Eckhard Quandt

List of Publications by Year
in descending order

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299 papers	9,753 citations	34105 52 h-index	53230 85 g-index
304 all docs	304 docs citations	304 times ranked	6739 citing authors

#	Article	IF	Citations
1	New materials for micro-scale sensors and actuators. Materials Science and Engineering Reports, 2007, 56, 1-129.	31.8	438
2	Ultralow-fatigue shape memory alloy films. Science, 2015, 348, 1004-1007.	12.6	361
3	Determination of elastic modulus of thin layers using nanoindentation. Journal of Materials Research, 1997, 12, 2475-2484.	2.6	346
4	Caloric Effects in Ferroic Materials: New Concepts for Cooling. Advanced Engineering Materials, 2012, 14, 10-19.	3.5	278
5	Exchange biasing of magnetoelectric composites. Nature Materials, 2012, 11, 523-529.	27.5	258
6	Giant magnetoelectric coefficients in (Fe90Co10)78Si12B10-AlN thin film composites. Applied Physics Letters, 2010, 96, .	3.3	222
7	High cyclic stability of the elastocaloric effect in sputtered TiNiCu shape memory films. Applied Physics Letters, 2012, 101, 091903.	3.3	211
8	Evolution of temperature profiles in TiNi films for elastocaloric cooling. Acta Materialia, 2014, 81, 9-20.	7.9	206
9	A Love-wave biosensor using nucleic acids as ligands. Sensors and Actuators B: Chemical, 2004, 101, 308-315.	7.8	158
10	MEMS magnetic field sensor based on magnetoelectric composites. Journal of Micromechanics and Microengineering, 2012, 22, 065024.	2.6	130
11	Preparation and applications of magnetostrictive thin films. Journal of Applied Physics, 1994, 76, 7000-7002.	2.5	127
12	Thin film shape memory microvalves with adjustable operation temperature. Sensors and Actuators A: Physical, 2000, 83, 214-219.	4.1	123
13	Phase engineering and supercompatibility of shape memory alloys. Materials Today, 2018, 21, 265-277.	14.2	122
14	Sputter deposition of TiNi, TiNiPd and TiPd films displaying the two-way shape-memory effect. Sensors and Actuators A: Physical, 1996, 53, 434-439.	4.1	120
15	Sensitivity enhancement of magnetoelectric sensors through frequency-conversion. Sensors and Actuators A: Physical, 2012, 183, 16-21.	4.1	119
16	First observation of light-induced spin change in vacuum deposited thin films of iron spin crossover complexes. Dalton Transactions, 2011, 40, 6364.	3.3	114
17	Monitoring complex formation in the blood-coagulation cascade using aptamer-coated SAW sensors. Biosensors and Bioelectronics, 2005, 20, 2044-2052.	10.1	111
18	Recent developments in shape memory thin film technology. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 378, 40-46.	5.6	100

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19	Local Evolution of the Elastocaloric Effect in TiNi-Based Films. Shape Memory and Superelasticity, 2015, 1, 142-152.	2.2	91
20	Giant magnetostrictive thin films for applications in microelectromechanical systems (invited). Journal of Applied Physics, 2000, 87, 4691-4695.	2.5	90
21	Wide Band Low Noise Love Wave Magnetic Field Sensor System. Scientific Reports, 2018, 8, 278.	3.3	89
22	Giant magnetoelectric effect in vacuum. Applied Physics Letters, 2013, 102, .	3.3	88
23	Piezoelectric properties of 0.5(Ba0.7Ca0.3TiO3) â€“ 0.5[Ba(Zr0.2Ti0.8)O3] ferroelectric lead-free laser deposited thin films. Journal of Applied Physics, 2011, 109, .	2.5	87
24	Giant Magnetoelectric Effect in Thinâ€Film Composites. Journal of the American Ceramic Society, 2013, 96, 1673-1681.	3.8	85
25	Fully integrable magnetic field sensor based on delta-E effect. Applied Physics Letters, 2011, 99, 223502.	3.3	82
26	Magnetostrictive actuation in microsystems. Sensors and Actuators A: Physical, 2000, 81, 275-280.	4.1	81
27	Highly sensitive wafer-level packaged MEMS magnetic field sensor based on magnetoelectric composites. Sensors and Actuators A: Physical, 2013, 189, 321-327.	4.1	81
28	Low damping resonant magnetoelectric sensors. Applied Physics Letters, 2010, 97, .	3.3	80
29	Shape memory microvalves based on thin films or rolled sheets. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1999, 273-275, 784-788.	5.6	79
30	Elastocaloric Cooling on the Miniature Scale: A Review on Materials and Device Engineering. Energy Technology, 2018, 6, 1588-1604.	3.8	78
31	Optimization of the Î”E effect in thin films and multilayers by magnetic field annealing. IEEE Transactions on Magnetics, 2002, 38, 2829-2831.	2.1	75
32	Giant magnetostrictive multilayers (invited). Journal of Applied Physics, 1999, 85, 6232-6237.	2.5	74
33	Noise Performance of Magnetometers With Resonant Thin-Film Magnetoelectric Sensors. IEEE Transactions on Instrumentation and Measurement, 2011, 60, 2995-3001.	4.7	74
34	Phase modulated magnetoelectric delta-E effect sensor for sub-nano tesla magnetic fields. Applied Physics Letters, 2015, 107, .	3.3	74
35	Ultra-Low Fatigue Quaternary TiNi-Based Films for Elastocaloric Cooling. Shape Memory and Superelasticity, 2016, 2, 95-103.	2.2	73
36	Giant magnetostrictive spring magnet type multilayers. Journal of Applied Physics, 1997, 81, 5420-5422.	2.5	71

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37	Highly sensitive strain sensors based on magnetic tunneling junctions. Applied Physics Letters, 2002, 81, 313-315.	3.3	71
38	Nanostructured magnetic Feâ€“Niâ€“Co/Teflon multilayers for high-frequency applications in the gigahertz range. Applied Physics Letters, 2006, 89, 242501.	3.3	71
39	Low temperature aluminum nitride thin films for sensory applications. AIP Advances, 2016, 6, .	1.3	70
40	TiNi-based films for elastocaloric microcoolingâ€" Fatigue life and device performance. APL Materials, 2016, 4, .	5.1	69
41	Self-Biased Magnetoelectric Composites: An Overview and Future Perspectives. Energy Harvesting and Systems, 2016, 3, 1-42.	2.7	69
42	Discrimination of Single Mutations in Cancer-Related Gene Fragments with a Surface Acoustic Wave Sensor. Analytical Chemistry, 2006, 78, 4865-4871.	6.5	67
43	Inverse bilayer magnetoelectric thin film sensor. Applied Physics Letters, 2016, 109, .	3.3	62
44	Multitarget sputtering of high magnetostrictive Tbâ€Dyâ€Fe films. Journal of Applied Physics, 1994, 75, 5653-5655.	2.5	61
45	Micropatterned Freestanding Superelastic TiNi Films. Advanced Engineering Materials, 2013, 15, 66-69.	3.5	59
46	Giant magnetostrictive thin film materials and applications. Journal of Alloys and Compounds, 1997, 258, 126-132.	5.5	57
47	Magnetoelectric thin film composites with interdigital electrodes. Applied Physics Letters, 2013, 103, .	3.3	57
48	Magnetoelectric magnetic field sensors. MRS Bulletin, 2018, 43, 834-840.	3.5	57
49	Time-of-flight magnetic flow cytometry in whole blood with integrated sample preparation. Lab on A Chip, 2013, 13, 1035.	6.0	55
50	Corrosion performance and mechanical properties of sputter-deposited MgY and MgGd alloys. Corrosion Science, 2014, 78, 43-54.	6.6	55
51	Magnetic anisotropy and domain patterning of amorphous films by He-ion irradiation. Applied Physics Letters, 2005, 86, 162502.	3.3	53
52	Deposition of Nanocomposites by Plasmas. Contributions To Plasma Physics, 2007, 47, 537-544.	1.1	53
53	Exchange biased magnetoelectric composites for magnetic field sensor application by frequency conversion. Journal of Applied Physics, 2015, 117, .	2.5	53
54	Mechanical-Resonance-Enhanced Thin-Film Magnetoelectric Heterostructures for Magnetometers, Mechanical Antennas, Tunable RF Inductors, and Filters. Materials, 2019, 12, 2259.	2.9	53

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55	Fabrication and simulation of magnetostrictive thin-film actuators. Sensors and Actuators A: Physical, 1995, 50, 105-109.	4.1	52
56	Electrically modulated magnetoelectric sensors. Applied Physics Letters, 2016, 108, .	3.3	51
57	Evaluation of magnetoelectric sensor systems for cardiological applications. Measurement: Journal of the International Measurement Confederation, 2018, 116, 230-238.	5.0	51
58	Functional Polymer Nanocomposites. Polymers and Polymer Composites, 2008, 16, 471-481.	1.9	48
59	Multimode delta-E effect magnetic field sensors with adapted electrodes. Applied Physics Letters, 2016, 108, .	3.3	48
60	Pushing the detection limit of thin film magnetoelectric heterostructures. Journal of Materials Research, 2017, 32, 1009-1019.	2.6	48
61	AlScN-based MEMS magnetoelectric sensor. Applied Physics Letters, 2020, 117, .	3.3	46
62	Integration of two degree-of-freedom magnetostrictive actuation and piezoresistive detection: application to a two-dimensional optical scanner. Journal of Microelectromechanical Systems, 2002, 11, 355-361.	2.5	44
63	SAW Sensor System for Markerâ€Free Molecular Interaction Analysis. Analytical Letters, 2006, 39, 1747-1757.	1.8	43
64	Roadmap on Magnetoelectric Materials and Devices. IEEE Transactions on Magnetics, 2021, 57, 1-57.	2.1	43
65	Successive occurrence of ferromagnetic and shape memory properties during crystallization of NiMnGa freestanding films. Journal of Magnetism and Magnetic Materials, 2006, 302, 421-428.	2.3	41
66	Pressure sensor based on magnetic tunnel junctions. Journal of Applied Physics, 2009, 105, .	2.5	41
67	Determination of elastic modulus of thin films and small specimens using beam bending methods. Journal of Materials Research, 1999, 14, 2152-2161.	2.6	39
68	The ferromagnetic shape memory system Feâ€“Pdâ€“Cu. Acta Materialia, 2010, 58, 5949-5961.	7.9	39
69	Advanced magneto-optical microscopy: Imaging from picoseconds to centimeters - imaging spin waves and temperature distributions (invited). AIP Advances, 2016, 6, .	1.3	39
70	Tuning fork for noise suppression in magnetoelectric sensors. Sensors and Actuators A: Physical, 2016, 237, 91-95.	4.1	39
71	High-performance elastocaloric materials for the engineering of bulk- and micro-cooling devices. MRS Bulletin, 2018, 43, 280-284.	3.5	37
72	Mesoscale simulation of elastocaloric cooling in SMA films. Acta Materialia, 2017, 136, 105-117.	7.9	36

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73	Magnetic properties and microstructure of giant magnetostrictive TbFe/FeCo multilayers. Journal of Applied Physics, 1998, 83, 7267-7269.	2.5	35
74	High-frequency magnetoelastic materials for remote-interrogated stress sensors. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 1126-1131.	2.3	35
75	Noise of a JFET Charge Amplifier for Piezoelectric Sensors. IEEE Sensors Journal, 2017, 17, 7364-7371.	4.7	35
76	Elastic modulus of TbDyFe filmsâ€”a comparison of nanoindentation and bending measurements. Thin Solid Films, 1996, 287, 208-213.	1.8	34
77	Niâ€“Tiâ€“Ag shape memory thin films. Scripta Materialia, 2007, 56, 1075-1077.	5.2	33
78	Biofunctional structural design of SAW sensor chip surfaces in a microfluidic sensor system. Sensors and Actuators B: Chemical, 2007, 124, 46-52.	7.8	32
79	Magnetic anisotropy controlled FeCoSiB thin films for surface acoustic wave magnetic field sensors. Applied Physics Letters, 2020, 116, .	3.3	32
80	First experimental test of a new monochromated and aberration-corrected 200kV field-emission scanning transmission electron microscope. Ultramicroscopy, 2006, 106, 963-969.	1.9	31
81	Dual wavelength magneto-optical imaging of magnetic thin films. Applied Physics Letters, 2013, 103, .	3.3	31
82	Origin of hysteretic magnetoelastic behavior in magnetoelectric 2-2 composites. Applied Physics Letters, 2014, 105, .	3.3	31
83	Electrically modulated magnetoelectric AlN/FeCoSiB film composites for DC magnetic field sensing. Journal Physics D: Applied Physics, 2018, 51, 354002.	2.8	31
84	Comparison of the corrosion behaviour of bulk and thin film magnesium alloys. Corrosion Science, 2010, 52, 3973-3977.	6.6	30
85	Energy transduction ferroic materials. Materials Today, 2018, 21, 771-784.	14.2	30
86	Converse Magnetoelectric Composite Resonator for Sensing Small Magnetic Fields. Scientific Reports, 2019, 9, 16355.	3.3	30
87	Giant magnetostrictive thin film materials and applications. Journal of Alloys and Compounds, 1997, 258, 126-132.	5.5	30
88	Micro-sensor coupling magnetostriction and magnetoresistive phenomena. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 1132-1135.	2.3	29
89	Magnetism, elasticity, and magnetostriction of FeCoGa alloys. Journal of Applied Physics, 2003, 93, 8627-8629.	2.5	29
90	Magnetoelastic and magnetostatic interactions in exchange-spring multilayers. Physical Review B, 2005, 72, .	3.2	29

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91	Magnetic domain control and voltage response of exchange biased magnetoelectric composites. Applied Physics Letters, 2014, 104, .	3.3	29
92	Tunnel Magnetoresistance Sensors with Magnetostrictive Electrodes: Strain Sensors. Sensors, 2016, 16, 1902.	3.8	29
93	Effect of crystallographic compatibility and grain size on the functional fatigue of sputtered TiNiCuCo thin films. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20150311.	3.4	28
94	Thin magnesium layer confirmed as an antibacterial and biocompatible implant coating in a co-culture model. Molecular Medicine Reports, 2017, 15, 1624-1630.	2.4	28
95	Cu-rich Ti52.8Ni22.2Cu22.5Co2.5 shape memory alloy films with ultra-low fatigue for elastocaloric applications. Journal of Applied Physics, 2020, 127, .	2.5	28
96	Magnetically tunable SAW-resonator. , 0, , .		27
97	Integration of crossed anisotropy magnetic core into toroidal thin-film inductors. IEEE Transactions on Microwave Theory and Techniques, 2005, 53, 2096-2100.	4.6	27
98	Antiparallel exchange biased multilayers for low magnetic noise magnetic field sensors. Applied Physics Letters, 2019, 114, .	3.3	27
99	Exchange biased delta-E effect enables the detection of low frequency pT magnetic fields with simultaneous localization. Scientific Reports, 2021, 11, 5269.	3.3	27
100	Combination of a SAW-biosensor with MALDI mass spectrometric analysis. Biosensors and Bioelectronics, 2008, 23, 1496-1502.	10.1	26
101	Adaptive Readout Schemes for Thin-Film Magnetoelectric Sensors Based on the delta-E Effect. IEEE Sensors Journal, 2016, 16, 4891-4900.	4.7	26
102	Application of magnetostrictive thin films for microdevices. IEEE Transactions on Magnetics, 1997, 33, 2163-2166.	2.1	25
103	Giant magnetostrictive TbFe/Fe multilayers. Journal of Alloys and Compounds, 1997, 258, 133-137.	5.5	25
104	Strain sensors based on magnetostrictive GMR/TMR structures. IEEE Transactions on Magnetics, 2002, 38, 2826-2828.	2.1	25
105	Positive/negative magnetostrictive GMR trilayer systems as strain gauges. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 795-799.	2.3	25
106	Local setting of magnetic anisotropy in amorphous films by Co ion implantation. Journal Physics D: Applied Physics, 2009, 42, 055006.	2.8	25
107	Comparison of the Fatigue Performance of Commercially Produced Nitinol Samples versus Sputter-Deposited Nitinol. Journal of Materials Engineering and Performance, 2014, 23, 2437-2445.	2.5	25
108	Cascaded SMA-Film Based Elastocaloric Cooling. , 2019, , .		25

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109	Fabrication of two-dimensional hybrid photonic crystals utilizing electron beam lithography. Microelectronic Engineering, 2005, 78-79, 442-447.	2.4	24
110	The biocompatibility and mechanical properties of cylindrical NiTi thin films produced by magnetron sputtering. Materials Science and Engineering C, 2012, 32, 2523-2528.	7.3	24
111	Thermal-Mechanical Noise in Resonant Thin-Film Magnetoelectric Sensors. IEEE Sensors Journal, 2017, 17, 2338-2348.	4.7	24
112	Modeling and Analysis of Noise Sources for Thin-Film Magnetoelectric Sensors Based on the Delta-E Effect. IEEE Transactions on Instrumentation and Measurement, 2017, 66, 2771-2779.	4.7	24
113	Stress-induced remagnetization in magnetostrictive films. Journal of Applied Physics, 2004, 95, 6861-6863.	2.5	23
114	Magnetoelectric effect in sputtered composites. Journal of Applied Physics, 2005, 97, 10Q301.	2.5	23
115	Influence of the quality factor on the signal to noise ratio of magnetoelectric sensors based on the delta-E effect. Applied Physics Letters, 2019, 114, .	3.3	23
116	Magnetic particle mapping using magnetoelectric sensors as an imaging modality. Scientific Reports, 2019, 9, 2086.	3.3	23
117	Materials development for thin film actuators. Microsystem Technologies, 1995, 1, 178-184.	2.0	22
118	Shape memory effect and magnetostriction of sputtered NiMnGa thin films. , 2003, , .		22
119	Magnetic vector field sensor using magnetoelectric thin-film composites. IEEE Transactions on Magnetics, 2005, 41, 3667-3669.	2.1	22
120	Kinetic Binding Analysis of Aptamers Targeting HIV-1 Proteins by a Combination of a Microbalance Array and Mass Spectrometry (MAMS). Journal of Proteome Research, 2009, 8, 3568-3577.	3.7	22
121	Revisiting magnetic stripe domains â€" anisotropy gradient and stripe asymmetry. Journal of Applied Physics, 2013, 113, 073903.	2.5	22
122	Exchange biased magnetoelectric composites for vector field magnetometers. Journal of Applied Physics, 2013, 113, .	2.5	22
123	Shape memory alloy engine for high efficiency low-temperature gradient thermal to electrical conversion. Applied Energy, 2019, 251, 113277.	10.1	22
124	Origami-inspired thin-film shape memory alloy devices. Scientific Reports, 2021, 11, 10988.	3.3	22
125	Application of a Multilayered Magnetostrictive Film to a Micromachined 2-D Optical Scanner. Journal of Microelectromechanical Systems, 2004, 13, 264-271.	2.5	21
126	Microscopic magnetic and high-frequency properties of a stress sensor using FeCoBSi magnetostrictive thin films. IEEE Transactions on Magnetics, 2005, 41, 3691-3693.	2.1	21

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127	Fabrication of TiNi thin film stents. Smart Materials and Structures, 2009, 18, 104010.	3.5	21
128	Polycrystalline and amorphous MgZnCa thin films. Corrosion Science, 2012, 63, 234-238.	6.6	21
129	Elastocaloric cooling using shape memory alloy films. Journal of Physics: Conference Series, 2013, 476, 012138.	0.4	21
130	Specific targeting of ultrasound contrast agent (USCA) for diagnostic application: an in vitro feasibility study based on SAW biosensor. Biosensors and Bioelectronics, 2005, 20, 1829-1835.	10.1	20
131	Time-resolved scanning electron microscopy with polarization analysis. Applied Physics Letters, 2016, 108, .	3.3	20
132	The impact of O₂/Ar ratio on morphology and functional properties in reactive sputtering of metal oxide thin films. Nanotechnology, 2019, 30, 235603.	2.6	20
133	Quantitative Evaluation for Magnetoelectric Sensor Systems in Biomagnetic Diagnostics. Sensors, 2022, 22, 1018.	3.8	20
134	Analysis of proteolytic degradation of a crude protein mixture using a surface acoustic wave sensor. Biosensors and Bioelectronics, 2007, 22, 2360-2365.	10.1	19
135	Piezotronicâ€based magnetoelectric sensor: Fabrication and response. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 2208-2215.	1.8	19
136	Bistability in a multiferroic composite resonator. Applied Physics Letters, 2018, 113, .	3.3	19
137	Magnetoelastic thin films for high-frequency applications. IEEE Transactions on Magnetics, 2001, 37, 2690-2692.	2.1	18
138	Sputter deposition of NiTi to investigate the Ti loss rate as a function of composition from cast melted targets. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 378, 429-433.	5.6	18
139	Local stress engineering of magnetic anisotropy in soft magnetic thin films. Applied Physics Letters, 2009, 94, .	3.3	18
140	Non-contact strain measurements based on inverse magnetostriction. Sensors and Actuators A: Physical, 2010, 158, 224-230.	4.1	18
141	Magnetron Sputtering a New Fabrication Method of Iron Based Biodegradable Implant Materials. Advances in Materials Science and Engineering, 2015, 2015, 1-9.	1.8	18
142	Highly strain-sensitive magnetostrictive tunnel magnetoresistance junctions. Journal of Magnetism and Magnetic Materials, 2015, 384, 308-313.	2.3	18
143	Fast corroding, thin magnesium coating displays antibacterial effects and low cytotoxicity. Biofouling, 2017, 33, 294-305.	2.2	18
144	Magnetic Sensitivity of Bending-Mode Delta-E-Effect Sensors. Physical Review Applied, 2019, 12, .	3.8	18

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145	Multi-Mode Love-Wave SAW Magnetic-Field Sensors. Sensors, 2020, 20, 3421.	3.8	18
146	Correlation between phase compatibility and efficient energy conversion in Zr-doped Barium Titanate. Scientific Reports, 2020, 10, 3496.	3.3	18
147	Characterization of magnetic tunnel junctions (MTJ) with magnetostrictive free layer materials. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 2023-2024.	2.3	17
148	High-Frequency Properties of FeCoSiB Thin Films With Crossed Anisotropy. IEEE Transactions on Magnetics, 2004, 40, 2703-2705.	2.1	17
149	High ultimate tensile stress in nano-grained superelastic NiTi thin films. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 415, 304-308.	5.6	17
150	Artificial Single Variant Martensite in Freestanding Fe₇₀Pd₃₀Films Obtained by Coherent Epitaxial Growth. Advanced Materials, 2010, 22, 2668-2671.	21.0	17
151	Capability of Sputtered Micro-patterned NiTi Thick Films. Shape Memory and Superelasticity, 2015, 1, 286-293.	2.2	17
152	Structuring of sputtered superelastic NiTi thin films by photolithography and etching. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 481-482, 623-625.	5.6	16
153	Self-sensing atomic force microscopy cantilevers based on tunnel magnetoresistance sensors. Applied Physics Letters, 2013, 102, 153104.	3.3	16
154	Amorphous FeCoSiB for exchange bias coupled and decoupled magnetoelectric multilayer systems: Real-structure and magnetic properties. Journal of Applied Physics, 2014, 116, 134302.	2.5	16
155	Generalized Magnetic Frequency Conversion for Thin-Film Laminate Magnetoelectric Sensors. IEEE Sensors Journal, 2017, 17, 1373-1383.	4.7	16
156	Numerical simulation and experimental investigation of the elastocaloric cooling effect in sputter-deposited TiNiCuCo thin films. Continuum Mechanics and Thermodynamics, 2018, 30, 53-68.	2.2	16
157	Sensitivity and noise analysis of SAW magnetic field sensors with varied magnetostrictive layer thicknesses. Sensors and Actuators A: Physical, 2020, 311, 111998.	4.1	16
158	Characterization of magnetostrictive TMR pressure sensors by MOKE. Journal of Magnetism and Magnetic Materials, 2007, 316, e223-e225.	2.3	15
159	Permeability and Magnetic Properties of Ferromagnetic NiFe/FeCoBSi Bilayers for High-Frequency Applications. IEEE Transactions on Magnetics, 2007, 43, 2624-2626.	2.1	15
160	Noise Analysis and Comparison of Phase- and Frequency-Detecting Readout Systems: Application to SAW Delay Line Magnetic Field Sensor. IEEE Sensors Journal, 2019, 19, 8000-8008.	4.7	15
161	Direct Link between Specific Magnetic Domain Activities and Magnetic Noise in Modulated Magnetoelectric Sensors. Physical Review Applied, 2020, 13, .	3.8	15
162	High-frequency magnetoelastic multilayer thin films and applications. IEEE Transactions on Magnetics, 2003, 39, 3062-3067.	2.1	14

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163	MEMS-Based AlScN Resonating Energy Harvester With Solidified Powder Magnet. Journal of Microelectromechanical Systems, 2019, 28, 1019-1031.	2.5	14
164	Frequency tunable resonant magnetoelectric sensors for the detection of weak magnetic field. Journal of Micromechanics and Microengineering, 2020, 30, 075009.	2.6	14
165	Tuning crystallographic compatibility to enhance shape memory in ceramics. Physical Review Materials, 2019, 3, .	2.4	14
166	Magneto-optic indicator film observations of domain motion in magnetostrictive materials under stress. Journal of Applied Physics, 2004, 95, 6948-6950.	2.5	13
167	Multifunctional FeCo/TiN Multilayer Thin Films with Combined Magnetic and Protective Properties. Advanced Engineering Materials, 2009, 11, 969-975.	3.5	13
168	Method for Fabricating Miniaturized NiTi Self-Expandable Thin Film Devices with Increased Radiopacity. Shape Memory and Superelasticity, 2016, 2, 391-398.	2.2	13
169	Tunable Strain in Magnetoelectric ZnO Microrod Composite Interfaces. ACS Applied Materials & Interfaces, 2017, 9, 25571-25577.	8.0	13
170	Cobalt Gradient Evolution in Sputtered TiNiCuCo Films for Elastocaloric Cooling. Physica Status Solidi (B): Basic Research, 2018, 255, 1700299.	1.5	13
171	Fabrication and Characterization of Freestanding NiTi Based Thin Film Materials for Shape Memory Micro-actuator Applications. Shape Memory and Superelasticity, 2019, 5, 327-335.	2.2	13
172	Fundamental Noise Limits and Sensitivity of Piezoelectrically Driven Magnetoelastic Cantilevers. Journal of Microelectromechanical Systems, 2020, 29, 1347-1361.	2.5	13
173	Exploding and weeping ceramics. Nature, 2021, 599, 416-420.	27.8	13
174	Demonstration of magnetoelectric scanning probe microscopy. Review of Scientific Instruments, 2007, 78, 106103.	1.3	12
175	Magnetic moment investigation by frequency mixing techniques. Review of Scientific Instruments, 2009, 80, 115106.	1.3	12
176	Direct measurements of field-induced strain at magnetoelectric interfaces by grazing incidence x-ray diffraction. Applied Physics Letters, 2013, 102, 011601.	3.3	12
177	Nitinol: Tubing versus sputtered film â€“ microcleanliness and corrosion behavior. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2016, 104, 1176-1181.	3.4	12
178	Suppression of abnormal grain growth in K0.5Na0.5NbO3: phase transitions and compatibility. Scientific Reports, 2019, 9, 19775.	3.3	12
179	Thin-Film-Based SAW Magnetic Field Sensors. Sensors, 2021, 21, 8166.	3.8	12
180	BerÃ¼hrungslose Magnetoelastische Sensoren (Remotely Interrogated Magnetoelastic Sensors). TM Technisches Messen, 2001, 68, .	0.7	11

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181	Processing and Damping Properties of Sputtered NiTi Thin Films for Tools in Machining Processes. Journal of Materials Engineering and Performance, 2011, 20, 500-505.	2.5	11
182	Evolution of Temperature Profiles during Stress-Induced Transformation in NiTi Thin Films. Materials Science Forum, 0, 738-739, 287-291.	0.3	11
183	Giant magnetostrictive TbFe/Fe multilayers. Journal of Alloys and Compounds, 1997, 258, 133-137.	5.5	11
184	TiNiHf/SiO₂/Si shape memory film composites for bi-directional micro actuation. International Journal of Smart and Nano Materials, 2022, 13, 293-314.	4.2	11
185	High-frequency magnetic properties of FeCoBSi/SiO/sub 2/ and (FeCo/CoB)/SiO/sub 2/ multilayer thin films. IEEE Transactions on Magnetics, 2003, 39, 3166-3168.	2.1	10
186	Microstructured Nickel-Titanium Thin Film Leaflets for Hybrid Tissue Engineered Heart Valves Fabricated by Magnetron Sputter Deposition. Cardiovascular Engineering and Technology, 2016, 7, 69-77.	1.6	10
187	Cell adhesion on NiTi thin film sputter-deposited meshes. Materials Science and Engineering C, 2016, 59, 611-616.	7.3	10
188	Power-Source-Free Analysis of Pyroelectric Energy Conversion. Physical Review Applied, 2019, 12, .	3.8	10
189	Phase Noise of SAW Delay Line Magnetic Field Sensors. Sensors, 2021, 21, 5631.	3.8	10
190	Zero Hysteresis in Shape-Memory TI-NI-X Films (X = CU, PD) Under Constraint. Materials Research Society Symposia Proceedings, 1999, 604, 117.	0.1	9
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