

IX - PUBLICATIONS

Books and magazines are authorized by the member of CMP.

Books and magazines

2011

COURTOIS B.

Chapter in the book "CMOS Biomicrosystems: Where Electronics Meet Biology", by Krzysztof Iniewski.

Published by John Wiley & Sons

To appear in 2011

DI PENDINA G.

Chapter in the book "Advances in Engineering Research"

Published by Nova Science Publishers, Inc.

To appear in 2011

2010

COURTOIS B., RENCZ M.*, Editors

Proceedings of 16th International Workshop on THERmal Investigations of ICs and Systems (THERMINIC'10),

ISBN 978-2-35500-012-6, Barcelona, Spain, 6-8 October 2010

* Budapest University of Technology and Economics, Hungary

COURTOIS B. et al, Editors

Proceedings of Symposium on Design, Test, Integration and Packaging of MEMS/MOEMS (DTIP 2010),

ISBN 978-2-35500-011-9, Seville, Spain, 5-7 May 2010

BEN-TEKAYA R., BAGANNE A., TORKI K., TOURKI R.

Performance evaluation of MIC@R NoC for real-time Applications, International Journal of Computer Aided Engineering and Technology 2010 - Vol. 2, No.2/3, pp. 274 – 293

MACHHOUT M., GUITOUNI Z., TORKI K., KHRIJI L., TOURKI R.

Coupled FPGA/ASIC implementation of elliptic curve cryptoprocessor, International Journal of Network Security & Its Applications (IJNSA), Volume 2, Number 2, April 2010

2009

COURTOIS B., RENCZ M.*, Editors

Proceedings of 15th International Workshop on THERmal Investigations of ICs and Systems (THERMINIC'09),

ISBN 978-2-35500-010-2, Leuven, Belgium, 7-9 October 2009

* Budapest University of Technology and Economics, Hungary

COURTOIS B., Guest Editor

Special issue on European Micro and Nano Systems (ENS 2007) held in Paris, 3-4 December 2007,

Microelectronics Journal, Vol. 40, No. 4-5, Pages 655-710, April-May 2009

COURTOIS B., DE VENUTO D.* Guest Editors

Special issue on 2nd IEEE International Workshop on Advances in Sensors and Interfaces (IWASI 2007) held in Bari, 26-27 June 2007, Microelectronics Journal, Vol. 40, No. 9, September 2009

* Politecnico di Bari, Italy

COURTOIS B. et al, Editors

Proceedings of Symposium on Design, Test, Integration and Packaging of MEMS/MOEMS (DTIP 2009),

ISBN 978-2-35500-009-6, Rome, Italy, 1-3 April 2009

MALEK J., SEBRI A., MABROUK S., TORKI K., TOURKI R.
Automated Breast Cancer Diagnosis Based on GVF-Snake Segmentation, Wavelet Features Extraction and Fuzzy Classification, Journal of Signal Processing Systems, Springer New York, Volume 55, Numbers 1-3 / April 2009

ZAIDI M., OUNI R., TORKI K., TOURKI R.
Low Power ASIC Designs For Fast Handoff In IEEE802.11, International Journal of Computers, Systems and Signals, Vol. 10, No.1, 2009

2008

COURTOIS B. et al, Editors
Proceedings of Symposium on Design, Test, Integration and Packaging of MEMS/MOEMS (DTIP 2008), Nice, French Riviera, France, April 9-11, 2008

COURTOIS B., RENCZ M.*, LASANCE C.**, SZEKELY V.***, Editors
Proceedings of 14thInternational Workshop on THERmal Investigations of ICs and Systems (THERMINIC'08), Rome, Italy, September 24-26, 2008

* MicRed Microelectronics Res & Dev Ltd., Hungary; ** Philips, The Netherlands; *** Budapest University of Technology and Economics, Hungary

COURTOIS B., Guest Editor
Special Issue ENS 2006, Microelectronics Journal 39 (2008)

2007

COURTOIS B., KARAM J.M.*, Editors
Proceedings of Symposium on Design, Test, Integration and Packaging of MEMS/MOEMS (DTIP 2007), Stresa, Italy, 25--27 April 2007

* MEMSCAP, Crolles, France

GALY N., CHARLOT B., COURTOIS B.
A full fingerprint verification system for a single-line sweep sensor
IEEE Sensors, vol.7, n°7, July 2007

SZEKELY V.*, RENCZ M.**, COURTOIS B.
Die attach quality testing structure function evaluation
Book chapter 23 in Micro- and opto-electronic materials and structures: Physics, mechanics, design, reliability, packaging, by E. Suhir, Y.C Lee, C.P. Wong (Editors), Springer, Vol. I, pp.629-650, 2007

* Budapest University of Technology and Economics, Hungary; ** MicRed Microelectronics Res & Dev Ltd., Hungary

COURTOIS B., RENCZ M.*, LASANCE C.**, SZEKELY V.***, Editors
Proceedings of 13thInternational Workshop on THERmal Investigations of ICs and Systems (THERMINIC'07), Budapest, Hungary, September 17-19, 2007

University of Technology and Economics, Hungary

COURTOIS B.
Proceedings of ENS 2007, Paris, 3-4 December 2007

COURTOIS B., Michel B.*, Editorial
Special Issue on the Symposium on Design, Test, Integration of MEMS/MOEMS (DTIP'06)
Research Journal on Microsystem Technologies, Springer Publishers, October 2007

* IZM, Berlin, Germany

COURTOIS B., Guest Editor
Special Issue on selected papers on Symposium on Design, Test, Integration and Packaging of
MEMS/MOEMS (DTIP 2006)
An International Journal on Analogue Integrated Circuits and Signal Processing

2006

COURTOIS B., MARKUS K.* et al., Editors
Proceedings of Symposium on Design, Test, Integration and Packaging of MEMS/MOEMS (DTIP 2006),
Stresa, Italy, 26-28 April 2006

COURTOIS B., RENCZ M.*, LASANCE C.**, SZEKELY V.***, Editors
Proceedings of 12th International Workshop on THERmal Investigations of ICs and Systems
(THERMINIC'06), Nice, Côte d'Azur, France, September 27-29, 2006

* MicRed Microelectronics Res & Dev Ltd., Hungary; ** Philips, The Netherlands; *** Budapest
University of Technology and Economics, Hungary

SHAKOURI A.*, KANG S.M.*, BAR-COHEN A.**, COURTOIS B., Guest Editors
Scanning the Special Issue on On-Chip thermal engineering
Proceedings of the IEEE, Vol.94, No.8, pp. 1-3, August 2006

* University of California Santa Cruz, USA; ** University of Maryland, College Park, USA

COURTOIS B., Michel B.*, Editorial
Special Issue on the Symposium on Design, Test, Integration of MEMS/MOEMS (DTIP'05)
Research Journal on Microsystem Technologies, Springer Publishers, Vol. 12, Nos 10-11, September 2006 -

* IZM, Berlin, Germany

COURTOIS B., Guest Editor
Special Issue on selected papers on Symposium on Design, Test, Integration and Packaging of
MEMS/MOEMS (DTIP 2005)
An International Journal on Analogue Integrated Circuits and Signal Processing

2005

COURTOIS B., MARKUS K.* et al., Editors
Proceedings of Symposium on Design, Test, Integration and Packaging of MEMS/MOEMS (DTIP 2005),
Montreux, Switzerland, June 1-3, 2005

COURTOIS B., RENCZ M.*, LASANCE C.**, SZEKELY V.***, Editors
Proceedings of 11th International Workshop on THERmal Investigations of ICs and Systems
(THERMINIC'05), Belgirate, Lake Maggiore, Italy, September 27– 30, 2005

* MicRed Microelectronics Res & Dev Ltd., Hungary; ** Philips, The Netherlands; *** Budapest University of
Technology and Economics, Hungary

COURTOIS B., Guest Editor
Special issue on European Micro and Nano Systems (EMN04) held in Paris, 20–21 October, 2004
Microelectronics Journal, Vol. 36, No. 7, Pages 613-686, July 2005

COURTOIS B., Guest Editor
Special Issue on selected papers on Symposium on Design, Test, Integration and Packaging of
MEMS/MOEMS (DTIP 2004)
An International Journal on Analogue Integrated Circuits and Signal Processing, Vol.44, No.2, August 2005

DE VENUTO D.*, COURTOIS B., Editors
Proceedings of 1st International Workshop on Advances in Sensors and Interfaces (IWASI'05), Bari, Italy,
April 19-20, 2005 (ISBN 88-8231-323-9)

* Politecnico di Bari, Italy

ROMAN C., CIONTU F., COURTOIS B.

Nanoscopic modeling of a carbon nanotube force-measuring biosensors
Molecular Simulations Journal, Taylor & Francis Publisher, Vol.31, No.2-3, 123 - 133, 15 February –
15 March 2005

Conferences and Workshops

2011

COURTOIS B.

Electronics for Energy Management

Keynote at ASQED 2011, July 19-20 2011, Kuala Lumpur, Malaysia

2010

COURTOIS B.

Electronics for energy management

Keynote at 5th International Design & Test Workshop (IDT), December 14-16, 2010, Abu Dhabi, UAE

COURTOIS B.

Electronics and sensors for biomed applications

IEEE SENSORS 2010 Conference, November 1 - 4, 2010, Waikoloa, USA

TORKI K.

CMP service for 3D-IC: Design Methodologies & Manufacturing

Invited paper at TWEPP-10, Topical Workshop Electronics for Particle Physics, 20-24 September 2010,
Aachen, Germany

COURTOIS B.

Infrastructure for ICs and MEMS manufacturing

IEEE/ASME International Conference on Mechatronic and Embedded Systems and Applications (MESA)
July 15-17, 2010, Qingdao, ShanDong, China

COURTOIS B.

And now, where do we go?

Keynote at 8th European Workshop on Microelectronics Education (EWME), May 10-12, 2010, Darmstadt,
Germany

COURTOIS B.

Energy management: how electronics can help?

International Multi-Conference on Complexity, Informatics and Cybernetics (IMCIC), April 6-9 2010, Orlando,
USA

COURTOIS B.

ICs and MEMS for energy management

Keynote at 11th IEEE Latin-American Test Workshop (LATW), March 28-31 2010, Punta del Este, Uruguay

COURTOIS B.

Gestion de l'énergie par les composants

Invited speaker at Journée d'étude « Les SEC se mettent au vert »

March 4 2010 – Université Paul Sabatier, Toulouse, France

2009

COURTOIS B.

CMP Service: BioMed applications

12th International Symposium on Integrated Circuits (ISIC), December 14-16 2009, Singapore

COURTOIS B.

SOC/SIP for energy management

Invited paper, International SoC Design Conference (ISOCC), November 22-24 2009, Busan, Korea

DHAHRI S., KABBAI L., ZITOUNI A., TORKI K., TOURKI R.

A low power ASIC design of a FSS motion estimator for H.264AVC

Humboldt Kolleg, Advancements in Nanotechnology and Microelectronics (ANM'09), November 13-14, 2009, Tunisia

COURTOIS B., TORKI K., DUMONT S., EYRAUD S., PAILLOTIN J-F, DI PENDINA G.

Infrastructures for Education and Research: from National Initiatives to global operations

The 13th World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI), July 10-13 2009, Orlando, USA

COURTOIS B.

Prototyping custom circuits and systems: 20 years back, X years forward.

Keynote in 20th IEEE/IFIP International Symposium on Rapid System Prototyping (RSP'09), June 22-26 2009, Paris, France

COURTOIS B.

Infrastructures for Education and Research: from National initiatives to global operations and from EE&CS communities to other communities and key applications

Keynote in 4th IEEE International Conference on Design & Technology of Integrated Systems in Nanoscale Era (DTIS), April 6-7 2009, Cairo, Egypt

BEN-TEKAYA R., BAGANNE A., TORKI K., TOURKI R.

Performance Evaluation of MIC@R NoC for Real-Time applications

4th IEEE International Conference on Design & Technology of Integrated Systems in Nanoscale Era (DTIS), April 6-7 2009, Cairo, Egypt

NICOLAIDIS M., TORKI K., NATALI F., BELHADDAD K., ALEXANDRESCU D.

Implementation and Validation of a Low-Cost Single-Event Latchup Mitigation Scheme

SELSE 5, IEEE Workshop on Silicon Errors in Logic – System Effects, Stanford University, March 24-25, 2009.

COURTOIS B.

CMP Service: past, present, future

Invited paper in 15th Workshop on Synthesis and System Integration of Mixed Information technologies (SASIMI), March 9-10 2009, Okinawa, Japan

COURTOIS B.

Infrastructures services like CMP: where should they be heading?

Invited talk in CMOS Emerging Technologies Workshop, February 18-20 2009, Banff, Canada

COURTOIS B., TORKI K., DUMONT S., EYRAUD S., PAILLOTIN J-F, DI PENDINA G.

Infrastructures for Education, Research and Industry in Microelectronics - a look worldwide and a look at India

22nd International Conference on VLSI Design, 5-9 January 2009, New-Delhi, India

2008

COURTOIS B.

Integrated Circuit Brokers: Where do they come from? Where are they heading?

Keynote in IEEE International Conference on Microelectronics (ICM'08), December 14-17, 2008 in Sharjah, UAE

BEN-TEKAYA R., BAGANNE A., TORKI K., TOURKI R.

Performance Evaluation of MIC@R Router for On-Chip Networks

IDT'08, December 20-22 2008, Monastir, Tunisia

GUESMI H., DJEMAL R., TORKI K., TOURKI R.

Design of a High Active Queue management

9e Colloque Africain sur la Recherche en Informatique et en Mathématiques Appliquées 27-30 Octobre 2008, Rabat, Morocco

COURTOIS B., CHARLOT B.* , DI PENDINA G., RUFER L.**
Electronics Manufacturing Infrastructures for Education and Commercialization
30th Annual International IEEE EMBS Conference, August 20-24, 2008, Vancouver, British Columbia,
Canada
*IES/MITEA, Montpellier – France, **TIMA, Grenoble – France

COURTOIS B., CHARLOT B.* , DI PENDINA G., RUFER L.**
Infrastructures for Education, Research and Industry: CMOS and MEMS for BioMed
Invited paper at the 12th World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI 2008),
Orlando USA, 29 June – 2 July 2008
*IES/MITEA, Montpellier - France, **TIMA, Grenoble – France

COURTOIS B., CHARLOT B.* , DI PENDINA G., RUFER L.**
Infrastructures for mixed signalS in biology and medicine
14th IEEE International Mixed-Signals, sensors, and systems Test Workshop (IMS3TW 2008),
Vancouver, Canada, 18-20 June 2008
*IES/MITEA, Montpellier - France
**TIMA, Grenoble - France

COURTOIS B., EYRAUD S., PAILLOTIN J-F, DI PENDINA G., TORKI K.
Infrastructures for Education, Research and Industry in Microelectronics
7th European Workshop on Microelectronics Education (EWME 2008), Budapest (Hungary) 28-30 May 2008

COURTOIS B.
Infrastructures for Education, Research and Industry in ICs and MEMS
Invited paper at the International Conference on MEMS and Nanotechnology (ICMN 2008), Kuala Lumpur
(Malaysia), 13-15 May 2008.

COURTOIS B, TORKI K., DUMONT S., EYRAUD S., PAILLOTIN J-F., DI PENDINA G.
Infrastructures for Education, Research and Industry in Microelectronics
14th IEEE Mediterranean Electrotechnical Conference (MELECON 2008), Ajaccio (France), 5-7 May 2008.

2007

TORKI K.
CMP, Infrastructures for Microelectronics & MEMS
3D Integrated Technology Perspectives - First workshop on LHC-ILC prospects, Palaiseau, France, 29-30
Nov. 2007.

COURTOIS B., TORKI K., COLIN S., DELORI H., EYRAUD S., PAILLOTIN J.-F., DI PENDINA G., DUMONT S.
Infrastructures for Education, Research and Industry in Microelectronics – Recent Developments.
International Symposium on Integrated Circuits (ISIC'2007), Singapore, 26-28 September 2007.

BHAR J., OUNI R. , TORKI K., NASRI S.
Handover Strategies Challenges in Wireless ATM Networks
World Academy of Science, Engineering and Technology, April 2007, ISSN 1307-6884

2006

SZABO P.*, POPPE A. **, FARKAS G. *, SZEKELY V.** , RENCZ M. **, COURTOIS B.
Thermal characterization and compact modeling of stacked die packages
International Conference on Thermal and Thermomechanical Phenomena in Electronic Systems
(ITherm'06), San Diego, California, USA, May 30 – June 2, 2006

* MicRed Microelectronics Res & Dev Ltd., Hungary; ** Budapest University of Technology and Economics,
Hungary;

SZABO P.**, NEMETH B. *, RENCZ M. **, COURTOIS B.
Characterization of the etching quality in micro-electro-mechanical systems by thermal transient
methodology

Symposium on Design, Test, Integration and Packaging of MEMS/MOEMS (DTIP'06), Stresa, Italy,
April 26-28, 2006

* Budapest University of Technology and Economics, Hungary; ** MicRed Microelectronics Res & Dev Ltd.,
Hungary

RENCZ M. **, SZABO P. **, POPPE A. **, COURTOIS B.
Thermal testing and dynamic modeling of multiple die packages
International Conference on Thermal and Thermomechanical Phenomena in Electronic Systems
(ITherm'06), San Diego, California, USA, May 30 – June 2, 2006

* Budapest University of Technology and Economics, Hungary; ** MicRed Microelectronics Res & Dev Ltd.,
Hungary

RENCZ M. **, NEMETH B. *, SZABO P. **, POPPE A. **, COURTOIS B.
Characterization of the etching quality in micro-electro-mechanical systems by thermal transient
methodology
Symposium on Design, Test, Integration and Packaging of MEMS/MOEMS (DTIP'06), Stresa, Italy, 26-28
April 2006

* Budapest University of Technology and Economics, Hungary; ** MicRed Microelectronics Res & Dev Ltd.,
Hungary

2005

TORKI K., COURTOIS B.
CMP service for prototyping and low volume production
CEPA 2 Workshop – Digital Platforms for Defence, Brussels, Belgique, March 15-16, 2005

SZABO P. *, RENCZ M. *, SZEKELY V. **, POPPE A. *, FARKAS G. *, COURTOIS B.
Thermal modeling of multiple die packages
7th Electronics Packaging Technology Conference (EPTC'05), Singapore, December 7-9, 2005

* MicRed Microelectronics Res & Dev Ltd., Hungary; **Budapest University of Technology and Economics,
Hungary

SZABO P. **, SZEKELY V. *, POPPE A. **, FARKAS G. **, COURTOIS B., RENCZ M. **, **
Thermal characterization and modeling of stacked die packages
Technical Conference and Exhibition on Integration and Packaging of Micro, Nano and Electronic Systems
(InterPACK 2005), San Francisco, Ca., USA, July 17-22, 2005

* Budapest University of Technology and Economics, Hungary; ** MicRed Microelectronics Res & Dev Ltd.,
Hungary

SZABO P. *, PERLAKY G. **, BOGNAR GY. **, HORVATH GY. **, RESS S. **, POPPE A. **, SZEKELY V. *,
RENCZ M. **, COURTOIS B.
Thermo-mechanical characterization and integrity checking of packages and movable-structures
Nanotechnology Conference and Trade Show (NANOTECH'05), Anaheim, California, USA,
May 8-12, 2005

* Budapest University of Technology and Economics, Hungary; ** MicRed Microelectronics Res & Dev Ltd.,
Hungary

ROMAN C., CIONTU F., COURTOIS B.
A framework for computing transport properties of carbon nanotube-based conductance biochemical
sensors
European Nano Systems (ENS'05), Paris, France, 14-16 December 2005

ROMAN C., CIONTU F., COURTOIS B.
Electronic properties of graphitic surfaces with absorbed aromatic amine acids
Nanotechnology Conference and Trade Show (NanoTech'05), Anaheim, California, U.S.A.,

March 8-12, 2005

COURTOIS B., RENCZ M.*

Thermal modeling of multiple die packages

7th Electronics Packaging Technology Conference (EPTC'05), Singapore, December 7-9, 2005

* MicRed Microelectronics Res & Dev Ltd., Hungary