Claudio Mele

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8596983/publications.pdf

Version: 2024-02-01

98	1,850	236925 25	361022 35
papers	citations	h-index	g-index

100	100	100	1652
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Evaluation of erosionâ€“corrosion in multiphase flow via CFD and experimental analysis. Wear, 2003, 255, 237-245.	3.1	106
2	Ultrasonic spot welding of carbon fiber reinforced epoxy composites to aluminum: mechanical and electrochemical characterization. Composites Part B: Engineering, 2018, 144, 134-142.	12.0	94
3	Electrochemical oxidation of WC in acidic sulphate solution. Corrosion Science, 2004, 46, 453-469.	6.6	50
4	A SERS Investigation of Cyanide Adsorption and Reactivity during the Electrodeposition of Gold, Silver, and Copper from Aqueous Cyanocomplexes Solutions. Journal of Physical Chemistry C, 2008, 112, 6352-6358.	3.1	45
5	An electrochemical and in situ SERS study of Cu electrodeposition from acidic sulphate solutions in the presence of 3-diethylamino-7-(4-dimethylaminophenylazo)-5-phenylphenazinium chloride (Janus) Tj ETQq1 1 0.784314 rgBT /Over	3.8	41
6	An electrochemical impedance investigation of the behaviour of anodically oxidised titanium in human plasma and cognate fluids, relevant to dental applications. Journal of Materials Science: Materials in Medicine, 2008, 19, 3443-3453.	3.6	44
7	A SERS investigation of the electrodeposition of Agâ€“Au alloys from free-cyanide solutions. Journal of Electroanalytical Chemistry, 2004, 563, 133-143.	3.8	39
8	Electrodeposition of Cu from Acidic Sulfate Solutions in the Presence of Bis-(3-sulfopropyl)-disulfide (SPS) and Chloride Ions. Journal of the Electrochemical Society, 2006, 153, C254.	2.9	39
9	Electrosynthesis of Co/PPy nanocomposites for ORR electrocatalysis: a study based on quasi-in situ X-ray absorption, fluorescence and in situ Raman spectroscopy. Electrochimica Acta, 2014, 137, 535-545.	5.2	39
10	Electrodeposition of Cu from Acidic Sulphate Solutions in the Presence of PEG: An Electrochemical and Spectroelectrochemical Investigation â€“ Part I. Journal of Applied Electrochemistry, 2006, 36, 789-800.	2.9	37
11	GO/glucose/PEDOT:PSS ternary nanocomposites for flexible supercapacitors. Composites Part B: Engineering, 2018, 148, 149-155.	12.0	37
12	Anodic behaviour of WC-Co type hardmetal. Materials and Corrosion - Werkstoffe Und Korrosion, 2003, 54, 295-303.	1.5	35
13	An SFG/DFG investigation of CNâ¯ adsorption at an Au electrode in 1-butyl-1-methyl-pyrrolidinium bis(trifluoromethylsulfonyl) amide ionic liquid. Electrochemistry Communications, 2010, 12, 56-60.	4.7	35
14	Electrochemical dynamics and structure of the Ag/AgCl interface in chloride-containing aqueous solutions. Surface and Coatings Technology, 2007, 201, 4619-4627.	4.8	34
15	A novel polymeric leveller for the electrodeposition of copper from acidic sulphate bath: A spectroelectrochemical investigation. Electrochimica Acta, 2007, 52, 4767-4777.	5.2	34
16	Electrodeposition of polyanilineâ€“carbon nanotubes composite films and investigation on their role in corrosion protection of austenitic stainless steel by SNIFTIR analysis. Journal of Nanoparticle Research, 2011, 13, 6035-6047.	1.9	32
17	Localised corrosion processes of austenitic stainless steel bipolar plates for polymer electrolyte membrane fuel cells. Journal of Power Sources, 2010, 195, 3590-3596.	7.8	31
18	An in situ SFG and SERS investigation into the electrodeposition of Au from and solutions. Journal of Electroanalytical Chemistry, 2007, 602, 61-69.	3.8	30

#	Article	IF	Citations
19	Characterization of the particulate anode of a laboratory flow Znâ€“air fuel cell. Journal of Applied Electrochemistry, 2017, 47, 877-888.	2.9	30
20	An SFG investigation of Au(111) and Au(210) electrodes in aqueous solutions containing KCN and cetylpyridinium chloride. Journal of Electroanalytical Chemistry, 2004, 574, 85-94.	3.8	29
21	Voltammetric and in situ FTIRS study on CNâ¯ and Au(CN)â¯x complexes at the polycrystalline gold surface in citrate medium. Journal of Electroanalytical Chemistry, 2004, 569, 53-60.	3.8	28
22	Electrodeposition of Cu from Acidic Sulphate Solutions in the Presence of PEG - Part II Visible Electroreflectance Spectroscopy Measurements during Electrodeposition. Journal of Applied Electrochemistry, 2006, 36, 87-96.	2.9	28
23	Electrodeposition of Cu from Cyanoalkaline Solutions in the Presence of CPC and PEG. Journal of the Electrochemical Society, 2005, 152, C255.	2.9	27
24	Doubly Resonant Sum Frequency Generation Spectroscopy of Adsorbates at an Electrochemical Interface. Journal of Physical Chemistry C, 2008, 112, 11791-11795.	3.1	27
25	Coupling of Morphology and Chemistry Leads to Morphogenesis in Electrochemical Metal Growth: A Review of the Reaction-Diffusion Approach. Acta Applicandae Mathematicae, 2012, 122, 53.	1.0	25
26	In-situ photoelectron microspectroscopy during the operation of a single-chamber SOFC. Electrochemistry Communications, 2012, 24, 104-107.	4.7	25
27	Electrodeposition of manganese oxide from eutectic urea/choline chloride ionic liquid: An in situ study based on soft X-ray spectromicroscopy and visible reflectivity. Journal of Power Sources, 2012, 211, 71-76.	7.8	23
28	Electrochemical fabrication of nanoporous gold-supported manganese oxide nanowires based on electrodeposition from eutectic urea/choline chloride ionic liquid. Electrochimica Acta, 2013, 87, 918-924.	5.2	23
29	Electrodeposition of white gold alloys: an electrochemical, spectroelectrochemical and structural study of the electrodeposition of Au-Sn alloys in the presence of 4-cyanopyridine. Journal of Solid State Electrochemistry, 2004, 8, 147-158.	2.5	21
30	Time-dependent in situ SERS study of CNâ¯ adsorbed on gold. Journal of Electroanalytical Chemistry, 2006, 592, 25-30.	3.8	21
31	Corrosion of cemented carbide grades in petrochemical slurries. Part I - Electrochemical adsorption of CNÂ¯, SCNÂ¯ and MBT: A study based on in situ SFG. International Journal of Refractory Metals and Hard Materials, 2016, 60, 37-51.	3.8	21
32	A SERS investigation of the electrodeposition of Agâ€“Au alloys from free-cyanide solutions â€“ part II. Journal of Electroanalytical Chemistry, 2004, 570, 29-34.	3.8	20
33	Corrosion of Ni in 1-butyl-1-methyl-pyrrolidinium bis (trifluoromethylsulfonyl) amide room-temperature ionic liquid: an in situ X-ray imaging and spectromicroscopy study. Physical Chemistry Chemical Physics, 2011, 13, 7968.	2.8	19
34	An investigation into the corrosion of Ag coins from the Greek colonies of Southern Italy. Part I: An in situ FT-IR and ERS investigation of the behaviour of Ag in contact with aqueous solutions containing 4-cyanopyridine. Corrosion Science, 2006, 48, 193-208.	6.6	18
35	Electrodeposition of Cu from acidic sulphate solutions in the presence of polyethylene glycol and chloride ions. Journal of Materials Science: Materials in Electronics, 2006, 17, 915-923.	2.2	18
36	Electrodeposition and Ageing of Mnâ€Based Binary Composite Oxygen Reduction Reaction Electrocatalysts. ChemElectroChem, 2015, 2, 1541-1550.	3.4	18

#	Article	IF	Citations
37	Spectroelectrochemical investigation of the anodic and cathodic behaviour of zinc in 5.3ÂM KOH. Journal of Applied Electrochemistry, 2015, 45, 43-50.	2.9	18
38	Electrochemical fabrication of nanoporous gold decorated with manganese oxide nanowires from eutectic urea/choline chloride ionic liquid. Part III â˜' Electrodeposition of Auâ€"Mn: a study based on in situ Sum-Frequency Generation and Raman spectroscopies. Electrochimica Acta, 2016, 218, 208-215.	5.2	18
39	Electrodeposition of Au from [EMIm][TFSA] room-temperature ionic liquid: An electrochemical and Surface-Enhanced Raman Spectroscopy study. Journal of Electroanalytical Chemistry, 2011, 651, 1-11.	3.8	17
40	Morphological Evolution of Zn-Sponge Electrodes Monitored by In Situ X-ray Computed Microtomography. ACS Applied Energy Materials, 2020, 3, 4931-4940.	5.1	17
41	Investigation into dynamics of Au electrodeposition based on analysis of SERS spectral time series. Transactions of the Institute of Metal Finishing, 2009, 87, 193-200.	1.3	16
42	Electrodeposition of Co/CoO nanoparticles onto graphene for ORR electrocatalysis: a study based on micro-X-ray absorption spectroscopy and X-ray fluorescence mapping. Acta Chimica Slovenica, 2014, 61, 263-71.	0.6	16
43	Silver electrodeposition from waterâ€"acetonitrile mixed solvents and mixed electrolytes in the presence of tetrabutylammonium perchlorate. Part Iâ€"electrochemical nucleation on glassy carbon electrode. Journal of Solid State Electrochemistry, 2009, 13, 1577-1584.	2.5	15
44	Investigation of Au electrodeposition from [BMP][TFSA] room-temperature ionic liquid containing K[Au(CN)2] by in situ two-dimensional sum frequency generation spectroscopy. Journal of Electroanalytical Chemistry, 2011, 661, 20-24.	3.8	15
45	Electrochemical behaviour and surface characterisation of Zr exposed to an SBF solution containing glycine, in view of dental implant applications. Journal of Materials Science: Materials in Medicine, 2011, 22, 193-200.	3.6	15
46	Electrodeposition of nanostructured bioactive hydroxyapatite-heparin composite coatings on titanium for dental implant applications. Journal of Materials Science: Materials in Medicine, 2014, 25, 1425-1434.	3.6	15
47	ORR stability of Mnâ€"Co/polypyrrole nanocomposite electrocatalysts studied by quasi in-situ identical-location photoelectron microspectroscopy. Electrochemistry Communications, 2016, 69, 50-54.	4.7	15
48	Electrodeposition of Auâ€"Sn alloys from acid Au(III) baths. Journal of Applied Electrochemistry, 2003, 33, 747-754.	2.9	14
49	Prediction of Morphological Properties of Smart-Coatings for Cr Replacement, Based on Mathematical Modelling. Advanced Materials Research, 0, 138, 93-106.	0.3	14
50	In situ X-ray spectromicroscopy study of bipolar plate material stability for nano-fuel-cells with ionic-liquid electrolyte. Microelectronic Engineering, 2011, 88, 2456-2458.	2.4	14
51	GO/PEDOT:PSS nanocomposites: effect of different dispersing agents on rheological, thermal, wettability and electrochemical properties. Nanotechnology, 2017, 28, 174001.	2.6	14
52	An Electrochemical and Spectroelectrochemical Study of the Electrodeposition of Au from KAU(CN)₂ Solutions containing 4-Cyanopyridine and Cetylpyridinium Chloride. Transactions of the Institute of Metal Finishing, 2003, 81, 59-67.	1.3	13
53	Electrochemical adsorption of cyanide on Ag(111) in the presence of cetylpyridinium chloride. Journal of Crystal Growth, 2004, 271, 274-286.	1.5	13
54	An in situ FT-IR evaluation of candidate organic corrosion inhibitors for carbon steel in contact with alkaline aqueous solutions. Materials and Corrosion - Werkstoffe Und Korrosion, 2007, 58, 362-368.	1.5	13

#	Article	IF	Citations
55	Analysis of the Process Parameters, Post-Weld Heat Treatment and Peening Effects on Microstructure and Mechanical Performance of Tiâ€“Al Dissimilar Laser Weldings. Metals, 2021, 11, 1257.	2.3	13
56	Autofluorescence of Model Polyethylene Terephthalate Nanoplastics for Cell Interaction Studies. Nanomaterials, 2022, 12, 1560.	4.1	13
57	An SFG and ERS investigation of the corrosion of CoW0.013C0.001 alloys and WCâ€“Co cermets in CNâ¯-containing aqueous solutions. Corrosion Science, 2007, 49, 2392-2405.	6.6	12
58	Electrochemical fabrication of nano- and micrometric Cu particles:in situinvestigation by electroreflectance and optical second harmonic generation. Transactions of the Institute of Metal Finishing, 2008, 86, 267-274.	1.3	12
59	Spectroelectrochemical study of the electro-oxidation of ethanol on WC-supported Pt â€“ Part III: Monitoring of electrodeposited-Pt catalyst ageing by in situ Fourier transform infrared spectroscopy, in situ sum frequency generation spectroscopy and ex situ photoelectron spectromicroscopy. Journal of Power Sources, 2013, 231, 6-17.	7.8	12
60	An Erosion-Corrosion Investigation of Coated Steel for Applications in the Oil and Gas Field, Based on Bipolar Electrochemistry. Coatings, 2020, 10, 92.	2.6	12
61	An in-situ FT-IR investigation of the anodic behaviour of WC-Co hardmetal. Materials and Corrosion - Werkstoffe Und Korrosion, 2003, 54, 694-696.	1.5	11
62	On the observation of inductive high-frequency impedance behaviour during the electrodeposition of Auâ€“Sn alloys. Journal of Applied Electrochemistry, 2004, 34, 277-281.	2.9	11
63	Study on levellers for Cu electrodeposition from acidic sulphate solution: anin situspectroelectrochemical approach. Transactions of the Institute of Metal Finishing, 2006, 84, 177-187.	1.3	11
64	Electrochemical reconstruction of a heavily corroded Tarentum hemiobolus silver coin: a study based on microfocus X-ray computed microtomography. Journal of Archaeological Science, 2014, 52, 24-30.	2.4	11
65	The role of chromium in the corrosion performance of cobalt- and cobalt-nickel based hardmetal binders: A study centred on X-ray absorption microspectroscopy. International Journal of Refractory Metals and Hard Materials, 2020, 92, 105320.	3.8	11
66	Corrosion behaviour of CoW0Â·013C0Â·001in aqueous acidic sulphate solutions containing sodium lauryl sulphate and sodium citrate. Corrosion Engineering Science and Technology, 2005, 40, 290-300.	1.4	10
67	An SFG and DFG investigation of polycrystalline Au, Auâ€“Cu and Auâ€“Agâ€“Cu electrodes in contact with aqueous solutions containing KCN. Journal of Alloys and Compounds, 2007, 427, 341-349.	5.5	10
68	A SERS investigation of the electrodeposition of Au in a phosphate solution. Surface and Coatings Technology, 2007, 201, 6267-6272.	4.8	10
69	An SFG and DFG investigation of Au(111), Au(100), Au(110) and Au(210) electrodes in contact with aqueous solutions containing KCN. Journal of Solid State Electrochemistry, 2008, 12, 303-313.	2.5	10
70	In Situ Electrochemical SFG/DFG Study of CNâ¯ and Nitrile Adsorption at Au from 1-Butyl-1-methyl-pyrrolidinium Bis(trifluoromethylsulfonyl) Amide Ionic Liquid ([BMP][TFSA]) Containing 4-{2-[1-(2-Cyanoethyl)-1,2,3,4-tetrahydroquinolin-6-yl]diazenyl} Benzonitrile (CTDB) and K[Au(CN)2]. Molecules, 2012, 17, 7722-7736.	3.8	10
71	Sustainable Materials from Fish Industry Waste for Electrochemical Energy Systems. Energies, 2021, 14, 7928.	3.1	10
72	Silver electrodeposition from waterâ€“acetonitrile mixed solvents in the presence of tetrabutylammonium perchlorate. Journal of Solid State Electrochemistry, 2009, 13, 1553-1559.	2.5	9

#	Article	IF	Citations
73	Fabrication and testing of an electrochemical microcell for in situ soft X-ray microspectroscopy measurements. Journal of Physics: Conference Series, 2013, 425, 182010.	0.4	9
74	An Electrochemical and in situ SERS Study of Au Electrodeposition from a Thiourea Solution. Transactions of the Institute of Metal Finishing, 2003, 81, 75-78.	1.3	8
75	Electrochemical behaviour of alloy CoW0Â·013C0Â·001in acidic sulphate solutions. Corrosion Engineering Science and Technology, 2005, 40, 149-157.	1.4	8
76	Electrodeposition of Cu from acidic sulphate solutions in presence of Bis-(3-sulphopropyl)-disulphide (SPS). Transactions of the Institute of Metal Finishing, 2006, 84, 83-93.	1.3	8
77	A SERS investigation of carbon steel in contact with aqueous solutions containing BenzylDiMethylPhenylAmmonium Chloride. Materials and Corrosion - Werkstoffe Und Korrosion, 2007, 58, 20-24.	1.5	8
78	Electrodeposition of Ni/ceria composites: an in situ visible reflectance investigation. Journal of Solid State Electrochemistry, 2012, 16, 3429-3441.	2.5	8
79	An in situ near-ambient pressure X-ray photoelectron spectroscopy study of CO 2 reduction at Cu in a SOE cell. Journal of Electroanalytical Chemistry, 2017, 799, 17-25.	3.8	8
80	Operando soft Xâ€ray microscope study of rechargeable Znâ€“air battery anodes in deep eutectic solvent electrolyte. X-Ray Spectrometry, 2019, 48, 527-535.	1.4	8
81	Electrodeposition of Zinc from Alkaline Electrolytes Containing Quaternary Ammonium Salts and Ionomers: Impact of Cathodicâ€Anodic Cycling Conditions. ChemElectroChem, 2020, 7, 1752-1764.	3.4	8
82	Corrosion Performance of Austenitic Stainless Steel Bipolar Plates for Nafion- and Room-Temperature Ionic-Liquid-Based PEMFCs. Open Fuels and Energy Science Journal, 2012, 5, 47-52.	0.2	8
83	Au electrodeposition in presence of selfassembling organics:in situstudy by sum frequency generation and surface enhanced Raman spectroscopy. Transactions of the Institute of Metal Finishing, 2010, 88, 130-143.	1.3	7
84	Electrochemical fabrication of nanoporous gold decorated with manganese oxide nanowires from eutectic urea/choline chloride ionic liquid. Part II â€“ Electrodeposition of Auâ€“Mn: A study based on soft X-ray microspectroscopy. Electrochimica Acta, 2013, 114, 889-896.	5.2	7
85	Electrodeposition of a Au-Dy2O3 Composite Solid Oxide Fuel Cell Catalyst from Eutectic Urea/Choline Chloride Ionic Liquid. Energies, 2012, 5, 5363-5371.	3.1	6
86	Controlled corrosion of micrometric and submicrometric metal powders in fluidised bed reactor. Transactions of the Institute of Metal Finishing, 2006, 84, 154-158.	1.3	5
87	A SERS investigation of Cu electrodeposition in the presence of the model leveller 4-{2-[1-(2-cyanoethyl)-1,2,3,4-tetrahydroquinolin-6-yl]diazenyl} benzonitrile. Electrochimica Acta, 2010, 55, 3279-3285.	5.2	5
88	In SituSoft X-ray Microscopy Study of Fe Interconnect Corrosion in Ionic Liquid-Based Nano-PEMFC Half-Cells. Fuel Cells, 2013, 13, 196-202.	2.4	5
89	Electrodeposition of DLC films on carbon steel from acetic acid solutions. Transactions of the Institute of Metal Finishing, 2014, 92, 183-188.	1.3	5
90	A simple and safe method to implement corrosion experiments with 1â€…bar of H₂S. Corrosion Engineering Science and Technology, 2017, 52, 325-331.	1.4	5

#	Article	IF	Citations
91	Dy- and Tb-doped CeO2-Ni cermets for solid oxide fuel cell anodes: electrochemical fabrication, structural characterization, and electrocatalytic performance. Journal of Solid State Electrochemistry, 2018, 22, 3761-3773.	2.5	5
92	SFG and DFG investigation of Au(111), Au(210), polycrystalline Au, Auâ€“Cu and Auâ€“Agâ€“Cu electrodes in contact with aqueous solutions containing KCN and 4-cyanopyridine. Journal of Applied Electrochemistry, 2008, 38, 897-906.	2.9	4
93	Electrodeposition of a Mnâ€“Cuâ€“ZnO Hybrid Material for Supercapacitors: A Soft Xâ€ray Fluorescence and Absorption Microspectroscopy Study. ChemElectroChem, 2014, 1, 392-399.	3.4	4
94	Silver electrodeposition from waterâ€“acetonitrile mixed solvents. Part IIIâ€”an in situ investigation by optical second harmonic generation spectroscopy. Journal of Solid State Electrochemistry, 2010, 14, 989-995.	2.5	3
95	A comprehensive assessment of the performance of corrosion resistant alloys in hot acidic brines for application in oil and gas production. Corrosion Engineering Science and Technology, 2017, 52, 99-113.	1.4	3
96	Pulseâ€Plating of Mnâ€“Cuâ€“ZnO for Supercapacitors: A Study Based on Soft Xâ€ray Fluorescence and Absorption Microspectroscopy. ChemElectroChem, 2014, 1, 1161-1172.	3.4	2
97	Quantifying and rationalizing polarization curves of Zn-air fuel-cells: A simple enabling contribution to device-scale analysis and monitoring. Electrochimica Acta, 2022, 425, 140712.	5.2	1
98	Fourier analysis of an electrochemical phase formation model enables the rationalization of zinc-anode battery dynamics. Applications in Engineering Science, 2021, 5, 100033.	0.8	0