

POSTER SESSION II (from 14:20 to 16:50)

- *Bioarchaeology*
- *Food preparation and consumption in antiquity*
- *Field archaeology*
- *Archaeo-chronometry*
- *Recent developments in radiocarbon dating*
- *Human – environment interactions*
- *Metals and metallurgical ceramics (technology and provenance)*
- *Integrated site studies*

Program

BIOARCHAEOLOGY

314. Azizipoor, T., Nemati, A.-R., Khademi, F. - Palaeodietary of Parthian site of Valiran
315. Beckett, S., Rogers, K. - Species identification of bone fragments: a new method of pyrolysis and X-ray diffraction analysis
316. Caracuta, V., Fiorentino, G. - Micro-stratigraphical and archaeobotanical strategies in analysing a Middle Bronze Age "Midden" at Tell Mardikh – Ebla (Syria)
317. Castaños, P., Castaños, J., Murelaga, X., Ortega, L.A., Zuluaga, M.C., Alonso-Olazabal, A. - Metrical discrimination between Aurochs (*Bos primigenius*) calves and young Cattle (*Bos taurus*)
318. Catalano, G., Lari, M., Mona, S., Boscato, P., Di Patti, C., Sineo, L., Casoli, A., Bertorelle, G., Caramelli, D. - Mitochondrial DNA phylogeography in Italian *Bos primigenius* specimens: new insights into cattle domestication process
319. Chilaridi, S., Giardino, C. - Bones as smelting fuel in Zhezkazgan metallurgy?
320. Colaianni, G., Primavera, M., Fiorentino, G. - Sampling strategies and archaeobotanical analysis at the messapian sanctuary of Oria-Papalucio (South-eastern Italy)
321. Coppey, F., Le Hô, A.-S., Leblanc, C., Regert, M. - Unravelling the organic contents of Egyptian jars: first results from the Ramesseum (Louqsor, West Bank)
322. Degano, I., Colombini, M.P. - Pre-Peruvian archaeological textiles: a multianalytical approach for dyestuff identification
323. Deiana, A. - Archaeobotanical investigations in the north-western Sardinia (Italy): archaeology of the agrarian and forest landscapes in medieval and postmedieval age
324. Doolin, M.A., Armitage, R.A. - Qualitative THM-GC-MS and quantitative analysis of proteins and amino acids in rock painting binders
325. Dotsika, E., Maniati, M., Maniatis, Y., Pitsios, Th., Coltrain, J.B., Hedges, R.E.M. - Nutritional evolution from Neolithic times to the Classical age
326. Ergenekon, B. - Etruria, Knidia and Delphi: Aplu-Apollon cult
327. Fang, X., Wang, C., Pan, W., Han, Q. - Restoration of bone flute from Jiahu site by using CT
328. Fossati, S., Decri, A., Pesce, G.L. - The study of the provenance of the wood through the dendrochronological analysis of the growth sampling curves
329. Fraser, D., Armitage, R.A. - Clinical test strips for rapid identification of binder materials in rock paintings

330. Hu, Y., Song, G., Wang, C., Richards, M.P. - Subsistence strategies in the Xia-Shang-Zhou Dynasties revealed by stable isotope analysis of human and faunal bones from the Nanchen Site, Luoyang, China
331. Jiang, H.-E, Zhang, Y.-B. - New advance of archaeobotanical studies of the Yanghai tombs, Xinjiang, China
332. Kakoulli, I., Prikhodko, S., Fischer, C., Boytner, R., Lozada, M.C., Ciluffo, M., Uribe, M., Bodzin, N. - Digging the past: Focused-Ion Beam (FIB) milling and variable pressure scanning electron microscopy coupled with energy dispersive X-ray and Raman spectroscopy (VPSEM-EDS-RS) for the study of bioarchaeological specimens
333. Koon, H.E.C., Collins, M. - Scurvy, the scourge of guinea pigs and man
334. Kuleff, I., Keenleyside, A., Panayotova, K. - Dietary reconstruction of the inhabitants of Apollonia Pontica using multielement analysis and isotope ratios of carbon and nitrogen in bones
335. Le Hô, A.-S., Regert, M., Sablier, M. - Mongolian archaeological lacquerwares investigated by pyrolysis-gas chromatography/mass spectrometry: towards the understanding of commercial routes
336. Lentini, A., Belgiorno, M.R. - Palaethnobotanical investigations at the archaeological site of Pyrgos – Mavroraki, Cyprus
337. Lubritto, C., Sirignano, C., Passariello, I., Marzaioli, F., Rubino, M. - Paleodiet studies at C.I.R.C.E. Laboratory
338. Mark, L., Marcsik, A. - Hormone Mass Fingerprinting: sex determination of ancient human skeletal remains
339. Maxwell, G.M., Brown-Sinha, J.A., Merrell, C., Armitage, R.A.- Little Lost River Cave, Idaho: I. Characterization of a black residue and implications for radiocarbon dating
340. McCreesh, N.C., Gize, A., David, R. - From a Single Strand: scientific analyses of human hair
341. Modugno, F., Colombini, M.P., Ribechini, E., Lucejko, J. - Characterisation of archaeological waterlogged wood by Direct Exposure Mass Spectrometry (DE-MS) and Pyrolysis/Gas Chromatography/Mass Spectrometry (PY/GC/MS)
342. Murelaga, X., Castaños, P., Castaños, J., Ortega, L.A., Zuluaga, M.C., Alonso-Olazabal, A. - Mammal remains from Upper Pleistocene Kiputz IX site (Mutriku, North of Spain)
343. Ogasawara, M., Kato, K. - Novel chemical methodology for identifying origin of archeological bitumen: existence of long trade routes along the Japanese archipelago and Sakhalin island in Prehistory
344. Pizzo, B., Giachi, G., Fiorentino, L. - Chemical characterization methods for archaeological waterlogged wood
345. Poon, K.W.C., Dadour, I., McKinley, A. - In situ chemical analysis of tattooing inks and pigments in ancient mummified remains
346. Price, T.D. - The early inhabitants of Campeche, Mexico: isotopic determination of place of origin
347. Raghavan, M., McCullagh, J., Hedges, R.E.M. - Compound-specific stable isotope analysis of hair keratin and its application in dietary reconstruction
348. Reiche, I., Chadeaux, C., Vignaud, C., Chalmin, E. - Insights into the color origin of stained archaeological bones or ivory - multianalytical study by micro-PIXE/PIGE, SEM/TEM, FT-IR, XRD and XANES
349. Reynard, L.M., Hedges, R., Henderson, G. - Detecting dairying in antiquity with stable calcium isotope ratios
350. Ribechini, E., Rocchi, M., Deviese, T., Colombini, M.P. - European provenance ambers: gas chromatographic and mass spectrometric investigations
351. Rickards, O., Craig, O.E., Martinez-Labarga, C., Lelli, R. - Dietary variability, mobility and genetic origins of early farmers of Southern Italy: an integrated biomolecular approach
352. Roumpou, M., Heron, C., Jones, G., Kiriati, E., Valamoti, S.M., Andreou, S. - Detection and identification of organic residues in ceramic vessels from Late Bronze Age Northern Greece: a preliminary investigation of consumption and exchange of plant oils
353. Roumpou, M., Heron, C., Stratouli, G. - Detection and identification of organic residues in ceramic vessels dated to the Neolithic from Drakaina cave (Kephallonia), Greece
354. Schroeder, H., Evans, J.A., O'Connell, T.C., Hedges, R.E.M. - Restoring the links: Isotopic evidence for the origins of enslaved Africans from colonial Barbados

355. Seath, J.H., Gize, A.P., David, A.R. - Scent from the grave: a spectroscopic and microscopic study of ancient Predynastic residues
356. Soberl, L., Evershed, R.P., Pollard, J. - Cooking for the dead: Investigation of organic residues preserved in Early Bronze Age funerary pottery from Britain
357. Stanc, S.M. - Animal resources exploitation by the (L) Ibida fortress inhabitants: archaeozoological data
358. Styring, A.K., Evershed, R.P., Pearson, J. - Complementary use of $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ values of skeletal collagen amino acids for palaeodietary reconstruction
359. Tornero Dacasa, C., Sana i Seguí, M. - Integrating stable isotopes to study the origin of herding strategies: $\delta^{13}\text{C}$ and $\delta^{18}\text{O}$ results from bioapatite enamel of *Bos* sp. in recent PPNB tell Halula site (Syria, Middle Euphrates Valley) during 7800 – 7300 cal BC
360. Triantaphyllou, S. - Stable isotope analysis and diet in Prehistoric Greek Macedonia
361. Türkekel Bıyık, A., Özbal, H. - Chemical analysis of the residual lipids in the cooking pots from Chalcolithic Anatolia
362. Tykot, R.H., Metroka, A., Bergfield, R., Dietz, M.J. - Chemical Analysis of Hair Segments and Short-Term Dietary Variation: Results for the Ancient Site of Chongos (Peru)
363. Van Gemert, J., Stambek, J., Mallouf, R., Rowe, M., Armitage, R.A. - Characterization of a use residue on a unique stone tool from the Coahuila Desert
364. Varvara, S., Gligor, M., Popa, M. - Preliminary considerations on the preservation state of the Neolithic human remains discovered at Alba Iulia-"Lumea Noua" archaeological settlement
365. Vika, E., Richards, M., Schutkowski, H., Aravantinos, V. - Strangers in the Grave: Investigating identities with $\delta^{34}\text{S}$ analysis in a Bronze Age mass burial in Thebes, Greece
366. Watson, J., Nordby, C. - Distinguishing reindeer antler from bone using Raman spectroscopy

FOOD PREPARATION AND CONSUMPTION IN ANTIQUITY

367. Baccarini, L., Giorgi, G., Pecci, A., Salvini, L. - Functional analysis of ceramics and floors of an altomedieval wooden domestic structure at Donoratico (Tuscany)
368. Campanella, L., Pecci, A., Salvini, L., Trojsi, G. - Residue analysis of pottery from the Phoenician and Punic settlement of Sant'Antioco (Sardinia)
369. Delnevo, E., Fermo, P., De Vos, M. - Organic residues in archaeological Tunisian amphorae from Ain Wassel (Dougga, North Tunisia)
370. Domínguez-Bella, S., Bernal Casasola, D. - Fish-based subproducts in Late Antiquity. Archaeometrical study and archeological evidence from the fish factories at *Traducta* (Algeciras, Cádiz, Spain)
371. Fritz-Popovski, G. - Investigation of residue layers on ceramics from the Hallstatt region
372. Gregg, M., Banning, E., Gibbs, K., Slater, G. - A new approach for the isolation, concentration, and transterification of free fatty acids in archaeological ceramics
373. Inserra, F., Pecci, A., Buonincontri, M.P. - A medieval tavern: chemical analyses of floors at San Genesio (central Italy)
374. Pecci, A., Di Pasquale, G., Corbino, C., Buonincontri, M., Salvini, L., Giorgi, G., Cantini, F. - Food preparation and consumption in the Middle Age. The center of Florence case study (13th century)
375. Semeraro, G., Notarstefano, F., Lettieri, M.T. - Food preparation and consumption in the Messapian settlement of San Vito dei Normanni (south eastern Italy): organic residue analyses on pottery vessels of the Archaic age
376. VanderVeen, J.M. - Finding food while protecting pots: a non-destructive protocol for absorbed residue analysis

ARCHAEOCHRONOMETRY

377. Bahain, J.J., Bianca, M., Burrafato, G., Caputo, R., Falguères, C., Gueli, A.M., Stella, G., Troja, S.O., Zuccarello, A.R. - Application of absolute dating methods to reconstruct the Late Quaternary uplift of the Lucanian Ionian coast (Southern Italy)
378. Barrandon, J.-N. -How can the element analysis “date” the copper coinages struck by the roman emperor *Tiberius*?
379. Blain, S., Prigent, D., Guibert, P., Sapin, C. - Dating an early medieval church by the luminescence method: the case of St. Martin at Angers (France)
380. Burrafato, G., Finocchiaro, F., Gueli, A.M., Stella, G., Troja, S.O., Zuccarello, A.R. - Characterization and study of datability of mortar from the monumental complex of S. Francesco at the Collina of Paternò (Catania, Italy)
381. De Vincolis, R., Gueli, A. M., Lahaye, C., Loughlin, M., Stella, G., Troja, S. O., Zuccarello, A.R. - Virtual reconstruction of archaeological structures TO evaluate the gamma-contribution to annual dose in absolute dating
382. Genevey, A., Gallet, Y., Rosen, J., Le Goff, M. - Constraining the Earth’s magnetic field intensity variations in Western Europe over the past eight hundred years: towards a dating tool for displaced archeological baked-clay artifacts
383. Giannattasio, C., Grillo, S.M. - The defense towers in Cagliari (XVI century): dating strategies through the metrological-chronological analysis of masonries and the petrographic and geochemical characterization of materials
384. Golikov, V.P., Zhadanov, B., Soloviev, V., Borovlev, Y., Kalinin, A. - Organic synthetic Azo-pigments and Phthalocyanine pigments as chronological markers for XIX-XX century’s paintings
385. Guibert, P., Bailiff, I.K., Blain, S., Gueli, A.M., Martini, M., Sibilia, E., Stella, G., Troja, S.O. - Luminescence dating of architectural ceramics from an early Medieval abbey: the St-Philbert investigation (Loire Atlantique, France)
386. Hartmann, G.A., Afonso, M., Trindade, R. - Archeomagnetic secular variations in Brazil and potential applications for archeomagnetic dating
387. Kiyak, N.G., Ozturk, T. - Authentication of ancient Turkish pottery by luminescence techniques
388. Mark, L., Marcsik, A., Tamas, L. - Dating of Human Skeletal Remains by FT-IR Spectroscopy
389. Michniewicz, J., Nawrocka, D. - The latest archaeological investigations at the Cracow Market Square in the light of radiocarbon dating of mortars
390. Moreau, J.-F., Gratuze, B., Hancock, R.G.V., Blet-Lemarquand, M. - Dating sixteenth century settlement in the vicinity of Quebec City (Canada) by means of elemental analysis of glass beads through thermal and fast neutrons activation analyses
391. Quarta, G., Calcagnile, L., D’Elia, M., Butalag, K., Tiberi, I. - Studying the diagenetic state of bone samples submitted for ¹⁴C AMS dating by combined FTIR and nuclear methods
392. Ramirez, A., Chung, H., Gonzales, P., Schaaf, P. - The Chronology of Chichen Itza, Yucatan, Mexico by Thermoluminescence dating
393. Reich, S.I., Leitius, G., Shalev, S. - Superconductivity in the service of archaeology; a method for dating lead artifacts
394. Sandoval, J.A., Vásquez, C., Escobar, J., Daza, C. - Use of Electron Spin Resonance (ESR) in dating archaeological human tooth enamel in an early Colombian site
395. Sibilia, E., Martini, M., Galli, A., Jens, S. - Characterisation of Javanese ceramics by luminescence
396. Sibilia, E., Martini, M., Maspero, F., Santoro, S. - The Amphitheatre in Durres (Albania): a contribution to the chronology of the medieval settlement using luminescence and radiocarbon dating
397. Sibilia, E., Martini, M., Panzeri, L., Jens, S. - The chronology of pre-Slavic and Slavic settlements in the lower Elba river area (Germany) by means of luminescence dating
398. Skinner, A.R., Blackwell, B., Gong, J., Blais-Stephens, A., Nelson, R.E. - A new dating proposal: using Electron Spin Resonance (ESR) with Pleistocene barnacles
399. Watson, J., Tryon, C., Vicéns, M. - A new method for faster and more accurate processing of samples for micro-tephrochronology
400. Zacharias, N., Orfanou, S., Rizou-Kalakona, M., Georgakopoulou, M., Bassiakos, Y., Michael, C.T. - Optically Stimulated Luminescence Studies of Early Cycladic Metallurgical Ceramics from Seriphos, Greece

RECENT DEVELOPMENTS IN RADIOCARBON DATING

401. Armitage, R.A. - Characterizing the organic material in rock paintings by THM- and conventional GC-MS: implications for radiocarbon dating of Rock Art
402. Beavan-Athfield, N.R., Sutton, K., Trompeter, B., Ditchburn, B., Barry, B., Soong, R. - Examining acetic acid treatment of bone carbonate for radiocarbon dating: preliminary results
403. Freund, M.E., Merrell, C., Armitage, R.A. - Little Lost River Cave, Idaho: II. Development of Effective Chemical Pretreatments for "Non-destructive" Radiocarbon Dating of Fragile Reed and Bark Artifacts
404. Nawrocka, D. - ¹⁴C dating of wood and charcoal from mortars on different examples
405. Pesce, G.L., Cavaciocchi, P., Lastrico, C. - Radiocarbon dating of aerial lime mortars: considerations on the applicability of method and on the limitations of using data. The study case of S. Nicolò of Capodimonte church (Camogli – Genoa)

FIELD ARCHAEOLOGY

406. Barba, L., Blancas, J., Ortiz, A., Rosales, A. - Georadar in a hunter-gather archaeological site in sand dunes of Bahía de los Muertos, Baja California Sur, Mexico
407. Campana, S. - Filling the void: unrealistic dream or achievable reality?
408. Campana, S., Donoghue, D., Galiatsatos, N. - Undercanopy archaeology using airborne laser scanner to overcome the Mediterranean vegetation
409. Campana, S., Frezza, B., Ghisleni, M.E. - Mapping Tuscany: remote sensing and test-excavation of a stratified Roman, Late Antique and Medieval site (Italy)
410. Campana, S., Marasco, L., Pericci, F., Felici, C. - Pava project (Tuscany-Italy)
411. Campana, S., Marasco, L., Piro, S., Dabas, M. - Remote sensing and test-excavation of a Medieval mound (Tuscany-Italy)
412. Campana, S., Pericci, F. - Aerial survey project: seven years of flights over the Tuscan sky
413. Campana, S., Remondino, F., Sarazzi, D., Sordini, M. - Integrated technologies for the 3D digital documentation of archaeological excavation and historical building
414. Krivanek, R. - The different ways of collaboration of geophysical and archaeological methods in research project "The Neglected Archaeology"
415. Krivanek, R. - Combination of non-destructive methods for observation of state of subsurface preservation of ploughed archaeological site on example of oppidum Stradonice in Bohemia
416. Morrison, H.F., Gasperikova, E., Becker, A., Smith, T. - A multi sensor electromagnetic system for determining the depth, size and shape of buried metallic objects
417. Taghavi, A. - The spatial organization of Farah Abad city in Safavid period

HUMAN-ENVIRONMENT INTERACTIONS

418. Athanassas, C., Fountoulis, I., Zacharias, N., Bassiakos, I. - Ancient shore line movements in Pylos area derived from studies of archaeological sites and absolute chronology
419. Bruch, A.A., Scharrer, S., Gabrielyan, I., Kirscher, U. - Early to Middle Pleistocene environment in Armenia – preliminary results of a new project
420. Cremaschi, M., Zerboni, A., Perego, A. - Incoming aridity, adapting irrigation strategies in the middle-late Holocene: the case study of the Salut oasis (Sultanate of Oman)

421. Dallai, L., Donati, A., Protano, G., Simoncini, E. - Determination of trace elements for the characterization of Alunite of the Upper Cornia Valley
422. D'Oronzo, C., Calcagnile, L., Caracuta, V., Colaianni, G., D'Elia, M., Fiorentino, G., Quarta, G., Semeraro, G. - Archaeobotany and Carbon isotopes analysis at Tas-Silġ sanctuary: climate and culture in Malta island
423. Dotsika, E., Tzavidopoulos, I., Poutoukis, D., Maniatis, Y., Albanakis, K., Somiadis, D. - Geochemistry of Picrolimni lake for the evidence of natron precipitation
424. Eckmeier, E. - Charred organic matter in soils and the change from natural to cultural landscapes in NW-Germany
425. Evans, J.A., Tatham, S., Chenery, C.A., Chenery, S.R. - The application of strontium isotope profiles in herbivore teeth as a tool for examining animal husbandry practices in the past
426. Farswan, Y.S. - Reconstruction of Intensity of Occupation through Elemental Analysis of Anthropogenic Soil from Earthquake Hit Settlements of Garhwal Himalaya, India
427. Giardino, D., Marchiori, A., Mazzoli, C., Montagna, P., Kovačić, V. - Geochemical and isotopic study on marine mollusc shells from archaeological sites: the case study of Loron (Istria, Croatia)
428. Hall, A.J., Photos-Jones, E. - The medicinal earths of antiquity as archaeological materials and the need to understand the biochemical role of aluminium
429. Hodges, C.M., Matson, E. - Remaking the urban habitat: the creation of the modern Seattle Waterfront and urban landscape, A.D. 1850 to A.D. 1950
430. Kampa, M., Sioliou, M.K., Kaparti, P., Tsirimon, E., Ispikoudis, I. - Cultural landscapes of South-eastern Rhodope: transition from the Byzantine times to modern times
431. Krahtopoulou, A., Frederick, C. - Long-term implication of terracing in dynamic landscapes: geoarchaeological investigation of polycyclic terracing from Kythera Island, Greece
432. Lai, L., Tykot, R., Goddard, E., Hollander, D., Beckett, J.F., Floris, R., Fonzo, O., Usai, E., Manunza, M.R. - Understanding the interplay of climate change and people's agency in the past: the perspective of isotopic analyses on Prehistoric Sardinia
433. Oh, Y.A. - The Aterian Chronology & Palaeoenvironment at Taforalt, Morocco
434. Polymeris, G.S., Kitis, G., Sakalis, A., Tsirliganis, N. - IRSL dating of a deep water core from Pylos, Greece; comparison to post IR Blues OSL and TL dating results
435. Ponterio, R.C., Aliotta, F., Trusso, S., Vasi, C. - Information technology as a tool for the fruition of Cultural Heritage
436. Primavera, M., Fiorentino, G., Radina, F. - Palaeo-environmental reconstruction at Pulo di Molfetta (south-eastern Italy) by in-site and off-site strategies
437. Rouai, M., Dekayir, A., Canuti, P., Fanti, R. - Slope instability and risk assessment in Volubilis archaeological site (Morocco)
438. Salvi, M.C., Salvini, R., Gallotti, R., Gruppioni, G. - Digital terrestrial photogrammetry for the depositional and postdepositional analysis of archaeological records applied to Gombore II Acheulean site (Melka Kunture, Etiopia)
439. Sapsford, M., Shortland, A., Degryse, P. - The Wadi Natrun: The use of geochemistry and analytical science in identifying patterns of usage of sodium salts in Ancient Egypt
440. Sarti, L., Pizziolo, G., Ghinassi, M., Tangocci, F. - A multidisciplinary approach for the landscape reconstruction of Sesto Fiorentino area (Florence, Italy): the integration of archaeological, stratigraphical and environmental analysis
441. Scarciglia, F., Robustelli, G., Tiné, V., Abate, M., La Russa, M.F., Pezzino, A. - Geo-archeometric study of the Santuario della Madonna Cave (Calabria, Southern Italy): Holocene climatic changes or human impact?
442. Valiulin, T.R., Valiulina, S. - Alchemy workshop at the end of XII – first third of the XIII centuries in Bilar (experiment in reconstruction)
443. Zacharias, N., Evelpidou, N., Polydorou, M., Poulos, S., Tsertos, H., Michael, C.T., Bassiakos, I., Vassilopoulos, A. - Environmental and chronological studies of Aegean coastal sand dune formations

METALS AND METALLURGICAL CERAMICS (TECHNOLOGY AND PROVENANCE)

444. Adamski, F.M., Pernot, M. - Technological study of antic large bronze repairing patches from the Gallo-roman site of Barzan (France)
445. Agresti, J., Siano, S., Mencaglia, A., Rastrelli, A., Salimbeni, R., Miccio, M. - Quantitative alloy analyses of a set of bronze figurine using an innovative portable laser induced plasma spectroscopy instrument
446. Alexandrescu, C.G., Greiff, S. - A colourful choice of alloys: Metal analyses of a Roman cornu
447. Àlvarez Pérez, A., Gutierrez Garcia-Moreno, A., Pitarch Martí, A., Mestres Campdelacreu, I., Masó i Giralt, R. - Iron oxid-rich sediments and slag fragments analysis from the medieval site of Can Calderó (Vic, Barcelona, Spain)
448. Angiorama, C.I. - Study of composition of pre-hispanic metallic objects from the Argentinian Northwest
449. Arles, A., Bompaire, M., Gratuze, B., Téreygeol, F. - An experimental approach of processes used in the French medieval minting
450. Asderaki-Tzoumerkioti, E., Karydas, A.G. - Non-destructive analyses of four silver gilded Hellenistic epaulettes
451. Asderaki, E., Rehren, Th. - Early iron age iron metal from Halos and Lefkandi, Greece
452. Asmus, B., Bartels, C. - *Theophilus* and 12th century copper smelting in Harz Mountains, Germany
453. Bahari, M. - A comparative study of the environmental effect on corrosion speed and nature of the ancient bronze in two sites: Gohar Tepe and Tepe Kelar of Mazandaran, Iran
454. Bassiakos, Y., Georgakopoulou, M., Philaniotou, O. - Early Bronze Age copper production on the western Cycladic islands: the evidence from Kythnos and Seriphos
455. Beck, L., Alloin, E., Klein, U., Berthier, C. - The Preuschorf coin hoard: first results on the alloy composition
456. Belgya, T., Kasztovszky, Zs., Kis, Z., Szentmiklósi, L., Kockelmann, W.A., Festa, G., Kirfel, A., Kudejova, P., Schulze, R., Biró, K.T., Dúzs, K., Hajnal, Zs., Visser, D. - Radiography driven PGAA and neutron diffraction measurements on black boxes designed for the 'Ancient Charm' project
457. Blakelock, E., Martínón-Torres, M., Young, T. - Slag Inclusions and the Quest for Provenance: Analysis of Slag and Slag Inclusions from Iron Smelting Experiments
458. Bollard, I. - Archaeometallurgical analyses for the characterization of some monetary specimens of Late Antiquity: study of copper alloys coins and medallions from 294 to 392
459. Bonamici, M., Giardino, C., Guida, G., Paternoster, G. - Populonia. Etruscan iron smelting: new data
460. Burger, E.M., Bourgarit, D., Frotte, V. - Smelting sulphides without a separate preliminary roasting? An attempt to overcome a paradox of Chalcolithic/Early Bronze Age copper smelting process in Western Europe
461. Chiarantini, L., Benvenuti, M., Giunti, I., Costagliola, P., Dini, A. - Trace element composition and isotopic signature as markers of provenance and technology: a contribution from the study of "AES RUDE" from two Etruscan sites (Italy)
462. Chiarantini, L., Benvenuti, M., Recchia, S., Giunti, I., Costagliola, P., Dini, A. - the use of copper isotopes for provenance studies in archaeometallurgy: preliminary data from the polymetallic sulphide deposits of the ancient "Etruria mineraria" mining district
463. Cohen, C.R., Rehren, Th., Van Buren, M. - The invasion of the Spanish and their influence on silver production: a review of technological change on silver smelting in the Southern Andes during the Spanish colonial era
464. Constantinescu, B. - Studies on gold provenance for archaeological objects from Romanian museums using micro-SR-XRF and micro-PIXE
465. Della Schiava, E., Agnoletti, S., Cagnini, A., Porcinai, S., Benvenuti, M., Pecchioni, E. - The casting core study of a XVI century bronze statue: manufacturing and conservation aspects of San Giovanni Battista by Vincenzo Danti
466. Doonan, R.C.P., Boyd, M., Wilson, G. - Out of Touch? Virtual solutions to real problems in the study of ancient craft production

467. Fraresso, G.A., Pernot, M., Uceda, S. - Archaeometallurgical study of a copper base alloys workshop at Huaca de la Luna Moche site, Peru
468. Giardino, C., Guida, G., Paternoster, G. - Central Kazakhstan metallurgy during the Bronze Age: archaeometallurgical studies on Zhezkazgan area
469. Gliozzo, E., Cartechini, L., Arletti, R., Rinaldi, R., Imberti, S., Kockelmann, W.A., Turbanti Memmi, I. - Time of Flight Neutron Diffraction studies on Roman Army bronze artefacts from the *Thamusida* archaeological excavations (Rabat, Morocco)
470. Gliozzo, E., Comini, A., Ciacci, A., Cherubini, A., Turbanti Memmi, I. - Ceramic production and metal working at the Trebbio archaeological site (Sansepolcro, Arezzo, Italy)
471. Gluzman, G.A., González, L.R., Sives, F. - Studies of pre-Hispanic refractory materials from the valley of Yocavil, northwest Argentina. An interdisciplinary approach
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