

# Editors and Editorial Board

## Herausgeber/Editors

M. Bachmann Nielsen, Kopenhagen  
K. Jäger, Basel  
E. Merz, Frankfurt am Main  
G. Mostbeck, Wien  
K. Seitz, Sigmaringen

## 1980 gegründet von Founded in 1980 by

H. R. Müller, Basel †  
E. Reinold, Wien  
G. Rettenmaier, Böblingen

## Beirat/Editorial Board

Th. Albrecht, Berlin  
Ch. Arning, Hamburg  
R. Badea, Cluj-Napoca  
I. Baumgartner, Bern  
J. Bates, London  
G. Bernaschek, Wien  
H.-G. Blaas, Trondheim  
G. Bodner, Gibraltar  
R. Bollmann, Berlin  
L. Braun, Bedano  
B. Brkljacic, Zagreb  
A. Brichta, Wien  
A. Bunk, Dresden  
R. Chaoui, Berlin  
K. H. Deeg, Bamberg  
F. Degenhardt, Bielefeld  
S. Delorme, Heidelberg  
J. Deutinger, Wien  
F. M. Drudi, Rom

M. Essig, Zweisimmen  
D. H. Evans, Leicester  
M. Gebel, Hannover  
U. Gembruch, Bonn  
O. H. Gilja, Bergen  
R. Graf, Stolzalpe  
N. Gritzmann, Salzburg  
B. J. Hackelöer, Hamburg  
H. Heynemann, Halle  
S. Karstrup, Roskilde  
H. Kathrein, Schwaz  
G. D. Kneissl, Leipzig  
D. Koischwitz, Siegburg  
Ch. Kollmann, Wien  
H. Lutz, Bayreuth  
W. Mann, Mainz  
G. Mathis, Hohenems  
H. Merk, Greifswald  
J.-Y. Meuwly, Lausanne

This journal is indexed in MEDLINE, Current Contents (CM), Science Citation Index and in EMBASE/Excerpta Medical Abstract Journals

**Impact Factor: 2.398**

[www.thieme-connect.de](http://www.thieme-connect.de)  
[www.thieme.de/ultraschall](http://www.thieme.de/ultraschall)

manuscript submission at  
<http://mc.manuscriptcentral.com/eju>

Ch. Meyenberger, St. Gallen  
P. A. Mircea, Cluj Napoca  
Ch. Nolsøe, Kopenhagen  
D. Nürnberg, Neuruppin  
F. Piscaglia, Bologna  
L. von Rohden, Magdeburg  
E. Rosenfeld, Merseburg  
H.-D. Rott, Erlangen  
J. Simanowski, Hannover  
I. Sporea, Timisoara  
H. Stiegler, München  
D. Strobel, Erlangen  
H. Strunk, Bonn  
S. Tercanli, Basel  
H. Weiss, Ludwigshafen  
W. Wermke, Berlin  
B. Widder, Günzburg  
M. Woydt, Würzburg  
P. S. Zoumpoulis, Kifissia  
H.-J. Zweifel, Buchs

**Imprint**

Ultraschall in der Medizin/European Journal of Ultrasound (Ultraschall in Med)

Eigentümer & Copyright  
© Georg Thieme Verlag KG 2012

**Editors-in-Chief**

Prof. Dr. M. Bachmann Nielsen, Department of Radiology, Section of Ultrasound, Rigshospitalet, Blegdamsvej 9, DK-2100 Copenhagen, Denmark  
Prof. Dr. K. Jäger, Chefarzt Angiologie, Universitäts-spital Basel, Petersgraben 4, 4031 Basel, Switzerland

Prof. Dr. E. Merz, Krankenhaus Nordwest, Frauenklinik, Steinbacher Hohl 2–26, 60488 Frankfurt am Main, Germany

Prof. Dr. G. Mostbeck, Institut für diagnostische und interventionelle Radiologie, Wilhelminenspital und Röntgeninstitut Otto Wagner Spital, Wien, Montleartstr. 37, A-1160 Wien, Austria  
PD Dr. K. Seitz, Kreiskrankenhaus Sigmaringen, Innere Abteilung, 72481 Sigmaringen, Germany

**Publishers**

Georg Thieme Verlag KG  
Rüdigerstraße 14, 70469 Stuttgart  
P.O. Box 30 11 20, 70451 Stuttgart  
phone +49-711-8931-0  
fax +49-711-8931-298  
[www.thieme.com](http://www.thieme.com)  
<http://www.ultraschall.thieme.de>  
<http://www.thieme-connect.de/ejournals>

**Copyright**

This journal, including all individual contributions and illustrations published therein, is legally protected by copyright for the duration of the copyright period. Any use, exploitation or commercialization outside the narrow limits set by copyright legislation, without the publisher's consent, is illegal and liable to criminal prosecution. This applies in particular to photocopy reproduction, copyright, cyclostyling, mimeographing or duplication of any kind, translating, preparation of microfilms, and electronic data processing and storage.

**Advertising responsibility**

Thieme.media  
Pharmmedia Anzeigen- und Verlagsservice GmbH  
Irmgard Mayer  
Rüdigerstraße 14, 70469 Stuttgart and  
P.O. Box 30 08 80, 70448 Stuttgart  
phone +49-711-8931-469  
fax +49-711-8931-569  
e-mail: [Irmgard.Mayer@pharmmedia.de](mailto:Irmgard.Mayer@pharmmedia.de)

**Printed in Germany**

AZ Druck und Datentechnik, Kempten

**Typesetting**

Reemers Publishing Services GmbH, Krefeld

**Production manager**

phone +49-711-8931-277  
fax +49-711-8931-355  
e-mail: [Angelika.Hoebrink@thieme.de](mailto:Angelika.Hoebrink@thieme.de)

**Subscription information**

phone +49-711-8931-321  
fax +49-711-8931-422  
e-mail: [aboservice@thieme.de](mailto:aboservice@thieme.de)

**General information**

Ultraschall in der Medizin/European Journal of Ultrasound, ISSN 0172-4614, is published in 6 issues per year. Subscribers are asked to inform the publisher immediately in case of address changes in order to ensure correct delivery of the journal. All subscription orders are entered for the calendar year. The rate of subscription is invoiced in advance at the end of the year for the following year and becomes due for payment for the full calendar year. Subscriptions can be started anytime. Subscriptions are automatically extended each year unless notice of cancellation is received from the subscriber prior to September 30 of each year (applies to Germany, Switzerland, Austria only).

**Subscription for Europe and countries outside the American continent**

Order from Georg Thieme Verlag KG, Rüdigerstr. 14, 70469 Stuttgart, Germany; P.O. Box 30 11 20, 70451 Stuttgart, Germany; phone +49-711-8931-421; fax +49-711-8931-410; e-mail: [custserv@thieme.de](mailto:custserv@thieme.de).  
Subscription rates for 2008 are listed below.

**Subscription for the American Continent**

Order from Thieme New York, 333 Seventh Avenue, New York, NY 10001, USA. Order toll free +1-800-782-3488 (US only) or +1-212-760-0888, fax +1-212-947-0108; e-mail: [customerservice@thieme.com](mailto:customerservice@thieme.com).

Subscription rates for 2008 are listed below. Airfreight and mailing in the USA by Publications Expediting Inc., 200 Meacham Ave., Elmont, NY 11003. Periodicals postage paid at Jamaica NY 11431. Postmaster: Send address changes to Ultraschall in der Medizin/European Journal of Ultrasound Publications Expediting Inc., 200 Meacham Ave., Elmont, NY 11003.

For information on personal rate subscriptions or special society agreements, please contact Fiona Henderson, Thieme International, phone +49-711-8931-458, fax +49-711-8931-410, e-mail: [Fiona.Henderson@thieme.de](mailto:Fiona.Henderson@thieme.de)

**For Users in the USA**

Authorization of photocopy items for internal or personal use, or the internal or personal use of specific clients, is granted by Georg Thieme Verlag Stuttgart New York for libraries and other users registered with the Copyright Clearance Center (CCC) Transactional Reporting Service; [www.copyright.com](http://www.copyright.com)

For reprint information in the US, please contact: International Reprint Corporation, 287 East "H" St., Benicia, CA 94510, USA; phone: +1-707-746-8740, fax +1-707-746-1643; e-mail: [irc@intreprints.com](mailto:irc@intreprints.com)

**Product names**

Product names which are registered trademarks may not have been specifically designated as such in every case. In case that a product has been referred to by its registered trademark it cannot be concluded that the name used is in the public domain. The same applies to labels, names or other signs.

**Manuscripts**

Manuscript submission exclusively via: <http://mc.manuscriptcentral.com/eju>  
For details regarding manuscript submission please refer to "Instruction for Authors". In princi-

**Important note**

Medicine is an ever-changing science undergoing continual development. Research and clinical experience are continually expanding our knowledge, in particular our knowledge of proper treatment and drug therapy. Insofar as this journal mentions any dosage or application, readers may rest assured that the authors, editors and publishers have made reasonable effort to ensure that such references are in accordance with the state of knowledge at the time of production of the journal. Nevertheless this does not involve, imply, or express any guarantee or responsibility on the part of the publishers in respect of any dosage instructions and forms of application stated in the journal. Every user is requested to examine carefully the manufacturers' leaflets accompanying each drug and to check, if necessary in consultation with a physician or specialist, whether the dosage schedules mentioned therein or the contraindications stated by the manufacturers differ from the statements made in the present journal. Such examination is particularly important with drugs that are either rarely used or have been newly released on the market. Every dosage schedule or every form of application used is entirely at the users own risk and responsibility. The authors and publishers request every user to report to the publishers any discrepancies or inaccuracies noticed.

ple only papers will be accepted which have not been published previously, domestically or abroad. Furthermore, manuscripts may not be offered to other publications at the same time as they are under consideration for this journal.

With the acceptance of the manuscript for publication the authors transfer the exclusive, spatial and temporally unrestricted right to the publishing house for all editions/updates for the duration of the legal period of protection (§64 UrHG) for also excerpt-wise utilization in printed form as well as into electronic media (data bases, online reticulated systems, Internet, CD-ROM, DVD, PDA etc.) also in changed form or in form of an excerpt-wise linkage with other works including the translation into other languages as well as by transmission of rights to use to third.

As far as illustrations are taken out of other publications, the author grants only the not exclusive right to use to the extent of the managing paragraph to the publishing house. The author is responsible for the complete indication of source as well as the obtaining of the written consent of the other publishing house to the managing evacuations of right and proves these to the publishing house.

The corresponding author will receive a PDF-file for private use.

**Online**

The scientific text of this journal is available online through Thieme-connect, <http://www.thieme-connect.de>. Access to Thieme-connect is free of charge for personal subscribers. For information concerning licenses and prices for institutional access, please contact Carmen Krenz, e-mail: [sales@thieme-connect.de](mailto:sales@thieme-connect.de)

Customers from North, Central and South America and Canada please contact Alexandra Williams, e-mail: [awilliams@thieme.com](mailto:awilliams@thieme.com)

Authors may choose to allow, for a fee, free general access to their papers online. For details, please contact [ultraschall@thieme.de](mailto:ultraschall@thieme.de)

Subscription rates 2012*	Germany	Total	Europe	Total	Global	Total
Postage & Handling	21,40		31,80		38,60	
Personal Subscription Rate	340,00	361,40	340,00	371,80	340,00	378,60
Institutional Subscription Rate	576,00	(614,40)	576,00	(624,80)	576,00	(631,60)

Members of the following societies will receive this journal within their membership: German Society of Ultrasound in Medicine and Biology; Austrian Society of Ultrasound in Medicine and Biology; Swiss Ultrasound Society in Medicine and Biology; Danish Society of Diagnostic Ultrasound; Norwegian Society of Diagnostic Ultrasound in Medicine; Flemish Society of Ultrasound; Latvian Society of Ultrasound; Croatian Society of Ultrasound in Medicine and Biology; Slovene Society for Ultrasonics; Romanian Society of Ultrasonography in Medicine and Biology; Hellenic Society for Ultrasound in Medicine and Biology

Single issue: 68,00 Euro

\* Prices include 7% VAT; Euro is equivalent to Euro (D).

© Georg Thieme Verlag KG  
Stuttgart · New York 2012

Heft 1	(February 2012)	= Seite	1 – 89
Heft 2	(April 2012)	= Seite	113 – 186
Heft 3	(June 2012)	= Seite	211 – 294
Heft 4	(August 2012)	= Seite	313 – 388
Heft 5	(October 2012)	= Seite	407 – 496
Heft 6	(December 2012)	= Seite	517 – 599
Heft 7	(December 2012)	= Seite	364 – 365
			E1 – E373
Heft S 1	(July 2012)	= Seite	S1 – S66

## Case Report

- E366 Chopra, S. S., R. Eisele, O. Guckelberger, M. Mogl, C. Grieser, P. Neuhaus, T. Denecke  
Stellenwert der Duplex-Sonografie in der Diagnose und Therapiekontrolle des Lienalis-Steal-Syndroms nach Lebertransplantation
- 85 Colmorn, L. B., T. Jensen, B. L. Petersen, M. Helvind, F. S. Jørgensen  
Prenatal Ultrasound Diagnosis of a Multiple Atypical Right Atrial Cardiac Fibroma
- 185 Deuschle, P., M. Michel, F. Lenz, L. Wessel  
Erstbeschreibung einer pränatal diagnostizierten Nuck-Zyste
- 493 Enzensberger, C., K. Eskef, A. Schwarze, D. Faas, R. Axt-Fliedner  
Course and Outcome of Pregnancy After Maternal Exposure to Angiotensin-II-Receptor Blockers – Case Report and Review of the Literature
- E361 Fette, A., J. Mayr  
Slipped Distal Humerus Epiphysis in Tiny Infants Easily Detected and Followed-Up by Ultrasound
- E372 Holschbach, V., C. R. Lattrich, O. Ortmann, A. M. Müller, U. Germer  
Upper Abdominal Cysts in First Trimester Fetuses
- E369 Hoxha, A., E. Merz  
Maternal Sjögren Syndrome and Isolated Complete Fetal AV Block: Prenatal Diagnosis and Therapy
- 364 Ilivitzki, A., R. Shaoul, A. Engel  
The Unique Sonographic Appearance of a Gastric Mucosal Lining Duplication Cyst
- 183 Koch, A. M.  
Abgang der rechten Koronararterie aus dem linken Sinus Valsalva mit interarteriellem Verlauf bei einem asymptomatischen Neugeborenen
- E350 Miric Tesanic, D., A. Tikvica Luetic, D. Habek, M. Stanojevic, J. Grujic Koracin  
Prenatal Diagnosis of Ambient Cistern Cyst
- E359 Pompili, M., L. Riccardi, M. Garcovich, L. Sollazzi, A. Seccia, G. Rapaccini  
Severe Skin Burn at Needle Entry Point Complicating Radiofrequency Ablation for Hepatocellular Carcinoma
- 597 Solivetti, F. M., F. Elia, F. Musicco, A. C. Bonagura, N. Di Leo, J. Iera, Francesco Drudi  
Anaphylactic Shock Induced by Sulphur Hexafluoride in an Individual with no History of Heart Disease: Case Report and Literature review
- E352 Song, I.-H., U. Rediner, K.-G. Hermann, G. R. Burmester, M. Backhaus  
Contrast-Enhanced Ultrasound for the Monitoring of the Efficacy of Intra-Articular Glucocorticosteroids in 2 Patients with Inflammatory Knee Joint Synovitis
- E355 Tombesi, P., F. Di Vece, E. Salviato, R. Galeotti, S. Sartori  
Spontaneous Active Bleeding in Thoracoacromial Artery Diagnoses by Contrast-Enhanced Ultrasound – a Case Report

- E357 Viacoz, A., H. Müller, F. Perren  
Asymptomatic External Carotid Artery Thrombosis in Acute Stroke

## Congress Report

- 386 Seitz, K.  
Zur wissenschaftlichen Repräsentanz der mittelgroßen Sektionen und Arbeitskreise der DEGUM am Dreihunderttreffen 2010 in Mainz

## Consensus Paper

- 344 Dietrich, C. F., M. A. Averkiou, J.-M. Correias, N. Lassau, E. Leen, F. Piscaglia  
An EFSUMB Introduction into Dynamic Contrast-Enhanced Ultrasound (DCE-US) for Quantification of Tumour Perfusion
- 175 Merz, E., J. Abramovicz, K. Baba, H.-G. K. Blaas, J. Deng, L. Gindes, W. Lee, L. Platt, D. Pretorius, R. Schild, P. Sladkevicius, I. Timor-Tritsch  
3D imaging of the fetal face – Recommendations from the International 3D Focus Group
- 593 Merz, E., K.-H. Eichhorn, C. von Kaisenberg, T. Schramm  
Aktualisierte Qualitätsanforderungen an die weiterführende differenzierte Ultraschalluntersuchung in der pränatalen Diagnostik (= DEGUM-Stufe II) im Zeitraum von 18+0 bis 21+6 Schwangerschaftswochen

## Continuing Education

- 8 Berzigotti, A., F. Piscaglia  
Ultraschall bei Pfortaderhochdruck – Teil 2 – und EFSUMB-Empfehlungen zur Durchführung und Dokumentation von Ultraschalluntersuchungen bei Pfortaderhochdruck
- 416 Drudi, F. M., M. Valentino, N. Di Leo, F. Malpassini, V. Cantisani, M. Gnecci, F. Iori  
Farb-/Powerdoppler-US und US-Kontrastmittel bei akutem Skrotum – Teil 1
- 520 Hagendorff, A., S. Stoebe, A. Tarr, D. Pfeiffer  
Die konventionelle Standarduntersuchung in der transthorakalen Echokardiografie bei Patienten mit degenerativer Aortenklappenstenose
- 218 Harrer, J. U., J. Eyding, M. Ritter, U. Schminke, G. Schulte-Altdorneburg, M. Köhrmann, M. Nedelmann, F. Schlachetzki  
Neurosonografie in der neurologischen Notfall- und Intensivmedizin: Grundlagen, vaskuläre Schlaganfall-diagnostik und Monitoring – Teil 1
- 320 Harrer, J. U., J. Eyding, M. Ritter, U. Schminke, G. Schulte-Altdorneburg, M. Köhrmann, M. Nedelmann, F. Schlachetzki  
Neurosonografie in der neurologischen Notfall- und Intensivmedizin: Monitoring des erhöhten intrakraniellen Druckes, Hirntoddiagnostik und Untersuchung der zerebralen Autoregulation – Teil 2
- 122 Steiner, H., I. Haberlehner, T. Jaeger  
Doppler-Sonografie in der Geburtshilfe

## Editorial

- 215 Abramowicz, J. S., F. W. Kremkau, E. Merz  
Ultraschall in der Geburtshilfe: Kann der Fötus die Ultraschallwelle hören und die Hitze spüren?

- 119 Jaeger, K. A.  
Weiterbildung in Ultraschall
- 316 Mostbeck, G.  
Mammasonografie von Mikrokalk – technisch möglich und klinisch relevant?
- S1 Mostbeck, G.  
“Hot Topics” in Contrast-Enhanced Ultrasound (CEUS) – Introduction
- 517 Seitz, K.  
Qualitätssicherung in der Ultraschalldiagnostik in Deutschland – eine unendliche Geschichte
- 5 Sidhu, P. S., B. I. Choi, M. B. Nielsen  
The EFSUMB Guidelines on the Non-Hepatic Clinical Applications of Contrast Enhanced Ultrasound (CEUS): a New Dawn for the Escalating Use of This Ubiquitous Technique

#### Editorial

- 411 Dietrich, C. F., R. Ponnudurai, M. Bachmann Nielsen  
Is There a Need for New Imaging Methods for Lymph Node Evaluation?

#### Erratum

- E1 Gindes, L., A. Weissmann-Brenner, R. Achiron, K. Tzadikvitch-Geffen, M. Zajicek, B. Weisz  
3-Dimensional Demonstration of Fetal Anal Canal and Sphincter

#### Guidelines

- 544 Kollmann, C., C. deKorte, N. J. Dudley, N. Gritzmann, K. Martin, D. H. Evans  
Guideline for Technical Quality Assurance (TQA) of Ultrasound devices (B-Mode) – Version 1.0 (July 2012)
- 33 Piscaglia, F., C. Nolsøe, C. F. Dietrich, D. O. Cosgrove, O. H. Gilja, M. Bachmann Nielsen, T. Albrecht, L. Barozzi, M. Bertolotto, O. Catalano, M. Claudon, D. A. Clevert, J. M. Correas, M. D'Onofrio, F. M. Drudi, J. Eyding, M. Giovannini, M. Hocke, A. Ignee, E. M. Jung, A. S. Klauser, N. Lassau, E. Leen, G. Mathis, A. Saftoiu, G. Seidel, P. S. Sidhu, G. ter Haar, D. Timmerman, H. P. Weskott  
The EFSUMB Guidelines and Recommendations on the Clinical Practice of Contrast Enhanced Ultrasound (CEUS): Update 2011 on non-hepatic applications

#### Letter to the Editor

- 87 Li, Q., J. Tang  
Role of Low-Mechanical Index CEUS in the Differentiation between Low and High Grade Bladder Carcinoma: a Pilot Study
- 598 Letter to the Editor

#### Original Article

- E233 Ahmed, A. B., K. Matre, T. Hausken, H. Gregersen, O. H. Gilja  
Rome III Subgroups of Functional Dyspepsia Exhibit Different Characteristics of Antral Contractions Measured by Strain Rate Imaging – a Pilot Study

- E95 Albrich, S., R. M. Laterza, A. Merinsky, C. Skala, H. Koelbl, G. Naumann  
Die Messung des infrapubischen Winkels in der 3-D-Perineal-Sonografie und seine Beziehung zu geburts-hilfflichen Parametern
- 245 Arzt, W., F. Klement, I. Veit, B. Stadlober, H. C. Duba, B. Günther, D. Wertaschnigg  
Einfluss der nicht invasiven Ersttrimester-Diagnostik auf Indikationen und Ergebnisse der Chorionzottenbiopsien
- E51 Axt-Fliedner, R., C. Enzensberger, N. Fass, M. Vogel, A. Kawecki, J. Weichert, T. Kohl, U. Gembruch, U. Germer, M. Krapp, J. Degenhardt  
Fetal Diagnosis of Hypoplastic Left Heart, Associations and Outcomes in the Current Era
- E80 Bahlmann, F., M. Fittschen, I. Reinhard, S. Wellek, A. Puhl  
Blood Flow Velocity Waveforms of the Umbilical Artery in a Normal Population: Reference Values from 18 Weeks to 42 Weeks of Gestation
- 258 Bahlmann, F., M. Fittschen, I. Reinhard, S. Wellek, E. Steiner  
Reference Values for Blood Flow Velocity in the Uterine Artery in Normal Pregnancies from 18 Weeks to 42 Weeks of Gestation Calculated by Automatic Doppler Waveform Analysis
- 463 Bhatia, K., C. S. Tong, C. C. Cho, E. H. Yuen, J. Lee, A. T. Ahuja  
Reliability of Shear Wave Ultrasound Elastography for Neck Lesions Identified in Routine Clinical Practice
- E166 Boesen, M., K. Ellegaard, L. Boesen, M. A. Cimmino, P. S. Jensen, L. Terslev, S. Torp-Pedersen, B. Danneskiold-Samsøe, H. Bliddal  
Ultrasound Doppler Score Correlates with OMERACT RAMRIS Bone Marrow Oedema and Synovitis Score in the Wrist Joint of Patients with Rheumatoid Arthritis
- E191 Bohle, W., P. U. Clemens, T. Heubach, W. G. Zoller  
Contrast-Enhanced Ultrasound (CEUS) for Differentiating Between Hepatocellular and Cholangiocellular Carcinoma
- 455 Butz, T., F. van Buuren, K.-P. Mellwig, C. Langer, O. Oldenburg, K. A. Treusch, A. Meissner, G. Plehn, H.-J. Trappe, D. Horstkotte, L. Faber  
Echokardiografische Gewebedoppleranalyse der Mitralringgeschwindigkeiten bei Patienten mit hypertropher Kardiomyopathie und bei Hochleistungssportlern
- 141 Celebi, N., K. Zwirner, U. Lischner, M. Bauder, K. Dittthard, S. Schürger, R. Riessen, C. Engel, B. Balletshofer, P. Weyrich  
Student Tutors Are Able to Teach Basic Sonographic Anatomy Effectively – a Prospective Randomized Controlled Trial
- E138 Chiorean, A. R., M. M. Duma, S. M. Dudea, S. Bolboaca, D. Dumitriu, D. Eniu, S. A. Sfrangeu  
Typical and Unusual Sonoelastographic Patterns of Breast Cystic Lesions: Impact on BI-RADS Classification
- E321 Clemmesen, L., L. Knudsen, E. Sloth, T. Bendtsen  
Dynamic Needle Tip Positioning – Ultrasound Guidance for Peripheral Vascular Access. A Randomized, Controlled and Blinded Study in Phantoms Performed by Ultrasound Novices
- E339 Edelbauer, M., K. Maurer, I. Gassner  
Spinal Subdural Effusion – An Additional Sonographic Sign of Child Abuse

- 474 Eiler, J., U. Kleinholdermann, D. Albers, J. Dahms, F. Hermann, C. Behrens, M. Luedemann, V. Klingmueller, G. F. Alzen  
Standard value of ultrasound elastography using acoustic radiation force impulse imaging (ARFI) in healthy liver tissue of children and adolescents.
- E75 Enzensberger, C., C. Pulvermacher, J. Degenhardt, A. Kawacki, U. Germer, U. Gembruch, M. Krapp, J. Weichert, R. Axt-Fliedner  
Fetal Loss Rate and Associated Risk Factors After Amniocentesis, Chorionic Villus Sampling and Fetal Blood Sampling
- E38 Enzensberger, C., M. Vogel, J. Degenhardt, N. Fass, A. Kawecky, T. Kohl, E. Widriani, R. Axt-Fliedner  
Fetal Pulmonary Venous Flow and Restrictive Foramen Ovale in Hypoplastic Left Heart
- E263 Ertl, M., M. Altmann, E. Torka, H. Helbig, U. Bogdahn, A. Gamulescu, F. Schlachetzki  
The Retrobulbar "Spot Sign" as a Discriminator Between Vasculitic and Thrombo-Embolic Affections of the Retinal Blood Supply
- 480 Faschingbauer, F., M. W. Beckmann, T. W. Goecke, B. Yazdi, J. Siemer, M. Schmid, A. Mayr, R. L. Schild  
A New Formula for Optimized Weight Estimation in Extreme Fetal Macrosomia ( $\geq 4500\text{g}$ )
- E62 Faschingbauer, F., F. Voigt, T. W. Goecke, J. Siemer, M. W. Beckmann, B. Yazdi, R. L. Schild  
Fetal Weight Estimation in Extreme Macrosomia ( $\geq 4,500\text{g}$ ): Comparison of 10 Formulas
- 372 Fischer, T., U. Peisker, S. Fiedor, T. Slowinski, P. Wedemeyer, F. Diekmann, M. Grigoryev, A. Thomas  
Significant Differentiation of Focal Breast Lesions: Raw Data-Based Calculation of Strain Ratio
- 357 Fischer, T., M. Grigoryev, S. Bossenz, F. Diekmann, U. Bick, T. Slowinski, A. Thomas  
Sonografische Mikrokalkdetektion – Potenzial einer neuen Methode
- E101 Fruscalzo, A., R. Schmitz, W. Klockenbusch, J. Steinhard  
Reliability of Cervix Elastography in the Late First and Second Trimester of Pregnancy
- E25 Gindes, L., A. Weissmann-Brenner, R. Achiron, K. Tzadikivitch-Geffen, M. Zajicek, B. Weisz  
3-Dimensional Demonstration of Fetal Anal Canal and Sphincter
- E202 Guth, S., U. Leise, C. Gocke, C. U. Herborn, A. Galach, C. M. Bamberger  
Stellenwert der Sonografie im Rahmen präventiver Untersuchungen im Vergleich zur Ganzkörper-MRT – eine retrospektive Untersuchung bei 833 Patienten
- 270 Hahn, M., L. Roessner, U. Krainick-Strobel, I. V. Gruber, B. Krämer, C. Gall, K. C. Siegmann, D. Wallwiener, K. O. Kagan  
Dignitätskriterien der Mammasonografie unter Anwendung des Real-Time Compound Image in Kombination mit dem XRES Adaptiv Image Processing
- 366 Hahn, M., U. Krainick-Strobel, T. Toellner, J. Gissler, S. Kluge, E. Krapfl, U. Peisker, V. Duda, F. Degenhardt, H. P. Sinn, D. Wallwiener, I. V. Gruber  
Interdisciplinary Consensus Recommendations for the use of Vacuum-Assisted Breast Biopsy under Sonographic Guidance: First update 2012
- 275 He, H., T. Yu, Y. Zhang  
The Interaction between a Drug and Ultrasound in Sonochemotherapy against Ovarian Cancers
- 160 Hille, H., M. Vetter, B. J. Hackelöer  
The Accuracy of BI-RADS Classification of Breast Ultrasound as a First-Line Imaging Method
- 68 Hofer, M., L. Kamper, F. Miese, P. Kröpil, C. Naujoks, J. Handschel, N. Heussen  
Quality Indicators for the Development and Didactics of Ultrasound Courses in Continuing Medical Education
- 447 Hsu, H.-H., J.-C. Yu, G.-C. Hsu, C.-P. Yu, W.-C. Chang, H.-J. Tung, W.-C. Lin, S.-H. Tsai, G.-S. Huang  
Atypical Ductal Hyperplasia of the Breast Diagnosed by Ultrasonographically Guided Core Needle Biopsy
- E158 Hsu, Y.-C., Y.-C. Wu, H.-H. Wang, M.-S. Lee, G.-S. Huang  
Assessment of Cam-Type Femoroacetabular Impingement by Ultrasonography: Value of Anterior Femoral Distance Measurements
- E275 Idzenga, T., H. Hansen, R. Lopata, C. de Korte  
Estimation of Longitudinal Shear Strain in the Carotid Arterial Wall Using Ultrasound Radiofrequency Data
- 152 Juhl-Olsen, P., C. A. Frederiksen, E. Sloth  
Ultrasound Assessment of Inferior Vena Cava Collapsibility Is Not a Valid Measure of Preload Changes During Triggered Positive Pressure Ventilation: A Controlled Cross-Over Study
- E46 Kargl, S., D. Wertaschnigg, I. Scharnreitner, W. Pumberger, W. Arzt  
Closing Gastroschisis: eine Sonderform der Gastroschisis mit hoher Morbidität und Mortalität
- 265 Kehl, S., C. Körber, N. Hart, T. W. Goecke, R. L. Schild, J. Siemer  
New Sonographic Method for Fetuses with a Large Abdominal Circumference Improves Fetal Weight Estimation
- 469 Kehl, S., C. Körber, N. Hart, T. W. Goecke, R. L. Schild, J. Siemer  
New Sonographic Method for Fetuses with Small Abdominal Circumference Improves Fetal Weight Estimation
- E299 Li, S., P. Huang, H. Xu, K. Xu, X. Wu  
Comparison of Double Contrast-Enhanced Ultrasound and MDCT for Assessing Vascular Involvement of Pancreatic Adenocarcinoma: Preliminary Results Correlated with Surgical Findings
- E218 Li, S., P. Huang, Z. Wang, J. Chen, H. Xu, L. Wang, Y. Zhang, G. Mo, J. Zhu, D. Cosgrove  
Preoperative T Staging of Advanced Gastric Cancer using Double Contrast-Enhanced Ultrasound
- 146 Linde, H.-N. G., A. Holland, B. H. Greene, C. Görg  
Kontrastunterstützte Sonografie (CEUS) bei Pneumonie: Darstellungsmuster und prognostische Bedeutung – eine retrospektive Studie bei n = 50 Patienten
- E326 Logallo, N., J. Lind, H. Naess, T. Idicula, J. Brogger, U. Waje-Andreassen, L. Thomassen  
Middle Cerebral Artery Stenosis: Transcranial Color-Coded Sonography based on continuity equation versus CT-Angiography
- 352 Loizides, A., S. Peer, M. Plaikner, T. Djurdjevic, H. Gruber  
Punched Nerve Syndrome: Ultrasonographic Appearance of Functional Vascular Nerve Impairment
- E31 Lomax, L., H. Johansson, L. Valentin, P. Sladkevicius  
Agreement Between Prenatal Ultrasonography and Fetal Autopsy Findings: A Retrospective Study of Second Trimester Terminations of Pregnancy
- E57 Lüthgens, K., M. Hoopmann, R. Alkier, H. Abele, B. Yazdi, K. Kagan  
Screening auf Trisomie 18 und Trisomie 13 durch das kombinierte Anwenden der Risiko-Algorithmen für Trisomie 21, 18 und 13
- E283 Marcus, K. A., C. L. de Korte, T. Feuth, J. M. Thijssen, L. Kapusta  
Abnormal Two-Dimensional Strain Echocardiography Findings in Children with Congenital Valvar Aortic Stenosis

- E179 Marone, U., O. Catalano, C. Caracò, A. M. Anniciello, F. Sandomenico, G. Di Monta, M. L. Di Cecilia, S. Mori, G. Botti, A. Petrillo, N. Mozzillo  
Can High-Resolution Ultrasound Avoid the Sentinel Lymph-node Biopsy Procedure in the Staging Process of Patients with Stage I-II Cutaneous Melanoma?
- E68 Mihailovic, T., B. V. Stimec, M. Terzic, A. Dmitrovic, J. Micic  
The Absence of the Vomer in the First and Early Second Trimester of Pregnancy – A New Marker of Trisomy 21 and Trisomy 13
- E225 Nylund, K., T. Hausken, S. Ødegaard, G. E. Eide, O. H. Gilja  
Gastrointestinal Wall Thickness Measured with Trans-abdominal Ultrasonography and Its Relationship to Demographic Factors in Healthy Subjects
- E186 Park, S. J., S. H. Park, Y. J. Choi, D. W. Kim, E. J. Son, H. S. Lee, J. H. Yoon, E.-K. Kim, H. J. Moon, J. Y. Kwak  
Interobserver Variability and Diagnostic Performance in US Assessment of Thyroid Nodule According to Size
- E210 Pavlovic Markovic, A., T. Rösch, T. Alempijevic, M. Krstic, D. Tomic, P. Dugalic, A. Sokic Milutinovic, M. Bulajic  
Endoscopic Ultrasound for Differential Diagnosis of Duodenal Lesions
- 574 Pfandzelter, R., G. Sander, T. Balhar, M. Langer  
Technische Qualitätssicherung der Ultraschall Diagnostik in der ambulanten Versorgung
- E268 Poredos, P., M. K. Jezovnik  
Enlargement of the Diameter of the Peripheral Arteries in Patients with Idiopathic Venous Thrombosis
- E333 Richter-Rodier, M., A. E. Lange, B. Hinken, M. Hofmann, R. D. Stenger, W. Hoffmann, C. Fusch, J. P. Haas  
Ultrasound Screening Strategies for the Diagnosis of Congenital Anomalies of the Kidney and Urinary Tract
- E132 Schnabel, A., F. Schuster, T. Ermert, L. H. Eberhart, T. Metterlein, P. Kranke  
Ultrasound Guidance for Neuraxial Analgesia and Anesthesia in Obstetrics: a Quantitative Systematic Review
- E88 Scholbach, T. M., J. Konje, B. Huppertz  
Pixelwise Quantification of Placental Perfusion Visualized by 3D Power Doppler Sonography
- E196 Schrader, H., M. Wiese, M. Ellrichmann, O. Belyaev, W. Uhl, A. Tannapfel, W. Schmidt, J. Meier  
Diagnostic Value of Quantitative EUS Elastography for Malignant Pancreatic Tumors: Relationship with Pancreatic Fibrosis
- E126 Seeliger, C., A. Brueckmann, E. Schleußner  
Maternale Endothelfunktion in Schwangerschaft und Wochenbett – ultraschallgestützte longitudinale Erfassung mittels Flow Mediated Dilatation (FMD)
- E306 Serra, C., A. Stauffer, B. Actor, J.-K. Burkhardt, N. H.-B. Ulrich, R.-L. Bernays, O. Bozinov  
Intraoperative High Frequency Ultrasound in Intracerebral High-Grade Tumors
- E173 Terslev, L., M. A. D'Agostino, M. Brossard, P. Aegerter, P. Balint, M. Backhaus, G. A. Bruyn, I. Chary-Valckenare, E. Filippucci, J. Freeston, F. Gandjbakhch, A. Iagnocco, S. Jousse-Joulin, P. Mandl, I. Möller, E. Naredo, M. Szkudlarek, R. J. Wakefield, A. Zayat, W. A. Schmidt  
Which Knee and Probe Position Determines the Final Diagnosis of Knee Inflammation by Ultrasound? Results from a European Multicenter Study
- E119 Tomsin, K., T. Mesens, G. Molenberghs, L. Peeters, W. Gyselaers  
Time Interval Between Maternal Electrocardiogram and Venous Doppler Waves in Normal Pregnancy and Preeclampsia: A Pilot Study
- E108 Ulrich, D., G. Desoye, C. Wadsack, J. Haas, B. Csapo, M. Holzapfel-Bauer, U. Lang, D. Schlembach  
Fetal Anterior Wall Thickness and Amniotic Fluid Insulin Levels: an Interdependence?
- E256 Uthoff, H., M. Siegemund, M. Aschwanden, L. Hunziker, T. Fabbro, U. Baumann, K. A. Jaeger, S. Imfeld, D. Staub  
Prospective Comparison of Noninvasive, Bedside Ultrasound Methods for Assessing Central Venous Pressure
- E313 Vyskocil, E., S. Pfaffenberger, C. Kollmann, A. Gleiss, G. Nawratil, S. Kastl, E. Unger, K. Aumayr, O. Schuhfried, K. Huber, J. Wojta, M. Gottsauner-Wolf  
Thermal Effects of Diagnostic Ultrasound in an Anthropomorphic Skull Model
- 251 Willruth, A. M., A. Geipel, C. Berg, R. Fimmers, U. Gembruch  
Assessment of Fetal Global and Regional Ventricular Function in Congenital Heart Disease Using a Novel Feature Tracking Technique
- E293 Willruth, A. M., A. Geipel, C. Berg, R. Fimmers, U. Gembruch  
Assessment of Left Ventricular Global and Regional Longitudinal Peak Systolic Strain, Strain Rate and Velocity with Feature Tracking in Healthy Fetuses
- E114 Willruth, A. M., N. Dwinger, J. Ritgen, R. Stressig, A. Geipel, U. Gembruch, C. Berg  
Fetal Aberrant Right Subclavian Artery (ARSA) – a Potential New Soft Marker in the Genetic Scan?
- E241 Xu, H.-X., M.-D. Lu, L.-N. Liu, Y.-F. Zhang, L.-H. Guo, C. Liu, S. Wang  
Imaging Features of Intrahepatic Biliary Cystadenoma and Cystadenocarcinoma on B-Mode and Contrast-Enhanced Ultrasound
- E145 Yoon, J. H., E.-K. Kim, J. Y. Kwak, H. J. Moon, M. J. Kim  
Is US-guided Core Needle Biopsy (CNB) enough in Probably Benign Nodules with Interval Growth?
- E250 Zhong-Zhen, S., L. Kai, Z. Rong-Qin, X. Er-Jiao, Z. Ting, Z. Ao-Hua, Y. Shu-Fang, H. Xu-Qi  
A Feasibility Study for Determining Ablative Margin with 3D-CEUS-CT/MR Image Fusion after Radiofrequency Ablation of Hepatocellular Carcinoma
- E151 Zimmermann, N., R. Ohlinger  
Diagnostic Value of Palpation, Mammography, and Ultrasonography in the Diagnosis of Fibroadenoma: Impact of Breast Density, Patient Age, Ultrasonographic Size, and Palpability

#### Pictorial Essay

- 489 Dencker, D., C. Ewertsen, S. Karstrup  
Drainage of Air-Containing Cavities Guided by Image Fusion involving Ultrasound and Electromagnetic Needle Tracking
- 76 Heinzmann, A., T. Müller, J. Leitlein, B. Braun, S. Kubicka, W. Blank  
Endocavitary Contrast Enhanced Ultrasound (CEUS) – Work in Progress
- E344 Ruiz Santiago, F., I. Guzmán Álvarez, M. del Mar Castellano García  
Ultrasound Pathology of the Elbow: a Pictorial Essay

#### Quality Assurance

- 289 Rosenfeld, E., S. Wolter, A. Kopp, E. Liebscher  
Investigation of the Suitability of Tissue Phantoms for Testing the Constancy of Ultrasonic Transducer Arrays in Quality Assurance

## Rapid Communication

- 587 Egger, C., R. S. Goertz, D. Strobel, M. Lell, M. F. Neurath, F. Knieling, M. Scharf  
Dynamic Contrast-Enhanced Ultrasound (DCE-US) for Easy and Rapid Evaluation of Hepatocellular Carcinoma Compared to Dynamic Contrast-Enhanced Computed Tomography (DCE-CT) – A Pilot Study
- 581 Gehmert, S., E. M. Jung, T. Kügler, S. Klein, S. Gehmert, K. Zeitler, M. Loibl, L. Prantl  
Sonoelastography Can Be Used to Monitor the Restoration of Achilles Tendon Elasticity after Injury
- 581 Gehmert, S., E.-M. Jung, T. Kügler, S. Gehmert, S. Klein, K. Zeitler, M. Gosau, M. Loibl, L. Prantl  
Sonoelastography Can Be Used to Monitor the Restoration of Achilles Tendon Elasticity after Injury
- 380 Goertz, R. S., C. Egger, M. F. Neurath, D. Strobel  
Impact of Food Intake, Ultrasound Transducer, Breathing Maneuvers and Body Position on Acoustic Radiation Force Impulse (ARFI) Elastometry of the Liver
- 164 Goertz, R. S., R. Heide, T. Bernatik, M. J. Waldner, J. Mudter, M. F. Neurath, D. Strobel  
Mesenteric Transit Time Using Contrast-Enhanced Ultrasound (CEUS) Does Not Correlate with Disease Activity in Crohn's Disease
- 283 Mansour, N., K. F. Stock, A. Chaker, M. Bas, A. Knopf  
Evaluation of Parotid Gland Lesions with Standard Ultrasound, Color Duplex Sonography, Sonoelastography, and Acoustic Radiation Force Impulse Imaging – a Pilot Study
- 170 Wiggemann, P., E.-M. Jung, S. Glöckner, P. Hoffstetter, W. Uller, A. Vasilj, A. Schreyer, C. Stroszczynski  
Real-Time Elastography of Hepatic Thermal Lesions In Vitro: Histopathological Correlation

## Review

- 431 Andresen, C., A. Matias, E. Merz  
Fetal Face: The Whole Picture
- 60 Cokkinos, D., E. Antypa, K. Stefanidis, P. Tserotas, V. Kostaras, A. Parlamenti, K. Tavernaraki, P. N. Piperopoulos  
Contrast-Enhanced Ultrasound for Imaging Blunt Abdominal Trauma – Indications, Description of the Technique and Imaging Review
- E1 Drudi, F. M., V. Cantisani, M. Gneccchi, F. Malpassini, N. Di Leo, C. de Felice  
Contrast-Enhanced Ultrasound Examination of the Breast: A Literature Review
- E8 Griffiths, A., G. terHaar, I. Rivens, D. Giussani, C. Lees  
High-Intensity Focused Ultrasound in Obstetrics and Gynecology: The Birth of a New Era of Noninvasive Surgery?
- 337 Gruber, I., M. Hahn, T. Fehm, C. Hann von Weyhern, A. Stäbler, A. Winckelmann, D. Wallwiener, T. Kühn  
Relevance and Methods of Interventional Breast Sonography in Preoperative Axillary Lymph Node Staging
- 441 Pedersen, M., U. Fredberg, H. Langberg  
Sonoelastography as a Diagnostic Tool in the Assessment of Musculoskeletal Alterations: A Systematic Review
- 135 Piskunowicz, M., W. Kosiak, T. Batko  
Intravenous Application of Second-Generation Ultrasound Contrast Agents in Children: A Review of the Literature
- 550 Sporea, I., R. L. Sirlì  
Hepatic Elastography for the Assessment of Liver Fibrosis – Present and Future

- E16 Tutschek, B., K. G. Schmidt  
Sonographic Assessment of Fetal Cardiac Function: Indirect Measurements of Fetal Cardiac Function, Newer Techniques and Clinical Applications
- 236 Tutschek, B., K. G. Schmidt  
Sonographic Assessment of Fetal Cardiac Function: Introduction and Direct Measurement of Cardiac Function

## Supplement

- S57 Dietrich, C. F., X. W. Cui, B. Boozari, M. Hocke, A. Ignee  
Contrast-Enhanced Ultrasound (CEUS) in the Diagnostic Algorithm of Hepatocellular and Cholangiocellular Carcinoma, Comments on the AASLD Guidelines
- S39 Dietrich, C. F., X. W. Cui, A. P. Barreiros, M. Hocke, A. Ignee  
EFSUMB Guidelines 2011: Comment on Emergent Indications and Visions
- S11 Dietrich, C. F., X. W. Cui, D. G. Schreiber-Dietrich, A. Ignee  
EFSUMB Guidelines 2011: Comments and Illustrations
- S22 Dietrich, C. F.  
Liver Tumor Characterization – Comments and Illustrations Regarding Guidelines
- S3 Dietrich, C. F., M. E. Maddalena, X. W. Cui, D. Schreiber-Dietrich, A. Ignee  
Liver Tumor Characterization – Review of the Literature
- S48 Quaia, E., A. Lorusso, G. Grisi, F. Stacul, M. A. Cova  
The Role of CEUS in the Characterization of Hepatocellular Nodules Detected During the US Surveillance Program – Current Practices in Europe
- S31 Tranquart, F., L. Mercier, P. Frinking, E. Gaud, M. Arditi  
Perfusion Quantification in Contrast-Enhanced Ultrasound (CEUS) – Ready for Research Projects and Routine Clinical Use

## Title Page

- 407 Cantisani, V., M. Olive, M. Di Segni, N. Di Leo, H. Grazdhan, G. D'Ettore, G. Ceccarelli, C. Fioravanti, P. Ricci  
Darstellung eines Leydig-Zell-Tumors des Hodens im kontrastverstärkten Ultraschall (CEUS) und der Elastosonografie
- 1 Ewertsen, Caroline, Ditte Dencker, Steen Karstrup  
Stanzbiopsie eines kleinen retroperitonealen Lymphoms gestützt durch Bildfusion und elektromagnetischem Nadel-Tracking
- 211 Merz, E  
Titelbildbeitrag – 5 Oberflächendarstellung eines Feten (28 + 2 SSW) mittels HDlive-Technologie
- 313 Neye, H., P. Rauh, E. Erbstößer, S. Rickes  
Titelbildbeitrag – Der Morbus Whipple – eine seltene Darmerkrankung und ihre sonografischen Merkmale
- 113 Tenisch, Estelle, Emilie Uldry, Jean-Yves Meuwly, Fabio Becce  
Titelbildbeitrag – Bilaterale subkapsuläre Urinome: Ungewöhnliche Ursache einer Page-Niere mit Nierenversagen

## A

Abele, H. E57  
 Abramovicz, J. 175  
 Abramowicz, J. S. 215  
 Achiron, R. E1, E25  
 Actor, B. E306  
 Aegerter, P. E173  
 Ahmed, A. B. E233  
 Ahuja, A. T. 463  
 Albers, D. 474  
 Albrecht, T. 33  
 Albrich, S. E95  
 Alempijevic, T. E210  
 Alkier, R. E57  
 Altmann, M. E263  
 Alzen, G. F. 474  
 Andresen, C. 431  
 Anniciello, A. M. E179  
 Antypa, E. 60  
 Ao-Hua, Z. E250  
 Arditì, M. S31  
 Arzt, W. 245, E46  
 Aschwanden, M. E256  
 Aumayr, K. E313  
 Averkiou, M. A. 344  
 Axt-Fliedner, R. 493, E38, E51, E75

## B

Baba, K. 175  
 Bachmann Nielsen, M. 33, 411  
 Backhaus, M. E173, E352  
 Bahlmann, F. 258, E80  
 Balhar, T. 574  
 Balint, P. E173  
 Balletshofer, B. 141  
 Bamberger, C. M. E202  
 Barozzi, L. 33  
 Barreiros, A. P. S39  
 Bas, M. 283  
 Batko, T. 135  
 Bauder, M. 141  
 Baumann, U. E256  
 Becce, Fabio 113  
 Beckmann, M. W. 480, E62  
 Behrens, C. 474  
 Belyaev, O. E196  
 Bendtsen, T. E321  
 Berg, C. 251, E114, E293  
 Bernatik, T. 164  
 Bernays, R.-L. E306  
 Bertolotto, M. 33  
 Berzigotti, A. 8  
 Bhatia, K. 463  
 Bick, U. 357  
 Blaas, H.-G. K. 175  
 Blank, W. 76  
 Bliddal, H. E166  
 Boesen, L. E166  
 Boesen, M. E166  
 Bogdahn, U. E263  
 Bohle, W. E191  
 Bolboaca, S. E138  
 Bonagura, A. C. 597  
 Boozari, B. S57  
 Bossenz, S. 357  
 Botti, G. E179

Bozinov, O. E306  
 Braun, B. 76  
 Brogger, J. E326  
 Brossard, M. E173  
 Brueckmann, A. E126  
 Bruyn, G. A. E173  
 Bulajic, M. E210  
 Burkhardt, J.-K. E306  
 Burmester, G. R. E352  
 Butz, T. 455

## C

Cantisani, V. 407, 416, E1  
 Caracò, C. E179  
 Catalano, O. 33, E179  
 Ceccarelli, G. 407  
 Celebi, N. 141  
 Chaker, A. 283  
 Chang, W.-C. 447  
 Chary-Valckenare, I. E173  
 Chen, J. E218  
 Chiorean, A. R. E138  
 Cho, C. C. 463  
 Choi, B. I. 5  
 Choi, Y. J. E186  
 Chopra, S. S. E366  
 Cimmino, M. A. E166  
 Claudon, M. 33  
 Clemens, P. U. E191  
 Clemmesen, L. E321  
 Clevert, D. A. 33  
 Cokinos, D. 60  
 Colmorn, L. B. 85  
 Correas, J. M. 33  
 Correas, J.-M. 344  
 Cosgrove, D. O. 33, E218  
 Cova, M. A. S48  
 Csapo, B. E108  
 Cui, X. W. S3, S11, S39, S57

## D

D'Agostino, M. A. E173  
 Dahms, J. 474  
 Danneskiold-Samsøe, B. E166  
 de Felice, C. E1  
 Degenhardt, F. 366  
 Degenhardt, J. E38, E51, E75  
 deKorte, C. 544  
 de Korte, C. E275, E283  
 del Mar Castellano García, M. E344  
 Dencker, D. 489  
 Dencker, Ditte 1  
 Denecke, T. E366  
 Deng, J. 175  
 Desoye, G. E108  
 Deuschle, P. 185  
 Di Cecilia, M. L. E179  
 Diekmann, F. 357, 372  
 Dietrich, C. F. 33, 344, 411, S3, S11, S22, S39, S57  
 Di Leo, N. 407, 416, 597, E1  
 Di Monta, G. E179  
 Di Segni, M. 407  
 Dittthard, K. 141  
 Di Vece, F. E355

Djurdjevic, T. 352  
 Dmitrovic, A. E68  
 D'Onofrio, M. 33  
 Drudi, F. M. 33, 416, E1  
 Drudi, Francesco 597  
 Duba, H. C. 245  
 Duda, V. 366  
 Dudea, S. M. E138  
 Dudley, N. J. 544  
 Dugalic, P. E210  
 Duma, M. M. E138  
 Dumitriu, D. E138  
 Dwinger, N. E114  
 D'Ettore, G. 407

## E

Eberhart, L. H. E132  
 Edelbauer, M. E339  
 Egger, C. 380, 587  
 Eichhorn, K.-H. 593  
 Eide, G. E. E225  
 Eiler, J. 474  
 Eisele, R. E366  
 Elia, F. 597  
 Ellegaard, K. E166  
 Ellrichmann, M. E196  
 Engel, A. 364  
 Engel, C. 141  
 Eniu, D. E138  
 Enzensberger, C. 493, E38, E51, E75  
 Erbstößer, E. 313  
 Er-Jiao, X. E250  
 Ermert, T. E132  
 Ertl, M. E263  
 Eskef, K. 493  
 Evans, D. H. 544  
 Ewertsen, C. 489  
 Ewertsen, Caroline 1  
 Eyding, J. 33, 218, 320

## F

Faas, D. 493  
 Fabbro, T. E256  
 Faber, L. 455  
 Faschingbauer, F. 480, E62  
 Fass, N. E38, E51  
 Fehm, T. 337  
 Fette, A. E361  
 Feuth, T. E283  
 Fiedor, S. 372  
 Filippucci, E. E173  
 Fimmers, R. 251, E293  
 Fioravanti, C. 407  
 Fischer, T. 357, 372  
 Fittschen, M. 258, E80  
 Fredberg, U. 441  
 Frederiksen, C. A. 152  
 Freeston, J. E173  
 Frinking, P. S31  
 Fruscalzo, A. E101  
 Fusch, C. E333

## G

Galach, A. E202



Galeotti, R. E355  
 Gall, C. 270  
 Gamulescu, A. E263  
 Gandjbakhch, F. E173  
 Garcovich, M. E359  
 Gassner, I. E339  
 Gaud, E. S31  
 Gehmert, S. 581, 581, 581, 581  
 Geipel, A. 251, E114, E293  
 Gembruch, U. 251, E51, E75, E114, E293  
 Germer, U. E51, E75, E372  
 Gilja, O. H. 33, E225, E233  
 Gindes, L. 175, E1, E25  
 Giovannini, M. 33  
 Gissler, J. 366  
 Giussani, D. E8  
 Gleiss, A. E313  
 Glöckner, S. 170  
 Gneccchi, M. 416, E1  
 Gocke, C. E202  
 Goecke, T. W. 265, 469, 480, E62  
 Goertz, R. S. 164, 380, 587  
 Görg, C. 146  
 Gosau, M. 581  
 Gottsauner-Wolf, M. E313  
 Grazdhani, H. 407  
 Greene, B. H. 146  
 Gregersen, H. E233  
 Grieser, C. E366  
 Griffiths, A. E8  
 Grigoryev, M. 357, 372  
 Grisi, G. S48  
 Gritzmann, N. 544  
 Gruber, H. 352  
 Gruber, I. V. 270, 337, 366  
 Grujic Koracin, J. E350  
 Guckelberger, O. E366  
 Günther, B. 245  
 Guo, L.-H. E241  
 Guth, S. E202  
 Guzmán Álvarez, I. E344  
 Gyselaers, W. E119

H

Haar, G. ter. 33  
 Haas, J. E108, E333  
 Habek, D. E350  
 Haberlehner, I. 122  
 Hackelöer, B. J. 160  
 Hagendorff, A. 520  
 Hahn, M. 270, 337, 366  
 Handschel, J. 68  
 Hann von Weyhern, C. 337  
 Hansen, H. E275  
 Harrer, J. U. 218, 320  
 Hart, N. 265, 469  
 Hausken, T. E225, E233  
 He, H. 275  
 Heide, R. 164  
 Heinzmann, A. 76  
 Helbig, H. E263  
 Helvind, M. 85  
 Herborn, C. U. E202  
 Hermann, F. 474  
 Hermann, K.-G. E352  
 Heubach, T. E191  
 Heussen, N. 68

Hille, H. 160  
 Hinken, B. E333  
 Hocke, M. 33, S39, S57  
 Hofer, M. 68  
 Hoffmann, W. E333  
 Hoffstetter, P. 170  
 Hofmann, M. E333  
 Holland, A. 146  
 Holschbach, V. E372  
 Holzapfel-Bauer, M. E108  
 Hoopmann, M. E57  
 Horstkotte, D. 455  
 Hoxha, A. E369  
 Hsu, G.-C. 447  
 Hsu, H.-H. 447  
 Hsu, Y.-C. E158  
 Huang, G.-S. 447, E158  
 Huang, P. E218, E299  
 Huber, K. E313  
 Hunziker, L. E256  
 Huppertz, B. E88

I

Iagnocco, A. E173  
 Idicula, T. E326  
 Idzenga, T. E275  
 Iera, J. 597  
 Ignee, A. 33, S3, S11, S39, S57  
 Iilivitzki, A. 364  
 Imfeld, S. E256  
 Iori, F. 416

J

Jaeger, K. A. 119, E256  
 Jaeger, T. 122  
 Jensen, P. S. E166  
 Jensen, T. 85  
 Jezovnik, M. K. E268  
 Johansson, H. E31  
 Jousse-Joulin, S. E173  
 Juhl-Olsen, P. 152  
 Jung, E. M. 33, 581  
 Jung, E.-M. 170, 581  
 Jørgensen, F. S. 85

K

Kagan, K. O. 270, E57  
 Kai, L. E250  
 Kamper, L. 68  
 Kapusta, L. E283  
 Kargl, S. E46  
 Karstrup, S. 489  
 Karstrup, Steen 1  
 Kastl, S. E313  
 Kawacki, A. E75  
 Kaweck, A. E38, E51  
 Kehl, S. 265, 469  
 Kim, D. W. E186  
 Kim, E.-K. E145, E186  
 Kim, M. J. E145  
 Klauser, A. S. 33  
 Klein, S. 581, 581  
 Kleinholdermann, U. 474  
 Klement, F. 245

Klingmueller, V. 474  
 Klockenbusch, W. E101  
 Kluge, S. 366  
 Knieling, F. 587  
 Knopf, A. 283  
 Knudsen, L. E321  
 Koch, A. M. 183  
 Koelbl, H. E95  
 Kohl, T. E38, E51  
 Köhrmann, M. 218, 320  
 Kollmann, C. 544, E313  
 Konje, J. E88  
 Kopp, A. 289  
 Körber, C. 265, 469  
 Kosiak, W. 135  
 Kostaras, V. 60  
 Krainick-Strobel, U. 270, 366  
 Krämer, B. 270  
 Kranke, P. E132  
 Krapfl, E. 366  
 Krapp, M. E51, E75  
 Kremkau, F. W. 215  
 Kröpil, P. 68  
 Krstic, M. E210  
 Kubicka, S. 76  
 Kügler, T. 581, 581  
 Kühn, T. 337  
 Kwak, J. Y. E145, E186

L

Lang, U. E108  
 Langberg, H. 441  
 Lange, A. E. E333  
 Langer, C. 455  
 Langer, M. 574  
 Lassau, N. 33, 344  
 Laterza, R. M. E95  
 Latrich, C. R. E372  
 Lee, H. S. E186  
 Lee, J. 463  
 Lee, M.-S. E158  
 Lee, W. 175  
 Leen, E. 33, 344  
 Lees, C. E8  
 Leise, U. E202  
 Leitlein, J. 76  
 Lell, M. 587  
 Lenz, F. 185  
 Li, Q. 87  
 Li, S. E218, E299  
 Liebscher, E. 289  
 Lin, W.-C. 447  
 Lind, J. E326  
 Linde, H.-N. G. 146  
 Lischner, U. 141  
 Liu, C. E241  
 Liu, L.-N. E241  
 Logallo, N. E326  
 Loibl, M. 581, 581  
 Loizides, A. 352  
 Lomax, L. E31  
 Lopata, R. E275  
 Lorusso, A. S48  
 Lu, M.-D. E241  
 Luedemann, M. 474  
 Lüthgens, K. E57

## M

Maddalena, M. E. S3  
 Malpassini, F. 416, E1  
 Mandl, P. E173  
 Mansour, N. 283  
 Marcus, K. A. E283  
 Marone, U. E179  
 Martin, K. 544  
 Mathis, G. 33  
 Matias, A. 431  
 Matre, K. E233  
 Maurer, K. E339  
 Mayr, A. 480  
 Mayr, J. E361  
 Meier, J. E196  
 Meissner, A. 455  
 Mellwig, K.-P. 455  
 Mercier, L. S31  
 Merinsky, A. E95  
 Merz, E 211  
 Merz, E. 175, 215, 431, 593, E369  
 Mesens, T. E119  
 Metterlein, T. E132  
 Meuwly, Jean-Yves 113  
 Michel, M. 185  
 Micic, J. E68  
 Miese, F. 68  
 Mihailovic, T. E68  
 Miric Tesanic, D. E350  
 Mo, G. E218  
 Mogl, M. E366  
 Molenberghs, G. E119  
 Möller, I. E173  
 Moon, H. J. E145, E186  
 Mori, S. E179  
 Mostbeck, G. 316, S1  
 Mozzillo, N. E179  
 Mudter, J. 164  
 Müller, A. M. E372  
 Müller, H. E357  
 Müller, T. 76  
 Musicco, F. 597

## N

Naess, H. E326  
 Naredo, E. E173  
 Naujoks, C. 68  
 Naumann, G. E95  
 Nawratil, G. E313  
 Nedelmann, M. 218, 320  
 Neuhaus, P. E366  
 Neurath, M. F. 164, 380, 587  
 Neye, H. 313  
 Nielsen, M. B. 5  
 Nolsøe, C. 33  
 Nylund, K. E225

## O

Ohlinger, R. E151  
 Oldenburg, O. 455  
 Olive, M. 407  
 Ortmann, O. E372

## P

Park, S. J. E186, E186  
 Parlamenti, A. 60  
 Pavlovic Markovic, A. E210  
 Pedersen, M. 441  
 Peer, S. 352  
 Peeters, L. E119  
 Peisker, U. 366, 372  
 Perren, F. E357  
 Petersen, B. L. 85  
 Petrillo, A. E179  
 Pfaffenberger, S. E313  
 Pfandzelter, R. 574  
 Pfeiffer, D. 520  
 Piperopoulos, P. N. 60  
 Piscaglia, F. 8, 33, 344  
 Piskunowicz, M. 135  
 Plaikner, M. 352  
 Platt, L. 175  
 Plehn, G. 455  
 Pompili, M. E359  
 Ponnudurai, R. 411  
 Poredos, P. E268  
 Prantl, L. 581, 581  
 Pretorius, D. 175  
 Puhl, A. E80  
 Pulvermacher, C. E75  
 Pumberger, W. E46

## Q

Quaia, E. S48

## R

Rapaccini, G. E359  
 Rauh, P. 313  
 Rediner, U. E352  
 Reinhard, I. 258, E80  
 Riccardi, L. E359  
 Ricci, P. 407  
 Richter-Rodier, M. E333  
 Rickes, S. 313  
 Riessen, R. 141  
 Ritgen, J. E114  
 Ritter, M. 218, 320  
 Rivens, I. E8  
 Roessner, L. 270  
 Rong-Qin, Z. E250  
 Rösch, T. E210  
 Rosenfeld, E. 289  
 Ruiz Santiago, F. E344

## S

Saftoiu, A. 33  
 Salviato, E. E355  
 Sander, G. 574  
 Sandomenico, F. E179  
 Sartori, S. E355  
 Scharf, M. 587  
 Scharnreitner, I. E46  
 Schild, R. L. 175, 265, 469, 480, E62  
 Schlachetzki, F. 218, 320, E263  
 Schlembach, D. E108

Schleußner, E. E126  
 Schmid, M. 480  
 Schmidt, K. G. 236, E16  
 Schmidt, W. E173, E196  
 Schminke, U. 218, 320  
 Schmitz, R. E101  
 Schnabel, A. E132  
 Scholbach, T. M. E88  
 Schrader, H. E196  
 Schramm, T. 593  
 Schreiber-Dietrich, D. S3, S11  
 Schreyer, A. 170  
 Schuhfried, O. E313  
 Schulte-Altendorneburg, G. 218, 320  
 Schürger, S. 141  
 Schuster, F. E132  
 Schwarze, A. 493  
 Seccia, A. E359  
 Seeliger, C. E126  
 Seidel, G. 33  
 Seitz, K. 386, 517  
 Serra, C. E306  
 Sfrangeu, S. A. E138  
 Shaoul, R. 364  
 Shu-Fang, Y. E250  
 Sidhu, P. S. 5, 33  
 Siegemund, M. E256  
 Siegmann, K. C. 270  
 Siemer, J. 265, 469, 480, E62  
 Sinn, H. P. 366  
 Sirli, R. L. 550  
 Skala, C. E95  
 Sladkevicius, P. 175, E31  
 Sloth, E. 152, E321  
 Slowinski, T. 357, 372  
 Sokic Milutinovic, A. E210  
 Solivetti, F. M. 597  
 Sollazzi, L. E359  
 Son, E. J. E186  
 Song, I.-H. E352  
 Sporea, I. 550  
 Stäbler, A. 337  
 Stacul, F. S48  
 Stadlober, B. 245  
 Stanojevic, M. E350  
 Staub, D. E256  
 Stauffer, A. E306  
 Stefanidis, K. 60  
 Steiner, E. 258  
 Steiner, H. 122  
 Steinhard, J. E101  
 Stenger, R. D. E333  
 Stimec, B. V. E68  
 Stock, K. F. 283  
 Stoebe, S. 520  
 Stressig, R. E114  
 Strobel, D. 164, 380, 587  
 Stroszczyński, C. 170  
 Szkudlarek, M. E173

## T

Tang, J. 87  
 Tannapfel, A. E196  
 Tarr, A. 520  
 Tavernaraki, K. 60  
 Tenisch, Estelle 113  
 terHaar, G. E8

Terslev, L. E166, E173  
 Terzic, M. E68  
 Thijssen, J. M. E283  
 Thomas, A. 357, 372  
 Thomassen, L. E326  
 Tikvica Luetic, A. E350  
 Timmerman, D. 33  
 Timor-Tritsch, I. 175  
 Ting, Z. E250  
 Toellner, T. 366  
 Tombesi, P. E355  
 Tomic, D. E210  
 Tomsin, K. E119  
 Tong, C. S. 463  
 Torka, E. E263  
 Torp-Pedersen, S. E166  
 Tranquart, F. S31  
 Trappe, H.-J. 455  
 Treusch, K. A. 455  
 Tsai, S.-H. 447  
 Tserotas, P. 60  
 Tung, H.-J. 447  
 Tutschek, B. 236, E16  
 Tzadikevitch-Geffen, K. E1, E25

U

Uhl, W. E196  
 Uldry, Emilie 113  
 Uller, W. 170  
 Ulrich, D. E108  
 Ulrich, N. H.-B. E306  
 Unger, E. E313  
 Uthoff, H. E256

V

Valentin, L. E31  
 Valentino, M. 416  
 van Buuren, F. 455  
 Vasilj, A. 170  
 Veit, I. 245  
 Vetter, M. 160  
 Viaccoz, A. E357  
 Vogel, M. E38, E51  
 Voigt, F. E62  
 von Kaisenberg, C. 593  
 Vyskocil, E. E313

W

Wadsack, C. E108  
 Waje-Andreassen, U. E326  
 Wakefield, R. J. E173  
 Waldner, M. J. 164  
 Wallwiener, D. 270, 337, 366  
 Wang, H.-H. E158  
 Wang, L. E218  
 Wang, S. E241  
 Wang, Z. E218  
 Wedemeyer, P. 372  
 Weichert, J. E51, E75  
 Weissmann-Brenner, A. E1, E25  
 Weisz, B. E1, E25  
 Wellek, S. 258, E80  
 Wertaschnigg, D. 245, E46  
 Weskott, H. P. 33

Wessel, L. 185  
 Weyrich, P. 141  
 Widriani, E. E38  
 Wiese, M. E196  
 Wiggermann, P. 170  
 Willruth, A. M. 251, E114, E293  
 Winkelmann, A. 337  
 Wojta, J. E313  
 Wolter, S. 289  
 Wu, X. E299  
 Wu, Y.-C. E158

X

Xu, H. E218, E299  
 Xu, H.-X. E241  
 Xu, K. E299  
 Xu-Qi, H. E250

Y

Yazdi, B. 480, E57, E62  
 Yoon, J. H. E145, E186  
 Yu, C.-P. 447  
 Yu, J.-C. 447  
 Yu, T. 275  
 Yuen, E. H. 463

Z

Zajicek, M. E1, E25  
 Zayat, A. E173  
 Zeitler, K. 581, 581  
 Zhang, Y. 275, E218  
 Zhang, Y.-F. E241  
 Zhong-Zhen, S. E250  
 Zhu, J. E218  
 Zimmermann, N. E151  
 Zoller, W. G. E191  
 Zwirner, K. 141  
 Ødegaard, S. E225