A : Smart Textile

P1. **Smart Processes for Smart Textiles:**
Platform-based Approach to Develop Connected Process Chains for Smart Textiles
Inga Gehrke[1], Thomas Gries[1]
[1] Institut für Textiltechnik of RWTH Aachen University, Aachen, Germany

P2. **Measurement of Dog's Heart Rate Using Dog Wear with Electrodes**
Yoko Komatsu[1], Kazunori Hirata[2], Yasushi Atsuta[3], Hiroko Shibanai[4], Mitsuaki Ohta[5]
[1] TOYOBO Co., Ltd., [2] TOYOBO STC Co., Ltd., [3] Unicharm Corporation
[4] Japan Animal Hospital Association
[5] Tokyo University of Agriculture

P3. **Analysis Methodorogy for Smart Textile Production Locations**
Daniel Buecher[1], Bernhard Schmenk[1], Thomas Gries[1]
[1] Institut fuer Textiltechnik der RWTH Aachen University

P4. **Development of Sensing Ware Using Printed Electronics for Respiratory Measurement**
W. Fujimoto[1], W. Kawaji[1], M. Honda[1], E. Anzai[1], M. Yamauchi[2] and N. Saiwaki[1]
[1] Grad. School of Humanities and Sciences, Nara Women's University
[2] Nara Medical University

P5. **Study of Effective Costume and Interaction for IoT Nurse Robot**
W. Fujimoto, M. Honda, E. Anzai and N. Saiwaki
Grad. School of Humanities and Sciences, Nara Women's University

P6. **Development Project of FBG Sensor System for Healthcare Clothing**
-No.1: FBG Interrogator for Wearable System-
Yuki Haseda[1], Ken Ogawa[2], Keiichi Fujita[2], Shouhei Koyama[3], Hiroaki Ishizawa[4]
[1] Gratuate School of Medicine, Science and Technology, Shinshu University
[2] Nagano Keiki Co., LTD.
[3] Faculty of Textile Science and Technology, Shinshu University
[4] Institute for Fiber Engineering, Shinshu University

P7. **Development Project of FBG Sensor System for Healthcare Clothing**
-No.2: Measurement Signal by Sensor Installation Point-
Yuya Ohno[1], Shouhei Koyama[2], Hiroaki Ishizawa[3]
[1] Graduate School of Science and Technology, Shinshu University
[2] Faculty of Textile Science and Technology, Shinshu University
[3] Institute for Fiber Engineering, Shinshu University

P8. **Development Project of FBG Sensor System for Healthcare Clothing**
-No.3: Blood Pressure Detection-
Atsushi Fujimoto[1], Shun Chino[2], Keisaku Fujimoto[3], Shouhei Koyama[4], Hiroaki Ishizawa[5]
[1] Graduate School of Science and Technology, Shinshu University
[2] Interdisciplinary Graduate School of Science and Technology, Shinshu University
[3] Department of Clinical Laboratory Science, School of Health Sciences, Shinshu University
[4] Faculty of Textile Science and Technology, Shinshu University
[5] Institute for Fiber Engineering, Shinshu University

P9. **Development Project of FBG Sensor System for Healthcare Clothing**
-No.4: Stress Loading Detection-
Seiya Fujiwara[1], Masayoshi Kamijo[1], Shouhei Koyama[2], Hiroaki Ishizawa[3]
[1] Graduate School of Medicine, Science and Technology, Shinshu University
[2] Faculty of Textile Science and Technology, Shinshu University
[3] Institute for Fiber Engineering, Shinshu University

P10. **Development Project of FBG Sensor System for Healthcare Clothing -No.5: Blood Glucose Sensing-**

Shintaro Kurasawa[1], Shouhei Koyama[2*], Hiroaki Ishizawa[3], Keisaku Fujimoto[4]
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[3] Institute for Fiber Engineering, Shinshu University
[4] Department of Clinical Laboratory Sciences, School of Health Sciences, Shinshu University

P11. **Development Project of FBG Sensor System for Healthcare Clothing -No.6: FBG Sensor Embedded Textile Product-**

Akio Sakaguchi[1], Misaki Sakai[1], Shouhei Koyama[1], Hiroaki Ishizawa[2]
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[2] Institute for Fiber Engineering, Shinshu University

P12. **Development Project of FBG Sensor System for Healthcare Clothing -No.7: Multiple Vital Sign Sensor for Healthcare Clothing-**

Shouhei Koyama[1], Akio Sakaguchi[1], Keisaku Fujimoto[2], Hiroaki Ishizawa[3]
[1] Faculty of Textile Science and Technology, Shinshu University
[2] Department of Clinical Laboratory Sciences, School of Health Sciences, Shinshu University
[3] Institute for Fiber Engineering, Shinshu University

P13. **Piezoelectric Response of Amorphous Electrospun Fibers of Atactic Polystyrene**

Chonthicha Iumsrivun, Shintaro Kurihara, Ryusei Kitayama,
Atsushi Yokoyama, Yuya Ishii
Faculty of Fiber Science and Engineering, Kyoto Institute of Technology

P14. **Wearable Textile Devices for Physiological Signals of People with Dementia**

Fangmeng Zeng, Dongeun Choi, Noriaki Kuwahara
Advanced Fibro-Science, Kyoto Institute of Technology

P15. **Vortex Core-Spun Yarn Containing a Metal Wire for Conductive Traces of Smart Textiles in Soft Robotic Applications**

Zeguang Pei, Xiangzhang Xiong, Jian He, YanZhang
College of Mechanical Engineering, Donghua University, Shanghai, China

P16. **Fabrication of Printed Wiring on Non-woven Fabric VECRUS™ by a Selective-Wetting Method**

Masashi Nitani[1], Kazuki Maeda[1], Mariko Omori[1], Mayumi Uno[1],
Soichi Obata[2], Yasuhiro Shirotani[3], Kohei Hayashi[3]
[1] Osaka Research Institute of Industrial Science and Technology
[2] Kuraray Kuraflex Co., Ltd.
[3] Kuraray Co., Ltd.

P17. **Metal Fabric with Triple Woven Structure for the Current Collector of Solid Oxide Fuel Cell**

Kengo Kubotera[1], Eiichi F. Mine[1], Akihisa Higuchi[1], Hideki Okamura[2]
[1]Tokyo Metropolitan Industrial Technology research Institute
[2]Okamura textile Co., Ltd.

P18. **Textile Crack Sensor for Steel Structure**

Eiichi F. Mine[1], Kengo Kubotera[1], Yoichi Ito[1], Tomotaro Watanabe[1],
Tatsuro Sakamoto[2], Akira Suzuki[2]
[1] Tokyo Metropolitan Industrial Technology Research Institute
[2] Railway Technical Research Institute

P19. **Development of Decubitus Prevention System Using Body Pressure Distribution Measuring Sheet Made of Conductive Knit**

Riku Takuma, Jun Fujioka
National Institute Technology, Ishikawa College

P20. **Development of Smart Fitness Wear Embedded with Surface Electromyography Electrodes and Validity Evaluation of Muscle Activity Measurements**

Siyeon Kim[1], Juyoung Chun[2], Jisu Kim[1,2], Daeyoung Lim[1],
Euichul Kwon[3], Wonyoung Jeong[1]
[1] Korea Institute of Industrial Technology, South Korea
[2] Hanyang Univeristy, South Korea, [3] Toyobo Co., Ltd., Japan

P21. **Development and Performance Test of the Textile-based Multi-channel Smart Heated Garment**

Siyeon Kim[1], Daeyoung Lim[1], Youngku Kong[2], Wonyoung Jeong[1]
[1] Korea Institute of Industrial Technology, South Korea,
[2] SungKyunKwan University, South Korea

P22. **The Interfacial Electrical Properties of Textile-based Sensors for Ambulatory ECG Monitoring**

Pengjun Xu, Qiang Wang
Faculty of Clothing and Design, Minjiang University

P23. **Smart Textile Based on Optical Fibre Bragg Grating Sensors for Monitoring Human Physiological Parameters**

Hongqiang Li[1], Xiaoqing Wei[1], Rui Xie[1], Meng Wang[1], Joan Daniel Prades[2], Cheng Zhang[1],
Meiling Zhang[3], Changyun Miao[1], Enbang Li[4]
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[3] School of Textile Science and Engineering, Tianjin Polytechnic University, China
[4] School of Physics, Faculty of Engineering and Information Sciences, University of Wollongong, Australia

B : Fiber and Textile Materials

P24. **Improving Deodorization of Ammonia, Amines, and Ethane Thiol by Chemical Modification of Wool Fibers**

Natsuko Kohara
Showa Women's University

P25. **Effect of Good Solvents on the Biodegradability of Poly (lactic acid) Fiber Fabrics Shrink-processed by a Mixture of Good and Poor Solvents**

Tomomi Hanada, Ayusa Kizaki, Kana Natsume, Miku Suzuki,
Shiori Ando, Erika Akiyama, Yoko Nodayama
Tokyo Kasei Gakuin University

P26. **Drape Behavior of Fabrics with Radial Seam**

Tetsuya Danno, Kurumi Nishizawa, Chikaho Monma
Otsuma Women's University

P27. **Evaluation of the Texture of Absorbent Pads**

Hitomi Hamada, Manae Koshihara, Misa Shimizu
Tokyo Kasei University

P28. **New Possibly of Mawata (floss silk) - Collaboration with Yamawaki Genpei-Shouten -**

Mayu Tabata, Naomi Yokota
The University of Shiga Prefecture

P29. **Effect of Water Mist on Surface Temperature and Preference**

Yuriko Kibayashi, Sachiko Sukigara
Kyoto Institute of Technology, Japan

P30. **Change in the Texture of Green Tea Derived CNF Coated Fabrics by Washing**

Kaori Sasaki and Hitomi Hamada
Graduate School of Humanities and Life Sciences, Tokyo Kasei University

P31. **Influences of Weight Mass Balance on the Appearance and Mechanical Properties of Braids**

Kuniko Matsunashi[1], Masumi Tada[2]
[1] Japan Women's University, [2] Graduate School of Kyoto Insitute of Technology

P32. **Changes in Performance of the Polyurethane Blend Stretching Fabric due to Aging and Wearing**

Nanako Okuwaki, Kuniko Matsunashi
Japan Women's University

P33. **Changes in Properties of Polyurethane Blend Fabrics Subjected to Accelerated Deterioration Processes**

Riho KANEDA[1], Kuniko MATSUNASHI[2], Masao ENOMOTO[3]
[1] Graduate School of Japan Women's University
[2] Japan Women's University, [3] Kyoto Women's University

P34. **The Effect of Color of Reactive Dyes Silk Fabric on UV Protection Performance**

Zhang Hui, Zhu Xiaoxiao, Ma Kai, Song Anxi
Beijing Institute of Fashion Technology

P35. **Evaluation of the Fukafuka Sensation for Textile Products**

Masayoshi Kamijo, Taiki Kazama, Mayumi Uemae, Hiroaki Yoshida
Faculty of Textile Science and Technology, Shinshu University, Japan

P36. **Research and Development of a Braided Cervical Cell Harvest Instruments Using PLLA Yarn-Fiber Structure and Modified Cross Section Yarn-**

Hitomi MORINO[1], Kozo HIRATA[1], Shigeyuki NAKANO[2],
Hideki YAMANE[3], Kazuhisa NOMURA[4]
[1] Kobe Women's University, [2] Hyogo Prefectural Institute of Technology,
[3] Kyoto Institute of Technology, [4] Nishiwaki Municipal Hospital

P37. **Thermal Comfort of the Waist Part of Disposable Diapers**

Natsuki Shirai, Hitomi Hamada
Tokyo Kasei University

P38. **Development of Three Dimensional Evaluation System of Dynamic Drape Behavior of the Fabrics**

Teruko Tamura[1], EunJin Lee[2], Fujie Haishima[3],
Tomohiko Hananouchi[3] and Takafumi Katayama[4]
[1] Bunka Gakuen University, [2] Haruyama Holdings Inc.
[3] Silk Science Research Institute, [4] KISSEI COMTEC Co., Ltd.

P39. **Working Conditions on the Afterglow Characteristics of Rare-earth Luminous Fibers**

Xuefeng Guo[1,2], Keqin Zhang[1], Hongwei Zhang[2], Mingqiao Ge[3]
[1] College for Textile and Clothing Engineering, National Engineering Laboratory for Modern Silk, Soochow University, China
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[3] College of Textiles and Clothing, Key Laboratory of Eco-Textile Ministry of Education, Jiangnan University, China

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P40. **Wettability Control of PET Fiber by Atmospheric Pressure Plasma Jet Treatment**

Eriko Shohbuke[1], Keiko Gotoh[2]
[1] Okamoto Corporation, [2] National Institute of Technology, Nara College

P41. **UV Shielding Properties of Cotton Fabrics Supported by Various Cation Exchanged Calcium Hydroxyapatite Particles**

Akemi Yasukawa, Ayano Soma, Junna Tamura
Hirosaki University

P42. **Surface Functionalization of Wool Textile Using an Atmospheric Pressure Plasma Jet**

Ryoko Yasukawa[1], Keiko Gotoh[2]
[1] Kyoto Notre Dame University, [2] National Institute of Technology, Nara College

P43. **Water Free Scouring & Dyeing of Cotton/Polyester Fabrics Using Supercritical Carbon Dioxide**

Heba Ghanayem, Satoko Okubayashi
Advanced Fibro Science, Kyoto Institute of Technology, Japan

P44. **Waterless Treatment of Cotton Fabrics Using Supercritical Carbon Dioxide**

Heba Ghanayem, Satoko Okubayashi
Advanced Fibro Science, Kyoto Institute of Technology, Japan

P45. **The Combined Effect of Deodorant Fibers with Different Thiol Removal Mechanisms**

Toshiko Amemiya
Ochanomizu University

P46. **Mordant-free Dyeing of Wool Blend Felt using Extraction from Toyama Tulip Petals**

Noriko Fukuda
Shinsyu University

P47. **Dyeing of UHMWPE by Radiation Graft Polymerization**

Ichiro Enomoto
Japan Women's University

P48. **Organic Conductive Processing of Natural Fibers**

Shin Soeda
Tokyo Metropolitan Industrial Technology Research Institute

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P49. **Introduction of Rinse Process with Fine Bubble Water to Detergent System**

Yumiko Tagawa[1], Erina Nishimura[2], Keiko Gotoh[3]
[1] Osaka Sangyo University, [2] Nara Women's University,
[3] National Institute of Technology, Nara College

P50. **Quantitative Analysis of Organic Stains by a New Model of Hand-held XRF**

Arashi Yamada, Masaru Oya
Yokohama National University

P51. **Effects of Foamability and Surface Activities on the Touch Feeling of the Foam**

Kakeru Hosoi, Masaru Oya
Graduate school of environment and information sciences, Yokohama National University

P52. **Study on the Improvement of Washing Conditions at the Time of Disaster**

Noriko Obata
Toyama University International Studies

P53. **Study of Removal Effect of Dirt by Ultrafine Bubbles**

Kumiko Shimomura
Showa Women's University

P54. **Experimental Verification of Consumer Information on Calcium Stain Removal with Citric Acid**

Junko Komatsu[1,2], Remi Tamogami[2], Masaru Oya[2]
[1] Nagasaki University, [2] Yokohama National University

P55. **Analysis of the Effect of Enzyme and Oxygen Bleach on the Cleanability of Protein Soils by Using Probability Density Functional Method**

Naoaki Fujimura, Masaru Oya
Yokohama National University

P56. **Evaluation of Residue Amount and the Detergency of UV Absorbent Left on the Fabric by Image Analysis**

Daichi Morino[1], Masaru Oya[2]
[1]Graduate School of Yokohama National University, [2]Yokohama National University

P57. **In Situ Monitoring of Fatty Acid Removal Processes from PET Surfaces Using Quartz Crystal Microbalance Technique**

Yu Nagai Kanasaki[1], Yasuyuki Kobayashi[2], Keiko Gotoh[3]
[1] Graduate School of Education, Hiroshima University
[2] Osaka Research Institute of Industrial Science and Technology
[3] National Institute of Technology, Nara College

P58. **Fundamental Properties Involved in the Washing for the Ultrafine Bubble Water**

Yoko Yamaguchi, Jyuri Iha
Kyoritsu Women's Junior College

P59. **Kinetics Meaning of Cleaning Analysis with Probability Density Functional Method**

Karen Miyamoto[1], Masaru Oya[2]
[1] Graduate School of Yokohama National University, [2] Yokohama National University

P60. **Evaluation of Consumer Information on Natural Cleaning Using Natural Surfactants**

Yuka Sakamoto[1,2], Toshiki Okuma[2], Masaru Oya[2]
[1] Kobe Shoin Woman's University, [2] Yokohama National University

P61. **Determination of Protein Soil in Air Noncontact System**

Mai Tsukazaki[1], Toshiko Amemiya[2], Miho Matsuda[3], Miyuki Morita[4]
[1] Jissen Women's University, [2] Ochanomizu University
[3] Hokkaido Takuhoku Special Needs School, [4] Tokyo Gakugei University

P62. **Effect of Detergents on the Drying Time of Cotton Fabrics**

Aiko Tai, Tsuyoshi Terabayashi, Yoshifumi Yamagata, Izumi Onuki,
Ai Tanaka, Yukari Sekine, Yoichiro Kohno, Hiroyuki Masui
LION Corporation

E : Clothing Construction

P63. **Extraction of 3D-body Types of Curved Surface Shape in the Japanese Males and Females Using Angle Curvatures for the Made – to – Order Garment**

Tomoe Masuda[1], Yukio Yamamoto[2]
[1] Faculty of Education, Mie University, [2] Onward Kashiyama Co., Ltd

P64. **Spectral Analysis for 3D Human Body Shapes with Spherical Harmonics**

Yukio Yamamoto[1], Tomoe Masuda[2]
[1] Onward Kashiyama Co., Ltd., [2] Faculty of Education, Mie University

P65. **Examination of Methods of Analyzing Body Types Using Homologous Body Models**

Ayumi Takemoto, Michiko Ohtsuka
Japan women's University

P66. **Classification of the Lower Body Type of Modern Japanese Adult Females**

Marika Miyamoto[1], Ayumi Takemoto[2], Michiko Ohtsuka[2]
[1] Graduate School of Japan women's University, [2] Japan women's University

P67. **Design of Clothing for Athletes: Designing a Clothing Pattern Based on an Analysis of the Body Shape of Rugby Players**

Momoko Omoto[1], Ayumi Takemoto[2], Michiko Ohtsuka[2]
[1] Graduate School of Japan Women's University, [2] Japan Women's University

P68. **Proposal of Pattern for a Volleyball Undershirt to Support the Shoulder Joint**

Yumi Yokoo[1], Hanae Kenmochi[2], Ayumi Takemoto[2], Michiko Otsuka[2]
[1] Graduate school of Japan Women's University, [2] Japan Women's University

P69. **Relationship between Trunk Somatotype Variation and Bodice Pattern of Japanese Standard-sized Women**

Masako Dohi[1], Chie Tsunoda[2]
[1] Bunkyo University, [2] Sagami Women's University

P70. **Analysis Result of Human Body Measurement Data of Japanese from 2014 to 2016－1 — Verification of DROP Conforming to ISO8559 —**

Sanae Tanaka[1], Kuniko Nakamura[2], Ayumi Takemoto[3], Michiko Otsuka[3]
[1] Tokyo Kasei University, [2] Otsuma Women's University Junior College Division
[3] Japan Women's University

P71. **Analysis Result of Human Body Measurement Data of Japanese from 2014 to 2016－2 Estimation of Female Body Type via Multiple Regression Analysis**

Kuniko Nakamura[1], Sanae Tanaka[2], Ayumi Takemoto[3], Michiko Otsuka[3]
[1] Otsuma Women's University Junior College Division
[2] Tokyo Kasei University, [3] Japan Women's University

P72. **Production and Evaluation of a Men's Trousers Pattern Suitable for Both Standing and Sitting Postures**

Tamami Soda[1], Chie Tsunoda[2]
[1] Japan Women's University, [2] Sagami Women's University

P73. **The Influence of the Weight of a Wearing Bag on Young Woman's Postures**

Chiho Kato, Hisayo Ishihara, and Kyohei Joko
Sugiyama Jogakuen University

P74. **Measurement of Shoulder Shape Using Smart Wear**

Daisuke Iguchi[1], KyoungOK Kim[2], Masayuki Takatera[2]
[1] Graduate School of Science and Technology, Shinshu University
[2] Faculty of Textile Science and Technology, Shinshu University

P75. **Estimation of Muscle Activity When Wearing Elbow Support Using Musculoskeletal Simulation**

Yosuke Horiba, Mari Nishiyama, Shigeru Inui
Shinshu University

P76. **Fashion Design for Heartbeat Communication**

Chiaki Ujihira[1], Chikako Miura[2], Sakiho Kai[3], Takao Furukawa[3]
[1] Kyoritsu Girls' Junior & Senior High School
[2] W.L. Gore & Associates, Co. Ltd., [3] Kyoritsu Women's University

P77. **Standard Body Figures for Design Drawing for Senior Fashion based-on the Diversity of Japanese Women's Body Shape**

Morishita Aoi[1], Nakamura Kensuke[2]
[1] University of Shiga Prefecture, Japan, [2] Chung-ang University, Rep. of Korea

P78. **Silhouette Design of Japanese Traditional Crepe Fabrics for Dresses**

Hiroko Yokura[1], Masayo Okashiro[1], Naomi Maruta[2], Sachiko Sukigara[3]
[1] Shiga University, [2] Kyoritsu Women's University
[3] Kyoto Institute of Technology

P79. **A Study of Children's Clothing for Nighttime Road Safety: Arrangement Effect of Retroreflective Materials on Eye Movement**

Keiko Sugita[1,2], Masaru Oya[2], Masashi Kobayashi[1]
[1] Osaka Shoin Women's University, [2] Yokohama National University

P80. **Images of Silk Crepe Used in Traditional Japanese Clothing**

Eiko Abe
Otsuma Women's University

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P81. **Sleep and Bed Climate in Primary and High School Students: a Longitudinal Study.**

Kazue Okamoto-Mizuno[1], Koh Mizuno[1], Akiko Maeda[2]
[1] Tohoku Fukushi University, [2] Gunma University

P82. **Effect of Vapor Permeability and Apertures of Outdoor Parka and Environmental Velocity on Its Evaporative Heat Transfer and Ventilation Rate**

Yayoi Satsumoto[1], Takuya Aoyagi[2], Ayano Dempoya[3], Tomoko Koshiba[4], Teruko Tamura[4]
[1] Yokohama National University,
[2] Former Student of Graduate school of Yokohama National University
[3] Kanagawa University, [4] Bunka Gakuen University

P83. **Relation between Thermal Comfort Limit and Metabolism in Japanese Young Female and Male**

Takako Fukazawa
Faculty of Education, Kyoto University of Education

P84. **Effect of Boots-Shape and Insole on the Insulation of Winter Boots**

Mi-Jung Kang[1], Young-Ah Kwon[2]
Div. of Convergence Design, Silla University, Pusan, Korea

P85. **Clothing Pressure Design of Compression Running Tights for Reducing Physiological Load**

Reina Kato[1], Riho Sakashita[1], Harumi Morooka[2]
[1] Graduate School of Kyoto Women's University, [2] Kyoto Women's University

P86. **Effects of *Cooling Vest* on Body Heat Loss on Wearing Small Fans for Heatstroke Prevention**

Riho Sakashita[1], Reina Kato[1], Harumi Morooka[2], Miyuki Makahashi[3]
[1] Graduate School of Kyoto Women's University, [2] Kyoto Women's University
[3] Toyama Industrial Technology Research and Development Center

P87. **Current Status and Issues of Medical X-ray Protective Clothing**

Ayako Kumada[1], Harumi Morooka[2], Nobumasa Kawahara[3]
[1] Graduate School of Kyoto Women's University,
[2] Kyoto Women's University, [3] Adegg Co., Ltd.

P88. **Development of Elastic Heat-Generating Fabric**

Haruka Otomo, Junko Deguchi
Asahi Kasei Corporation,

P89. **Influences of Cold Water Footbaths on Thermoregulation and Autonomic Nervous System in a Hot and Humid Environment**

Qing Wang[1], Masao Uruma[2], Teruko Tamura[1], Nobuo Nagai[1]
[1] Graduate School of Bunka Gakuen University, [2] Former Bunka Fashion Graduate University

P90. **Quantification of Contact Area between Manikin Body and Garment using 3D Scanner and Evaluation of Heat Loss from the Manikin**

Mikako Kamatani[1], Takayuki Aimi[1], Kenji Nakamura, Kozo Hirata[2]
[1] Goldwin Inc, [2] Kobe Women's University

P91. **Effects of the Structure of Nonwovens on Physical Properties and Hand Evaluation**

Tsurugi Kawakami, Mari Inoue
Graduate School of Human Development and Environment, Kobe University

P92. **Objective Hand Evaluation of Car Interior Materials**

Takafumi Hata, Mari Inoue
Graduate School of Human Development and Environment, Kobe University

P93. **Measurement of the Effective Thermal Conductivity of Fiber Assemblies in Low Fiber Volume Fraction**

Youfeng Wang**,** Mari Inoue
Graduate School of Human Development and Environment, Kobe University

P94. **Clothing Climate While Wearing Functional Base Layers: A Skin Model Study**

Mariko Sato, Yuki Tanaka, Yuko Matsui, Naomi Izu, Teruko Tamura
Bunka Gakuen University

P95. **Walking Characteristics When Wearing Traditional Japanese Clothing**

Naomi Izu, Misato Fukura, Satoko Aoki, Mariko Sato
Bunka Gakuen University

P96. **Transitions and Functionality in Traditional Han Chinese Clothing**

Yang Shizhe, Mariko Sato
Bunka Gakuen University

P97. **Effect of Wearing a Compression Garment on Fat Oxidation during Exercise**

Tamaki Mitsuno[1]**,** Ayane Serizawa[1]**,** Hiromi Tosaka[2]**,** Akio Yoshida[3]**,**
Yashuhiro Sekine[3]**,** Shinichi Watanabe[3]
[1]Shinshu University, [2]Kanebo Cosmillion Ltd., [3]Fukuske Co. Ltd.

P98. **Analyzing Flow inside Clothing Microclimate for Thermal Comfort**

Yasuhiro Shimazaki[1], Shunpei Katsuta[2], Takeru Kodama[1]
[1] Toyohashi University of Technology, [2] Okayama Prefectural University

P99. **Thermal Comfort Wearing Kimono in Summer - Comparison of Different Combinations of Fabric Materials -**

Ayano Dempoya[1], Tomoko Koshiba[2], Shizuo Iwamoto[1]
[1]Kanagawa University, [2]Bunka Gakuen University

P100. **Experimental Study on the Differences between Heat Loss and Mass Loss Method Using a Sweating Thermal Manikin**

Sanae Kanji[1]**,** Teruko Tamura[2]
[1]Kyoto Electronics Manufacturing Co., Ltd.,
[2]Bunka Gakuen University

P101. **The Effect of Adjunctive Cooling Gels on Core Temperature and Cognitive Function during Cooling Process in Mild Hyperthermic Individuals**

Akira Nagamatsu[1], Hirokazu Watanabe[1], Kotaro Kitajima[1],
Ryuichi Kiyoe[1], Masayuki Fukue[1], Fumino Kobayashi[2],
Hiroki Nakata[2], Manabu Shibasaki[2]
[1] Kobayashi Pharmaceutical Co., Ltd.,
[2] Nara Women's University

P102. **Neural Activity and Network during Go/No-go Tasks in Heat-stressed Individuals.**

Fumino Kobayashi[1], Hiroki Nakata[2], and Manabu Shibasaki[2]
[1] Graduate School of Humanities and Sciences, Nara Women's University
[2] Department of Health Sciences, Nara Women's University

P103. **The Wear Performance Evaluation of Single-Use Protective Clothing for Infection Prevention**

Tomoko Koshiba[1], YukoMatsui[1], Mika Kinugawa[2], Tsuneki Kusaba[3]
[1]Bunka Gakuen University, [2]DuPont-Asahi Flash Spun Products Co., Ltd,
[3]Moraine Corporation

P104. **Fact-finding Survey of Bedding, Nightclothes, and Sleeping PositionsDuring Summer: A Comparison of 1996 and 2017**

Utako Shimane
Wayo Women's University,

P105. **Effects of Shading Tent on the Thermoregulatory Responses of Exercising Young and Older Men in the Outdoor Environment Compared to Directly Solar Heat Exposure**

Kazuyo Tsuzuki[1], Ikusei Misaka[2], Kenichi Narita[2], Yasushi Ishimaru[3]
[1] Toyohashi University of Technology,
[2] Nippon Institute of Technology
[3] Center for Environmental Information Science

P106. **A Comparative Study of Moisture and Heat Transfer Properties of Non Permeable Films with Holes and Textile Cloths by using a Skin Model**

Jing Feng Zhang[1], Teruko Tamura[2]
[1] Bunka Gakuen University (Presently ASAHI KASEI CORPORATION)
[2] Bunka Gakuen University

P107. **Temperature-Lowering Function of Cotton-and-Metal Hybrid Fabric**

Shang Na**,** Soyogu Matsushita, Masashi Kobayashi
Graduate School of Human Sciences, Osaka Shoin Women's University

G : Consumer Science and Psychology

P108. **Characteristics of Japanese Souvenirs Female University Students Recommend**

Yukie Tsuji
Kobegakuin University

P109. **The Facto When Choosing Sweets**

JIJI WONG
Kobegakuin University

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Yoshiyuki Matsumura, Shuhei Fukawa, NurAfifa Izyan
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