Siegfried Bauer

List of Publications by Year
in descending order

212 papers	22,314 citations	11908 72 h-index	9865 146 g-index
227 all docs	227 docs citations	227 times ranked	24735 citing authors

#	Article	IF	Citations
1	Body Temperature-Triggered Mechanical Instabilities for High-Speed Soft Robots. Soft Robotics, 2022, 9, 128-134.	4.6	4
2	iSens: A Fiberâ€Based, Highly Permeable and Imperceptible Sensor Design. Advanced Materials, 2021, 33, e2102736.	11.1	12
3	iSens: A Fiberâ€Based, Highly Permeable and Imperceptible Sensor Design (Adv. Mater. 37/2021). Advanced Materials, 2021, 33, 2170293.	11.1	1
4	Stretchâ€Safe: Magnetic Connectors for Modular Stretchable Electronics. Advanced Intelligent Systems, 2020, 2, 2080072.	3.3	0
5	Stretchâ€Safe: Magnetic Connectors for Modular Stretchable Electronics. Advanced Intelligent Systems, 2020, 2, 2000065.	3.3	5
6	Resilient yet entirely degradable gelatin-based biogels for soft robots and electronics. Nature Materials, 2020, 19, 1102-1109.	13.3	278
7	A Lesson from Plants: Highâ€Speed Soft Robotic Actuators. Advanced Science, 2020, 7, 1903391.	5.6	55
8	Stretchable Polymerized High Internal Phase Emulsion Separators for High Performance Soft Batteries. Advanced Energy Materials, 2020, 10, 2000467.	10.2	15
9	Nonlinear bending deformation of soft electrets and prospects for engineering flexoelectricity and transverse (d₃₁) piezoelectricity. Soft Matter, 2019, 15, 127-148.	1.2	64
10	â€œFluidic diodeâ€•for passive unidirectional liquid transport bioinspired by the spermathecae of fleas. Journal of Bionic Engineering, 2018, 15, 42-56.	2.7	21
11	Using history to foster critical scientific thinking: Aristotle and Galileo's debate resolved through high-speed motion tracking in the classroom. American Journal of Physics, 2018, 86, 903-908.	0.3	1
12	Bio-inspired â€œfluidic diodeâ€•for large-area unidirectional passive water transport even against gravity. Sensors and Actuators A: Physical, 2018, 283, 375-385.	2.0	10
13	The importance of open and frugal labware. Nature Electronics, 2018, 1, 484-486.	13.1	8
14	Direct writing of anodic oxides for plastic electronics. Npj Flexible Electronics, 2018, 2, .	5.1	16
15	Imperceptible organic electronics. MRS Bulletin, 2017, 42, 124-130.	1.7	42
16	High-performance electromechanical transduction using laterally-constrained dielectric elastomers part I: Actuation processes. Journal of the Mechanics and Physics of Solids, 2017, 105, 81-94.	2.3	46
17	Electroactive polymers for healthcare and biomedical applications. , 2017, , .		1
18	Instant tough bonding of hydrogels for soft machines and electronics. Science Advances, 2017, 3, e1700053.	4.7	359

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19	Confining metal-halide perovskites in nanoporous thin films. Science Advances, 2017, 3, e1700738.	4.7	103
20	Charge-spring model for predicting the piezoelectric response of dielectric materials: Considering tetragonality extends validity to ferroelectric crystals. , 2016, , .		5
21	Piezoelectric and Electrostrictive Polymers as EAPs: Devices and Applications. , 2016, , 533-547.		1
22	Polymer Electrets and Ferroelectrets as EAPs: How to Start Experimenting with Them. , 2016, , 661-668.		1
23	Piezoelectric and Electrostrictive Polymers as EAPs: Devices and Applications. , 2016, , 1-15.		1
24	Semiconductors that stretch and heal. Nature, 2016, 539, 365-367.	13.7	16
25	Polymer Electrets and Ferroelectrets as EAPs: How to Start Experimenting with Them. , 2016, , 1-8.		0
26	Highâ€Frequency, Conformable Organic Amplifiers. Advanced Materials, 2016, 28, 3298-3304.	11.1	49
27	Transparent, flexible, thin sensor surfaces for passive light-point localization based on two functional polymers. Sensors and Actuators A: Physical, 2016, 239, 70-78.	2.0	12
28	From Playroom to Lab: Tough Stretchable Electronics Analyzed with a Tabletop Tensile Tester Made from Toyâ€Bricks. Advanced Science, 2016, 3, 1500396.	5.6	42
29	Cost-Efficient Open Source Desktop Size Radial Stretching System With Force Sensor. IEEE Access, 2015, 3, 556-561.	2.6	21
30	Dielectric Elastomers. , 2015, , 568-576.		0
31	Anodization Behavior of Glassy Metallic Hafnium Thin Films. Journal of the Electrochemical Society, 2015, 162, E30-E36.	1.3	11
32	Standards for dielectric elastomer transducers. Smart Materials and Structures, 2015, 24, 105025.	1.8	245
33	Flexible high power-per-weight perovskite solar cells with chromium oxideâ€“metal contacts for improved stability in air. Nature Materials, 2015, 14, 1032-1039.	13.3	807
34	Directional, passive liquid transport: the Texas horned lizard as a model for a biomimetic â€˜liquid diodeâ€™. Journal of the Royal Society Interface, 2015, 12, 20150415.	1.5	168
35	An Imperceptible Plastic Electronic Wrap. Advanced Materials, 2015, 27, 34-40.	11.1	145
36	Temporal change in the electromechanical properties of dielectric elastomer minimum energy structures. Journal of Applied Physics, 2014, 115, 214105.	1.1	8

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37	Heteropolar Charging of Ferroelectrets for Flexible Keyboards and Tactile Sensors. Ferroelectrics, 2014, 472, 90-99.	0.3	1
38	Laser ultrasonic receivers based on organic photorefractive polymer composites. Applied Physics B: Lasers and Optics, 2014, 114, 509-515.	1.1	16
39	25th Anniversary Article: A Soft Future: From Robots and Sensor Skin to Energy Harvesters. Advanced Materials, 2014, 26, 149-162.	11.1	732
40	Charge localization instability in a highly deformable dielectric elastomer. Applied Physics Letters, 2014, 104, 022905.	1.5	17
41	Natural rubber for sustainable high-power electrical energy generation. RSC Advances, 2014, 4, 27905-27913.	1.7	125
42	Built To Disappear. ACS Nano, 2014, 8, 5380-5382.	7.3	29
43	Dielectric Elastomers. , 2014, , 1-9.		0
44	An ultra-lightweight design for imperceptible plastic electronics. Nature, 2013, 499, 458-463.	13.7	2,133
45	Ultrathin, highly flexible and stretchable PLEDs. Nature Photonics, 2013, 7, 811-816.	15.6	832
46	Ferroelectric Polarization in Nanocrystalline Hydroxyapatite Thin Films on Silicon. Scientific Reports, 2013, 3, 2215.	1.6	112
47	Sophisticated skin. Nature Materials, 2013, 12, 871-872.	13.3	210
48	Surface patterned dielectrics by direct writing of anodic oxides using scanning droplet cell microscopy. Electrochimica Acta, 2013, 113, 755-761.	2.6	12
49	Modeling of large-area sensors with resistive electrodes for passive stimulus-localization. Sensors and Actuators A: Physical, 2013, 202, 37-43.	2.0	5
50	Hydrogenâ€Bonded Semiconducting Pigments for Airâ€Stable Fieldâ€Effect Transistors. Advanced Materials, 2013, 25, 1563-1569.	11.1	218
51	Natural resin shellac as a substrate and a dielectric layer for organic field-effect transistors. Green Chemistry, 2013, 15, 1473.	4.6	99
52	Hydrogen-bonds in molecular solids â€“ from biological systems to organic electronics. Journal of Materials Chemistry B, 2013, 1, 3742.	2.9	264
53	Natural Materials for Organic Electronics. Springer Series in Materials Science, 2013, , 295-318.	0.4	9
54	Intrinsically stretchable and rechargeable batteries for self-powered stretchable electronics. Journal of Materials Chemistry A, 2013, 1, 5505.	5.2	98

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55	Giant voltage-induced deformation in dielectric elastomers near the verge of snap-through instability. Journal of the Mechanics and Physics of Solids, 2013, 61, 611-628.	2.3	298
56	Breakthroughs in Photonics 2012: Large-Area Ultrathin Photonics. IEEE Photonics Journal, 2013, 5, 0700805-0700805.	1.0	2
57	Light curtain for 2D large-area object detection. Optics Express, 2013, 21, 12757.	1.7	4
58	Stretch dependence of the electrical breakdown strength and dielectric constant of dielectric elastomers. Smart Materials and Structures, 2013, 22, 104012.	1.8	126
59	Control of Current Hysteresis of Networked Singleâ€Walled Carbon Nanotube Transistors by a Ferroelectric Polymer Gate Insulator. Advanced Functional Materials, 2013, 23, 1120-1128.	7.8	23
60	Performance of dissipative dielectric elastomer generators. Journal of Applied Physics, 2012, 111, .	1.1	85
61	Materials for stretchable electronics. MRS Bulletin, 2012, 37, 207-213.	1.7	397
62	Investigation of trap states and mobility in organic semiconductor devices by dielectric spectroscopy: Oxygen-doped P3HT:PCBM solar cells. Physical Review B, 2012, 86, .	1.1	13
63	Dynamic capacitive extensometry setup for in-situ monitoring of dielectric elastomer actuators. , 2012, , .		5
64	Intermolecular hydrogen-bonded organic semiconductorsâ€”Quinacridone versus pentacene. Applied Physics Letters, 2012, 101, .	1.5	89
65	Model of dissipative dielectric elastomers. Journal of Applied Physics, 2012, 111, .	1.1	200
66	Modeling guided design of dielectric elastomer generators and actuators. Proceedings of SPIE, 2012, , .	0.8	1
67	Green and biodegradable electronics. Materials Today, 2012, 15, 340-346.	8.3	389
68	Electric-field-tuned color in photonic crystal elastomers. Applied Physics Letters, 2012, 100, 101902.	1.5	40
69	Harnessing snap-through instability in soft dielectrics to achieve giant voltage-triggered deformation. Soft Matter, 2012, 8, 285-288.	1.2	373
70	Ultraâ€thin anodic alumina capacitor films for plastic electronics. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 813-818.	0.8	59
71	Back Cover: Ultraâ€thin anodic alumina capacitor films for plastic electronics (Phys. Status Solidi A) Tj ETQq1 1 0.784314 rgBT /Overl	0.8	0
72	Ultrathin and lightweight organic solar cells with high flexibility. Nature Communications, 2012, 3, 770.	5.8	1,452

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73	Indigo and Tyrian Purple â€“ From Ancient Natural Dyes to Modern Organic Semiconductors. Israel Journal of Chemistry, 2012, 52, 540-551.	1.0	130
74	Vacuum-processed polyethylene as a dielectric for low operating voltage organic field effect transistors. Organic Electronics, 2012, 13, 919-924.	1.4	63
75	Indigo â€•A Natural Pigment for High Performance Ambipolar Organic Field Effect Transistors and Circuits. Advanced Materials, 2012, 24, 375-380.	11.1	383
76	Real-time in-situ observation of morphological changes in organic bulk-heterojunction solar cells by means of capacitance measurements. Journal of Applied Physics, 2011, 109, 044503-044503-5.	1.1	16
77	Dielectric elastomers: from the beginning of modern science to applications in actuators and energy harvesters. , 2011, , .		7
78	Pyroelectric, piezoelectric, and photoeffects in hydroxyapatite thin films on silicon. Applied Physics Letters, 2011, 98, 123703.	1.5	70
79	Exotic materials for bio-organic electronics. Journal of Materials Chemistry, 2011, 21, 1350-1361.	6.7	157
80	Natural and nature-inspired semiconductors for organic electronics. Proceedings of SPIE, 2011, , .	0.8	35
81	Method for measuring energy generation and efficiency of dielectric elastomer generators. Applied Physics Letters, 2011, 99, .	1.5	106
82	High mobility, low voltage operating C60 based n-type organic field effect transistors. Synthetic Metals, 2011, 161, 2058-2062.	2.1	48
83	Discharge of ferroelectrets upon ionizing alpha-radiation. IEEE Transactions on Dielectrics and Electrical Insulation, 2011, 18, 64-68.	1.8	2
84	P-196: Adding Interactivity to Displays Using the Q-Foil Technology. Digest of Technical Papers SID International Symposium, 2011, 42, 1838-1840.	0.1	0
85	Utilizing a high fundamental frequency quartz crystal resonator as a biosensor in a digital microfluidic platform. Sensors and Actuators A: Physical, 2011, 172, 161-168.	2.0	21
86	Dielectric Elastomer Generators: How Much Energy Can Be Converted?. IEEE/ASME Transactions on Mechatronics, 2011, 16, 33-41.	3.7	303
87	Ambipolar organic field effect transistors and inverters with the natural material Tyrian Purple. AIP Advances, 2011, 1, .	0.6	78
88	Dielectric response of doped organic semiconductor devices: P3HT:PCBM solar cells. Physical Review B, 2011, 84, .	1.1	15
89	Large area expansion of a soft dielectric membrane triggered by a liquid gaseous phase change. Applied Physics A: Materials Science and Processing, 2011, 105, 1-3.	1.1	22
90	An Allâ€Printed Ferroelectric Active Matrix Sensor Network Based on Only Five Functional Materials Forming a Touchless Control Interface. Advanced Materials, 2011, 23, 2069-2074.	11.1	215

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91	Anodized Aluminum Oxide Thin Films for Roomâ€Temperatureâ€Processed, Flexible, Lowâ€Voltage Organic Nonâ€Volatile Memory Elements with Excellent Charge Retention. Advanced Materials, 2011, 23, 4892-4896.	11.1	102
92	Reversible and irreversible degradation of organic solar cell performance by oxygen. Solar Energy, 2011, 85, 1238-1249.	2.9	174
93	PbTiO₃â€“ P(VDF-TrFE) â€“ Nanocomposites for Pressure and Temperature Sensitive Skin. Ferroelectrics, 2011, 419, 23-27.	0.3	10
94	Elastic components for prosthetic skin. , 2011, 2011, 8373-6.		7
95	Biocompatible and Biodegradable Materials for Organic Fieldâ€Effect Transistors. Advanced Functional Materials, 2010, 20, 4069-4076.	7.8	387
96	Arrays of Ultracompliant Electrochemical Dry Gel Cells for Stretchable Electronics. Advanced Materials, 2010, 22, 2065-2067.	11.1	151
97	An electrowetting on dielectrics based lab-on-a-chip utilizing an integrated high fundamental frequency quartz crystal resonator as a biosensor. Procedia Engineering, 2010, 5, 959-964.	1.2	2
98	Environmentally sustainable organic field effect transistors. Organic Electronics, 2010, 11, 1974-1990.	1.4	129
99	Flexible and stretchable dielectrics. , 2010, , .		3
100	Conformable large-area position-sensitive photodetectors based on luminescence-collecting silicone waveguides. Journal of Applied Physics, 2010, 107, 123101.	1.1	14
101	Stretching Dielectric Elastomer Performance. Science, 2010, 330, 1759-1761.	6.0	471
102	Video-speed detection of the absolute position of a light point on a large-area photodetector based on luminescent waveguides. Optics Express, 2010, 18, 2209.	1.7	26
103	RÃ¶ntgenâ€™s electrode-free elastomer actuators without electromechanical pull-in instability. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 4505-4510.	3.3	203
104	Printable Ferroelectric PVDF/PMMA Blend Films with Ultralow Roughness for Low Voltage Nonâ€Volatile Polymer Memory. Advanced Functional Materials, 2009, 19, 2812-2818.	7.8	239
105	Lightâ€and Touchâ€Point Localization using Flexible Large Area Organic Photodiodes and Elastomer Waveguides. Advanced Materials, 2009, 21, 3510-3514.	11.1	30
106	Current versus gate voltage hysteresis in organic field effect transistors. Monatshefte FÃ¼r Chemie, 2009, 140, 735-750.	0.9	269
107	Small-molecule vacuum processed melamine-C60, organic field-effect transistors. Organic Electronics, 2009, 10, 408-415.	1.4	25
108	User-friendly, miniature biosensor flow cell for fragile high fundamental frequency quartz crystal resonators. Biosensors and Bioelectronics, 2009, 24, 2643-2648.	5.3	30

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109	Frequency dependent dielectric and mechanical behavior of elastomers for actuator applications. Journal of Applied Physics, 2009, 106, .	1.1	108
110	Electrical response of highly ordered organic thin film metal-insulator-semiconductor devices. Journal of Applied Physics, 2009, 106, .	1.1	29
111	Flexible active-matrix cells with selectively poled bifunctional polymer-ceramic nanocomposite for pressure and temperature sensing skin. Journal of Applied Physics, 2009, 106, .	1.1	181
112	Organic Nonvolatile Memory Transistors for Flexible Sensor Arrays. Science, 2009, 326, 1516-1519.	6.0	888
113	Mobile Ionic Impurities in Poly(vinyl alcohol) Gate Dielectric: Possible Source of the Hysteresis in Organic Fieldâ€Effect Transistors. Advanced Materials, 2008, 20, 1018-1022.	11.1	103
114	Vacuumâ€Processed Polyanilineâ€“C₆₀ Organic Field Effect Transistors. Advanced Materials, 2008, 20, 3887-3892.	11.1	55
115	Flexible-foam-based capacitive sensor arrays for object detection at low cost. Applied Physics Letters, 2008, 92, .	1.5	157
116	PbTiO<inf>3</inf>/P(VDF-TrFE) nanocomposites for flexible skin. , 2008, , .		1
117	Micropatterned atmospheric pressure discharge surface modification of fluorinated polymer films for mammalian cell adhesion and protein binding. Applied Physics A: Materials Science and Processing, 2008, 92, 547-555.	1.1	7
118	Analysis of safe and failure mode regimes of dielectric elastomer actuators. , 2008, , .		2
119	Ionic Impurities in Poly(vinyl alcohol) Gate Dielectrics and Hysteresis Effects in Organic Field Effect Transistors. Materials Research Society Symposia Proceedings, 2008, 1091, 1.	0.1	2
120	Materials and Components for Flexible and Stretchable Transducers. Materials Research Society Symposia Proceedings, 2008, 1078, 100401.	0.1	0
121	Cellular ferroelectrets for flexible touchpads, keyboards and tactile sensors. , 2008, , .		7
122	Flexible large area ferroelectret sensors for location sensitive touchpads. Applied Physics Letters, 2008, 92, .	1.5	68
123	Capacitive extensometry for transient strain analysis of dielectric elastomer actuators. Applied Physics Letters, 2008, 92, .	1.5	126
124	Cellular ferroelectrets for electroactive polymer hybrid systems: soft matter integrated devices with advanced functionality. , 2008, , .		2
125	Nonlinear capacitance dilatometry for investigating elastic and electromechanical properties of ferroelectrets. Applied Physics Letters, 2007, 91, 122901.	1.5	9
126	Generation and detection of broadband airborne ultrasound with cellular polymer ferroelectrets. Applied Physics Letters, 2007, 91, .	1.5	20

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127	Energy minimization for self-organized structure formation and actuation. Applied Physics Letters, 2007, 90, 081916.	1.5	292
128	Lowâ€Voltage Organic Thinâ€Film Transistors with Highâ€k Nanocomposite Gate Dielectrics for Flexible Electronics and Optothermal Sensors. Advanced Materials, 2007, 19, 2241-2245.	11.1	193
129	Organic field-effect transistors and memory elements using deoxyribonucleic acid (DNA) gate dielectric. Organic Electronics, 2007, 8, 648-654.	1.4	112
130	Unexpected electromechanical actuation in conjugated polymer based diodes. Journal of Materials Chemistry, 2006, 16, 1789-1793.	6.7	5
131	Transparent pyroelectric sensors and organic field-effect transistors with fluorinated polymers: steps towards organic infrared detectors. IEEE Transactions on Dielectrics and Electrical Insulation, 2006, 13, 1087-1092.	1.8	5
132	Piezo-, pyro- and ferroelectrets: soft transducer materials for electromechanical energy conversion. IEEE Transactions on Dielectrics and Electrical Insulation, 2006, 13, 953-962.	1.8	27
133	Photoresponse of organic field-effect transistors based on conjugated polymer/fullerene blends. Organic Electronics, 2006, 7, 188-194.	1.4	165
134	Self-organized minimum-energy structures for dielectric elastomer actuators. Applied Physics A: Materials Science and Processing, 2006, 85, 141-143.	1.1	155
135	Electrically actuated elastomers for electroâ€“optical modulators. Applied Physics B: Lasers and Optics, 2006, 85, 7-10.	1.1	33
136	Capacitance Dilatometry for the in-situ Controlled Expansion Process of Cellular Polymer-Filler Composites (Ferroelectrets). Ferroelectrics, 2006, 331, 181-187.	0.3	9
137	Electromechanical characterization and measurement protocol for dielectric elastomer actuators. , 2006, 6168, 698.		10
138	Flexible ferroelectret field-effect transistor for large-area sensor skins and microphones. Applied Physics Letters, 2006, 89, 073501.	1.5	177
139	High-mobility n-channel organic field-effect transistors based on epitaxially grown C60 films. Organic Electronics, 2005, 6, 105-110.	1.4	129
140	Microstorms in Cellular Polymers: A Route to Soft Piezoelectric Transducer Materials with Engineered Macroscopic Dipoles. ChemPhysChem, 2005, 6, 1014-1025.	1.0	187
141	High-Performance Ambipolar Pentacene Organic Field-Effect Transistors on Poly(vinyl alcohol) Organic Gate Dielectric. Advanced Materials, 2005, 17, 2315-2320.	11.1	215
142	Piezoelectric polymers. Materials Research Society Symposia Proceedings, 2005, 889, 1.	0.1	0
143	Elastic and electromechanical properties of polypropylene foam ferroelectrets. Applied Physics Letters, 2005, 86, 031910.	1.5	36
144	Fabrication and characterization of solution-processed methanofullerene-based organic field-effect transistors. Journal of Applied Physics, 2005, 97, 083714.	1.1	137

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145	Unusual electromechanical effects in organic semiconductor Schottky contacts: Between piezoelectricity and electrostriction. Applied Physics Letters, 2005, 87, 163501.	1.5	49
146	Electromechanical strain in conjugated polymer diodes under forward and reverse bias. Applied Physics Letters, 2005, 86, 193507.	1.5	8
147	High-mobility pentacene organic field-effect transistors with a high-dielectric-constant fluorinated polymer film gate dielectric. Applied Physics Letters, 2005, 86, 242902.	1.5	115
148	En-face scanning optical coherence tomography with ultra-high resolution for material investigation. Optics Express, 2005, 13, 1015.	1.7	107
149	Nonlinear dielectric response of poled amorphous polymer dipole glasses. Journal of Non-Crystalline Solids, 2005, 351, 2759-2763.	1.5	15
150	Controlled inflation of voids in cellular polymer ferroelectrets: Optimizing electromechanical transducer properties. Applied Physics Letters, 2004, 84, 392-394.	1.5	141
151	Dielectric investigation of photo-induced chromophore degradation in nonlinear optical side-chain polymer electrets. IEEE Transactions on Dielectrics and Electrical Insulation, 2004, 11, 80-89.	1.8	0
152	Nonvolatile organic field-effect transistor memory element with a polymeric gate electret. Applied Physics Letters, 2004, 85, 5409-5411.	1.5	213
153	Charged cellular polymers with "ferroelectretic" behavior. IEEE Transactions on Dielectrics and Electrical Insulation, 2004, 11, 255-263.	1.8	114
154	Ferroelectrets: Soft Electroactive Foams for Transducers. Physics Today, 2004, 57, 37-43.	0.3	475
155	Plasma-deposited parylene-like thin films: process and material properties. Surface and Coatings Technology, 2003, 174-175, 124-130.	2.2	26
156	Current practice in space charge and polarization profile measurements using thermal techniques. IEEE Transactions on Dielectrics and Electrical Insulation, 2003, 10, 883-902.	1.8	74
157	Ferroelectric-like behavior in nonpolar cellular electrets. , 2003, 4946, 120.		1
158	Air-gap capacitance cell for the investigation of porous or solvent containing dielectric films. Review of Scientific Instruments, 2002, 73, 1845-1852.	0.6	6
159	Dielectric barrier microdischarges: Mechanism for the charging of cellular piezoelectric polymers. Journal of Applied Physics, 2002, 91, 5283-5287.	1.1	131
160	Piezo- and pyroelectricity of a polymer-foam space-charge electret. Journal of Applied Physics, 2001, 89, 4503-4511.	1.1	129
161	Polymer electrets for electronics, sensors, and photonics. , 2001, , 185-231.		14
162	Chemical composition and charge stability of highly crystalline pulsed-laser-deposited polytetrafluoroethylene films on metal substrates. Applied Physics A: Materials Science and Processing, 2001, 72, 581-585.	1.1	15

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163	Large piezoelectric effects in charged, heterogeneous fluoropolymer electrets. Applied Physics A: Materials Science and Processing, 2000, 70, 1-4.	1.1	98
164	Large and broadband piezoelectricity in smart polymer-foam space-charge electrets. Applied Physics Letters, 2000, 77, 3827-3829.	1.5	162
165	Preparation and characterization of novel piezoelectric and pyroelectric polymer electrets. IEEE Transactions on Dielectrics and Electrical Insulation, 2000, 7, 578-586.	1.8	44
166	Dielectric and electret properties of nanoemulsion spin-on polytetrafluoroethylene films. Applied Physics Letters, 2000, 76, 2612-2614.	1.5	22
167	Monomorphs, bimorphs, and multimorphs from polar polymer electrets. Brazilian Journal of Physics, 1999, 29, 306-317.	0.7	9
168	Relaxation behaviour of electrically induced polar orientation and of optically induced non-polar orientation in an azo-chromophore side group polymer. Journal Physics D: Applied Physics, 1999, 32, 2996-3003.	1.3	9
169	Separate contributions to the pyroelectricity in poly(vinylidene fluoride) from the amorphous and crystalline phases, as well as from their interface. Journal of Applied Physics, 1999, 85, 3282-3288.	1.1	81
170	Low-dielectric-constant cross-linking polymers: Film electrets with excellent charge stability. Applied Physics Letters, 1999, 75, 3998-4000.	1.5	48
171	In-situ profiling of dipole polarization distributions in poled nonlinear optical polymers with electrothermal and optical techniques. Chemical Physics, 1999, 245, 297-310.	0.9	3
172	Film structure and ferroelectric properties of in situ grown SrBi 2 Ta 2 O 9 films. Applied Physics A: Materials Science and Processing, 1999, 69, 55-61.	1.1	18
173	Pulsed-laser-deposited and plasma-polymerized polytetrafluoroethylene (PTFE)-like thin films: A comparative study on PTFE-specific properties. Journal of Polymer Science, Part B: Polymer Physics, 1999, 37, 2115-2125.	2.4	27
174	<title>Pulsed electrothermal technique for the characterization of dielectric films</title>. , 1999, , .		1
175	Charge stability of pulsed-laser deposited polytetrafluoroethylene film electrets. Applied Physics Letters, 1998, 73, 2941-2943.	1.5	50
176	Dielectric investigation of thermally-induced chromophore degradation in nonlinear optical polymer electrets. IEEE Transactions on Dielectrics and Electrical Insulation, 1998, 5, 21-25.	1.8	7
177	Temperature-domain analysis of primary and secondary dielectric relaxation phenomena in a nonlinear optical side-chain polymer. Journal of Applied Physics, 1998, 83, 7799-7807.	1.1	15
178	Polymer waveguides with optimized overlap integral for modal dispersion phase-matching. Applied Physics Letters, 1997, 70, 3347-3349.	1.5	28
179	Dielectric, pyroelectric, and electro-optic monitoring of the cross-linking process and photoinduced poling of Red Acid Magly. Applied Physics Letters, 1997, 70, 568-570.	1.5	15
180	Poling and characterization of photonic waveguide devices for efficient second-harmonic generation. Proceedings of SPIE, 1997, , .	0.8	0

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181	Pyroelectric polymer electrets. IEEE Transactions on Dielectrics and Electrical Insulation, 1996, 3, 647-676.	1.8	49
182	Spatial and thermal analysis of optical nonlinearity created by asymmetric charge injection. Optics Communications, 1996, 123, 195-200.	1.0	7
183	Electrical determination of the degree of cross-linking in a poled non-linear optical polymer. Chemical Physics Letters, 1996, 262, 663-667.	1.2	6
184	Comparison of quasiâ€phaseâ€matching geometries for secondâ€harmonic generation in poled polymer channel waveguides at 1.5 Î¼m. Applied Physics Letters, 1996, 68, 1183-1185.	1.5	57
185	Pulsed electrothermal technique for measuring the thermal diffusivity of dielectric films on conducting substrates. Journal of Applied Physics, 1996, 80, 6124-6128.	1.1	25
186	Poled polymers for sensors and photonic applications. Journal of Applied Physics, 1996, 80, 5531-5558.	1.1	172
187	Preparation and pyroelectrical investigation of bimorph polymer layers. Annalen Der Physik, 1995, 507, 355-366.	0.9	9
188	Phase-shift interference microscope for the investigation of dipole-orientation distributions. Optics Letters, 1995, 20, 816.	1.7	23
189	Optimized poling of nonlinear optical polymers based on dipoleâ€orientation and dipoleâ€relaxation studies. Journal of Applied Physics, 1994, 75, 7211-7219.	1.1	48
190	Pyroelectrical investigation of charged and poled nonlinear optical polymers. Journal of Applied Physics, 1994, 75, 5306-5315.	1.1	40
191	Pyroelectrical investigation of the dipole orientation in nonlinear optical polymers during and after photoinduced poling. Journal of Applied Physics, 1994, 76, 2627-2635.	1.1	59
192	Photothermal poling of nonlinear optical polymer films. Applied Physics Letters, 1994, 64, 2770-2772.	1.5	39
193	Selective poling of nonlinear optical polymer films by means of a monoenergetic electron beam. Applied Physics Letters, 1994, 64, 22-24.	1.5	62
194	Second-harmonic generation with partially poled polymers. Optics Letters, 1993, 18, 16.	1.7	18
195	Scanning electroâ€optical and pyroelectrical microscopy for the investigation of polarization patterns in poled polymers. Applied Physics Letters, 1993, 63, 1724-1726.	1.5	41
196	Method for the analysis of thermal-pulse data. Physical Review B, 1993, 47, 11049-11055.	1.1	27
197	Nonlinear optical sideâ€chain polymer with high thermal stability and its pyroelectric thermal analysis. Applied Physics Letters, 1993, 63, 2018-2020.	1.5	24
198	The ferroelectric phase transition of P(VDF-TrFE) polymers. Ferroelectrics, 1992, 127, 209-214.	0.3	12

#	Article	IF	Citations
199	Dielectric spectroscopy on ferroelectric P(VDF-TrFE). Ferroelectrics, 1992, 127, 215-220.	0.3	14
200	Thermal wave probing of pyroelectric distributions in the surface region of ferroelectric materials: A new method for the analysis. Journal of Applied Physics, 1992, 72, 5363-5370.	1.1	188
201	Optical properties of a metal film and its application as an infrared absorber and as a beam splitter. American Journal of Physics, 1992, 60, 257-261.	0.3	37
202	Second-harmonic generation of light in ferroelectric polymer films with a spatially nonuniform distribution of polarization. IEEE Transactions on Electrical Insulation, 1992, 27, 849-855.	0.8	5
203	Design and properties of a microcalorimeter. IEEE Transactions on Electrical Insulation, 1992, 27, 861-866.	0.8	13
204	Polarization distribution of thermally poled PVDF films, measured with a heat wave method (LIMM). Ferroelectrics, 1991, 118, 363-378.	0.3	43
205	Characterization of materials for integrated pyroelectric sensors. Sensors and Actuators A: Physical, 1991, 26, 407-411.	2.0	34
206	Interference effects of thermal waves and their application to bolometers and pyroelectric detectors. Sensors and Actuators A: Physical, 1991, 26, 417-421.	2.0	13
207	Analysis of signals from superposed relaxation processes. Journal of Applied Physics, 1991, 69, 2759-2767.	1.1	21
208	Measurement of the thermal diffusivity of thin films with bolometers and with pyroelectric temperature sensors. Ferroelectrics, 1991, 118, 435-450.	0.3	22
209	A method for the measurement of the thermal, dielectric, and pyroelectric properties of thin pyroelectric films and their applications for integrated heat sensors. Journal of Applied Physics, 1990, 68, 6361-6367.	1.1	113
210	A heat wave method for the measurement of thermal and pyroelectric properties of pyroelectric films. Ferroelectrics, 1990, 106, 393-398.	0.3	15
211	Integrated pyroelectric detector arrays with the sensor material PVDF. Ferroelectrics, 1990, 109, 223-228.	0.3	34
212	A simple technique to interface pyroelectric materials with silicon substrates for infrared detection. Ferroelectrics, Letters Section, 1989, 9, 155-160.	0.4	32