

ABSTRACT #	FORMAT	PAPER TITLE
01-003	Oral	AN SOI THERMAL-DIFFUSIVITY-BASED TEMPERATURE SENSOR WITH $\pm 0.6^{\circ}\text{C}$ (3σ) UNTRIMMED INACCURACY FROM -70°C TO 170°C
01-008	Poster	PHASE-LOCKED DRIVE LOOP WITH AMPLITUDE REGULATION BASED ON PHASE-SHIFTING FOR GYROSCOPES
01-012	Poster	DESIGN OF T-SHAPE VECTOR HYDROPHONE BASED ON MEMS
01-015	Oral	SAW-PIRANI VACUUM SENSOR WITH A NEW FUNCTIONING MODE AND A FAST RESPONSE TIME
01-018	Poster	A CMOS CAPACITIVE PRESSURE SENSOR CHIP FOR FINGERPRINT DETECTION
01-020	Poster	GAAS/INXGA1-XAS/GAAS/ALAS RESONANT TUNNELING DIODES FOR NOVEL MEMS GYROSCOPE APPLICATION
01-021	Poster	A WIDEBAND ANTI-HIGH-OVERLOAD THERMOELECTRIC MICROWAVE POWER SENSOR BASED ON GAAS MMIC TECHNOLOGY
01-022	Oral	NOVEL COUPLING CONCEPT FOR FIVE-CONTACT VERTICAL HALL DEVICES
01-024	Poster	A 3-AXIS ACCELEROMETER AND STRAIN SENSOR SYSTEM FOR BUILDING INTEGRITY MONITORING
01-025	Poster	COMPACT GYROSCOPE WITH SI NANOGAGE PIEZO-RESISTIVE DETECTION
01-031	Poster	A NEW LOW CONSUMPTION 3D COMPASS USING INTEGRATED MAGNETS AND PIEZORESISTIVE NANO-GAUGES
01-047	Poster	OUT-OF-PLANE AXIS SOI MEMS GYROSCOPE WITH INITIALLY DISPLACED VERTICAL SENSING COMB
01-048	Poster	ELECTRICAL PERFORMANCE OPTIMIZATION OF A SILICON-BASED EUV PHOTODIODE WITH NEAR-THEORETICAL QUANTUM EFFICIENCY
01-050	Oral	SELF-POWERED HIGH SIGNAL-TO-NOISE RATIO ACOUSTIC EMISSION SENSOR AND ITS DEMONSTRATION ON DETECTING DYNAMIC FRICTION VARIATION
01-054	Poster	A NEW N/MEMS-BASED NONVOLATILE CIRCUIT
01-059	Poster	CYLINDER-SHAPED THERMAL INERTIAL FORCE SENSOR FOR WEARABLE FABRIC SENSOR SYSTEMS
01-060	Poster	HIGH FREQUENCY AND SENSITIVITY ELECTRON TUNNELING TRANSDUCER USING FREQUENCY DOWNMIXING READOUT OF NANOMECHANICAL MOTION
01-061	Poster	PATCH-TYPE FLEXIBLE FLOW SENSOR FOR LARGE SCALE AIR-CONDITIONING NETWORK SYSTEMS
01-062	Poster	A CMOS WIRELESS TWO-AXIS DIGITAL ACCELEROMETER USING BONDWIRE INERTIAL SENSING
01-063	Oral	WAFER-LEVEL PACKAGING FOR A CMOS COMPATIBLE TWO-DIMENSIONAL THERMAL WIND SENSOR BASED ON AU-AU BONDING TECHNOLOGY
01-066	Poster	DAMPING CHARACTERISTICS OF A MICROMACHINED PIEZOELECTRIC DIAPHRAGM-BASED PRESSURE SENSOR FOR UNDERWATER APPLICATIONS
01-068	Poster	COMPACT ELECTRODE DESIGN FOR IN-PLANE ACCELEROMETER ON SOI WITH REFILLED ISOLATION TRENCH
01-069	Poster	MICROFLUIDIC MICROSYSTEM FOR MAGNETIC SENSING OF NANOPARTICLES WITH GMI TECHNOLOGY
01-070	Oral	A MEMS MICRO-REED SWITCH DESIGNED FOR PORTABLE APPLICATIONS
01-071	Poster	FIRST HIGH-G MEASUREMENT BY THERMAL ACCELEROMETERS
01-074	Poster	EFFECT OF KNUDSEN NUMBER ON MAXIMUM RESPONSE OF A THERMAL CONDUCTIVITY DETECTOR
01-077	Poster	THREE DIMENSIONAL PHOTOACOUSTIC IMAGING USING A MONOLITHIC CMOS MEMS CAPACITIVE ULTRASONIC SENSOR
01-079	Oral	MONOLITHIC-INTEGRATED SILICON BULK-MICROMACHINED ACCELEROMETER AND PRESSURE-SENSOR FOR TIRE-PRESSURE-MONITORING-SYSTEM (TPMS) APPLICATION
01-084	Poster	AN AERODYNAMICALLY EFFICIENT SPHERE ANEMOMETER WITH INTEGRATED HOT-FILM SENSORS FOR 2-D ENVIRONMENTAL AIRFLOW MONITORING
01-088	Poster	A FILTER-LESS MULTI-WAVELENGTH FLUORESCENCE DETECTOR
01-092	Poster	MULTI-PARAMETERS DECOUPLING METHOD WITH LAMB WAVE SENSOR FOR IMPROVING THE SELECTIVITY OF LABEL-FREE LIQUID DETECTION
01-093	Poster	A LOW-COST FLEXIBLE INTEGRATED MICROMACHINED HOT-FILM SENSOR ARRAY FOR MEASURING SURFACE FLOW VECTOR

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01-098	Oral	MICROMECHANICAL MAGNETOMETER BASED ON A CLAMPED-CLAMPED HIGH-Q NONLINEAR RESONATOR
01-099	Poster	A HIGH-SENSITIVE ULTRA-THIN MEMS CAPACITIVE PRESSURE SENSOR
01-101	Poster	ZERO TEMPERATURE COEFFICIENT GAS-SEALED PRESSURE SENSOR USING MECHANICAL TEMPERATURE COMPENSATION
01-103	Poster	IMPROVEMENT OF CMOS-MEMS ACCELEROMETER USING POST-CMOS SELECTIVE ELECTROPLATING TECHNIQUE
01-105	Oral	A 400X400UM ² ACCELEROMETER WITH VERTICALLY INTEGRATED 3-AXIS SENSING ELECTRODES DESIGN USING 0.18UM CMOS PROCESS
01-106	Poster	MONOLITHIC PRESSURE+ACCELERATION SENSOR WITH SELF-TEST FUNCTION FOR RELIABLE & LOW-COST TIRE-PRESSURE-MONITORING-SYSTEM (TPMS) APPLICATION
01-108	Poster	AN SOI 3-AXIS ACCELEROMETER WITH A ZIGZAG-SHAPED Z-ELECTRODE FOR DIFFERENTIAL DETECTION
01-109	Poster	PIEZOELECTRIC SWITCH TO ACTIVATE EVENT-DRIVEN
01-110	Oral	SINGLE CHIP FLOW SENSING SYSTEM WITH A DYNAMIC FLOW RANGE OF MORE THAN 4 DECADES
01-111	Oral	MINIATURE ULTRASOUND ACOUSTIC IMAGING DEVICES USING 2-D PMUTS ARRAY ON EPITAXIAL PZT/SRRUO ₃ /PT/Γ-AL ₂ O ₃ /SI STRUCTURE
01-113	Poster	MEMS SENSOR WITH GIANT PIEZORESISTIVE EFFECT USING METALL-SEMICONDUCTOR HYBRID STRUCTURE
01-117	Poster	TRANSPARENT TOUCH PANEL BASED ON CONDUCTIVE LIQUID CHANNEL STRUCTURE
01-118	Poster	DESIGN AND IMPLEMENTATION OF A NOVEL CMOS MEMS CONDENSER MICROPHONE WITH CORRUGATED DIAPHRAGM
01-119	Oral	SINGE-STEP FABRICATION OF ORGANIC NANOFIBROUS MEMBRANE FOR PIEZOELECTRIC VIBRATION SENSOR
01-123	Poster	OPTICAL PRESSURE SENSOR USING NANO-OPTO-MECHANICAL SYSTEMS (NOMS)
01-124	Poster	A HIGH SENSITIVITY SOI ELECTRIC-FIELD SENSOR WITH NOVEL COMB-SHAPED MICROELECTRODES
01-127	Oral	A HIGHLY SENSITIVE FLEXIBLE PRESSURE AND SHEAR SENSOR ARRAY FOR MEASUREMENT OF GROUND REACTIONS IN PEDESTRIAN NAVIGATION
01-128	Poster	SELF-CLEANING MASS CALIBRATION OF A THERMOGRAVIMETRIC DEVICE USING A THIN FILM MOLYBDENUM
01-129	Poster	DEVELOPMENT OF A SHEAR HORIZONTAL SURFACE ACOUSTIC WAVE GYROSCOPE ON 360 YX LITAO ₃ SUBSTRATE
01-130	Poster	A ROBUST MICRO MECHANICAL-LATCH SHOCK SWITCH WITH LOW CONTACT RESISTANCE
01-131	Poster	A NOVEL INTEGRATED TRANSPARENT FLEXIBLE TACTILE SENSOR
01-133	Poster	FABRICATION AND TESTING OF A ULTRA-HIGH RESOLUTION EXTENSOMETER BASED ON RESONANT MEMS STRAIN SENSORS
01-134	Oral	IMPACT OF ENCAPSULATION MATERIALS ON THE PERFORMANCE OF SILICON-BASED SOLID-STATE HIGH-PRESSURE SENSORS WITH SURFACE TRENCHES
01-135	Poster	MICRO-CANTILEVERS FOR NON-DESTRUCTIVE CHARACTERIZATION OF NANOGRASS UNIFORMITY
01-136	Poster	IN-PROCESS PARAMETER CALIBRATION OF THERMOELECTRICAL FLOW SENSORS WITH MONOLITHIC INTEGRATED CHANNEL
01-138	Poster	IN-PLANE COBALT-NICKEL MICRORESONATOR SENSOR WITH MAGNETIC ACTUATION AND READOUT
01-141	Poster	ALN BASED PIEZOELECTRIC FORCE SENSOR FOR ENERGY AUTONOMOUS SENSOR SYSTEMS
01-142	Oral	A DIFFERENTIAL DIFFERENCE AMPLIFIER WITH AUTOMATIC GAIN SELECTION AS READOUT INTERFACE FOR CMOS STRESS SENSORS IN ORTHODONTIC BRACKETS
01-143	Poster	A CMOS COMPATIBLE POLYCRYSTALLINE SILICON-GERMANIUM BASED PIEZORESISTIVE PRESSURE SENSOR
01-144	Poster	DEVELOPMENT OF A STRAIN SENSOR FOR ROLLING CONTACT LOADS
01-145	Poster	AC CHARACTERISATION OF THERMAL FLOW SENSOR WITH FLUID CHARACTERISATION FEATURE

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01-146	Poster	NOVEL METHOD FOR GATED INDUCTIVE READOUT FOR HIGHLY SENSITIVE AND LOW COST VISCOSITY AND DENSITY SENSORS
01-147	Poster	MODULATED ELECTRO-MECHANICAL CONTINUOUS-TIME LOWPASS SIGMA-DELTA-MODULATOR FOR MICROMACHINED GYROSCOPES
01-149	Poster	DEFLECTION AMPLIFICATION MECHANISM IN A CAPACITIVE ACCELEROMETER
01-151	Oral	LOCALIZED STRAIN SENSING USING HIGH SPATIAL RESOLUTION, HIGHLY SENSITIVE MEMS RESONANT STRAIN GAUGES FOR FAILURE PREVENTION
01-154	Poster	NOVEL SINGLE-DEVICE "XOR" AND "AND" GATES FOR HIGH SPEED, VERY LOW POWER LSI MECHANICAL PROCESSORS
01-160	Oral	CAPACITIVE ABSOLUTE PRESSURE SENSOR WITH INDEPENDENT ELECTRODE AND MEMBRANE SIZES FOR RELAXING SIGNAL CONDITIONING
01-162	Oral	NONLINEAR VIBRATION IN RESONANT SILICON BRIDGE PRESSURE SENSOR: THEORY AND EXPERIMENT
01-163	Oral	DETECTION SYSTEM OF INCIDENT SLIPPAGE AND FRICTION COEFFICIENT BASED ON A FLEXIBLE TACTILE SENSOR WITH STRUCTURAL ELECTRODES
01-171	Poster	DESIGN AND IMPLEMENTATION OF AN EXTREMELY LARGE PROOF-MASS CMOS-MEMS CAPACITIVE TILT SENSOR FOR SENSITIVITY AND RESOLUTION IMPROVEMENT
01-174	Poster	MEASUREMENT OF THE MAGNITUDE AND DIRECTION OF MAGNETIC FIELD BY A MICROMACHINED CANTILEVER
01-177	Oral	IR THERMOCYCLER FOR CENTRIFUGAL MICROFLUIDIC PLATFORM WITH DIRECT ON-DISK WIRELESS TEMPERATURE MEASUREMENT SYSTEM
01-179	Poster	LIGHTWEIGHT BIOCOMPATIBLE PHYSICAL FILM-BASED SENSORS: POLYMERS "SELF-METALLIZED" WITH ORGANIC MOLECULAR CONDUCTORS
01-180	Poster	POSFET TOUCH SENSOR WITH ON-CHIP ELECTRONIC MODULE FOR SIGNAL CONDITIONING
01-181	Poster	A NOVEL MEMS TUNABLE IONIZATION SENSOR BASED ON PATTERNED FREESTANDING NICKEL NANOWIRES AND MOVING ELECTRODE
01-188	Oral	AN ACTIVE MATRIX ARRAYED MICROPHONE WITH ACOUSTIC BANDWIDTH RESPONSE
01-189	Poster	CONTROL OF MEMS ON THE EDGE OF INSTABILITY
01-197	Poster	HIGH TEMPERATURE COMPATIBLE ALUMINUM NITRIDE RESONATING STRAIN SENSOR
01-203	Poster	FABRICATION AND TESTING OF AN IONIC ELECTROSPRAY PROPULSION SYSTEM DEVICE WITH A POROUS NI TIP ARRAY
01-209	Poster	ELECTRICAL COUPLING SUPPRESSING FOR A MICROGYROSCOPE USING ASCENDING FREQUENCY DRIVE WITH 2-DOF PID CONTROLLER
01-210	Oral	CARBON NANOTUBE-INTEGRATED INERTIAL SWITCH WITH EXTENDED CONTACT TIME
01-213	Poster	ANALYSIS OF ACCELERATION SENSITIVITY IN MEMS TUNING FORK GYROSCOPE
01-215	Oral	A REEL-TO-REEL COMPATIBLE PRINTED ACCELEROMETER
01-223	Poster	ULTRASENSITIVE MASS SENSOR USING THE OUT-OF-PHASE VIBRATION EIGENSTATE OF INTERCOUPLED DUAL-MICROCANTILEVERS
01-233	Poster	WIRELESS PASSIVE SENSING APPLICATION USING A CAVITY LOADED EVANESCENT MODE HALF MODE SUBSTRATE INTEGRATED WAVEGUIDE RESONATOR
01-237	Poster	A MONOLITHICALLY INTEGRATED 3-AXIS THERMAL-CONVECTIVE ACCELEROMETER WITH A PNEUMATICALLY CURVED THERMOPILE-CANTILEVER FOR Z-AXIS SENSING
01-238	Poster	DIFFERENTIAL PRESSURE DISTRIBUTION MEASUREMENT OF A FREE-FLYING BUTTERFLY WING
01-239	Oral	SENSITIVITY LINEARIZATION TECHNIQUE FOR A TIME BASED MEMS ACCELEROMETER
01-249	Poster	SILICON CARBIDE PRESSURE SENSOR FOR HIGH TEMPERATURE AND HIGH PRESSURE APPLICATIONS: INFLUENCE OF SUBSTRATE MATERIAL ON PERFORMANCE
01-251	Poster	ACCELEROMETER USING MOSFET WITH MOVABLE GATE ELECTRODE: ELECTROPLATING THICK NICKEL PROOF MASS ON FLEXIBLE PARYLENE BEAM FOR ENHANCING SENSITIVITY

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01-252	Poster	FLEXIBLE FORCE SENSOR MEASURING CHANGE IN CAPACITANCE DUE TO DIELECTRIC OIL DISPLACEMENT OUT OF DOMED POLYMER INTO SURROUNDING HANNELS
01-255	Oral	BAROMETRIC PRESSURE CHANGE MEASUREMENT
01-257	Poster	A TWO DEGREE-OF-FREEDOM SOI-MEMS TRANSLATION STAGE WITH CLOSED LOOP POSITIONING
01-259	Poster	NON-DEGENERATE PARAMETRIC AMPLIFICATION AND FILTERING IN BIOMIMETIC HAIR FLOW SENSORS
01-260	Oral	A FOURTH ORDER UNCONSTRAINED $\Sigma\Delta$ CAPACITIVE ACCELEROMETER
01-261	Poster	FORCE SENSOR FOR POWER TRANSFER BETWEEN THE HUMAN BODY AND THE ENVIRONMENT
01-262	Oral	SUB-DEGREE-PER-HOUR SILICON MEMS RATE SENSOR WITH 1 MILLION Q-FACTOR
01-264	Poster	THIN FILM ENCAPSULATED SIGE ACCELEROMETER FOR MEMS ABOVE IC INTEGRATION
01-265	Oral	ULTRAHIGH PRECISION MEMS ACCELEROMETER
01-266	Poster	PHOTODIODE WITH MICRO TEXTURE FOR IMPROVING SENSITIVITY AT LARGE ANGLE OF INCIDENCE FOR PARTICLE SENSORS
01-267	Poster	ARTIFICIAL HAIR CELL WITH EMBEDDED PIEZORESISTIVE FORCE SENSORS
01-270	Poster	THE SENSITIVITY ENHANCEMENT FOR THE RADIATION SENSOR BASED ON FILM BULK ACOUSTIC-WAVE RESONATOR
01-274	Oral	IN-SITU WAFER-LEVEL POLARIZATION OF ELECTRET FILMS IN MEMS ACOUSTIC SENSOR ARRAYS
01-276	Poster	ALUMINUM NITRIDE PMUT BASED ON A FLEXURALLY-SUSPENDEED MEMBRANE
01-278	Oral	SINGLE-CRYSTAL-SILICON VIBRATORY CYLINDRICAL RATE INTEGRATING GYROSCOPE (CING)
01-280	Poster	A NOVEL MICRO-G, EXTENDED RANGE, SOI-MEMS PIEZORESISTIVE TIME-ACCELEROMETER OPERATING IN TWO DISTINCT TIME-BASED TRANSDUCTION MODES
01-281	Poster	A MICROMECHANICAL ULTRASONIC DISTANCE SENSOR WITH >1 METER RANGE
01-284	Oral	A CONTOUR-MODE FILM BULK ACOUSTIC RESONATOR FOR MONITORING BLOOD COAGULATION IN REAL-TIME
01-286	Oral	MEMS ULTRASONIC TRANSDUCERS FOR HIGHLY SENSITIVE DOPPLER VELOCITY SENSOR FOR LOW VELOCITY MEASUREMENT
01-287	Poster	A DESIGN WITH IMPROVED LINEARITY AND TEMPERATURE COMPENSATION OF A HIGH PERFORMANCE MEMS CAPACITIVE STRAIN SENSOR
01-290	Oral	A MODE-MATCHED 0.9 MHZ SINGLE PROOF MASS DUAL-AXIS GYROSCOPE
02-004	Poster	DUAL PHOTONIC ELECTROCHEMICAL LAB ON A CHIP FOR LACTATE DETECTION IN CONTINUOUS FLOW MODE
02-005	Poster	LOW-LEAKAGE GAS SAMPLE-INJECTION SYSTEM FOR GAS CHROMATOGRAPHY IN HARSH ENVIRONMENTS
02-012	Poster	A MICROFLUIDIC SENSOR CHIP WITH RENEWABLE IN-SITU COPPER MODIFIED MICROELECTRODE FOR CONTINUOUS MONITORING OF NITRATE
02-015	Poster	A RESONANT CANTILEVER SENSOR FOR MONITORING AIRBORNE NANOPARTICLES
02-016	Poster	FLOW INSENSITIVE THERMAL CONDUCTIVITY DETECTOR FOR μ GAS CHROMATOGRAPHY
02-020	Poster	HYDROGEN GAS SENSING PERFORMANCE OF PT/GRAPHENE/SIC CONTACTS
02-021	Poster	WAVELENGTH-INTERROGATED INFRARED SURFACE PLASMON RESONANCE SENSOR WITH HIGH REFRACTIVE-INDEX SENSITIVITY
02-022	Poster	A MICROFLUIDIC DEVICE FOR HIGH FREQUENCY CHARACTERIZATION OF FLUIDS UNDER HIGH DC ELECTRIC FIELDS
02-025	Poster	A TEXTILE INTEGRATED SENSOR SYSTEM FOR MONITORING HUMIDITY AND TEMPERATURE
02-026	Poster	FEM MODELING SAW HUMIDITY SENSOR BASED ON ZNO/IDTS/ALN/SI STRUCTURES
02-029	Poster	GOLD NANOPARTICLES IMMOBILIZED QUARTZ CRYSTAL MICROBALANCE BIOCHIP WITH ULTRASONIC STANDING WAVE ENHANCEMENT FOR REAL-TIME SENSING PROTEIN-LIGAND INTERACTION

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02-033	Oral	OXYGEN PLASMA FUNCTIONALIZED PEDOT/PSS-SWCNTS THIN FILM DEPOSITED BY ELECTROPHORESIS FOR GAS SENSING
02-036	Oral	ENHANCEMENT OF SENSITIVITY OF COULOMETRIC DETECTION USING A ONE-ELECTRODE SYSTEM
02-038	Oral	ENHANCED PERFORMANCE OF A CMOS INTERDIGITAL CAPACITIVE HUMIDITY SENSOR BY GRAPHENE OXIDE
02-039	Poster	A MINIATURIZED NETWORKED SENSOR FOR TRACE EXPLOSIVES
02-040	Poster	MICROMECHANICAL OLFACTORY SYSTEM FOR SENSITIVE AND SELECTIVE DETECTION OF EXPLOSIVES
02-041	Poster	MICROFABRICATED ELECTROSPRAY IONIZATION CHIP WITH 60 TIPS FOR HIGH THROUGHPUT MASS SPECTROMETRIC ANALYSES
02-042	Poster	SELECTIVITY OF NITROGEN DIOXIDE SENSORS BASED ON TUNGSTEN OXIDE FILMS WITH MANGANESE OXIDE THIN FILTERS
02-043	Poster	THIN FILM GAS SENSOR FOR DETECTION OF TOXIC GASES FROM MICROBIAL
02-044	Poster	ANALYTE FOCUSING AT SELF ASSEMBLING HOT SPOTS FOR SURFACE ENHANCED RAMAN SPECTROSCOPY
02-045	Poster	PROGRAMABLE MICROFLUIDIC PROCESSOR WITH PUMPING AND COULOMETRIC DETECTING FUNCTIONS
02-047	Oral	MULTIMODAL BIO-IMAGE SENSOR FOR REAL-TIME PROTON AND FLUORESCENCE IMAGING
02-049	Poster	HIGH-PERFORMANCE NO ₂ SENSOR USING STABILIZED ZIRCONIA AND NIO PREPARED BY MICROWAVE SYNTHESIS
02-050	Poster	MIXED-POTENTIAL TYPE NO _x SENSOR USING STABILIZED ZIRCONIA AND CR ₂ O ₃ -WO ₃ NANOCOMPOSITES
02-051	Poster	NASICON-BASED POTENTIOMETRIC CL ₂ SENSOR USING CR ₂ O ₃ SENSING ELECTRODE
02-052	Poster	FLEXIBLE POLYMER HUMIDITY SENSOR FABRICATED BY INKJET PRINTING
02-053	Poster	A MICROFABRICATED PRECONCENTRATING DEVICE FOR EXHALED BREATH ANALYSIS
02-054	Poster	UV-ENHANCED ROOM TEMPERATURE GAS SENSOR BASED ON HOLLOW SPHERE SNO ₂ -TiO ₂
02-056	Oral	NANOPARTICLE SELF-ASSEMBLY BASED TRIPETALOID ARRAYED STRUCTURES AS SURFACE-ENHANCED RAMAN SCATTERING SUBSTRATES
02-058	Poster	ANALYSIS OF C ₁ AND C ₂ HYDROCARBON GAS MIXTURES USING MINIATURIZED GAS CHROMATOGRAPHY AND SNO ₂ GAS DETECTORS
02-060	Poster	CO ₂ MEASUREMENT USING AN ALN/SI SAW SENSOR
02-063	Oral	FIELD TESTING OF A RUGGED MEMS GAS CHROMATOGRAPH PROTOTYPE: SELECTIVE ANALYSIS OF TRACE-LEVEL TCE VAPORS IN CONTAMINATED HOMES
02-068	Poster	HIGHLY SELECTIVE SENSORS FOR TOXIC AND FLAMMABLE GASES BASED ON FLAME-SPRAY-MADE SNO ₂ NANOPARTICLES
02-070	Poster	SURFACE ACOUSTIC WAVE GAS SENSOR FOR MONITORING LOW CONCENTRATION AMMONIA
02-072	Poster	MINIATURISED GAS CHROMATOGRAPHIC SYSTEM WITH METAL OXIDE GAS SENSOR ARRAY FOR FAST DETECTION OF OFF-FLAVOURS
02-073	Poster	HIGHLY SENSITIVE VAPOR DETECTION OF AMINES WITH FLUORESCENT CONJUGATED POLYMER: A NOVEL LASING TURN-ON SENSORY MECHANISM
02-078	Poster	MULTI-WELL STRUCTURE FOR CELL CULTURE ON THE CHEMICAL IMAGING SENSOR
02-081	Poster	RAPID HORMONE IMMUNOSENSOR WITH FLUID CONTROL MECHANISM
02-083	Oral	ULTRA-LOW POWER PALLADIUM-COATED MEMS RESONATORS FOR HYDROGEN DETECTION UNDER AMBIENT CONDITIONS
02-086	Poster	FLUORENE-THIOPHENE-BASED THIN-FILM FLUORESCENCE TURN-ON CHEMOSENSOR FOR METHAMPHETAMINE VAPOR
02-087	Oral	LOCALLY SYNTHESIZED METAL OXIDE NANOWIRE-DEVICES AND THEIR GAS SENSING APPLICATIONS
02-089	Poster	MICRO TITRATION DEVICE AND ITS APPLICATION TO RICE FRESHNESS MEASUREMENT
02-090	Poster	FUNCTIONALIZATION OF NANOSCALED 2-NM-THICK ALD-HF ₂ O ₂ LAYER BY RAPID THERMAL ANNEALING AND CF ₄ PLASMA FOR LAPS NH ₄ ⁺ DETECTION

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02-093	Poster	ADVANCES IN POLYMER-COATED SURFACE ACOUSTIC WAVE GAS SENSOR
02-094	Poster	A MEMS GAS CHROMATOGRAPH FOR RAPID DETERMINATIONS OF EXPLOSIVE MARKER COMPOUNDS
02-098	Oral	MICROFLUIDIC SURFACE-ENHANCED RAMAN SCATTERING SENSORS FOR ONLINE MONITORING TRACE CHEMICAL MIXING AND REACTION
02-101	Poster	DESIGN OF WIRELESS SENSOR NODE BASED ON A NOVEL HYBRID CHEMICAL SENSOR FOR HEAVY METAL MONITORING
02-104	Poster	OZONE SENOSR USING ZNO BASED FILM BULK ACOUSTIC RESONATOR
02-108	Poster	A PHOTOVOLTAGE-BASED INTEGRATED SENSOR FOR NEPHROTOXICITY EVALUATION UNDER DRUG STIMULATION
02-111	Poster	DEVELOPMENT OF A NOVEL MICROPRECONCENTRATOR FOR MICRO GAS CHROMATOGRAPH
02-112	Poster	HYDROGEN SENSOR BASED ON PALLADIUM NANOTUBE ARRAYS FABRICATED BY NOVEL LOW-TEMPERATURE HYDROTHERMAL SYNTHESIS
02-114	Poster	FLUORINATED-HFO ₂ LAYER FOR EIS STRUCTURE SENSITIVE TO POTASSIUM IONS
02-115	Poster	MEASURING THE FREQUENCY RESOLUTION OF A MULTI DEGREE OF FREEDOM RESONATOR FOR MASS DETECTION
02-116	Oral	SINGLE CHIP NANOTUBE SENSORS FOR CHEMICAL AGENT MONITORING
02-117	Poster	SENSING CHARACTERISTICS OF RNA OLIGOMER COATED SWNT GAS SENSORS
02-118	Oral	TEMPERATURE DEPENDENCE OF VACUUM ENCAPSULATED RESONATORS FOR HUMIDITY MEASUREMENT
02-119	Oral	INTEGRATED SILICON-BASED CHEMICAL MICROSYSTEM FOR PORTABLE SENSING APPLICATIONS
02-120	Poster	ELECTROLYTIC CHARGE INVERSION AT PROGRAMMABLE CMOS SENSOR INTERFACES
02-122	Oral	FREQUENCY-MULTIPLEXED COMBINATORY MASS SENSING WITH SINGLE DATA LINE FROM MULTIPLE INTEGRATED FILM BULK ACOUSTIC RESONATORS
02-123	Poster	DMMP VAPOR DETECTION WITH 50NM THICK ALN FILMS BASED MICROCANTILEVER
02-124	Oral	TOWARDS QUANTIFICATION OF BIOCOMPATIBILITY: MONITORING INGROWTH BEHAVIOR OF BIOMATERIALS IN TISSUE WITH A MICROSENSOR IMPLANT
02-125	Poster	ON THE RELATIVE SENSITIVITY OF MASS-SENSITIVE CHEMICAL MICROSENSORS
02-127	Oral	A PRESSURE PROGRAMMABLE GAS CHROMATOGRAPHY MICROSYSTEM UTILIZING MOTIONLESS KNUDSEN PUMP, FIBER-INTEGRATED OPTICAL DETECTOR, AND SILICON MICROMCHINED SEPARATION COLUMN
02-129	Poster	PH MEASUREMENTS WITH ZNO BASED SURFACE ACOUSTIC WAVE RESONATOR
02-130	Oral	MEMS-BASED AC DIFFERENTIAL SCANNING CALORIMETRY
02-132	Poster	FLEXIBLE ELECTROCHEMICAL IMAGING BY LIGHT-ADDRESSABLE POTENTIOMETRIC SENSOR WITH "ZOOM-IN" FUNCTIONALITY
02-133	Poster	A NOVEL FABRICATION OF PALLADIUM NANOROD ELECTRODE ENSEMBLE FOR ELECTROCHEMICAL DETECTION OF HYDROGEN EVALUATION
02-134	Poster	CYCLODEXTRIN-BASED MICRO NEUROTRANSMITTER SENSOR FOR SELECTIVE CATECHOLAMINE HORMONE DETECTION
03-001	Poster	COMPARISON OF EXTRACELLULAR SIGNALS BETWEEN GOLD AND CARBON NANOTUBES BASED MICROELECTRODE ARRAYS
03-003	Oral	MULTI-SITE MONITORING OF CHOLINE AND GLUTAMATE USING BIOSENSOR MICROPROBE ARRAYS IN COMBINATION WITH CMOS
03-009	Poster	MANIPULATION OF ELECTRICAL CHARGE OF PROTEINS FOR SENSITIVE BIOSENSING USING FIELD-EFFECT TRANSISTORS
03-012	Poster	A MICRO DEVICE FOR IMPEDANCE AND MECHANICAL CHARACTERIZATION OF BIOLOGICAL CELLS
03-015	Poster	REUSABLE HIGH-FREQUENCY ELECTRODELESS QCM BIOSENSOR WITH A BARE QUARTZ RESONATOR EMBEDDED IN A SILICON MICROCHANNEL
03-016	Poster	TUNABLE SENSITIVITY AND LINEARITY OF SELF-ASSEMBLED CARON NANOTUBE COMPOSITE BASED PH BIOSENSORS USING SILICA NANOPARTICLES

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03-019	Poster	PCR ON A PDMS-BASED MICROCHIP WITH INTEGRATED BUBBLE REMOVAL
03-023	Oral	RESIDUAL STRESS-FREE 100 MHZ PZT-BASED CONCAVE DIAPHRAGM RESONATOR FOR LABEL-FREE PROTEIN-LIGAND BIOSENSING WITH SELF-ENHANCING MECHANISM
03-024	Poster	INTEGRATED MICROFLUIDIC LOOP-MEDIATED-ISOTHERMAL-AMPLIFICATION SYSTEMS FOR RAPID ISOLATION AND DETECTION OF AQUACULTURE PATHOGENS
03-026	Oral	PROTOZOON CLASSIFICATIONS BASED ON SIZE, SHAPE AND REFRACTIVE INDEX USING ON-CHIP IMMERSION REFRACTOMETER
03-030	Oral	MEMS MASS SENSOR WITH UNIFORM SENSITIVITY AND ITS APPLICATION TO MONITORING OF CELLULAR APOPTOSIS
03-031	Poster	RAPID ON-SITE MEASUREMENT OF THE FRESHNESS OF RICE ON A MICRO ELECTROCHEMICAL DEVICE
03-032	Oral	DIAGNOSTIC DEVICE FOR COW MASTITIS BASED ON THE DETECTION OF SUPEROXIDE SECRETED FROM NEUTROPHILS
03-035	Oral	PULSATILE SHEAR STRESS AND HIGH GLUCOSE CONCENTRATIONS INDUCED REACTIVE OXIGEN SPECIES PRODUCTION IN ENDOTHELIAL CELLS
03-038	Oral	DNA MICROARRAYS IMMOBILIZED ON UNMODIFIED PLASTICS IN A MICROFLUIDIC BIOCHIP FOR RAPID TYPING OF AVIAN INFLUENZA VIRUS
03-050	Poster	MECHANICAL AND ELECTRICAL EVALUATION FOR THE LONG-TERM STABILITY OF IMPLANTED 3D RETINAL MICROELECTRODE
03-051	Poster	IMPROVING SENSITIVITY OF PHOTONIC CRYSTAL-BASED BIOSENSORS BY A CAVITY ARRANGEMENT
03-054	Poster	SI-NANOWIRE BIOSENSOR ARRAYS: FABRICATION AND CHARACTERIZATION
03-059	Poster	HIGH-DENSITY MICROELECTRODE ARRAY SYSTEM AND OPTIMAL FILTERING FOR CLOSED-LOOP EXPERIMENTS
03-060	Oral	ULTRA-SENSITIVE CARBON NANOTUBES FOR SINGLE-MOLECULE DETECTION OF DNA HYBRIDIZATION KINETICS USING CONDUCTANCE-BASED CORRELATION SPECTROSCOPY
03-061	Oral	NANOPORE DNA SENSORS IN CMOS WITH ON-CHIP LOW-NOISE PREAMPLIFIERS
03-063	Poster	EVALUATION OF THE PACKAGING AND ENCAPSULATION RELIABILITY IN FULLY INTEGRATED, FULLY WIRELESS 100 CHANNEL UTAH SLANT ELECTRODE ARRAY (USEA): IMPLICATIONS FOR LONG TERM FUNCTIONALITY
03-065	Poster	A CELL ELECTROPORATION AND VIABILITY MONITORING CHIP USING A SINGLE CHANNEL WITH MULTIPLE ELECTRIC FIELD ZONES
03-066	Oral	HIGH-Q IN-PLANE RESONANCE-MODE CANTILEVER BIO/CHEMICAL SENSOR FOR REAL-TIME DETECTION IN LIQUIDS
03-070	Poster	LOCALIZED ELECTROPORATION OF MOUSE EMBRYO USING DIELECTRIC GUIDES
03-072	Oral	INDUCTIVELY COUPLED WIREBONDED MICROCOILS FOR WIRELESS ON-CHIP NMR
03-076	Poster	TEMPERATURE MODULATED EXCITATION AND PHASE SENSITIVE DETECTION TO SELECTIVELY IMAGE DNA SEQUENCES
03-078	Poster	STICTION-FREE POLY-SIGE RESONATORS FOR MONOLITHIC INTEGRATION OF BIOSENSORS WITH CMOS
03-080	Poster	AN ALL-DIGITAL, TIME-GATED 128X128 SPAD ARRAY FOR ON-CHIP, FILTER-LESS FLUORESCENCE DETECTION
03-081	Poster	MICROENGINEERED IRON AND IRON-OXIDE CONTRAST AGENT PARTICLES FOR TUNABLE MULTISPECTRAL MAGNETIC RESONANCE IMAGING
03-090	Poster	LOW COST AND HIGH SPECIFIC ANESTHETIC BIOSENSORS WITH FUNCTIONALLY IMPRINTED NANOCAVITIES ON POLYMER FILMS
03-093	Poster	A WIRELEE LOVE WAVE BIOSENSOR PLATFORM FOR SIMULTANEOUS DETECTIONS OF TWO DIFFERENT BIOMOLECULES
03-098	Poster	SPECIFIC AND LABEL-FREE IMMUNOGLOBULIN G ANTIBODY DETECTION USING NANO POROUS HYDROGEL PHOTONIC CRYSTALS
03-099	Poster	LABEL-FREE DNA DETECTION BASED ON SILICON NANOWIRES
03-106	Oral	SINGLE CELL REAL TIME SECRETION ASSAY USING AMORPHOUS FLUOROPOLYMER MICROWELL ARRAY

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03-109	Poster	MAGNETIC MICROHEATERS FOR SINGLE CELL SEPARATION, MANIPULATION, AND LYSING
03-110	Poster	A LATERALLY RESONATING GRAVIMETRIC SENSOR WITH UNIFORM MASS SENSITIVITY AND HIGH LINEARITY
03-111	Oral	SEPARATION OF CAENORHABDITIS ELEGANS BY ELECTROTAXIS IN A MICRODEVICE
03-112	Poster	PATTERN GENERATION OF MICROFLUIDIC-BASED BIOSENSOR TO DETECT C-REACTIVE PROTEIN USING COMPETITIVE PROTEIN ADSORPTION
03-113	Poster	A HIGH-THROUGHPUT FULLY-AUTOMATED MICROFLUIDIC LIVE CELL ARRAY FOR COMBINATION DRUG TREATMENT ANALYSIS OF COLORECTAL CANCER CELLS
03-125	Oral	MECHANICAL STIMULATOR OF CULTURED VASCULAR ENDOTHELIAL CELL FOR INVESTIGATION OF DRUG PERMEABILITY OF BLOOD VESSEL
03-126	Oral	LABEL-FREE REAL TIME IMAGING OF NEURAL COMMUNICATION USING ACETYLCHOLINE IMAGE SENSOR
03-129	Poster	ULTRASENSITIVE DIELECTRIC FILLED LAMINATE; MODE BIOMASS SENSOR
03-130	Poster	ON-DEMAND MICRO ENCAPSULATION UTILIZING ON-CHIP SYNTHESIS OF SEMI-PERMEABLE ALGINATE-PLL CAPSULES
03-131	Poster	PRECISE SAMPLE POSITIONING FOR MULTIPOINT IMMUNOASSAY USING NANOFUIDIC PRECONCENTRATOR
03-132	Poster	RECORDING OF NEURAL ACTIVITY OF MOUSE RETINAL GANGLION CELLS BY MEANS OF AN INTEGRATED HIGH-DENSITY MICROELECTRODE ARRAY
03-138	Poster	FLUORESCENT HYDROGEL FIBERS FOR LONG-TERM IN VIVO GLUCOSE MONITORING
03-152	Poster	NANOSLIT BIOSENSOR WITH SINGLE-PIXEL RESOLVED KINETICS CAPABILITY: FINITE ELEMENT METHOD AND EXPERIMENTAL RESULTS
03-153	Oral	MULTILAYER PHASED MICROCOIL ARRAY FOR MAGNETIC RESONANCE IMAGING
03-158	Poster	THE EFFECT OF SEQUENCE LENGTH ON DNA DECORATED CNT GAS SENSORS
03-162	Oral	GOLD NANOPARTICLE-BASED REDOX SIGNAL ENHANCEMENT TOWARDS THE DETECTION OF SINGLE BACTERIUM
03-163	Poster	POLYMER OPTO-MECHANICAL TRANSDUCER FOR ABNORMAL CELL CONTRACTION DIAGNOSTICS
03-166	Poster	CELL-BASED SURFACE ACOUSTIC WAVE RESONANT MICROSENSOR FOR
03-170	Poster	MULTI-SITE ELECTRORETINOGRAM RECORDINGS INSIDE ISOLATED MOUSE RETINA USING FLEXIBLE SPATIALLY ARRANGED MICROELECTRODE PROBES
03-171	Poster	A NOVEL MICRONEEDLE-BASED NON-ENZYMATIC GLUCOSE SENSOR FOR PAINLESS DIABETES TESTING APPLICATION
03-172	Oral	NEW CLASS OF CHRONIC RECORDING MULTICHANNEL NEURAL PROBES WITH POST-IMPLANT SELF-DEPLOYED SATELLITE RECORDING SITES-
03-173	Poster	PARYLENE MICROPROBES WITH ENGINEERED STIFFNESS AND SHAPE FOR IMPROVED INSERTION
03-174	Oral	3D LOBULE-MIMETIC CHIP VIA POSITIVE DIELECTROPHORESIS FORCE WITH SINUSOIDAL SPACING POLY (ETHYLENE GLYCOL)-DIACRYLATE MICROWALLS
03-175	Poster	PARALLEL FOCUSING AND SWITCHING OF LEAKAGE FLUX FROM MAGNETIC LOOP FOR ON-CHIP PATTERNING OF MAGNETICALLY LABELED CELLS
03-178	Oral	A COMPACT HALL-EFFECT SENSOR ARRAY FOR THE DETECTION AND IMAGING OF SINGLE MAGNETIC BEADS IN BIOMEDICAL ASSAYS
03-180	Oral	A FLEXIBLE FISH-BONE-SHAPED NEURAL PROBE STRENGTHENED BY BIODEGRADABLE SILK COATING FOR ENHANCED BIOCOMPATIBILITY
03-182	Poster	PATHOGEN DETECTION USING MICROFLUIDIC BEAD-BASED PCR
03-183	Poster	PLANT PATHOGEN SPORES IN MICROFLUIDIC DROPLETS: A HIGH-THROUGHPUT APPROACH TO ANTIGUNGLAL DRUG SCREENING
03-184	Oral	SI NANO-PILLARS FOR MEASURING TRACTION FORCES EXERTED BY FILOPODIA
03-185	Poster	MAGNETICALLY ACTUATED CELLULAR STRAIN ASSESSMENT TOOL; A STUDY ON THE STRAIN INDUCED DIRECTIONAL MIGRATION OF HUMAN ENDOTHELIAL CELLS

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03-186	Poster	A 3-D CAPILLARY-ENDOTHELIUM-MIMETIC MICROFLUIDIC CHIP FOR THE STUDY THE EXTRAVASATION OF NEUTROPHIL
03-190	Oral	TEMPERATURE-MEDIATED CELL CAPTURE AND RELEASE USING SURFACE-IMMOBILIZED APATMERS IN A MICROFLUIDIC DEVICE
03-197	Oral	MOTOR PROTEIN MOTION ALONG MICROTUBULES FOR MOLECULAR DETECTION
03-200	Poster	CHEMICAL INDUCED IMPEDANCE SPECTROSCOPY FOR SINGLE CANCER CELL DETECTION
03-201	Poster	A SUBMERSIBLE PIEZORESISTIVE MEMS LATERAL FORCE SENSOR FOR CELLULAR BIOMECHANICS APPLICATIONS
03-203	Poster	A FULLY INTEGRATED, HIGH-THROUGHPUT, MULTI-PARAMETRIC FLOW CYTOMETRY CHIP USING "MICROFLUIDIC DRIFTING" BASED THREE-DIMENSIONAL (3D) HYDRODYNAMIC FOCUSING
03-205	Poster	POINT-OF-CARE PERITONITIS MONITORING USING AN IMMUNOASSAY BASED MICROFLUIDIC CHIP
04-001	Oral	A GLUCOSE-RESPONSIVE INSULIN DELIVERY MICRO DEVICE EMBEDDED WITH NANOHYDROGEL PARTILES AS "SMART VALVES"
04-004	Oral	FULLY INTEGRAED DROPLET BASED POINT-OF-CARE PLATFORM FOR MOLECULAR DETECTION FROM CRUDE BIOSAMPLES
04-005	Oral	DISPOSABLE MICRO DEVICES FOR CLINICAL ICSI
04-006	Poster	FLEXIBLE MICRO-TACTILE SENSOR FOR NORMAL AND SHEAR ELASTICITY MEASUREMENTS
04-010	Poster	A NOVEL IMPLANTABLE SAW SENSOR FOR BLOOD PRESSURE MONITORING
04-012	Oral	DELIVERY OF AN ANTI-CANCER DRUG FROM A MAGNETICALLY CONTROLLED MEMS DEVICE SHOW APOPTOSIS IN PC3 AND HUVEC CELLS
04-014	Oral	ISOLATION OF TUMOR CELLS USING A NEW MICROFLUIDIC INCUBATOR WITH MOVING-WALL STRUCTURES
04-016	Oral	LEUKOCYTE 5-PART DIFFERENTIAL COUNT USING A MICROFLUIDIC CYTOMETER
04-017	Oral	A MICROFLUIDIC BLOOD-CLOGGING VALVE FOR ON-CHIP BLOOD ANALYSIS
04-021	Oral	SEMIPERMEABLE PARYLENE MEMBRANE AS AN ARTIFICIAL BRUCH'S MEMBRANE
04-028	Poster	DEVELOPMENT OF A MICROFLUIDIC DEVICE WITH MICROCANTILEVER ARRAY FOR PROBING SINGLE CANCER CELL MECHANICS
04-031	Poster	A MEMS INTRAOCULAR ORIGAMI COIL
04-035	Poster	ANIMAL EXPERIMENTAL STUDY ON THE NERVE ROOT RETRACTION WITH A SILICON PRESSURE SENSOR
04-036	Oral	A PARYLENE-BASED FLEXIBLE ELECTROPORATION CHIP APPLICABLE FOR IN VIVO GENE AND SIRNA DELIVERY
04-037	Poster	A WIRELESS AND BATTERYLESS MICROSYSTEM WITH IMPLANTABLE GRID ELECTRODE/3-DIMENSIONAL PROBE ARRAY FOR ECOG AND EXTRACELLULAR NEURAL RECORDING ON RAT
04-039	Poster	A HIGH-PERFORMANCE MICROSYSTEM FOR ISOLATING VIABLE CIRCULATING TUMOR CELLS
04-041	Poster	TEMPERATURE SENSING PROBE INTEGRATED WITH AN SU-8 FLEXIBLE RIBBON CABLE FOR HEART SURGERY APPLICATION
04-047	Oral	A MEMS DIFFERENTIAL AFFINITY SENSOR FOR CONTINUOUS GLUCOSE DETECTION
04-050	Poster	MICRO-LIQUID HANDLING ON PAPER ANALYSIS CHIP TRIGGERED BY INK-JET DROPLET
04-059	Poster	EASY AND STABLE LIPID BILAYER FORMATION:A DROPLETS-CONTACTING-METHOD IN PARYLENE MICROPORES FOR MULTIPLE ION CHANNEL RECORDINGS
04-060	Poster	AN INTEGRATED MICROFLUIDIC SYSTEM FOR INTERSTITIAL FLUID TRANSDERMAL EXTRACTION
04-061	Poster	AN INTEGRATED LOBULE-MIMETIC LIVER CHIP FOR TESTING HEPATOTOXICITY
04-065	Poster	A PHOTOACOUSTIC IMAGER WITH INFRARED ILLUMINATION THROUGH THE CMUT CHIP

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04-066	Poster	POST-OPERATIVE WIRELESS PLATFORM FOR IN-VIVO MONITORING AND TREATMENT
04-069	Poster	MICROFLUIDIC DEVICE TO PERFORM IMPEDOMETRIC DETECTION OF ACTIVATED PARTIAL THROMBOPLASTIN TIME OF BLOOD
04-070	Oral	CAPSULE MICROROBOT FOR TARGETTING IN MEDICAL DIAGNOSTIC TREATMENT
04-072	Poster	A NOVEL SURFACE MODIFICATION METHOD TO ACHIEVE LOW IMPEDANCE NEURAL MICROELECTRODE ARRAYS
04-073	Oral	ELECTROCHEMICALLY-BASED DOSE MEASUREMENT FOR CLOSED-LOOP DRUG DELIVERY APPLICATIONS
04-075	Oral	A MEDICAL TACTILE SENSOR FOR MEASURING TISSUE HARDNESS FOR ROBOTIC SURGICAL TOOLS
04-076	Poster	WIRELESS RECHARGING OF BATTERY OVER LARGE DISTANCE FOR IMPLANTABLE BLADDER PRESSURE CHRONIC MONITORING
04-078	Poster	INDIVIDUALLY-ADDRESSABLE PARYLENE MICRONEEDLE ARRAYS WITH INTEGRATED MICROCHANNELS FOR RETINAL PROSTHESIS STUDY
04-080	Poster	PRELIMINARY THERMAL CHARACTERIZATION OF A FULLY-PASSIVE WIRELESS BACKSCATTERING MEMS NEURO-RECORDER
04-081	Poster	A FABRY-PÉROT PRESSURE SENSOR FABRICATED ON LEFT VENTRICULAR ASSIST DEVICE FOR HEART FAILURE IMPLANT
05-005	Poster	A MULTIPLEXED MICROFLUIDIC RESISTIVE PULSE SENSOR FOR HIGH THROUGHPUT PARALLEL COUNTING OF MICROPARTICLES
05-006	Poster	A HYBRID ELECTROKINETIC BIOPROCESSOR FOR STATIC AND DYNAMIC PATHOGEN MANIPULATION IN PHYSIOLOGICAL SAMPLES
05-008	Oral	AN ACTIVE GYROSCOPIC MAGNETIC MICROMIXER FOR RAPID FLUID MIXING IN DROPLET BASED MICROFLUIDIC SYSTEMS
05-011	Poster	MICROFLUIDIC VALVES BASED ON TIO ₂ COATING WITH TUNABLE SURFACE WETTABILITY BETWEEN SUPERHYDROPHILIC AND SUPERHYDROPHOBIC
05-019	Oral	ENHANCED MICRO-DROPLET SPLITTING, CONCENTRATION, SENSING AND EJECTION BY INTEGRATING ELECTROWETTING-ON-DIELECTRICS AND SURFACE ACOUSTIC WAVE TECHNOLOGIES
05-023	Poster	LASER-ACTUATED MICRO-VALVES AND MICRO-PUMPS
05-024	Oral	MICRO-AQUATIC-FARM: ON CHIP STIMULATION AND EVALUATION SYSTEM
05-026	Oral	ON-CHIP SYNTHESIS OF SILICA NANOPARTICLE ASSEMBLIES WITH CONTROLLED SHAPE AND SIZE
05-028	Oral	FULLY INTEGRATED DILUTION SERIES GENERATION ON A LABORATORY CENTRIFUGE
05-030	Poster	A MICROFLUIDIC "TREADMILL" FOR SPERM SELECTIVE TRAPPING ACCORDING TO MOTILITY CLASSIFICATION
05-031	Poster	ACTIVE SURFACE TENSION DRIVEN MICROPUMP USING DROPLET/MENISCUS PRESSURE GRADIENT
05-034	Poster	ON-CHIP GELATION OF TEMPORALLY CONTROLLED ALGINATE MICRODROPLETS
05-035	Poster	CONDUCTOMETRIC AND OPTICAL SENSING OF STIMULI SENSITIVE HYDROGELS INSIDE MICROFLUIDIC CHANNELS
05-036	Poster	SIZE FRACTIONATION OF PRIMARY MUSCLE CELLS USING HYDRODYNAMICS IN MICROCHANNELS
05-037	Poster	HIGH-PERFORMANCE PROTEIN PRECONCENTRATOR USING MICROCHANNEL-INTEGRATED NAFION STRIP
05-038	Poster	OPTICAL-DRIVEN VORTEX AS A MICROPARTICLE CONCENTRATOR
05-040	Oral	STAND-ALONE MICRO FLUIDIC SYSTEM USING PARTLY DISPOSABLE PDMS MICROWELL ARRAY FOR HIGH THROUGHPUT CELL ANALYSIS
05-042	Poster	DYNAMICALLY CONTROLLABLE CONCENTRATION GRADIENT GENERATOR FOR STUDYING CELLULAR RESPONSE TO CHEMICAL INSTIGATION
05-043	Poster	A BISTABLE SHAPE MEMORY MICROVALVE FOR THREE-WAY CONTROL
05-045	Poster	AN ABSORPTIVE FILTER USING MICROFLUIDIC SWITCHABLE METAMATERIALS
05-046	Poster	FRICTIONAL DRAG REDUCTION IN MICROCHANNEL USING SLIP ON CONVEX AIR BUBBLES NATURALLY FORMED IN A SPECIFIED CAVITY
05-047	Poster	HIGH-YIELD BLOOD PLASMA SEPARATION BY MODULATING INERTIAL MIGRATION IN A CONTRACTION-EXPANSION ARRAY MICROCHANNEL

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05-048	Oral	A WAFER-LEVEL, HETEROGENEOUSLY INTEGRATED, HIGH FLOW SMA-SILICON GAS MICROVALVE
05-054	Poster	OPTIMIZATION OF LIQUID DIELECTROPHORESIS (L-DEP) BASED DEVICES TOWARDS CONDUCTIVE BIOLOGICAL LIQUIDS HANDLING
05-056	Poster	DIGITAL LIQUID-LIQUID MICROEXTRACTION
05-059	Poster	DYNAMIC EFFECTS OF DROPLET IMPINGEMENT ON NANOTEXTURED SURFACE FOR HIGH EFFICIENT SPRAY COOLING
05-062	Poster	2-DIMENSIONAL SEPARATION OF BIOMIMETIC PARTICLES BY STOPPED-FLOW CENTRIFUGO-MAGNETOPHORESIS
05-065	Poster	MILLILITER-TO-MICROLITER PLATFORM FOR ON-DEMAND LOADING OF AQUEOUS AND NON-AQUEOUS DROPLETS TO DIGITAL MICROFLUIDICS
05-067	Oral	HIGH PRESSURE EWOD DIGITAL MICROFLUIDICS
05-070	Poster	ON-DEMAND DELIVERY OF OOCYTE IN MICROCHANNEL USING MAGNETICALLY DRIVEN MICROTOOL
05-072	Poster	MEMS SILICON-BASED RESISTOJET MICRO-THRUSTER FOR ATTITUDE CONTROL OF NANO-SATELLITES
05-077	Poster	DEPOSITION OF CARBON NANOPARTICLES USING OPTICALLY INDUCED DIELECTROPHORESIS FORCE
05-079	Oral	IN-SITU GENERATION AND SHRINKAGE OF MONODISPERSE WATER-IN-OIL EMULSION FOR FEMTOLITER COMPARTMENTALIZATION USING CAPILLARY TRAPS
05-080	Oral	AMPLIFICATION OF CHEMOTACTIC RESPONSES OF MOTILE BACTERIAL CELLS FOR CHARACTERIZING PREFERENTIAL CHEMOTAXIS TOWARD CARBON SOURCES
05-082	Poster	OPTOELECTRONIC TWEEZERS INTEGRATION WITH MULTILAYER MICROFLUIDIC DEVICE USING SWNT EMBEDDED PDMS MEMBRANE ELECTRODE
05-085	Oral	ON-CHIP INTEGRATION OF EIGHT DIRECTIONAL DROPLET EJECTORS FOR INKING A SPOT WITH EIGHT DROPLETS WITHOUT EJECTOR MOVEMENT
05-088	Poster	AN UNTETHERED MICROROBOT ACTUATED BY AN ELECTROMAGNETIC FIELD WITH AN ACOUSTICALLY OSCILLATING BUBBLE FOR BIO/MICRO-OBJECT MANIPULATION
05-091	Poster	FOCUSING MICROPARTICLES IN A MICROFLUIDIC CHANNEL WITH FERROFLUIDS
05-092	Oral	MAGNETOPHORETIC LABEL-FREE CELL SEPARATION USING PARAMAGNETIC SOLUTION
05-096	Poster	AN ELECTROSTATICALLY ACTUATED PARYLENE MICROVALVE FOR LAB-ON-A-CHIP APPLICATIONS
05-097	Poster	IN-SITU CLOSED LOOP HYDROGEL MEMBRANE FORMATION BY ONE STEP STAMPING
05-098	Poster	WIRELESS ACTUATED MICROVALVE SYSTEM USING INDUCTION HEATING AND ITS THERMAL EFFECT ON THE MICROFLUIDIC SYSTEM
05-099	Poster	FLUORESCENCE ENHANCEMENT VIA SINGLE-CORE LIQUID WAVEGUIDES IN MICROFLUIDIC CHANNELS
05-102	Poster	PLANAR ON-CHIP FLOW CYTOMETER USING EVANESCENT WAVES BASED ON LIQUID TOTAL INTERNAL REFLECTION (L-TIR)
05-103	Poster	A NOVEL NARROW MIST SPRAY DEVICE USING SURFACE ACOUSTIC WAVE WITH A CHANNEL
05-104	Poster	HIGH THROUGHPUT MELTING CURVE ANALYSIS (MCA) IN MONOLITHIC SILICON-BASED MICROFLUIDIC DEVICE
05-105	Poster	HIGH-EFFICIENCY BLOOD SEPARATION UTILIZING SPIRAL FILTRATION MICROCHANNEL WITH GRADUALLY VARIED WIDTH
05-113	Poster	ROTATIONALLY CONTROLLED CENTRIFUGO-PNEUMATIC VALVING UTILIZING DISSOLVABLE FILMS
05-115	Oral	HIGH-SPEED PULSED MIXING WITH HIGH-FREQUENCY SWITCHING OF MICROPUMP DRIVING AND ITS APPLICATION TO NANOPARTICLE SYNTHESIS
05-120	Poster	DETERMINING THE EFFECTIVE ZETA POTENTIALS IN MICROCHANNELS WITH NONUNIFORM ZETA POTENTIALS FOR FLOW CONTROL APPLICATIONS
05-121	Poster	DIODE CHARACTERISTIC OF ELECTROLYTE-OXIDE-SEMICONDUCTOR STRUCTURE FOR POTENTIAL CHEMICAL AND BIOLOGICAL APPLICATIONS

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05-123	Poster	ROLLING, ALIGNING, AND TRAPPING DROPLETS ON A LASER BEAM USING MARANGONI OPTOFLUIDIC TWEEZERS
05-124	Poster	A MICROFLUIDIC CONTROL SYSTEM WITH RE-USABLE MICROPUMP/VALVE ACTUATOR AND INJECTION MOLDED DISPOSABLE POLYMER LAB-ON-A-SLIDE
05-125	Poster	MARANGONI-DRIVEN MICROMOTOR IN LIQUID MEDIUM
05-126	Poster	A DOUBLE TRAPPED SINGLE CELL CONTACT AND INTERACTION SYSTEM VIA MOVEABLE POLY(ETHYLENE GLYCOL) DIACRYLATE (PEG-DA) MICROSTRUCTURE FOR IMMUNE ANALYSIS
05-127	Oral	CONTINUOUS FLOW LAYER-BY-LAYER MICROBEAD FUNCTIONALIZATION VIA A MICROPOST ARRAY RAILING SYSTEM
05-131	Poster	A DIGITAL MICROFLUIDICS NEAR JUNCTION EVAPORATIVE COOLING SYSTEM USING NANOPOROUS SUPERHYDROPHYLIC COATING
05-132	Oral	A THIN PASSIVE CHECK VALVE USING MICROSPHERES FOR LOW PRESSURE AND LOW FLOW RATE APPLICATIONS
05-133	Poster	A MICROFLUIDIC MIXER BASED ON PARALLEL, HIGH-SPEED CIRCULAR MOTION OF INDIVIDUAL MICROBEADS IN A ROTATING MAGNETIC FIELD
05-134	Oral	INERTIAL PARTICLE FOCUSING IN PARALLEL MICROFLUIDIC CHANNELS FOR HIGH-THROUGHPUT FILTRATION
05-138	Poster	HIGH THROUGHPUT SEPARATION OF BLOOD CELLS BY USING HYDRODYNAMICS AND MAGNETOPHORESIS
05-141	Poster	ACOUSTIC TWEEZERS: ACHIEVING QUASI-DYNAMIC MICROPARTICLE PATTERNING USING TUNABLE SURFACE ACOUSTIC WAVES
05-142	Poster	FINGER-POWERED MICRODROPLET GENERATOR
05-143	Poster	MICROEDDY DESIGN AND APPLICATION FOR SINGLE CELL TRAPPING AND MONITORING
06-004	Poster	LOW-TEMPERATURE ZERO-LEVEL PACKAGING TECHNIQUE USING PHOTSENSITIVE FILM TYPE PERMX POLYMER
06-012	Oral	LOW TEMPERATURE ENCAPSULATION OF NANOCHANNELS WITH WATER INSIDE
06-014	Poster	RELIABILITY OF MICRO-HOTPLATES ON POLYIMIDE FOIL
06-016	Oral	A NOVEL MEMS CONFIGURATION FOR THREE DIMENSIONAL FINE POSITIONING AND MECHANICAL FIXING OF A BALL LENS IN THE PACKAGING OF SILICON PHOTONICS
06-018	Poster	ELECTRICAL CONNECTION USING SUBMICRON POROUS GOLD BUMPS FOR WAFER-LEVEL PACKAGING OF MEMS USING ANODICALLY-BONDABLE LTCC WAFER
06-019	Poster	MATERIAL OPTIMIZATION OF PHOSPHORUS-DOPED POLYCRYSTALLINE SILICON GERMANIUM FOR MINIATURIZED THERMOELECTRIC GENERATOR
06-020	Poster	MONOCRYSTALLINE THIN-FILM WAFERLEVEL ENCAPSULATION OF MICROSYSTEMS USING POROUS SILICON
06-022	Poster	BLACK SILICON WITH SUB-PERCENT REFLECTIVITY: INFLUENCE OF THE 3D TEXTURIZATION GEOMETRY
06-025	Oral	VERY HIGH TEMPERATURE (800DEGC) OHMIC CONTACT OF AU/NI ₂ SI ON N-TYPE POLYCRYSTALLINE SILICON CARBIDE AGED IN AIR
06-027	Poster	INCREASE IN MECHANICAL STRENGTH BY SCALLOPING REMOVAL
06-029	Poster	TUNABLE DYNAMIC MECHANICAL PROPERTIES OF ELECTROPHORESIS ASSEMBLED CARBON NANOTUBE-POLYMER PIEZOELECTRIC TRANSDUCERS
06-032	Oral	DIRECT WAFER BONDING OF ATOMIC LAYER DEPOSITED TiO ₂ AND Al ₂ O ₃ THIN FILMS
06-033	Poster	LOW TEMPERATURE PYREX/SILICON WAFER BONDING VIA A SINGLE INTERMEDIATE PARYLENE LAYER
06-037	Poster	CONTINUOUS PHOTOLITHOGRAPHY SYSTEM AND TECHNOLOGY FOR FIBER SUBSTRATE
06-039	Poster	A GENETIC ALGORITHM BASED KINETIC MONTE CARLO SIMULATION FOR THE EVOLUTION OF COMPLEX SURFACE IN ANISOTROPIC WET ETCHING
06-042	Poster	HIGH DENSITY 256-CHANNEL CHIP INTEGRATION WITH FLEXIBLE PARYLENE POCKET
06-043	Oral	PLANAR MEMS RF CAPACITOR INTEGRATION
06-045	Poster	WAFER-LEVEL TWO-STEP BONDING PROCESS FOR COMBINED SENSOR WITH TWO DIFFERENT PRESSURE CHAMBERS

ABSTRACT #	FORMAT	PAPER TITLE
06-046	Oral	ELECTRO-WETTING ENHANCED BONDING STRENGTH
06-047	Poster	SELF-ASSEMBLY AND TRANSFERRING OF PHOTORESIST AS PLANAR LAYER FOR FABRICATION OF TSV AND FREE STANDING BEAMS
06-048	Oral	CREEP OF PARYLENE-C FILM
06-049	Poster	ADHESION-ENHANCING SURFACE TREATMENTS FOR PARYLENE DEPOSITION
06-051	Poster	PRECISE CELL TRAPPING WITH STRUCTURE-CONFINED DIELECTROPHORESIS
06-055	Oral	A WAFER-LEVEL POLY-SIGE-BASED THIN FILM PACKAGING TECHNOLOGY DEMONSTRATED ON A SOI-BASED HIGH-Q MEM RESONATOR
06-056	Poster	LOW-COST FABRICATION OF PMMA AND PMMA BASED MAGNETIC COMPOSITE CANTILEVERS
06-057	Poster	A TRANSFER METHOD FOR COMPLEX STRUCTURES FABRICATED ON NON-PLANAR SURFACES
06-058	Poster	A BROADBAND 3D PACKAGE FOR RF MEMS DEVICES UTILIZING THROUGH SILICON VIAS (TSV)
06-060	Oral	INTEGRATION AND PACKAGING TECHNOLOGY OF MEMS-ON-CMOS TACTILE SENSOR FOR ROBOT APPLICATION USING MOLDED THICK BCB LAYER AND BACKSIDE-GROOVED ELECTRICAL CONNECTION
06-061	Poster	A SINGLE-WAFER-BASED SINGLE-SIDED BULK-MICROMACHINING TECHNIQUE FOR HIGH-YIELD AND LOW-COST VOLUME PRODUCTION OF PRESSURE SENSORS
06-063	Poster	THE INTEGRATION OF CNTS-BASED FLEXIBLE TACTILE SENSOR AND FLEXIBLE CIRCUIT BY POLYMER MOLDING PROCESS
06-064	Poster	ENTIRELY STRESS-FREE WAFER-LEVEL TRANSFER BONDING OF POLYMER LAYERS USING FLOATATION
06-065	Poster	COMB-DRIVE III-NITRIDE MICRO MIRROR FABRICATED BY FAST ATOM BEAM ETCHING
06-067	Oral	INVESTIGATIONS OF THERMOCOMPRESSSION BONDING WITH THIN METAL LAYERS
06-070	Poster	FABRICATION OF MICROPATTERNS ON CHANNEL SIDEWALLS USING STRAIN-RECOVERY PROPERTY OF A SHAPE MEMORY POLYMER
06-073	Oral	POLYMERIC DROPLET DEPOSITION AND SELF-RELEASE FORMING MICRO PARTS ON HETEROGENEOUS SURFACES
06-075	Poster	ROOM-TEMPERATURE REACTIVE BONDING BY USING NANO SCALE MULTILAYER SYSTEMS
06-080	Poster	LASER ANNEALED SIGE DEVICES FOR MEMS APPLICATIONS AT TEMPERATURES BELOW 250°C
06-081	Oral	SPUTTERED MOLYBDENUM AS CONDUCTIVE MATERIAL FOR HIGH-TEMPERATURE MICROHOTPLATES
06-082	Oral	HEATED MEMBRANES PREVENT CLOGGING OF APERTURES IN NANOSTENCIL LITHOGRAPHY
06-083	Poster	PLASMA ENHANCED BONDING OF POLYDIMETHYLSILOXANE (PDMS) WITH PARYLENE
06-084	Poster	SILICON RETAINER RING INTEGRATION IN MICRO-TURBINE WITH THRUST BALL BEARING SUPPORT MECHANISM
06-085	Poster	TRANSFER TECHNOLOGY OF PYROLYZED POLYMER ONTO LOW THERMAL TOLERANCE SUBSTRATE
06-086	Poster	NOVEL POST-PROCESS GAP REDUCTION TECHNOLOGY OF HIGH ASPECT RATIO MICROSTRUCTURES UTILIZING MICRO WELDING
06-088	Poster	INKJET PRINTING ON PAPER FOR THE REALIZATION OF HUMIDITY AND TEMPERATURE SENSORS
06-089	Oral	WAFER-LEVEL THIN FILM VACUUM PACKAGES FOR MEMS USING NANOPOROUS ANODIC ALUMINA MEMBRANES
06-096	Poster	WAX-EMBEDDED MAGNETIC PATTERNING ON PAPER VIA LASER SURFACE TREATMENT
06-097	Poster	ROOM-TEMPERATURE WAFER-LEVEL VACUUM SEALING BY COMPRESSION OF HIGH-SPEED WIRE BONDED GOLD BUMPS
06-099	Poster	A STUDY OF SURFACE DIFFUSION OF METALS IN TUNGSTEN FOR MEMS APPLICATIONS

ABSTRACT #	FORMAT	PAPER TITLE
06-101	Poster	CRACK PROPAGATION DIRECTION CONTROL FOR CRACK-LESS SOLDER BONDING USING AL/NI FLASH HEATING TECHNIQUE
06-102	Poster	DISPENSE AND SELF PLANARIZATION PROCESS ON A MODIFIED SURFACE FOR MULTIPLE HEIGHT 3-D MICROFABRICATION
06-104	Poster	INFLUENCE OF THERMAL TREATMENT ON MECHANICAL CHARACTERISTICS OF AL-SI-CU THIN FILMS EVALUATED BY BIAXIAL TENSILE TESTING
06-109	Poster	REFINED SI-CMOS-MEMS PROCESS USING AOE, DRIE AND PREFORM BONDING
06-110	Oral	NIFE-AAO NANOCOMPOSITE FOR PERFORMANCE ENHANCEMENT OF ON-CHIP SPIRAL INDUCTORS
06-111	Poster	LOW-TEMPERATURE SEALING FOR OPTICAL MICROSYSTEM PACKAGES USING AU-AU SURFACE ACTIVATED BONDING IN ATMOSPHERIC PRESSURE ENVIRONMENT
06-116	Poster	EFFICIENT SOLUTION TO SELECTIVE WET ETCHING OF ULTRA-THICK COPPER SACRIFICIAL LAYER WITH HIGH SELECTIVE ETCHING RATIO
06-117	Poster	ELECTRODEPOSITION AND CHARACTERIZATION OF CONIMNP PERMANENT MAGNET ARRAYS FOR MEMS APPLICATIONS
06-118	Poster	A POLYMER STACKING PROCESS WITH 3D ELECTRICAL ROUTINGS FOR FLEXIBLE TEMPERATURE SENSOR ARRAY AND ITS HETEROGENEOUS INTEGRATION
06-120	Oral	PIEZORESISTIVE BIOCOMPATIBLE MEMBRANES FOR FLEXIBLE PRESSURE SENSORS
06-121	Oral	ONE STEP INTEGRATION OF GOLD COATED SENSORS IN OSTE POLYMER CARTRIDGES BY LOW TEMPERATURE DRY BONDING
06-122	Poster	THE SENSITIVITY OF STICTION PERFORMANCE TO SURFACE CHEMISTRY UNDER VARIOUS HUMIDITY REGIMES
06-123	Poster	ISOTROPIC ETCHING OF 111 SCS FOR WAFER-SCALE MANUFACTURING OF PERFECTLY HEMISPHERICAL SILICON MOLDS
06-126	Oral	CONFORMAL COATING AND DEEP UV LITHOGRAPHY OF A POLY(GLYCIDYL METHACRYLATE) THIN FILM FORMED BY INITIATED CHEMICAL VAPOR DEPOSITION
06-127	Poster	EPOXY-LESS PACKAGING METHODS FOR ELECTRICAL CONTACT TO PARYLENE-BASED FLAT FLEXIBLE CABLE
06-131	Poster	HERMETIC PACKAGING OF RESONATORS WITH VERTICAL FEEDTHROUGHS USING A GLASS-IN-SILICON REFLOW PROCESS
06-133	Poster	INTEGRATION OF ORGANIC OPTO-ELECTROWETTING AND POLY(ETHYLENE) GLYCOL DIACRYLATE (PEGDA) MICROFLUIDICS FOR DROPLET MANIPULATION
06-134	Poster	BIO-INSPIRED 3D SELF-PATTERNING OF FUNCTIONAL COATINGS FOR PDMS MICROFLUIDICS
06-136	Poster	POLYMER MEMS FABRICATION PROCESS FOR SELF-ASSEMBLED MILLIMETER-WAVE ON-CHIP ANTENNAS
06-137	Oral	DEVELOPMENT OF A "FLIP GLASS SUBSTRATE" LED PACKAGE TECHNOLOGY FOR COLOR BIN YIELD AND VIEW ANGLE ENHANCEMENT
06-138	Poster	SUPPRESSION OF WEAR IN CYCLICALLY LOADED POLYCRYSTALLINE SILICON MEMS VIA A THIN SILICON CARBIDE COATING
06-139	Oral	ORIENTATION-SPECIFIC SELF-ASSEMBLY AT AIR-WATER INTERFACE USING MAGNETIC FIELD
06-140	Oral	NEGATIVE-PHOTORESIST MECHANICAL PROPERTY FOR NANO-FILTRATION MEMBRANE EMBEDDED IN MICROFLUIDICS
06-143	Poster	OUT-OF-PLANE ASSEMBLY OF 3D NEURAL PROBE ARRAYS USING A PLATFORM WITH SU-8-BASED THERMAL ACTUATORS
06-146	Poster	HIGH PERFORMANCE 18F- CONCENTRATION ELECTRODE FOR PET APPLICATION BY USING INTERDIGITATED MICROSTRUCTURE AND PYROLYZED POLYMER/GLASSY CARBON COMPOSITE
06-151	Poster	FABRICATION OF HIGH ASPECT RATIO CARBON NANOTUBE-CARBON COMPOSITE MICROSTRUCTURES BASED ON SILICON MOLDING TECHNIQUE
06-154	Poster	DIELECTROPHORESIS FORMATION OF ELLIPSOIDAL PDMS MICRO-LENS ARRAY DIAGONALLY ALIGNED ON FLEXIBLE MEMBRANE
06-156	Poster	UV LASER DICING WITHOUT FAILURE CAUSED BY CONTAMINATION AND HEAT FOR THICK ANODICALLY BONDED SILICON/GLASS MEMS WAFERS

ABSTRACT #	FORMAT	PAPER TITLE
06-170	Poster	PROGRAMMABLE MICROPATTERNING OF NANOFIBERS USING FLOATING ELECTRODES FOR FUNCTIONAL TISSUE ENGINEERING
06-171	Poster	RAPID NON-LITHOGRAPHY BASED FABRICATION PROCESS AND CHARACTERIZATION OF PARYLENE C BELLOWS FOR APPLICATIONS IN MEMS ELECTROCHEMICAL ACTUATORS
06-172	Poster	ANODICALLY-BONDABLE LTCC SUBSTRATES WITH NOVEL NANO-STRUCTURED ELECTRICAL INTERCONNECTION FOR MEMS PACKAGING
06-174	Oral	DIE-LEVEL TSV FABRICATION PLATFORM FOR CMOS-MEMS INTEGRATION
06-175	Oral	ELECTROLYTIC HYDROGENATION TECHNIQUE: NEW APPROACH FOR THE MODIFICATION OF TI-FILM MECHANICAL PROPERTIES AND MEMS APPLICATIONS
06-177	Poster	SIMPLE AND LOW-COST PATTERNING OF CARBON NANOTUBE ON PDMS FOR FLEXIBLE MEMS
06-180	Poster	FABRICATION AND TESTING OF CVD DIAMOND SINGLE-MATERIAL MEMS RESONATORS WITH PIEZORESISTIVE DETECTION
06-183	Poster	NOVEL ISOTROPIC AND ANISOTROPIC ETCHING OF MEMS STRUCTURES BY CONTROLLING THE DYNAMICS OF THE ETCHANT
06-184	Poster	A MAGNETOSTATIC 2-AXIS MEMS SCANNER WITH I-SECTION RIB-REINFORCEMENT AND SLENDER PERMANENT MAGNET PATTERNS
06-189	Oral	IMPROVED RELIABILITY OF SIC PRESSURE SENSORS FOR LONG TERM HIGH TEMPERATURE APPLICATIONS
06-191	Poster	THE FABRICATION OF 3D ASPHERICAL SILICON MICROLENSES USING A SHADOW MASK
06-197	Poster	MICROFLUIDIC CHANNELS FABRICATED USING A LITHOGRAPHY-FREE METHOD
07-007	Oral	DESIGN EVALUATION OF SHOCK INDUCED FAILURE MECHANISMS OF MEMS BY CORRELATION OF NUMERICAL AND EXPERIMENTAL RESULTS
07-008	Oral	CHARGE ACCUMULATION IN BULK PECVD DIELECTRIC MATERIALS USED FOR ELECTROSTATIC RF MEMS SWITCHES
07-009	Oral	EXPERIMENTAL EVALUATION OF ALTERNATIVE DRIVE-MODE CONTROL ELECTRONICS DEVELOPED FOR HIGH-PERFORMANCE MEMS GYROSCOPES
07-012	Poster	A PARYLENE-LED WINGBEATING INDICATOR FOR VISUAL REMOTE SENSING
07-014	Poster	ENGINEERING APPLICATION OF MEMS VECTOR HYDROPHONE AND SELF-ADAPTING ROOT-MUSIC ALGORITHM
07-015	Oral	EFM STUDY OF THE INFLUENCE OF HUMIDITY ON CHARGE INJECTION AND CHARGE RELAXATION IN SILICON NITRIDE USED FOR ELECTROSTATICALLY ACTUATED MEMS
07-016	Poster	CAPACITIVE DETECTION OF NANOLITER DROPLETS ON THE FLY - INVESTIGATION OF ELECTRIC FIELD DURING DROPLET FORMATION USING CFD-SIMULATION
07-018	Poster	TOWARDS MEASUREMENT OF THE CASIMIR FORCE BETWEEN PARALLEL PLATES SEPARATED AT SUB-MICRON DISTANCE
07-019	Poster	THE INVESTIGATION OF POINT DEFECT MODES OF PHONONIC CRYSTAL FOR HIGH Q RESONANCE
07-022	Poster	DYNAMIC OPTIMIZATION OF VALVELESS MICROPUMPS
07-026	Oral	SUBPIXEL TRANSLATION OF MEMS MEASURED BY DISCRETE FOURIER TRANSFORM ANALYSIS OF CCD IMAGES
07-030	Oral	MIXED-LEVEL MODELING OF SQUEEZE FILM DAMPING IN MEMS: SIMULATION AND PRESSURE-DEPENDENT EXPERIMENTAL VALIDATION
07-031	Poster	TIME-DEPENDENT CELL MEMBRANE DAMAGE UNDER MECHANICAL TENSION: EXPERIMENTS AND MODELING
07-032	Oral	ANALYSIS OF ACOUSTIC RADIATION AND VISCOUS DAMPING ON THE VIBRATION OF PIEZOELECTRIC CIRCULAR MICRODIAPHRAGMS
07-035	Poster	USE OF A NEW ANISOTROPIC ETCHING SIMULATOR ON QUARTZ CRYSTAL
07-041	Poster	CHARACTERISTICS OF INVERTED PYRAMIDAL MICRODISCHARGE DEVICES OPERATING IN CHF ₃ AND CHF ₃ /AR FOR MASKLESS MICROPLASMA ETCHING
07-045	Poster	DESIGN OF PRECISION LIGHT INTENSITY MODULATION FOR LIGHT-ADDRESSABLE POTENTIOMETRIC SENSOR
07-046	Poster	THIN FILM THERMAL CONDUCTIVITY METROLOGY USING PHOTOLUMINESCENCE OF QUANTUM DOTS

ABSTRACT #	FORMAT	PAPER TITLE
07-047	Poster	A NOVEL STRESS ISOLATION GUARD RING DESIGN FOR THE IMPROVEMENT OF THREE-AXIS PIEZORESISTIVE ACCELEROMETER
07-052	Poster	MODELING OF THE ELASTICITY OF CRYSTALLINE SILICON BASED ON A LATTICE DYNAMICS APPROACH
07-053	Poster	ASSESSING POLYMER SORPTION KINETICS USING MICROMACHINED RESONATORS
07-055	Poster	NONLINEAR AIR DRAG DAMPING OF TORSIONAL MICROSCANNERS
07-058	Poster	MICROFLUIDIC FLOW METER AND VISCOMETER UTILIZING FLOW-INDUCED VIBRATION ON AN OPTIC FIBER CANTILEVER
07-060	Poster	EXTENDED TIMOSHENKO BEAM FORMULA FOR CELLULAR CONTRACTION FORCE CALCULATION
07-062	Poster	DESIGN AND EXPERIMENTS OF A NANO-OPTO-MECHANICAL SWITCH USING EIT-LIKE EFFECTS OF COUPLED-RING RESONATOR
07-063	Oral	A NOVEL TEST METHOD FOR SIMULTANEOUS MEASUREMENT OF THERMAL CONDUCTIVITY, CTE, RESIDUAL STRESS AND YOUNG'S MODULUS OF SUSPENDED THIN FILMS USING A LASER DOPPLER VIBROMETER
07-065	Poster	A NOVEL, SIMPLE, AND Q-INDEPENDENT SELF OSCILLATION LOOP DESIGNED FOR VIBRATORY MEMS GYROSCOPES
07-067	Poster	INVESTIGATION OF TEMPORARY STICKTION IN POLY-SIGE MICROMIRROR ARRAYS
07-069	Poster	COMPREHENSIVE DYNAMIC AND STABILITY ANALYSIS OF ELECTROSTATIC VIBRATION ENERGY HARVESTER (E-VEH)
07-071	Poster	THE MINIMUM TIME ESTIMATION FOR INITIATING TUMOR-CELL ATTACHMENT
07-078	Poster	INTEGRATION AND INSTALLATION OF WATER-QUALITY MONITORING NETWORK BASED ON MODEL-BASED DESIGN TECHNIQUE
07-083	Oral	A FRENKEL-POOLE MODEL OF DIELECTRIC CHARGING IN CMOS-MEMS
07-085	Poster	RATE AND RATE-INTEGRATING GYROSCOPE CONTROL SYSTEM USING COMMERCIAL SOFTWARE DEFINED RADIO HARDWARE
07-086	Oral	A DESIGN OF LONGITUDINALLY-DIVIDED BALLOON STRUCTURE IN PDMS PNEUMATIC BALLOON ACTUATOR BASED ON FEM SIMULATIONS
07-088	Oral	MECHANICAL REGULATION OF COLLECTIVE CELL BEHAVIOR VIA MICROTOPOGRAPHIC SUBSTRATES
07-090	Poster	CMOS TEST CIRCUIT ARCHITECTURE FOR THE EXTRACTION OF FLUID PROPERTIES USING INTERDIGITATED ELECTRODES MICROSENSORS
07-092	Poster	ELECTRICALLY DRIVEN CMOS-MEMS NONLINEAR PARAMETRIC RESONATOR DESIGN USING A HIERARCHICAL MEMS CIRCUIT LIBRARY
07-093	Poster	DIRECT PICK AND PLACE OF CNT BUNDLES FOR STRAIN SENSING APPLICATIONS
07-095	Poster	ANALYTICAL MODEL FOR PERTURBATION ANALYSIS IN COUPLED RESONATOR SYSTEM FOR ELECTRONIC NOSE APPLICATIONS
07-096	Poster	MEASUREMENT OF ADHESION FORCE AT ELEVATED TEMPERATURES IN MEMS USING THERMAL-STRUCTURAL ACTUATION
08-002	Poster	MICRO-BEAM ACTUATOR BASED ON CONDUCTING INTERPENETRATING POLYMER NETWORKS: FROM PATTERNING PROCESS TO ACTUATION IN OPEN AIR
08-003	Poster	A NOVEL SU-8 ELECTROTHERMAL MICROGRIPPER BASED ON TYPE SYNTHESIS OF KINEMATIC CHAIN METHOD
08-004	Oral	A THREE-TERMINAL SINGLE-WALLED CARBON NANOTUBE THIN FILM MEMS SWITCH FOR DIGITAL LOGIC APPLICATIONS
08-006	Poster	DESIGN AND CHARACTERIZATION OF A LOW-VOLTAGE PIEZOELECTRIC-ACTUATED POLYMER MEMBRANE
08-007	Oral	3D OMNIDIRECTIONAL CONTROLLABLE ELASTIC IPMC TWEEZER WITH SELF-SENSING AND ADJUSTABLE CLAMPING FORCE ABILITIES FOR BIOMEDICAL APPLICATIONS
08-008	Poster	A LATCHABLE HIGH-PRESSURE COMPOSITE VALVE ACTUATOR COMBINING PARAFFIN AND A LOW MELTING POINT ALLOY
08-012	Poster	ELECTROMECHANICAL COUPLING OF POLYPYRROLE TRILAYER ACTUATORS
08-013	Oral	HYGROSCOPIC BIOMIMETIC TRANSDUCERS MADE FROM CNT-HYDROGEL COMPOSITES

ABSTRACT #	FORMAT	PAPER TITLE
08-015	Poster	NOVEL MINIATURIZATION ACTUATOR USING A SYMMETRIC PIEZOELECTRIC PUSHER ELEMENT FOR POCKET SUN-TRACKING SYSTEM
08-016	Poster	GAN COMB-DRIVE ACTUATORS ON SI SUBSTRATE
08-017	Oral	NANO-OPTICAL LINEAR ACTUATOR UTILIZING GRADIENT OPTICAL FORCE
08-018	Poster	RAPID AND REPEATED BOLUS DRUG DELIVERY ENABLED BY HIGH EFFICIENCY ELECTROCHEMICAL BELLOWS ACTUATORS
08-021	Poster	RELIABLE RF MEMS SWITCH FABRICATED WITH AN INNOVATIVE DIELECTRIC-LESS TECHNOLOGY
08-022	Poster	CYMBAL TYPE PIEZO-POLYMER-COMPOSITE ACTUATORS FOR ACTIVE CANCELLATION OF FLOW INSTABILITIES ON AIRFOILS
08-023	Oral	DEVELOPMENT OF THE MICRO-MIRROR WITH LARGE SCANNING ANGLE USING FE-BASED METALLIC GLASS THIN FILM
08-024	Poster	A MICROGRIPPER WITH CHANGEABLE GRIPPING TIPS FOR MICRO AND NANO MANIPULATION
08-026	Poster	WALKING OF A MAGNETICALLY BIPEDAL MICROROBOT
08-029	Poster	A MINIATURIZED OPTICALLY-INDUCED FLUORESCENCE-ACTIVATED CELL SORTER
08-030	Poster	CONTROL OF THE RADIAL MOTION OF A SELF-PROPELLED MICROBOAT THROUGH A SIDE RUDDER
08-031	Poster	RAPID PROTOTYPING OF 3D MICROSTRUCTURES BY DIRECT PRINTING OF LIQUID METAL AT TEMPERATURES UP TO 500°C USING THE STARJET TECHNOLOGY
08-032	Poster	CHARACTERIZATION OF THE 2ND GENERATION MAGNETIC MICROBEARING WITH INTEGRATED STABILIZATION FOR FRICTIONLESS DEVICES
08-033	Oral	A MICRO ELECTROSTATIC LINEAR ACCELERATOR BASED ON ELECTROMAGNETIC LEVITATION
08-036	Poster	MONODISPERSE MICROPARTICLE GENERATION FROM AQUEOUS SOLUTIONS
08-037	Poster	INTEGRATED THIN-FILM PIEZOELECTRIC TRAVELING WAVE ULTRASONIC MOTOR
08-040	Poster	A NANO-OPTICAL-MECHANICAL ACTUATOR DRIVEN BY OPTICAL RADIATION FORCE
08-041	Poster	DISPOSABLE MICROFLUIDIC VACUUM MODULES USING INDUCTIVELY TRIGGER TRANSFORMATIVE POLYMERS FOR POINT-OF-CARE DIAGNOSTICS
08-043	Poster	A HYBRID VERTICAL COMB-DRIVE ACTUATOR SUPPORTED BY FLEXIBLE PDMS SUSPENSIONS
08-048	Poster	SILICON LINKAGE WITH NOVEL COMPLIANT MECHANISM FOR PIEZOELECTRIC ACTUATION OF AN INTRAOCULAR IMPLANT
08-049	Poster	THERMALLY-ACTUATED HIGH SPEED DROPLET MANIPULATION PLATFORM
08-050	Oral	NANO-ELECTROMECHANICAL STORAGE ELEMENT FOR A LOW-POWER COMPLIMENTARY LOGIC ARCHITECTURE USING PZT SWITCHES
08-055	Poster	THREE AXIS TACTILE DISPLAY USING PDMS PNEUMATIC ACTUATOR FOR ROBOT ASSISTED SURGERY
08-059	Poster	BATCH MICROFABRICATED BIDIRECTIONAL DIELECTRIC ELASTOMER ACTUATORS
08-060	Oral	A NOVEL TWEEZERS USING ACOUSTICALLY EXCITED OSCILLATING TWIN BUBBLES
08-061	Poster	A DRUG-INJECTION SYSTEM WITH CHEMO-MECHANICAL ENERGY CONVERSION FOR ACTIVE FEEDBACK CONTROL OF GLUCOSE CONCENTRATION IN A BLOOD
08-062	Poster	MICROFLUIDIC ACTUATORS BASED ON INFRARED-LIGHT RESPONSIVE PNIPAAm HYDROGEL NANOCOMPOSITE INCORPORATING GRAPHENE-OXIDE
08-065	Poster	LIGHT-CONTROLLED MIGRATION OF D.DISCOIDEUM SLUGS IN MICROFABRICATED CONFINEMENTS
08-066	Oral	A FUNCTIONAL MICROPROBE INTEGRATED WITH SHARP TIP AND HUGE DEFLECTION CRANK SLIDER STRUCTURAL CANTILEVER FOR VERSATILE INSTRUMENT
08-070	Poster	NI-BASED MICROVALVES FOR FLOW MODULATION: TOWARD ACTIVE COMBUSTION CONTROL
08-073	Poster	EFFICIENT ELECTROSTATIC INCHWORM MOTORS WITH SIMPLE CONTROL AND HIGH FORCE DENSITY

ABSTRACT #	FORMAT	PAPER TITLE
08-077	Poster	CHEMICAL SWITCHING OF MICRO JELLYFISH-SHAPED ROBOT CONSISTING ONLY OF CARDIOMYOCYTE GEL
08-079	Poster	ACTIVE CMOS-MEMS CONDUCTIVE PROBES AND ARRAYS FOR TUNNELING-BASED ATOMIC-LEVEL SURFACE IMAGING
08-081	Poster	RESONANT STATOR ACTUATION OF GEAR COUPLED ULTRASONIC MOTORS
08-082	Poster	ALL-ELECTRICAL PERISTALTIC VACUUM PUMP UTILIZING ELECTROMAGNETIC AND HYDRAULIC ACUTATION WITH A HIGHLY FLEXIBLE LATEX MEMBRANE
09-001	Poster	FREQUENCY TUNING OF ALN MICROMECHANICAL RESONATORS
09-002	Poster	INFLUENCE OF THE A-F EFFECT ON THE TEMPERATURE STABILTY OF SILICON MICROMECHANICAL RESONATORS
09-005	Poster	VERIFICATION OF THE PHASE-NOISE MODEL FOR MEMS OSCILLATORS OPERATING IN THE NONLINEAR REGIME
09-008	Oral	ENCAPSULATED MECHANICALLY COUPLED FULLY-DIFFERENTIAL BREATHE-MODE RING FILTERS WITH ULTRA-NARROW BANDWIDTH
09-009	Poster	MICRO DISK RESONATOR WITH ON-DISK PIEZOELECTRIC THIN FILM TRANSDUCERS FOR INTEGRATED MEMS UBIQUITOUS APPLICATIONS
09-011	Poster	NOVEL MEMS OSCILLATOR USING IN-PLANE DISK RESONATOR WITH SENSING PLATFORM AND ITS MASS SENSING CHARACTERISTICS
09-015	Poster	AN EWOD DRIVEN MILLIMETER-WAVE PHASE SHIFTER USING A MOVABLE ULTRASOFT METALIZED PDMS GROUND PLANE
09-019	Poster	NOVEL FREQUENCY AGILE ELECTROMAGNETIC DECOUPLING MEMS DEVICE
09-020	Oral	BATTERY-FREE WIRELESS TOUCH DRIVEN TRANSMITTER WITH ON-CHIP ANTENNAS FOR WIRELESS SENSOR SYSTEMS
09-023	Poster	PIEZOELECTRIC ALN MEMS RESONATORS WITH HIGH COUPLING COEFFICIENT
09-025	Oral	SPONTANEOUS OSCILLATION DUE TO CHARGING EFFECT IN MEMS RF SWITCHES
09-027	Poster	WIDEBAND TUNABLE LOVE WAVE FILTER USING ELECTROSTATICALLY-ACTUATED MEMS VARIABLE CAPACITORS INTEGRATED ON LITHIUM NIOBATE
09-029	Oral	VERY HIGH FREQUENCY DOUBLE-ENDED TUNING FORK NANO-MECHANICAL FIN-FET RESONATOR
09-033	Poster	DOUBLING FREQUENCY RESPONSE USING SYNCHRONIZED OSCILLATION IN MECHANICALLY COUPLED OPPOSITE C-SHAPED CANTILEVER-BASED OSCILLATORS
09-036	Oral	3-D MICROCOILS AS A METAMATERIAL WITH ELECTRIC AND MAGNETIC RESPONSE
09-039	Oral	RF MEMS SWITCHES INTEGRATED WITH SEALED SUSPENDED COPLANAR WAVEGUIDES FOR RECONFIGURABLE RF CIRCUITS
09-040	Oral	HIGH-Q, LARGE-STOPBAND-REJECTION INTEGRATED CMOS-MEMS OXIDE RESONATORS WITH EMBEDDED METAL ELECTRODES
09-042	Oral	WLAN(IEEE 802.11N)/M-WIMAX(IEEE 802.16E) 2x2 MIMO FRONT-END MODULE USING MEMS & LTCC TECHNOLOGY
09-044	Poster	PIEZOELECTRIC MICRO-SCALE TUNING FORK RESONATORS FOR SENSING APPLICATIONS
09-045	Poster	CMOS-MEMS TRANSVERSE-MODE SQUARE PLATE RESONATOR WITH HIGH Q AND LOW MOTIONAL IMPEDANCE
09-048	Poster	A TUNABLE LASER USING DOUBLE-RING RESONATOR EXTERNAL CAVITY VIA FREE-CARRIER DISPERSION EFFECT
09-052	Oral	ONE-DIMENSIONAL LINEAR ACOUSTIC BANDGAP STRUCTURES FOR PERFORMANCE ENHANCEMENT OF ALN-ON-SILICON MICROMECHANICAL RESONATORS
09-053	Poster	A DRY ETCHING METHOD USING DOUBLE-LAYERED ETCHING MASK FOR MODULATING SHAPE OF DEEP-ETCHED QUARTZ SURFACE
09-055	Poster	QUALITY FACTOR ENHANCEMENT IN LAMB WAVE RESONATORS UTILIZING ALN PLATES WITH CONVEX EDGES
09-057	Poster	A STATE-CONVERTING INLINE RF MEMS POWER SENSOR USING GAAS MMIC TECHNOLOGY
09-058	Poster	LATERALLY-EXCITED SILICON BULK ACOUSTIC RESONATORS WITH SIDEWALL ALN
09-059	Poster	LORENTZ FORCE TRANSDUCTION FOR RF MICROMECHANICAL FILTERS

ABSTRACT #	FORMAT	PAPER TITLE
09-060	Oral	OPTO-ACOUSTIC OSCILLATOR USING SILICON MEMS OPTICAL MODULATOR
09-062	Poster	RELIABLE LOW-COST FABRICATION AND CHARACTERIZATION METHODS FOR MICROMECHANICAL DISK RESONATORS
09-063	Poster	A LONG-TERM RELIABILITY ANALYSIS OF A CREEP IMMUNE RF-MEMS TUNABLE CAPACITOR
09-064	Oral	VOLTAGE PROGRAMMABLE DUAL-BAND BANDPASS/BANDSTOP FILTER RESPONSE IN A SINGLE MICRO-ELECTRO-MECHANICAL DEVICE
09-066	Poster	ELECTROTHERMALLY ACTUATED RF MEMS CAPACITIVE SWITCH WITH ATOMIC LAYER DEPOSITED (ALD) DIELECTRICS
09-067	Poster	DIFFERENTIAL-INPUT PIEZORESISTIVELY-SENSED SQUARE-EXTENSIONAL MODE RESONATOR FOR PARASITIC FEEDTHROUGH CANCELLATION
09-073	Poster	NANOSCALE INVESTIGATION OF DIFFERENT STICTION MECHANISMS IN ELECTROSTATIC MEMS BASED ON ADHESION AND FRICTION MEASUREMENTS
09-074	Poster	MILLIMETER-WAVE FILTER USING NOVEL MICROMACHINED SUSBRATE INTEGRATED WAVEGUIDE STRUCTURE WITH EMBEDDED SILICON VIAS IN BCB DIELECTRICS
09-079	Oral	ON-CHIP RF INDUCTORS WITH MAGNETIC NANO PARTICLES MEDIUM
09-085	Oral	HIGH-PERFORMANCE BULK-MODE GALLIUM NITRIDE RESONATORS AND FILTERS
09-086	Oral	A 1.75 GHZ PIEZOELECTRICALLY-TRANSDUCED SIC LATERAL OVERTONE BULK ACOUSTIC-WAVE RESONATOR
09-088	Oral	ENGINEERING OF ACOUSTIC META-MATERIALS WITH APPLICATION TO MEMS BAW RESONATORS
09-090	Poster	ULTRA HIGH FREQUENCY FRACTAL PHONONIC CRYSTAL IN SILICON CARBIDE
09-092	Poster	INDEPENDENT TUNING OF QUALITY FACTOR AND RESONANT FREQUENCY OF TORSIONAL MICRO-RESONATORS FOR TIMING AND SENSING APPLICATIONS
10-002	Poster	MODE-SELECTIVE OPTICAL FILTERING AND WAVELENGTH-SELECTIVE SWITCHING THROUGH FABRY-PEROT CAVITY WITH CYLINDRICAL REFLECTORS
10-009	Poster	SPECKLE REDUCTION IN LASER DISPLAYS USING A MEMS TANDEM MODULATOR
10-011	Oral	INTERFEROMETRIC MODULATORS USING MECHANICALLY COUPLED MIRROR ACTUATORS FOR COLOR REPRODUCTION
10-012	Poster	A NOVEL ELECTROMAGNETIC MICROACTUATOR WITH LATERAL MAGNETIO-STATIC FORCE FOR SCANNING MICROMIRROR DEVICE
10-014	Poster	MICROMACHINED ARRAY-TYPE MIRAU INTERFEROMETER FOR MEMS METROLOGY
10-015	Poster	A THERMAL TUNABLE BULK-MICROMACHNIED OPTICAL FILTER
10-017	Poster	MICRO-MIRRORS CONNECTED IN SERIES FOR LOSS-MECHANISM STUDY AND LOW-VOLTAGE OPERATION
10-021	Oral	A MICROMACHINED OPTICAL DELAY LINE BY SWITCHABLE METAMATERIALS
10-023	Poster	DESIGN, FABRICATION, AND VACUUM PACKAGE PROCESS FOR HIGH PERFORMANCE OF 2D SCANNING MEMS MICROMIRROR
10-026	Poster	A NOVEL DUAL SCREEN PROJECTION SYSTEM USING BALANCE-TYPE MICROMIRROR WITH PIEZOELECTRIC ACTUATOR
10-027	Poster	NOVEL ULTRA-LIGHTWEIGHT AND HIGH-RESOLUTION MEMS X-RAY OPTICS FOR SPACE ASTRONOMY
10-030	Poster	VARIFOCAL SCANNING MICRO-MIRROR FABRICATED FROM SILICON-ON-INSULATOR WAFER
10-032	Oral	ELECTROSTATIC TORSIONAL VERTICAL FLAPS FOR REFLECTIVE MEMS DISPLAY
10-034	Poster	METAL-BASED PIEZOELECTRIC MEMS SCANNER MIRRORS COMPOSED OF PZT THIN FILMS ON TITANIUM SUBSTRATES
10-036	Poster	PROCESS OPTIMIZATION AND PERFORMANCE ANALYSIS OF AN ELECTROSTATICALLY ACTUATED VARIFOCAL LIQUID LENS
10-038	Oral	ON-CHIP OPTICAL POWER MEASUREMENT BY OPTICAL FORCE
10-044	Poster	A NANO-OPTICAL-MECHANICAL RING RESONATOR PRESSURE SENSOR

ABSTRACT #	FORMAT	PAPER TITLE
10-050	Poster	HOLLOW CORE MOEMS BRAGG GRATING MICROPHONE FOR DISTRIBUTED AND REMOTE SENSING
10-051	Poster	2D IMAGING WITH 1D LED ARRAY INTEGRATED FR4 ACTUATOR
10-053	Oral	MICROFABRICATION AND PACKAGING OF A RUBIDIUM VAPOR CELL AS A PLASMA LIGHT SOURCE FOR MEMS ATOMIC CLOCKS
10-054	Poster	MICRO-OPTO-MECHANICAL TECHNOLOGY FOR THE FABRICATION OF HIGHLY MINIATURIZED FIBER-OPTIC ULTRASONIC DETECTORS
10-055	Poster	CONTINUOUS MEMBRAN DEFORMABLE MIRROR FOR ADAPTIVE OPTICS USING BIMORPH SPRING
10-056	Poster	A MONOLITHIC MEMS MICHELSON INTERFEROMETER FOR FTIR SPECTROSCOPY
10-057	Poster	A NOVEL VACUUM-PACKAGED LOW-POWER SCANNING MIRROR WITH INCLINED 3D-SHAPED WINDOW
10-058	Poster	TUNABLE PHOTONIC CRYSTAL WITH 50 NANOMETER TUNING RANGE AND 100 MILLISECOND RESPONSE TIME
10-059	Poster	CAVITY OPTOMECHANICAL SENSORS
10-061	Oral	PHOTOTHERMAL NANOBLADE FOR LARGE CARGO DELIVERY INTO MAMMALIAN CELLS
10-066	Poster	AN APODIZED SURFACE GRATING COUPLER ENABLING THE FABRICATION OF SILICON PHOTONIC NANOWIRE SENSOR CIRCUITS IN ONE LITHOGRAPHY STEP
10-067	Poster	TRANSMISSIVE COLOR SHIFT THROUGH LAYERED SUB-WAVELENGTH GRATINGS BASED ON PLASMON ENHANCED COUPLING
10-068	Poster	INTEGRATED TRACKING AND FOCUSING MICRO LENS ACTUATORS BASED ON SILICON BULK MICROMACHINING
10-070	Poster	BISTABLE OPTOFLUIDIC ATTENUATOR WITH INTEGRATED ELECTROWETTING ACTUATION AND HIGH DYNAMIC RANGE
10-071	Poster	LOW POWER PECVD SIC DELAY LINES FOR OPTICAL COHERENCE TOMOGRAPHY IN THE VISIBLE
10-072	Poster	ADAPTIVE PIEZOELECTRIC AXICON MIRRORS FOR HIGH POWER FEMTOSECOND LASER APPLICATIONS
10-073	Poster	SPATIAL AND TEMPORAL MODULATION OF PICOSECOND X-RAYS USING MEMS SPATIAL LIGHT MODULATORS TO PROBE MATERIALS AT THE NANOSCALE
10-074	Poster	MULTIFUNCTIONAL OPTICAL MEMS SENSOR PLATFORM FOR WIRELESS OPTICAL SENSOR NETWORKS
10-075	Oral	"BOTTOM-UP" THREE DIMENSIONAL METAMATERIALS AT TERAHERTZ FREQUENCIES
10-078	Poster	1-D ELECTRO-OPTIC BEAM STEERING DEVICE
10-079	Poster	A MECHANICAL RESONANT 2-D OPTICAL SCANNER USING PZT BASED PUSH-PULL ACTUATOR
10-080	Poster	SILICON BULKMICROMACHINED PIEZOELECTRICALLY ACTUATED CORNER CUBE RETROREFLECTOR
10-082	Poster	A MICRO CAMERA UTILIZING A MICROLENS ARRAY FOR MULTIPLE VIEWPOINT IMAGING
10-084	Oral	MULTISPECTRAL ANALYSIS OF CANCER CELLS USING QUANTUM DOT LEDS PATTERNED ON-CHIP
10-085	Oral	CORTICAL BLOOD FLOW IMAGING WITH A PORTABLE MEMS BASED 2-PHOTON FLUORESCENCE MICROENDOSCOPE
10-087	Poster	INDIRECT WAVELENGTH SELECTIVE INFRARED EMITTER USING SURFACE PLASMON POLARITON
10-088	Oral	FRONTSIDE-ONLY PROCESSING OF 2-D MEMS SCANNERS FOR MINIATURE DUAL-AXIS CONFOCAL MICROENDOSCOPES
10-090	Poster	TUNABLE SOLID-BODY ELASTOMERIC DIFFRACTIVE LENS
10-091	Oral	LENS SCANNING BASED MEMS CATHETER FOR FORWARD ENDOSCOPIC OPTICAL COHERENCE TOMOGRAPHY
10-094	Poster	NANOPLASMONIC PHOTOCONDUCTIVE ANTENNA FOR HIGH POWER TERAHERTZ EMISSION
10-095	Poster	SILICON/III-V MATERIAL ACTIVE LAYER HETEROINTEGRATED VERTICAL PIN WAVEGUIDE PHOTODIODE BY DIRECT BONDING

ABSTRACT #	FORMAT	PAPER TITLE
10-096	Oral	HIGHLY EFFICIENT LED LENS BIOLOGICALLY INSPIRED FROM CUTICLE NANOSTRUCTURES OF FIREFLY LIGHT ORGANS
10-102	Poster	TIO2 FREESTANDING THIN FILM AS EVANESCENT WAVEGUIDE SENSOR FOR BIOMEDICAL APPLICATION
10-103	Poster	INCORPORATION OF POLYMER REFRACTIVE MICROLENS ARRAY FOR EFFICIENCY IMPROVEMENT OF CUINS2 QUANTUM DOT-BASED HYBRID PV CELLS
10-106	Poster	SWITCHABLE PHOTONIC CRYSTALS BASED ON THE PHOTONIC DEFORMATIONS OF
10-109	Oral	ACOUSTIC SPEAKER BASED ON HIGH-EFFICIENCY BROADBAND NANO-PILLAR PHOTONIC CRYSTAL OPTO-THERMO-MECHANICAL MEMS EXCITATION
10-111	Poster	A COMPACT PROJECTION SYSTEM ENABLING TOPOGRAPHICAL MEASUREMENTS FOR A MINIATURIZED SUBMERSIBLE EXPLORER
10-112	Poster	MEMS MIRRORS BASED ON CURVED CONCENTRIC ELECTROTHERMAL ACTUATORS WITH VERY SMALL LATERAL SHIFT AND TILT
10-113	Oral	SPR PHOTO DIODE DETECTOR USING TRANSPORTATION PHENOMENON OF PHOTON AND ELECTRON COUPLING
10-115	Poster	A WIRELESS PAIRED EMITTER DETECTOR DIODE DEVICE AS OPTICAL SENSOR FOR LAB-ON-A-DISC APPLICATIONS
10-118	Poster	ELECTROLUMINESCENCE FROM A FREESTANDING INTEGRATABLE SINGLE ZNO QUANTUM DOT
10-119	Poster	INTEGRATED SELF-ALIGNED TIPS FOR DISPERSION TUNING IN A PHOTONIC CRYSTAL MICRO-CAVITY
10-121	Poster	DUAL-BAND MEMS FABRY-PEROT FILTER WITH TWO MOVABLE REFLECTORS FOR MID- AND LONG-WAVE INFRARED MICROSPECTROMETERS
10-122	Oral	PORTABLE ORAL CANCER DETECTION USING MINIATURE CONFOCAL IMAGING PROBE WITH LARGE FIELD OF VIEW
10-123	Poster	MEMS SCANNER BASED HANDHELD FLUORESCENT HYPERSPECTRAL IMAGING SYSTEM
10-124	Poster	A HIGH-SPEED ELECTROSTATIC DOUBLE-LAYERED VIBRATORY GRATING SCANNER WITH VERY HIGH OPTICAL RESOLUTION
10-125	Poster	DESIGN AND FABRICATION OF 2D FAST ELECTROTHERMAL MICROMIRRORS WITH LARGE SCAN RANGE AND SMALL CENTER SHIFT
10-127	Oral	ALL-OPTICAL PROGRAMMABLE PHOTONIC INTEGRATED CIRCUIT: AN OPTICAL ANALOGY TO ELECTRONIC FPGA
10-128	Oral	"MEMSEYE" FOR OPTICAL 3D POSITION AND ORIENTATION MEASUREMENT
10-129	Oral	REFLECTANCE-BASED TIO2 PHOTONIC CRYSTAL SENSORS
10-130	Poster	POLYMER-DISPERSED LIQUID CRYSTAL (PDLC) BASED LIGHT SHUTTER DRIVEN BY SURFACE ACOUSTIC WAVES
10-131	Poster	ULTRA-COMPACT ELECTRO-THERMALLY TUNABLE PHOTONIC CRYSTAL PRISM FOR ON-CHIP OPTICAL ROUTER APPLICATION
11-001	Poster	FORMATION OF SILICON NANO TIPS USING POST SAM-BASED WET ETCHING
11-003	Poster	HIGH PERFORMANCE SURFACE-TENSION-DRIVEN CAPILLARY PUMPING BASED ON LAYER-BY-LAYER SELF-ASSEMBLY OF TIO2 NANOPARTICLES
11-004	Oral	REDUCING STICTION IN MICROELECTROMECHANICAL SYSTEMS BY NANOMETER-SCALE FILMS GROWN BY ATOMIC LAYER DEPOSITION
11-005	Poster	WAFER-SCALE AU MEMBRANES WITH SUB-MM HOLE ARRAYS
11-006	Poster	HYBRID SOLAR CELL BASED ON CDSE NANOCRYSTAL AND CONJUGATED POLYMER
11-009	Poster	ENHANCED ELECTRO-MECHANICAL PERFORMANCE OF TIO2 NANO-PARTICLE MODIFIED POLYDIMETHYLSILOXANE (PDMS) AS ELECTROACTIVE POLYMERS
11-010	Oral	NANOELECTROMECHANICAL SWITCHES BASED ON DIAMOND-ON-DIAMOND
11-012	Oral	ELECTRICAL CATCHING AND TRANSFER OF NANOPARTICLES VIA NANOTIP SILICON PROBE ARRAYS
11-013	Poster	ELECTRICAL INSULATION OF CARBON NANOTUBE SEPARATION COLUMNS FOR MICROCHIP ELECTROCHROMATOGRAPHY
11-015	Poster	TECHNOLOGY AND CHARACTERISTICS OF MICROHUMIDITY SENSORS
11-017	Poster	SUSPENDED CARBON NANOTUBE THIN FILM STRUCTURES WITH A HIGH DEGREE OF ALIGNMENT FOR NEMS SWITCH APPLICATIONS

ABSTRACT #	FORMAT	PAPER TITLE
11-018	Oral	GRAPHITIZATION OF N-TYPE POLYCRYSTALLINE SILICON CARBIDE AND ITS APPLICATION FOR MICRO- SUPERCAPACITORS
11-019	Poster	MEASUREMENT OF SHEAR STRESS BETWEEN SINGLE-WALL CARBON NANOTUBES AND SUBSTRATES USING NEMS DEVICES
11-022	Poster	A NEW PLATFORM FOR ASSEMBLY OF CARBON NANOTUBES ON NANO SENSORS BY UTILIZING OPTICALLY-INDUCED DIELECTROPHORESIS AND DIELECTROPHORESIS
11-023	Poster	GROWTH OF HORIZONTALLY ALIGNED CARBON NANOTUBES FROM DESIGNATED SIDEWALL OF DRIE-ETCHED SILICON TRENCH
11-024	Poster	WAFER-LEVEL FABRICATION OF NANOSCALE PATTERNED SAPPHIRE SUBSTRATES WITH BROADBAND OPTICAL TRANSMITTANCE
11-025	Poster	DIELECTRIC CONSTANTS OF PDMS NANOCOMPOSITES BY CONDUCTING POLYMER NANOWIRES
11-030	Poster	VERTICAL SILICON NANO-PILLAR FOR NON-VOLATILE MEMORY
11-031	Oral	PROGRAMMABLE TRANSFORMATION OF VERTICALLY ALIGNED CARBON NANOTUBES INTO 3D MICROSTRUCTURES
11-033	Oral	ULTRASENSITIVE PRESSURE SENSOR BASED ON GATE- ALL-AROUND NANOWIRE FET
11-035	Poster	PARTICLE TRAPPING AND MANIPULATION BY DOUBLE COUPLED RING RESONATORS (DCRR) THROUGH WAVELENGTH TUNING
11-038	Oral	GRAPHENE-BASED MICROELECTRODE FOR RECORDING NEURAL SIGNALS
11-039	Oral	NANOCRYSTALLINE SIC METAL-SEMICONDUCTOR-METAL PHOTODETECTOR WITH ZNO NANOROD ARRAYS FOR HIGH TEMPERATURE APPLICATIONS
11-040	Poster	IC COMPATIBLE TOP DOWN PROCESS FOR SILICON NANOWIRE FET ARRAYS WITH THREE {100} SURFACES FOR (BIO) CHEMICAL SENSING
11-048	Poster	LIGHT-ACTUATED CNT-DOPED ELASTOMER BLISTERS TOWARDS BRAILLE DOTS
11-050	Poster	INTEGRATION OF PRE-SYNTHESED SINGLE NANOWIRES INTO MEMS DEVICES
11-058	Oral	A NEMS OPTICAL SWITCH DRIVEN BY OPTICAL FORCE
11-059	Poster	CHEMO-RESISTIVITY OF SOLID STATE LAYERS OF PORPHYRIN NANOTUBES
11-071	Poster	MAGNETORESISTANCE BEHAVIORS OF UNDOPED AND N-DOPED GRAPHENE GROWN BY CVD METHOD
11-073	Poster	DIAGNOSTIC OF MICROPLASMA REACTOR FOR SCANNING PLASMA ETCHING
11-074	Poster	ELECTROSTATIC GATING OF ION AND MOLECULE TRANSPORT THROUGH A NANOCHANNEL-ARRAY MEMBRANE
11-076	Poster	PROTECTIVE ENCASEMENT OF BATCH-FABRICATED NANOMAGNETS FOR SUB-NANOMETER SCANNED-PROBE MAGNETIC RESONANCE IMAGING
11-077	Poster	FUNCTIONALIZATION OF CERAMIC LIPOSOMAL NANOPARTICLES, CERASOMES, WITH ANTIBODIES
11-079	Oral	THREE DIMENSIONAL NANOSCALE FABRICATION AND MODELING OF DYNAMIC MODE MULTIDIRECTIONAL UV LITHOGRAPHY
11-083	Poster	3D MICROELECTRODE BASED ON INTEGRATED MICRO AND NANOARCHITECTURES
11-084	Poster	FABRICATION OF PLASMA PROBE FOR CHEMICAL VAPOR DEPOSITION
11-089	Poster	CARBON NANOTUBE ARRAY AS REMOVABLE SOLID ADHESIVE FOR HIGH TEMPERATURE SILICON PROCESSING
11-092	Poster	FABRICATION OF 3D HYBRID POLYMER-MAGNETITE NANOSTRUCTURES WITH GEOMETRIC SHAPE ANISOTROPY
11-096	Oral	DENSELY PACKED CARBON NANOTUBE FOREST ON SILICON SUBSTRATE
11-098	Oral	SELF-ALIGNED DOUBLE-GATE SUSPENDED-BODY CARBON NANOTUBE FIELD-EFFECT-TRANSISTORS FOR RF APPLICATIONS
11-099	Poster	NANO-PHOTONIC DISPLACEMENT SENSING MECHANISM
11-100	Oral	AUTONOMOUS PASSIVE LIGHT TRACKING UTILIZING SINGLE-WALL CARBON NANOTUBE ENHANCED OPTO-THERMO-MECHANICAL ELASTOMER ACTUATORS
11-102	Poster	2D PHOTONIC CRYSTAL TM POLARIZER FABRICATED BY ONE-STEP COMBINED NANOIMPRINT AND PHOTOLITHOGRAPHY
11-104	Oral	BIONANO CRYSTALLIZATION OF POLY-SI FILM FOR INCREASING TENSILE STRESS IN MEMS/NEMS DEVICE STRUCTURES

ABSTRACT #	FORMAT	PAPER TITLE
11-109	Poster	AMBIPOLAR SI NANOWIRE FIELD EFFECT TRANSISTORS FOR LOW CURRENT AND TEMPERATURE SENSING
11-114	Oral	'PICKUP AND PLACE' INTEGRATION METHOD OF BRIDGING CARBON NANOTUBES BY STAMPING TRANSFER
11-123	Oral	STRUCTURAL AND THERMOELECTRIC CHARACTERIZATION OF INDIVIDUAL SINGLE CRYSTALLINE NANOWIRES
11-124	Oral	BIOASSISTED SELECTIVE-CAPTURE AND RELEASE OF NANOPARTICLES TOWARD APPLICATION ON MICROFLUIDIC DEVICES
11-126	Oral	LAYER-BY-LAYER DEPOSITION OF COLLOIDAL SEMICONDUCTOR NANOCRYSTALS FOR INTEGRATION OF INFRARED PHOTON-DETECTORS ON 3D TOPOGRAPHY
11-128	Oral	MONOLITHIC INTEGRATION OF NEMS TUNABLE COLOR FILTER AND LSI DRIVER CIRCUITS
11-133	Poster	CARBON NANOTUBE BASED MULTI-SPECTRUM INFRARED DETECTOR ARRAY
11-134	Poster	NANOGAP-CONTROLLABLE SELF-ASSEMBLY OF GOLD NANOPARTICLES USING NANOTRENCH TEMPLATE
11-135	Poster	AXIALLY STRETCHED NANO-THICK PIEZORESISTIVE SILICON CLAMPED-BEAMS TO SENSE SPECIFIC-REACTION-INDUCED DOUBLE-SIDE SURFACE-STRESS WITH MUCH HIGHER SENSITIVITY THAN CANTILEVERS
11-141	Poster	DESIGN, FABRICATION AND HELIUM ION MICROSCOPE PATTERNING OF SUSPENDED NANOMECHANICAL GRAPHENE STRUCTURES FOR NEMS APPLICATIONS
11-144	Poster	ELECTRON-BEAM EFFECT ON ELECTRICAL CHARACTERIZATION OF INDIVIDUAL NANOWIRES INSIDE SCANNING ELECTRON MICROSCOPE
11-148	Poster	NANOPROBE ELECTRODES CUT BY PHYSICAL STRETCH OF PARYLENE-INSULATED CARBON NANOTUBE BRIDGES
11-150	Poster	DIRECT GROWTH OF SINGLE WALLED CARBON NANOTUBES ON PAPER
11-152	Poster	HIGH PERFORMANCE BIOFUEL CELLS WITH TAILORING CARBON-BASED THIN FILM NANOCATALYSTS
11-153	Oral	HIGHLY SENSITIVE BILAYER STRUCTURED GRAPHENE SENSOR
11-155	Oral	IMPLEMENTATION OF INDUCTIVE PROXIMITY SENSOR USING NANOPOROUS ANODIC ALUMINUM OXIDE LAYER
11-158	Oral	GATE-ALL-AROUND SINGLE-CRYSTALLINE SILICON NANOWIRE
11-161	Poster	AN ULTRA-SENSITIVE NANOCOMPOSITE PRESSURE SENSOR PATTERNED IN A PDMS DIAPHRAGM
11-162	Poster	LARGE-SURFACE-AREA 3D SELF-ASSEMBLED NANO-POROUS STRUCTURE FOR HIGH-SENSITIVITY GAS-SENSING
11-163	Poster	MULTI-SPACER TECHNIQUE FOR LOW-VOLTAGE, HIGH-ASPECT-RATIO LATERAL ELECTROSTATIC ACTUATORS
11-164	Oral	OPTICAL MEASUREMENT OF STRAIN USING SCATTERING FROM NANOPARTICLE PAIRS ON ELASTOMER
11-165	Poster	DUAL SIDEWALL LATERAL NANOELECTROMECHANICAL RELAYS WITH BEAM ISOLATION
11-166	Poster	CMOS-MEMS ATOMIC FORCE MICROSCOPE
11-168	Poster	MULTIPLE-MODE ELECTROMECHANICAL RESONATORS BASED ON NANOSCALE THIN SIC MEMBRANES
12-001	Poster	A SELF-SUSTAINING PYROELECTRIC ENERGY HARVESTER UTILIZING SPATIAL THERMAL GRADIENTS
12-014	Poster	A NOVEL FLAT HIGH PERFORMANCE MICRO ENERGY HARVESTER
12-015	Poster	A MICRO ENERGY HARVESTER WITH 3D WIREBONDED MICROCOILS
12-017	Oral	GREEN VEHICLE SHOCK ABSORBER: MICROMACHINED WAVY SHAPED PIEZOELECTRIC CUSHION ENERGY HARVESTER AND ITS POWER GENERATING DEMONSTRATION BASED ON REAL NAVIGATION
12-021	Poster	THERMAL ENERGY HARVESTING USING SHAPE MEMORY/PIEZOELECTRIC COMPOSITES
12-023	Poster	A NEW APPROACH OF A SHAPE-OPTIMIZED PIEZOELECTRIC MEMS GENERATOR FOR FLUID-ACTUATED ENERGY SCAVENGING
12-024	Poster	POWER SWITCH SYSTEM BASED ON MICROELECTROMECHANICAL SWITCH
12-025	Oral	DESIGN AND MICROFABRICATION OF INTEGRATED MAGNETIC MEMS ENERGY HARVESTER FOR LOW FREQUENCY APPLICATION

ABSTRACT #	FORMAT	PAPER TITLE
12-030	Oral	A MILLIMETER-SIZED ELECTRET-ENERGY-HARVESTER WITH MICROFABRICATED HORIZONTAL ARRAYS AND VERTICAL PROTRUSIONS FOR POWER GENERATION ENHANCEMENT
12-031	Oral	DESIGN, MODELING, FABRICATION AND CHARACTERIZATION OF AN ELECTRET-BASED MEMS ELECTRO-STATIC ENERGY HARVESTER
12-033	Poster	SCREEN PRINTED PZT/PZT THICK FILM BIMORPH MEMS CANTILEVER DEVICE FOR VIBRATION ENERGY HARVESTING
12-034	Poster	PIEZOELECTRIC MEMS ENERGY HARVESTING MODULE BASED ON NON-RESONANT EXCITATION
12-036	Poster	NON-CONTACT REPULSIVE-FORCE EXCITATION FOR HIGHLY ENDURABLE WIDE FREQUENCY-RANGE ENERGY-HARVESTING
12-038	Poster	PASSIVE-SELF-TUNABLE VIBRATIONAL ENERGY HARVESTER
12-043	Poster	ENERGY HARVESTING FROM A ROTATING GEAR USING AN IMPACT TYPE PIEZOELECTRIC SCAVENGER
12-044	Oral	POWER ENHANCEMENT OF MICRO THERMOELECTRIC GENERATORS BY MICRO FLUIDIC HEAT TRANSFER PACKAGING
12-047	Poster	BIOCOMPATIBLE ALN-BASED PIEZO ENERGY HARVESTERS FOR IMPLANTS
12-048	Poster	PHOTOVOLTAICALLY RECHARGEABLE FUEL CELL ACCUMULATOR FOR ENERGY SELF-SUFFICIENT MICROSYSTEMS
12-053	Oral	DEVELOPMENT OF MEMS PIEZOELECTRIC ENERGY HARVESTERS FOR HIGH POWER OUTPUT AND VARIOUS RESONANT FREQUENCIES
12-056	Oral	A HIERARCHICAL APPROACH FOR THE FABRICATION OF THREE-DIMENSIONAL MICROBATTERY ELECTRODES
12-057	Poster	THINNED-PZT ON SOI PROCESS AND DESIGN OPTIMIZATION FOR PIEZOELECTRIC INERTIAL ENERGY HARVESTING
12-060	Poster	HIGHLY SCALABLE AND SENSITIVE BROADBAND 1HZ~1KHZ VIBRATED ENERGY HARVESTER WITH NOVEL SELF-ALTERNATION MAGNETIC-FLUX AND 3D COILS
12-061	Poster	MICROELECTROMAGNETIC ENERGY HARVESTER WITH INTEGRATED MAGNETS
12-068	Poster	HARVESTING TRAFFIC INDUCED BRIDGE VIBRATIONS
12-069	Poster	A MICRO INITIATOR REALIZED BY REACTIVE NI/AL NANOLAMINATES FOR MEMS APPLICATIONS
12-072	Poster	STUDY OF VIBRATION-INDUCED BROADBAND FLEXIBLE PIEZOELECTRIC ZNO MICRO-HARVESTER WITH STORAGE SYSTEM
12-077	Poster	LIQUID-ENCAPSULATED ENERGY HARVESTER FOR LOW FREQUENCY VIBRATIONS
12-078	Oral	AMORPHOUS SILICON-COATED CNT FOREST FOR ENERGY STORAGE APPLICATIONS
12-080	Oral	LARGE ARRAY ELECTROSPUN PVDF NANOGENERATORS ON A FLEXIBLE SUBSTRATE
12-082	Oral	HIGHLY EFFICIENT PIEZOELECTRIC MICRO HARVESTER FOR LOW LEVEL OF ACCELERATION FABRICATED WITH A CMOS COMPATIBLE PROCESS
12-084	Poster	A NOVEL ASSEMBLY METHOD FOR MICRO DIRECT METHANOL FUEL CELLS USING MULTI-LAYER BONDING TECHNIQUE
12-085	Poster	PIEZOELECTRIC PDMS FILMS FOR POWER MEMS
12-086	Poster	AGING CHARACTERISTICS OF ELECTRET USED IN A VIBRATION-BASED ELECTROSTATIC INDUCTION ENERGY HARVESTER
12-089	Poster	VIBRATION-DRIVEN MEMS ENERGY HARVESTER WITH VACUUM UV-CHARGED VERTICAL ELECTRETS
12-091	Poster	ELECTRET BASED ENERGY HARVESTER USING A SHARED SI ELECTRODE
12-096	Poster	INCREASED-BANDWIDTH MEANDERING VIBRATION ENERGY HARVESTER
12-097	Poster	FABRICATION OF HIGHLY DIELECTRIC NANO-BATIO3/EPOXY-RESIN COMPOSITE PLATE HAVING TRENCHES BY MOLD CASTING AND ITS APPLICATION TO CAPACITIVE ENERGY HARVESTING
12-098	Poster	EFFICIENT ENERGY HARVESTING FROM HUMAN MOTION USING WEARABLE PIEZOELECTRIC SHELL STRUCTURES
12-100	Oral	BIOFUEL CELLS WITH TREHALOSE TOWARD AN INSECT-IMPLANTED POWER SOURCE

ABSTRACT #	FORMAT	PAPER TITLE
12-106	Poster	A VIBRATION-BASED ELECTROMAGNETIC ENERGY HARVESTER SYSTEM WITH A HIGH CONVERSION EFFICIENCY INTERFACE ELECTRONICS
12-108	Poster	ELECTROSTATICALLY-DRIVEN ACTIVE SPACE RADIATOR USING NEAR-FIELD THERMAL RADIATION
12-109	Oral	A MICRO TESLA TURBINE FOR POWER GENERATION FROM LOW PRESSURE HEADS AND EVAPORATION DRIVEN FLOWS
12-111	Poster	EFFECT OF ILLUMINATION ON THERMIONIC EMISSION FROM MICROFABRICATED SILICON CARBIDE STRUCTURES