

Lehning A., Zimmer W., **Zimmer I.**, Schnitzler J.P. (2001) Modeling of annual variations of oak (*Quercus robur* L.) isoprene synthase activity to predict isoprene emission rates. *J. Geophys. Res.* **106**, 3157-3166. This paper was cited 41 times until 2010.

Title: The emission factor of volatile isoprenoids: stress, acclimation, and developmental responses

Author(s): Niinemets U, Arneth A, Kuhn U, et al.

Source: BIOGEOSCIENCES Volume: 7 Issue: 7 Pages: 2203-2223

Published: **2010**

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Abiotic stresses and induced BVOCs

Author(s): Loreto F, Schnitzler JP

Source: TRENDS IN PLANT SCIENCE Volume: 15 Issue: 3 Pages: 154-166

Published: **MAR 2010**

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Process-based simulation of seasonality and drought stress in monoterpene emission models

Author(s): Grote R, Keenan T, Lavoit AV, et al.

Source: BIOGEOSCIENCES Volume: 7 Issue: 1 Pages: 257-274

Published: **2010**

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Seasonality of monoterpene emission potentials in *Quercus ilex* and *Pinus pinea*: Implications for regional VOC emissions modeling

Author(s): Keenan T, Niinemets U, Sabate S, et al.

Source: JOURNAL OF GEOPHYSICAL RESEARCH-ATMOSPHERES Volume: 114 Article Number: D22202

Published: **NOV 18 2009**

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Atmospheric composition change: Ecosystems-Atmosphere interactions

Author(s): Fowler D, Pilegaard K, Sutton MA, et al.

Source: ATMOSPHERIC ENVIRONMENT Volume: 43 Issue: 33 Special Issue: Sp. Iss. SI Pages: 5193-5267

Published: **OCT 2009**

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Leaf carotenoid concentrations and monoterpene emission capacity under acclimation of the light reactions of photosynthesis

Author(s): Porcar-Castell A, Penuelas J, Owen SM, et al.

**Source: BOREAL ENVIRONMENT RESEARCH Volume: 14 Issue: 4
Pages: 794-806**

Published: **AUG 31 2009**

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Modelling the drought impact on monoterpene fluxes from an evergreen Mediterranean forest canopy

Author(s): Grote R, Lavoit AV, Rambal S, et al.

Source: OECOLOGIA Volume: 160 Issue: 2 Pages: 213-223

Published: **MAY 2009**

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Modelling and observation of biosphere-atmosphere interactions in natural savannah in Burkina Faso, West Africa

Author(s): Grote R, Lehmann E, Brummer C, et al.

Source: PHYSICS AND CHEMISTRY OF THE EARTH Volume: 34 Issue: 4-5 Pages: 251-260

Published: **2009**

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Regulation of isoprene synthase promoter by environmental and internal factors

Author(s): Cinege G, Louis S, Haensch R, et al.

Source: PLANT MOLECULAR BIOLOGY Volume: 69 Issue: 5 Pages: 593-604

Published: **MAR 2009**

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Assessment of high (diurnal) to low (seasonal) frequency variations of isoprene emission rates using a neural network approach

Author(s): Boissard C, Chervier F, Dutot AL

**Source: ATMOSPHERIC CHEMISTRY AND PHYSICS Volume: 8 Issue: 7
Pages: 2089-2101**

Published: **2008**

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Modeling volatile isoprenoid emissions - a story with split ends

Author(s): Grote R, Niinemets U

Source: PLANT BIOLOGY Volume: 10 Issue: 1 Pages: 8-28

Published: JAN 2008

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Regulation of isoprene emission in Populus trichocarpa leaves subjected to changing growth temperature

Author(s): Wiberley AE, Donohue AR, Meier ME, et al.

Source: PLANT CELL AND ENVIRONMENT Volume: 31 Issue: 2 Pages: 258-267

Published: FEB 2008

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Isoprene emission from plants: Why and how

Author(s): Sharkey TD, Wiberley AE, Donohue AR

Source: ANNALS OF BOTANY Volume: 101 Issue: 1 Pages: 5-18

Published: JAN 2008

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Interannual variation in biogenic emissions on a regional scale

Author(s): Gulden LE, Yang ZL, Niu GY

Source: JOURNAL OF GEOPHYSICAL RESEARCH-ATMOSPHERES Volume: 112 Issue: D14 Article Number: D14103

Published: JUL 21 2007

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Monoterpene and isoprene emissions from typical tree species in forests around Mexico City

Author(s): Dominguez-Taylor P, Ruiz-Suarez LG, Rosas-Perez I, et al.

Source: ATMOSPHERIC ENVIRONMENT Volume: 41 Issue: 13 Pages: 2780-2790

Published: APR 2007

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Sensitivity of volatile monoterpene emission to changes in canopy structure: a model-based exercise with a process-based emission model

Author(s): Grote R

Source: NEW PHYTOLOGIST Volume: 173 Issue: 3 Pages: 550-561

Published: 2007

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Process-based estimates of terrestrial ecosystem isoprene emissions: incorporating the effects of a direct CO₂-isoprene interaction

Author(s): Arneth A, Niinemets U, Pressley S, et al.

Source: ATMOSPHERIC CHEMISTRY AND PHYSICS Volume: 7 Pages: 31-53

Published: JAN 10 2007

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Process-based modelling of isoprenoid emissions from evergreen leaves of Quercus ilex (L.)

Author(s): Grote R, Mayrhofer S, Fischbach RJ, et al.

Source: ATMOSPHERIC ENVIRONMENT Volume: 40 Pages: S152-S165 Supplement: Suppl. 1

Published: 2006

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Temporal and spatial variation of forest VOC emissions in Germany in the decade 1994-2003

Author(s): Smiatek G, Steinbrecher R

Source: ATMOSPHERIC ENVIRONMENT Volume: 40 Pages: S166-S177 Supplement: Suppl. 1

Published: 2006

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Isoprene prevents the negative consequences of high temperature stress in Platanus orientalis leaves

Author(s): Velikova V, Loreto F, Tsonev T, et al.

Source: FUNCTIONAL PLANT BIOLOGY Volume: 33 Issue: 10 Pages: 931-940

Published: 2006

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Thermal history regulates methylbutenol basal emission rate in Pinus ponderosa

Author(s): Gray DW, Goldstein AH, Lerdau MT

Source: **PLANT CELL AND ENVIRONMENT** Volume: 29 Issue: 7 Pages: 1298-1308

Published: JUL 2006

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Seasonal variation of mono- and sesquiterpene emission rates of Scots pine

Author(s): Hakola H, Tarvainen V, Back J, et al.

Source: **BIOGEOSCIENCES** Volume: 3 Issue: 1 Pages: 93-101

Published: 2006

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Uncertainty assessment of potential biogenic volatile organic compound emissions from forests with the Monte Carlo method: Case study for an episode from 1 to 10 July 2000 in Poland

Author(s): Smiatek G, Bogacki M

Source: **JOURNAL OF GEOPHYSICAL RESEARCH-ATMOSPHERES** Volume: 110 Issue: D23 Article Number: D23304

Published: DEC 6 2005

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Dynamics of monoterpene emissions in Pinus sylvestris during early spring

Author(s): Back J, Hari P, Hakola H, et al.

Source: **BOREAL ENVIRONMENT RESEARCH** Volume: 10 Issue: 5 Pages: 409-424

Published: OCT 24 2005

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Diurnal and seasonal variation of isoprene biosynthesis-related genes in Grey poplar leaves

Author(s): Mayrhofer S, Teuber M, Zimmer I, et al.

Source: **PLANT PHYSIOLOGY** Volume: 139 Issue: 1 Pages: 474-484

Published: SEP 2005

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Diurnal and seasonal emissions of volatile organic compounds from cork oak (Quercus suber) trees

Author(s): Pio CA, Silva PA, Cerqueira MA, et al.

Source: **ATMOSPHERIC ENVIRONMENT** Volume: 39 Issue: 10 Pages: 1817-1827

Published: **MAR 2005**

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Distributed run of a one-dimensional model in a regional application using SOAP-based web services

Author(s): Smiatek G

Source: **ATMOSPHERIC ENVIRONMENT** Volume: 39 Issue: 10 Pages: 1961-1966

Published: **MAR 2005**

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Strong correlation between isoprene emission and gross photosynthetic capacity during leaf phenology of the tropical tree species Hymenaea courbaril with fundamental changes in volatile organic compounds emission composition during early leaf development

Author(s): Kuhn U, Rottenberger S, Biesenthal T, et al.

Source: **PLANT CELL AND ENVIRONMENT** Volume: 27 Issue: 12 Pages: 1469-1485

Published: **DEC 2004**

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Seasonal differences in isoprene and light-dependent monoterpene emission by Amazonian tree species

Author(s): Kuhn U, Rottenberger S, Biesenthal T, et al.

Source: **GLOBAL CHANGE BIOLOGY** Volume: 10 Issue: 5 Pages: 663-682

Published: **MAY 2004**

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Hybridization of European oaks (Quercus ilex x Q-robur) results in a mixed isoprenoid emitter type

Author(s): Schnitzler JP, Steinbrecher R, Zimmer I, et al.

Source: **PLANT CELL AND ENVIRONMENT** Volume: 27 Issue: 5 Pages: 585-593

Published: **MAY 2004**

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Isoprenoid emission in trees of *Quercus pubescens* and *Quercus ilex* with lifetime exposure to naturally high CO₂ environment

Author(s): Rapparini F, Baraldi R, Miglietta F, et al.

Source: PLANT CELL AND ENVIRONMENT Volume: 27 Issue: 4 Pages: 381-391

Published: APR 2004

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Impact of rising CO₂ on emissions of volatile organic compounds: isoprene emission from *Phragmites australis* growing at elevated CO₂ in a natural carbon dioxide spring

Author(s): Scholefield PA, Doick KJ, Herbert BMJ, et al.

Source: PLANT CELL AND ENVIRONMENT Volume: 27 Issue: 4 Pages: 393-401

Published: APR 2004

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: The process-based SIM-BIM model: towards more realistic prediction of isoprene emissions from adult *Quercus petraea* forest trees

Author(s): Zimmer W, Steinbrecher R, Korner C, et al.

Source: ATMOSPHERIC ENVIRONMENT Volume: 37 Issue: 12 Pages: 1665-1671

Published: APR 2003

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Diurnal variation in the basal emission rate of isoprene

Author(s): Funk JL, Jones CG, Baker CJ, et al.

Source: ECOLOGICAL APPLICATIONS Volume: 13 Issue: 1 Pages: 269-278

Published: FEB 2003

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Impact of drought on seasonal monoterpene emissions from *Quercus ilex* in southern France

Author(s): Staudt M, Rambal S, Joffre R, et al.

Source: JOURNAL OF GEOPHYSICAL RESEARCH-ATMOSPHERES Volume: 107 Issue: D21 Article Number: 4602

Published: NOV 2002

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Xylem-transported glucose as an additional carbon source for leaf isoprene formation in Quercus robur

Author(s): Kreuzwieser J, Graus M, Wisthaler A, et al.

Source: NEW PHYTOLOGIST Volume: 156 Issue: 2 Pages: 171-178

Published: NOV 2002

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Quantitative analysis of phytopathogenic ascomycota on leaves of pedunculate oaks (Quercus robur L.) by real-time PCR

Author(s): Heuser T, Zimmer W

Source: FEMS MICROBIOLOGY LETTERS Volume: 209 Issue: 2 Pages: 295-299

Published: APR 9 2002

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Emission of biogenic volatile organic compounds: An overview of field, laboratory and modelling studies performed during the 'Tropospheric Research Program' (TFS) 1997-2000

Author(s): Schnitzler JP, Bauknecht N, Brüggemann N, et al.

Source: JOURNAL OF ATMOSPHERIC CHEMISTRY Volume: 42 Issue: 1 Pages: 159-177

Published: MAY-JUL 2002

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: Seasonal pattern of monoterpene synthase activities in leaves of the evergreen tree Quercus ilex

Author(s): Fischbach RJ, Staudt M, Zimmer I, et al.

Source: PHYSIOLOGIA PLANTARUM Volume: 114 Issue: 3 Pages: 354-360

Published: MAR 2002

Cited References:

... LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS

Title: A model coupling foliar monoterpene emissions to leaf photosynthetic characteristics in Mediterranean evergreen Quercus species

Author(s): Niinemets U, Seufert G, Steinbrecher R, et al.

Source: NEW PHYTOLOGIST Volume: 153 Issue: 2 Pages: 257-275

Published: **FEB 2002**

Cited References:

... **LEHNING A, 2001, V106, P3157, J GEOPHYS RES-ATMOS**