomatal behaviour in alpine plant communities between 600 and 2600 metres above sea level. In: Grace J, Ford ED, Jarvis PG (eds) Plants and their atmospheric environment. Blackwell, Oxford - London - Edinburgh, pp 205-218

Körner C (1980) Oekologische Untersuchungen an Schafweiden im Zentralkaukasus. Der Alm- und Bergbauer 30:1-8

Körner C (1980) Zur anthropogenen Belastbarkeit der alpinen Vegetation. Verhandl Ges Oekol 8:451-461

Körner C, Wieser G, Guggenberger H (1980) Der Wasserhaushalt eines alpinen Rasens in den Zentralalpen. Veröff Oesterr MaB-Hochgebirgsprogramm Hohe Tauern 3: Untersuchungen an alpinen Böden in den Hohen Tauern 1974-1978. Stoffdynamik und Wasserhaushalt, pp 243-264

1979-1976

Körner C, De Moraes JAPV (1979) Water potential and diffusion resistance in alpine cushion plants on clear summerdays. Oecol Plant 14:109-120

Körner C, Scheel JA, Bauer H (1979) Maximum leaf diffusive conductance in vascular plants. Photosynthetica 13:45-82

Körner C, Hoflacher H, Wieser G (1978) Untersuchungen zum Wasserhaushalt von Almflächen im Gasteiner Tal. Veröff Oesterr MaB-Hochgebirgsprogramm Hohe Tauern 2: Oekologische Analysen von Almflächen im Gasteiner Tal, pp 67-79

Körner C, Hilscher H (1978) Wachstumsdynamik von Grünerlen auf ehemaligen Almflächen an der zentralalpiner Waldgrenze. Veröff Oesterr MaB-Hochgebirgsprogramm Hohe Tauern 2: Oekologische Analysen von Almflächen im Gasteiner Tal, pp 187-193

Körner C, Jussel U, Schiffer K (1978) Transpiration, Diffusionswiderstand und Wasserpotential in verschiedenen Schichten eines Grünerlenbestandes. Veröff Oesterr MaB-Hochgebirgsprogramm Hohe Tauern 2: Oekologische Analysen von Almflächen im Gasteiner Tal, pp 81-98

Körner C, Schubert A (1978) Spaltenverhalten verschiedener Pflanzenarten auf Almwiesen an der zentralalpiner Waldgrenze. Veröff Oesterr MaB-Hochgebirgsprogramm Hohe Tauern 2: Oekologische Analysen von Almflächen im Gasteinertal, pp 99-112

Körner C (1977) Blattdiffusionswiderstände verschiedener Pflanzen im alpinen Grasheidegürtel der Hohen Tauern. Veröff Oesterr MaB-Hochgebirgsprogramm Hohe Tauern 1: Alpine Grasheide Hohe Tauern. Ergebnisse der Oekosystemstudie 1976:69-81

Körner C (1977) Der CO₂-Gaswechsel verschiedener Pflanzen im alpinen Grasheidegürtel. I. Der Einsatz einer neuen teilklimatischen Messkammer für *in-situ*-Messungen an kleinwüchsigen Gebirgspflanzen. Veröff Oesterr MaB-Hochgebirgsprogramm Hohe Tauern 1: Alpine Grasheide Hohe Tauern. Ergebnisse der Oekosystemstudie 1976:133-139

Körner C (1977) Evapotranspiration und Transpiration verschiedener Pflanzenbestände im alpinen Grasheidegürtel der Hohen Tauern. Veröff Oesterr MaB-Hochgebirgsprogramm Hohe Tauern 1: Alpine Grasheide Hohe Tauern. Ergebnisse der Oekosystemstudie 1976:47-68

Körner C (1977) Untersuchungen zum Wasserhaushalt der Pflanzen im Bereich einer Schiabfahrt bei Achenkirch, Tirol. In: Cernusca A (ed) Oekologische Veränderungen durch das Anlegen von Schiabfahrten an Waldhängen. Fonds f Umweltstudien, Bonn, pp 32-40

Körner C (1976) Wasserhaushalt und Spaltenverhalten alpiner Zwergsträucher. Verhandl Ges Oekol (Junk, The Hague) 5:23-30

Körner C, Cernusca A (1976) A semi-automatic, recording diffusion porometer and its performance under alpine field conditions. Photosynthetica 10:172-181