

# Matjaž Finšgar

## List of Publications by Year in descending order

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94  
papers

4,868  
citations

172207

29  
h-index

95083

68  
g-index

97  
all docs

97  
docs citations

97  
times ranked

3646  
citing authors

#	ARTICLE	IF	CITATIONS
1	Application of corrosion inhibitors for steels in acidic media for the oil and gas industry: A review. <i>Corrosion Science</i> , 2014, 86, 17-41.	3.0	979
2	Inhibition of copper corrosion by 1,2,3-benzotriazole: A review. <i>Corrosion Science</i> , 2010, 52, 2737-2749.	3.0	539
3	What Determines the Inhibition Effectiveness of ATA, BTAH, and BTAOH Corrosion Inhibitors on Copper?. <i>Journal of the American Chemical Society</i> , 2010, 132, 16657-16668.	6.6	278
4	A comparative electrochemical and quantum chemical calculation study of BTAH and BTAOH as copper corrosion inhibitors in near neutral chloride solution. <i>Electrochimica Acta</i> , 2008, 53, 8287-8297.	2.6	197
5	Organic corrosion inhibitors for aluminum and its alloys in chloride and alkaline solutions: A review. <i>Arabian Journal of Chemistry</i> , 2019, 12, 4646-4663.	2.3	197
6	An electrochemical, long-term immersion, and XPS study of 2-mercaptobenzothiazole as a copper corrosion inhibitor in chloride solution. <i>Corrosion Science</i> , 2014, 83, 164-175.	3.0	185
7	2-Mercaptobenzimidazole as a copper corrosion inhibitor: Part I. Long-term immersion, 3D-profilometry, and electrochemistry. <i>Corrosion Science</i> , 2013, 72, 82-89.	3.0	149
8	2-Mercaptobenzimidazole as a copper corrosion inhibitor: Part II. Surface analysis using X-ray photoelectron spectroscopy. <i>Corrosion Science</i> , 2013, 72, 90-98.	3.0	139
9	Green corrosion inhibitors for aluminium and its alloys: a review. <i>RSC Advances</i> , 2017, 7, 27299-27330.	1.7	134
10	Electrochemical and XPS study of polyethyleneimines of different molecular sizes as corrosion inhibitors for AISI 430 stainless steel in near-neutral chloride media. <i>Materials Chemistry and Physics</i> , 2009, 116, 198-206.	2.0	116
11	Polyethyleneimine as a corrosion inhibitor for ASTM 420 stainless steel in near-neutral saline media. <i>Corrosion Science</i> , 2009, 51, 525-533.	3.0	116
12	EQCM and XPS analysis of 1,2,4-triazole and 3-amino-1,2,4-triazole as copper corrosion inhibitors in chloride solution. <i>Corrosion Science</i> , 2013, 77, 350-359.	3.0	111
13	2-Mercaptobenzoxazole as a copper corrosion inhibitor in chloride solution: Electrochemistry, 3D-profilometry, and XPS surface analysis. <i>Corrosion Science</i> , 2014, 80, 82-95.	3.0	107
14	Organic corrosion inhibitors for aluminium and its alloys in acid solutions: a review. <i>RSC Advances</i> , 2016, 6, 62833-62857.	1.7	107
15	Recent progressive use of atomic force microscopy in biomedical applications. <i>TrAC - Trends in Analytical Chemistry</i> , 2016, 80, 96-111.	5.8	100
16	Corrosion behaviour of stainless steels in aqueous solutions of methanesulfonic acid. <i>Corrosion Science</i> , 2010, 52, 2430-2438.	3.0	77
17	The corrosion inhibition of certain azoles on steel in chloride media: Electrochemistry and surface analysis. <i>Corrosion Science</i> , 2016, 111, 370-381.	3.0	74
18	Mechanically strong, flexible and thermally stable graphene oxide/nanocellulosic films with enhanced dielectric properties. <i>RSC Advances</i> , 2016, 6, 49138-49149.	1.7	58

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19	Novel chitosan/diclofenac coatings on medical grade stainless steel for hip replacement applications. <i>Scientific Reports</i> , 2016, 6, 26653.	1.6	56
20	A review of techniques for the application of bioactive coatings on metal-based implants to achieve controlled release of active ingredients. <i>Materials and Design</i> , 2022, 217, 110653.	3.3	54
21	Triazole, Benzotriazole, and Naphthotriazole as Copper Corrosion Inhibitors: I. Molecular Electronic and Adsorption Properties. <i>ChemPhysChem</i> , 2011, 12, 3547-3555.	1.0	53
22	Novel ethanol-induced pectin-xanthan aerogel coatings for orthopedic applications. <i>Carbohydrate Polymers</i> , 2017, 166, 365-376.	5.1	50
23	Corrosion study of copper in the presence of benzotriazole and its hydroxy derivative. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2011, 62, 956-966.	0.8	49
24	Electrochemical, 3D topography, XPS, and ToF-SIMS analyses of 4-methyl-2-phenylimidazole as a corrosion inhibitor for brass. <i>Corrosion Science</i> , 2020, 169, 108632.	3.0	45
25	Cellulose nanofibrils-reduced graphene oxide xerogels and cryogels for dielectric and electrochemical storage applications. <i>Polymer</i> , 2018, 147, 260-270.	1.8	44
26	Galvanic series of different stainless steels and copper- and aluminium-based materials in acid solutions. <i>Corrosion Science</i> , 2013, 68, 51-56.	3.0	40
27	A detailed electrochemical impedance spectroscopy study of a bismuth-film glassy carbon electrode for trace metal analysis. <i>Analytica Chimica Acta</i> , 2018, 1004, 10-21.	2.6	40
28	Determination of the Cu <sub>2</sub> O Thickness on BTAH-Inhibited Copper by Reconstruction of Auger Electron Spectra. <i>Journal of the Electrochemical Society</i> , 2010, 157, C295.	1.3	36
29	UV-Induced reduction of graphene oxide in cellulose nanofibril composites. <i>New Journal of Chemistry</i> , 2019, 43, 681-688.	1.4	35
30	Carboxymethyl cellulose/diclofenac bioactive coatings on AISI 316LVM for controlled drug delivery, and improved osteogenic potential. <i>Carbohydrate Polymers</i> , 2020, 230, 115612.	5.1	30
31	Bismuth-tin-film electrodes for Zn(II), Cd(II), and Pb(II) trace analysis. <i>Microchemical Journal</i> , 2019, 145, 676-685.	2.3	29
32	A combination of interdisciplinary analytical tools for evaluation of multi-layered coatings on medical grade stainless steel for biomedical applications. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2018, 128, 230-246.	2.0	28
33	Polysaccharide Thin Solid Films for Analgesic Drug Delivery and Growth of Human Skin Cells. <i>Frontiers in Chemistry</i> , 2019, 7, 217.	1.8	28
34	Clindamycin-Based 3D-Printed and Electrospun Coatings for Treatment of Implant-Related Infections. <i>Materials</i> , 2021, 14, 1464.	1.3	27
35	X-ray excited Auger Cu L <sub>3</sub> L <sub>4,5</sub> M <sub>4,5</sub> spectra measured at low take-off angles as a fingerprint for a Cu-organics connection. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2018, 222, 10-14.	0.8	25
36	The first electrochemical and surface analysis of 2-aminobenzimidazole as a corrosion inhibitor for copper in chloride solution. <i>New Journal of Chemistry</i> , 2017, 41, 7151-7161.	1.4	23

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37	Efficient Copper Removal from an Aqueous Environment using a Novel and Hybrid Nanoadsorbent Based on Derived-Polyethyleneimine Linked to Silica Magnetic Nanocomposites. <i>Nanomaterials</i> , 2019, 9, 209.	1.9	21
38	A Review of Recent Advances in the Inhibition of Sweet Corrosion. <i>Chemical Record</i> , 2021, 21, 1845-1875.	2.9	21
39	A Flexible, Disposable Hydrogen Peroxide Sensor on Graphene Nanoplatelet-Coated Cellulose. <i>Current Analytical Chemistry</i> , 2017, 13, .	0.6	21
40	Corrosion inhibition and surface analysis of amines on mild steel in chloride medium. <i>Chemical Papers</i> , 2017, 71, 81-89.	1.0	19
41	The Corrosion Inhibition of AA6082 Aluminium Alloy by Certain Azoles in Chloride Solution: Electrochemistry and Surface Analysis. <i>Coatings</i> , 2019, 9, 380.	1.2	19
42	Copper-bismuth-film in situ electrodes for heavy metal detection. <i>Microchemical Journal</i> , 2020, 154, 104635.	2.3	19
43	Effect of surface powder particles and morphologies on corrosion of Ti-6Al-4V fabricated with different energy densities in selective laser melting. <i>Materials and Design</i> , 2021, 211, 110184.	3.3	18
44	Copper-film electrodes for Pb(II) trace analysis and a detailed electrochemical impedance spectroscopy study. <i>Microchemical Journal</i> , 2019, 147, 863-871.	2.3	17
45	Surface analysis of the 2-mercaptobenzothiazole corrosion inhibitor on 6082 aluminum alloy using ToF-SIMS and XPS. <i>Analytical Methods</i> , 2020, 12, 456-465.	1.3	17
46	The Role of Growth Factors in Bioactive Coatings. <i>Pharmaceutics</i> , 2021, 13, 1083.	2.0	15
47	Analytical Techniques for the Characterization of Bioactive Coatings for Orthopaedic Implants. <i>Biomedicines</i> , 2021, 9, 1936.	1.4	15
48	The first X-ray photoelectron spectroscopy surface analysis of 4-methyl-2-phenyl-imidazole adsorbed on copper. <i>Analytical Methods</i> , 2015, 7, 6496-6503.	1.3	14
49	Surface analysis of 2-mercapto-1-methylimidazole adsorbed on copper by X-ray photoelectron spectroscopy. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2018, 190, 290-297.	2.0	13
50	Characterization of chitosan-lysine surfactant bioactive coating on silicone substrate. <i>Carbohydrate Polymers</i> , 2020, 232, 115817.	5.1	13
51	Evaluation of Au/ZrO <sub>2</sub> Catalysts Prepared via Postsynthesis Methods in CO <sub>2</sub> Hydrogenation to Methanol. <i>Catalysts</i> , 2022, 12, 218.	1.6	13
52	An Improved Reversed-Phase High-Performance Liquid Chromatography Method for the Analysis of Related Substances of Prednisolone in Active Ingredient. <i>ACS Omega</i> , 2020, 5, 7987-8000.	1.6	12
53	Surface analysis by gas cluster ion beam XPS and ToF-SIMS tandem MS of 2-mercaptobenzoxazole corrosion inhibitor for brass. <i>Corrosion Science</i> , 2021, 182, 109269.	3.0	12
54	Cyclic Voltammetry as an Electroanalytical Tool for Analysing the Reaction Mechanisms of Copper in Chloride Solution Containing Different Azole Compounds. <i>Current Analytical Chemistry</i> , 2020, 16, 465-474.	0.6	12

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55	Addressing the Needs of the Rapidly Aging Society through the Development of Multifunctional Bioactive Coatings for Orthopedic Applications. <i>International Journal of Molecular Sciences</i> , 2022, 23, 2786.	1.8	12
56	Recent Progress in Non-Enzymatic Electroanalytical Detection of Pesticides Based on the Use of Functional Nanomaterials as Electrode Modifiers. <i>Biosensors</i> , 2022, 12, 263.	2.3	12
57	Reusability of SPE and Sb-modified SPE Sensors for Trace Pb(II) Determination. <i>Sensors</i> , 2018, 18, 3976.	2.1	11
58	Analysis of the Thermal Stability of Very Thin Surface Layers of Corrosion Inhibitors by Time-of-Flight Secondary Ion Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2018, 29, 2305-2316.	1.2	11
59	Degradation behaviour of Mg-4Ag and Mg-5Gd alloys under in-vitro conditions and different time-frames. <i>Journal of Alloys and Compounds</i> , 2019, 774, 980-987.	2.8	11
60	Dexamethasone-Loaded Bioactive Coatings on Medical Grade Stainless Steel Promote Osteointegration. <i>Pharmaceutics</i> , 2021, 13, 568.	2.0	11
61	Artificial Biomimetic Electrochemical Assemblies. <i>Biosensors</i> , 2022, 12, 44.	2.3	11
62	The development and characterization of bioactive coatings for local drug delivery in orthopedic applications. <i>Progress in Organic Coatings</i> , 2021, 158, 106350.	1.9	9
63	Time-of-flight secondary ion mass spectrometry analysis of chitosan-treated viscose fibres. <i>Analytical Biochemistry</i> , 2018, 557, 131-141.	1.1	8
64	Advanced surface analysis using GCIB-C60++-tandem-ToF-SIMS and GCIB-XPS of 2-mercaptobenzimidazole corrosion inhibitor on brass. <i>Microchemical Journal</i> , 2020, 159, 105495.	2.3	8
65	The corrosion resistance of 2205 duplex steel in non-inhibited methanesulphonic acid at elevated temperature. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2015, 66, 1299-1304.	0.8	7
66	Indicator Layers Based on Ethylene-Vinyl Acetate Copolymer (EVA) and Dicyanovinyl Azobenzene Dyes for Fast and Selective Evaluation of Vaporious Biogenic Amines. <i>Sensors</i> , 2018, 18, 4361.	2.1	7
67	Electrochemical and Surface Analysis of 2-Phenylimidazole Adsorbed on Copper from Chloride Solution. <i>Coatings</i> , 2018, 8, 234.	1.2	7
68	An Advanced Statistical Approach Using Weighted Linear Regression in Electroanalytical Method Development for Epinephrine, Uric Acid and Ascorbic Acid Determination. <i>Sensors</i> , 2020, 20, 7056.	2.1	7
69	Single-Drop Analysis of Epinephrine and Uric Acid on a Screen-Printed Carbon Electrode. <i>Biosensors</i> , 2021, 11, 285.	2.3	7
70	Bioactive coatings with anti-osteoclast therapeutic agents for bone implants: Enhanced compliance and prolonged implant life. <i>Pharmacological Research</i> , 2022, 176, 106060.	3.1	7
71	A Comparison of Hydrochloric Acid and Acetate Buffer Media for Trace Metal Analysis Using Sb-Film Electrodes: A Detailed Electrochemical Impedance Spectroscopy Study. <i>Journal of the Electrochemical Society</i> , 2019, 166, H108-H118.	1.3	6
72	2-Phenylimidazole Corrosion Inhibitor on Copper: An XPS and ToF-SIMS Surface Analytical Study. <i>Coatings</i> , 2021, 11, 966.	1.2	6

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73	Indolizine quaternary ammonium salt inhibitors: The inhibition and anti-corrosion mechanism of new dimer derivatives from ethyl acetate quinolinium bromide and n-butyl quinolinium bromide. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022, 651, 129649.	2.3	6
74	Electrochemical Study of AISI C1018 Steel in Methanesulfonic Acid Containing an Acetylenic Alcohol-Based Corrosion Inhibitor Formulation. <i>Journal of the Association for Laboratory Automation</i> , 2016, 21, 632-641.	2.8	5
75	Novel <i>in situ</i> Bi <sup>3+</sup> Film Electrodes for Trace Heavy Metal Analysis. <i>Electroanalysis</i> , 2018, 30, 2781-2792.	1.5	5
76	HPLC-MS/MS method optimisation for matrix metalloproteinase 3 and matrix metalloproteinase 9 determination in human blood serum using target analysis. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2018, 150, 137-143.	1.4	4
77	The Effect of Polyphenolics in Extracts from Natural Materials on Metabolic Activity of Metastatic Melanoma WM-266-4 Cells. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 3499.	1.3	4
78	Pb(II) Determination in a Single Drop Using a Modified Screen-Printed Electrode. <i>Chemosensors</i> , 2021, 9, 38.	1.8	4
79	The influence of the amino group in 3-amino-1,2,4-triazole corrosion inhibitor on the interface properties for brass studied by ToF-SIMS. <i>Rapid Communications in Mass Spectrometry</i> , 2021, 35, e9056.	0.7	4
80	Analysis of the Enamelled AISI 316LVM Stainless Steel. <i>Journal of Materials Engineering and Performance</i> , 2018, 27, 1122-1129.	1.2	3
81	The Use of Factorial Design and Simplex Optimization to Improve Analytical Performance of In Situ Film Electrodes. <i>Sensors</i> , 2020, 20, 3921.	2.1	3
82	Progressive use of multispectral imaging flow cytometry in various research areas. <i>Analyst, The</i> , 2021, 146, 4985-5007.	1.7	3
83	The Interface Characterization of 2-Mercapto-1-methylimidazole Corrosion Inhibitor on Brass. <i>Coatings</i> , 2021, 11, 295.	1.2	3
84	Evaluation of Natural Extracts as Promising Components of Bioactive Coatings for Orthopedic Implants. <i>Frontiers in Materials</i> , 2022, 9, .	1.2	3
85	Defective Grey TiO <sub>2</sub> with Minuscule Anatase-Rutile Heterophase Junctions for Hydroxyl Radicals Formation in a Visible Light-Triggered Photocatalysis. <i>Catalysts</i> , 2021, 11, 1500.	1.6	3
86	Trace Arsenic Determination in a TiO <sub>2</sub> Pigment Matrix Using Electrothermal Atomic Absorption Spectrometry. <i>SLAS Technology</i> , 2020, 25, 123-131.	1.0	2
87	Surface analysis and interface properties of 2-aminobenzimidazole corrosion inhibitor for brass in chloride solution. <i>Analytical and Bioanalytical Chemistry</i> , 2020, 412, 8431-8442.	1.9	2
88	Dimer Indolizine Derivatives of Quaternary Salt Corrosion Inhibitors: Enlightened High-Effective Choice for Corrosion Prevention of Steel in Acidizing. <i>SPE Production and Operations</i> , 2021, 36, 34-42.	0.4	1
89	A Magnetic Nanocomposite Modifier for Improved Ultrasensitive Detection of Hexavalent Chromium in Water Samples. <i>Chemosensors</i> , 2021, 9, 189.	1.8	1
90	Time-of-flight secondary ion mass spectrometry and X-ray photoelectron spectroscopy study of 2-phenylimidazole on brass. <i>Rapid Communications in Mass Spectrometry</i> , 2021, 35, e8974.	0.7	1

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91	Novel High-Effective Component for Acidizing Corrosion Inhibitors: Indolizine Derivatives of the Quaternary Quinolinium Salts. , 2020, , .		1
92	The Effect of Preconditioning Strategies on the Adsorption of Model Proteins onto Screen-Printed Carbon Electrodes. Sensors, 2022, 22, 4186.	2.1	1
93	Development and analysis of frits for enamelling AA2024, AA6082 and AA7075 aluminium alloys. Materials and Corrosion - Werkstoffe Und Korrosion, 2021, 72, 660-671.	1.5	1
94	Development and analysis of frits for enamelling AA2024, AA6082 and AA7075 aluminium alloys. Materials and Corrosion - Werkstoffe Und Korrosion, 2021, 72, 660-671.	0.8	0