Damien Faurie

List of Publications by Year in Descending Order

89 papers	989 citations	17 h-index	26 g-index
92 ext. papers	1,065 ext. citations	3.4 avg, IF	4.05 L-index

#	Paper	IF	Citations
89	Strain ratio and thickness effects on plasticity and crack patterns of Nickel thin films. *Scripta Materialia*, **2022**, 213, 114638	5.6	1
88	Film thickness and architecture effects in biaxially strained polymer supported Al/Mo bilayers. *Materials Today Communications*, **2022**, 31, 103455	2.5	1
87	Mechanical properties of Li2MoO4 single crystals. *Journal of Applied Physics*, **2022**, 131, 175102	2.5	1
86	Effect of composition and nanostructure on the mechanical properties and thermal stability of Zr100-xCux thin film metallic glasses. *Materials and Design*, **2022**, 110752	8.1	1
85	Prospects toward flexible magnonic systems. *Journal of Applied Physics*, **2021**, 130, 150901	2.5	4
84	A review on nanostructured thin films on flexible substrates: links between strains and magnetic properties. *Journal of Physics Condensed Matter*, **2021**, 33,	1.8	1
83	Effects of Heterogeneous Strain on the Magnetization Processes in Magnetic Nanomembranes. *Physica Status Solidi - Rapid Research Letters*, **2021**, 15, 2100149	2.5	2
82	Differentiated Strain-Control of Localized Magnetic Modes in Antidot Arrays. *ACS Applied Materials & Interfaces*, **2021**, 13, 29906-29915	9.5	5
81	Role of layer order on the equi-biaxial behavior of Al/Mo bilayers. *Scripta Materialia*, **2021**, 194, 113656	5.6	6
80	Strain ratio effects in mechanical properties of supported thin films. *Journal of Applied Physics*, **2020**, 127, 105103	2.5	4
79	90° ferroelectric domain switching effect on interfacial strain mediated magnetoelectric coupling. *Journal Physics D: Applied Physics*, **2020**, 53, 145001	3	2
78	Mechanical properties of CoCrCuFeNi multi-principal element alloy thin films on Kapton substrates. *Surface and Coatings Technology*, **2020**, 402, 126474	4.4	4
77	Lattice Strain Evolutions in Ni-W Alloys during a Tensile Test Combined with Synchrotron X-ray Diffraction. *Materials*, **2020**, 13,	3.5	2
76	X-ray diffraction and stress relaxations to study thermal and stress-assisted annealings in nanocrystalline gold thin films. *Acta Materialia*, **2019**, 173, 87-95	8.4	3
75	Local Stiffness Effect on Ferromagnetic Response of Nanostructure Arrays in Stretchable Systems (Phys. Status Solidi RRL 2/2019). *Physica Status Solidi - Rapid Research Letters*, **2019**, 13, 1970015	2.5	2
74	Micromagnetic modeling of nanostructures subject to heterogeneous strain fields. *Journal Physics D: Applied Physics*, **2019**, 52, 355004	3	6
73	Fracture behavior of Ni-W alloy probed by in situ synchrotron X-ray diffraction. *Materials Letters*, **2019**, 239, 116-119	3.3	5

72	Local Stiffness Effect on Ferromagnetic Response of Nanostructure Arrays in Stretchable Systems. *Physica Status Solidi - Rapid Research Letters*, **2019**, 13, 1800509	2.5	8
71	In situ x-ray diffraction analysis of 2D crack patterning in thin films. *Acta Materialia*, **2019**, 165, 177-182	8.4	13
70	Multicracking and Magnetic Behavior of NiFe Nanowires Deposited onto a Polymer Substrate. *Nano Letters*, **2018**, 18, 3199-3202	11.5	15
69	Origin of relationship between ferromagnetic response and damage in stretched systems. *Scientific Reports*, **2018**, 8, 13695	4.9	8
68	Setup for high-temperature surface Brillouin light scattering: Application to opaque thin films and coatings. *Review of Scientific Instruments*, **2017**, 88, 023903	1.7	7
67	Fragmentation and adhesion properties of CoFeB thin films on polyimide substrate. *Applied Physics Letters*, **2017**, 110, 091904	3.4	10
66	Relaxation mechanisms in a gold thin film on a compliant substrate as revealed by X-ray diffraction. *Applied Physics Letters*, **2017**, 110, 211901	3.4	7
65	Annealing effect on elastic, magnetic and magnetoelastic properties of CoFeB thin films on polymer substrate. *Journal Physics D: Applied Physics*, **2017**, 50, 455002	3	3
64	Large area periodic ferromagnetic nanowires deposited onto a polymer substrate. *Applied Physics Letters*, **2017**, 111, 052408	3.4	10
63	Ferromagnetic resonance investigation of physical origins of modification of the perpendicular magnetic anisotropy in Pd/Co layered films in the presence of hydrogen gas. *Journal of Applied Physics*, **2017**, 122, 163901	2.5	12
62	Ferromagnetic resonance in thin films submitted to multiaxial stress state: application of the uniaxial equivalent stress concept and experimental validation. *Journal Physics D: Applied Physics*, **2016**, 49, 265001	3	13
61	Data on the impact of increasing the W amount on the mass density and compressive properties of Ni-W alloys processed by spark plasma sintering. *Data in Brief*, **2016**, 7, 1405-8	1.2	7
60	Spectroscopic investigation of elastic and magnetoelastic properties of CoFeB thin films. *Journal Physics D: Applied Physics*, **2016**, 49, 145003	3	14
59	Bulk Ni□W alloys with a composite-like microstructure processed by spark plasma sintering: Microstructure and mechanical properties. *Materials and Design*, **2016**, 89, 1181-1190	8.1	19
58	Unambiguous magnetoelastic effect on residual anisotropy in thin films deposited on flexible substrates. *Europhysics Letters*, **2016**, 114, 17003	1.6	11
57	Nano-structuration effect on the mechanical behavior of gold thin films studied by 2D synchrotron x-ray diffraction. *Surface and Coatings Technology*, **2016**, 308, 418-423	4.4	1
56	Annealing temperature and thickness dependencies of structural and magnetic properties of Co2FeAl thin films. *Physical Review B*, **2016**, 94,	3.3	10
55	Effective 90-degree magnetization rotation in Co2FeAl thin film/piezoelectric system probed by microstripline ferromagnetic resonance. *Applied Physics Letters*, **2015**, 107, 032908	3.4	8

54	Magnetic domain-wall motion study under an electric field in a Finemet thin film on flexible substrate. *Journal of Magnetism and Magnetic Materials*, **2015**, 373, 259-262	2.8	4
53	Peculiar effective elastic anisotropy of nanometric multilayers studied by surface Brillouin scattering. *Superlattices and Microstructures*, **2015**, 88, 551-560	2.8	
52	Laue-DIC: a new method for improved stress field measurements at the micrometer scale. *Journal of Synchrotron Radiation*, **2015**, 22, 980-94	2.4	18
51	Machine biaxiale sur la ligne de lumière Diffabs pour l'étude des propriétés mécaniques de films minces déposés sur substrats polymères. *Materiaux Et Techniques*, **2015**, 103, 610	0.6	
50	Combining ferromagnetic resonator and digital image correlation to study the strain induced resonance tunability in magnetoelectric heterostructures. *Review of Scientific Instruments*, **2014**, 85, 103905	1.7	14
49	Mastering the biaxial stress state in nanometric thin films on flexible substrates. *Applied Surface Science*, **2014**, 306, 70-74	6.7	8
48	In situmonitoring of X-ray strain pole figures of a biaxially deformed ultra-thin film on a flexible substrate. *Journal of Applied Crystallography*, **2014**, 47, 181-187	3.8	10
47	Time-Resolved X-Ray Stress Analysis in Multilayered Thin Films during Continuous Loading: Use of 2D Remote Detection. *Advanced Materials Research*, **2014**, 996, 878-883	0.5	
46	Comparative study of the mechanical properties of nanostructured thin films on stretchable substrates. *Journal of Applied Physics*, **2014**, 116, 093504	2.5	17
45	Bending strain-tunable magnetic anisotropy in Co2FeAl Heusler thin film on Kapton . *Applied Physics Letters*, **2014**, 105, 062409	3.4	34
44	Micro-strip ferromagnetic resonance study of strain-induced anisotropy in amorphous FeCuNbSiB film on flexible substrate. *Journal of Applied Physics*, **2014**, 116, 123903	2.5	14
43	Optimization of indirect magnetoelectric effect in thin-film/substrate/piezoelectric-actuator heterostructure using polymer substrate. *Applied Physics Letters*, **2014**, 105, 052411	3.4	12
42	Voltage-induced strain control of the magnetic anisotropy in a Ni thin film on flexible substrate. *Journal of Applied Physics*, **2013**, 114, 073902	2.5	32
41	X-ray elastic strain analysis of compressed Au thin film on polymer substrate. *Surface and Coatings Technology*, **2013**, 215, 322-326	4.4	2
40	Structural and elastic properties of ternary metal nitrides TixTa1−xN alloys: First-principles calculations versus experiments. *Surface and Coatings Technology*, **2013**, 215, 199-208	4.4	34
39	Non-equibiaxial deformation of W/Cu nanocomposite thin films on stretchable substrate: Effect of loading path. *Thin Solid Films*, **2013**, 549, 239-244	2.2	2
38	Sin2 analysis in thin films using 2D detectors: Non-linearity due to set-up, stress state and microstructure. *Thin Solid Films*, **2013**, 530, 25-29	2.2	11
37	Yield surface of polycrystalline thin films as revealed by non-equibiaxial loadings at small deformation. *Acta Materialia*, **2013**, 61, 5067-5077	8.4	26

36	Deformation modes of nanostructured thin film under controlled biaxial deformation. *Thin Solid Films*, **2013**, 530, 30-34	2.2	17
35	Phase transition signature on elastic constants in Al1-xCrxNy ternary alloys thin films. *Applied Physics Letters*, **2013**, 103, 041601	3.4	7
34	Deposition of ultra-thin gold film on in situ loaded polymeric substrate for compression tests. *Materials Letters*, **2012**, 73, 99-102	3.3	8
33	Structural and elastic properties of single-crystal and polycrystalline Ti1−ZrxN alloys: A computational study. *Journal of Alloys and Compounds*, **2012**, 536, S138-S142	5.7	12
32	Static and dynamic magnetic properties of epitaxial Fe1.7Ge thin films grown on Ge(111). *Journal of Applied Physics*, **2012**, 111, 07D502	2.5	6
31	Static and dynamic study of magnetic properties in FeNi film on flexible substrate, effect of applied stresses. *European Physical Journal B*, **2012**, 85, 1	1.2	11
30	Combining Laue Microdiffraction and Digital Image Correlation for Improved Measurements of the Elastic Strain Field with Micrometer Spatial Resolution. *Procedia IUTAM*, **2012**, 4, 133-143		11
29	In situ tailoring of magnetization configuration in NiFe film deposited onto flexible substrate. *Journal of Applied Physics*, **2012**, 111, 07A926	2.5	10
28	Synchrotron X-ray diffraction experiments with a prototype hybrid pixel detector. *Journal of Applied Crystallography*, **2012**, 45, 38-47	3.8	30
27	Structural and magnetic properties of Co2MnSi thin films. *Physica Status Solidi (A) Applications and Materials Science*, **2012**, 209, 1328-1333	1.6	6
26	In situstudy of spin waves in thin films deposited onto compliant substrates submitted to external stresses. *Journal Physics D: Applied Physics*, **2011**, 44, 155002	3	4
25	Time resolved synchrotron x-ray strain measurements of gold thin film on flexible substrate. *Thin Solid Films*, **2011**, 520, 1603-1607	2.2	2
24	X-ray strain analysis of {111} fiber-textured thin films independent of grain-interaction models. *Journal of Applied Crystallography*, **2011**, 44, 409-413	3.8	4
23	Combined synchrotron X-ray and image-correlation analyses of biaxially deformed W/Cu nanocomposite thin films on Kapton. *Journal of Applied Crystallography*, **2011**, 44, 1071-1079	3.8	32
22	X-ray elastic response of metallic thin film supported by polyimide substrates. *Journal of Strain Analysis for Engineering Design*, **2011**, 46, 639-649	1.3	3
21	Measurement of applied strains in thin films deposited onto polymer by synchrotron X-ray diffraction. *Procedia Engineering*, **2011**, 10, 2701-2706		
20	X-ray strain analysis in thin films enhanced by 2D detection. *EPJ Web of Conferences*, **2010**, 6, 26008	0.3	
19	Structural, static and dynamic magnetic properties of Co2MnGe thin films on a sapphire a-plane substrate. *Journal of Applied Physics*, **2010**, 108, 063926	2.5	14

18	Development of a synchrotron biaxial tensile device for in situ characterization of thin films mechanical response. *Review of Scientific Instruments*, **2010**, 81, 103903	1.7	43
17	Elastic-strain distribution in metallic film-polymer substrate composites. *Applied Physics Letters*, **2010**, 96, 041905	3.4	31
16	Controlled biaxial deformation of nanostructured W/Cu thin films studied by X-ray diffraction. *Surface and Coatings Technology*, **2010**, 205, 1420-1425	4.4	7
15	Elastic anisotropy of polycrystalline Au films: Modeling and respective contributions of X-ray diffraction, nanoindentation and Brillouin light scattering. *Acta Materialia*, **2010**, 58, 4998-5008	8.4	35
14	Development of a biaxial tensile module at synchrotron beamline for the study of mechanical properties of nanostructured films. *Materials Research Society Symposia Proceedings*, **2009**, 1224, 1		
13	In situdiffraction strain analysis of elastically deformed polycrystalline thin films, and micromechanical interpretation. *Journal of Applied Crystallography*, **2009**, 42, 1073-1084	3.8	39
12	Mechanical Properties of Thin Films and Nanometric Multilayers Using Tensile Testing and Synchrotron X-Ray Diffraction. *Plasma Processes and Polymers*, **2007**, 4, 311-317	3.4	3
11	Study of texture effect on elastic properties of Au thin films by x-ray diffraction and Brillouin light scattering. *Journal of Physics: Conference Series*, **2007**, 92, 012170	0.3	2
10	Strains, Stresses and Elastic Properties in Polycrystalline Metallic Thin Films: In Situ Deformation Combined with X-Ray Diffraction and Simulation Experiments. *Materials Science Forum*, **2006**, 524-525, 735-740	0.4	2
9	Elastic behavior of polycrystalline thin films inferred from in situ micromechanical testing and modeling. *Applied Physics Letters*, **2006**, 89, 061911	3.4	16
8	Study of texture effect on elastic properties of Au thin films by X-ray diffraction and in situ tensile testing. *Acta Materialia*, **2006**, 54, 4503-4513	8.4	62
7	Elastic properties of polycrystalline gold thin films: Simulation and X-ray diffraction experiments. *Surface and Coatings Technology*, **2006**, 201, 4300-4304	4.4	7
6	Evolution under annealing and nitrogen implantation of the mechanical properties of amorphous carbon films. *Thin Solid Films*, **2005**, 482, 318-323	2.2	1
5	Determination of elastic constants of a fiber-textured gold film by combining synchrotron x-ray diffraction and in situ tensile testing. *Journal of Applied Physics*, **2005**, 98, 093511	2.5	25
4	Elastic behavior of fibre-textured gold films by combining synchrotron X-ray diffraction and in-situ tensile testing. *Materials Research Society Symposia Proceedings*, **2005**, 875, 1		1
3	TEM study of the indentation behaviour of thin Au film on GaAs. *Thin Solid Films*, **2004**, 460, 150-155	2.2	5
2	Measurement of thin film elastic constants by X-ray diffraction. *Thin Solid Films*, **2004**, 469-470, 201-205	2.2	21
1	Measurement of the elastic constants of textured anisotropic thin films from x-ray diffraction data. *Applied Physics Letters*, **2003**, 83, 473-475	3.4	48