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Liste de Publications 2010-2015 :

Y. Didane, A. K. Diallo, T. Fiorido, A. Suzuki, N. Yoshimoto, S. Bernardini, J. Ackermann, F. Fages, H. Brisset, **M. Bendahan**, K. Aguir, C. Videlot-Ackermann
Investigation of solution-processed organic thin film transistors based on α,ω -hexyl-distyryl-bithiophene (DH-DS2T): growth and transport properties
J. Optoelectron. Adv. Mater., (2010), vol. 12, iss. 7, p 1546-1551.

T. Fiorido, **M. Bendahan***, K. Aguir, S. Bernardini, C. Martini, H. Brisset, F. Fages, C. Videlot Ackermann, J. Ackermann
All Solution processed flexible ammonia gas and light sensors based on Hexyl Distyrylbithiophene films
Sensors and Actuators B: vol 151_2010 p 77-82; DOI: 10.1016/j.snb.2010.09.048

V. Martini, S. Bernardini, **M. Bendahan***, K. Aguir, P. Perrier, I. Graur,
Fabrication and characterization of gas detection microfluidic system,
Procedia Engineering, Volume 5, 2010, Pages 1188-1191; DOI: 10.1016/j.proeng.2010.09.324

T. Fiorido, S. Bernardini, **M. Bendahan***, K. Aguir, H. Brisset, C. Videlot-Ackermann, J. Ackermann
A New Active Organic Component for Flexible Ammonia Gas Sensors
Procedia Engineering 25 (2011) 1069 – 1072; DOI: 10.1016/j.proeng.2011.12.263
V. Martini, S. Bernardini, **M. Bendahan***, K. Aguir, P. Perrier, I. Graur
Microfluidic gas sensor with integrated pumping system
Sensors and Actuators B [Volume 170](#), 31 July 2012, Pages 45–50; doi: 10.1016/j.snb.2011.01.011

K. Aguir, J. Guérin, N. Mliki, **M. Bendahan**
Role of the active layer thickness on the sensitivity of WO₃ gas sensors
International Journal of Nanotechnology Volume: 9 Issue: 3-7 Pages: 471-479 Published: 2012 ; doi: 10.1504/ijnt.2012.045349

S. Nénon, A. Kumagai, H. Brisset, Z. Chen, J. Ackermann, F. Fages, S. Bernardini, **M. Bendahan**, K. Aguir, N. Yoshimoto, C. Videlot-Ackermann
Towards solution-processed ambipolar organic thin film transistors based on α,ω -hexyl-distyryl-bithiophene (DH-DS2T) and a fluorocarbon-substituted dicyanoperylene (PDIF-CN₂).
Journal of Optoelectronics and Advanced Materials, Vol.14, No.1-2, 2012, p.131 -135

Ch. Leroux, **M. Bendahan**, L. Ajroudi, V. Madigou, N. Mliki
Sensors Based on New Materials: Cobalt ferrite, a new gas sensing material – proceeding IMCS 2012, p 1119 - 1121; doi 10.5162/IMCS2012/P1.8.5

V. Laithier, I. Graur, S. Bernardini, **M. Bendahan***, K. Aguir, P. Perrier.
Thermal creep study in a gas detection microsystem / – proceeding IMCS 2012, p 1236 - 1239; doi 10.5162/IMCS2012/P1.9.25

V. Martini, S. Bernardini, **M. Bendahan**, K. Aguir, P. Perrier, I. Graur,
Ammonia detection by a novel Pyrex microsystem based on thermal creep phenomenon
Sensors and Actuators B: Chemical, Volume 192, 1 March 2014, pp 714-719
[doi :10.1016/j.snb.2013.10.120](https://doi.org/10.1016/j.snb.2013.10.120)

Ch. Leroux, **M. Bendahan**, V. Madigou, L. Ajroudi, N. Mliki
Nanoparticles of cobalt ferrite for NH₃ sensing

Sensors and transducers, vol. 27, *Special Issues*, avril 2014, 239-241,
http://www.sensorsportal.com/HTML/DIGEST/Special_Issue_May_2014.htm

M. Acuautla, S. Bernardini, M. Bendahan.
Ozone Sensor on Flexible substrate by ZnO nanoparticles.
Key Engineering Materials Vol. 605 (2014) p163 - p166.
<http://dx.doi.org/10.4028/www.scientific.net/KEM.605.163>

M. Acuautla, S. Bernardini, L. Gallais, T. Fiorido, L. Patout, **M. Bendahan**.
Ozone flexible sensors fabricated by photolithography and laser ablation process based on ZnO nanoparticles.
Sensors and Actuators B 203 (2014) 602–611
<http://dx.doi.org/10.1016/j.snb.2014.07.010>

M. Acuautla, S. Bernardini, L. Gallais, **M. Bendahan**.
Direct laser patterning of a gas sensor on flexible substrate.
Procedia Engineering 87 (2014) p 899-902, (ISSN 1877-7058)
doi: 10.1016/j.proeng.2014.11.300

A. Gamet, S. Meillère, **M. Bendahan**, P. Le Fevre, N. Froidevaux.,
Investigation on bond wire dedicated to integrated time base
IEEE - Electronics, Circuits and Systems – 2014- p 227-230
[10.1109/ICECS.2014.7049963](http://dx.doi.org/10.1109/ICECS.2014.7049963)

CONGRES INTERNATIONAUX :

EUROSENSORS XXIV, Proc. Eurosensors XXIV, September 5-8, 2010, Linz, Austria
Fabrication and Characterization of Gas detection Microfluidic System / V. Martini, S. Bernardini, **M. Bendahan**, K. Aguir, P. Perrier, I. Graur.

IBERMAN-CMC2, 25-26 nov Barcelone 2010/ Fabrication and characterization of fluidic Microsystems for gas detection/ K. Aguir, V. Martini, **M. Bendahan**, S. Bernardini

MADICA 2010- 7^{èmes} journées Maghreb-Europe – Tabarka (Tunisie) 20-22 Octobre 2010/ Analyse du comportement thermique d'un microsystème fluidique de détection gazeuse/ V. Martini, K. Aguir, **M. Bendahan**, S. Bernardini

MRS 2011 / Boston/ Active Inks based on hybrid semiconductor nanoparticles for printed electronics and photovoltaics/ / I Shupyk, Y Didane, G Poize, S Bernardini, **M Bendahan**, K Aguir, J Mawyin, C Martini, E Shilova, F Fages, J Ackermann

EUROSENSORS XXV, September 4-7, 2011, Athens, Greece
T.Fiorido, S.Bernardini, **M.Bendahan***, K.Aguir, H.Brisset, C.Videlot-Ackermann , J.Ackermann

PLASTIC ELECTRONICS 2011, Dresden, Germany; 11-13 oct 2011
Ink Innovations for printed low cost sensors/ J.Ackermann , S.Bernardini, **M.Bendahan**

Swiss-@print CONFERENCE, First Swiss conference on printed electronics and functional materials, Basel, Switzerland December 1-2 2011 / Organic flexible sensors for gas, light and temperature applications
S.Bernardini, **M.Bendahan***, T.Fiorido , K.Aguir, J. Ackermann, C.Videlot-Ackermann

IMCS 2012 - The 14th International Meeting on Chemical Sensors, May 20 - 23, 2012, Nürnberg / Nuremberg, Germany / Topic 4. Emerging Sensing Materials and Technologies / Cobalt ferrite, a new gas sensing material - Ch. Leroux, **M.Bendahan**, L.Ajrouti, V.Madigou, N.Mliki

MADICA 2012 ; 7-9 nov 2012 - SOUSSE (Tunisie) / Development of test platforms on flexible supports by laser ablation: micro sensor and micro heating applications. / M. Acuautila, M. Bendahan, S. Bernardini, L. Gallais, K. Aguir

JMC13 – 13^{ème} Journée de la Matière Condensée- Montpellier – aout 2012 / Nano Cobalt Ferrite for gas sensing / Ch. Leroux, **M.Bendahan**, V.Madigou, L.Ajrouti, , N.Mliki.

IMCS 2012 - The 14th International Meeting on Chemical Sensors, May 20 - 23, 2012, Nürnberg / Nuremberg, Germany / Topic 7. Sensing for Health, Safety and Security / Thermal creep study in a gas detection microsystem / V. Laithier, I. Graur , S. Bernardini, **M. Bendahan***, K. Aguir, P. Perrier.

MADICA 2012 ; 7-9 nov 2012 - SOUSSE (Tunisie) / Nano cobalt ferrite for gas sensing / Ch. Leroux, **M.Bendahan**, V.Madigou, L.Ajrouti, , N.Mliki.

EMRS, 14-18 mai 2012- Strasbourg / Novel materials and fabrication methods for new emerging devices / Cobalt Ferrite, a new gas sensing material / Ch. Leroux, **M.Bendahan**, L.Ajrouti, V.Madigou, N.Mliki

IPSO – Inovative printed Smart Objects Conference – 16-17 oct 2012- Gardannes France/
M. Acuautila, S. Bernardini, L. Gallais, K. Aguir and **M. Bendahan**
Conception of novel test platforms by laser ablation for flexible sensors

6^{èmes} Journées Franco-espagnoles, Micro and nano Sensors and Microsystems
Nov 22, 23th, 2012: Inovative laser ablation technology for flexible sensor processing /
M. Acuautila, S. Bernardini, L. Gallais, K. Aguir and **M. Bendahan**

3rd International Conference on Materials and Applications for Sensors and Transducers, September 13-17, 2013, Prague, Czech Republic / M. Acuautila, S. Bernardini and **M. Bendahan**,
Ozone Sensor on Flexible Substrate by ZnO nanoparticles,

5th Plenary Workshop of the Nanowires GdR, april 2-5, 2013, Saint-Martin-de -Londres, France
/ S. Bernardini, V. Laithier, M. Acuautila, **M. Bendahan**, I. Shupyk, J. Ackermann,
“NO₂ detection by ZnO nanorods”,

Swiss-e-print CONFERENCE, second Swiss conference on printed electronics and functional materials, Basel, Switzerland November 2013, p30,
M. Acuautila, S. Bernardini, L. Gallais and **M. Bendahan**,
Conception of Kapton and Powercoat paper flexible platforms by novel laser ablation for gas sensors applications

Swiss-e-print CONFERENCE, second Swiss conference on printed electronics and functional materials, Basel, Switzerland November 2013, p15
T.Fiorido, S.Bernardini, **M.Bendahan**, K.Aguir, H. Brisset, C.Videlot-Ackermann, J. Ackermann,
DH-Ds2T flexible gas sensor aging behaviour

IPSO – Inovative printed Smart Objects Conference – 28-29 Nov 2013- Gardannes France/
M. Acuautila, S. Bernardini, L. Gallais, **M. Bendahan**,
Flexible gas sensors realized by laser ablation

IPSO – Inovative printed Smart Objects Conference – 28-29 Nov 2013- Gardanne France
M.D. Dankoco, E. Benevent, E. Bergeret, M. Guerin, L. Gallais, **M. Bendahan**
Study and realization of temperature sensor on flexible substrate

Conférence Franco-Maghrébine sur les Nanomatériaux ; Sousse Tunisie, 2-5 mai 2013.

Mliki, L. Ajroudi, V. Madigou, M. Bendahan, L. Bessais, Ch. Leroux

Ferrites de cobalt nanostructurées, des matériaux multifonctionnels.

Sensors Energy Harvesting Wireless Network & Smart Objects, SENSO 2014, Gardanne, France, October 2014 - M. Acuautla, S. Bernardini, L. Gallais, V. Laithier-Martini, **M. Bendahan**, *Flexible Ozone Sensor Fabricated by Photolithography and Laser Patterning.*

10th International Conference on advanced Semiconductor Devices and Microsystems. ASDAM 2014, Smolenice Castle, Slovakia. M.D. Dankoco, E. Bénevent, E. Bergeret, L. Gallais, and **M. Bendahan**. *Temperature Sensor on flexible substrate patterned by laser ablation (Présentation Orale)*. .

Eurosenors 2014, Brescia, Italy, September 2014

M. Acuautla, S. Bernardini, L. Gallais, **M. Bendahan**. *Direct laser patterning of a gas sensor on flexible substrate.*

ICST 2014, Liverpool, UK, September 2014, M. Acuautla, S. Bernardini, L. Gallais, **M. Bendahan**. *Ammonia sensing properties of ZnO nanoparticles on flexible substrate (Présentation Orale)*.

10th Conference on Ph. D. Research in Microelectronics and Electronics (PRIME), Grenoble, France, July 2014
M. Acuautla, S. Bernardini, E. Preti, **M. Bendahan**. *Thickness effects of ZnO thin films on flexible ozone sensors. (Présentation Orale)*.

Colloque de printemps du club micro-capteurs chimiques (CMC2), Besançon - France, May 2014

M. Acuautla, S. Bernardini, L. Gallais, **M. Bendahan**. *Ozone and ammonia sensors on flexible substrate. (Présentation Orale)*.

E-MRS, Matériaux et Applications aux Dispositifs Capteurs, Sousse, Tunisie, 5-7 nov 2014. M. Acuautla, S. Bernardini, **M. Bendahan**, E. Pietri. *Flexible Gas Sensor Fabricated by Ultrasonic Spray Deposition. (Présentation Orale)*.

E- MRS, Matériaux et Applications aux Dispositifs Capteurs, Mahdia, Tunisie, 2014.

M.D. Dankoco, E. Bénevent, E. Bergeret, L. Gallais, and M. **Bendahan**. *Etude et réalisation de capteurs de température sur support souple*

IEEE International Conference on Electronics Circuit and Systems ICECS 2014, 8-10 dec 2014, Pharo, Marseille, France.

A. Gamet, P. Le Fevre, N. Froidevaux, S. Meillère, **M. Bendahan**. *Investigation on Bond Wire Dedicated to Integrated Time Base*

18TH International Microscopy Congress, *imc2014*, MS-3-P-2855, Prague Czech Republic, septembre 2014

V. Madigou, S. Villain, **M. Bendahan**, M. Arab, S. Bernardini, C. Leroux

CoxFe3-xO4 films for sensor applications

8th International Symposium on Flexible Organic Electronics (ISFOE 2015), Juillet 2015, Grèce.

M. D. Dankoco, G. Y. Tesfay, E. Bénevent, **M. Bendahan**

Flexible temperature sensor realized by inkjet process

Sensors, Energy harvesting, wireless Network & Smart Objects Conference 2015- October 14 to 16, 2015, Gardanne

S. Bernardini, M. Acuautla, V. Martini-Laithier, T. Fiorido, Emmanuelle Pietri and **M. Bendahan**

Ozone sensor based on zno nanoparticules deposited by ultrasonic spray (oral presentation)

The 4th Advancements in Nuclear Instrumentation Measurement Methods and their Application (ANIMMA) 20-24 April 2015, Lisbon Congress Center

C. Reynard-Carette, M. Carette, K. Aguir, **M. Bendahan**, T. Fiorido, A. Lyoussi, D. Fourmentel, J.F. Villard, M. Barthès, F. Lanzetta, G. Layes, S. Vives

Nuclear heating measurements by in-pile calorimetry: prospective works for a microsensor design.

2015 "Sensors Energy harvesting wireless Network & Smart Objects" Conference. / October 14 to 16, 2015, Microelectronics Center of Provence (CMP), Gardanne
M.D. Dankoco, E. Bénevent, E. Bergeret, L. Gallais, K. Aguir, **M. Bendahan**
DIRECT LASER PATTERNING OF METALLIC TEMPERATURE SENSORS ON FLEXIBLE SUBSTRATE" has (oral presentation) /.

IEEE ICSyS 2015 - International Circuits and Systems Symposium, MALAYSIA-2 – 4 September 2015
Yann Bacher, Arnaud Gamet, Nicolas Froidevaux, Philippe Le Fevre, Henri Braquet, Gilles Jacquemod, Stéphane Meillère, Marc Bendahan
A New RLC Structure Measurement Method using a Transverse ElectroMagnetic Cell

CONGRES NATIONAUX :

DIELOR 2010- Dispositifs Electroniques Organiques –, 11-13 Octobre 2010, Giens, France / Capteurs Souples à base d'Oligothiophènes/ T. Fiorido, **M. Bendahan***, S. Bernardini, K. Aguir, J. Ackermann, C. Videlot-Ackermann, H. Brisset, F. Fages, S. Sanaur

JNRDM 10- Journées Nationales du Réseau Doctoral en Microélectronique, 7, 8 et 9 Juin 2010 / Fabrication et caractérisation thermique d'un microsystème de détection gazeuse/ V. Martini, **M. Bendahan**, S. Bernardini, K. Aguir

Journée CMC2 ; Octobre 2011- La Rochelle/ Study of a Gas detection Microfluidic System / V. Martini, **M. Bendahan**, K. Aguir, S. Bernardini, I. Graur, P. Perrier

13èmes journées de la Matière Condensée, Société Française de Physique p262, Montpellier 2012
Ch.Leroux, M. Bendahan, V. Madigou, L. Ajroudi and N. Mliki,
Nano cobalt ferrite for gas sensing

13 ème Congrès de la société française des microscopies, Nantes, juillet 2013
V. Madigou, S. Villain, M. Bendahan, M. Arab, N. Mikli Ch. Leroux
Apport de différentes microscopies à la caractérisation de capteurs de gaz à base de ferrites de cobalt

JNRDM 2015, "Modélisation des fils d'interconnexion puce/package pour des applications base de temps intégrées", A.Gamet, P.Le Fevre, N.Froidevaux, S.Meillère, M.Bendahan.