

特定研究集会（課題番号：28C-03）

集会名：第 5 回表層地質が地震動に及ぼす影響に関する国際シンポジウム

研究代表者：松島信一

開催日：平成 28 年 8 月 15 日～17 日

開催場所：外貿協會台北國際會議中心(Taipei International Convention Center)

参加者数：191 名 (所外 183 名, 所内 8 名)

・大学院生の参加状況：防災研からは参加者大学院生なし

研究及び教育への波及効果について

防災研究所から関連する最先端研究を多く発表し、防災研ブースを出展したことで、東南アジア諸国の研究者らをはじめとする国際コミュニティにおいて防災研究所のプレゼンスをさらに高めることができた。

研究集会報告

(1)目的

表層地質が地震動に及ぼす影響に関する研究（ESG 研究）の重要性は国際的には 1985 年メキシコ地震による大災害を契機に認識され、ESG 研究を進展させるために 4 回の国際シンポジウムが開催されてきた。第 5 回目が台湾・台北市にて「強震動予測を地震学及び地震工学に応用するための挑戦」を主題として、大きな被害を与える地震動を精度良く予測する手法やそのために必要な表層地盤を精度良く推定する手法について議論することを目的に開催された。

(2)成果のまとめ

ESG 研究はこれまで防災研究所を中心とする日本の研究者らによって牽引されて来っており、本シンポジウムはこれまで日本と欧米において開催されてきたが、今回は東南アジアで開催される初めてのシンポジウムとなった。このシンポジウムを防災研究所が共催し、防災研究所から関連する最先端研究を多く発表し、防災研ブースを出展したことで、東南アジア諸国の研究者らをはじめとする国際コミュニティにおいて防災研究所のプレゼンスをさらに高めることができた。

(3)プログラム

3 日間において、口頭発表 29 件、ポスター発表 100 件。詳細は後述する。

(4)研究成果の公表

本シンポジウムのポストカンファレンス論文集として、Earth, Planets and Space 誌において特集号が組まれている。

DPRI Newsletter, No.82, p.10, 2016.11 にて、Wilma James により報告済み。

**5th IASPEI / IAEE International Symposium:
Effects of Surface Geology on Seismic Motion August 15-17, 2016**

Program

Day 1 (Monday, Aug. 15th, 2016)			
08:00~09:00	Registration		
09:00~09:30	Opening Ceremony (Presentation Venue)		
09:30~10:10	Presentation Session I (Chair: Kuo-Liang Wen)	Kojiro Irikura	Methodology of simulating ground motions from crustal earthquake and mega-thrust subduction earthquakes: application to the 2016 Kumamoto earthquake (crustal) and the 2011 Tohoku earthquake (mega-thrust)
10:10~10:40	Coffee Break (Poster Session)		
10:40~11:20	Presentation Session II (Chair: Hiroshi Kawase)	Pierre-Yves Bard	Using ambient vibration measurements for risk assessment at an urban scale : from numerical proof of concept to a case study in Beirut (Lebanon)
11:20~12:00		Jonathan Stewart	Non-ergodic site response in seismic hazard analysis
12:00~13:30	Lunch Break (Poster Session)		
13:30~13:50	Presentation Session III (Chair: Shin Aoi, Shiann-Jong Lee)	Tomotaka Iwata	Long-period ground motion characteristics and simulations in the Osaka Basin during the 2011 great Tohoku earthquake
13:50~14:10		Ruizhi Wen	Directivity effect in the empirical Green's function method for ground-motion simulation
14:10~14:30		Li Zhao	Quantification of topography effect on seismic ground motion: a case study in northern Taiwan
14:30~14:50		Takuto Maeda	Two-dimensional wavefield reconstruction: tsunami data assimilation and seismic gradiometry
14:50~15:40	Coffee Break (Poster Session)		
15:40~16:00	Presentation Session IV (Chair: On-Lei Annie Kwok, Saburoh Midorikawa)	Saburoh Midorikawa	Site effects on strong motion records of the 2011 Tohoku, Japan earthquake
16:00~16:20		Yadab Dhakal	Analysis of S-wave H/V spectral ratios at the ocean bottom strong motion sites for soil nonlinearity
16:20~16:40		Jin-Hung Hwang	Soil liquefaction issues in Meinong earthquake
16:40~18:00	Poster Session		
18:00~20:00	Reception (TICC 4F-VIP Room)		

Day 2 (Tuesday, Aug. 16th, 2016)			
09:00~09:40	Presentation Session V (Chair: Huey-Chu Huang)	Hiroshi Kawase	Studies on the deep basin site effects based on the observed strong ground motions and microtremors
09:40~10:00		Kuo-Liang Wen	Construction of the shallow shear-wave velocity model in Taiwan
10:00~11:00	Coffee Break (Poster Session)		
11:00~11:20	Presentation Session VI (Chair: Pierre-Yves Bard)	Shigeki Senna	Modeling of the subsurface structure from the seismic bedrock to the ground surface for a broadband strong motion evaluation in the Kanto area, Japan
11:20~12:00		Kazuyoshi Kudo	Advantages of borehole array data for better understanding of strong ground motion in sedimentary basins
12:00~13:30	Lunch Break (Poster Change) & ESG Joint Working Group Meeting		
13:30~14:10	Presentation Session VII (Chair: Ralph Archuleta)	Francisco Sánchez-Sesma	Modeling and inversion of the microtremor H/V spectral ratio: physical basis behind the diffuse-field approach
14:10~14:30		Donat Fäh	Assessment of the complex seismic response of geological structures
14:30~14:50		Huey-Chu Huang	Estimation of shallow S-wave velocity structures using microtremor array measurements and their applications
14:50~15:30	Coffee Break (Poster Session)		
15:30~15:50	Presentation Session VIII (Chair: Francisco Sánchez-Sesma)	Jamison Steidl	Downhole Array Monitoring in the United States
15:50~16:10		Nai-Chi Hsiao	The CWB downhole seismic array and its application for earthquake observation in Taiwan
16:10~16:30		Ralph Archuleta	Scaling laws for strong ground motion parameters and their uncertainty for earthquakes with M3.3-7.7
16:30~18:00	Poster Session		
18:00~20:00	Conference Banquet (TICC 4F-VIP Room)		

Day 3 (Wednesday, Aug. 17th, 2016)			
09:00~09:20	Presentation Session IX (Chair: Chiun-Lin Wu)	Kuo-Chun Chang	Introduction of NCREE south laboratory
09:20~10:00		Brian Chiou	Hanging-wall and directivity effects on the near-fault ground motion
10:00~11:00	Coffee Break (Poster Session)		
11:00~11:20	Presentation Session X (Chair: Bor-Shouh Huang)	Mayssa Dabaghi	Simulation of near-fault ground motions for specified earthquake source and site characteristics
11:20~11:40		Shin Aoi	The 2016 Kumamoto earthquake sequence: strong motion and source processes
11:40~12:00		Kuo-Fong Ma	Killer pulses observed in 20160206 Meinong, ML 6.6, Taiwan, earthquake
12:00~13:30	Lunch Break (Poster Session)		
13:30~14:10	Presentation Session XI (Chair: Brian Chiou)	Chin-Hsiung Loh	Selection of ground-motion prediction equations for probabilistic seismic hazard analysis: case study of Taiwan
14:10~14:30		Marco Pagani	Probabilistic seismic hazard analysis: issues and challenges from the GEM perspective
14:30~15:20	Coffee Break (Poster Session)		
15:20~15:40	Presentation Session XII (Chair: Kuo-Fong Ma)	Hiroyuki Fujiwara	Improved seismic hazard assessment for Japan after the 2011 Great East Japan earthquake
15:40~16:00		Chin-Hsun Yeh	Progress report on seismic loss estimations in Taiwan
16:00~16:40	Beer Break (Poster & Exhibition Hall)		
16:40~17:00	Closing Ceremony (Poster & Exhibition Hall)		

Detailed session summary

Meaning of presentation number

Each presentation number will constitute from following rules,

[Type]-[Day]-[Number]-[Session]

- [Type]: including K indicate keynote lecture, I indicate invited speaker, P indicate poster
- [Day]: including 1 means day 1 (Aug. 15), 2 means day 2 (Aug. 16), 3 means day 3 (Aug. 17) for oral,
1 means first round and 2 means second round for poster.
- [Number]: indicate paper number for each session
- [Session]: including session you had choose for your submission

EX:

P101A means poster with paper number 1 in session A, with display time belonging to first round

I202C means paper number 2 in session C, with presentation time in Aug. 16.

Keynote

Paper NO.	First Name	Last Name	Paper Title
K101A	Kojiro	Irikura	METHODOLOGY OF SIMULATING GROUND MOTIONS FROM CRUSTAL EARTHQUAKE AND MEGA-THRUST SUBDUCTION EARTHQUAKES: APPLICATION TO THE 2016 KUMAMOTO EARTHQUAKE (CRUSTAL) AND THE 2011 TOHOKU EARTHQUAKE (MEGA-THRUST)
K102A	Pierre-Yves	Bard	USING AMBIENT VIBRATION MEASUREMENTS FOR RISK ASSESSMENT AT AN URBAN SCALE : FROM NUMERICAL PROOF OF CONCEPT TO A CASE STUDY IN BEIRUT (LEBANON)
K201B	Hiroshi	Kawase	STUDIES ON THE DEEP BASIN SITE EFFECTS BASED ON THE OBSERVED STRONG GROUND MOTIONS AND MICROTREMORS
K101C	Jonathan	Stewart	NON-ERGODIC SITE RESPONSE IN SEISMIC HAZARD ANALYSIS
K201D	Francisco	Sánchez-Sesma	MODELING AND INVERSION OF THE MICROTREMOR H/V SPECTRAL RATIO: PHYSICAL BASIS BEHIND THE DIFFUSE-FIELD APPROACH
K201E	Kazuyoshi	Kudo	ADVANTAGES OF BOREHOLE ARRAY DATA FOR BETTER UNDERSTANDING OF STRONG GROUND MOTION IN SEDIMENTARY BASINS
K301F	Brian	Chiou	HANGING-WALL AND DIRECTIVITY EFFECTS ON THE NEAR-FAULT GROUND MOTION
K301G	Chin-Hsiung	Loh	SELECTION OF GROUND-MOTION PREDICTION EQUATIONS FOR PROBABILISTIC SEISMIC HAZARD ANALYSIS: CASE STUDY OF TAIWAN

Invited

Paper NO.	First Name	Last Name	Paper Title
I101A	Tomotaka	Iwata	LONG-PERIOD GROUND MOTION CHARACTERISTICS AND SIMULATIONS IN THE OSAKA BASIN DURING THE 2011 GREAT TOHOKU EARTHQUAKE
I102A	Ruizhi	Wen	DIRECTIVITY EFFECT IN THE EMPIRICAL GREEN'S FUNCTION METHOD FOR GROUND-MOTION SIMULATION
I103A	Li	Zhao	QUANTIFICATION OF TOPOGRAPHY EFFECT ON SEISMIC GROUND MOTION: A CASE STUDY IN NORTHERN TAIWAN
I104A	Takuto	Maeda	TWO-DIMENSIONAL WAVEFIELD RECONSTRUCTION: TSUNAMI DATA ASSIMILATION AND SEISMIC GRADIOMETRY
I201B	Kuo-Liang	Wen	CONSTRUCTION OF THE SHALLOW SHEAR-WAVE VELOCITY MODEL IN TAIWAN
I202B	Shigeki	Senna	MODELING OF THE SUBSURFACE STRUCTURE FROM THE SEISMIC BEDROCK TO THE GROUND SURFACE FOR A BROADBAND STRONG MOTION EVALUATION IN THE KANTO AREA, JAPAN
I101C	Saburoh	Midorikawa	SITE EFFECTS ON STRONG MOTION RECORDS OF THE 2011 TOHOKU, JAPAN EARTHQUAKE
I102C	Yadab	Dhakai	ANALYSIS OF S-WAVE H/V SPECTRAL RATIOS AT THE OCEAN BOTTOM STRONG MOTION SITES FOR SOIL NONLINEARITY
I103C	Jin-Hung	Hwang	SOIL LIQUEFACTION ISSUES IN MEINONG EARTHQUAKE
I201D	Donat	Fäh	ASSESSMENT OF THE COMPLEX SEISMIC RESPONSE OF GEOLOGICAL STRUCTURES
I202D	Huey-Chu	Huang	ESTIMATION OF SHALLOW S-WAVE VELOCITY STRUCTURES USING MICROTREMOR ARRAY MEASUREMENTS AND THEIR APPLICATIONS
I201E	Jamison	Steidl	DOWNHOLE ARRAY MONITORING IN THE UNITED STATES
I202E	Nai-Chi	Hsiao	THE CWB DOWNHOLE SEISMIC ARRAY AND ITS APPLICATION FOR EARTHQUAKE OBSERVATION IN TAIWAN
I201F	Ralph	Archuleta	SCALING LAWS FOR STRONG GROUND MOTION PARAMETERS AND THEIR UNCERTAINTY FOR EARTHQUAKES WITH M3.3-7.7
I303F	Mayssa	Dabaghi	SIMULATION OF NEAR-FAULT GROUND MOTIONS FOR SPECIFIED EARTHQUAKE SOURCE AND SITE CHARACTERISTICS

Paper NO.	First Name	Last Name	Paper Title
I304F	Shin	Aoi	THE 2016 KUMAMOTO EARTHQUAKE SEQUENCE: STRONG MOTION AND SOURCE PROCESSES
I305F	Kuo-Fong	Ma	KILLER PULSES OBSERVED IN 20160206 MEINONG, ML 6.6, TAIWAN, EARTHQUAKE
I301G	Marco	Pagani	PROBABILISTIC SEISMIC HAZARD ANALYSIS: ISSUES AND CHALLENGES FROM THE GEM PERSPECTIVE
I302G	Hiroyuki	Fujiwara	IMPROVED SEISMIC HAZARD ASSESSMENT FOR JAPAN AFTER THE 2011 GREAT EAST JAPAN EARTHQUAKE
I303G	Chin-Hsun	Yeh	PROGRESS REPORT ON SEISMIC LOSS ESTIMATIONS IN TAIWAN

Poster

Paper NO.	First Name	Last Name	Paper Title
P101A	Tomotaka	Iwata	THREE-DIMENSIONAL GROUND MOTION SIMULATIONS OF REPEATED ARRIVALS AT AMAGASAKI STRONG MOTION STATION, NW OF THE OSAKA SEDIMENTARY BASIN, FORM LOCAL EVENTS
P102A	Strong	Wen	THE ESTIMATION OF STRONG MOTION FROM THE DESTRUCTIVE EARTHQUAKES IN SW TAIWAN
P103A	Yi-Wun	Liao	GROUND MOTION SIMULATION OF THE 1909 TAIPEI EARTHQUAKE
P104A	Toshimi	Satoh	BROADBAND SOURCE MODEL AND STRONG MOTIONS OF THE 1855 ANSEI-EDO EARTHQUAKE ESTIMATED BY THE EMPIRICAL GREEN'S FUNCTION METHOD
P105A	Elif	Oral	SPECTRAL ELEMENT MODELING OF SEISMIC WAVE PROPAGATION IN 1D-1C AND 1D-3C LINEAR AND NONLINEAR MEDIA INCLUDING PORE PRESSURE EFFECTS
P106A	Yosuke	Nagasaka	INTRODUCTION OF THE RUPTURE DIRECTIVITY EFFECT TO THE PSEUDO POINT-SOURCE MODEL
P107A	Celine	Gelis	NUMERICAL STUDY OF 1D/2DWAVE PROPAGATION IN THE MYGNODIAN BASIN, EUROSEISTEST, NORTHERN GREECE
P108A	Phyoe Swe	Aung	MICROTREMOR SURVEY IN SAGAING CITY, MYANMAR FOR SEISMIC MICROZONATION
P109A	Michihiro	Ohori	ESTIMATION OF EMPIRICAL GREEN'S TENSOR SPATIAL DERIVATIVE ELEMENTS: A PRELIMINARY STUDY USING STRONG MOTION RECORDS IN SOUTHERN FUKUI PREFECTURE, JAPAN
P110A	Atsushi	Nozu	SIMULATION OF STRONG GROUND MOTION IN THE KANTO PLAIN DURING THE 2011 TOHOKU, JAPAN, EARTHQUAKE (MW9.0) WITH THE PSEUDO POINT-SOURCE MODEL
P111A	Subeg	Bijukchhen	TRIAL CONSTRUCTION OF 1-D VELOCITY STRUCTURE OF KATHMANDU VALLEY USING THE 2015 GORKHA EARTHQUAKE RECORDS
P112A	Susumu	Ohno	LONG-PERIOD GROUND-MOTION CHARACTERISTICS IN SENDAI, JAPAN, INTERPRETED BY WAVE PROPAGATION ANALYSES OF 3-D SUBSURFACE STRUCTURES
P113A	Ying-Chi	Chen	STRONG GROUND MOTION SIMULATION AND SOURCE MODELING OF THE OCTOBER 31, 2013 RUISUI, TAIWAN EARTHQUAKE USING EMPIRICAL GREEN'S FUNCTION METHOD

Paper NO.	First Name	Last Name	Paper Title
P114A	Anatoly	Petukhin	HETEROGENEOUS RUPTURE VELOCITY MODEL EXTRACTED FROM SOURCE INVERSION RESULTS OF INLAND EARTHQUAKES
P115A	Takashi	Akazawa	STRONG GROUND MOTION SIMULATION BY STOCHASTIC GREEN'S FUNCTION METHOD INCORPORATED WITH EMPIRICAL SITE EFFECTS IN TIME DOMAIN
P116A	Ken	Miyakoshi	DEPTH DEPENDENCY OF STRESS PARAMETERS ON STRONG MOTION GENERATION AREAS FOR INLAND CRUSTAL EARTHQUAKES IN JAPAN
P117A	Hongjun	Si	PROPOSAL OF EVALUATION EQUATIONS FOR AMPLIFICATION FACTOR FOR 5% DAMPING RESPONSE SPECTRA INFERRED FROM THE VERTICAL ARRAY OBSERVATIONS
P118A	Diego	Mercerat	MODELING OF 1D WAVE PROPAGATION IN NONLINEAR SOILS USING THE ELASTO-PLASTIC IWAN MODEL BY FOUR NUMERICAL SCHEMES
P119A	Jyun-Yan	Huang	VARIOUS FAULT SLIP ASPERITY MODELS FOR THE ETF-BASED HIGH FREQUENCY STRONG MOTION SIMULATION OF THE SHANCHIAO FAULT, TAIWAN
P120A	Chiara	Varone	SITE-CITY INTERACTION IN A RECENT URBANIZED AREA: PRELIMINARY RESULTS FOR THE CASE STUDY OF ROME (ITALY)
P121A	Chiara	Varone	DISTRIBUTION OF EARTHQUAKE INDUCED STRAIN EFFECTS IN THE TIBER ALLUVIAL VALLEY DEPOSITS - ROME ITALY
P122A	Sohan	Lal	MODELING OF THE SOURCE OF THE 2015 NEPAL EARTHQUAKE USING MODIFIED SEMI-EMPIRICAL APPROACH
P123A	Ming-Che	Hsieh	LONG-PERIOD GROUND MOTION SIMULATION OF THE 1909 TAIPEI EARTHQUAKE SCENARIOS
P124A	Takashi	Hayakawa	A METHOD FOR IMPROVING 3-D VELOCITY STRUCTURE MODELS WITH SITE RESPONSES IN A PERIOD RANGE OF 2 TO 5 S
P125A	Yoshiya	Hata	EVALUATION OF 'SAF VALUE' AT RECLAIMED LAND IN RESIDENTIAL AREA BASED ON SEISMIC ARRAY OBSERVATION WITH VERY HIGH DENSE SPATIAL LOCATION
P126A	Hiroyuki	Goto	EFFECT OF SUBSURFACE IRREGULARITY ON GROUND MOTION COHERENCE
P127A	Svetlana	Stripajova	IDENTIFICATION OF KEY STRUCTURAL PARAMETERS RESPONSIBLE FOR SITE EFFECTS BASED ON EXTENSIVE NUMERICAL SIMULATIONS
P128A	Jozef	Kristek	AN OPTIMIZED FINITE-DIFFERENCE SCHEME FOR MODELING EARTHQUAKE GROUND MOTION IN LOCAL SURFACE SEDIMENTARY BASINS

Paper NO.	First Name	Last Name	Paper Title
P101B	Hao	Wu	AN ALTERNATIVE METHOD TO IDENTIFY UNDERGROUND VELOCITY STRUCTURES FROM MICROTREMOR H/V SPECTRAL RATIO
P102B	Chun-Te	Chen	SHALLOW S-WAVE VELOCITY STRUCTURE IN THE WESTERN PLAIN OF TAIWAN FROM MICROTREMOR ANALYSIS
P103B	Haruko	Sekiguchi	CONSTRUCTION OF A 3D VELOCITY STRUCTURE MODEL OF OSAKA SEDIMENTARY BASIN
P104B	Kimiyuki	Asano	SURFACE WAVE GROUP VELOCITY TOMOGRAPHY IN THE OSAKA SEDIMENTARY BASIN, JAPAN, USING AMBIENT NOISE CROSS-CORRELATION FUNCTIONS
P105B	Kazuhiro	Somei	ESTIMATION OF SITE AMPLIFICATION FACTORS FOR STRONG MOTION STATIONS IN THE HOKURIKU DISTRICT, JAPAN
P106B	Shinako	Noguchi	SITE CHARACTERISTICS FOR AS-NET, SEISMIC OBSERVATION NETWORK AROUND SHIMOKITA PENINSULA
P107B	Shun Chiang	Chang	THE HIGH FREQUENCY SPECTRAL DECAY OF SHEAR WAVES IN TAIWAN
P108B	Cheng-Feng	Wu	DETECTION OF FRACTURE ZONE USING MICROTREMOR ARRAY MEASUREMENT
P109B	Mingwey	Huang	THE DECAY EFFECT AT THE HIGH FREQUENCY OF THE NEAR SURFACE SEDIMENT IN THE TAIPEI BASIN
P110B	Yoshikazu	Shingaki	APPLICATION OF S-WAVE IMPEDANCE TO SITE AMPLIFICATION FACTORS
P111B	Kahori	Iiyama	SPATIAL DISTRIBUTION OF SEISMIC RESPONSE BY SHALLOW SEDIMENTS IN FURUKAWA DISTRICT, MIYAGI, JAPAN
P112B	Che-Min	Lin	S-WAVE VELOCITY STRUCTURE OF THE ILAN BASIN USING THE MICROTREMOR H/V SPECTRAL RATIO MODELING
P113B	Po-Shen	Lin	THE EFFECT OF BASIN DEPTH PARAMETER Z1.0 TO GROUND MOTION PREDICTION EQUATION
P101C	Pierre-Yves	Bard	MODULATION OF WEAK MOTION SITE TRANSFER FUNCTIONS BY NON-LINEAR BEHAVIOR: A STATISTICAL COMPARISON OF 1D NUMERICAL SIMULATION WITH KIKNET DATA.
P102C	Aurore	Laurendeau	PREDICTION OF REFERENCE MOTIONS FROM CORRECTED KIK-NET RECORDS OF THE LOCAL SITE EFFECTS
P103C	Aurore	Laurendeau	PRELIMINARY OBSERVATIONS OF SITE EFFECTS DURING THE MW 7.8 PEDERNALES (ECUADOR) EARTHQUAKE OF APRIL 16TH 2016

Paper NO.	First Name	Last Name	Paper Title
P104C	Hori	Arika	NONLINEAR SITE AMPLIFICATION DERIVED FROM STRONG MOTION RECORDS INCLUDING RECORDS IN THE 2011 OFF THE PACIFIC COAST OF TOHOKU EARTHQUAKE
P105C	Yefei	Ren	NONLINEAR SITE RESPONSE IN 2008 WENCHUAN EARTHQUAKE IDENTIFIED IN BOTH FREQUENCY AND TIME DOMAINS
P106C	On Lei Annie	Kwok	EVALUATION OF SITE EFFECT AT SURFACE-DOWNHOLE GROUND MOTION STATIONS IN TAIWAN BY NONLINEAR GROUND RESPONSE ANALYSES
P107C	Rami	Ibrahim	SITE RESPONSE ANALYSES IN THE TOKYO METROPOLITAN AREA USING EQUIVALENT LINEAR APPROACH
P108C	Olga	Pavlenko	FEATURES OF SOIL BEHAVIOUR IN THE NEAR-FAULT ZONES DURING THE 2011 TOHOKU MEGATHRUST (MW=9.0) EARTHQUAKE
P201D	Shigeki	Senna	DEVELOPMENT OF CLOUD-TYPE MICROTREMOR OBSERVATION SYSTEM
P202D	Manuel	Hobiger	SITE CHARACTERIZATION IN THE FRAMEWORK OF THE RENEWAL OF THE SWISS STRONG MOTION NETWORK (SSMNET)
P203D	Vincent	Perron	BROADBAND SITE EFFECT ASSESSMENT: COMPARISON BETWEEN APPROACHES BASED ON EARTHQUAKES AND ON MICROTREMOR ON TWO SITES
P204D	Shinichi	Matsushima	DIRECTIONALLY DEPENDENT H/V SPECTRAL RATIOS OF MICROTREMORS AT ONAHAMA, FUKUSHIMA, JAPAN
P205D	Kosuke	Chimoto	MICROTREMOR ARRAY EXPLORATION AT DAMAGED SITES DURING THE 1912 MUREFTE EARTHQUAKE, TURKEY
P206D	Masayuki	Yoshimi	MICROTREMOR SURVEYS IN BEPPU BAY SEDIMENTARY BASIN, JAPAN, FOR BETTER ESTIMATION OF THE STRONG MOTION
P107D	Yasuyuki	Nabeshima	H/V SPECTRAL RATIO OF MICRO-TREMORS IN THE RESIDENTIAL LAND EMBANKMENTS DAMAGED BY THE 2011 TOHOKU EARTHQUAKE
P208D	Sadanori	Higashi	JOINT RESEARCH ON MODELING OF HETEROGENEOUS SUBSURFACE STRUCTURE FOR EVALUATING SPATIAL VARIATION OF GROUND MOTION CHARACTERISTICS
P209D	Kazuaki	Masaki	EVALUATION OF SHEAR WAVE VELOCITY IN BUILDINGS FOR SEISMIC CAPACITY ASSESSMENT USING MICROTREMOR MEASUREMENT
P210D	Kazuhiro	Seita	GEOPHYSICAL EXPLORATION OF SHALLOW S-WAVE VELOCITY STRUCTURE IN THE VICINITY OF TACHIKAWA-FAULT, JAPAN

Paper NO.	First Name	Last Name	Paper Title
P211D	Seiji	Tsuno	LOCAL SITE EFFECTS GENERATING STRONG GROUND MOTIONS FOR A PERIOD OF 2 TO 3 SECONDS IN THE KANTO REGION, DURING THE 2011 OFF THE PACIFIC COAST OF TOHOKU EARTHQUAKE
P212D	Kyosuke	Okamoto	APPLICATION OF MICROTREMOR EXPLORATIONS TO AN IRREGULAR GROUND-CASE STUDY IN THE MIDDLE COAST OF MIYAZAKI PREFECTURE
P213D	Xin	Wang	A METHOD OF DETECTING DEGRADATION PARTS OF BUILDINGS USING VERTICAL MEASUREMENT ARRAY: APPLICATION TO SUPER HIGH-RISE BUILDINGS
P214D	Hiroaki	Yamanaka	APPLICATION OF MICROTREMOR ARRAY EXPLORATION FOR SITE AMPLIFICATION IN JAPAN
P201E	Chi-Chin	Tsai	LEARNING FORM BLIND PREDICTION OF GROUND RESPONSE AT THE TURKEY FLAT
P202E	Yu Hua	Liou	ASSESSMENT EMPIRICAL SITE AMPLIFICATION IN TAIWAN BY RATIO METHODS WITH CWB NEXT GENERATION SEISMIC NETWORK
P203E	Damiano	Federico	IN SITU SHEAR MODULUS REDUCTION COMPUTATION USING SEISMIC INTERFEROMETRY BY DECONVOLUTION FROM BOREHOLE AND SURFACE DATA: THEORY AND EXAMPLES
P204E	Masatoshi	Fujioka	DEEP VERTICAL ARRAY OBSERVATION IN KASHIWAZAKI-KARIWA NUCLEAR POWER STATION
P206E	Hiroyuki	Miyakoshi	INFLUENCE OF SOURCE, PATH, AND SITE EFFECTS ON RELATIONSHIP BETWEEN P-WAVES AT SEISMIC BEDROCK AND S-WAVES ON THE GROUND SURFACE: EVALUATION FOR STATIONS OF KIK-NET IN AND AROUND THE KANTO BASIN
P201F	Rosemary	Fayjaloun	THE VARIABILITY OF THE DIRECTIVITY PULSE PERIODS RECORDED DURING AN EARTHQUAKE
P202F	Yating	Lee	SYNTHETIC GROUND-MOTION SIMULATION USING A SPATIAL STOCHASTIC MODEL WITH SLIP SELF-SIMILARITY
P203F	Kunikazu	Yoshida	SOURCE PROCESS OF THE 2016 KUMAMOTO EARTHQUAKE (MJ7.3) INFERRED FROM KINEMATIC INVERSION OF THE NEAR FAULT STRONG MOTION
P204F	Marco	Stupazzini	NEAR-FAULT EARTHQUAKE GROUND-MOTION SIMULATION IN THE ISTANBUL AREA
P205F	Chung-Jung	Lee	CENTRIFUGE MODELING ON SURFACE DEFORMATION PROFILES AND SUBSURFACE DISTORSION ZONE INDUCED BY REVERSE FAULTING IN COMPOSITE STRATA

Paper NO.	First Name	Last Name	Paper Title
P206F	Michiko	Shigefuji	CHARACTERISTICS OF LONG-PERIOD GROUND MOTION IN THE KATHMANDU VALLEY FROM THE LARGE AFTERSHOCKS OF THE 2015 GORKHA NEPAL EARTHQUAKE
P207F	Nobuo	Takai	FEATURES OF GROUND ACCELERATIONS IN THE KATHMANDU VALLEY DURING THE 2015 GORKHA NEPAL EARTHQUAKE
P208F	Chun-Hsiang	Kuo	STRONG MOTIONS AND SITE EFFECTS IN THE NEAR-SOURCE REGION OF THE MEINONG, TAIWAN EARTHQUAKE
P201G	Cheng-Tao	Yang	IMPACT OF MEINONG EARTHQUAKE ON NATIONAL HIGHWAY TRAFFIC
P202G	Kahori	Iiyama	DAMAGE ANALYSIS OF WOODEN HOUSES SUBJECTED TO 2011 TOHOKU EARTHQUAKE IN FURUKAWA DISTRICT, MIYAGI, JAPAN
P203G	Kun-Sung	Liu	SEISMIC HAZARDS AND ASSESSMENTS OF HUMAN FATALITY IN CHIANAN AREA, TAIWAN
P204G	Phuong	Nguyen Hong	URBAN SEISMIC RISK ASSESSMENT AND LOSS ESTIMATION IN VIETNAM
P205G	Vladimir	Sokolov	PROBABILISTIC SEISMIC HAZARD ANALYSIS BASED ON DISTRIBUTION OF EARTHQUAKES WITH MAXIMUM EXPECTED MAGNITUDES.
P206G	Vladimir	Sokolov	ON THE USE OF MULTIPLE-SITE PROBABILISTIC SEISMIC HAZARD ASSESSMENT
P207G	Seung Han	Lee	INVESTIGATION OF POSSIBILITIES TO REDUCE UNCERTAINTIES OF SEISMIC RISK EVALUATION FOR NANKAI TROUGH EARTHQUAKES
P208G	Ming-Kai	Hsu	USING PROBABILISTIC SEISMIC HAZARD ANALYSIS IN ASSESSING SEISMIC RISK FOR TAIPEI CITY AND NEW TAIPEI CITY
P209G	Chung-Han	Chan	SEISMIC HAZARD ASSESSMENT FOR MYANMAR: EARTHQUAKE MODEL DATABASE, GROUND-MOTION SCENARIOS, AND PROBABILISTIC ASSESSMENTS
P210G	Le Minh	Nguyen	THE 2014's UPDATED VERSION OF VIETNAM SEISMIC HAZARD MAP
P201H	Tomiichi	Uetake	LONG-PERIOD GROUND MOTION IN TOKYO BAY AREA DURING THE M7 CLASS EVENTS THAT OCCURRED IN THE NORTH OF NAGANO PREFECTURE, JAPAN
P202H	Yoshihiro	Sawada	INVESTIGATION ABOUT DIRECTIONAL DEPENDENCE OF EARTHQUAKE AMPLIFYING CHARACTERISTIC BASED ON HIGH-DENSITY SEISMIC OBSERVATION
P203H	Shunichi	Kataoka	ESTIMATING SITE FACTORS AT STRONG GROUND MOTION OBSERVATION STATIONS IN HACHINOHE CITY

Paper NO.	First Name	Last Name	Paper Title
P204H	Ulrike	Kleinbrod	ON THE SEISMIC RESPONSE OF INSTABLE ROCK SLOPES BASED ON AMBIENT VIBRATION RECORDINGS
P205H	Yu-Wen	Chang	IDENTIFICATION OF BASIN TOPOGRAPHY CHARACTERISTIC USING MULTIVARIATE SINGULAR SPECTRUM ANALYSIS: CASE STUDY OF THE TAIPEI BASIN
P206H	Masumi	Yamada	EVALUATION OF EFFECTIVE INPUT MOTIONS TO STRUCTURES USING SEISMOGRAMS RECORDED AT STRUCTURE FOUNDATIONS AND FREE FIELD
P207H	Anna	Kaiser	QUANTIFICATION AND MODELLING OF LOCAL SITE AMPLIFICATION IN CHRISTCHURCH DURING THE 2010 – 2011 CANTERBURY EARTHQUAKE SEQUENCE BASED ON FOURIER SPECTRA MODELS
P208H	Yi-Zen	Chang	THE MONITORING OF SHALLOWER CRUSTAL ACTIVITIES IN YUN-CHIA-NAN AREA, TAIWAN
P209H	Masahiro	Sawairi	A STUDY ON THE LOCAL AMPLIFICATION MECHANISMS AT HAMAOKA NUCLEAR POWER STATION IN 2009 SURUGA BAY EARTHQUAKE
P210H	Vincent	Perron	ANALYSIS OF ROTATION SENSOR DATA FROM THE SINAPS@ KEFALONIA POST-SEISMIC EXPERIMENT
P211H	Shu-Hsien	Chao	DEVELOPMENT OF HORIZONTAL TAIWAN GROUND MOTION MODEL FOR SHALLOW CRUST AND SUBDUCTION EARTHQUAKE
P212H	Chiao Chu	Hsu	DEVELOPMENT OF HORIZONTAL SPECTRAL ACCELERATIONS RELATIONSHIP BETWEEN ROTD50 AND ROTD100 FOR TAIWAN EARTHQUAKE
P213H	Hiroe	Miyake	STRONG MOTION OBSERVATION DURING AND AFTER THE 2014 NORTHERN NAGANO EARTHQUAKE
P214H	Hiroe	Miyake	SEISMIC INTENSITY MEASUREMENT BY IT KYOSHIN SEISMOMETER AND STRONG MOTION ACCELEROMETER AT CAMPUS BUILDINGS