

# MariaPia Pia Pedeferra

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2015280/publications.pdf>

Version: 2024-02-01

90  
papers

2,286  
citations

218677

26  
h-index

243625

44  
g-index

93  
all docs

93  
docs citations

93  
times ranked

2343  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of anodic oxidation parameters on the titanium oxides formation. <i>Corrosion Science</i> , 2007, 49, 939-948.	6.6	218
2	Characterization of photocatalytic and superhydrophilic properties of mortars containing titanium dioxide. <i>Cement and Concrete Research</i> , 2008, 38, 1349-1353.	11.0	144
3	Interference colors of thin oxide layers on titanium. <i>Color Research and Application</i> , 2008, 33, 221-228.	1.6	131
4	Prevention of steel corrosion in concrete exposed to seawater with submerged sacrificial anodes. <i>Corrosion Science</i> , 2002, 44, 1497-1513.	6.6	92
5	Experimental analysis of a chiral separation through simulated moving bed chromatography. <i>Chemical Engineering Science</i> , 1999, 54, 3735-3748.	3.8	85
6	Photocatalytic and self-cleaning activity of colored mortars containing TiO <sub>2</sub> . <i>Construction and Building Materials</i> , 2013, 46, 167-174.	7.2	82
7	Experimental design to study the influence of temperature, pH, and chloride concentration on the pitting and crevice corrosion of UNS S30403 stainless steel. <i>Corrosion Science</i> , 2019, 159, 108160.	6.6	63
8	Molecular modelling and electrochemical evaluation of organic inhibitors in concrete. <i>Corrosion Science</i> , 2015, 100, 231-241.	6.6	62
9	Corrosion of Titanium: Part 1: Aggressive Environments and Main Forms of Degradation. <i>Journal of Applied Biomaterials and Functional Materials</i> , 2017, 15, e291-e302.	1.6	62
10	Photocatalytic behavior of different titanium dioxide layers. <i>Thin Solid Films</i> , 2007, 515, 6309-6313.	1.8	59
11	Electrochemically induced anatase inhibits bacterial colonization on Titanium Grade 2 and Ti6Al4V alloy for dental and orthopedic devices. <i>Colloids and Surfaces B: Biointerfaces</i> , 2011, 88, 648-655.	5.0	59
12	Anodic titanium oxide as immobilized photocatalyst in UV or visible light devices. <i>Journal of Hazardous Materials</i> , 2011, 186, 2103-2109.	12.4	57
13	Long term self-cleaning and photocatalytic performance of anatase added mortars exposed to the urban environment. <i>Construction and Building Materials</i> , 2015, 96, 270-278.	7.2	56
14	Anodic oxidation of titanium: from technical aspects to biomedical applications. <i>Journal of Applied Biomaterials and Biomechanics</i> , 2011, 9, 55-69.	0.4	44
15	Mutual interactions between carbonation and titanium dioxide photoactivity in concrete. <i>Building and Environment</i> , 2013, 62, 174-181.	6.9	44
16	Effect of thermal oxidation on titanium oxides' characteristics. <i>Journal of Experimental Nanoscience</i> , 2009, 4, 365-372.	2.4	41
17	Characterisation of titanium oxide films by potentiodynamic polarisation and electrochemical impedance spectroscopy. <i>Corrosion Engineering Science and Technology</i> , 2010, 45, 428-434.	1.4	41
18	Anodic coloring of titanium and its alloy for jewels production. <i>Color Research and Application</i> , 2012, 37, 384-390.	1.6	38

#	ARTICLE	IF	CITATIONS
19	Effects of Photoactivated Titanium Dioxide Nanopowders and Coating on Planktonic and Biofilm Growth of <i>Pseudomonas aeruginosa</i> . <i>Photochemistry and Photobiology</i> , 2011, 87, 1387-1394.	2.5	35
20	Application-wise nanostructuring of anodic films on titanium: a review. <i>Journal of Experimental Nanoscience</i> , 2015, 10, 1285-1308.	2.4	35
21	Effects of AC-interference on chloride-induced corrosion of reinforced concrete. <i>Construction and Building Materials</i> , 2017, 137, 76-84.	7.2	35
22	Heterostructured TiO <sub>2</sub> /SiO <sub>2</sub> /Fe <sub>2</sub> O <sub>3</sub> /rGO Coating with Highly Efficient Visible-Light-Induced Self-Cleaning Properties for Metallic Artifacts. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 29671-29683.	8.0	34
23	Organic substances as inhibitors for chloride-induced corrosion in reinforced concrete. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2011, 62, 170-177.	1.5	33
24	On-line monitoring of enantiomer concentration in chiral simulated moving bed chromatography. <i>Journal of Chromatography A</i> , 2000, 888, 73-83.	3.7	29
25	Corrosion inhibitors in reinforced concrete structures Part 3 – migration of inhibitors into concrete. <i>Corrosion Engineering Science and Technology</i> , 2011, 46, 334-339.	1.4	29
26	Self-cleaning building materials: The multifaceted effects of titanium dioxide. <i>Construction and Building Materials</i> , 2018, 182, 126-133.	7.2	29
27	Thickness of Anodic Titanium Oxides as a Function of Crystallographic Orientation of the Substrate. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2008, 39, 2143-2147.	2.2	27
28	Multi-step anodizing on Ti6Al4V components to improve tribomechanical performances. <i>Surface and Coatings Technology</i> , 2013, 227, 19-27.	4.8	27
29	Memristive Electronic Synapses Made by Anodic Oxidation. <i>Chemistry of Materials</i> , 2019, 31, 8394-8401.	6.7	26
30	Modeling chromatographic chiral separations under nonlinear competitive conditions. <i>AIChE Journal</i> , 2000, 46, 1530-1540.	3.6	24
31	Production of Anodic TiO <sub>2</sub> Nanofilms and their Characterization. <i>Physics Procedia</i> , 2013, 40, 30-37.	1.2	24
32	Corrosion inhibitors in reinforced concrete structures Part 1: Preventative technique. <i>Corrosion Engineering Science and Technology</i> , 2004, 39, 219-228.	1.4	23
33	Effect of etching on the composition and structure of anodic spark deposition films on titanium. <i>Materials and Design</i> , 2016, 108, 77-85.	7.0	22
34	Alternating current anodizing of titanium in halogen acids combined with Anodic Spark Deposition: Morphological and structural variations. <i>Corrosion Science</i> , 2010, 52, 1824-1829.	6.6	21
35	TiO <sub>2</sub> Nanotubes Arrays Loaded with Ligand-Free Au Nanoparticles: Enhancement in Photocatalytic Activity. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 31051-31058.	8.0	20
36	Robust anodic colouring of titanium: Effect of electrolyte and colour durability. <i>Materials and Design</i> , 2016, 90, 1085-1091.	7.0	20

#	ARTICLE	IF	CITATIONS
37	Anti-fingerprints fluorinated coating for anodized titanium avoiding color alteration. <i>Journal of Coatings Technology Research</i> , 2011, 8, 153-160.	2.5	19
38	Compatibility of Imidazolium-Based Ionic Liquids for CO <sub>2</sub> Capture with Steel Alloys: a Corrosion Perspective. <i>Electrochimica Acta</i> , 2016, 192, 414-421.	5.2	19
39	Pitting corrosion on anodized titanium: Effect of halides. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2018, 69, 1441-1446.	1.5	18
40	Enhancement of pure titanium localized corrosion resistance by anodic oxidation. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2018, 69, 503-509.	1.5	17
41	Probing anodic oxidation kinetics and nanoscale heterogeneity within TiO <sub>2</sub> films by Conductive Atomic Force Microscopy and combined techniques. <i>Electrochimica Acta</i> , 2014, 129, 203-210.	5.2	16
42	An insight into the evolution of corrosion resistant coatings on titanium during bipolar plasma electrolytic oxidation in sulfuric acid. <i>Electrochimica Acta</i> , 2021, 379, 138190.	5.2	16
43	Corrosion of titanium: Part 2: Effects of surface treatments. <i>Journal of Applied Biomaterials and Functional Materials</i> , 2018, 16, 3-13.	1.6	15
44	The Improvement of Durability of Reinforced Concretes for Sustainable Structures: A Review on Different Approaches. <i>Materials</i> , 2022, 15, 2728.	2.9	15
45	Nanoscale Investigation of Photoinduced Hydrophilicity Variations in Anatase and Rutile Nanopowders. <i>Langmuir</i> , 2013, 29, 14512-14518.	3.5	14
46	Characterization of the gonioapparent character of colored anodized titanium surfaces. <i>Color Research and Application</i> , 2015, 40, 483-490.	1.6	13
47	Magnetically Recoverable TiO <sub>2</sub> /SiO <sub>2</sub> /Fe <sup>3+</sup> -Fe <sub>2</sub> O <sub>3</sub> /rGO Composite with Significantly Enhanced UV-Visible Light Photocatalytic Activity. <i>Molecules</i> , 2020, 25, 2996.	3.8	13
48	A novel nanotubular TiO <sub>2</sub> -based Plug-Flow reactor for gas phase photocatalytic degradation of toluene. <i>Chemical Engineering Journal</i> , 2022, 437, 135323.	12.7	13
49	TiO <sub>2</sub> alterations with natural aging: Unveiling the role of nitric acid on NIR reflectance. <i>Solar Energy Materials and Solar Cells</i> , 2016, 157, 791-797.	6.2	12
50	Electrochemical Anodizing Treatment to Enhance Localized Corrosion Resistance of Pure Titanium. <i>Journal of Applied Biomaterials and Functional Materials</i> , 2017, 15, 19-24.	1.6	12
51	Photocatalytic Activity of Nanotubular TiO <sub>2</sub> Films Obtained by Anodic Oxidation: A Comparison in Gas and Liquid Phase. <i>Materials</i> , 2018, 11, 488.	2.9	12
52	Decoupling the dual source of colour alteration of architectural titanium: Soiling or oxidation?. <i>Corrosion Science</i> , 2013, 72, 125-132.	6.6	11
53	Immobilized TiO <sub>2</sub> nanoparticles produced by flame spray for photocatalytic water remediation. <i>Journal of Nanoparticle Research</i> , 2016, 18, 1.	1.9	11
54	Concrete, mortar and plaster using titanium dioxide nanoparticles: applications in pollution control, self-cleaning and photo sterilization. , 2013, , 299-326.		10

#	ARTICLE	IF	CITATIONS
55	Effect of polymer modified cementitious coatings on chloride-induced corrosion of steel in concrete. <i>Structural Concrete</i> , 2020, 21, 1810-1822.	3.1	10
56	A comparison between corrosion performances of titanium grade 2 and 7 in strong reducing acids. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2021, 72, 1506-1517.	1.5	10
57	Anodic Oxidation as a Means to Produce Memristive Films. <i>Journal of Applied Biomaterials and Functional Materials</i> , 2016, 14, e290-e295.	1.6	9
58	Immobilized Nano-TiO <sub>2</sub> Photocatalysts for the Degradation of Three Organic Dyes in Single and Multi-Dye Solutions. <i>Coatings</i> , 2020, 10, 919.	2.6	8
59	Effect of ultraviolet and moisture action on biodegradable polymers and their blend. <i>Journal of Applied Biomaterials and Functional Materials</i> , 2020, 18, 228080002092665.	1.6	8
60	Mechanistic insights into photogenerated electrons store-and-discharge in hydrogenated glucose template synthesized Pt: TiO <sub>2</sub> /WO <sub>3</sub> photocatalyst for the round-the-clock decomposition of methanol. <i>Materials Research Bulletin</i> , 2021, 137, 111203.	5.2	8
61	Cathodic protection monitoring of buried carbon steel pipeline: measurement and interpretation of instant-off potential. <i>Corrosion Engineering Science and Technology</i> , 2017, 52, 253-260.	1.4	7
62	Anodized titanium oxide thickness estimation with ellipsometry, reflectance spectra extrema positions and electronic imaging: importance of the interfaces electromagnetic phase-shift. <i>Thin Solid Films</i> , 2020, 709, 138181.	1.8	7
63	Unipolar plasma electrolytic oxidation: Waveform optimisation for corrosion resistance of commercially pure titanium. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2021, 72, 1091-1104.	1.5	7
64	CHROMATOGRAPHIC RESOLUTION OF ENANTIOMERS. <i>Chemical Engineering Communications</i> , 1998, 163, 55-68.	2.6	6
65	Photocatalytic and Antimicrobial Coatings by Electrodeposition of Silver/TiO <sub>2</sub> Nano-Composites. <i>ECS Transactions</i> , 2013, 45, 1-6.	0.5	6
66	Chemical oxidation as repairing technique to restore corrosion resistance on damaged anodized titanium. <i>Surface and Coatings Technology</i> , 2019, 364, 225-230.	4.8	6
67	Sealing of porous titanium oxides produced by plasma electrolytic oxidation. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 0, , .	1.5	6
68	Representing localized corrosion processes through cellular automata. <i>Corrosion Reviews</i> , 2011, 29, .	2.0	5
69	Monitoring cathodic protection of buried pipeline by means of a potential probe with an embedded zinc reference electrode. <i>Materials and Design</i> , 2017, 114, 194-201.	7.0	5
70	Electrochemical methods for the determination of Pedeferrì's diagram of stainless steel in chloride containing environment. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2019, 70, 9-18.	1.5	5
71	Addition of Organic Acids during PEO of Titanium in Alkaline Solution. <i>Coatings</i> , 2022, 12, 143.	2.6	5
72	Key Oxidation Parameters that Influence Photo-Induced Properties and Applications of Anodic Titanium Oxides. <i>Journal of the Electrochemical Society</i> , 2016, 163, H119-H127.	2.9	4

#	ARTICLE	IF	CITATIONS
73	Photocatalytic performance of mortars with nanoparticles exposed to the urban environment. , 2019, , 527-555.		4
74	On the Role of $\text{Fe}_3\text{O}_4$ Nanoparticles and Reduced Graphene Oxide Nanosheets in Enhancing Self-Cleaning Properties of Composite $\text{TiO}_2$ for Cultural Heritage Protection. Coatings, 2020, 10, 933.	2.6	4
75	Mixed-in inhibitors for concrete structures. , 2007, , 185-202.		3
76	Effect of water content on the corrosiveness of imidazolium-based ionic liquids. Materials and Corrosion - Werkstoffe Und Korrosion, 2018, 69, 1658-1668.	1.5	3
77	Photocatalytic behaviour of anodised titanium using different cathodes. Surface Engineering, 2019, 35, 46-53.	2.2	3
78	Towards a better preservation of current and future outdoor architectural heritage; maximum suppression of discolouration in anodized and non-anodized titanium sheets. Environmental Technology Reviews, 2020, 9, 37-54.	4.3	3
79	Risk of galvanic corrosion induced by CFRP strengthening in reinforced concrete. , 2007, , 62-74.		2
80	Migrating inhibitors on corrosion in reinforced concrete. , 2007, , 211-225.		2
81	Tuning of Titanium Oxide Morphology at Micro and Nano Scale by Alternating Current Anodising. Journal of Nano Research, 2009, 6, 61-66.	0.8	2
82	Multi-angle color prediction of glossy anodized titanium samples through the determination of the oxide layer structural parameters. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2021, 38, 1065.	1.5	2
83	Chromatic properties of anodised titanium obtained with two techniques. , 2006, , 205-210.		1
84	The Role of the Nano/Microstructure in the Case of the Photodegradation of Two Model VOC Pollutants Using Commercial $\text{TiO}_2$ . Energy and Environment Focus, 2015, 4, 226-231.	0.3	1
85	Determination of oxidized metals' oxide layer thickness from local extrema of reflectance spectra: theoretical basis and application to anodized titanium. Measurement Science and Technology, 2020, 31, 125601.	2.6	1
86	Titanium Anodization Efficiency Through Real-Time Gravimetric Measurement of Oxygen Evolution. Journal of the Electrochemical Society, 2020, 167, 061507.	2.9	1
87	Protection of reinforced concrete piles in marine structures with sacrificial anodes. , 2007, , 288-299.		0
88	Memristive Anodic Oxides: Production, Properties and Applications in Neuromorphic Computing. , 2018, , .		0
89	Effect of environmental conditions on the durability of polycarbonate for the protection of cultural heritage sites. Journal of Applied Biomaterials and Functional Materials, 2019, 17, 228080001988162.	1.6	0
90	Corrosion resistance enhancement of chemically oxidized titanium through NaOH and $\text{H}_2\text{O}_2$ exposure. Materials and Corrosion - Werkstoffe Und Korrosion, 2019, 70, 802-809.	1.5	0