Nicolas Martin

List of Publications by Year in Descending Order

129 papers	2,650 citations	26 h-index	44 g-index
129 ext. papers	2,901 ext. citations	4 avg, IF	5 L-index

#	Paper	IF	Citations
129	Anisotropic thermal conductivity of nanocolumnar W thin films. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2022**, 426, 127878	2.3	1
128	Oblique angle co-deposition of nanocolumnar tungsten thin films with two W sources: Effect of pressure and target current. *Materials Chemistry and Physics*, **2022**, 281, 125864	4.4	0
127	Controlled grain-size thermochromic VO2 coatings by the fast oxidation of sputtered vanadium or vanadium oxide films deposited at glancing angles. *Surfaces and Interfaces*, **2021**, 27, 101581	4.1	1
126	Microstructural analysis and electrical behaviours of co-sputtered W□Ag thin films with a tilted columnar architecture. *Journal Physics D: Applied Physics*, **2021**, 54, 255304	3	1
125	Tuning the Optical Properties of WO3 Films Exhibiting a Zigzag Columnar Microstructure. *Coatings*, **2021**, 11, 438	2.9	1
124	Plasmonic Helical Nanoantenna As a Converter between Longitudinal Fields and Circularly Polarized Waves. *Nano Letters*, **2021**, 21, 3410-3417	11.5	8
123	Microstructured ZnO-ZnS composite for earth-abundant photovoltaics: Elaboration, surface analysis and enhanced optical performances. *Solar Energy*, **2021**, 218, 312-319	6.8	5
122	Thermoelectric Performance of Ge-Doped Mg2Si0.35Sn0.65 Thin Films. *Journal of Materials Engineering and Performance*, **2021**, 30, 4045-4052	1.6	
121	Contrasted morphologies in nanostructured Janus W-Cu columns. *Materials Today Communications*, **2021**, 27, 102331	2.5	1
120	Impacts of Cu-Doping and Mg-Deficiency on Mg2Sn Thin Films Thermoelectric Properties. *Journal of Electronic Materials*, **2021**, 50, 2738-2749	1.9	0
119	Resistivity anisotropy of tilted columnar W and W Cu thin films. *Surface and Coatings Technology*, **2021**, 421, 127412	4.4	1
118	Pt□i Alloy Coatings Deposited by DC Magnetron Sputtering: A Potential Current Collector at High Temperature. *Coatings*, **2020**, 10, 224	2.9	0
117	Highly improved responsivity of self-powered UV□Visible photodetector based on TiO2/Ag/TiO2 multilayer deposited by GLAD technique: Effects of oriented columns and nano-sculptured surface. *Applied Surface Science*, **2020**, 529, 147069	6.7	26
116	Highly sensitive, ultra-low dark current, self-powered solar-blind ultraviolet photodetector based on ZnO thin-film with an engineered rear metallic layer. *Materials Science in Semiconductor Processing*, **2020**, 110, 104957	4.3	23
115	Influence of Thickness and Sputtering Pressure on Electrical Resistivity and Elastic Wave Propagation in Oriented Columnar Tungsten Thin Films. *Nanomaterials*, **2020**, 10,	5.4	9
114	A 4-view imaging to reveal microstructural differences in obliquely sputter-deposited tungsten films. *Materials Letters*, **2020**, 264, 127381	3.3	7
113	Conductive multilayer film based on composite materials made of conjugated polyelectrolytes and inorganic particles. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2020**, 586, 124290	5.1	0

112	Reactive co-sputtering of tungsten oxide thin films by glancing angle deposition for gas sensors. *Materials Today: Proceedings*, **2019**, 6, 314-318	1.4	8
111	Thermoelectric properties improvement in Mg2Sn thin films by structural modification. *Journal of Alloys and Compounds*, **2019**, 797, 1078-1085	5.7	8
110	Nanocomposite thin films based on Au-Ag nanoparticles embedded in a CuO matrix for localized surface plasmon resonance sensing. *Applied Surface Science*, **2019**, 484, 152-168	6.7	13
109	Nanostructured Ti1-xCux thin films with tailored electrical and morphological anisotropy. *Thin Solid Films*, **2019**, 672, 47-54	2.2	4
108	High performance piezoresistive response of nanostructured ZnO/Ag thin films for pressure sensing applications. *Thin Solid Films*, **2019**, 691, 137587	2.2	4
107	Subwavelength polarization optics via individual and coupled helical traveling-wave nanoantennas. *Light: Science and Applications*, **2019**, 8, 76	16.7	18
106	Chiroptical transmission through a plasmonic helical traveling-wave nanoantenna, towards on-tip chiroptical probes. *Optics Letters*, **2019**, 44, 4861-4864	3	4
105	Nanoplasmonic response of porous Au-TiO thin films prepared by oblique angle deposition. *Nanotechnology*, **2019**, 30, 225701	3.4	22
104	Electrical resistivity and elastic wave propagation anisotropy in glancing angle deposited tungsten and gold thin films. *Applied Surface Science*, **2019**, 475, 606-614	6.7	12
103	Tuning electrical resistivity anisotropy of ZnO thin films for resistive sensor applications. *Thin Solid Films*, **2018**, 654, 93-99	2.2	10
102	Exploiting the dodecane and ozone sensing capabilities of nanostructured tungsten oxide films. *Sensors and Actuators B: Chemical*, **2018**, 266, 773-783	8.5	17
101	W-Cu sputtered thin films grown at oblique angles from two sources: Pressure and shielding effects. *Surface and Coatings Technology*, **2018**, 343, 153-159	4.4	11
100	Optimization of nanocomposite Au/TiO 2 thin films towards LSPR optical-sensing. *Applied Surface Science*, **2018**, 438, 74-83	6.7	40
99	Electrical conductivity enhancement and wettability modification of (PDDA/PEDOT:PSS)n multilayer film. *Thin Solid Films*, **2018**, 664, 33-40	2.2	5
98	Reactive sputter deposition of CoCrCuFeNi in nitrogen/argon mixtures. *Journal of Alloys and Compounds*, **2018**, 769, 881-888	5.7	22
97	Anisotropic conductivity enhancement in inclined W-Cu columnar films. *Materials Letters*, **2018**, 232, 126-129	3.3	5
96	Nano-sculptured Janus-like TiAg thin films obliquely deposited by GLAD co-sputtering for temperature sensing. *Nanotechnology*, **2018**, 29, 355706	3.4	13
95	Structure, composition and electronic transport properties of tungsten oxide thin film sputter-deposited by the reactive gas pulsing process. *Materials Chemistry and Physics*, **2018**, 205, 391-400	4.4	6

94	Electron Tomography of Plasmonic Au Nanoparticles Dispersed in a TiO Dielectric Matrix. *ACS Applied Materials & Interfaces*, **2018**, 10, 42882-42890	9.5	12
93	Influence of Sputtering Parameters on Structural, Electrical and Thermoelectric Properties of Mg Si Coatings. *Coatings*, **2018**, 8, 380	2.9	3
92	Correlation between structure and electrical resistivity of W-Cu thin films prepared by GLAD co-sputtering. *Surface and Coatings Technology*, **2017**, 313, 1-7	4.4	22
91	Correlations between structure, composition and electrical properties of tungsten/tungsten oxide periodic multilayers sputter deposited by gas pulsing. *Superlattices and Microstructures*, **2017**, 101, 127-137	2.8	1
90	In situ electrical resistivity measurements of vanadium thin films performed in vacuum during different annealing cycles. *Review of Scientific Instruments*, **2017**, 88, 025105	1.7	4
89	Flexible and conductive multilayer films based on the assembly of PEDOT:PSS and water soluble polythiophenes. *Organic Electronics*, **2017**, 46, 263-269	3.5	5
88	Synthesis and characterization of polyaniline-silica composites: Raspberry vs core-shell structures. Where do we stand?. *Journal of Colloid and Interface Science*, **2017**, 502, 184-192	9.3	19
87	Influence of the sputtering pressure on the morphological features and electrical resistivity anisotropy of nanostructured titanium films. *Applied Surface Science*, **2017**, 420, 681-690	6.7	21
86	Anisotropic propagation imaging of elastic waves in oriented columnar thin films. *Journal Physics D: Applied Physics*, **2017**, 50, 484005	3	8
85	Correlation between deposition parameters of periodic titanium metal/oxide nanometric multilayers and their chemical and structural properties investigated by STEM-EELS. *Micron*, **2017**, 101, 62-68	2.3	1
84	Relationships between elaboration conditions, structural parameters and electrical properties in metal oxides nanometric periodic multilayers **2016**, 714-715		
83	Temperature dependence of electrical resistivity in oxidized vanadium films grown by the GLAD technique. *Surface and Coatings Technology*, **2016**, 304, 476-485	4.4	12
82	Controlled thermal oxidation of nanostructured vanadium thin films. *Materials Letters*, **2016**, 174, 162-166	3.3	7
81	Electrochemical characterization of nanostructured Ag:TiN thin films produced by glancing angle deposition on polyurethane substrates for bio-electrode applications. *Journal of Electroanalytical Chemistry*, **2016**, 768, 110-120	4.1	9
80	Architectured columns with a metal-dielectric periodic nanostructure. *Materials Letters*, **2016**, 172, 128-131	3.3	1
79	Piezoresistive response of nano-architectured Ti x Cu y thin films for sensor applications. *Sensors and Actuators A: Physical*, **2016**, 247, 105-114	3.9	14
78	Improvement of ozone detection with GLAD WO3 films. *Materials Letters*, **2015**, 155, 1-3	3.3	26
77	Study of the electrical behavior of nanostructured Ti Ag thin films, prepared by Glancing Angle Deposition. *Materials Letters*, **2015**, 157, 188-192	3.3	9

76	Optical properties of nanostructured WO3 thin films by GLancing Angle Deposition: Comparison between experiment and simulation. *Surface and Coatings Technology*, **2015**, 276, 136-140	4.4	15
75	Ag y :TiN x thin films for dry biopotential electrodes: the effect of composition and structural changes on the electrical and mechanical behaviours. *Applied Physics A: Materials Science and Processing*, **2015**, 119, 169-178	2.6	2
74	ZnO nano-tree active layer as heavy hydrocarbon sensor: From material synthesis to electrical and gas sensing properties. *Thin Solid Films*, **2015**, 596, 128-134	2.2	7
73	Tungsten Oxide Thin Films Sputter Deposited by the Reactive Gas Pulsing Process for the Dodecane Detection. *Materials Today: Proceedings*, **2015**, 2, 4656-4663	1.4	4
72	Structural, electrical and magnetic characterization of in-situ crystallized ZnO:Co thin films synthesized by reactive magnetron sputtering. *Materials Chemistry and Physics*, **2015**, 161, 26-34	4.4	14
71	Flash annealing influence on structural and electrical properties of TiO2/TiO/Ti periodic multilayers. *Thin Solid Films*, **2014**, 553, 47-51	2.2	1
70	Process monitoring during AlNxOy deposition by reactive magnetron sputtering and correlation with the films properties. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2014**, 32, 021307	2.9	7
69	Electrochemical behaviour of nanocomposite Agx:TiN thin films for dry biopotential electrodes. *Electrochimica Acta*, **2014**, 125, 48-57	6.7	26
68	Structural and electrical properties in tungsten/tungsten oxide multilayers. *Thin Solid Films*, **2014**, 553, 93-97	2.2	7
67	Electrical characterization of Ag:TiN thin films produced by glancing angle deposition. *Materials Letters*, **2014**, 115, 136-139	3.3	22
66	Nanostructured functional TiAg electrodes for large deformation sensor applications. *Sensors and Actuators A: Physical*, **2014**, 220, 204-212	3.9	17
65	Effect of RGPP process on properties of CrSiN coatings. *Surface Engineering*, **2014**, 30, 606-611	2.6	10
64	Low temperature electronic transport in sputter deposited a-IGZO films. *Current Applied Physics*, **2014**, 14, 1481-1485	2.6	6
63	Preparation of conductive PDDA/(PEDOT:PSS) multilayer thin film: influence of polyelectrolyte solution composition. *Journal of Colloid and Interface Science*, **2014**, 431, 64-70	9.3	13
62	Enhanced tunability of the composition in silicon oxynitride thin films by the reactive gas pulsing process. *Applied Surface Science*, **2014**, 290, 148-153	6.7	9
61	TiAgx thin films for lower limb prosthesis pressure sensors: Effect of composition and structural changes on the electrical and thermal response of the films. *Applied Surface Science*, **2013**, 285, 10-18	6.7	27
60	Nanocomposite Ag:TiN thin films for dry biopotential electrodes. *Applied Surface Science*, **2013**, 285, 40-48	6.7	30
59	Correlation between structural and optical properties of WO3 thin films sputter deposited by glancing angle deposition. *Thin Solid Films*, **2013**, 534, 275-281	2.2	57

58	Cation size effect on the thermochromic properties of rare earth cobaltites RECoO3 (RE: La, Nd, Sm). *Journal of Applied Physics*, **2013**, 114, 113510	2.5	11
57	Interdependence of structural and electrical properties in tantalum/tantalum oxide multilayers. *Surface and Coatings Technology*, **2013**, 227, 38-41	4.4	15
56	Anisotropic electrical resistivity during annealing of oriented columnar titanium films. *Materials Letters*, **2013**, 105, 20-23	3.3	19
55	The interdependence of structural and electrical properties in TiO2/TiO/Ti periodic multilayers. *Acta Materialia*, **2013**, 61, 4215-4225	8.4	10
54	Accurate control of friction with nanosculptured thin coatings: Application to gripping in microscale assembly. *Tribology International*, **2013**, 59, 67-78	4.9	11
53	Structural and Morphological Changes in Ag:TiN Nanocomposite Films Promoted by In-Vacuum Annealing. *Journal of Nano Research*, **2013**, 25, 67-76	1	8
52	METAL-TO-DIELECTRIC TRANSITION INDUCED BY ANNEALING OF ORIENTED TITANIUM THIN FILMS. *Functional Materials Letters*, **2013**, 06, 1250051	1.2	15
51	Analysis of multifunctional titanium oxycarbide films as a function of oxygen addition. *Surface and Coatings Technology*, **2012**, 206, 2525-2534	4.4	21
50	Structural analysis of W3O/WO3 and TiO/TiO2 periodic multilayer thin films sputter deposited by the reactive gas pulsing process. *Thin Solid Films*, **2012**, 520, 4778-4781	2.2	13
49	Electrical properties of AlNxOy thin films prepared by reactive magnetron sputtering. *Thin Solid Films*, **2012**, 520, 6709-6717	2.2	21
48	Photocatalytic Activity of Nanostructured Titanium Dioxide Thin Films. *International Journal of Photoenergy*, **2012**, 2012, 1-8	2.1	9
47	Optical properties of WO3 thin films modeled by finite-difference time-domain and fabricated by glancing angle deposition. *Journal of Nanoscience and Nanotechnology*, **2012**, 12, 9125-30	1.3	4
46	A theoretical model for the electrical properties of chromium thin films sputter deposited at oblique incidence. *Journal Physics D: Applied Physics*, **2011**, 44, 215301	3	32
45	Silicon oxynitride thin films synthesised by the reactive gas pulsing process using rectangular pulses. *Applied Surface Science*, **2011**, 257, 10065-10071	6.7	11
44	Effect of various parameters on the conductivity of free standing electrosynthesized polypyrrole films. *Synthetic Metals*, **2010**, 160, 2180-2185	3.6	49
43	Effect of sputtering pressure on some properties of chromium thin films obliquely deposited. *IOP Conference Series: Materials Science and Engineering*, **2010**, 12, 012015	0.4	6
42	The reactive gas pulsing process for tuneable properties of sputter deposited titanium oxide, nitride and oxynitride coatings. *International Journal of Materials and Product Technology*, **2010**, 39, 159	1	3
41	Optical anisotropy of tilted columns thin films of chromium deposited at oblique incidence. *Optical Materials*, **2010**, 32, 1146-1153	3.3	19

40	Photocatalysis of Ag Doped TiO x Films Prepared at Room Temperature. *Catalysis Letters*, **2009**, 132, 244-247	2.8	6
39	Physical and Mechanical Properties of CrAlN and CrSiN Ternary Systems for Wood Machining Applications. *Plasma Processes and Polymers*, **2009**, 6, S113-S117	3.4	9
38	ZrOxNydecorative thin films prepared by the reactive gas pulsing process. *Journal Physics D: Applied Physics*, **2009**, 42, 195501	3	23
37	The contribution of grain boundary barriers to the electrical conductivity of titanium oxide thin films. *Applied Physics Letters*, **2008**, 93, 064102	3.4	19
36	Glancing angle deposition to control microstructure and roughness of chromium thin films. *Wear*, **2008**, 264, 444-449	3.5	21
35	Reactive sputtering of TiOxNy coatings by the reactive gas pulsing process. Part I: Pattern and period of pulses. *Surface and Coatings Technology*, **2007**, 201, 7720-7726	4.4	37
34	Reactive sputtering of TiOxNy coatings by the reactive gas pulsing process. *Surface and Coatings Technology*, **2007**, 201, 7727-7732	4.4	19
33	Reactive sputtering of TiOxNy coatings by the reactive gas pulsing process: Part III: The particular case of exponential pulses. *Surface and Coatings Technology*, **2007**, 201, 7733-7738	4.4	21
32	Titanium oxynitride thin films sputter deposited by the reactive gas pulsing process. *Applied Surface Science*, **2007**, 253, 5312-5316	6.7	93
31	Optical and Electrical Properties of W-O-N Coatings Deposited by DC Reactive Sputtering. *Plasma Processes and Polymers*, **2007**, 4, S69-S75	3.4	10
30	Phase mixture in MOCVD and reactive sputtering TiOxNy thin films revealed and quantified by XPS factorial analysis. *Acta Materialia*, **2006**, 54, 3067-3074	8.4	26
29	Reactive sputtering: A method to modify the metallic ratio in the novel silver□opper oxides. *Applied Surface Science*, **2006**, 253, 1484-1488	6.7	22
28	Investigation of Niobium oxynitride thin films deposited by reactive magnetron sputtering. *Surface and Coatings Technology*, **2006**, 201, 4152-4157	4.4	33
27	Modeling of Young's modulus, hardness and stiffness of chromium zigzag multilayers sputter deposited. *Thin Solid Films*, **2006**, 503, 177-189	2.2	23
26	Property change in multifunctional TiCxOy thin films: Effect of the O/Ti ratio. *Thin Solid Films*, **2006**, 515, 866-871	2.2	42
25	Substrate temperature and water vapour effects on structural and mechanical properties of TiOxNy coatings. *Journal of Materials Science*, **2006**, 41, 5639-5645	4.3	8
24	Nanoindentation of chromium zigzag thin films sputter deposited. *Surface and Coatings Technology*, **2005**, 200, 269-272	4.4	26
23	Properties and electrochromic performances of reactively sputtered tungsten oxide films with water as reactive gas. *Surface and Coatings Technology*, **2005**, 200, 232-235	4.4	11

22	Influence of zigzag microstructure on mechanical and electrical properties of chromium multilayered thin films. *Surface and Coatings Technology*, **2004**, 180-181, 26-32	4.4	60
21	Influence of substrate temperature on titanium oxynitride thin films prepared by reactive sputtering. *Applied Surface Science*, **2004**, 225, 29-38	6.7	47
20	Water as reactive gas to prepare titanium oxynitride thin films by reactive sputtering. *Thin Solid Films*, **2003**, 440, 66-73	2.2	54
19	Glancing angle deposition to modify microstructure and properties of sputter deposited chromium thin films. *Surface and Coatings Technology*, **2003**, 174-175, 316-323	4.4	78
18	Structural and mechanical properties of chromium nitride, molybdenum nitride, and tungsten nitride thin films. *Journal Physics D: Applied Physics*, **2003**, 36, 1023-1029	3	131
17	Structure and composition of TixAl1□N thin films sputter deposited using a composite metallic target. *Surface and Coatings Technology*, **2002**, 157, 138-143	4.4	63
16	Nitrogen pulsing to modify the properties of titanium nitride thin films sputter deposited. *Journal of Materials Science*, **2002**, 37, 4327-4332	4.3	6
15	Correlation between processing and properties of TiOxNy thin films sputter deposited by the reactive gas pulsing technique. *Applied Surface Science*, **2001**, 185, 123-133	6.7	96
14	Energy distribution of ions bombarding TiO2 thin films during sputter deposition. *Surface and Coatings Technology*, **2001**, 138, 77-83	4.4	41
13	Enhanced sputtering of titanium oxide, nitride and oxynitride thin films by the reactive gas pulsing technique. *Surface and Coatings Technology*, **2001**, 142-144, 615-620	4.4	62
12	Influence of two reactive gases on the instabilities of the reactive sputtering process. *Surface and Coatings Technology*, **2001**, 142-144, 206-210	4.4	22
11	Intrinsic low energy bombardment of titanium chromium oxide thin films prepared by reactive sputtering. *Surface and Coatings Technology*, **2000**, 130, 280-289	4.4	12
10	Enhancement of mechanical properties of TiN/AlN multilayers by modifying the number and the quality of interfaces. *Surface and Coatings Technology*, **2000**, 124, 210-221	4.4	38
9	High rate and process control of reactive sputtering by gas pulsing: the Ti□ system. *Thin Solid Films*, **2000**, 377-378, 550-556	2.2	36
8	Prediction of the periods of multilayers prepared by multitarget sputtering. *Journal of Applied Physics*, **2000**, 87, 8747-8753	2.5	1
7	Instabilities of the reactive sputtering process involving one metallic target and two reactive gases. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1999**, 17, 2869-2878	2.9	22
6	Modelling of reactive sputtering processes involving two separated metallic targets. *Surface and Coatings Technology*, **1999**, 114, 235-249	4.4	14
5	The effect of bias power on some properties of titanium and titanium oxide films prepared by r.f. magnetron sputtering. *Surface and Coatings Technology*, **1998**, 107, 172-182	4.4	50

4	Use of a theoretical model to investigate RF and DC reactive sputtering of titanium and chromium oxide coatings. *Surface and Coatings Technology*, **1998**, 110, 158-167	4.4	27
3	Microstructure modification of amorphous titanium oxide thin films during annealing treatment. *Thin Solid Films*, **1997**, 300, 113-121	2.2	220
2	Characterizations of titanium oxide films prepared by radio frequency magnetron sputtering. *Thin Solid Films*, **1996**, 287, 154-163	2.2	89
1	Architecture of Thin Solid Films by the GLAD Technique1-30		1