

# Idalina V Aoki

## List of Publications by Year in descending order

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75  
papers

1,796  
citations

236925

25  
h-index

289244

40  
g-index

78  
all docs

78  
docs citations

78  
times ranked

1650  
citing authors

#	ARTICLE	IF	CITATIONS
1	Electrochemical study of modified non-functional bis-silane layers on Al alloy 2024-T3. Corrosion Science, 2008, 50, 1258-1266.	6.6	97
2	Encapsulation of dodecylamine corrosion inhibitor on silica nanoparticles. Electrochimica Acta, 2014, 124, 109-118.	5.2	86
3	Electrochemical study of modified cerium-silane bi-layer on Al alloy 2024-T3. Corrosion Science, 2009, 51, 1238-1250.	6.6	80
4	Corrosion behavior of carbon steel protected with single and bi-layer of silane films filled with silica nanoparticles. Surface and Coatings Technology, 2008, 202, 2850-2858.	4.8	79
5	Smart protection provided by epoxy clear coating doped with polystyrene microcapsules containing silanol and Ce (III) ions as corrosion inhibitors. Surface and Coatings Technology, 2016, 303, 310-318.	4.8	76
6	Investigation of the corrosion behaviour of a bilayer cerium-silane pre-treatment on Al 2024-T3 in 0.1M NaCl. Electrochimica Acta, 2007, 52, 7496-7505.	5.2	70
7	Influence of light, temperature and metallic ions on biodiesel degradation and corrosiveness to copper and brass. Fuel, 2012, 102, 795-807.	6.4	67
8	Microstructural and electrochemical characterization of Ce conversion layers formed on Al alloy 2024-T3 covered with Cu-rich smut. Electrochimica Acta, 2006, 51, 5943-5953.	5.2	66
9	Influence of cerium (IV) ions on the mechanism of organosilane polymerization and on the improvement of its barrier properties. Electrochimica Acta, 2009, 54, 2655-2662.	5.2	60
10	Highly ordered mesoporous silica loaded with dodecylamine for smart anticorrosion coatings. Surface and Coatings Technology, 2016, 303, 319-329.	4.8	59
11	Localized corrosion inhibition of 304 stainless steel in pure water by oxyanions tungstate and molybdate. Electrochimica Acta, 2004, 49, 2779-2785.	5.2	54
12	Dodecylamine-Loaded Halloysite Nanocontainers for Active Anticorrosion Coatings. Frontiers in Materials, 2015, 2, .	2.4	53
13	Ac-impedance and Raman spectroscopy study of the electrochemical behaviour of pure aluminium in citric acid media. Electrochimica Acta, 2001, 46, 1871-1878.	5.2	52
14	Copper phthalocyanine as corrosion inhibitor for ASTM A606-4 steel in 16% hydrochloric acid. Journal of Applied Electrochemistry, 2002, 32, 915-919.	2.9	50
15	Electrochemical impedance spectroscopy investigation of the electrochemical behaviour of copper coated with artificial patina layers and submitted to wet and dry cycles. Electrochimica Acta, 2011, 56, 2801-2814.	5.2	50
16	Effect of cerium (IV) ions on the anticorrosion properties of siloxane-poly(methyl methacrylate) based film applied on tin coated steel. Electrochimica Acta, 2010, 55, 5100-5109.	5.2	49
17	In vitro evaluation of the erosive potential of orange juice modified by food additives in enamel and dentine. Journal of Dentistry, 2011, 39, 841-848.	4.1	47
18	Anti-erosive properties of solutions containing fluoride and different film-forming agents. Journal of Dentistry, 2015, 43, 458-465.	4.1	40

#	ARTICLE	IF	CITATIONS
19	Microstructural and electrochemical characterization of environmentally friendly conversion layers on aluminium alloys. <i>Journal of the Brazilian Chemical Society</i> , 2003, 14, 651-659.	0.6	38
20	Influence of silica nanoparticles added to an organosilane film on carbon steel electrochemical and tribological behaviour. <i>Progress in Organic Coatings</i> , 2007, 60, 90-98.	3.9	38
21	Electrochemical and corrosion studies of poly(nickel-tetraaminophthalocyanine) on carbon steel. <i>Electrochimica Acta</i> , 2006, 52, 519-526.	5.2	36
22	Corrosion and corrosion-fatigue synergism on the base metal and nugget zone of the 2524-T3 Al alloy joined by FSW process. <i>Corrosion Science</i> , 2021, 182, 109253.	6.6	35
23	Synthesis of polypyrrole-magnetite/silane coatings on steel and assessment of anticorrosive properties. <i>Electrochimica Acta</i> , 2014, 124, 100-108.	5.2	32
24	Chemical characterization and anticorrosion properties of corrosion products formed on pure copper in synthetic rainwater of Rio de Janeiro and São Paulo. <i>Corrosion Science</i> , 2010, 52, 826-837.	6.6	30
25	Influence of bioadhesive polymers on the protective effect of fluoride against erosion. <i>Journal of Dentistry</i> , 2017, 56, 45-52.	4.1	27
26	Influence of Toothbrushing on the Antierosive Effect of Film-Forming Agents. <i>Caries Research</i> , 2016, 50, 104-110.	2.0	26
27	Evaluation of Castor Bark Powder as a Corrosion Inhibitor for Carbon Steel in Acidic Media. <i>Materials Research</i> , 2017, 20, 492-505.	1.3	26
28	An in vitro study on the influence of viscosity and frequency of application of fluoride/tin solutions on the progression of erosion of bovine enamel. <i>Archives of Oral Biology</i> , 2018, 89, 26-30.	1.8	23
29	Influence of sonication on anticorrosion properties of a sulfursilane film doped with Ce (IV) on galvanized steel. <i>Progress in Organic Coatings</i> , 2013, 76, 812-820.	3.9	21
30	Evaluation of Palm Kernel Cake Powder ( <i>Elaeis guineensis</i> Jacq.) as Corrosion Inhibitor for Carbon Steel in Acidic Media. <i>Metals and Materials International</i> , 2021, 27, 1519-1530.	3.4	21
31	Epoxy Self-Healing Coating by Encapsulated Epoxy Ester Resin in Poly (Urea-Formaldehyde-Melamine) Microcapsules. <i>Frontiers in Materials</i> , 2019, 6, .	2.4	20
32	Anti-Erosive Effect of Solutions Containing Sodium Fluoride, Stannous Chloride, and Selected Film-Forming Polymers. <i>Caries Research</i> , 2019, 53, 305-313.	2.0	20
33	Evaluation of a sulfursilane anticorrosive pretreatment on galvanized steel compared to phosphate under a waterborne epoxy coating. <i>Electrochimica Acta</i> , 2014, 124, 128-136.	5.2	19
34	Evaluation of Purple Onion ( <i>Allium cepa</i> L.) Extract as a Natural Corrosion Inhibitor for Carbon Steel in Acidic Media. <i>Metals and Materials International</i> , 2021, 27, 3238-3249.	3.4	19
35	Effects of lamellar reconstruction routes in the release of molybdate encapsulated in Mg-Al layered double hydroxides. <i>Materials Chemistry and Physics</i> , 2016, 173, 26-32.	4.0	18
36	Enhancing the corrosion protection of Ti-6Al-4V alloy through reactive sputtering niobium oxide thin films. <i>Surface and Coatings Technology</i> , 2021, 428, 127854.	4.8	16

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37	Local electrochemical investigation of copper patina. Journal of Solid State Electrochemistry, 2012, 16, 109-116.	2.5	15
38	Octylsilanol and Ce(III) ions as alternative corrosion inhibitors for carbon steel in chloride neutral solutions. Journal of Materials Research and Technology, 2020, 9, 8723-8734.	5.8	15
39	Electrochemical behavior of carbon steel pre-treated with an organo functional bis-silane filled with copper phthalocyanine. Journal of the Brazilian Chemical Society, 2008, 19, 744-754.	0.6	12
40	The influence of copper and chromium on the semiconducting behaviour of passive films formed on weathering steels. Thin Solid Films, 2006, 515, 2167-2172.	1.8	11
41	Comparative investigation of the adhesion of Ce conversion layers and silane layers to a AA 2024-T3 substrate through mechanical and electrochemical tests. Materials Research, 2007, 10, 399-406.	1.3	11
42	Dodigen 213-N as corrosion inhibitor for ASTM 1010 mild steel in 10% HCL. Journal of Applied Electrochemistry, 2009, 39, 1199-1205.	2.9	11
43	Kinetic aspects of Mg-Al layered double hydroxides influencing smart corrosion protective behavior. Materials Chemistry and Physics, 2019, 238, 121883.	4.0	11
44	Evaluation of the influence of experimental parameters in the formation of a vinyltrimethoxysilane film on 1010 carbon steel through electrochemical impedance spectroscopy and contact angle techniques. Electrochimica Acta, 2014, 124, 137-142.	5.2	10
45	Development of an orange juice surrogate for the study of dental erosion. Brazilian Dental Journal, 2011, 22, 473-478.	1.1	8
46	Influence of cerium ions and shelf life of hybrid solution as pretreatment for AA 2024 aluminum alloy on its anticorrosion performance. Surface and Interface Analysis, 2016, 48, 809-817.	1.8	7
47	Evaluation of Nitriding, Nitrocarburizing, Organosilicon Interlayer, Diamond-Like Carbon Film and Duplex Plasma Treatment in the Wear and Corrosion Resistance of AISI 4340 Steel. Journal of Materials Engineering and Performance, 2020, 29, 8107-8121.	2.5	7
48	Randomized in situ trial on the efficacy of Carbopol in enhancing fluoride / stannous anti-erosive properties. Journal of Dentistry, 2020, 101, 103347.	4.1	7
49	Effect of niobium oxide thin film on the long-term immersion corrosion of the 2198-T851 aluminium alloy. Materialia, 2022, 22, 101407.	2.7	7
50	Chemical and mechanical resistance of novel experimental hybrid coatings on dentin permeability. Microscopy Research and Technique, 2021, 84, 163-170.	2.2	6
51	Erosive tooth wear inhibition by hybrid coatings with encapsulated fluoride and stannous ions. Journal of Materials Science: Materials in Medicine, 2021, 32, 83.	3.6	6
52	Protective Effect of Solutions Containing Polymers Associated with Fluoride and Stannous Chloride on Hydroxyapatite Dissolution. Caries Research, 2021, 55, 122-129.	2.0	6
53	Using the Electrochemical Impedance Spectroscopy to Characterize Carbon Steel in Biodiesel Medium. ECS Transactions, 2012, 43, 71-77.	0.5	4
54	Study of the wettability and the corrosion protection of the hybrid silane (3-aminopropyl) triethoxysilane (APTES) and (3-glycidioxypropyl) trimethoxysilane (GPTMS) film on galvanized steel. Revista Materia, 2020, 25, .	0.2	4

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55	Surface Micromorphology, Ion Release and Resistance to Corrosion of Orthodontic Wires Aesthetic Coating Subject to Degradation. <i>Journal of Bio- and Tribo-Corrosion</i> , 2022, 8, 1.	2.6	4
56	In-vitro evaluation of the anti-cariogenic effect of a hybrid coating associated with encapsulated sodium fluoride and stannous chloride in nanoclays on enamel. <i>Journal of Applied Oral Science</i> , 2022, 30, e20210643.	1.8	4
57	Rapid and eco-friendly one-step synthesis of dodecylamine-encapsulated mesoporous silica nanocontainers. <i>Microporous and Mesoporous Materials</i> , 2022, 341, 112109.	4.4	4
58	Enhancing the Anti-Erosive Properties of Fluoride and Stannous with the Polymer Carbopol. <i>Caries Research</i> , 2020, 54, 250-257.	2.0	3
59	Microstructural and Corrosion Resistance of Lean Duplex Stainless Steel UNS S32304 Welded by SAW with Cold Wire Addition. <i>Corrosion</i> , 2020, 76, 619-627.	1.1	3
60	Protective effect of anti-erosive solutions enhanced by an aminomethacrylate copolymer. <i>Journal of Dentistry</i> , 2021, 105, 103540.	4.1	3
61	Corrosion of Pure Aluminium in Organic Acid Media in the Presence and in the Absence of Chloride Ions: Mass Transport Effects. <i>Materials Science Forum</i> , 1998, 289-292, 585-594.	0.3	2
62	Polarisation Curves and Experiment Design as Tools in the Search of Optimised Inhibitors Mixture Formulation for HSLA Steel in Hydrochloric Acid. <i>Materials Science Forum</i> , 1998, 289-292, 1237-1244.	0.3	2
63	Characterization by Coulometric Reduction of Surface Chemical Components Formed on Copper in Fluorine-Containing Plasmas. <i>Electrochemical and Solid-State Letters</i> , 2003, 6, B55.	2.2	2
64	Supplementation of an Orange Juice with Dietary Proteins to Prevent Enamel and Dentin Erosion. <i>Brazilian Dental Journal</i> , 2015, 26, 263-267.	1.1	2
65	Welding Heat Input Influence on UNS S82441 Lean Duplex Stainless Steel Corrosion Resistance Assessed by Scanning Vibrating Electrode Technique (SVET). <i>Journal of Materials Engineering and Performance</i> , 2018, 27, 6389-6397.	2.5	2
66	Effect of benzotriazole on electrochemical and corrosion behaviour of type 304 stainless steel in 2M sulphuric acid solution. <i>Corrosion Engineering Science and Technology</i> , 1996, 31, 305-308.	0.3	2
67	Electrochemical and Economic Evaluation of the Cocoa Bean Shell as a Corrosion Inhibitor in Acidic Medium. <i>Materials Research</i> , 0, 25, .	1.3	2
68	Coulometric Reduction in the Study of Copper Behavior in Atmospheres with Low H <sub>2</sub> S and Low Relative Humidity. <i>Materials Science Forum</i> , 1998, 289-292, 449-458.	0.3	1
69	Analysis of the formation of a vinyltrimethoxysilane film on 1010 carbon steel using electrochemical techniques. <i>Anti-Corrosion Methods and Materials</i> , 2013, 60, 251-258.	1.5	1
70	EIS investigation of the behaviour in 0.1M sodium chloride solution of a double layer cerium-silane pre-treatment on Al 2024-T3. , 2007, , 19-34.		0
71	Electrochemical Characterization of Conductive Hybrid Coatings Obtained for Protection Against Corrosion of Carbon Steel. <i>ECS Transactions</i> , 2012, 43, 17-22.	0.5	0
72	Influence of Water-Cement Ratio and Cover Thickness on Chloride Extraction of Reinforced Concrete. <i>ACI Materials Journal</i> , 2005, 102, .	0.2	0

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73	The effect of powdered juice on human dental enamel dissolution. Clinical and Laboratorial Research in Dentistry, 2015, 21, 44.	0.1	0
74	Avaliação da resistência à corrosão do filme de silanoviniltrimetoxisilano modificado com Ânions Ce (III) e Ce (IV) como pré-tratamento do aço carbono. Revista Materia, 2019, 24, .	0.2	0
75	Study of corrosion inhibiting properties of quaternary imidazoline under high temperature and pressure conditions and its encapsulation in clay minerals. Technical Papers ... Rio Oil & Gas, 2020, 20, 239-240.	0.0	0