

# David Delafosse

## List of Publications by Year in descending order

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43  
papers

925  
citations

566801

15  
h-index

454577

30  
g-index

43  
all docs

43  
docs citations

43  
times ranked

743  
citing authors

#	ARTICLE	IF	CITATIONS
1	Determination of oxidized metals' oxide layer thickness from local extrema of reflectance spectra: theoretical basis and application to anodized titanium. <i>Measurement Science and Technology</i> , 2020, 31, 125601.	1.4	1
2	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.	0.8	7
3	Hydrogen and Crystal Defects Interactions: Effects on Plasticity and Fracture. , 2019, , 199-222.		9
4	Resorbability of a Bioglass®-based glass-ceramic scaffold produced via a powder metallurgy approach. <i>Ceramics International</i> , 2017, 43, 8625-8635.	2.3	9
5	Tactile Perception and Friction-Induced Vibrations: Discrimination of Similarly Patterned Wood-Like Surfaces. <i>IEEE Transactions on Haptics</i> , 2017, 10, 409-417.	1.8	19
6	Gloss evaluation and prediction of achromatic low-gloss textured surfaces from the automotive industry. <i>Color Research and Application</i> , 2016, 41, 154-164.	0.8	3
7	Color Effects of Nanotextured Aluminum Surfaces: Characterization and Modeling of Optical Behavior. <i>Advanced Engineering Materials</i> , 2015, 17, 45-51.	1.6	3
8	Characterization of the gonioapparent character of colored anodized titanium surfaces. <i>Color Research and Application</i> , 2015, 40, 483-490.	0.8	13
9	Correlation between dislocation organization and slip bands: TEM and AFM investigations in hydrogen-containing nickel and nickel-chromium. <i>Acta Materialia</i> , 2015, 91, 141-151.	3.8	43
10	Structural Colors of Nanoporous Anodic Alumina: Overview of Recent Advances and Case Study in Elaboration, Characterization, Photometry and Modelling. <i>Current Nanoscience</i> , 2015, 11, 317-325.	0.7	3
11	Experimental investigations of internal and effective stresses during fatigue loading of high-strength steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 597, 381-386.	2.6	13
12	Hydrogenation method based on electrodeposited layers controlling the hydrogen desorption rate. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 17398-17403.	3.8	4
13	Hydrogen effect on dislocation nucleation in a ferritic alloy Fe-15Cr as observed per nanoindentation. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 604, 86-91.	2.6	12
14	Ability of quality controllers to detect standard scratches on polished surfaces. <i>Precision Engineering</i> , 2013, 37, 924-928.	1.8	10
15	Design of a gonio-spectro-photometer for optical characterization of gonio-apparent materials. <i>Measurement Science and Technology</i> , 2013, 24, 065901.	1.4	17
16	Hydrogen effects on the plasticity of face centred cubic (fcc) crystals. , 2012, , 247-285.		15
17	Plasticity localization ahead of a crack tip modeled by 2D discrete dislocation dynamics. <i>Philosophical Magazine</i> , 2010, 90, 1415-1434.	0.7	4
18	Defect hardening modeled in 2D discrete dislocation dynamics. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009, 527, 150-156.	2.6	4

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19	Some correlations between slip band emergence and dislocation pattern. IOP Conference Series: Materials Science and Engineering, 2009, 3, 012012.	0.3	6
20	Couplage hydrogène - plasticité dans les matériaux cubiques à faces centrées. , 2009, , .		0
21	Multiscale simulation of crack tip shielding by a dislocation. Acta Materialia, 2008, 56, 2441-2449.	3.8	18
22	Hydrogen effects on the plasticity of nickel and binary nickel-chromium alloy. , 2008, , 189-199.		2
23	Effect of strain-path on stress corrosion cracking of AISI 304L stainless steel in PWR primary environment at 360 °C. , 2007, , 87-102.		4
24	Influence of ageing heat treatment on alloy A-286 microstructure and stress corrosion cracking behaviour in PWR primary water. Journal of Nuclear Materials, 2007, 360, 222-230.	1.3	19
25	Influence of localized deformation on A-286 austenitic stainless steel stress corrosion cracking in PWR primary water. Journal of Nuclear Materials, 2007, 366, 187-197.	1.3	33
26	Hydrogen - Plasticity Interactions: Modelling and Experiments in Hydrogenated Nickel Alloys. Journal of the Mechanical Behavior of Materials, 2005, 16, 151-162.	0.7	0
27	Role of second phases in the stress corrosion cracking of a nickel-aluminium bronze in saline water. Corrosion Science, 2005, 47, 2792-2806.	3.0	49
28	Measurement of the saturated dislocation pinning force in hydrogenated nickel and nickel base alloys. Scripta Materialia, 2004, 51, 1177-1181.	2.6	23
29	Solute-dislocation interactions: modelling and experiments in hydrogenated nickel and nickel base alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 387-389, 51-54.	2.6	14
30	Hydrogen vibrations in austenitic fcc Fe-Cr-Mn-Ni steels. Europhysics Letters, 2003, 63, 69-75.	0.7	5
31	Hydrogen vibrations in austenitic stainless steel. Applied Physics A: Materials Science and Processing, 2002, 74, s992-s994.	1.1	4
32	Numerical simulations of hydrogen-dislocation interactions in fcc stainless steels.. Acta Materialia, 2002, 50, 1507-1522.	3.8	123
33	Numerical simulations of hydrogen-dislocation interactions in fcc stainless steels.. Acta Materialia, 2002, 50, 1523-1538.	3.8	70
34	Oxidation induced intergranular cracking and Portevin-Le Chatelier effect in nickel base superalloy 718. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 316, 166-173.	2.6	77
35	Cyclic plastic deformation behaviour of Ni single crystals oriented for single slip as a function of hydrogen content. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 314, 7-11.	2.6	25
36	Mechanisms of Corosion and Oxidation of Metals and Alloys. Advanced Engineering Materials, 2001, 3, 555.	1.6	8

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37	Hydrogen induced plasticity in stress corrosion cracking of engineering systems. Engineering Fracture Mechanics, 2001, 68, 693-729.	2.0	127
38	Modelling of hydrogen - dislocation interactions during stress corrosion cracking. European Physical Journal Special Topics, 2000, 10, Pr6-179-Pr6-184.	0.2	0
39	Microfracture by pile-up formation at a stress corrosion crack tip : Numerical simulations of hydrogen/dislocation interactions. European Physical Journal Special Topics, 1999, 09, Pr9-251-Pr9-260.	0.2	1
40	Cathodic hydrogen embrittlement in alloy 718. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1999, 269, 111-119.	2.6	88
41	Simulations numériques des interactions hydrogène-dislocations en corrosion sous contrainte dans les matériaux cubiques à faces centrées. Annales De Chimie: Science Des Matériaux, 1999, 24, 295-305.	0.2	1
42	Dislocation-hydrogen interactions during stress corrosion cracking in fcc metals: experiments on single crystals and numerical simulations. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1997, 234-236, 889-892.	2.6	17
43	Dynamic strain ageing and crack propagation in the 2091 Al-Li alloy. Scripta Metallurgica Et Materialia, 1993, 29, 1379-1384.	1.0	22