Hakone 2026 -Program (v02)

Paper	Authors	Title
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I1	A. Bourdon	Modeling and simulation of atmospheric pressure low-temperature plasmas
O1-1	H. Höft, C. Flores, K.-D. Weltmann, M. M. Becker	Analysis of Spatio-Temporal Ignition Patterns in Sinusoidal-Driven Dielectric Barrier Discharges in a Multi-Filament Arrangement
O1-2	Eliot Collard, Antoine Belinger, Nicolas Gherardi, Nicolas Naudé, Simon Dap, Hubert Caquineau	Revisiting the memory effect in diffuse Nitrogen DBD using a fluid modeling approach
Session 2		
O1-3	Fumiyoshi Tochikubo, Takuto Nozawa, Yusuke Nakagawa	Numerical Study of Filamentary Dielectric Barrier Discharges in Dry Air: Effects of Simulation Parameters and Model Dimensionality
O1-4	Julie Haton, Robin De Meyer, Antoine Belinger, Nicolas Naudé, Luc Stafford	On the Memory Effect and Discharge Characteristics of a Diffuse Dielectric Barrier Discharge in Various N_2/O_2 Mixtures
O1-5	L. Krös, H. Höft, M. Stankov, D. Loffhagen, J. H. van Helden, R. Brandenburg	Tunable diode laser absorption spectroscopy on a single-filament dielectric barrier discharge in argon at atmospheric pressure
O1-6	Jakub Kelar, Michal Pazderka, David Brodnansky, Martin Karkus, Sebastian Dahle, Zlata Kelar Tucekova	Surface Engineering of Heterogeneous Bio-based Materials: Utilizing a Proprietary Hybrid Surface-to-Volume Dual-Frequency Discharge.
O1-7	Alexander Quack, Lennard Buck, Kerstin Sgonina, Jan Benedikt	Influence of Differently Sized Dielectric Beads on Plasma Properties in Plasma Catalysis
Session 3		
I2	Atsushi Komuro	Physicochemical dynamics of atmospheric pressure streamer discharges: Numerical modeling and electric field measurement in DBDs
O2-1	Jean-Baptiste Billeau, Denis V. Seletskiy, Svetlana Starikovskaia, Stephan Reuter	Defining the influence of electrical pulse parameters on atmospheric pressure plasma jet chemistry
O2-2	Alexander Schicke, Amira Nouira, Sebastian Burhenn, Steffen Schüttler, Marc Böke, Judith Golda	The impact of metastable atoms on Penning dissociation of CO_2 in an atmospheric plasma jet

O2-3	Mohamed G. Elsheikh, Richard Sydora, Amina Hussien and Ahmad Hamdan	Pulsed nanosecond discharge at heptane-water interface: influence of ambient pressure on bubble dynamics, interfacial instability, and emulsification efficiency
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O2-4	Michel Moisan	Reproducible plasma columns sustained by EM field with a linearly decreasing axial electron density that depends solely on the gas pressure, field frequency and tube radius
O2-5	Philipp Wirth, Máté Vass, Thomas Mussenbrock	Global Chemistry Modeling of Biogas Conversion in Surface Dielectric Barrier Discharges with Vortex-Induced Mixing
O2-6	Valentina Riazantceva, Lyes Sebih, Ahmad Hamdan, Emile Carbone, Zhangen Chen, Shuhui Sun	Relative Humidity Role in Discharge Mode Probability for Nanosecond Plasmas with a Confined Water Droplet
O2-7	Dante Filice, Sylvain Coulombe	Pulsed RF Excitation in CO_2-CH_4 Mixtures: Electrical Characteristics of Power Modulation
O2-8	Sander Nijdam, Wouter Meekes	Streamer diagnostics using a flexible fast pulse source
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I3	Katharina Stapelmann, Jonathan E. Thomas, Kristina Pattison, Suneel Kumar, Francois Berthiaume, and Vandana Miller	Plasma endpoint detection for wound healing
O3-1	Joanna Pawlat, Agnieszka Mazur – Lesz, Elżbieta Grządka, Piotr Terebun, Dawid Zarzeczny, Michał Kwiatkowski, Agnieszka Starek – Wójcicka, Irena Malinowska, Magdalena Mnichowska-Polanowska, Monika Machoy	The influence of cold plasma on dental prosthetic materials
O3-2	Adrien Gady, Gérard Bauville, Joël Lemaire, Pascal Jeanney, Michel Heninger, João Santos Sousa, Stéphane Pasquiers, Antoine Pallandre	Synthesis of early life's buildings blocks using non thermal plasmas in microfluidic structures
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O3-4	Dingxin Liu, Mingyan Zhang, Zifeng Wang, Jishen Zhang, Li Guo	On the critical role of O_2NOOH for plasma-induced water activation
O3-5	Emily M. Hong, Zhenyu Ma, Justin French, Herek L. Clack	Non-thermal Plasma Inactivation of Airborne DNA Virus at Different AC Frequencies

O3-6	Mohamed Khalaf, Anna Zahoranová, Matej Klas, Stanislav Kyzek,Petra Šrámková, Pavol Ďurina, Monika Stupavská, Dušan Kováčik, Veronika Medvecká	Effect of Glow, After-glow Plasma, and Plasma-Activated Water on Radish Seeds
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O4-2	Stephane Simon, Laura Cacot, David Brassard, Jason R. Tavares, Frédéric Sirois, Stephan Reuter	Electrical control of plasma chemistry: Tuning reactive species production in atmospheric DBDs
O4-3	Pierre-Luc Girard-Lauriault, Avishek Banerjee, Saif Marji, Owen Armstrong, Gabriela Baez-Zaldivar	Formation of Higher-Order Products from Liquid Organic Feedstocks in a Micro-second-Pulsed Gas-over-Liquid Dielectric Barrier Discharge
O4-4	Laura Cacot, Stéphane Simon, Alexandre Lapointe, David Brassard, Emilie Bédard, Jason R. Tavares, Stephan Reuter	Plasma-liquid interactions for hydroponics farms: a multi-phase diagnostic framework for reactor scale-up
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O5-2	Sarah Hekking, Robin De Meyer, Charles Moderie, Antoine Goullet, Agnes Granier, Clément Maheu, Mireille Richard-Plouet, Luc Stafford	Plasma-surface effects in dielectric barrier discharges: investigating diffuse, filamentary and hybrid discharge modes for material processing
O5-3	Alessandro Patelli, Riccardo Fiorotto, Ehsan Shakerinasab, Alessandro Andreetto	Impact on surfaces of dual frequency pulsed+RF plasma jet in open air

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O5-4	Oleksandr Boiko, Grzegorz Komarzyniec, Michał Aftyka, Marta Dziuba-Kozieł, Grzegorz Kozieł, Michał S. Gęca, Fumiaki Mitsugi, Henryka D. Stryczewska	The influence of key operating parameters of the three-electrode gliding arc reactor on the NO_x production efficiency
O5-5	Yiwei Jiang, Theo van de Ven, Jacopo Profili	Plasma-Enhanced Siloxane Coating of Carboxymethylated Cellulose Films for Improved Hydrophobicity and Moisture Barrier Performance
O5-6	Laura Cacot, Arghavan Yazdanpanah, Robin De Meyer, Heliam Klein, Mariam El Rachidi, Myrtil L. Kahn, Richard Clergereaux, Nicolas Naudé, Luc Stafford	Aerosol-Assisted Thin Film Deposition in a Dielectric Barrier Discharge: Effect of the Precursor on the Deposition Mechanisms
O5-7	Jordan Figueiredo, Bassam Dally, Deanna Lacoste	In-flight reduction of iron oxides from various sources by hydrogen plasma
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O6-3	Yusuke Nakagawa, Yusei Takano, Fumiyoshi Tochikubo	Anisotropic Hydrophilization of Resins Using Atomic Oxygen Produced by Laser Photolysis of O_3
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O6-7	Xingyu Chen, Jiaqi Tang, Mauritius C.M. van de Sanden	Quantifying Atomic Oxygen Flux in an Atmospheric-Pressure Microwave Induced Plasma Decapsulation System

O6-8	Ronny Brandenburg, Jafet Ortiz Valverde, Hamed Mahdikia, Rüdiger Hink, Jan Hummel, Dirk Uhrlandt	On the Characterization of Gliding Arc Discharges in Carbon Dioxide Containing Gases at Atmospheric Pressure
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O7-2	Prisca Stephanie Kandjo Ngoubeyou, Dunpin Hong, Hervé Rabat, Benoit Cagnon, Béatrice Vallee, Olivier Aubry	Non-thermal plasma-Fe functionalized activated carbon coupling for PFOA removal in water
O7-3	Jesus Diaz Alcala, Tanubhav Srivastava, Yuanchang Xu, John Foster	Characterization of an atmospheric coaxial streamer discharge plasma reactor for PFAS degradation
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O7-4	Jisu Jeon, Tiago C. Dias, Stephen Olson, Xuefei Qiu, Selma Mededovic Thagard, Mark J. Kushner	PFOA Plasma Degradation in Water: Long-Time-Scale Modeling Investigation
O7-5	Koichi Sasaki, Tsukasa Yamakawa, Yoshinobu Inagaki	Synthesis of ammonia using atmospheric-pressure nitrogen and water vapor plasmas
O7-6	Marc Böke, Henrik van Impel, Yue Cheng, David Steuer, Volker Schulz-von der Gathen, Judith Golda	Characteristics of a Micro-cavity Plasma Array for Gas Conversion
O7-7	Catherine Batiot-Dupeyrat, Samy Bouacem, Thomas Orrière, Deborah De Masi, Paul Hazemann	Plasma and Plasma-catalysis coupling for hydrogen production from H_2S decomposition
O7-8	Carlo van Melis, Tom Huiskamp, Wilfred Hoeben	Plasma-driven upgrading of hydrocarbons with CO_2
O7-9	A. Hecimovic, R. Antunes, C. Kranig, A. Meindl, U. Fantz	The role of bubble hydrodynamics in plasma-based PFAS treatment
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