



3D-ARCH 2019

📍 BERGAMO, ITALY 📅 6-8 FEBRUARY 2019



Preliminary program – 08.01.2019

WEDNESDAY, February 6th 2019	
9:00	Opening
9:30-10:45	Technical Session 1 – 3D Surveying and Modeling
	<ul style="list-style-type: none"> ● GIGAPIXEL ORTOPHOTO AS SUPPORT FOR THE MAINTENENCE OF COMPLEX BUILDING Perfetti, L.; Fassi, F.; Gulsan, H. ● A COMPLETE FRAMEWORK OPERATING SPATIALLY-ORIENTED RTI IN A 3D/2D CULTURAL HERITAGE DOCUMENTATION AND ANALYSIS TOOL Pamart, A.; Ponchio, F.; Abergel, V.; Alaoui Mdarhri, A.; Corsini, M.; Dellepiane, M.; Morlet, F.; Scopigno, R.; De Luca, L. ● ALEPPO – BEFORE AND AFTER Fangi, G.
10:45	Sponsor presentation
11:00-11:30	COFFEE BREAK
11:30-13:00	Technical Session 2 – Point cloud processing
	<ul style="list-style-type: none"> ● CLUSTERING OF WALL GEOMETRY FROM UNSTRUCTURED POINT CLOUDS Bassier, M.; Vergauwen, M. ● POINT CLOUD SEGMENTATION AND SEMANTIC ANNOTATION AIDED BY GIS DATA FOR HERITAGE COMPLEXES Murtiyoso, A.; Grussenmeyer, P. ● COMPARISON WITH ACCURACY OF TERRESTRIAL LASER SCANNER BY USING POINT CLOUD ALIGNED WITH SHAPE MATCHING AND BEST FITTING METHODS Ogawa, T.; Hori, Y. ● AUTOMATED DETECTION AND LAYOUT REGULARIZATION OF SIMILAR FEATURES IN INDOOR POINT CLOUD

	Previtali, M.; Barazzetti, L.; Roncoroni, F.
13:00-14:00	LUNCH
14:00-15:30	POSTERS and DEMOS
15:30-16:00	COFFEE BREAK
16:00-17:45	Keynote – Jan Boehm (UCL, UK) "Modelling from point clouds and the BIM process"
	Technical Session 3 – BIM
	<ul style="list-style-type: none"> ● THE ARCHAEOLOGICAL ANALYSIS OF MASONRY FOR THE RESTORATION PROJECT IN HBIM Trizio, I.; Savini, F.; Giannangeli, A.; Boccabella, R.; Petrucci, G. ● AUTOMATING THE VERIFICATION OF HERITAGE BUILDING INFORMATION MODELS CREATED FROM POINT CLOUD DATA Macher, H.; Chow, L.; Fai, S. ● AS-BUILT RELIABILITY IN ARCHITECTURAL HBIM MODELING Maiezza, P.
19:00	Welcome party

THURSDAY, February 7th 2019

9:00-10:45	Keynote – G. Vassena (Univ. of Brescia, Italy) "iMMS approach for construction monitoring and geospatial applications: new prospective and near future developments"
	Technical Session 4 – Data fusion
	<ul style="list-style-type: none"> ● QUALITY FEATURES FOR THE INTEGRATION OF TERRESTRIAL AND UAV IMAGES Farella, E. M.; Torresani, A.; Remondino, F. ● A COMBINED APPROACH FOR SURVEYING COMPLEX COASTAL SITES Liuzzo, L.; Feo, R.; Giuliano, S.; Pampalone, V. ● THE INTEGRATED 3D SURVEY FOR PLANNED CONSERVATION: THE FORMER CHURCH AND CONVENT OF SANT'AGOSTINO IN BERGAMO Cardaci, A.; Mirabella Roberti, G.; Versaci, A.
10:45	Sponsor presentation
11:00-11:30	COFFEE BREAK
11:30-13:00	Technical Session 5 – 3D in Heritage
	<ul style="list-style-type: none"> ● MODELLING BUILDING COSTS FROM 3D BUILDING MODELS - ESTIMATING THE CONSTRUCTION EFFORT FROM IMAGE-BASED SURFACE MODELS OF DRY-STONE SHEPHERD SHELTERS (KRAS, SLOVENIA) Štuhec, S.; Verhoeven, G.; Štuhec, I. ● KNOWLEDGE-BASED FRAMEWORK FOR AUTOMATIC SEMANTISATION AND RECONSTRUCTION OF MILITARY ARCHITECTURE ON CITY-SCALE MODELS Gros, A.; Jacquot, K.; Messaoudi, T. ● HIGH QUALITY TEXTURE MAPPING PROCESS AIMED AT THE OPTIMIZATION OF 3D STRUCTURED LIGHT MODELS Inzerillo, L.; Di Paola, F.; Alogna, Y. ● 3D MODELING FOR ROCK ART DOCUMENTATION USING LIGHTWEIGHT MULTISPECTRAL CAMERA Zainuddin, K.; Majid, Z.; Ariff, M. F. M.; Idris, K. M.; Abbas, M. A.; Darwin, N.
13:00-14:00	LUNCH
14:00-15:30	POSTERS and DEMOS
15:30-16:00	COFFEE BREAK
16:00-17:30	FINE Benchmark session
18:30	Guided tour
19:30	Social dinner

FRIDAY, February 8th 2019

9:30-11:00	Keynote – L. De Luca (MAP-CNRS, France) "Reality-based 3D annotation of cultural heritage artefacts"
	Technical Session 6 – 3D investigations
	<ul style="list-style-type: none"> ● A COMPARATIVE STUDY AMONG THREE REGISTRATION ALGORITHMS: PERFORMANCE, QUALITY ASSURANCE AND ACCURACY Wujanz, D.; Barazzetti, L.; Previtali, M.; Scaioni, M. ● FOVEON VS BAYER: COMPARISON OF 3D RECONSTRUCTION PERFORMANCES Vlachos, M.; Skarlatos, D.; Bodin, P.
11:00-11:30	COFFEE BREAK
11:30-13:00	Technical Session 7 – Semantic
	<ul style="list-style-type: none"> ● SEMANTIC PHOTOGRAMMETRY – BOOSTING IMAGE-BASED 3D RECONSTRUCTION WITH SEMANTIC LABELLING Stathopoulou, E.K.; Remondino, F. ● TOWARDS DEEP LEARNING FOR ARCHITECTURE: A MONUMENT RECOGNITION MOBILE APP Palma, V. ● GENERATIVE ADVERSARIAL NETWORKS FOR SINGLE PHOTO 3D RECONSTRUCTION Kniaz, V.V.; Remondino, F.; Knyaz, V.A. ● VAULT MODELING WITH NEURAL NETWORKS Barazzetti, L.; Previtali, M.
13:00-14:00	LUNCH
14:00-15:00	POSTERS and DEMOS
15:00-16:30	Technical Session 8 – Heritage visualization and VR/AR
	<ul style="list-style-type: none"> ● INTERACTIVE IMAGE GEOLOCALIZATION IN AN IMMERSIVE WEB APPLICATION Harrach, M.; Devaux, A.; Brédif, M. ● ACCESS AND WEB-SHARING OF 3D DIGITAL DOCUMENTATION OF ENVIRONMENTAL AND ARCHITECTURAL HERITAGE Tommasi, C.; Fiorillo, F.; Jiménez Fernández-Palacios, B.; Achille, C. ● VIRTUALISING AN OTTOMAN FORTRESS – LASER SCANNING AND 3D MODELLING FOR THE DEVELOPMENT OF AN INTERACTIVE, IMMERSIVE VIRTUAL REALITY APPLICATION Tschirschwitz, F.; Büyüksalih, G.; Kersten, T. P.; Kan, T.; Enc, G.; Baskaraca, P. ● PARAMETRIC SURFACES FOR AUGMENTED ARCHITECTURE REPRESENTATION Russo, M.; Menconero, S.; Baglioni, L.
16:30	Awards and Closing

POSTERS PRESENTATIONS - WEDNESDAY, February 6th 2019, 14:00-15:30

- CREATING. VISUALIZING AND SHARING HIGH-POLY AND MULTI-TEXTURES MODELS ON THE WEB
Rechichi, F.; Fiorillo, F.
- RECREATING CULTURAL HERITAGE ENVIRONMENTS FOR VR USING PHOTOGRAMMETRY
Dhanda, A.; Reina Ortiz, M.; Weigert, A.; Paladini, A.; Min, A.; Gyi, M.; Su, S.; Fai, S.; Santana Quintero, M.
- INTEGRATION AND COMPARISON OF CLOSE-RANGE SFM METHODOLOGIES FOR THE ANALYSIS AND THE DEVELOPMENT OF THE HISTORICAL CITY CENTER OF BETHLEHEM
Parrinello, S.; Picchio, F.
- SEMANTIC WEB TECHNOLOGIES MEET BIM FOR ACCESSING AND UNDERSTANDING CULTURAL HERITAGE
Iadanza, E.; Maietti, F.; Ziri, A.E.; Di Giulio, R.; Medici, M.; Ferrari, F.; Bonsma, P.; Turillazzi, B.
- MACRO PHOTOGRAMMETRY IN INVENTORY OF HISTORICAL ENGRAVINGS AT THE ROYAL CASTLE IN WARSAW

- Zawieska, D.; Markiewicz, J.; Łuba, M.
- IMAGE RECORDING CHALLENGES FOR PHOTOGRAMMETRIC CONSTRUCTION SITE MONITORING
Vincke, S.; Bassier, M.; Vergauwen, M.
 - THE EUROPEAN RESEARCH NIGHT: NEW WAYS FOR COMMUNICATING SCIENCE WITH ICT AND VIDEOMAPPING
Quattrini, R.; Pierdicca, R.; Lucidi, A.; Di Stefano, F.; Malinverni, E. S.
 - UNCERTAINTY VISUALIZATION APPROACHES FOR 3D MODELS OF CASTLES RESTITUTED FROM ARCHEOLOGICAL KNOWLEDGE
Landes, T.; Heissler, M.; Koehl, M.; Benazzi, T.; Nivola, T.
 - CONNECTING INSIDE AND OUTSIDE THROUGH 360° IMAGERY FOR CLOSE-RANGE PHOTOGRAMMETRY
Barazzetti, L.; Previtali, M.; Roncoroni, F.; Valente, R.
 - A BIM APPROACH FOR THE ANALYSIS OF AN ARCHAEOLOGICAL MONUMENT
Bosco, A.; D'Andrea, A.; Nuzzolo, M.; Zanfagna, P.
 - WOODEN TRUSSES RECONSTRUCTION AND ANALYSIS THROUGH PARAMETRIC 3D MODELING
Prati, D.; Zuppella, G.; Mochi, G.; Guardigli, L.; Gulli, R.
 - RECONSTRUCTION OF LOST ARCHITECTURAL VOLUMES BY INTEGRATION OF PHOTOGRAMMETRY FROM ARCHIVE IMAGERY WITH 3-D MODELS OF THE STATUS QUO
Bevilacqua, M. G.; Caroti, G.; Piemonte, A.; Ulivieri, D.
 - INTEGRATED 3D SURVEY AND DIAGNOSTIC ANALYSIS FOR THE BUILDING ENGINEERING: THE FORMER KINDERGARTEN SAN FILIPPO NERI IN DALMINE
Azzola, P.; Cardaci, A.; Versaci, A.
 - ACCURACY ASSESSMENT OF 3D MODELS GENERATED FROM GOOGLE STREET VIEW IMAGERY
Bruno, N.; Roncella, R.
 - A FULLY AUTOMATED INCREMENTAL PHOTOGRAMMETRIC PROCESSING DEDICATED FOR COLLABORATIVE REMOTE-COMPUTING WORKFLOW
Pamart, A.; Morlet, F.; de Luca, L.
 - EVALUATING THE STRUCTURAL INTEGRITY OF THE SAINT ANTONIO BARREL VAULT IN THE FORTRESS OF ALMEIDA BY COMBINING LASER SCANNER AND LIMIT ANALYSIS
Sanchez-Aparicio, L.J.; Rodriguez-Gonzalvez, P.,(2); Gonzalez-Aguilera, D., Ramos, L. F.
 - THE REAL IN THE VIRTUAL - THE 3D MODEL IN THE CULTURAL HERITAGE SECTOR: THE TIP OF THE ICEBERG
Pratali Maffei, S.; Canevese, E.; De Gottardo, T.
 - AUGMENTED EXPERIENCE TO DISSEMINATE CULTURAL HERITAGE: HOUSE OF COMMONS WINDOWS, PARLIAMENT HILL NATIONAL HISTORIC SITE (CANADA)
Carrión-Ruiz, B.; Blanco-Pons, S.; Duong, M.; Chartrand, J.; Li, M.; Prochnau, K.; Fai, S.; Lerma, J. L.
 - QUALITY ASSESSMENT OF UAV PHOTOGRAMMETRIC ARCHAEOLOGICAL SURVEY
Barba, S.; Barbarella, M.; Di Benedetto, A.; Fiani, M.; Limongiello, M.
 - DIGITAL CONTENTS FOR ENHANCING THE COMMUNICATION OF MUSEUM EXHIBITION: THE PERVIVAL PROJECT
Micoli, L. L.; Gonizzi Barsanti, S.; Caruso, G.; Guidi, G.
 - IMMERSIVE WAYFINDING: VIRTUAL RECONSTRUCTION AND EYE-TRACKING FOR ORIENTATION STUDIES INSIDE COMPLEX ARCHITECTURE
Bianconi, F.; Filippucci, M.; Felicini, N.
 - FAST INDOOR MAPPING TO FEED AN INDOOR DB FOR BUILDING AND FACILITY MANAGEMENT
Cantoni, S.; Vassena, G.
 - DATA MODELING FOR MUSEUM COLLECTIONS
Lo Turco, M.; Calvano, M.; Giovannini, E. C.
 - THE "DIAGNOSTIC SURVEY": A METHODOLOGY FOR THE KNOWLEDGE OF A COMPLEX ARCHITECTURAL PALIMPSEST
Bortolotto, S.; Ciochini, E.; Garzulino, A.; Simonelli, R.; Zangheri, F.

- 3D DATA PROCESSING TOWARD MAINTENANCE AND CONSERVATION. THE INTEGRATED DIGITAL DOCUMENTATION OF CASA DE VIDRO
Balzani, M.; Maietti, F., Rossato, L.
- THE SUITABILITY OF TERRESTRIAL LASER SCANNING FOR BUILDING SURVEY AND MAPPING APPLICATIONS
Russhakim, N. A. S.; Ariff, M. F. M.; Majid, Z.; Idris, K. M.; Darwin, N.; Abbas, M. A.; Zainuddin, N. K.; Yusoff, A. R.
- 3D CAMERAS ACQUISITIONS FOR THE DOCUMENTATION OF CULTURAL HERITAGE
Pulcrano, M.; Scandurra, S.; Minin, G.; di Luggo, A.
- FROM THE INTEGRATED SURVEY OF HISTORIC SETTLEMENTS TO THE PATTERN BOOK WITHIN THE BIM.
Bianconi, F.; Filippucci, M.; Amoruso, G.; Bertinelli, M.
- VIRTUAL HERITAGE FOR THE DISSEMINATION OF THE BARATTI IN 3D PROJECT
Nicastro, G.; Puma, P.

POSTERS PRESENTATIONS THURSDAY, February 7th 2019, 14:00-15:30

- THE INTEGRATED SURVEY OF NARROW SPACES AND UNDERGROUND ARCHITECTURE: THE CASE STUDY OF CAMPANA CAVES BAS-RELIEFS
Clini, P.; Nespeca, R.; Angeloni, R.; Mammoli, R.
- REVERSE MODELING OF CULTURAL HERITAGE: PIPELINE AND BOTTLENECKS
Camagni, F.; Colaceci, S.; Russo, M.
- FROM SURVEY TO MODEL AND RETURN. THE CASE OF THE PARMA BAPTISTERY
Zerbi, A.; Mikolajewska, S.
- UAV PHOTOGRAMMETRY FOR CULTURAL HERITAGE PRESERVATION: MODELING AND MAPPING VENETIAN WALLS OF BERGAMO
Azzola, P.; Cardaci, A.; Mirabella Roberti, G.; Nannei, V. M.
- INTEGRATION OF SURVEYING TECHNIQUES TO DETECT THE IDEAL SHAPE OF A DOME: THE CASE OF THE ESCUELAS PÍAS CHURCH IN VALENCIA
Artese, S.; Lerma, J. L.; Aznar Molla, J.; Sánchez, R. M.; Zinno, R.
- AUGMENTED TURIN BAROQUE ATRIA: AR EXPERIENCES FOR ENHANCING CULTURAL HERITAGE
Palma, V.; Spallone, R.; Vitali, M.
- PHOTOGRAMMETRIC SURVEY WITH FISHEYE LENS FOR THE CHARACTERIZATION OF THE LA SASSA CAVE
Alessandri, L.; Baiocchi, V.; Del Pizzo, S.; Rolfo, M. F.; Troisi, S.
- 3D MODELLING AND MEDIEVAL LIGHTING RECONSTRUCTION FOR RUPESTRIAN CHURCHES
Lassandro, P.; Lepore, M.; Paribeni, A.; Zonno, M.
- INTERACTIVE ONLINE VISUALIZATION OF COMPLEX 3D GEOMETRIES
Boutsi, A.M.; Ioannidis, C.; Soile, S.
- UAV FOR MAPPING HISTORIC BUILDINGS: FROM 3D MODELLING TO BIM
Karachaliou, E.; Georgiou, E.; Psaltis, D. Stylianidis, E.
- A COMPARISON BETWEEN TLS AND UAV TECHNOLOGIES FOR HISTORICAL INVESTIGATION
Valenti, R.; Paternò, E.
- 3D MODELING OF GIRIFALCO FORTRESS
Masiero, A.; Chiabrande, F.; Lingua, A. M.; Marino, B. G.; Fissore, F.; Guarnieri, A.; Vettore, A.
- EXISTING-BIM: INTEGRATED SURVEY PROCEDURES FOR THE MANAGEMENT OF MODERN ARCHITECTURE
Monaco, S.; Siconolfi, M.; di Luggo, A.
- 3D AND 4D MODELLING IN BUILDING SITE WORKING CONTROL
Lucarelli, M.; Laurini, E.; De Berardinis, P.
- A REVIEW OF RECORDING TECHNOLOGIES FOR DIGITAL FABRICATION IN HERITAGE CONSERVATION
Weigert, A.; Dhanda, A.; Cano, J.; Bayod, C.; Fai, S.; Santana Quintero, M.

- TO ACHIEVE REAL IMMERSION: THE 3D VIRTUAL AND PHYSICAL RECONSTRUCTION OF CAVE 3 AND CAVE 12 OF YUNGANG GROTTOES
Changyu, D.; Zhirong, L.; Zhuo, Z.; Bo, N.; Yong, H.
- VIRTUAL REALITY TO ALLOW WHEELCHAIR USERS TOURING COMPLEX ARCHAEOLOGICAL SITES IN A REALISTIC MANNER. TOWARDS THEIR ACTUAL SOCIAL INTEGRATION
Pérez, E.; Merchán, M. J.; Salamanca, S.; Merchán, P.
- CAPTURE AND DOCUMENTATION: KAGA PARK
Morganti, C.; Bartolomei, C.
- 3D DIGITAL MODELS FOR A WIDESPREAD MUSEUM: THE RENON'S "BAUERNHÖFE"
Luigini, A.; Brusaporci, S., Vattano, S.; Tata, A.
- DIGITAL SURVEYS AND 3D RECONSTRUCTIONS FOR AUGMENTED ACCESSIBILITY OF ARCHAEOLOGICAL HERITAGE
Campi, M.; Di Luggo, A.; Palomba, D.; Palomba, R.
- CONSIDERATIONS ON THE USE OF DIGITAL TOOLS FOR DOCUMENTING ANCIENT WALL GRAFFITI
Valente, R.; Barazzetti, L.; Previtali, M.; Roncoroni, F.
- 3D IMAGE BASED GEOMETRIC DOCUMENTATION OF A MEDIEVAL FORTRESS
Tapinaki, S.; Skamantzari, M.; Chliverou, R.; Evgenikou, V.; Konidi, A. M.; Ioannatou, E.; Mylonas, A.; Georgopoulos, A.
- THE VALUE OF KNOWLEDGE THROUGH H-BIM MODELS: HISTORIC DOCUMENTATION WITH A SEMANTIC APPROACH
Parisi, P.; Lo Turco, M.; Giovannini E. C.
- HBIM AND THE 20TH CENTURY STEEL BUILDING HERITAGE A PROCEDURE SUITABLE FOR THE CONSTRUCTION HISTORY IN ITALY
Morganti, R.; Tosone, A.; Di Donato, D.; Abita, M.
- REASSEMBLY OF ROCK SEGMENTS, THE CASE OF AREOPAGUS HILL
Evgenikou, V.; Georgopoulos, A.; Korres, M.
- FORENSIC ENGINEERING SURVEYS WITH UAV PHOTOGRAMMETRY AND LASER SCANNING TECHNIQUES
Cappelletti, C.; Boniardi, M.; Casaroli, A.; De Gaetani, C. I.; Passoni, D.; Pinto, L.
- THE INTEGRATED 3D SURVEY FOR UNDERGROUND ARCHAEOLOGICAL ENVIRONMENT
Ebolese, D.; Lo Brutto, M.; Dardanelli, G.
- TERRESTRIAL LASER SCANNER AND FAST CHARACTERIZATION OF SUPERFICIAL LESIONS IN ARCHITECTURAL DIAGNOSIS
Costa-Jover, A.; Coll-Pla, S.; Queral Llaberia, J.; Moreno García, D.; Gas Llatge, A.
- 3D MODELLING AND VIRTUAL REALITY FOR COMPLEX ARCHITECTURES: APPLICATION IN HOSPITALS' DOCUMENTATION AND DESIGN
Chias, P.; Abad, T.; de Miguel, M.; García-Rosales, G.; Echeverria, E.
- THREE-DIMENSIONAL RECORDING AND PHOTOREALISTIC MODEL RECONSTRUCTION FOR VIRTUAL MUSEUM APPLICATION – AN EXPERIENCE IN MALAYSIA
Wei, O. C.; Majid, Z.; Halim, S.; Mohd, F.M.A.; Khairulnizam, M.I.; Nurhadija, D.; Ahmad, R.Y.; Khairulazhar, Z.

POSTERS PRESENTATIONS - FRIDAY, February 8th 2019, 14:00-15:00

- TOWARDS A DIGITAL ARCHAEOLOGICAL ARCHIVE: THE CASE STUDY OF THE ARTEFACTS OF THE AREA OF FORI IMPERIALI
Calisi, D.; Molinari, M.
- A LAYERED-WEB INTERFACE BASED ON HBIM AND 360° PANORAMAS FOR HISTORICAL, MATERIAL AND GEOMETRIC ANALYSIS
Banfi, F.; Previtali, M.; Stanga, C.; Brumana, R.
- RECONSTRUCTION OF URBAN SITES FROM PHOTOS
Agnello, F.
- EXTRACTION OF PRIMITIVES AND OBJECTS FROM HSHAPES

- Bolognesi, C.; Caffi, V.
- THE COMPARISON OF 2D AND 3D DETECTORS FOR TLS DATA REGISTRATION – PRELIMINARY RESULTS
Markiewicz, J. S.; Markiewicz, Ł.; Foryś, P.
 - THE VIRTUAL BATCAVE: A PROJECT FOR THE SAFEGUARD OF A UNESCO WHL FRAGILE ECOSYSTEM
Aiello, D.; Basso, A.; Spena, M. T.; D’Agostino, G.; Montedoro, U.; Galizia, M.; Grasso, R.; Santagati, C.
 - DEVELOPMENT OF VIRTUAL REALITY APPLICATION FOR CULTURAL HERITAGE VISUALIZATION FROM MULTI-SOURCE 3D DATA
Choromański, K.; Łobodecki, J.; Puchała, K.; Ostrowski, W.
 - A REVIEW OF 3D GIS FOR USE IN CREATING VIRTUAL HISTORIC DUBLIN
Chenau, A.; Murphy, M.; Pavia, S.; Fai, S.; Molnar, T.; Cahill, J.; Lenihan, S.; Corns, A.
 - SCAN-TO-BIM vs 3D IDEAL MODEL HBIM: PARAMETRIC TOOLS TO STUDY DOMES GEOMETRY
Capone, M.; Lanzara, E.
 - 3D STRUCTURE ANALYSIS: ARCHITECTURE AS AN EXPRESSION OF THE TIES BETWEEN GEOMETRY AND PHILOSOPHY
Bellone, T.; Mussio, L.; Porporato, C.
 - REPRESENTATION OF SYNTHETIC SHADOWS ON 3D DIGITAL MODELS FOR THE VOLUMETRIC INTERPRETATION ON CONCAVE-CONVEX ARCHAEOLOGICAL ARTIFACTS
Garcia-Fernandez, J.; Medeiros, L.; Pernão, J.
 - THE TOMB OF IPI: 3D DOCUMENTATION IN A MIDDLE KINGDOM THEBAN NECROPOLIS (EGYPT, 2000 BCE)
Echeverría, E.; Celis, F.; Morales, A.; da Casa, F.
 - THE SURVEY OF THE SAN FRANCESCO BRIDGE BY SANTIAGO CALATRAVA IN COSENZA, ITALY
Artese, S.
 - HBIM FOR ARCHAEOLOGICAL SITES: FROM SFM BASED SURVEY TO ALGORITHMIC MODELING
Argiolas, R.; Bagnolo, V.; Cuccu, A.
 - INFORMATION MODELING AND LANDSCAPE: INTERVENTION METHODOLOGY FOR READING COMPLEX SYSTEMS
Cianci, M. G.; Molinari, M.
 - VIRTUAL REALITY FOR HISTORICAL ARCHITECTURE
Agnello, F.; Avella, F.; Agnello, S.
 - THE USE OF DIGITAL TOOLS FOR THE PRESERVATION OF ARCHITECTURAL, ARTISTIC AND CULTURAL HERITAGE, THROUGH THREE-DIMENSIONAL SCANNING AND DIGITAL MANUFACTURING
Moreno Gata, K.; Echeverría Valiente, E.
 - RECREATE THE ANCIENT URBAN LANDSCAPE. MULTIMEDIA AND INTERACTIVE TOOLS TO IMPROVE ACCESSIBILITY AND ENHANCEMENT OF THE ARCHAEOLOGICAL HERITAGE OF MILAN
Garzulino, A.; Zenoni, G.
 - VIRTUAL TOURS FOR SMART CITIES: A COMPARATIVE PHOTOGRAMMETRIC APPROACH FOR LOCATING HOT-SPOTS IN SPHERICAL PANORAMAS
Feriozzi, R.; Meschini, A.; Rossi, D.; Sicuranza, F.
 - 3D DETECTION AND RECONSTRUCTION EXPERIMENTS IN RIVER BASINS
Palestini, C.; Basso, A.
 - PARAMETRICAL ANALYSIS AND DIGITAL FABRICATION OF THIN SHELL STRUCTURES: THE IMPACT OF CONSTRUCTION TECHNIQUE ON THE RESULTING GEOMETRY OF THE GAUSSIAN VAULTS OF ELADIO DIESTE
Melachos, F. C.; Florio, W.; Rossato, L.; Balzani, M.
 - SURVEY, STRATIGRAPHY OF THE ELEVATIONS, 3D MODELLING FOR THE KNOWLEDGE AND CONSERVATION OF ARCHAEOLOGICAL PARKS: THE CASTLE OF AVELLA
D’Aprile, M.; Piscitelli, M.
 - PALAZZO DUCALE OF SABBIONETA - ARCHITECTURAL SURVEY OF SOME DECORATED ROOMS
Bianchi, A.; Belloni, M.

