

- Wolf B, Kiese R, Chen W, Grote R, Zheng X, Butterbach-Bahl K** (2012) Modeling N₂O emissions from steppe in Inner Mongolia, China, with consideration of spring thaw and grazing intensity. *Plant Soil* 350:297-310
- Behnke K, Grote R, Brüggemann N, Zimmer I, Zhou G, Elobeid M, Janz D, Polle A, Schnitzler J-P** (2011) Isoprene emission-free poplars – a chance to reduce the impact from poplar plantations on the atmosphere. *New Phytol.* DOI: 10.1111/j.1469-8137.2011.03979.x:
- Blagodatsky S, Grote R, Kiese R, Werner C, Butterbach-Bahl K** (2011) Modelling of microbial carbon and nitrogen turnover in soil with special emphasis on N-trace gases emission. *Plant Soil* 346:297-330
- De Bruijn A, Grote R, Butterbach-Bahl K** (2011) An alternative modelling approach to predict emissions of N₂O and NO from forest soils. *Eur J Forest Res* 130:755-773
- Grote R, Kiese R, Grünwald T, Ourcival J-M, Granier A** (2011) Modelling forest carbon balances considering tree mortality and removal. *Agric. Forest Meteorol.* 151:179-190
- Grote R, Korhonen J, Mammarella I** (2011) Challenges for evaluating process-based models of gas exchange at forest sites with fetches of various species. *Forest Systems* 20:389-406
- Keenan T, Grote R, Sabate S** (2011) Overlooking the canopy: The importance of canopy structure in scaling isoprenoid emissions from leaf to canopy. *Ecol. Modell.* 222:737-747
- Kiese R, Heinzeller C, Werner C, Wochele S, Grote R, Butterbach-Bahl K** (2011) Quantification of nitrate leaching from German forest ecosystems by use of a process oriented biogeochemical model. *Environ. Pollut.* 159:3204-3214
- Offermann C, Ferrio JP, Holst J, Grote R, Siegwolf R, Kayler Z, Gessler A** (2011) The long way down – Are carbon and oxygen isotope signals in the tree ring uncoupled from canopy physiological processes. *Tree Physiol.* 31:1088-1102
- Grote,R.**, 2010. Welche Rolle spielen Kohlenwasserstoff-Emissionen aus Wäldern für die Forstwirtschaft der Zukunft? *AFJZ* 181, 77-81.
- Grote,R., Keenan,T., Lavoit,A.-V., Staudt,M.**, 2010. Process-based modelling of seasonality and drought stress in isoprenoid emission models. *Biogeosciences* 7, 257-274.
- Holst,J., Grote,R., Offermann,C., Ferrio,J.P., Gessler,A., Mayer,H., Rennenberg,H.**, 2010. Water fluxes within beech stands in complex terrain. *Int J Biometeorol* 54, 23-36.
- Meyer,A., Grote,R., Polle,A., Butterbach-Bahl,K.**, 2010. Simulating mycorrhiza contribution to forest C- and N cycling - the MYCOFON model. *Plant Soil* 327, 493-517.
- Miehle,P., Grote,R., Battaglia,M., Feikema,P.M., Arndt,S.K.**, 2010. Evaluation of a process-based ecosystem model for long-term biomass and stand development of *Eucalyptus globulus* plantations. *Eur J Forest Res* 129, 377-391.
- Grote R, Lavoit AV, Rambal S, Staudt M, Zimmer I, Schnitzler J-P.** 2009. Modelling the drought impact on monoterpene fluxes from an evergreen Mediterranean forest canopy. *Oecologia (Berl.)* 160:213-223.
- De Bruijn AMG, Butterbach-Bahl K, Blagodatsky S, Grote R.** 2009. Model evaluation of different mechanisms driving freeze-thaw N₂O emissions. *Agriculture, Ecosystems & Environment* 133:196-207.

- Grote R, Lehmann E, Brümmer C, Brüggemann N, Szarzynski J, Kunstmann H.** 2009. Modelling and observation of biosphere-atmosphere interactions in natural savannah in Burkina Faso, West Africa. *Physics and Chemistry of the Earth*, **34**:251-260.
- Grote R, Niinemets Ü.** 2008. Modeling Volatile Isoprenoid Emissions - A Story with Split Ends. *Plant Biology* **10**: 8-28.
- Pretzsch H, Grote R, Reineking B, Rötzer T, Seifert S.** 2008. Models for Forest Ecosystem Management: A European Perspective. *Annals of Botany* **101**:1065-1087.
- Grote R.** 2007. Sensitivity of volatile monoterpene emission to changes in canopy structure – A model based exercise with a process-based emission model. *New Phytologist* **173**: 550-561.
- Grote R, Mayrhofer S, Fischbach RJ, Steinbrecher R, Staudt M, Schnitzler J-P.** 2006. Process-based modelling of isoprenoid emissions from evergreen leaves of *Quercus ilex* (L.). *Atmospheric Environment* **40**: 152-165.
- Nunn AJ, Wieser G, Reiter IM, Häberle K-H, Grote R, Havranek WM, Matyssek R.** 2006. Testing the unifying theory for O₃ sensitivity with mature forest tree responses (*Fagus sylvatica* and *Picea abies*). *Tree Physiology* **26**: 1391-1403.
- Reiter IM, Häberle K-H, Nunn AJ, Heerdt C, Reitmayer H, Grote R, Matyssek R.** 2005. Competitive strategies in adult beech and spruce: space-related foliar carbon investment versus carbon gain. *Oecologia (Berl)* **146**: 337-349.
- Rötzer T, Grote R, Pretzsch H.** 2005. Effects of environmental changes on the vitality of forest stands. *European Journal of Forest Research* **124**: 349-362.
- Grote R, Reiter IM.** 2004. Competition-dependent modelling of foliage biomass in forest stands. *Trees-Structure and Function* **18**: 596-607.
- Rötzer T, Grote R, Pretzsch H.** 2004. The timing of bud burst and its effect on tree growth. *International Journal of Biometeorology* **48**: 109-118.
- Grote R.** 2003. Estimation of crown radii and crown projection area from stem size and tree position. *Annals of Forest Science* **60**: 393-402.
- Grote R, Schuck J, Block J, Pretzsch H.** 2003. Oberirdische holzige Biomasse in Kiefern-/Buchen- und Eichen-/Buchen- Mischbeständen. *Forstwissenschaftliches Centralblatt* **122**: 287-301.
- Agerer R, Grote R, Raidl S.** 2002. The new method 'micromapping', a means to study species-specific associations and exclusions of ectomycorrhizae. *Mycological Progress* **1**: 155-166.
- Grote R, Pretzsch H.** 2002. A Model for Individual Tree Development Based on Physiological Processes. *Plant Biology* **4**: 167-180.
- Grote R.** 2002. Foliage and branch biomass estimation of coniferous and deciduous tree species. *Silva Fennica* **36**: 779-788.