

Gerald U Gerlach

List of Publications by Year in descending order

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388
papers

3,970
citations

172457

29
h-index

223800

46
g-index

398
all docs

398
docs citations

398
times ranked

3442
citing authors

#	ARTICLE	IF	CITATIONS
1	Chemical and pH sensors based on the swelling behavior of hydrogels. <i>Sensors and Actuators B: Chemical</i> , 2005, 111-112, 555-561.	7.8	209
2	Review of micromachined thermopiles for infrared detection. <i>Measurement Science and Technology</i> , 2007, 18, R59-R75.	2.6	179
3	The measurement of dissolved and gaseous carbon dioxide concentration. <i>Measurement Science and Technology</i> , 2011, 22, 072001.	2.6	102
4	A Survey on Piezoelectric Ceramics for Generator Applications. <i>Journal of the American Ceramic Society</i> , 2010, 93, 901-912.	3.8	85
5	Calibration of uncooled thermal infrared cameras. <i>Journal of Sensors and Sensor Systems</i> , 2015, 4, 187-197.	0.9	78
6	Chemical sensors based on multiresponsive block copolymer hydrogels. <i>Sensors and Actuators B: Chemical</i> , 2007, 126, 97-106.	7.8	74
7	Hydrogel-based piezoresistive pH sensors: Design, simulation and output characteristics. <i>Sensors and Actuators B: Chemical</i> , 2006, 117, 17-26.	7.8	72
8	Application of sensitive hydrogels in chemical and pH sensors. <i>Macromolecular Symposia</i> , 2004, 210, 403-410.	0.7	63
9	Hydrogel-Based Piezoresistive pH Sensors: Investigations Using FT-IR Attenuated Total Reflection Spectroscopic Imaging. <i>Analytical Chemistry</i> , 2008, 80, 2957-2962.	6.5	61
10	Ion-beam induced chemical and structural modification in polymers. <i>Surface and Coatings Technology</i> , 2002, 158-159, 108-113.	4.8	54
11	Humidity-dependent mechanical properties of polyimide films and their use for IC-compatible humidity sensors. <i>Sensors and Actuators A: Physical</i> , 1996, 53, 330-334.	4.1	53
12	A piezoresistive humidity sensor. <i>Sensors and Actuators A: Physical</i> , 1994, 43, 181-184.	4.1	52
13	Characterization of ion-beam modified polyimide layers. <i>Surface and Coatings Technology</i> , 2001, 139, 257-264.	4.8	52
14	Scanning force microscopy investigation of the Pb(Zr _{0.25} Ti _{0.75})O ₃ /Pt interface. <i>Applied Physics Letters</i> , 2002, 81, 3215-3217.	3.3	46
15	Design studies on piezoresistive humidity sensors. <i>Sensors and Actuators B: Chemical</i> , 1998, 53, 1-7.	7.8	44
16	Modeling and simulation of pH-sensitive hydrogels. <i>Colloid and Polymer Science</i> , 2011, 289, 535-544.	2.1	44
17	An FEM-based method for analysis of the dynamic behavior of AC contactors. <i>IEEE Transactions on Magnetics</i> , 2000, 36, 1337-1340.	2.1	42
18	Alternative dynamic electromechanical models of magnetic actuators containing eddy currents. <i>IEEE Transactions on Magnetics</i> , 2000, 36, 1333-1336.	2.1	41

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19	Enzyme-Functionalized Piezoresistive Hydrogel Biosensors for the Detection of Urea. <i>Sensors</i> , 2019, 19, 2858.	3.8	40
20	Magnetron sputtering of piezoelectric AlN and AlScN thin films and their use in energy harvesting applications. <i>Microsystem Technologies</i> , 2016, 22, 1613-1617.	2.0	38
21	Shutter-less calibration of uncooled infrared cameras. <i>Journal of Sensors and Sensor Systems</i> , 2016, 5, 9-16.	0.9	37
22	Multi-layer beam with variable stiffness based on electroactive polymers. <i>Proceedings of SPIE</i> , 2012, , .	0.8	36
23	High rate deposition of highly stable a-Si:H films using multi-hollow discharges for thin films solar cells. <i>Surface and Coatings Technology</i> , 2010, 205, S241-S245.	4.8	35
24	Smart Hydrogel-Based Biochemical Microsensor Array for Medical Diagnostics. <i>Advances in Science and Technology</i> , 0, , .	0.2	33
25	A Worm-Like Biomimetic Crawling Robot Based on Cylindrical Dielectric Elastomer Actuators. <i>Frontiers in Robotics and AI</i> , 2020, 7, 9.	3.2	32
26	A Study on the Microphysical Mechanisms of Adsorption in Polyimide Layers for Microelectronic Applications. <i>Journal of the Electrochemical Society</i> , 1998, 145, 4012-4018.	2.9	31
27	Fabrication of a 3D differential-capacitive acceleration sensor by UV-LIGA. <i>Sensors and Actuators A: Physical</i> , 1999, 77, 14-20.	4.1	30
28	Application of Polyelectrolytic Temperature-Responsive Hydrogels in Chemical Sensors. <i>Macromolecular Symposia</i> , 2007, 254, 314-321.	0.7	30
29	Coupled Multi-field Formulation in Space and Time for the Simulation of Intelligent Hydrogels. <i>Journal of Intelligent Material Systems and Structures</i> , 2009, 20, 1483-1492.	2.5	30
30	Non-linear Effects in Hydrogel-based Chemical Sensors: Experiment and Modeling. <i>Journal of Intelligent Material Systems and Structures</i> , 2009, 20, 949-961.	2.5	30
31	Low-temperature PECVD-deposited silicon nitride thin films for sensor applications. <i>Surface and Coatings Technology</i> , 2001, 142-144, 808-812.	4.8	29
32	High Frequency LMM - A Powerful Tool for Ferroelectric Thin Film Characterization. <i>Integrated Ferroelectrics</i> , 2002, 46, 243-257.	0.7	29
33	Miniaturized force-compensated hydrogel-based pH sensors. <i>Sensors and Actuators B: Chemical</i> , 2018, 255, 3495-3504.	7.8	29
34	Swelling behavior of thin anisotropic polymer layers. <i>Thin Solid Films</i> , 1999, 350, 178-185.	1.8	28
35	Hydrogel-based sensor for a rheochemical characterization of solutions. <i>Sensors and Actuators B: Chemical</i> , 2008, 132, 471-476.	7.8	28
36	A Biomimetic Fish Fin-Like Robot Based on Textile Reinforced Silicone. <i>Micromachines</i> , 2020, 11, 298.	2.9	28

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37	Influence of ion-beam induced chemical and structural modification in polymers on moisture uptake. Surface and Coatings Technology, 2001, 142-144, 482-488.	4.8	27
38	Hydrogel-Based Sensors for Ethanol Detection in Alcoholic Beverages. Sensors, 2019, 19, 1199.	3.8	27
39	RF-sputtered PZT thin films for infrared sensor arrays. Ferroelectrics, 1999, 225, 57-66.	0.6	26
40	Miniaturized textile-based multi-layer ph-sensor for wound monitoring applications. Autex Research Journal, 2012, 12, 20-22.	1.1	26
41	Synthesis and deposition of metal nanoparticles by gas condensation process. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2014, 32, .	2.1	26
42	An advanced radiometric calibration approach for uncooled thermal cameras. Photogrammetric Record, 2018, 33, 30-48.	0.4	26
43	The metrological behaviour of bimorphic piezoresistive humidity sensors. Measurement Science and Technology, 1998, 9, 354-359.	2.6	24
44	Dielectric and pyroelectric properties of ultrathin, monocrystalline lithium tantalate. Infrared Physics and Technology, 2014, 63, 35-41.	2.9	24
45	Pyroelectric IR-detector arrays based on sputtered PZT and spin-coated P(VDF/TrFE) thin films. Integrated Ferroelectrics, 1998, 22, 383-392.	0.7	23
46	A multi-layered variable stiffness device based on smart form closure actuators. Journal of Intelligent Material Systems and Structures, 2016, 27, 375-383.	2.5	23
47	Experimental Investigation and Modeling of the Dynamic Resistance Response of Carbon Particle-Filled Polymers. Macromolecular Materials and Engineering, 2020, 305, 2000361.	3.6	23
48	Investigation of the RF pulse modulated plasma jet system during the deposition of Pb(ZrxTi1-x)O3 thin films on polymer substrates. Surface and Coatings Technology, 2005, 200, 940-946.	4.8	22
49	A resonant polyimide-based humidity sensor. Sensors and Actuators B: Chemical, 1996, 34, 301-304.	7.8	21
50	Investigation of the spatial polarization distribution of sputtered PZT thin films using limm. Integrated Ferroelectrics, 1999, 27, 127-136.	0.7	21
51	Modeling of Temperature-Sensitive Polyelectrolyte Gels by the Use of the Coupled Chemo-Electro-Mechanical Formulation. Mechanics of Advanced Materials and Structures, 2011, 18, 511-523.	2.6	21
52	Design, simulation and characterization of hydrogel-based thermal actuators. Sensors and Actuators B: Chemical, 2016, 236, 900-908.	7.8	21
53	A humidity sensor of a new type. Sensors and Actuators B: Chemical, 1994, 18, 85-88.	7.8	20
54	Characterization of RF-sputtered self-polarized PZT thin films for IR sensor arrays. Vacuum, 2002, 66, 473-478.	3.5	20

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55	Physical properties and structure of thin ion-beam modified polymer films. Nuclear Instruments & Methods in Physics Research B, 2004, 216, 143-148.	1.4	20
56	Infrared Responsivity of Pyroelectric Detectors With Nanostructured NiCr Thin-Film Absorber. IEEE Sensors Journal, 2010, 10, 1564-1565.	4.7	20
57	Multisensitive Swelling of Hydrogels for Sensor and Actuator Design. Advanced Engineering Materials, 2020, 22, 2000004.	3.5	20
58	Influence of Surface and Interface on PZT Film Optical Properties. Physica Status Solidi A, 1999, 175, 443-446.	1.7	19
59	Plasma emission controlled multi-target reactive sputtering for in-situ crystallized Pb(Zr,Ti)O ₃ thin films on 6" Si-wafers. Thin Solid Films, 2007, 515, 3547-3553.	1.8	19
60	Study of the pyroelectric behavior of BaTi _{1-x} Sn _x O ₃ piezo-ceramics. Journal of Electroceramics, 2008, 20, 43-46.	2.0	19
61	Piezoresistive Hydrogel-Based Sensors for the Detection of Ammonia. Sensors, 2019, 19, 971.	3.8	19
62	High-Displacement, Fiber-Reinforced Shape Memory Alloy Soft Actuator with Integrated Sensors and Its Equivalent Network Model. Advanced Intelligent Systems, 2021, 3, 2000221.	6.1	19
63	Equivalent circuit models of two-layer flexure beams with excitation by temperature, humidity, pressure, piezoelectric or piezomagnetic interactions. Journal of Sensors and Sensor Systems, 2014, 3, 187-211.	0.9	19
64	Reduction of mechanical stress in micromachined components caused by humidity-induced volume expansion of polymer layers. Microsystem Technologies, 1998, 5, 3-12.	2.0	18
65	Mechanical stress in micromachined components caused by humidity-induced in-plane expansion of thin polymer films. Thin Solid Films, 1998, 312, 232-239.	1.8	18
66	Piezoresistive pH Microsensors Based on Stimuli-Sensitive Polyelectrolyte Hydrogels Piezoresistive pH-Mikrosensoren auf der Basis stimuli-sensitiver polyelektrolytischer Hydrogele. TM Technisches Messen, 2010, 77, .	0.7	17
67	Hydrogel-based piezoresistive sensor for the detection of ethanol. Journal of Sensors and Sensor Systems, 2018, 7, 219-226.	0.9	17
68	Highly sensitive NO _x gas sensor based on a Au/n-Si Schottky diode. Sensors and Actuators B: Chemical, 2002, 84, 226-230.	7.8	16
69	Electrocaloric cooling based on relaxor ferroelectrics. Phase Transitions, 2015, 88, 333-341.	1.3	16
70	Lead-free Relaxor Ferroelectrics for Electrocaloric Cooling. Materials Today: Proceedings, 2016, 3, 622-631.	1.8	16
71	<title>Process technologies for high-resolution infrared detectors based on LiTaO ₃ </title>. , 1999, , .		15
72	Self-Polarized PZT Thin Films: Deposition, Characterization and Application. Ferroelectrics, 2004, 298, 309-316.	0.6	15

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73	50 Jahre Entdeckung des piezoresistiven Effekts " Geschichte und Entwicklungsstand piezoresistiver Sensoren (50 Years of Piezoresistive Sensors " History and State of the Art of Piezoresistive Sensors). TM Technisches Messen, 2005, 72, 53-76.	0.7	15
74	Piezoresistive biochemical sensors based on hydrogels. Microsystem Technologies, 2010, 16, 703-715.	2.0	15
75	On a high-potential variable-stiffness device. Microsystem Technologies, 2014, 20, 599-606.	2.0	15
76	A mmWave Phase Shifter Based on Ferroelectric Hafnium Zirconium Oxide Varactors. , 2019, , .		15
77	Influences of humidity and moisture on the long-term stability of piezoresistive pressure sensors. Measurement: Journal of the International Measurement Confederation, 1995, 16, 21-29.	5.0	14
78	Influence of polycrystalline silicon as electrical shield on reliability and stability of piezoresistive sensors. Sensors and Actuators A: Physical, 2005, 120, 567-572.	4.1	14
79	Piezoresistive Chemical Sensors Based on Functionalized Hydrogels. Chemosensors, 2014, 2, 145-170.	3.6	14
80	Chemically controlled micro-pores and nano-filters for separation tasks in 2D and 3D microfluidic systems. RSC Advances, 2017, 7, 49279-49289.	3.6	14
81	Ellipsometric Investigations of the Refractive Index Depth Profile in PZT Thin Films. Physica Status Solidi A, 2001, 188, 1549-1552.	1.7	13
82	Lead Excess in Pb(Zr,Ti)O ₃ Thin Films Deposited by Reactive Sputtering at Low Temperatures. Ferroelectrics, 2005, 318, 3-10.	0.6	13
83	Influence of Oxygen Stoichiometry and Cation Ordering on Magnetoresistive Properties of Sr ₂ FeMoO _{6±f} . Materials Science Forum, 2010, 636-637, 338-343.	0.3	13
84	A Self-Consistent Model for Thermal Oxidation of Silicon at Low Oxide Thickness. Advances in Condensed Matter Physics, 2016, 2016, 1-13.	1.1	13
85	Performance of Fast-Responsive, Porous Crosslinked Poly(N-Isopropylacrylamide) in a Piezoresistive Microsensor. , 2017, 1, 1-4.		13
86	Detection of diclofenac molecules by planar and nanostructured plasmonic sensor substrates. Sensors and Actuators B: Chemical, 2018, 254, 749-754.	7.8	13
87	Plasmonic sensor for on-site detection of diclofenac molecules. Sensors and Actuators B: Chemical, 2019, 288, 594-600.	7.8	13
88	Optical refraction index and polarization profile of ferroelectric thin films. Integrated Ferroelectrics, 2001, 38, 101-110.	0.7	12
89	Challenges in Sr ₂ FeMoO _{6±f} Thin Film Deposition. Physica Status Solidi (B): Basic Research, 2020, 257, 1900312.	1.5	12
90	Biochemical piezoresistive sensors based on hydrogels for biotechnology and medical applications. Journal of Sensors and Sensor Systems, 2016, 5, 409-417.	0.9	12

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91	Thermal effects to enhance the responsivity of pyroelectric infrared detectors. <i>Procedia Engineering</i> , 2010, 5, 944-947.	1.2	11
92	Macroporous Smart Hydrogels for Fast-responsive Piezoresistive Chemical Microsensors. <i>Procedia Engineering</i> , 2011, 25, 1141-1144.	1.2	11
93	Evaluation of polarization of embedded piezoelectrics by the thermal wave method. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2012, 59, 1950-1954.	3.0	11
94	Hydrogel-Based Plasmonic Sensor Substrate for the Detection of Ethanol. <i>Sensors</i> , 2019, 19, 1264.	3.8	11
95	Ambient humidity and moisture "a decisive failure source in piezoresistive sensors. <i>Sensors and Actuators A: Physical</i> , 1995, 46, 171-175.	4.1	10
96	A novel approach to modeling the transfer functions of four-terminal-transducer pressure sensors within a single simulation tool. <i>Sensors and Actuators A: Physical</i> , 2000, 80, 15-22.	4.1	10
97	Bisensitive Hydrogel With Volume Compensation Properties for Force Compensation Sensors. , 2017, 1, 1-4.		10
98	Intramolecular force-compensated hydrogel-based sensors with reduced response times. <i>TM Technisches Messen</i> , 2019, 86, 227-236.	0.7	10
99	Swelling Studies of Porous and Nonporous Semi-IPN Hydrogels for Sensor and Actuator Applications. <i>Micromachines</i> , 2020, 11, 425.	2.9	10
100	Tunability of Ferroelectric Hafnium Zirconium Oxide for Varactor Applications. <i>IEEE Transactions on Electron Devices</i> , 2021, 68, 5269-5276.	3.0	10
101	Phase Transitions in $PbZr_{1-x}Ti_xO_3$ Ceramics Prepared by Different Techniques. <i>Japanese Journal of Applied Physics</i> , 2002, 41, 6966-6968.	1.5	9
102	3-D Modeling of Pyroelectric Sensor Arrays Part II: Modulation Transfer Function. <i>IEEE Sensors Journal</i> , 2008, 8, 2088-2094.	4.7	9
103	Porous polyethylene terephthalate membranes in microfluidic applications. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2009, 206, 442-448.	1.8	9
104	Polymer composite strain sensor based on dielectrophoretically aligned tellurium nanorods. <i>Procedia Chemistry</i> , 2009, 1, 1151-1154.	0.7	9
105	Thermal wave study of piezoelectric coefficient distribution in PMN-PT single crystals. <i>Advances in Applied Ceramics</i> , 2010, 109, 131-134.	1.1	9
106	A Closed-Loop Hydrogel-Based Chemical Sensor. <i>IEEE Sensors Journal</i> , 2013, 13, 994-1002.	4.7	9
107	Performance of force-compensated chemical sensors based on bisensitive hydrogels. <i>Sensors and Actuators B: Chemical</i> , 2021, 342, 129420.	7.8	9
108	High-Speed, Helical and Self-Coiled Dielectric Polymer Actuator. <i>Actuators</i> , 2021, 10, 15.	2.3	9

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109	Compensation method in sensor technology: a system-based description. Journal of Sensors and Sensor Systems, 2012, 1, 5-27.	0.9	9
110	Properties of sputter and Sol-Gel deposited PZT thin films for sensor and actuator applications: Preparation, stress and space charge distribution, self poling. Ferroelectrics, 1999, 230, 109-114.	0.6	8
111	Jump phenomena of current in PZT-vibrators due to nonlinear damping of surrounding media. Journal of the European Ceramic Society, 2001, 21, 1395-1398.	5.7	8
112	Pyroelectric Thin Film Presence Detector Arrays with Micromachined Pixels. Integrated Ferroelectrics, 2002, 44, 77-90.	0.7	8
113	Chemical sensors based on temperature-responsive hydrogels. , 2006, , .		8
114	Multi-target reactive sputteringâ€”A promising technology for large-area Pb(Zr,Ti)O ₃ thin film deposition. Journal of the European Ceramic Society, 2007, 27, 3789-3792.	5.7	8
115	Deposition of PZT Thin Films on Copper-Coated Polymer Foilsâ€”Challenges and Perspectives. Ferroelectrics, 2009, 379, 107-112.	0.6	8
116	Dielectrophoretic alignment of polymer compounds for thermal sensing. Sensors and Actuators A: Physical, 2009, 156, 164-170.	4.1	8
117	Deposition of PZT thin film onto copper-coated polymer films by mean of pulsed-DC and RF-reactive sputtering. Surface and Coatings Technology, 2011, 205, S241-S244.	4.8	8
118	Vacuum-ultraviolet ellipsometry spectra and structural properties of Pb(Zr,Ti)O ₃ films. Thin Solid Films, 2011, 519, 2885-2888.	1.8	8
119	EAP-Actuators with Improved Actuation Capabilities for Construction Elements with Controllable Stiffness. Advances in Science and Technology, 2012, 79, 75-80.	0.2	8
120	Binary Zero-Power Sensors: an alternative solution for power-free energy-autonomous sensor systems. Microsystem Technologies, 2012, 18, 1225-1231.	2.0	8
121	A simple thermal wave method for the evaluation of the polarization state of embedded piezoceramics. Ceramics International, 2013, 39, S587-S590.	4.8	8
122	Signal enhancement in cantilever magnetometry based on a co-resonantly coupled sensor. Beilstein Journal of Nanotechnology, 2016, 7, 1033-1043.	2.8	8
123	Adapting BaTiO ₃ -based relaxor ferroelectrics for electrocaloric application. Ferroelectrics, 2017, 515, 1-7.	0.6	8
124	Development and testing of controlled adaptive fiber-reinforced elastomer composites. Textile Reseach Journal, 2018, 88, 345-353.	2.2	8
125	A Tunable mmWave Band-Pass Filter Based on Ferroelectric Hafnium Zirconium Oxide Varactors. , 2019, , .		8
126	Employing electro-mechanical analogies for co-resonantly coupled cantilever sensors. Journal of Sensors and Sensor Systems, 2016, 5, 245-259.	0.9	8

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127	Analysis of photoelastic properties of monocrystalline silicon. Journal of Sensors and Sensor Systems, 2020, 9, 209-217.	0.9	8
128	Effect of barium titanate particle filler on the performance of polyurethane-based dielectric elastomer actuators. , 2022, , .		8
129	Simulation of a complex sensor system using coupled simulation programs. Sensors and Actuators A: Physical, 1996, 54, 632-635.	4.1	7
130	High-resolution pyroelectric linear arrays based on LiTaO ₃ . , 2001, , .		7
131	Polarization profile of RF-sputtered self-polarized PZT thin films. Integrated Ferroelectrics, 2001, 32, 169-177.	0.7	7
132	Thermal Analysis of Pyroelectric Sensors in Scanning Thermal Microscopy. Japanese Journal of Applied Physics, 2002, 41, 7239-7241.	1.5	7
133	Optical Properties of Self-Polarized PZT Ferroelectric Films. Ferroelectrics, 2002, 273, 155-160.	0.6	7
134	The LIMM problem for ferroelectric thin films comprising space charge layers. Journal of the European Ceramic Society, 2005, 25, 2363-2368.	5.7	7
135	Polarization characterization of PZT disks and of embedded PZT plates by thermal wave methods. AIP Conference Proceedings, 2014, , .	0.4	7
136	Vacuum-ultraviolet ellipsometry spectra and optical properties of Ba(Zr,Ti)O ₃ films. Thin Solid Films, 2017, 621, 58-62.	1.8	7
137	Electrocaloric Cooling. , 0, , .		7
138	Stretchable and Compliant Textile Strain Sensors. IEEE Sensors Journal, 2021, 21, 25632-25640.	4.7	7
139	Simulation of a humidity-sensitive double-layer system. Sensors and Actuators B: Chemical, 1994, 18, 303-307.	7.8	6
140	Nondestructive investigations of the depth profile of PZT ferroelectric films. Ferroelectrics, 2001, 264, 151-156.	0.6	6
141	Ellipsometry investigation of perovskite/pyrochlore PZT thin film stacks. Ferroelectrics, 2001, 258, 271-276.	0.6	6
142	Phase transitions of self-polarized PZT thin films. Materials Research Society Symposia Proceedings, 2002, 718, 1.	0.1	6
143	High Temperature Effects in Li-Doped ZnO Thin Films. Integrated Ferroelectrics, 2004, 63, 209-213.	0.7	6
144	Performance improvements for pyroelectric infrared detectors. , 2006, 6206, 974.		6

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145	MULTI-TARGET REACTIVE SPUTTER DEPOSITION OF LEAD-ENRICHED Pb(Zr,Ti)O ₃ THIN FILMS. Integrated Ferroelectrics, 2006, 80, 189-195.	0.7	6
146	Electron emission from ferroelectric thin films enhanced by the presence of 90° ferroelectric domains. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2007, 54, 2555-2561.	3.0	6
147	3-D Modeling of Pyroelectric Sensor Arrays Part I: Multiphysics Finite-Element Simulation. IEEE Sensors Journal, 2008, 8, 2080-2087.	4.7	6
148	DC microelectrode array for investigating the intracellular ion changes. Biosensors and Bioelectronics, 2010, 26, 1268-1272.	10.1	6
149	Nondestructive Evaluation of Polarization in LTCC/PZT Piezoelectric Modules by Thermal Wave Methods. Ferroelectrics, 2011, 420, 25-29.	0.6	6
150	Large-area fabrication of stochastic nano-structures on polymer webs by ion- and plasma treatment. Surface and Coatings Technology, 2011, 205, S495-S497.	4.8	6
151	High-sensitive pyroelectric detectors with internal thermal amplification. Sensors and Actuators A: Physical, 2011, 172, 169-174.	4.1	6
152	Top-Down Fabrication of Ordered Mesoscopic PZT Dot Arrays by Natural Lithography. Integrated Ferroelectrics, 2011, 123, 75-80.	0.7	6
153	Infection Monitoring in Wounds. Procedia Chemistry, 2012, 6, 175-183.	0.7	6
154	A Laser Intensity Modulation Method for the Evaluation of the Polarization State of Embedded Piezoceramics. Ferroelectrics, 2013, 453, 127-132.	0.6	6
155	Hysteresis Phenomena in Relaxor Ferroelectrics: Consideration of Polar Nanoregions. Physica Status Solidi (B): Basic Research, 2018, 255, 1700245.	1.5	6
156	Bistable Threshold Humidity Sensor Switch with Rectangular Bimorph Bending Plate. Micromachines, 2020, 11, 569.	2.9	6
157	Hydrogel-Based Chemical and Biochemical Sensors—A Review and Tutorial Paper. IEEE Sensors Journal, 2021, 21, 12798-12807.	4.7	6
158	Underwater Bending Actuator Based on Integrated Anisotropic Textile Materials and a Conductive Hydrogel Electrode. Actuators, 2021, 10, 270.	2.3	6
159	Thermo-Electro-Mechanical Characterization of PDMS-Based Dielectric Elastomer Actuators. Materials, 2022, 15, 221.	2.9	6
160	High-strain helical dielectric elastomer actuators. , 2022, , .		6
161	Ellipsometry and LMM investigations of the interaction between PZT thin films and platinum electrodes and air. Ferroelectrics, 2001, 254, 205-211.	0.6	5
162	pH sensors based on polyelectrolytic hydrogels. , 2005, 5759, 540.		5

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163	Ferroelectric Thin Films: Deposition, Advanced Film Characterization and Novel Device Concepts. <i>Ferroelectrics</i> , 2006, 335, 137-148.	0.6	5
164	Polarization Profiling of Ferroelectrics by Thermal Square Wave Methods. <i>Ferroelectrics</i> , 2008, 367, 38-44.	0.6	5
165	Coupled chemo-electro-mechanical simulation of polyelectrolyte gels as actuators and sensors. , 2008, , .		5
166	Activation energy of thermally grown silicon dioxide layers on silicon substrates. <i>Physica Status Solidi (B): Basic Research</i> , 2009, 246, 2242-2247.	1.5	5
167	Reactive magnetron sputtering from a composite target for large area BaPbO3 thin film electrode. <i>Thin Solid Films</i> , 2010, 518, 4106-4112.	1.8	5
168	Smart hydrogel based microsensing platform for continuous glucose monitoring. , 2010, 2010, 677-9.		5
169	Ultra-low voltage ferroelectric electron emission from lead zirconate titanate thin films with nanostructured top electrodes. <i>Journal of Applied Physics</i> , 2011, 110, 014104.	2.5	5
170	Force-compensated hydrogel-based pH sensor. <i>Proceedings of SPIE</i> , 2015, , .	0.8	5
171	Influence of process parameters on properties of piezoelectric AlN and AlScN thin films for sensor and energy harvesting applications. <i>Proceedings of SPIE</i> , 2015, , .	0.8	5
172	Biochemical piezoresistive sensors based on pH- and glucose-sensitive hydrogels for medical applications. <i>Current Directions in Biomedical Engineering</i> , 2016, 2, 117-121.	0.4	5
173	Mono- and bi-stable planar actuators for stiffness control driven by shape memory alloys. <i>Sensors and Actuators A: Physical</i> , 2016, 238, 95-103.	4.1	5
174	Studies on porosity in poly(<i>i>N>isopropylacrylamide) hydrogels for fast-responsive piezoresistive microsensors. <i>Journal of Sensors and Sensor Systems</i> , 2021, 10, 93-100.	0.9	5
175	RF-Characterization of HZO Thin Film Varactors. <i>Crystals</i> , 2021, 11, 980.	2.2	5
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