MarÃ-a Teresa DomÃ©nech-CarbÃ³

List of Publications by Year
in descending order

75 papers	2,189 citations	172457 29 h-index	243625 44 g-index
75 all docs	75 docs citations	75 times ranked	1234 citing authors

#	Article	IF	Citations
1	Novel analytical methods for characterising binding media and protective coatings in artworks. Analytica Chimica Acta, 2008, 621, 109-139.	5.4	132
2	Dehydroindigo:Â A New Piece into the Maya Blue Puzzle from the Voltammetry of Microparticles Approach. Journal of Physical Chemistry B, 2006, 110, 6027-6039.	2.6	100
3	Analytical characterization of diterpenoid resins present in pictorial varnishes using pyrolysisâ€“gas chromatographyâ€“mass spectrometry with on line trimethylsilylation. Journal of Chromatography A, 2005, 1065, 265-278.	3.7	96
4	Maya Blue as a nanostructured polyfunctional hybrid organicâ€“inorganic material: the need to change paradigms. New Journal of Chemistry, 2009, 33, 2371.	2.8	95
5	Chemometric Study of Maya Blue from the Voltammetry of Microparticles Approach. Analytical Chemistry, 2007, 79, 2812-2821.	6.5	65
6	Dating Archeological Lead Artifacts from Measurement of the Corrosion Content Using the Voltammetry of Microparticles. Analytical Chemistry, 2011, 83, 5639-5644.	6.5	63
7	Evidence of Topological Indigo/Dehydroindigo Isomers in Maya Blue-Like Complexes Prepared from Palygorskite and Sepiolite. Journal of Physical Chemistry C, 2009, 113, 12118-12131.	3.1	62
8	Indigo/Dehydroindigo/Palygorskite Complex in Maya Blue:â€‰ An Electrochemical Approach. Journal of Physical Chemistry C, 2007, 111, 4585-4595.	3.1	57
9	Comparative study of different indigo-clay Maya Blue-like systems using the voltammetry of microparticles approach. Journal of Solid State Electrochemistry, 2009, 13, 869-878.	2.5	55
10	From Maya Blue to â€œMaya Yellowâ€: A Connection between Ancient Nanostructured Materials from the Voltammetry of Microparticles. Angewandte Chemie - International Edition, 2011, 50, 5741-5744.	13.8	53
11	Identification of natural dyes used in works of art by pyrolysisâ€“gas chromatography/mass spectrometry combined with in situ trimethylsilylation. Analytical and Bioanalytical Chemistry, 2005, 382, 259-268.	3.7	51
12	Dating Archaeological Copper/Bronze Artifacts by Using the Voltammetry of Microparticles. Angewandte Chemie - International Edition, 2014, 53, 9262-9266.	13.8	47
13	Layer-by-layer identification of copper alteration products in metallic works of art using the voltammetry of microparticles. Analytica Chimica Acta, 2010, 680, 1-9.	5.4	46
14	â€˜Oneâ€Touchâ€™ Voltammetry of Microparticles for the Identification of Corrosion Products in Archaeological Lead. Electroanalysis, 2011, 23, 1391-1400.	2.9	45
15	Application of the voltammetry of microparticles for dating archaeological lead using polarization curves and electrochemical impedance spectroscopy. Journal of Solid State Electrochemistry, 2012, 16, 2349-2356.	2.5	45
16	Characterization of acrylic resins used for restoration of artworks by pyrolysis-silylation-gas chromatography/mass spectrometry with hexamethyldisilazane. Journal of Chromatography A, 2006, 1127, 228-236.	3.7	43
17	Insights into the Maya Blue Technology: Greenish Pellets from the Ancient City of La Blanca. Angewandte Chemie - International Edition, 2012, 51, 700-703.	13.8	43
18	Identification of lead pigments in nanosamples from ancient paintings and polychromed sculptures using voltammetry of nanoparticles/atomic force microscopy. Talanta, 2007, 71, 1569-1579.	5.5	42

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19	Quantitation from Tafel Analysis in Solid-State Voltammetry. Application to the Study of Cobalt and Copper Pigments in Severely Damaged Frescoes. Analytical Chemistry, 2008, 80, 2704-2716.	6.5	40
20	Chronoamperometric study of proton transfer/electron transfer in solid state electrochemistry of organic dyes. Journal of Solid State Electrochemistry, 2006, 10, 949-958.	2.5	39
21	Study of behaviour on simulated daylight ageing of artistsâ€™ acrylic and poly(vinyl acetate) paint films. Analytical and Bioanalytical Chemistry, 2011, 399, 2921-2937.	3.7	37
22	Application of Modified Tafel Analysis to the Identification of Corrosion Products on Archaeological Metals Using Voltammetry of Microparticles. Electroanalysis, 2011, 23, 2803-2812.	2.9	37
23	Study of the influencing effect of pigments on the photoageing of terpenoid resins used as pictorial media. Journal of Chromatography A, 2006, 1121, 248-258.	3.7	36
24	An evaluation of daylight distribution as an initial preventive conservation measure at two Smithsonian Institution Museums, Washington DC, USA. Journal of Cultural Heritage, 2011, 12, 54-64.	3.3	36
25	Modeling Corrosion of Archaeological Silverâ€Copper Coins Using the Voltammetry of Immobilized Particles. Electroanalysis, 2012, 24, 1945-1955.	2.9	36
26	On the dehydroindigo contribution to Maya Blue. Journal of Materials Science, 2013, 48, 7171-7183.	3.7	34
27	Characterization of polyvinyl resins used as binding media in paintings by pyrolysisâ€“silylationâ€“gas chromatographyâ€“mass spectrometry. Analytical and Bioanalytical Chemistry, 2008, 391, 1371-1379.	3.7	32
28	FIB-FESEM and EMPA results on Antoninianus silver coins for manufacturing and corrosion processes. Scientific Reports, 2018, 8, 10676.	3.3	30
29	Study of the microbiodegradation of terpenoid resin-based varnishes from easel painting using pyrolysisâ€“gas chromatographyâ€“mass spectrometry and gas chromatographyâ€“mass spectrometry. Analytical and Bioanalytical Chemistry, 2006, 385, 1265-1280.	3.7	29
30	Electrochemical discrimination of mints: The last Chinese emperors Kuang HsÃ¼ and HsÃ¼an T'ung monetary unification. Talanta, 2017, 169, 50-56.	5.5	28
31	In situ AFM study of proton-assisted electrochemical oxidation/reduction of microparticles of organic dyes. Electrochemistry Communications, 2008, 10, 1238-1241.	4.7	26
32	Determination of the plasticizer content in poly(vinyl acetate) paint medium by pyrolysisâ€“silylationâ€“gas chromatographyâ€“mass spectrometry. Journal of Analytical and Applied Pyrolysis, 2009, 85, 487-491.	5.5	26
33	Electroanalytical techniques in archaeological and art conservation. Pure and Applied Chemistry, 2018, 90, 447-461.	1.9	26
34	Ageing behaviour and analytical characterization of the JatobÃ¡ resin collected from Hymenaea stigonocarpa Mart.. International Journal of Mass Spectrometry, 2009, 284, 81-92.	1.5	25
35	Application of solid-state electrochemistry techniques to polyfunctional organicâ€“inorganic hybrid materials: The Maya Blue problem. Microporous and Mesoporous Materials, 2013, 166, 123-130.	4.4	25
36	Microchemical surface analysis of historic copper-based coins by the combined use of FIB-FESEM-EDX, OM, FTIR spectroscopy and solid-state electrochemical techniques. Microchemical Journal, 2019, 148, 573-581.	4.5	25

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37	Study on the effects of chemical cleaning on pinaceae resin-based varnishes from panel and canvas paintings using pyrolysis-gas chromatography/mass spectrometry. Journal of Analytical and Applied Pyrolysis, 2006, 76, 144-153.	5.5	24
38	Identification of additives in poly(vinylacetate) artistâ€™s paints using PY-GC-MS. Analytical and Bioanalytical Chemistry, 2010, 397, 357-367.	3.7	23
39	Characterization of prehispanic cosmetics found in a burial of the ancient city of Teotihuacan (Mexico). Journal of Archaeological Science, 2012, 39, 1043-1062.	2.4	23
40	An authentication case study: Antonio Palomino versus Vicente Guillo paintings in the vaulted ceiling of the Sant Joan del Mercat church (Valencia, Spain). Journal of Raman Spectroscopy, 2012, 43, 1250-1259.	2.5	23
41	Electrochemical Characterization of Corrosion Products in Leaded Bronze Sculptures Considering Ohmic Drop Effects on Tafel Analysis. Electroanalysis, 2016, 28, 833-845.	2.9	23
42	Electrochemical Characterization of Coinage Techniques the 17th Century: The maravedÃs Case. Electroanalysis, 2017, 29, 2008-2018.	2.9	20
43	Dating Archaeological Strata in the Magna Mater Temple Using Solidâ€state Voltammetric Analysis of Leaded Bronze Coins. Electroanalysis, 2018, 30, 361-370.	2.9	20
44	Study of ageing of ketone resins used as picture varnishes by FTIR spectroscopy, UVâ€“Vis spectrophotometry, atomic force microscopy and scanning electron microscopy X-ray microanalysis. Analytical and Bioanalytical Chemistry, 2008, 391, 1351-1359.	3.7	18
45	Composition and Color of Maya Blue: Reexamination of Literature Data Based On the Dehydroindigo Model. Journal of Physical Chemistry C, 2019, 123, 770-782.	3.1	18
46	On-line database of voltammetric data of immobilized particles for identifying pigments and minerals in archaeometry, conservation and restoration (ELCHER database). Analytica Chimica Acta, 2016, 927, 1-12.	5.4	17
47	Discovery of indigoid-containing clay pellets from La Blanca: significance with regard to the preparation and use of Maya Blue. Journal of Archaeological Science, 2014, 41, 147-155.	2.4	16
48	Characterizing archaeological bronze corrosion products intersecting electrochemical impedance measurements with voltammetry of immobilized particles. Electrochimica Acta, 2017, 246, 269-279.	5.2	16
49	Multimethod analysis of Iranian Ilkhanate ceramics from the Takht-e Soleyman palace. Analytical and Bioanalytical Chemistry, 2010, 397, 319-329.	3.7	14
50	Screening and mapping of pigments in paintings using scanning electrochemical microscopy (SECM). Analyst, The, 2015, 140, 1065-1075.	3.5	14
51	Electrochemical Fingerprint of Archeological Lead Silicate Glasses Using the Voltammetry of Microparticles Approach. Journal of the American Ceramic Society, 2016, 99, 3915-3923.	3.8	14
52	Electrochemical Characterization of Egyptian Blue Pigment in Wall Paintings Using the Voltammetry of Microparticles Methodology. Electroanalysis, 2013, 25, 2621-2630.	2.9	13
53	Characterization of additives of PVAc and acrylic waterborne dispersions and paints by analytical pyrolysisâ€“GCâ€“MS and pyrolysisâ€“silylationâ€“GCâ€“MS. Journal of Analytical and Applied Pyrolysis, 2015, 113, 606-620.	5.5	13
54	Another beauty of analytical chemistry: chemical analysis of inorganic pigments of art and archaeological objects. ChemTexts, 2016, 2, 1.	1.9	13

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55	Analyzing chemical changes in verdigris pictorial specimens upon bacteria and fungi biodeterioration using voltammetry of microparticles. Heritage Science, 2017, 5, .	2.3	13
56	Detection of archaeological forgeries of Iberian lead plates using nanoelectrochemical techniques. The lot of fake plates from Bugarra (Spain). Forensic Science International, 2015, 247, 79-88.	2.2	12
57	Solid-state electrochemical characterization of emissions and authorities producing Roman brass coins. Microchemical Journal, 2020, 152, 104306.	4.5	12
58	Characterization of Iranian Moarraque glazes by light microscopy, SEM-EDX and voltammetry of microparticles. Journal of Cultural Heritage, 2008, 9, e50-e54.	3.3	11
59	Study of ageing of ketone resins used as picture varnishes by pyrolysisâ€“silylationâ€“gas chromatographyâ€“mass spectrometry. Journal of Analytical and Applied Pyrolysis, 2009, 85, 470-479.	5.5	11
60	Identification of indigoid compounds present in archaeological Maya blue by pyrolysis-silylation-gas chromatographyâ€“mass spectrometry. Journal of Analytical and Applied Pyrolysis, 2014, 105, 355-362.	5.5	11
61	Potential Application of Voltammetry of Microparticles for Dating Porcine Bloodâ€based Binding Media used in Taiwanese Architectural Polychromies. Chemistry - an Asian Journal, 2012, 7, 2268-2273.	3.3	10
62	Multiple-scan voltammetry of immobilized particles of ancient copper/bronze coins. Journal of Solid State Electrochemistry, 2021, 25, 195-206.	2.5	10
63	Electrochemical assessment of pigments-binding medium interactions in oil paint deterioration: a case study on indigo and Prussian blue. Heritage Science, 2020, 8, .	2.3	10
64	Electrochemical characterization of biodeterioration of paint films containing cadmium yellow pigment. Journal of Solid State Electrochemistry, 2016, 20, 3287-3302.	2.5	9
65	Microbial deterioration of Mowilith DMC 2, Mowilith DM5 and Conrayt poly(vinyl acetate) emulsions used as binding media of paintings by pyrolysis-silylation-gas chromatographyâ€“mass spectrometry. Journal of Analytical and Applied Pyrolysis, 2009, 85, 480-486.	5.5	8
66	Evaluation of a gelatin-based adhesive for historic paintings that incorporates citronella oil as an eco-friendly biocide. Journal of Adhesion Science and Technology, 2018, 32, 2320-2349.	2.6	8
67	Electrochemical identification of painters/workshops: The case of Valencian Renaissance-Baroque painters (ca. 1550- ca. 1670). Electrochimica Acta, 2019, 297, 685-695.	5.2	7
68	Spot tests: past and present. ChemTexts, 2022, 8, 4.	1.9	7
69	Influence of plasticizer and biocide on the functional properties of gelatin-based adhesives used in painting consolidation. Journal of Adhesion Science and Technology, 2015, 29, 1774-1795.	2.6	6
70	Multiple-scan voltammetry and OCP: Archaeometric tools for dating archaeological bronzes. Journal of Electroanalytical Chemistry, 2021, 893, 115336.	3.8	6
71	Application of focused ion beam-field emission scanning electron microscopy-X-ray microanalysis in the study of the surface alterations of archaeological tin-glazed ceramics. Ceramics International, 2022, 48, 14067-14075.	4.8	4
72	Polysaccharide remains in Maya mural paintings: is it an evidence of the use of plant gums as binding medium of pigments and additive in the mortar?. Science and Technology of Archaeological Research, 2019, 5, 200-220.	2.4	2

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73	Electrochemical analysis of coffin portraits from the National Museum in Krakow. Journal of Solid State Electrochemistry, 2021, 25, 2767-2776.	2.5	2
74	Response to â€œC. Tsiantos, M. Tsampodimou, G.H. Kacandes, M. SÃ¡nchez del RÃo, V. Gionis, G.D. Chryssikos. Comment to the paper: Identification of indigoid compounds present in archaeological Maya blue by pyrolysis-silylation-gas chromatographyâ€“mass spectrometry (M.T. DomÃ©nech-CarbÃ³, L. Osete-Cortina,) Tj ETQq1 1 0.784314 rgBT /Overlock		
75	Funerary colors in Pre-classical Maya culture: the red pigment in the 19th tomb of Rio Azul (Peten,) Tj ETQq1 1 0.784314 rgBT /Overlock	2.3	0