



Laboratoire de Physique des Gaz et des Plasmas
UMR 8578 du CNRS



Faculté des sciences
d'Orsay

UNIVERSITÉ
PARIS
SUD

**« DIREBIO »
Décharges Impulsionnelles, REactivité à haute pression,
Interfaces plasma-BIOlogie.**

Liste des publications, articles et chapitres de livre, thèses

[2007](#)

[2006](#)

[2005](#)

[2004](#)

(Classement par ordre alphabétique de titre)

2007

[Analysis of the self-pulsing operating mode of a microdischarge](#)

X. Aubert, G. Bauville, J. Guillon, B. Lacour, V. Puech, A. Rousseau
Plasma Sources Science and Technology, 16 (2007) 23-32.

[Effect of propene, n-decane, and toluene plasma kinetics on NO conversion in homogeneous oxygen-rich dry mixtures at ambient temperature](#)

G. Lombardi, N. Blin-Simiand, F. Jorand, L. Magne, S. Pasquiers, C. Postel, J.-R. Vacher
Plasma Chemistry and Plasma Processes, 27 (2007) 414-445.

[Electrical and optical properties of AC microdischarges in porous ceramics](#)

K. Hensel, V. Martisovits, Z. Machala, M. Janda, M. Lestinsky, P. Tardiveau, A. Mizuno
Plasma Processes and Polymers, 4 (2007) 682-693.

[Electron impact ionization cross-sections of toluene](#)

J.R. Vacher, F. Jorand, N. Blin-Simiand, S. Pasquiers
Chemical Physics Letters, 434 (2007) 188-193.

[Experimental and theoretical study of singlet oxygen production in microcathode sustained discharges](#)

G. Bauville, B. Lacour, L. Magne, V. Puech, J. Santos-Sousa, J-P. Bœuf, G. Hagelaar, E. Munoz-Serrano, L.C. Pitchford, N. Sadeghi, M. Touzeau,
AIAA paper 2007-4025 (2007).

[Influence of temperature on the removal of toluene by dielectric barrier discharge](#)

N. Blin-Simiand, F. Jorand, Z. Belhadj-Miled, S. Pasquiers, C. Postel
International Journal of Plasma, Environmental Science and Technology, 1 (2007) 64-70.

[Kinetic of the OH radical in mixtures of atmospheric gases with hydrocarbons studied by time resolved LIF in photo-triggered discharges](#)

L. Magne, S. Pasquiers, C. Postel
dans *Gas Discharges : Fundamentals and Applications*, Ch. 5, p. 114-147, éd. J. de Amorim Filho, 2007 (ISBN 978-81-7895-287-1).

[Production and reactivity of the hydroxyl radical in homogeneous high-pressure plasmas of atmospheric gases containing trace of light olefins](#)

L. Magne, S. Pasquiers, N. Blin-Simiand, C. Postel
Journal of Physics D : Applied Physics, 40 (2007) 3112-3127.

[Singlet oxygen production in a microcathode sustained discharge](#)

G. Bauville, B. Lacour, L. Magne, V. Puech, J.P. Bœuf, E. Munoz-Serrano, L.C. Pitchford,
Applied Physics Letters, 90 (2007) 031501.

2006

Association des plasmas non-thermiques à la catalyse : applications et verrous technologiques

S. Pasquiers, J-M. Tatibouët

dans *Plasmas Froids : Astrophysique, Aérospatial, Environnement, Biologie, Nanomatériaux*, Ch.9, p.181-214. Publications de l'Université de Saint-Etienne (12/2006). ISBN : 2-86272-425-4.

Décontamination de surface par un procédé plasma froid à la pression atmosphérique

J. Larbre

Thèse soutenue le 26 juin 2006 (direction A.M. Pointu).

Influence of water vapour on acetaldehyde removal efficiency by DBD

A. Chiper, N. Blin-Simiand, F. Jorand, S. Pasquiers, G. Popa, C. Postel
Journal of Optoelectronics and Advanced Materials, 8 (2006) 208-211.

Partial ionisation cross-sections of 2-propanol and ethanal

J-R. Vacher, N. Blin-Simiand, F. Jorand, S. Pasquiers
Chemical Physics, 323 (2006) 587-594.

Transportation of nitrogen atoms in an atmospheric post-discharge

P. Fromy, A-M. Pointu, M. Ganciu , J. Orphal

Journal of Physics D : Applied Physics, 39 (2006) 108-112.
Europhysics News, 37 (2006) 7.

2005

[A repetitively pulsed HF laser with a large discharge gap operating on the F₂-H₂ mixture](#)

B. Aleksandrov, E. Klimuk, K. Kutumov, B. Lacour, V. Puech, G. Troshchenko
Quantum Electronics, 35 (2005) 805-808.

[Determination of atomic nitrogen concentrations using titration with molecular oxygen](#)

M. Ganciu, J. Orphal, A.M. Pointu, M. Vervloet
Chemical Physics Letters, 413 (2005) 468-472.

[Electron impact ionisation cross-sections of 2-heptanone](#)

J-R. Vacher, N. Blin-Simiand, F. Jorand, S. Pasquiers
International Journal of Mass Spectrometry, 240 (2005) 161-168.

[LIF spectroscopy applied to the study of non-thermal plasmas for atmospheric pollutant abatement](#)

L. Magne, S. Pasquiers
C. R. Physique, 6 (2005) 908-917.

[Optical and electrical characterization of pulsed dielectric barrier discharges in heterogeneous structure](#)

P. Tardiveau, C. Boyer, F. Jorand, C. Postel, S. Pasquiers
IEEE Transactions on Plasma Science, 33 (2005) 314-315.

[Phototriggered XeCl lasers : from the first prototype to the industrial device](#)

B. Lacour, S. Pasquiers, V. Puech, D. Blin, I. Tassy, P. Delaporte
Proceedings SPIE, 5448 (2005) 366-378.

[Production of active species in N₂-O₂ flowing post-discharges at atmospheric pressure for sterilization](#)

A-M. Pointu, A. Ricard, B. Dodet, E. Odic, J. Larbre, M. Ganciu
Journal of Physics D : Applied Physics, 38 (2005) 1905-1909.

[Production of hydroxyl radicals and removal of acetaldehyde in a photo-triggered discharge in N₂/O₂/CH₃CHO mixtures](#)

L. Magne, S. Pasquiers, V. Edon, S. Jorand, C. Postel, J. Amorim
Journal of Physics D : Applied Physics, 38 (2005) 3446-3450.

[Removal of 2-heptanone by dielectric barrier discharges – Effect of a catalyst support](#)

N. Blin-Simiand, P. Tardiveau, A. Risacher, F. Jorand, S. Pasquiers
Plasma Processes and Polymers, 2 (2005) 256-262.

2004

Physico-chimie d'une décharge électrique impulsionnelle dans un mélange air-isooctane. Application au reformage par association plasma-catalyse.

K. Bouamra

Thèse soutenue le 15 octobre 2004 (direction S. Pasquiers).

Photo-triggered discharges for high power lasers and pollutant removal

S. Pasquiers, B. Lacour, V. Puech

Analelele Stiintifice ale Univ. " Al. I. Cuza " : Fizica Plasmei si Spectroscopie, éd. Univ. Iasi (Roumanie), tome L (2004) 33-42.

[Oxidation of 2-heptanone in air by a DBD-type plasma generated within a honeycomb monolith supported Pt-based catalyst](#)

C. Ayrault, J. Barrault, N. Blin-Simiand, F. Jorand, S. Pasquiers, A. Rousseau, J-M. Tatibouët
Catalysis Today, 89 (2004) 75-81.

[Removal of pollutants by plasma catalytic processes](#)

S. Pasquiers

European Physical Journal : Applied Physics, 28 (2004) 319-324.

[Study of hydrocarbons conversion in air using an homogeneous pre-ionised discharge](#)

S. Pasquiers, C. Postel, L. Magne, V. Puech, G. Lombardi

Journal of Advanced Oxidation Technologies, 7 (2004) 108-115.