POSTER SESSIONS

Monday, June 18

Poster session 1

Plasma cell and plasma tissue interaction

P1 **Plasma gas temperature effect on survival ratio of human cells**
Toshihiro Takamatsu, Takaya Oshita, Ryota Sasaki, Naoki Nakashima, Hidekazu Miyahara, Yoshihisa Matsumoto and Akitoshi Okino

P2 **Treatment of glioblastoma: New application for CAPs?**
Julia Köritzer, Tetsuji Shimizu, Tobias G. Klämpfl, Yang-Fang Li, Veronika Boxhammer, Jin Jeon, Gregor E. Morfill, Julia L. Zimmermann, Jürgen Schlegel

P3 **Inactivation of Bacteria in Solution by Atmospheric Pressure Plasma:Density Effects**
Veronika Boxhammer, Gregor E. Morfill, J. Randy Jokipii, Tetsuji Shimizu, Yang-Fang Li, Tobias G. Klämpfl, Julia Köritzer, Jürgen Schlegel, Julia L. Zimmermann

P4 **Intracellular or Extracellular: a Way to Plasma Protection**
Ruonan Ma, Hongqing Feng, Fangting Li, Yongdong Liang, Qian Zhang, Weidong Zhu, Jue Zhang, Kurt H. Becker, Jing Fang

P5 **Cell Proliferation Activated by Micro-Spot Atmospheric Pressure Plasma**
Chihiro Tsutsui, Toshifumi Komachi, Takumi Kishimoto, Takamichi Hirata, Akira Mori

P6 **The separation of photons and reactive particles in the effluent of He/O2 atmospheric pressure plasma jet**
S. Schneider, J-W. Lackmann, F. Narberhaus, J. Bandow, J. Benedikt

P7 **Towards a plasma treatment of ocular surface infections**
E. Martines, P. Brun, P. Brun, I. Castagliuolo, V. Deligianni, A. Leonardi, S. Spagnolo, E. Tarricone, M. Vono, M. Zuin

P8 **Characteristics of reactive oxygen and nitrogen species during nonthermal bioplasma interactions with biological cells immersed in fluids and its influences on the biomolecular surface electron energy structure**
Eun Ha Choi, Gyungsoon Park, Ku Yeon Baik, Guangsup Cho, Han Sup Uhm

P9 **Non-thermal Plasma-Induced Free Radical Effluent with Hydrogen peroxide Additives**
Mark Gołkowski, Czesław Gołkowski, S. Reed Plimpton, Bruce McCollister, Martin Voskuil, Chad Austin, Jori Leszczynski, Jun Ye, Piotr Masłowski, Aleksandra Foltynowicz, Benjamin Sadowitz, Gary Nieman, David Bruch

P10 **Validation of Plasma Irradiation Effect on Gene Transfection by Using Microplasma Jet from Capillary Nozzle**
Tadashi Okihiro, Jun Matsuda, Kentaro Ikeda, Hideki Motomura, Masafumi Jinno, Kunihide Tachibana, Susumu Satoh, Noboru Saeki

P11 **Gene Transfection by Electric Charge Injection Using Electrospray**
Hideki Motomura, Tadashi Okihiro, Jun Matsuda, Kentaro Ikeda, Masafumi Jinno, Kunihide Tachibana, Susumu Satoh, Noboru Saeki

P12 **Quantitative Investigation of Energy Injection and Gas Flow Rate for the Plasma Used in Gene Transfection**
Hideki Motomura, Jun Matsuda, Kentaro Ikeda, Tadashi Okihiro, Masafumi Jinno, Kunihide Tachibana, Susumu Satoh, Noboru Saeki

P13 **Effect of a non-thermal atmospheric pressure plasma effluent on both growth media and PC-3 prostate cancer cells**
A. R. Gibson, D. O'Connell, H. McCarthy, W. G. Graham

P14 **Influence of cold atmospheric plasma treatments on mammalian cells**
Mariam Naciri, Claire E. Staunton, Mohamed Al-Rubeai, Denis P. Dowling

P15 **Enhanced germination characteristics and seed vigor by Cold Atmospheric Plasma**
Anindita Mitra, J. L. Zimmermann, G. E. Morfill

P16 **Liquid Mediated Effects on Cells, Bacteria, and Model Membranes by Plasma-born Reactive Species**
Malte U. Hammer, Helena Tresp, Ansgar Schmidt-Bleker, Jörn Winter, Mareike A. Ch. Hänsch, Kristian Wende, Lucas Schaper, Bill Graham, Kai Masur

P17 **Feed Gas Humidity: A Hidden Parameter affects Cold Atmospheric Pressure Plasma Jet and Plasma-Treated Human Skin Cells**
Jörn Winter, Kristian Wende, Malte U. Hammer, Helena Tresp, Kai Masur, Klaus-Dieter Weltmann, Stephan Reuter

P18 **Genotoxicity of Atmospheric Pressure Cold Plasma Evaluated with Yeast Reporter Assay System**
Hiroki Yamaguchi, Hachiro Yasuda, Toshihiko Eki, Hirofumi Kurita Kazunori Takashima, Akira Mizuno

P19 **Effects of low-temperature atmospheric pressure plasma on cell physiology *in vitro***
Maxi Höntsch, Thomas von Woedtke, Klaus-Dieter Weltmann, J. Barbara Nebe

P20 ***In vitro* anti mitogenic and apoptotic effects by using plasma jets**
Philippe Kémoun, Sarah Cousty, Jean-Pierre Cambus, Laurent Marlin, François Virard, Marine Luzi, Franck Clément

P21 **Atmospheric Plasma Jet Exposures: Beyond the Skin**
Sophie Bennhar, Vincent Roucoules, Laurent Marlin, Panagiotis Svarnas, Alain Mavon, Franck Clement

P22 **Intravital Fluorescence Microscopy for the Assessment of Microcirculation and Leukocyte-Endothel Interaction after Application of Tissue Tolerable Plasma in the HET-CAM**
C. Bender, D. Pavlovic, A. Wegner, P. Hinz, A. Ekkernkamp, A. Kramer, A. Sckell

P23 **Microsecond-Pulsed DBD Plasma Induces Osteogenic Differentiation in Mesenchymal Cells**
Natalie Shainsky, Gary Friedman, Greg Fridman, Alexander Fridman, Marla J Steinbeck, Theresa A Freeman

P24 **Apoptosis induced by Nanosecond Dielectric Barrier Discharge Plasma**
Ilya Marinov, Arnaud Duval, Olivier Guaitella, Antoine Rousseau, Anne Janin, Svetlana Starikovskaia

P25 **Cold plasma for bacterial inactivation and its effects on keratinocytes**
Bouke Boekema, Coen van Gils, Sven Hofmann, Peter Bruggeman, Esther Middelkoop, Gerrit Kroesen

P26 **Cold Atmospheric Plasma in the Treatment of Malignant Glioma**
Alan Siu, Olga Volotskova, Michael Keidar, Jonathan H. Sherman

P27 **Comparison of the effect of cold atmospheric plasmas on mammalian and bacterial cells**
Denis P. Dowling, Mariam Naciri, Claire E. Staunton, Varun Lahoti, Ahmed Chebbi and Mohamed Al-Rubeai

P28 ***In vitro* antitumor activity of plasma Gun**
Marc Vandamme, Laura Brullé, Delphine Riès, Eric Robert, Vanessa Sarron, Sébastien Dozias, Stéphanie Lerondel, Jean-Michel Pouvesle, Alain Le Pape

P29 **Numerical Simulation of Reactive Species in Liquids in Contact with Atmospheric Pressure Plasmas**
Tatsuya Kanazawa and Satoshi Hamaguchi

Medical aspects and results of plasma in use

P30 **Non-thermal atmospheric argon plasma treatment as a novel approach to improving wound healing: Results of a first randomized placebocontrolled clinical trial on skin graft donor sites**
Julia Heinlin, Julia L. Zimmermann, Florian Zeman, Wolfram Bunk, Georg Isbary, Michael Landthaler, Tim Maisch, Roberto Monetti, Gregor E. Morfill, Tetsuji Shimizu, Julia M. Steinbauer, Wilhelm Stolz, Sigrid Karrer

P31 **Treatment of Diseases by Inhalation of Atmospheric Pressure Plasma Flow**
Takamichi Hirata, Shigeru Murata, Chihiro Tsutsui, Akane Kondo, Akira Mori

P32 **Low-temperature atmospheric plasma increases the expression of antiaging genes of skin cells without causing cellular damages**
Jeong-Hae Choi, Hyun-Wook Lee, Jae-Koo Lee, Jin-woo Hong,Gyoo-cheon Kim

P33 **The Exposure to the Non-Thermal Atmospheric Pressure Plasma Can Control the Proliferation of Mammalian Cells**
Yonghao Ma, Chang-Seung Ha, Hae June Lee, Kiwon Song

P34 **The Effects of In-vivo Application of Nonequilibrium Atmospheric Plasmas on Corneal Wound Healing in New Zealand White Rabbits**
J. Barratt, D. Belyea, S. Grewal, C. Geist, M.A. Stepp, A. Shashurin, M. Keidar

Plasma sources for medicine

P35 **Plasma sterilization of pharmaceutical products: from basics to production**
Benjamin Denis, Simon Steves, Nikita Bibinov, Egmont Semmler, Wenzel Novak, Peter Awakowicz

P36 **Low Temperature Non-Thermal Plasmas at Atmospheric Pressure: Diagnostics and Medical Applications**
Oleg Petrov, Svetlana Ermolaeva, Mikhail Vasiliev, Elena Sysolyatina, Igor Samoilov, Ravil Amirov, Andrei Mukhachev, Tetsuji Shimizu, Boris Naroditsky, Gregor Morfill, Anatoly Grigoriev, Vladimir Fortov, Alexander Gintsburg

P37 **Insight in the complex argon/humid air plasma chemistry, by means of numerical fluid modeling**
Wouter Van Gaens, Annemie Bogaerts

P38 **Characterization and Simulation of Plasma Chemistry Produced by Surface Micro Discharge**
Leila Taghizadeh , Tetsuji Shimizu, Yang-Fang Li, Julia L Zimmermann and Gregor E Morfill

P39 **How to tailor low temperature plasma at atmospheric pressure for a given biomedical application?**
M. Yousfi, N.Merbahi, O. Eichwald

P40 **Preliminary study of the argon gas flow from an atmospheric plasma jet applicator**
Adam Ian Williams, Steve Morris, Chris Hancock, Daniel Brown, Jonathan Tennyson

P41 **Measurement of active species concentrations in nitrogen and argon/nitrogen flowing afterglows at reduced pressure**
Laure Barreyre, Hayat Zerrouki, Gérald Ledru, Jean-Philippe Sarrette and André Ricard

P42 **Transition from non-uniform to uniform discharge in nanosecond pulsed FE-DBD and linear corona non-equilibrium plasmas**
Marco Boselli, Vittorio Colombo, Emanuele Ghedini, Matteo Gherardi, Romolo Laurita, Fabio Rotundo, Paolo Sanibondi

P43 **Effluent composition, thermal output and fluid-dynamics of a dual gas plasma needle device for biomedical applications: Part I**
Marco Boselli, Vittorio Colombo, Emanuele Ghedini, Matteo Gherardi, Romolo Laurita, Fabio Rotundo, Lorenzo Sabbatucci, Paolo Sanibondi

P44 **Effluent composition, thermal output and fluid-dynamics of a dual gas plasma needle device for biomedical applications: Part II**
Marco Boselli, Vittorio Colombo, Emanuele Ghedini, Matteo Gherardi, Romolo Laurita, Fabio Rotundo, Lorenzo Sabbatucci, Paolo Sanibondi1

P45 **Chemical pathways governing the production of Reactive Oxygen Species (ROS) in atmospheric pressure He+O2+H2O plasmas**
Kirsty McKay, Dingxin Liu, Mingzhe Rong, Felipe Iza, Michael G. Kong

P46 **Development of microdicharges in silicon operating in DC for medical applications**
M. K. Kulsreshath, L. Schwaederle, L. J. Overzet, T. Tillocher, S. Dozias, V. Felix, P. Lefaucheux, O. Aubry, R. Dussart

P47 **Space and time resolved characterization of *in-air* Pulsed Atmospheric Plasma Streams for biomedical applications**
Delphine Riès, Eric Robert, Carina Watson, Charles Bailey III, Sébastien Dozias, Vanessa Sarron, Marc Vandamme, Jean-Michel Pouvesle

P48 **Dynamics of Pulsed Atmospheric pressure Plasma Streams generated by a Plasma Gun**
Vanessa Sarron, Eric Robert, Delphine Riès, Sébastien Dozias, Marc Vandamme, Jean-Michel Pouvesle

P49 **Cold plasma type reactors and sources suitable for medical applications**
Dragos Astanei, Marius Ursache, Stephane Pellerin, Eugen Hnatiuc, Vasile Burlui, Bogdan Hnatiuc, Jean-Louis Brisset, Krzystof Dzierzega

Plasma surface modification for biomedical applications

P50 **Extraction of Penicillin G by polypropylene fibers treated with nitrogen plasma**
Naima Hachache, Youcef Bal, Dominique Debarnot, Fabienne Poncin-Epaillard

P51 **Radial control of cell colonization inside 3D scaffolds by means of plasma processes**
Francesca Intranuovo, Marco Domingos, Antonio Gloria, Roberto Gristina, Paulo J. Bartolo, Pietro Favia

P52 **Atmospheric Plasma Jet SiOx-Thin-Film Deposition on Enamel**
Antje Lehmann, Manuela Volkmer, Stefan Rupf, Georg Böhm, Thomas Arnold, Axel Schindler

P53 **Cold plasma technology for fast immobilization of enzymes**
Adil Elagli, Céline Vivien, Kalim Belhacene, David George, Anthony Treizebre, Philippe Supiot, Pascal Dhulster, Rénato Froidevaux

P54 **Comparison of various deposition strategies to prepare non-fouling plasma polymer films by atmospheric-pressure surface DBD**
Ivan Gordeev, Milan Šimek, Václav Prukner, Andrei Choukourov, Hynek Biederman

P55 **The quartz crystal microbalance with dissipation unit (QCM-D) as a tool for the evaluation of surface biocompatibility**
Metod Kolar, Darij Kreuh, Alenka Vesel, Miran Mozetič, Aleš Doliška, Karin Stana-Kleinschek

P56 **Non-sticking antibacterial protection ofbiomedical devices**
Cristina C. Surdu-Bob, Danut Turcu, Marius Badulescu, Cristin Coman, Catalin Luculescu, Alexandru Anghel

P57 **Plasma processing of 3D scaffolds to address specific cell response suitable for long term implants and tissue engineering**
E. Sardella, R. A. Salama, V. Giampietro, R. Gristina, R. d'Agostino, P. Favia

P58 **Aging of PEO-like plasma polymer films prepared by atmospheric and low pressure discharges**
Ivan Gordeev, Milan Šimek, Václav Prukner, Anna Artemenko, Andrei Choukourov, Hynek Biederman

P59 **Fibroblasts attachment on carbon nanowalls surface functionalized by reactive plasma**
E.C. Stancu, S. Vizireanu, S.D. Stoica, G. Dinescu, A.M. Stanciuc, L. Moldovan

P60 **Plasma based deposition of patterned organic fluorine-free (super)hydrophobic-(super)hydrophilic surfaces**
J.Berndt, E. Kovacevic, H.Acid, L.Boufendi

P61 **Plasma polymer deposition on scaffolds of poly(D,L)lactic acid. Effect on the adhesion and the proliferation of fibroblasts, osteoblasts and keratinocytes**
D. D'Angelo , E. Aimo Boot, F. Renò, M. Rizzi, M. Biasizzo,F. Trotta, G. Gottardi

P62 **Plasma preparation of titanium surfaces for stents**
Uroš Cvelbar, Martina Modic, Gregor Filipič, Saša Lazović, Danijela Vujošević

P63 **Nanostructured antibacterial coating of endoscopes by using atmospheric plasma sources**
Gerold Lukowski, Jörg Ehlbeck, Jörn Winter, Ulrike Lindequist, Martin Polak, Klaus-Dieter Weltmann

Plasma based sterilization/decontamination

P64 **Bio-physical Analysis of yeast responses to non-thermal plasma at atmospheric pressure**
Young-Hyo Ryu, Young-June Hong, Jin-Young Lee, Han-Sup Uhm, Gyungsoon Park, Eun-Ha Choi

P65 **Plasma-Microbubble Generator for Water Purification**
Hiroyuki Yoshiki, Kouki Okuda, Kazushige Sato

P66 **Study of the Disinfection Abilities of Water Treated by Atmospheric Pressure Cold Plasma**
Qian zhang, Hongqing Feng, Peng Sun, Ruonan Ma, Weidong Zhu, Jue Zhang, Jing Fang

P67 **Dental treatment using LF plasma jet with the reduced pH method -Disinfection of Dentin-**
Tomoko Ohshima, Hiromitsu Yamazaki, Satoshi Ikawa, Hiroyasu Yamaguchi, Asiri Jayawardena, Nobuko Maeda, Katsuhisa Kitano

P68 **Investigation of the antiseptic efficacy on *in vitro* biofilms of tissue tolerable plasma combined with common antiseptic solutions**
Matthes R., Bender C., Koban I., Kramer A.

P69 **Inactivation of Aspergillus Fumigatus with Low-Temperature plasma**
H. Ghomi, S. Zahedi Azad, N. Navab Safa, Sh. Mohammadi ,Sh. Mirpour

P70 **Effect of cold atmospheric plasma treatment on dental pulp in rat molars**
S. Rupf, M. Georg, M. Hannig, M. W. Laschke, A. Lehmann, A. Rueppell, A. Schindler

P71 **Interaction of pulsed electrical discharge produced at gas-liquid interface with bacteria in water**
Eva Spetlikova, Petr Lukes, Martin Clupek, Sandra Ondrckova, Vaclav Janda

P72 **Convective and diffusive transport of oxidative species from a plasma jet**
Yves Creyghton, Jos van der Vossen

P73 **On the Use of Plasma Sterilization for Planetary Protection: Investigation of the Destruction of Bacterial Spores from a Laboratory Strain and a Spacecraft Assembly Isolate by a Low-Pressure VHF-CCP**
Katharina Stapelmann, Nikita Bibinov, Ralf Möller, Peter Awakowicz

P74 **Plasma Synergy with Conventional Therapies for Cancer and Wound Sterilization**
Sharmin Karim, Ting-Ying Chung, Douglas S. Clark, David B. Graves

P75 **Parametric investigation of a N2 flowing post discharge source for decontamination of the inner surface of the small diameter tubes**
Soukayna Limam, Michael J. Kirkpatrick, Anne-Marie Pointu, Emmanuel Odic

P76 **Comparison of bacteria inactivation using two distinct devices of low temperature plasma jets at atmospheric pressure**
N. Merbahi, M. Yousfi, J. Ph. Sarrette, S. Cousty, H. Zarrouki

P77 **Bactericidal properties of cometary discharge with inserted grid**
Jaroslav Julák, Vladimír Scholtz, Eva Kvasničková, Vítězslav Kříha, Jaroslav Jíra

P78 **ROS and RNS formed in water sprayed through transient spark in air and their bactericidal effects**
Z. Machala, P. Lukeš, B. Tarabová, E. Špetlíková, K. Hensel, L. Šikurová

P79 **Determination of Plasma Parameters of a Low-Pressure VHF-CCP used for Sterilization**
Marcel Fiebrandt, Katharina Stapelmann, Nikita Bibinov, Peter Awakowicz

P80 **An innovative method of cold plasma for sterilization of medical devices**
Marie-Paule Gellé, Zouhaier Ben Belgacem, Mohamed Boudifa , Sophie Gangloff, Dominique Laurent-Maquin

P81 **Plasma treatment for agriculture applications**
Henryka Stryczewska, Joanna Pawłat, Kenji Ebihara

Tuesday, June 19

Poster session 2

Plasma cell and plasma tissue interaction

P101 **Molecular dynamics simulation of plasma-bacteria cell wall interaction**
M. Yusupov, E. C. Neyts, A. Bogaerts

P102 **Modified Scaffolds in Radial Flow Bioreactor for 3D Mammalian Cell Culture**
Odin Ramírez Fernández, Rafael Godínez Fernández, Juan Morales Corona, Luis Enrique Gómez Quiroz, María Concepción Gutiérrez Ruiz, Esmeralda Zúñiga Aguilar, Roberto Olayo González

P103 **Cell-Adhesion and Bone Integration on Different Plasma Coatings**
C. Zietz, T. Lindner, A. Fritsche, B. Finke, H. Testrich, S. Lenz, F. Espig, J. Meichsner, R. Bader

P104 **In-vitro investigations of different non-thermal atmospheric pressure plasma sources on human keratinocytes**
Susanne Blackert,Ute Greim, Beate Haertel, Thomas von Woedtke, Ulrike Lindequist

P105 **Differential Sensitivity of Lymphocyte Subpopulations to surface DBD Plasma**
Beate Haertel, Frauke Volkmann, Thomas von Woedtke, Ulrike Lindequist

P106 **DBD plasma treatment of HaCaT keratinocytes: reactive oxygen species rather than ozone increase integrin expression**
Beate Haertel, Susanne Blackert, Lea Talmann, Katrin Oehmigen, Thomas von Woedtke,Ulrike Lindequist

P107 **Differential Effect of Non-Thermal Atmospheric-Pressure Plasma on Angiogenesis**
Beate Haertel, Katrin Eiden, Anne Deuter, Thomas von Woedtke, Ulrike Lindequist

P108 **The Effects of Air and Nitrogen Plasma Jets on Living Cancer Cells**
Kangil Kim, Hak Jun Ahn, Minuk Jo, Jong-Soo Lee, Sang Sik Yang

P109 **Dose dependent killing of leukemia cells by low temperature atmospheric pressure plasma**
Nazir Barekzi and Mounir Laroussi

P110 **Effects of nitrous acid and nitric acid in an air-water plasma system on Hela cell viability**
Takehiko Sato, Mayo Yokoyama, Kohei Johkura

P111 **Plasmid DNA degradation induced by a plasma microjet**
Claire Douat, Pierre-Marie Girard, Michel Fleury, Gérard Beauville, Vincent Puech

P112 **Selective killing of melanoma cells with Air plasma and anti-HER2 antibody conjugated gold nanoparticle**
B. B. R. Choi, M. S. Kim,J. K. Lee,U. K. Kim, G. C. Kim

P113 **Impact of cold atmospheric pressure plasma on human skin cell-lines**
Annemarie Barton, Lena Bundscherer, Kai Masur, Ulrike Lindequist, Axel Kramer,Klaus-Dieter Weltmann

P114 **Cellular growth on rough surfaces after removing of biofilms by brush and/or atmospheric pressure plasma**
Kathrin Duske, Lukasz Jablonowski, Ina Koban, Klaus-Dieter Weltmann, Barbara J. Nebe, Thomas Kocher

P115 **On anomalous asymmetric rf current of the plasma mediated electrosurgery device**
Y. B. Seol, B. K. Na, J. H. Kim, H. Y. Chang, S. J. You

P116 **Apoptosis Induction on Fibroblast Cells by Atmospheric Pressure Plasma Treatment Using Nanosecond Pulsed Power Generator**
Ippei Yagi, Takuma Yasuda, Ryo Ono, Tetsuji Oda, Chihiro Tsutsui, Takamichi Hirata, Koichi Takaki

P117 **Impact of non-thermal atmospheric pressure plasma on T lymphocytes and monocytes**
L. Bundscherer, A. Barton, K. Wende, K. Masur, U. Lindequist, A. Kramer, K.-D. Weltmann

P118 **Study of protein aggregation and enzymatic activity after exposure to dielectric barrier plasma jet in helium**
Roxana Jijie, George Bogdan Rusu, Ionut Topala, Valentin Pohoata, Nicoleta Dumitrascu

P119 ***Ex vivo* survival of human lymphocytes after plasma treatment**
Sander Bekeschus, Kai Masur, Axel Kramer, Klaus-Dieter Weltmann

P120 **Modulation of B10R mouse macrophage signalling pathways using nonthermal atmospheric pressure plasma treatments**
Isabelle C. Lacaille, Sylvain Coulombe, Martin Olivier

P121 **Common versus noble- *Bacillus subtilis* differentially responds to air and argon gas plasma**
Theresa Winter, Jörg Bernhardt, Jörn Winter, Ulrike Mäder, Rabea Schlüter, Klaus-Dieter Weltmann, Michael Hecker, Harald Kusch

P122 **HIV-1 infected macrophages under cold atmospheric plasma jet treatment**
Olga Volotskova, Larisa Dubrovsky, M.A. Stepp, Michael Bukrinsky, Michael Keidar

P123 **In vivo treatment of cells with plasmas in liquids**
William G. Graham, Lucas Schaper, Mark Muir, Frederick J. Currell

P124 **Cell Proliferation Enhanced by Atmospheric-Pressure Plasma Application for Cells of Interest in Orthopedics**
Kazuto Masuda, Satoshi Hamaguchi, Yu Moriguchi, Tatsuya Kanazawa, Ayumi Ando, Kiyoshi Okada, Akira Myoui, Hideki Yoshikawa

P125 **Atmospheric-pressure plasma application on intra-cellular biochemistry**
Byung Keun Na, Youbin Seol, Hong Young Chang

P126 **Plasma Treatment of Skin Lipids**
N.Mertens, M.Marschewski, J.Hirschberg, T.Omairi, O.Höfft, W.Maus-Friedrichs, S.Emmert, V.Viöl

P127 **Differential Apoptosis Effects of DBD Plasma on Normal and Cancer Cells**
Kamonporn Panngom, Ku YounBaik, Young Hyo Ryu, Eun Ha Choi

P128 **Air DBD plasma selective effects on different cell lines**
D. Pignatelli, R. Gristina, G. Dilecce, B.R. Pistillo, S. De Benedictis, P. Favia

Medical aspects and results of plasma in use

P129 **Cold Plasma Selectivity and Application for Cancer Therapy**
Michael Keidar, Olga Volotskova, Alexey Shashurin, Mary Ann Stepp , Rafael Guerro-Preston, Barry Trink, R Walk, P Srinivasan, A Sandler

P130 **Determination of the effect of an Argon plasma coagulation (APC) discharge application on biological tissue**
Sandra Keller, Nikita Bibinov, Alexander Neugebauer, Klaus Fischer, Markus D. Enderle, Peter Awakowicz

P131 ***In Vivo* Skin Test by Using a Portable Cold Atmospheric Plasma Device**
Yang-Fang Li1, David Taylor, Julia L. Zimmermann, Hans-Ulrich Schmidt, Veronika Boxhammer, Jin Jeon, Tobias Klämpfl, Tetsuji Shimizu1, Georg Isbary, Gregor Morfill

P132 **Effects of combined plasma jet and gemcitabine treatments on tumor proliferation of a murine orthotopic pancreatic carcinoma model**
Laura Brullé, Delphine Ries, Marc Vandamme, Eric Robert, Stéphanie Lerondel, Eric Martel, Alain Le Pape, Jean-Michel Pouvesle

P133 **Antitumor activity of DBD and plasma Gun on colorectal tumors**
Marc Vandamme, Laura Brullé, Delphine Riès, Eric Robert, Vanessa Sarron, Sébastien Dozias, Stéphanie Lerondel, Jean-Michel Pouvesle, Alain Le Pape

Plasma sources for medicine

P134 **An Atmospheric Pressure Plasma Brush**
X. Lu and S. Wu

P135 **DBD Cell Designs for Efficient UV/VUV Production suitable to Biomedical Treatment and Sterilization**
Anand K. Srivastava, Shashank Sharma, H. K. Dwivedi

P136 **Diagnostics of cold non-equilibrium atmospheric plasma jets**
Alexey Shashurin, M. N. Shneider, A. Dogariu, R. B. Miles, O. Volotskova, M. Keidar

P137 **Measurements of streamer head potential in the cold nonequilibrium atmospheric plasmas**
Alexey Shashurin, M. N. Shneider,M. Keidar

P138 **Oxidizing species in late Ar-O2-N2 afterglow for bacterial treatment**
Cédric Noël, Kinga Kutasi, Thierry Belmonte

P139 **Spectral diagnostics of atmospheric-pressure argon plasma generated by a microwave plasma torch**
Mikhail Vasiliev, Maxim Alyapyshev, Oleg Petrov, Svetlana Ermolaeva, Elena Sysolyatina, Boris Naroditsky, Tetsuji Shimizu, Gregor Morfill, Anatoly Grigoriev,Vladimir Fortov, Alexander Gintsburg

P140 **Design and Performance Characteristics of a Novel Atmospheric Plasma Device for Biomedical Applications**
Vitalii Zablotskii, Oleksandr Churpita, Sarka Kubinova, Alexandr Dejneka, Eva Sykova

P141 **Diagnostic and Design of Plasma Generated Reactive Species in Liquids to Investigate Cellular Effects of Plasma Treatment**
Stephan Reuter, Jörn Winter, Malte U. Hammer, Kai Masur, Kristian Wende, Ansgar Schmidt-Bleker, Helena Tresp, Mareike A. Ch. Hänsch, M. Dünnbier, Sylvain Iseni,Thomas von Woedtke, Klaus-Dieter Weltmann

P142 **Atmospheric Pressure Plasma Jet for Non-Thermal Resistant Materials**
Joanna Pawłat, Radosław Samoń, Tomasz Giżewski, Henryka Stryczewska

P143 **Measurements of atomic nitrogen in an atmospheric-pressure plasma jet**
Erik Wagenaars, Timo Gans, Deborah O'Connell, Kari Niemi

P144 **Temporal kinetics of light emission from plasma at the interface with animal tissues**
Ionut Topala, Andrei Vasile Nastuta, Roxana Jijie, Valentin Pohoata, Nicoleta Dumitrascu

P145 **Ozone detection and production rate measurement by Mid-Infrared absorption spectroscopy in a plasma jet operating at atmospheric pressure**
Sylvain Iséni, Jörn Winter, Mario Dünnbier, Klaus-Dieter Weltmann, Stephan Reuter

P146 **Space resolved ozone detection in the effluent of a cold atmospheric pressure plasma jet**
M. Dünnbier, J. Winter, S. Iseni, A. Schmidt-Bleker, K.-D. Weltmann,S. Reuter

P147 **Plasma-Generated Reactive Species in physiological Solutions**
Helena Tresp, Malte U. Hammer, Ansgar Schmidt-Bleker, Jörn Winter, Mareike A. Ch. Hänsch, Kristian Wende, Lucas Schaper, Bill Graham, Kai Masur,Thomas von Woedtke, Klaus-Dieter Weltmann, Stephan Reuter

P148 **Biofilm removal from rough titanium surfaces with dental decontamination methods and/or atmospheric pressure plasma**
Lukasz Jablonowski, Katja Fricke, Kathrin Duske, Ina Koban, Rabea Schlüter, Klaus-Dieter Weltmann, Thomas von Woedtke,Thomas Kocher

Plasma surface modification for biomedical applications

P149 **Plasma needle treatment of Staphylococcus Aureus (ATCC 25923) biofilms**
Dejan Maletić, Maja Miletić, Nevena Puač, Nenad Selaković, Saša Lazović, Dragana Vuković, Pavle Milenković, Gordana Malović, Zoran Lj. Petrović

P150 **Plasma models applied to polymer deposition and surface control for biological applications**
Christine Charles, Donna J. Menzies, Thomas Gengenbach, John S. Forsythe, Nick Birbilis, Graham Johnson, Gail McFarland, Richard Williams, Celesta Fong, Patrick Leech , Keith McLean, Benjamin W. Muir

P151 **Tailoring crystalline structure in N-doped TiO2 thin films: application to photocatalytic and biological reactions**
Rod Boswell, Christian-Sarra-Bournet and Christine Charles

P152 **A multi-approach of the bacteria non-adhesion phenomenon onto hydrophobic polymeric surfaces**
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