Jrgen Kosel

List of Publications by Year in Descending Order

235 papers	3,475 citations	30 h-index	48 g-index
275 ext. papers	4,209 ext. citations	4 avg, IF	5.95 L-index

#	Paper	IF	Citations
235	Competition between Chiral Energy and Chiral Damping in the Asymmetric Expansion of Magnetic Bubbles. *ACS Applied Electronic Materials*, **2021**, 3, 4734-4742	4	
234	Low-Cost Inkjet-Printed Temperature Sensors on Paper Substrate for the Integration into Natural Fiber-Reinforced Lightweight Components. *Chemosensors*, **2021**, 9, 95	4	5
233	Cylindrical Magnetic Nanowires Applications. *IEEE Transactions on Magnetics*, **2021**, 57, 1-17	2	9
232	Integrated Magnetohydrodynamic Pump with Magnetic Composite Substrate and Laser-Induced Graphene Electrodes. *Polymers*, **2021**, 13,	4.5	1
231	A Microneedles Balloon Catheter for Endovascular Drug Delivery. *Advanced Materials Technologies*, **2021**, 6, 2100037	6.8	1
230	A Facile Magnetic System for Tracking of Medical Devices. *Advanced Materials Technologies*, **2021**, 6, 2100346	6.8	2
229	Magnetic Tracking: A Facile Magnetic System for Tracking of Medical Devices (Adv. Mater. Technol. 6/2021). *Advanced Materials Technologies*, **2021**, 6, 2170033	6.8	
228	Physical Sensors Based on Laser-Induced Graphene: A Review. *IEEE Sensors Journal*, **2021**, 21, 12426-12443	4	11
227	Robust, Long-Term, and Exceptionally Sensitive Microneedle-Based Bioimpedance Sensor for Precision Farming. *Advanced Science*, **2021**, 8, e2101261	13.6	2
226	Energy yield measurement of an elevated PV system on a white flat roof and a performance comparison of monofacial and bifacial modules. *Renewable Energy*, **2021**, 170, 613-619	8.1	8
225	Magnetic sensors-A review and recent technologies. *Engineering Research Express*, **2021**, 3, 022005	0.9	17
224	An Assistive Magnetic Skin System: Enabling Technology for Quadriplegics. *Advanced Engineering Materials*, **2021**, 23, 2000944	3.5	3
223	Flexible Hall sensor made of laser-scribed graphene. *Npj Flexible Electronics*, **2021**, 5,	10.7	4
222	A Wideband Magnetic Frequency Up-Converter Energy Harvester. *Advanced Engineering Materials*, **2021**, 23, 2001364	3.5	4
221	A Microneedles Balloon Catheter for Endovascular Drug Delivery (Adv. Mater. Technol. 8/2021). *Advanced Materials Technologies*, **2021**, 6, 2170046	6.8	
220	Enhanced Graphene Sensors via Multi-Lasing Fabrication. *IEEE Sensors Journal*, **2021**, 21, 18562-18570	4	
219	Cellular network Marine Sensor Buoy **2020**,		4

218	Giant clams in shallow reefs: UV-resistance mechanisms of Tridacninae in the Red Sea. *Coral Reefs*, **2020**, 39, 1345-1360	4.2	2
217	Laser-Printed, Flexible Graphene Pressure Sensors. *Global Challenges*, **2020**, 4, 2000001	4.3	20
216	Magnetic core-shell nanowires as MRI contrast agents for cell tracking. *Journal of Nanobiotechnology*, **2020**, 18, 42	9.4	13
215	Giant magnetoelectric effect in perpendicularly magnetized Pt/Co/Ta ultrathin films on a ferroelectric substrate. *Materials Horizons*, **2020**, 7, 2328-2335	14.4	6
214	Direct imaging of an inhomogeneous electric current distribution using the trajectory of magnetic half-skyrmions. *Science Advances*, **2020**, 6, eaay1876	14.3	10
213	Biocompatible 3D Printed Microneedles for Transdermal, Intradermal, and Percutaneous Applications. *Advanced Engineering Materials*, **2020**, 22, 2070005	3.5	2
212	A Dual-Mode Nested Rectifier for Ambient Wireless Powering in CMOS Technology. *IEEE Transactions on Microwave Theory and Techniques*, **2020**, 68, 1754-1762	4.1	6
211	Controlled spin-torque driven domain wall motion using staggered magnetic wires. *Applied Physics Letters*, **2020**, 116, 032402	3.4	9
210	Fabrication of Long-Range Ordered Aluminum Oxide and Fe/Au Multilayered Nanowires for 3-D Magnetic Memory. *IEEE Transactions on Magnetics*, **2020**, 56, 1-6	2	13
209	Nanowire transducers for biomedical applications **2020**, 697-713		1
208	Development and Evaluation of Portable Low Cost Testing System for Phthalates. *International Journal on Smart Sensing and Intelligent Systems*, **2020**, 7, 1-7	0.4	
207	Biocompatible 3D Printed Microneedles for Transdermal, Intradermal, and Percutaneous Applications. *Advanced Engineering Materials*, **2020**, 22, 1901358	3.5	30
206	Functionalization of Magnetic Nanowires for Active Targeting and Enhanced Cell-Killing Efficacy.. *ACS Applied Bio Materials*, **2020**, 3, 4789-4797	4.1	6
205	3D Printed Microneedle Array for Electroporation. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2020**, 2020, 2202-2205	0.9	
204	Strain-induced Differentiation of Mesenchymal Stem Cells. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2020**, 2020, 2239-2244	0.9	
203	Implantable 3D Printed Drug Delivery System **2019**,		2
202	Flexible, four-electrode conductivity cell for biologging applications. *Results in Materials*, **2019**, 1, 100009	2.3	4
201	Quantum oscillations on the surface of InAs epilayer. *Physica E: Low-Dimensional Systems and Nanostructures*, **2019**, 114, 113604	3	3

200	Aluminium-Polyethylene Terephthalate Sensor. *Smart Sensors, Measurement and Instrumentation*, **2019**, 115-128	0.3	
199	Conclusion, Challenges and Future Work. *Smart Sensors, Measurement and Instrumentation*, **2019**, 193-198	0.3	
198	Carbon Nanotubes-Polydimethylsiloxane Sensor. *Smart Sensors, Measurement and Instrumentation*, **2019**, 91-114	0.3	
197	Ultra Low Power Sensor for 3-Phase Water-Cut Applications **2019**, 3, 1-4		
196	Printed Flexible Sensors. *Smart Sensors, Measurement and Instrumentation*, **2019**,	0.3	1
195	Graphite-Polyimide Sensor. *Smart Sensors, Measurement and Instrumentation*, **2019**, 129-168	0.3	
194	Effect of Segment length on domain wall pinning in multisegmented Co/Ni nanowires for 3D memory applications. *Journal of Magnetism and Magnetic Materials*, **2019**, 484, 110-113	2.8	4
193	Interdigitated Sensing and Electrochemical Impedance Spectroscopy. *Smart Sensors, Measurement and Instrumentation*, **2019**, 83-89	0.3	
192	Graphite-Polydimethylsiloxane Sensor. *Smart Sensors, Measurement and Instrumentation*, **2019**, 169-192	0.3	
191	An Imperceptible Magnetic Skin. *Advanced Materials Technologies*, **2019**, 4, 1900493	6.8	20
190	Flexible and Multi-Functional Graphene Sensor Platform **2019**,		2
189	Wearable multifunctional printed graphene sensors. *Npj Flexible Electronics*, **2019**, 3,	10.7	40
188	Flexible tag design for semi-continuous wireless data acquisition from marine animals. *Flexible and Printed Electronics*, **2019**, 4, 035006	3.1	2
187	Growth of Ordered Iron Oxide Nanowires for Photo-electrochemical Water Oxidation. *ACS Applied Energy Materials*, **2019**, 2, 8473-8480	6.1	4
186	Wearable Electronics: An Imperceptible Magnetic Skin (Adv. Mater. Technol. 10/2019). *Advanced Materials Technologies*, **2019**, 4, 1970052	6.8	
185	Iron-Based Core-Shell Nanowires for Combinatorial Drug Delivery and Photothermal and Magnetic Therapy. *ACS Applied Materials & Interfaces*, **2019**, 11, 43976-43988	9.5	19
184	Magneto-Acoustic Resonator for Aquatic Animal Tracking. *IEEE Transactions on Magnetics*, **2019**, 55, 1-4	2	5
183	Flexible conductivity, temperature, and depth sensor for marine environment monitoring **2019**,		1

182	A Triaxial Flexible Magnetic Tunnel Junction Sensor for Catheter Tracking **2019**,		2
181	Electric-Field-Enhanced Bulk Perpendicular Magnetic Anisotropy in GdFe/Pb(MgNb)TiO Multiferroic Heterostructure. *ACS Applied Materials & Interfaces*, **2019**, 11, 47091-47097	9.5	3
180	Biofunctionalizing Magnetic Nanowires Toward Targeting and Killing Leukemia Cancer Cells. *IEEE Transactions on Magnetics*, **2019**, 55, 1-5	2	13
179	Design of Intense Nanoscale Stray Fields and Gradients at Magnetic Nanorod Interfaces. *ACS Applied Materials & Interfaces*, **2019**, 11, 4678-4685	9.5	7
178	3-D Printed Biocompatible Micro-Bellows Membranes. *Journal of Microelectromechanical Systems*, **2018**, 27, 472-478	2.5	7
177	Ultra-Low Power Corrosion Sensor Made of Iron Nanowires on Magnetic Tunnel Junctions. *Advanced Engineering Materials*, **2018**, 20, 1800337	3.5	1
176	High-Performance Flexible Magnetic Tunnel Junctions for Smart Miniaturized Instruments. *Advanced Engineering Materials*, **2018**, 20, 1800471	3.5	11
175	Inductively actuated micro needles for on-demand intracellular delivery. *Scientific Reports*, **2018**, 8, 9918	4.9	5
174	Development of Novel Gold/PDMS Sensors for Medical Applications **2018**,		1
173	Development of Printed Sensors for Shoe Sensing Applications **2018**,		1
172	Plasmonic Nanowires for Wide Wavelength Range Molecular Sensing. *Materials*, **2018**, 11,	3.5	7
171	Advanced Fabrication and Characterization of Magnetic Nanowires **2018**,		6
170	Flexible and Biofouling Independent Salinity Sensor. *Advanced Materials Interfaces*, **2018**, 5, 1801110	4.6	15
169	TEM Study of Current-Induced Domain Wall Motion in Cylindrical Nanowires: Towards 3D Magnetic Memory Devices. *Microscopy and Microanalysis*, **2018**, 24, 944-945	0.5	2
168	Highly-Sensitive Magnetic Tunnel Junction Based Flow Cytometer **2018**,		1
167	Broadband Magnetic Composite Energy Harvester. *Advanced Engineering Materials*, **2018**, 20, 1800492	3.5	7
166	3D printed mould-based graphite/PDMS sensor for low-force applications. *Sensors and Actuators A: Physical*, **2018**, 280, 525-534	3.9	60
165	Tunable, Flexible Composite Magnets for Marine Monitoring Applications. *Advanced Engineering Materials*, **2018**, 20, 1800229	3.5	11

164	Bioinspired Ciliary Force Sensor for Robotic Platforms. *IEEE Robotics and Automation Letters*, **2017**, 2, 971-976	4.2	21
163	Biocompatible 3D printed magnetic micro needles. *Biomedical Physics and Engineering Express*, **2017** , 3, 025005	1.5	29
162	Co/Au multisegmented nanowires: a 3D array of magnetostatically coupled nanopillars. *Nanotechnology*, **2017**, 28, 095709	3.4	27
161	Magnon Mode Selective Spin Transport in Compensated Ferrimagnets. *Nano Letters*, **2017**, 17, 3334-3340	11.5	35
160	Direct Observation of Current-Induced Motion of a 3D Vortex Domain Wall in Cylindrical Nanowires. *ACS Applied Materials & Interfaces*, **2017**, 9, 16741-16744	9.5	15
159	A remotely operated drug delivery system with dose control. *Sensors and Actuators A: Physical*, **2017**, 261, 177-183	3.9	12
158	Wearable Flexible Sensors: A Review. *IEEE Sensors Journal*, **2017**, 17, 3949-3960	4	259
157	Angular Magnetoresistance of Nanowires with Alternating Cobalt and Nickel Segments. *IEEE Transactions on Magnetics*, **2017**, 53, 1-5	2	4
156	Magnetic Composite Hydrodynamic Pump With Laser-Induced Graphene Electrodes. *IEEE Transactions on Magnetics*, **2017**, 53, 1-4	2	17
155	A Miniaturized Force Sensor Based on Hair-Like Flexible Magnetized Cylinders Deposited Over a Giant Magnetoresistive Sensor. *IEEE Transactions on Magnetics*, **2017**, 53, 1-5	2	5
154	Mesenchymal stem cells cultured on magnetic nanowire substrates. *Nanotechnology*, **2017**, 28, 055703	3.4	9
153	Scalable High-Affinity Stabilization of Magnetic Iron Oxide Nanostructures by a Biocompatible Antifouling Homopolymer. *ACS Applied Materials & Interfaces*, **2017**, 9, 40059-40069	9.5	13
152	Magnetic composite based magneto hydrodynamic pump **2017**,		1
151	Sensing system for salinity testing using laser-induced graphene sensors. *Sensors and Actuators A: Physical*, **2017**, 264, 107-116	3.9	62
150	Flexible Printed Sensors for Ubiquitous Human Monitoring. *Smart Sensors, Measurement and Instrumentation*, **2017**, 135-157	0.3	2
149	Tactile Sensing From Laser-Ablated Metallized PET Films. *IEEE Sensors Journal*, **2017**, 17, 7-13	4	47
148	Flexible temperature and flow sensor from laser-induced graphene **2017**,		9
147	Laser printed graphene on polyimide electrodes for magnetohydrodynamic pumping of saline fluids **2017**,		2

146	Influence of temperature and humidity on carbon based printed flexible sensors **2017**,		1
145	Development of printed sensors for taste sensing **2017**,		1
144	Urinary incontinence monitoring system using laser-induced graphene sensors **2017**,		4
143	Tunable magnetic nanowires for biomedical and harsh environment applications. *Scientific Reports*, **2016**, 6, 24189	4.9	71
142	Functionalized magnetic nanowires for chemical and magneto-mechanical induction of cancer cell death. *Scientific Reports*, **2016**, 6, 35786	4.9	47
141	Flexible carbon nanotube nanocomposite sensor for multiple physiological parameter monitoring. *Sensors and Actuators A: Physical*, **2016**, 251, 148-155	3.9	68
140	Sensors and Instrumentation towards early detection of osteoporosis **2016**,		2
139	In-Situ Study of Domain Walls Propagation and Pinning in Modulated Magnetic Nanowires.. *Microscopy and Microanalysis*, **2016**, 22, 832-833	0.5	1
138	Magnetic Tactile Sensor for Braille Reading. *IEEE Sensors Journal*, **2016**, 16, 8700-8705	4	33
137	Cytotoxic effects of nickel nanowires in human fibroblasts. *Toxicology Reports*, **2016**, 3, 373-380	4.8	25
136	Novel Sensing Approach for LPG Leakage Detection Part II: Effects of Particle Size, Composition, and Coating Layer Thickness. *IEEE Sensors Journal*, **2016**, 16, 1088-1094	4	31
135	Novel Sensing Approach for LPG Leakage Detection: Part I Operating Mechanism and Preliminary Results. *IEEE Sensors Journal*, **2016**, 16, 996-1003	4	47
134	Magnetic Nanocomposite Cilia Energy Harvester. *IEEE Transactions on Magnetics*, **2016**, 52, 1-4	2	8
133	Magnetotransport Measurements of Domain Wall Propagation in Individual Multisegmented Cylindrical Nanowires. *IEEE Transactions on Magnetics*, **2016**, 52, 1-5	2	13
132	MEMS digital parametric loudspeaker **2016**,		1
131	Cytotoxicity and intracellular dissolution of nickel nanowires. *Nanotoxicology*, **2016**, 10, 871-80	5.3	25
130	Multiscale differential phase contrast analysis with a unitary detector. *Ultramicroscopy*, **2016**, 162, 74-81	3.1	18
129	Magnetically Triggered Monodispersed Nanocomposite Fabricated by Microfluidic Approach for Drug Delivery. *International Journal of Polymer Science*, **2016**, 2016, 1-8	2.4	3

128	A Magnetoresistive Tactile Sensor for Harsh Environment Applications. *Sensors*, **2016**, 16,	3.8	23
127	Smart Sensing System for the Prognostic Monitoring of Bone Health. *Sensors*, **2016**, 16,	3.8	16
126	On-Chip Magnetic Bead Manipulation and Detection Using a Magnetoresistive Sensor-Based Micro-Chip: Design Considerations and Experimental Characterization. *Sensors*, **2016**, 16,	3.8	12
125	Unitary Detector DPC Imaging with Multiscale Capabilities for Analysis of Local Magnetic Field of Nanomaterials.. *Microscopy and Microanalysis*, **2016**, 22, 1704-1705	0.5	1
124	Fabrication and characterization of magnetic composite membrane pressure sensor **2016**,		3
123	A single magnetic nanocomposite cilia force sensor **2016**,		2
122	Flexible Magnetoelectric Nanocomposites with Tunable Properties. *Advanced Electronic Materials*, **2016**, 2, 1600081	6.4	17
121	Highly Efficient Thermoresponsive Nanocomposite for Controlled Release Applications. *Scientific Reports*, **2016**, 6, 28539	4.9	32
120	Periodic Magnetization Pattern for Controlled Domain Wall Motion in Nanowires. *Microscopy and Microanalysis*, **2016**, 22, 1678-1679	0.5	1
119	Piezoelectric transducer array microspeaker **2016**,		1
118	Single crystalline cylindrical nanowires - toward dense 3D arrays of magnetic vortices. *Scientific Reports*, **2016**, 6, 23844	4.9	37
117	Transparent biocompatible sensor patches for touch sensitive prosthetic limbs **2016**,		7
116	Digital electrostatic acoustic transducer array **2016**,		1
115	Semi-automated quantification of living cells with internalized nanostructures. *Journal of Nanobiotechnology*, **2016**, 14, 4	9.4	13
114	Modulated Magnetic Nanowires for Controlling Domain Wall Motion: Toward 3D Magnetic Memories. *ACS Nano*, **2016**, 10, 5326-32	16.7	101
113	Thin PZT-Based Ferroelectric Capacitors on Flexible Silicon for Nonvolatile Memory Applications. *Advanced Electronic Materials*, **2015**, 1, 1500045	6.4	80
112	Electrochemical synthesis of core–shell magnetic nanowires. *Journal of Magnetism and Magnetic Materials*, **2015**, 389, 144-147	2.8	11
111	Magnetic Microfluidic Platform for Biomedical Applications Using Magnetic Nanoparticles. *Key Engineering Materials*, **2015**, 644, 207-210	0.4	1

110	Magnetoelectric polymer nanocomposite for flexible electronics. *Journal of Applied Physics*, **2015**, 117, 17D711	2.5	48
109	Design and fabrication of magnetically functionalized flexible micropillar arrays for rapid and controllable microfluidic mixing. *Lab on A Chip*, **2015**, 15, 2125-32	7.2	63
108	Electromagnetically powered electrolytic pump and thermo-responsive valve for drug delivery **2015**,		3
107	Magnetic micropillar sensors for force sensing **2015**,		3
106	Flexible magnetoimpedance sensor. *Journal of Magnetism and Magnetic Materials*, **2015**, 378, 499-505	2.8	54
105	A Surface Acoustic Wave Passive and Wireless Sensor for Magnetic Fields, Temperature, and Humidity. *IEEE Sensors Journal*, **2015**, 15, 453-462	4	37
104	Performance enhancement of electronic sensor through mask-less lithography **2015**,		4
103	**2015**,		3
102	Tactile Sensors: Magnetic Nanocomposite Cilia Tactile Sensor (Adv. Mater. 47/2015). *Advanced Materials*, **2015**, 27, 7896-7896	24	2
101	A remotely operated drug delivery system with an electrolytic pump and a thermo-responsive valve. *Biomicrofluidics*, **2015**, 9, 052608	3.2	24
100	Osmotically driven drug delivery through remote-controlled magnetic nanocomposite membranes. *Biomicrofluidics*, **2015**, 9, 054113	3.2	14
99	Development of a sensing system to detect C-telopeptide of type-I collagen **2015**,		1
98	Magnetic Nanocomposite Cilia Tactile Sensor. *Advanced Materials*, **2015**, 27, 7888-92	24	116
97	Fabrication and Properties of Multiferroic Nanocomposite Films. *IEEE Transactions on Magnetics*, **2015**, 51, 1-4	2	3
96	Non-chemotoxic induction of cancer cell death using magnetic nanowires. *International Journal of Nanomedicine*, **2015**, 10, 2141-53	7.3	70
95	. *IEEE Sensors Journal*, **2015**, 15, 3110-3118	4	18
94	Magnetic nanowires and hyperthermia: How geometry and material affect heat production efficiency **2015**,		1
93	Rapid and molecular selective electrochemical sensing of phthalates in aqueous solution. *Biosensors and Bioelectronics*, **2015**, 67, 342-9	11.8	54

92	A detailed study of magnetization reversal in individual Ni nanowires. *Applied Physics Letters*, **2015**, 106, 032403	3.4	25
91	An efficient biosensor made of an electromagnetic trap and a magneto-resistive sensor. *Biosensors and Bioelectronics*, **2014**, 59, 145-50	11.8	28
90	Targeted cancer cell death induced by biofunctionalized magnetic nanowires **2014**,		3
89	A magnetic nanocomposite for biomimetic flow sensing. *Lab on A Chip*, **2014**, 14, 4362-9	7.2	62
88	Introducing molecular selectivity in rapid impedimetric sensing of phthalates **2014**,		12
87	Magneto-mechanical trapping systems for biological target detection. *Mikrochimica Acta*, **2014**, 181, 1743-1748	5.8	11
86	Magnetic Properties of FeNi-Based Thin Film Materials with Different Additives. *Biosensors*, **2014**, 4, 189-203	3.9	11
85	Magnetic polymer nanocomposites for sensing applications **2014**,		4
84	Isolation of cells for selective treatment and analysis using a magnetic microfluidic chip. *Biomicrofluidics*, **2014**, 8, 034114	3.2	21
83	Crystallographically driven magnetic behaviour of arrays of monocrystalline Co nanowires. *Nanotechnology*, **2014**, 25, 475702	3.4	42
82	Selective Manipulation of Superparamagnetic Beads by a Magnetic Microchip. *IEEE Transactions on Magnetics*, **2013**, 49, 3418-3421	2	16
81	A Magnetic Biosensor System for Detection of E. coli. *IEEE Transactions on Magnetics*, **2013**, 49, 3492-3495	2	17
80	Microfluidic Biosensing Device for Controlled Trapping and Detection of Magnetic Microparticles **2013**,		1
79	Three-Axis Magnetic Field Induction Sensor Realized on Buckled Cantilever Plate. *IEEE Transactions on Magnetics*, **2013**, 49, 4144-4147	2	18
78	MEMS based impedimetric sensing of phthalates **2013**,		7
77	Ovarian Hormone Estrone Glucuronide (E1G) quantification-impedimetric electrochemical spectroscopy approach **2013**,		1
76	Simulation of a Low Frequency Z-Axis SU-8 Accelerometer in CoventorWare and MEMS+ **2013**,		5
75	Integrated passive and wireless sensor for magnetic fields, temperature and humidity **2013**,		1

74	Technique for rapid detection of phthalates in water and beverages. *Journal of Food Engineering*, **2013**, 116, 515-523	6	73
73	Influence of Semiconductor/Metal Interface Geometry in an EMR Sensor. *IEEE Sensors Journal*, **2013** , 13, 664-669	4	6
72	Detection of bacterial endotoxin in food: New planar interdigital sensors based approach. *Journal of Food Engineering*, **2013**, 114, 346-360	6	56
71	A thin film passive magnetic field sensor operated at 425 MHz **2013**,		3
70	Extraordinary Magnetoresistance in Semiconductor/Metal Hybrids: A Review. *Materials*, **2013**, 6, 500-516	3.5	12
69	Metglas Elgiloy bi-layer, stent cell resonators for wireless monitoring of viscosity and mass loading. *Journal of Micromechanics and Microengineering*, **2013**, 23, 025010	2	25
68	Geometric factors in the magnetoresistance of n-doped InAs epilayers. *Journal of Applied Physics*, **2013**, 114, 203908	2.5	6
67	Simulation of SU-8 Frequency-Driven Scratch Drive Actuators **2013**,		7
66	Analysis of different coating thickness on new type of planar interdigital sensors for endotoxin detection **2013**,		2
65	A top-contacted extraordinary magnetoresistance sensor fabricated with an unpatterned semiconductor epilayer. *IEEE Electron Device Letters*, **2013**, 34, 547-549	4.4	3
64	Electrochemical impedance spectroscopy based MEMS sensors for phthalates detection in water and juices. *Journal of Physics: Conference Series*, **2013**, 439, 012026	0.3	46
63	Analysis of the distribution of magnetic fluid inside tumors by a giant magnetoresistance probe. *PLoS ONE*, **2013**, 8, e81227	3.7	14
62	Surface Acoustic Wave Based Magnetic Sensors **2013**,		2
61	Microdevice with Half-Ring Shaped GMR Sensors for Magnetic Bead Manipulation and Detection. *Smart Sensors, Measurement and Instrumentation*, **2013**, 121-138	0.3	6
60	Output voltage calculations in double barrier magnetic tunnel junctions with asymmetric voltage behavior. *Journal of Magnetism and Magnetic Materials*, **2012**, 324, 2844-2848	2.8	8
59	. *IEEE Transactions on Magnetics*, **2012**, 48, 2854-2856	2	22
58	Optimization of Autonomous Magnetic Field Sensor Consisting of Giant Magnetoimpedance Sensor and Surface Acoustic Wave Transducer. *IEEE Transactions on Magnetics*, **2012**, 48, 4324-4327	2	13
57	Development of FeNiMoB thin film materials for microfabricated magnetoelastic sensors. *Journal of Applied Physics*, **2012**, 112, 113912	2.5	11

56	Resonant Tunnel Magnetoresistance in a Double Magnetic Tunnel Junction. *Journal of Superconductivity and Novel Magnetism*, **2012**, 25, 2573-2576	1.5	
55	Finite Element Analysis on the Influence of Contact Resistivity in an Extraordinary Magnetoresistance Magnetic Field Micro Sensor. *Journal of Superconductivity and Novel Magnetism*, **2012**, 25, 2749-2752	1.5	8
54	Sensor and instrumentation for progesterone detection **2012**,		7
53	A micro-pillar array to trap magnetic beads in microfluidic systems **2012**,		2
52	Room temperature inductively coupled plasma etching of InAs/InSb in BCl3/Cl2/Ar. *Microelectronic Engineering*, **2012**, 98, 222-225	2.5	7
51	Finite-Element Modelling and Analysis of Hall Effect and Extraordinary Magnetoresistance Effect **2012**,		4
50	Hall effect enhanced low-field sensitivity in a three-contact extraordinary magnetoresistance sensor. *Applied Physics Letters*, **2012**, 100, 232407	3.4	8
49	Design Study of a Bar-Type EMR Device. *IEEE Sensors Journal*, **2012**, 12, 1356-1360	4	8
48	Asymmetric Voltage Behavior of the Tunnel Magnetoresistance in Double Barrier Magnetic Tunnel Junctions. *Solid State Phenomena*, **2012**, 190, 145-148	0.4	
47	Microfabrication of magnetostrictive beams based on NiFe film doped with B and Mo for integrated sensor systems. *Journal of Applied Physics*, **2012**, 111, 07E515	2.5	2
46	An integrated micro-chip for rapid detection of magnetic particles. *Journal of Applied Physics*, **2012**, 111, 07B327	2.5	20
45	A biodetection method using magnetic particles and micro traps. *Journal of Applied Physics*, **2012**, 111, 07B328	2.5	11
44	Magnetic biosensor system to detect biological targets **2012**,		1
43	Improved detection limits of bacterial endotoxins using new type of planar interdigital sensors **2012**,		3
42	Integration of thin film giant magnetoimpedance sensor and surface acoustic wave transponder. *Journal of Applied Physics*, **2012**, 111, 07E514	2.5	14
41	Strong Temperature Dependence of Extraordinary Magnetoresistance Correlated to Mobility in a Two-Contact Device. *Applied Physics Express*, **2012**, 5, 033002	2.4	8
40	A Planar Conducting Micro-Loop Structure for Transportation of Magnetic Beads: An Approach Towards Rapid Sensing and Quantification of Biological Entities. *Sensor Letters*, **2012**, 10, 770-774	0.9	15
39	Resonant tunnel magnetoresistance in double-barrier planar magnetic tunnel junctions. *Physical Review B*, **2011**, 84,	3.3	30

38	A magnetic particle micro-trap for large trapping surfaces. *Procedia Engineering*, **2011**, 25, 1201-1204		4
37	Development of untethered SU-8 polymer scratch drive microrobots **2011**,		8
36	Three dimensional simulation of giant magneto-impedance effect in thin film structures. *Journal of Applied Physics*, **2011**, 109, 07E519	2.5	14
35	On-chip bio-analyte detection utilizing the velocity of magnetic microparticles in a fluid. *Journal of Applied Physics*, **2011**, 109, 07B304	2.5	11
34	Spin Asymmetry Calculations of the $TMRhbox{-}V$ Curves in Single and Double-Barrier Magnetic Tunnel Junctions. *IEEE Transactions on Magnetics*, **2011**, 47, 2724-2727	2	10
33	Analyses of performance of novel sensors with different coatings for detection of Lipopolysaccharide **2011**,		1
32	A half-ring GMR sensor for detection of magnetic beads immobilized on a circular micro-trap **2011**,		2
31	A planar conducting microstructure to guide and confine magnetic beads to a sensing zone. *Microelectronic Engineering*, **2011**, 88, 1757-1760	2.5	16
30	Development of a passive and remote magnetic microsensor with thin-film giant magnetoimpedance element and surface acoustic wave transponder. *Journal of Applied Physics*, **2011**, 109, 07E524	2.5	8
29	Characterizations and performance evaluations of thin film interdigital sensors for Gram-negative bacteria detection **2011**,		2
28	Development of Electrochemical Impedance Spectroscopy based sensing system for DEHP detection **2011**,		12
27	A giant magnetoresistance ring-sensor based microsystem for magnetic bead manipulation and detection. *Journal of Applied Physics*, **2011**, 109, 07E517	2.5	21
26	Annealing Effect on the Performance of Sputtering Deposited Metglas Thin Films. *Materials Science Forum*, **2010**, 667-669, 1207-1212	0.4	1
25	Anatomical study of the radius and center of curvature of the distal femoral condyle. *Journal of Biomechanical Engineering*, **2010**, 132, 091002	2.1	15
24	Recent progress in biomedical applications of magnetic nanoparticles. *Recent Patents on Nanotechnology*, **2010**, 4, 111-8	1.2	30
23	Optimization of an Extraordinary Magnetoresistance sensor in the semiconductor-metal hybrid structure **2010**,		1
22	Biosensing utilizing the motion of magnetic microparticles in a microfluidic system. *Procedia Engineering*, **2010**, 5, 824-827		2
21	Cardiovascular oscillations of the carotid artery assessed by magnetoelastic skin curvature sensor. *IEEE Transactions on Biomedical Engineering*, **2008**, 55, 369-72	5	3

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12	Magnetostrictive Bilayer Sensor for Micro Torque Measurements. *Sensor Letters*, **2007**, 5, 304-307	0.9	4
11	Contactless Flow Detection with Magnetostrictive Bilayers. *Sensor Letters*, **2007**, 5, 308-310	0.9	3
10	Method for continuous nondisturbing monitoring of blood pressure by magnetoelastic skin curvature sensor and ECG. *IEEE Sensors Journal*, **2006**, 6, 819-828	4	54
9	Measurement of the differential susceptibility of soft magnetic ribbons under applied tensile and compressive stress. *Sensors and Actuators A: Physical*, **2006**, 129, 34-36	3.9	
8	Magnetostrictive bilayers for multi-functional sensor families. *Sensors and Actuators A: Physical*, **2006**, 129, 154-158	3.9	17
7	Non-contact detection of magnetoelastic bilayer position sensors. *Sensors and Actuators A: Physical*, **2005**, 123-124, 349-353	3.9	9
6	Stress dependence of the differential susceptibility of soft magnetic ribbons. *Journal of Applied Physics*, **2005**, 97, 10F902	2.5	3
5	Magnetostrictive bilayer sensors survey. *Journal of Alloys and Compounds*, **2004**, 369, 202-204	5.7	18
4	Optimisation of sensitivity and time constant of thermal sensors based on magnetoelastic amorphous bilayers. *Journal of Alloys and Compounds*, **2004**, 369, 198-201	5.7	5
3	Magnetostrictive bilayer sensors [multifunction sensors]		3

List of Publications

2	Magnetoelastic skin curvature sensor for biomedical applications	7
1	Theoretical investigation of magnetostrictive bilayers sensitive to bending or temperature changes	2