

Poster Session

- P-01 Looping gait based inchworm locomotion for biomedical micro-robot
Sung Hoon Kim, Shuichiro Hashi, Kazushi Ishiyama
- P-02 Physiological effects of the assistance of centrifugal flow rotary blood pumps
Telma Keiko Sugai, Akira Tanaka, Makoto Yoshizawa, Atsushi Baba, Yasuyuki Shiraishi, Tomoyuki Yambe, Shin-ichi Nitta
- P-03 Quantitative evaluation of autonomic nervous activity using independent component analysis for photoplethysmographic signal
Makoto Abe, Makoto Yoshizawa, Norihiro Sugita, Akira Tanaka, Shigeru Chiba, Tomoyuki Yambe, Shin-ichi Nitta
- P-04 Multi-point measurement in a fluidic channel for the sensing of urea concentration
Taito Sakai, Midori Yoshida, Ko-ichiro Miyamoto, Torsten Wagner, Shin'ichiro Kanoh, Tatsuo Yoshinobu
- P-05 Miniaturized chemical imaging sensor system using a display panel as a light source
Kazumi Kaneko, Akira Matsuo, Ko-ichiro Miyamoto, Torsten Wagner, Shin'ichiro Kanoh, Tatsuo Yoshinobu
- P-06 Continuous manipulation of micro particles by dielectrophoresis using asymmetric electrodes array
Masaki Midorikawa, Shin-ichiro Kuroki, Koji Kotani, Takashi Ito
- P-07 Effect of a transient stimulus on the modulation of steady-state visual evoked potential
Yoshiyuki Kashiwase, Kazumichi Matsumiya, Ichiro Kuriki, Satoshi Shioiri
- P-08 Development of a prediction system of lung tumor motion for radiation therapy
Kei Ichiji, Masao Sakai, Noriyasu Homma, Yoshihiro Takai, Makoto Yoshizawa
- P-09 PET imaging of Na/I symporter gene expression induced by nanobubbles and ultrasound
Yukiko Watanabe, Sachiko Horie, Yoshihito Funaki, Youhei Kikuchi, Hiromichi Yamazaki, Keizo Ishii, Shiro Mori, Tetsuya Kodama
- P-10 Observation for angiogenesis of liver metastases in preclinical models
Rui Chen, Yukiko Watanabe, Li Li, Sachiko Horie, Shiro Mori, Manabu Fukumoto, Tetsuya Kodama
- P-11 Precise mechanical scan for biomedical photoacoustic microscopy
Hideyuki Koike, Kazutoshi Kumagai, Naohiro Hozumi, Tsutomu Uemura, Yuji Matsuura, Yoshifumi Saijo
- P-12 PMMA-bone cement containing magnetite nanoparticles for hyperthermia of cancer
Koki Kawamura, Zhixia Li, Masakazu Kawashita
- P-13 Analysis of spatiotemporal profile of extracellular action potential of a hippocampal pyramidal neuron: a computer simulation study
Hou Son, Norihiro Katayama, Akihiro Karashima, Mitsuyuki Nakao
- P-14 Prediction of sleepiness based on auditory evoked potential
Yosuke Yasui, Akihiro Karashima, Hiroto Nakatani, Hirofumi Okubo, Norihiro Katayama, Mitsuyuki Nakao
- P-15 The effect of feedback training on brain activation during motor imagery: a NIRS study
Kei Iizuka, Shin'ichiro Kanoh, Ko-ichiro Miyamoto, Tatsuo Yoshinobu, Ryuta Kawashima
- P-16 A test of lower limb joint angle measurement method for wearable sensor system
Hiroki Saito, Takashi Watanabe, Achmad Arifin
- P-17 A basic study on error-based parameter adjustment method for fuzzy FES controller using cycle-to-cycle control
Mio Azegami, Takashi Watanabe, Makoto Yoshizawa
- P-18 A feasibility study of vibrotactile warning for collision prevention in a driving simulator
Makiko Sato, Takashi Watanabe, Makoto Yoshizawa
- P-19 Improvement of feedback error learning controller for FES - a computer simulation test in wrist joint movements
Keisuke Fukushima, Takashi Watanabe, Makoto Yoshizawa
- P-20 Comparison of two gait models for describing stability of natural sit-to-stand
Oscar David Pena Cabra, Takashi Watanabe, Makoto Yoshizawa

- P-21 Dynamic crosstalk canceller for a transaural system responsive to head rotation
Cheolsu Han, Takuma Okamoto, Yukio Iwaya, Yōiti Suzuki
- P-22 Development of a higher order ambisonics encoder and decoder for a 157-channel surround speaker array
Jorge Trevino, Takuma Okamoto, Yukio Iwaya, Yōiti Suzuki
- P-23 Audio-visual temporal perception for perceptually simplified speech sound and natural face image
Kaori Asakawa, Akihiro Tanaka, Shuichi Sakamoto, Yōiti Suzuki
- P-24 Automated identification of the heart wall region on echocardiograms using classification of RF signals
Hiroki Takahashi, Hideyuki Hasegawa, Hiroshi Kanai
- P-25 Estimation of the distance between two 2-D ultrasonic images by evaluating correlation of RF echoes
Atsuhiro Suzuki, Hideyuki Hasegawa, Hiroshi Kanai
- P-26 Modeling the mechanical system of object for contactless probing of its viscoelasticity
Kazuhiro Nakazawa, Hideyuki Hasegawa, Hiroshi Kanai
- P-27 Multi-angle receive beamforming for compound imaging with improved frame rate
Akinlolu Ponnle, Hideyuki Hasegawa, Hiroshi Kanai
- P-28 Improvement of high frequency ultrasound imaging quality by considering beam propagation
Minami Ogawa, Yoshifumi Saijo, Kazuto Kobayashi, Takahiro Iwamoto, Hideyuki Koike, Kazutoshi Kumagai, Akira Tanaka, Makoto Yoshizawa
- P-29 Evaluation of elastic inhomogeneity in ZnO crystal by means of the micro-LFB ultrasonic material characterization system
Sho Yoshida, Yuji Ohashi, Mototaka Arakawa, Jun-ichi Kushibiki, Noboru Sakagami
- P-30 Characterization of ZnO polycrystalline films on silica glass by the LFB ultrasonic material characterization system
Takanori Kondo, Sho Yoshida, Yuusuke Kourai, Yuji Ohashi, Mototaka Arakawa, Jun-ichi Kushibiki, Satoshi Fujii
- P-31 Measurements of acoustic properties of ZnO single crystals by the LFB/PW ultrasonic material characterization system
Yuusuke Kourai, Sho Yoshida, Yuji Ohashi, Mototaka Arakawa, Jun-ichi Kushibiki, Noboru Sakagami
- P-32 Four-dimensional high-frequency ultrasound imaging system for early detection of lymph node micro-metastasis
Li Li, Sachiko Horie, Rui Chen, Yukiko Watanabe, Nicolas Sax, Maya Sakamoto, Shiro Mori, Shoki Takahashi, Tetsuya Kodama
- P-33 TEM observation and analysis of echogenic nano-bubbles
Nicolas Sax, Sachiko Horie, Li Li, Rui Chen, Yukiko Watanabe, Shiro Mori, Tetsuya Kodama
- P-34 Volumetric and angiogenetic imaging system by using nanobubbles and high-frequency ultrasound for evaluation of the antitumor effects by cisplatin
Yoko Yagishita, Yoko Takata, Yukiko Watanabe, Sachiko Horie, Rui Chen, Li Li, Kosuke Ohki, Hitoshi Miyashita, Hidehiro Morikawa, Maya Sakamoto, Shiro Mori, Hiroshi Kawamura, Tetsuya Kodama
- P-35 High frequency ultrasound imaging and biomechanical testing of skin
Kazutoshi Kumagai, Hideyuki Koike, Minami Ogawa, Shingo Sakai, Kazuto Kobayashi, Yoshifumi Saijo
- P-36 Enhancement of localized heating by ultrasonically induced cavitation for high intensity focused ultrasound therapy
Ryo Takagi, Yuta Inaba, Shin Yoshizawa, Shin-ichiro Umemura
- P-37 Staircase voltage MOSFET driver and control circuit for therapeutic ultrasound
Jumpei Okada, Kosuke Moro, Shin Yoshizawa, Shin-ichiro Umemura
- P-38 Vibration analysis of single-element piezoelectric transducer for therapeutic ultrasound based on finite element method
Kenji Otsu, Yasuhiro Kaneshima, Shin Yoshizawa, Shin-ichiro Umemura
- P-39 LSPR-based sensing using hybrid plasmonic multilayer nanostructures fabricated by sequential self-assembly processes
Yoon Hee Jang, Dong Ha Kim
- P-40 Formation of bilayer lipid membranes based on anodic porous alumina films
Tasuku Taira, Azusa Oshima, Ayumi Hirano-Iwata, Kimura Yasuo, Michio Niwano

- P-41 Formation of stable lipid bilayers based on silicon microfabrication
Azusa Oshima, Ayumi Hirano-Iwata, Kouji Aoto, Tasuku Taira, Yasuo Kimura, Michio Niwano
- P-42 Different reactivity between thiol and disulfide for exchange reaction with myristate capping on Ag nanoparticles
Daiki Obara, Keisuke Imazu, Takeshi Nakada, Tomohiro Hayashi, Priastuti Wulandari, Kaoru Tamada
- P-43 Characterization of photocatalytic activity of TiO₂ and ZnO by localized plasmon band of silver nanosheet
Takeshi Nakada, Daiki Obara, Keisuke Imazu, Vincent Craig, Takeshi Nagahiro, Yasuo Kimura, Michio Niwano, Kaoru Tamada
- P-44 Three-state model for bipedal molecular motors with energy balance
Hidemi Akiyama, Kazuo Sasaki
- P-45 Preparation of magnetite-containing ceramic microspheres for hyperthermia of cancer by using a sol-gel process
Zhixia Li, Masakazu Kawashita
- P-46 Electrophoretic deposition of apatite nano-coatings onto quartz substrates
Koji Taninai, Masakazu Kawashita, Kunio Ishikawa, Yasuhiro Yoshida
- P-47 Synthesis of nickel-atom endohedral fullerene using plasma sputtering
Tatsuya Umakoshi, Hirayoyasu Isida, Toshiro Kaneko, Rikizo Hatakeyama
- P-48 Formation of gold nanoparticles intercalated carbon nanotubes with gas-ionic liquid interfacial plasmas
Takashi Harada, Toshiro Kaneko, Rikizo Hatakeyama
- P-49 Fabrication of thin film transistor with Ca encapsulated single-walled carbon nanotubes
Yosuke Osanai, Tetsuhiro Shimizu, Toshiaki Kato, Rikizo Hatakeyama
- P-50 Low computational complexity turbo decoder using tailbiting BIP
Hiroaki Arai, Naoto Miyamoto, Koji Kotani, Hisanori Fujisawa, Takashi Ito
- P-51 Preparation and thermoelectric properties of (Mn_{1-x}Cr_x)Si_y ($\gamma \sim 1.7$) solid solution
Yuta Kikuchi, Yoshitsugu Saito, Kei Hayashi, Yuzuru Miyazaki, Tsuyoshi Kajitani
- P-52 Preparation and electrochemical properties of MgCu₂O₃
Fumiya Kobayashi, Satohumi Maruyama, Yuzuru Miyazaki, Tsuyoshi Kajitani
- P-53 Substitution effect on thermoelectric properties of chimney-ladder compound MnSi_y ($\gamma \sim 1.74$)
Yoshitsugu Saito, Yuzuru Miyazaki, Kei Hayashi, Tsuyoshi Kajitani
- P-54 Ion-exchanged magnesium spinel as a possible cathode material
Satofumi Maruyama, Yuzuru Miyazaki, Tsuyoshi Kajitani
- P-55 Fabrication of silicide thermoelectric modules using TiSi₂ electrodes
Shota Kikuchi, Yoshitsugu Saito, Kei Hayashi, Yuzuru Miyazaki, Tsuyoshi Kajitani
- P-56 Inelastic neutron scattering study on the triangular lattice antiferromagnet CuMnO₂
Ryohei Fukatsu, Tomohiro Nozaki, Kei Hayashi, Yuzuru Miyazaki, Tsuyoshi Kajitani
- P-57 Thermoelectric properties of ZnMgO/ZnO multilayer
Motoki Nishiguchi, Kei Hayashi, Yuzuru Miyazaki, Tsuyoshi Kajitani
- P-58 Thermoelectric properties of CuFeO₂ enhanced by nanovoid structure
Syuho Hanasaki, Tomohiro Nozaki, Kei Hayashi, Yuzuru Miyazaki, Tsuyoshi Kajitani
- P-59 Low temperature thermoelectric properties of ytterbium compounds
Masaaki Kuroda, Kei Hayashi, Yuzuru Miyazaki, Tuyoshi Kajitani
- P-60 Structural and thermoelectric properties of silicide thin films
Koumei Takeda, Kei Hayashi, Yuzuru Miyazaki, Tuyoshi Kajitani

- P-61 First-principles calculation for the electronic structure and electrical conductivity in half-metallic heusler alloys
Yohei Kota, Hiroki Tsuchiura, Akimasa Sakuma
- P-62 Consideration of optimal NOL formation on Co₂FeSi full-heusler alloy for NCMR; Al-NOL or Cr-NOL
Yohei Shiokawa, Takahiko Otsuka, Masaski Doi, Masashi Sahashi
- P-63 Formation mechanism of nano-contacts in FeCo-AlOx nano-oxide layer
Megumi Shiota, Yohei Shiokawa, Takahiko Otsuka, Yoshiyuki Watanabe, Masaaki Doi, Masashi Sahashi
- P-64 Feature of current-induced microwave oscillation in nano-contacts magneto-resistive devices after high-temperature -annealing
Tetsuya Nakamura, Hiroaki Suzuki, Yoshihito Okutomi, Masaaki Doi, Hiromi Niu Fuke, Hitoshi Iwasaki, Masashi Sahashi
- P-65 MFM observations for a magnetic nano-constriction spin valve
Kousaku Miyake, Syohei Kawasaki, Seiich Suzuki, Yu Yahagi, Yutaka Majima, Toshiyuki Shima, Hiromi N Fuke, Susumu Hashimoto, Hitoshi Iwasaki, Masashi Sahashi
- P-66 Anomalous temperature dependence of training effect in specular spin valve using ultra-thin Cr₂O₃-NOL with magnetoelectric effect
Kazuya Sawada, Naoki Shimomura, Masaaki Doi, Masashi Sahashi
- P-67 Dependence of injection locking on oscillation line-width in nano-contacts magnetoresistive spin-torque oscillators (NCMR-STO)
Muftah Al-Mahdawi, Hiroaki Endo, Toshiyuki Tanaka, Hiroaki Suzuki, Masaaki Doi, Susumu Hashimoto, Hiromi Niu Fuke, Masashi Sahashi
- P-68 Impurity effects on the Cu-spin correlation and the superconductivity in the high-T_c superconductor La_{2-x}Sr_xCu_{1-y}(Ni,Zn)_yO₄
Yoichi Tanabe, Tadashi Adachi, Kensuke Suzuki, Risdiana, Takayuki Kawamata, Takao Suzuki, Isao Watanabe, Yoji Koike
- P-69 Possibility of quantum phase transition in non-superconducting Ni-substituted La_{2-x}Sr_xCu_{1-y}Ni_yO₄
Kensuke Suzuki, Yoichi Tanabe, Tadashi Adachi, Takayuki Kawamata, Risdiana, Takao Suzuki, Isao Watanabe, Yoji Koike
- P-70 Thermal conductivity in the bose-einstein condensed state of triplons in the bond-alternating spin-chain system Pb₂V₃O₉
Mitsuhide Sato, Takayuki Kawamata, Masanori Uesaka, Kazutaka Kudo, Norio Kobayashi, Yoji Koike
- P-71 Thermal conductivity of the quasi one-dimensional spin system Sr₂V₃O₉
Masanori Uesaka, Takayuki Kawamata, Naoto Kaneko, Mitsuhide Sato, Kazutaka Kudo, Norio Kobayashi, Yoji Koike
- P-72 Growth of InN by pressurized-reactor metalorganic vapor phase epitaxy (1) ~ The growth mechanisms ~
Yuhuai Liu, Takeshi Kimura, Yuantao Zhang, Masaki Hirata, Kiattiwit Prasertusk, Ryuji Katayama, Takashi Matsuoka
- P-73 Growth of InN by pressurized-reactor metalorganic vapor phase epitaxy (2) ~Towards the dense films under high-temperature growth~
Takeshi Kimura, Yuhuai Liu, Yuantao Zhang, Masaki Hirata, Kiattiwit Prasertusk, Ryuji Katayama, Takashi Matsuoka
- P-74 Growth of InN by pressurized-reactor metalorganic vapor phase epitaxy (3) ~ Temperature dependence on structure properties ~
Yuantao Zhang, Yuhuai Liu, Takeshi Kimura, Masaki Hirata, Kiattiwit Prasertusk, Ryuji Katayama, Takashi Matsuoka
- P-75 Growth of InN by pressurized-reactor metalorganic vapor phase epitaxy (4) ~ Optical and electrical properties ~
Masaki Hirata, Yuhuai Liu, Yuantao Zhang, Takeshi Kimura, Kiattiwit Prasertsuk, Ryuji Katayama, Takashi Matsuoka
- P-76 Influence of V/III ratio on surface morphologies and optical properties of MOVPE-grown InGaN epitaxial layers
Venkatachalm Suresh Kumar, Shiyang Ji, Kenji Hobo, Yuhuai Liu, Hirofumi Shindo, Takashi Matsuoka
- P-77 Progresses in GaN growth on ZnO substrate
Shiyang Ji, Venkatachalm Suresh Kumar, Yuhuai Liu, Yuantao Zhang, Takeshi Kimura, Kenji Hobo, Takashi Matsuoka
- P-78 Study of strain sensor using FeSiB magnetostrictive film
Yasuaki Suwa, Shigeto Agatsuma, Shuichiro Hashi, Kazushi Ishiyama
- P-79 A basic study on surface electrical stimulation system for motor rehabilitation
Naoto Miura, Satoru Sugimoto, Takashi Watanabe, Kazunori Seki, Hiroshi Kanai