

# Jan G Korvink

## List of Publications by Year in descending order

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390  
papers

7,520  
citations

71097

41  
h-index

98792

67  
g-index

450  
all docs

450  
docs citations

450  
times ranked

8098  
citing authors

#	ARTICLE	IF	CITATIONS
1	Printed electronics: the challenges involved in printing devices, interconnects, and contacts based on inorganic materials. <i>Journal of Materials Chemistry</i> , 2010, 20, 8446.	6.7	647
2	Cascaded digital lattice Boltzmann automata for high Reynolds number flow. <i>Physical Review E</i> , 2006, 73, 066705.	2.1	281
3	A hyperpolarized equilibrium for magnetic resonance. <i>Nature Communications</i> , 2013, 4, 2946.	12.8	126
4	Parallel imaging in non-bijective, curvilinear magnetic field gradients: a concept study. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2008, 21, 5-14.	2.0	125
5	Cyanobacteria use micro-optics to sense light direction. <i>ELife</i> , 2016, 5, .	6.0	125
6	The potential of paper-based diagnostics to meet the ASSURED criteria. <i>RSC Advances</i> , 2018, 8, 34012-34034.	3.6	97
7	A fully MEMS-compatible process for 3D high aspect ratio micro coils obtained with an automatic wire bonder. <i>Journal of Micromechanics and Microengineering</i> , 2010, 20, 015021.	2.6	95
8	Terahertz metamaterials fabricated by inkjet printing. <i>Applied Physics Letters</i> , 2009, 95, .	3.3	92
9	4D flow magnetic resonance imaging in bicuspid aortic valve disease demonstrates altered distribution of aortic blood flow helicity. <i>Magnetic Resonance in Medicine</i> , 2014, 71, 1542-1553.	3.0	91
10	Review: Automatic Model Reduction for Transient Simulation of MEMS-based Devices. <i>Sensors Update</i> , 2002, 11, 3-33.	0.5	88
11	CD-Based Microfluidics for Primary Care in Extreme Point-of-Care Settings. <i>Micromachines</i> , 2016, 7, 22.	2.9	88
12	Inkjet printed, conductive, 25 $\mu$ m wide silver tracks on unstructured polyimide. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2009, 206, 1626-1630.	1.8	83
13	Should patients with brain implants undergo MRI?. <i>Journal of Neural Engineering</i> , 2018, 15, 041002.	3.5	78
14	Enhanced reproducibility of inkjet printed organic thin film transistors based on solution processable polymer-small molecule blends. <i>Journal of Materials Chemistry</i> , 2010, 20, 9155.	6.7	77
15	Structure topology optimization: fully coupled level set method via FEMLAB. <i>Structural and Multidisciplinary Optimization</i> , 2005, 29, 407-417.	3.5	74
16	Dynamic electro-thermal simulation of microsystems—a review. <i>Journal of Micromechanics and Microengineering</i> , 2005, 15, R17-R31.	2.6	74
17	Efficient optimization of transient dynamic problems in MEMS devices using model order reduction. <i>Journal of Micromechanics and Microengineering</i> , 2005, 15, 822-832.	2.6	73
18	A factorized central moment lattice Boltzmann method. <i>European Physical Journal: Special Topics</i> , 2009, 171, 55-61.	2.6	71

#	ARTICLE	IF	CITATIONS
19	Assessment of flow instabilities in the healthy aorta using flow-sensitive MRI. <i>Journal of Magnetic Resonance Imaging</i> , 2011, 33, 839-846.	3.4	71
20	Microscale nuclear magnetic resonance: a tool for soft matter research. <i>Soft Matter</i> , 2012, 8, 10583.	2.7	71
21	Inkjet Technology for Crystalline Silicon Photovoltaics. <i>Advanced Materials</i> , 2015, 27, 599-626.	21.0	65
22	Microfluidic laboratories for <i>C. elegans</i> enhance fundamental studies in biology. <i>RSC Advances</i> , 2014, 4, 4691-4709.	3.6	62
23	On-chip three dimensional microcoils for MRI at the microscale. <i>Lab on A Chip</i> , 2010, 10, 1387.	6.0	61
24	A Low-Cost Electromagnetic Generator for Vibration Energy Harvesting. <i>IEEE Sensors Journal</i> , 2011, 11, 107-113.	4.7	61
25	Design, Simulation, and Fabrication of a Quadstable Monolithic Mechanism With X- and Y-Directional Bistable Curved Beams. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2007, 129, 1198-1203.	2.9	59
26	Prospective motion correction with continuous gradient updates in diffusion weighted imaging. <i>Magnetic Resonance in Medicine</i> , 2012, 67, 326-338.	3.0	58
27	Evolution of Glassy Carbon Microstructure: In Situ Transmission Electron Microscopy of the Pyrolysis Process. <i>Scientific Reports</i> , 2018, 8, 16282.	3.3	58
28	Model Order Reduction for Large Scale Engineering Models Developed in ANSYS. <i>Lecture Notes in Computer Science</i> , 2006, , 349-356.	1.3	56
29	Unconventional applications of wire bonding create opportunities for microsystem integration. <i>Journal of Micromechanics and Microengineering</i> , 2013, 23, 083001.	2.6	55
30	Miniaturized Fourier Transform Spectrometer for the near infrared wavelength regime incorporating an electromagnetic linear actuator. <i>Sensors and Actuators A: Physical</i> , 2005, 123-124, 459-467.	4.1	53
31	Polydimethylsiloxane bilayer films with an embedded spontaneous curvature. <i>Soft Matter</i> , 2016, 12, 45-52.	2.7	52
32	SOLIDIS: a tool for microactuator simulation in 3-D. <i>Journal of Microelectromechanical Systems</i> , 1997, 6, 70-82.	2.5	51
33	Modeling, Simulation, and Optimization of Electrowetting. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , 2006, 25, 234-247.	2.7	51
34	Adaptive moving mesh level set method for structure topology optimization. <i>Engineering Optimization</i> , 2008, 40, 529-558.	2.6	50
35	Lab on a chip phased-array MR multi-platform analysis system. <i>Lab on A Chip</i> , 2012, 12, 495-502.	6.0	49
36	Heteronuclear Micro-Helmholtz Coil Facilitates $\mu\text{m}$ -Range Spatial and Sub-Hz Spectral Resolution NMR of nL-Volume Samples on Customisable Microfluidic Chips. <i>PLoS ONE</i> , 2016, 11, e0146384.	2.5	49

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37	Contactless NMR Spectroscopy on a Chip. <i>Analytical Chemistry</i> , 2012, 84, 3696-3702.	6.5	48
38	Determination of the thermal conductivity of CMOS IC polysilicon. <i>Sensors and Actuators A: Physical</i> , 1994, 41, 161-164.	4.1	47
39	Electrostatic aluminum micromirrors using double-pass metallization. <i>Journal of Microelectromechanical Systems</i> , 1997, 6, 126-135.	2.5	47
40	An MRI Receiver Coil Produced by Inkjet Printing Directly on to a Flexible Substrate. <i>IEEE Transactions on Medical Imaging</i> , 2010, 29, 482-487.	8.9	47
41	Influence of eddy current, Maxwell and gradient field corrections on 3D flow visualization of 3D CINE PC-MRI data. <i>Magnetic Resonance in Medicine</i> , 2014, 72, 33-40.	3.0	47
42	Preserving the film coefficient as a parameter in the compact thermal model for fast electrothermal simulation. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , 2005, 24, 1838-1847.	2.7	46
43	Micromachined Mid-Infrared Emitter for Fast Transient Temperature Operation for Optical Gas Sensing Systems. <i>IEEE Sensors Journal</i> , 2010, 10, 353-362.	4.7	45
44	A dissipative particle dynamics model of carbon nanotubes. <i>Molecular Simulation</i> , 2008, 34, 737-748.	2.0	44
45	Printing and preparation of integrated optical waveguides for optronic sensor networks. <i>Mechatronics</i> , 2016, 34, 119-127.	3.3	42
46	Parameter preserving model order reduction for MEMS applications. <i>Mathematical and Computer Modelling of Dynamical Systems</i> , 2011, 17, 297-317.	2.2	41
47	Early tissue damage and microstructural reorganization predict disease severity in experimental epilepsy. <i>ELife</i> , 2017, 6, .	6.0	41
48	Wirelessly powered and remotely controlled valve-array for highly multiplexed analytical assay automation on a centrifugal microfluidic platform. <i>Biosensors and Bioelectronics</i> , 2018, 109, 214-223.	10.1	41
49	Structural optimization of a large-displacement electromagnetic Lorentz force microactuator for optical switching applications. <i>Journal of Micromechanics and Microengineering</i> , 2004, 14, 1585-1596.	2.6	40
50	Error indicators for fully automatic extraction of heat-transfer macromodels for MEMS. <i>Journal of Micromechanics and Microengineering</i> , 2005, 15, 430-440.	2.6	40
51	Reproduction of motion artifacts for performance analysis of prospective motion correction in MRI. <i>Magnetic Resonance in Medicine</i> , 2014, 71, 182-190.	3.0	40
52	A Fully Adaptive Scheme for Model Order Reduction Based on Moment Matching. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2015, 5, 1872-1884.	2.5	40
53	Variable aperture stop based on the design of a single chamber silicone membrane lens with integrated actuation. <i>Optics Letters</i> , 2011, 36, 2032.	3.3	39
54	Micro-fabricated Helmholtz coil featuring disposable microfluidic sample inserts for applications in nuclear magnetic resonance. <i>Journal of Micromechanics and Microengineering</i> , 2014, 24, 034004.	2.6	39

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55	Magnetic flux tailoring through Lenz lenses for ultrasmall samples: A new pathway to high-pressure nuclear magnetic resonance. <i>Science Advances</i> , 2017, 3, eaao5242.	10.3	38
56	Enhanced multipole acceleration technique for the solution of large Poisson computations. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , 1996, 15, 1541-1546.	2.7	37
57	Bubble functions for the lattice Boltzmann method and their application to grid refinement. <i>European Physical Journal: Special Topics</i> , 2009, 171, 173-179.	2.6	37
58	Bottom-up coarse-graining of a simple graphene model: The blob picture. <i>Journal of Chemical Physics</i> , 2011, 134, 064106.	3.0	37
59	Molecular MRI in the Earth's Magnetic Field Using Continuous Hyperpolarization of a Biomolecule in Water. <i>Journal of Physical Chemistry B</i> , 2016, 120, 5670-5677.	2.6	37
60	Pyrolysis-induced shrinking of three-dimensional structures fabricated by two-photon polymerization: experiment and theoretical model. <i>Microsystems and Nanoengineering</i> , 2019, 5, 38.	7.0	37
61	Topology optimization for three-dimensional electromagnetic waves using an edge element-based finite-element method. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2016, 472, 20150835.	2.1	36
62	Parahydrogen based NMR hyperpolarisation goes micro: an alveolus for small molecule chemosensing. <i>Lab on A Chip</i> , 2019, 19, 503-512.	6.0	36
63	Reduced order fully coupled structural acoustic analysis via implicit moment matching. <i>Applied Mathematical Modelling</i> , 2009, 33, 4097-4119.	4.2	35
64	Custom-Designed Glassy Carbon Tips for Atomic Force Microscopy. <i>Micromachines</i> , 2017, 8, 285.	2.9	35
65	Flexographic and Inkjet Printing of Polymer Optical Waveguides for Fully Integrated Sensor Systems. <i>Procedia Technology</i> , 2014, 15, 521-529.	1.1	34
66	Design of microfluidic channel networks with specified output flow rates using the CFD-based optimization method. <i>Microfluidics and Nanofluidics</i> , 2017, 21, 1.	2.2	34
67	Microfluidic integration of wirebonded microcoils for on-chip applications in nuclear magnetic resonance. <i>Journal of Micromechanics and Microengineering</i> , 2014, 24, 045021.	2.6	33
68	PROPERTIES OF THE CASCADED LATTICE BOLTZMANN AUTOMATON. <i>International Journal of Modern Physics C</i> , 2007, 18, 455-462.	1.7	32
69	Micro powder injection molding: process characterization and modeling. <i>Microsystem Technologies</i> , 2006, 12, 941-946.	2.0	31
70	Tailored probes for atomic force microscopy fabricated by two-photon polymerization. <i>Applied Physics Letters</i> , 2016, 109, .	3.3	31
71	Topology optimization of electrode patterns for electroosmotic micromixer. <i>International Journal of Heat and Mass Transfer</i> , 2018, 126, 1299-1315.	4.8	31
72	Miniaturization of fluorescence sensing in optofluidic devices. <i>Microfluidics and Nanofluidics</i> , 2020, 24, 1.	2.2	31

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73	An error indicator and automatic adaptive meshing for electrostatic boundary element simulations. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 1997, 16, 1439-1446.	2.7	30
74	Carbon-Based Materials for Articular Tissue Engineering: From Innovative Scaffolding Materials toward Engineered Living Carbon. Advanced Healthcare Materials, 2022, 11, e2101834.	7.6	30
75	MST MEMS model order reduction: Requirements and benchmarks. Linear Algebra and Its Applications, 2006, 415, 469-498.	0.9	29
76	Influence of hydrodynamic drag model on shear stress in the simulation of magnetorheological fluids. Journal of Non-Newtonian Fluid Mechanics, 2015, 218, 16-26.	2.4	29
77	Computationally efficient and stable order reduction methods for a large-scale model of MEMS piezoelectric energy harvester. Microelectronics Reliability, 2015, 55, 747-757.	1.7	29
78	Microfabricated Inserts for Magic Angle Coil Spinning (MACS) Wireless NMR Spectroscopy. PLoS ONE, 2012, 7, e42848.	2.5	27
79	Nano- and Microstructured Copper/Copper Oxide Composites on Laser-Induced Carbon for Enzyme-Free Glucose Sensors. ACS Applied Nano Materials, 2021, 4, 13747-13760.	5.0	27
80	Simulation of micro powder injection moulding: Powder segregation and yield stress effects during form filling. Journal of the European Ceramic Society, 2011, 31, 2525-2534.	5.7	26
81	Acceleration of MRI of the vocal tract provides additional insight into articulator modifications. Journal of Magnetic Resonance Imaging, 2015, 42, 925-935.	3.4	26
82	Ethanolamine-assisted synthesis of size-controlled indium tin oxide nanoinks for low temperature solution deposited transparent conductive films. Journal of Materials Chemistry C, 2015, 3, 11464-11470.	5.5	26
83	Efficient calculation of the mutual inductance of arbitrarily oriented circular filaments via a generalisation of the Kalantarov-Zeitlin method. Journal of Magnetism and Magnetic Materials, 2019, 483, 10-20.	2.3	26
84	Elastic reversible valves on centrifugal microfluidic platforms. Lab on A Chip, 2019, 19, 1090-1100.	6.0	25
85	High aspect ratio PMMA posts and characterization method for micro coils manufactured with an automatic wire bonder. Sensors and Actuators A: Physical, 2009, 156, 328-333.	4.1	24
86	Mixing mechanism of a straight channel micromixer based on light-actuated oscillating electroosmosis in low-frequency sinusoidal AC electric field. Microfluidics and Nanofluidics, 2021, 25, 1.	2.2	24
87	Miniaturization limits of piezoresistive MEMS accelerometers. Microsystem Technologies, 2009, 15, 1835-1844.	2.0	23
88	Optimization of no-moving part fluidic resistance microvalves with low reynolds number. , 2010, , .		23
89	The eLoaD platform endows centrifugal microfluidics with on-disc power and communication. Biosensors and Bioelectronics, 2018, 117, 464-473.	10.1	23
90	Microarchitected Carbon Structures as Innovative Tissue-Engineering Scaffolds. Advanced Engineering Materials, 2020, 22, 2000083.	3.5	23

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91	IC MEMS microtransducers. , 0, , .		22
92	Design Synthesis of Electromagnetic Vibration-Driven Energy Generators Using a Variational Formulation. Journal of Microelectromechanical Systems, 2011, 20, 466-475.	2.5	22
93	Hydrodynamic particle focusing design using fluid-particle interaction. Biomicrofluidics, 2013, 7, 054104.	2.4	22
94	Euler force actuation mechanism for siphon valving in compact disk-like microfluidic chips. Biomicrofluidics, 2014, 8, 024101.	2.4	22
95	Fast PRF-based MR thermometry using double-echo EPI: in vivo comparison in a clinical hyperthermia setting. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2015, 28, 305-314.	2.0	22
96	One-second MRI of a three-dimensional vocal tract to measure dynamic articulator modifications. Journal of Magnetic Resonance Imaging, 2017, 46, 94-101.	3.4	22
97	Inversely designed micro-textures for robust Cassie-Baxter mode of super-hydrophobicity. Computer Methods in Applied Mechanics and Engineering, 2018, 341, 113-132.	6.6	22
98	Levitating Micro-Actuators: A Review. Actuators, 2018, 7, 17.	2.3	22
99	Validation of X-Ray Lithography and Development Simulation System for Moving Mask Deep X-Ray Lithography. Journal of Microelectromechanical Systems, 2006, 15, 159-168.	2.5	21
100	Characterization of a 3D MEMS fabricated micro-solenoid at 9.4T. Journal of Magnetic Resonance, 2011, 208, 20-26.	2.1	21
101	Effect of cannula position in the thoracic aorta with continuous left ventricular support: four-dimensional flow-sensitive magnetic resonance imaging in an in vitro model. European Journal of Cardio-thoracic Surgery, 2013, 44, 551-558.	1.4	21
102	Electrifying the disk: a modular rotating platform for wireless power and data transmission for Lab on a disk application. Lab on A Chip, 2015, 15, 2584-2587.	6.0	21
103	“Small is beautiful” in NMR. Journal of Magnetic Resonance, 2019, 306, 112-117.	2.1	21
104	Vapour processed self-rolled poly(dimethylsiloxane) microcapillaries form microfluidic devices with engineered inner surface. Lab on A Chip, 2013, 13, 3827.	6.0	20
105	Wire bonded 3D coils render air core microtransformers competitive. Journal of Micromechanics and Microengineering, 2013, 23, 114020.	2.6	20
106	Microfluidic Chips for Life Sciences—A Comparison of Low Entry Manufacturing Technologies. Small, 2019, 15, e1901956.	10.0	20
107	Polyaramid-Based Flexible Antibacterial Coatings Fabricated Using Laser-Induced Carbonization and Copper Electroplating. ACS Applied Materials & Interfaces, 2020, 12, 53193-53205.	8.0	20
108	Simulation aspects of a thermal accelerometer. Sensors and Actuators A: Physical, 1996, 55, 3-6.	4.1	19

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109	Modeling, Design, and Verification for the Analog Front-End of a MEMS-Based Parallel Scanning-Probe Storage Device. <i>IEEE Journal of Solid-State Circuits</i> , 2007, 42, 1779-1789.	5.4	19
110	Closed circuit MR compatible pulsatile pump system using a ventricular assist device and pressure control unit. <i>Magnetic Resonance in Medicine</i> , 2012, 67, 258-268.	3.0	19
111	Subspace recycling accelerates the parametric macro-modeling of MEMS. <i>International Journal for Numerical Methods in Engineering</i> , 2013, 94, 84-110.	2.8	19
112	Discrete element study of viscous flow in magnetorheological fluids. <i>Rheologica Acta</i> , 2014, 53, 417-443.	2.4	19
113	Stable dynamics of micro-machined inductive contactless suspensions. <i>International Journal of Mechanical Sciences</i> , 2017, 131-132, 753-766.	6.7	19
114	Functional screen printed radio frequency identification tags on flexible substrates, facilitating low-cost and integrated point-of-care diagnostics. <i>Flexible and Printed Electronics</i> , 2018, 3, 025002.	2.7	19
115	3D Carbon Scaffolds for Neural Stem Cell Culture and Magnetic Resonance Imaging. <i>Advanced Healthcare Materials</i> , 2018, 7, 1700915.	7.6	19
116	Glassy carbon microelectrodes minimize induced voltages, mechanical vibrations, and artifacts in magnetic resonance imaging. <i>Microsystems and Nanoengineering</i> , 2019, 5, 61.	7.0	19
117	Magnetic Lenz lenses improve the limit-of-detection in nuclear magnetic resonance. <i>PLoS ONE</i> , 2017, 12, e0182779.	2.5	19
118	Complex three-dimensional high aspect ratio microfluidic network manufactured in combined PerMX dry-resist and SU-8 technology. <i>Biomicrofluidics</i> , 2011, 5, 341111-3411110.	2.4	18
119	Designing MR Shim Arrays With Irregular Coil Geometry: Theoretical Considerations. <i>IEEE Transactions on Biomedical Engineering</i> , 2014, 61, 1614-1620.	4.2	18
120	Novel selective TOCSY method enables NMR spectral elucidation of metabolomic mixtures. <i>Journal of Magnetic Resonance</i> , 2016, 272, 147-157.	2.1	18
121	Self-consistent adjoint analysis for topology optimization of electromagnetic waves. <i>Journal of Computational Physics</i> , 2018, 361, 353-376.	3.8	18
122	Two-Photon Nanolithography Enhances the Performance of an Ionic Liquid-Polymer Composite Sensor. <i>Advanced Functional Materials</i> , 2015, 25, 1683-1693.	14.9	17
123	Improving the robustness of 3D turbo spin echo imaging to involuntary motion. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2015, 28, 329-345.	2.0	17
124	Carbon fiber/microlattice 3D hybrid architecture as multi-scale scaffold for tissue engineering. <i>Materials Science and Engineering C</i> , 2021, 126, 112140.	7.3	17
125	Spatial scanning hyperspectral imaging combining a rotating slit with a Dove prism. <i>Optics Express</i> , 2019, 27, 20290.	3.4	17
126	Polymer Coated Capacitive Microintegrated Gas Sensor. , 0, , .		16



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127	A two-sided Arnoldi algorithm with stopping criterion and MIMO selection procedure. <i>Mathematical and Computer Modelling of Dynamical Systems</i> , 2005, 11, 79-93.	2.2	16
128	Solvent-free inkjet printing process for the fabrication of conductive, transparent, and flexible ionic liquid-polymer gel structures. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2012, 50, 38-46.	2.1	16
129	An L1-norm phase constraint for half-Fourier compressed sensing in 3D MR imaging. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2015, 28, 459-472.	2.0	16
130	Magnetic resonance imaging reveals functional anatomy and biomechanics of a living dragon tree. <i>Scientific Reports</i> , 2016, 6, 32685.	3.3	16
131	Topology optimization of metal nanostructures for localized surface plasmon resonances. <i>Structural and Multidisciplinary Optimization</i> , 2016, 53, 967-972.	3.5	16
132	Microfluidic Overhauser DNP chip for signal-enhanced compact NMR. <i>Scientific Reports</i> , 2021, 11, 4671.	3.3	16
133	Taxonomy for engineered living materials. <i>Cell Reports Physical Science</i> , 2022, 3, 100807.	5.6	16
134	Connecting heat transfer macromodels for array MEMS structures. <i>Journal of Micromechanics and Microengineering</i> , 2005, 15, 1205-1214.	2.6	15
135	Microtransformer-Based Isolated Signal and Power Transmission. <i>IEEE Transactions on Power Electronics</i> , 2012, 27, 3996-4004.	7.9	15
136	Theoretical design of gradient coils with minimum power dissipation: Accounting for the discretization of current density into coil windings. <i>Journal of Magnetic Resonance</i> , 2013, 235, 85-94.	2.1	15
137	Polymer Magnetic Composite Core Boosts Performance of Three-Dimensional Micromachined Inductive Contactless Suspension. <i>IEEE Magnetics Letters</i> , 2016, 7, 1-3.	1.1	15
138	Thermostat with a local heat-bath coupling for exact energy conservation in dissipative particle dynamics. <i>Physical Review E</i> , 2006, 73, 037701.	2.1	14
139	Integrated process simulation of primary shaping: multi scale approaches. <i>Microsystem Technologies</i> , 2008, 14, 1789-1796.	2.0	14
140	Process for the fabrication of hollow core solenoidal microcoils in borosilicate glass. <i>Journal of Micromechanics and Microengineering</i> , 2008, 18, 075002.	2.6	14
141	Using artificial reaction force to design compliant mechanism with multiple equality displacement constraints. <i>Finite Elements in Analysis and Design</i> , 2009, 45, 555-568.	3.2	14
142	3D high aspect ratio, MEMS integrated micro-solenoids and Helmholtz micro-coils. , 2009, , .		14
143	Printable poly(methylsilsesquioxane) dielectric ink and its application in solution processed metal oxide thin-film transistors. <i>RSC Advances</i> , 2015, 5, 20924-20930.	3.6	14
144	Bio-inspired variable imaging system simplified to the essentials: modelling accommodation and gaze movement. <i>Optics Express</i> , 2015, 23, 929.	3.4	14

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145	Micro and nano patternable magnetic carbon. Journal of Applied Physics, 2016, 120, .	2.5	14
146	Design and characterization of in-plane silicon stress sensors with isotropic sensitivity. , 2008, , .		13
147	Three-dimensional microcoils as terahertz metamaterial with electric and magnetic response. Applied Physics Letters, 2010, 97, 261105.	3.3	13
148	Design multiple-layer gradient coils using least-squares finite element method. Structural and Multidisciplinary Optimization, 2014, 49, 523-535.	3.5	13
149	In vivo MRI with Concurrent Excitation and Acquisition using Automated Active Analog Cancellation. Scientific Reports, 2018, 8, 10631.	3.3	13
150	Thermomechanical modeling of an actuated micromirror. Sensors and Actuators A: Physical, 1995, 47, 632-636.	4.1	12
151	Equivalent circuit model of resistive IC sensors derived with the box integration method. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 1999, 18, 1000-1013.	2.7	12
152	Parametric Model Reduction for Fast Simulation of Cyclic Voltammograms. Sensor Letters, 2006, 4, 165-173.	0.4	12
153	Fast transient temperature operating micromachined emitter for mid-infrared optical gas sensing systems: design, fabrication, characterization and optimization. Microsystem Technologies, 2010, 16, 745-754.	2.0	12
154	3D solenoidal microcoil arrays with CMOS integrated amplifiers for parallel MR imaging and spectroscopy. , 2011, , .		12
155	Design of high stroke electrostatic micropumps: a charge control approach with ring electrodes. Microsystem Technologies, 2011, 17, 165-173.	2.0	12
156	Low cost fabrication and assembly process for re-usable 3D polydimethylsiloxane (PDMS) microfluidic networks. Biomicrofluidics, 2011, 5, 36502-365026.	2.4	12
157	A microwave resonator integrated on a polymer microfluidic chip. Journal of Magnetic Resonance, 2016, 270, 169-175.	2.1	12
158	Ink-jet printed optical waveguides. Flexible and Printed Electronics, 2017, 2, 045003.	2.7	12
159	A comparison of Lenz lenses and LC resonators for NMR signal enhancement. Concepts in Magnetic Resonance Part B, 2017, 47B, e21357.	0.7	12
160	Fast prototyping of microtubes with embedded sensing elements made possible with an inkjet printing and rolling process. Journal of Micromechanics and Microengineering, 2018, 28, 025003.	2.6	12
161	Modeling a Pull-In Instability in Micro-Machined Hybrid Contactless Suspension. Actuators, 2018, 7, 11.	2.3	12
162	An NMR-compatible microfluidic platform enabling <i>in situ</i> electrochemistry. Lab on A Chip, 2020, 20, 3202-3212.	6.0	12

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163	Facile template-free synthesis of multifunctional 3D cellular carbon from edible rice paper. RSC Advances, 2020, 10, 16616-16628.	3.6	12
164	Simulation of Anisotropic Chemical Etching of Single Crystalline Silicon using Cellular-Automata. IEJ Transactions on Sensors and Micromachines, 2004, 124, 7-13.	0.1	11
165	Phased array of microcoils allows $^1\text{H}$ MR microscopy of <i>ex vivo</i> human skin samples at 9.4 T. Skin Research and Technology, 2015, 21, 61-68.	1.6	11
166	Relevance of the Implementation of Teeth in Three-Dimensional Vocal Tract Models. Journal of Speech, Language, and Hearing Research, 2017, 60, 2379-2393.	1.6	11
167	Integrated impedance sensing of liquid sample plug flow enables automated high throughput NMR spectroscopy. Microsystems and Nanoengineering, 2021, 7, 30.	7.0	11
168	Investigation of the Dynamic Behavior of Bridged Nanotube Resonators by Dissipative Particle Dynamics Simulation. International Journal for Multiscale Computational Engineering, 2008, 6, 549-562.	1.2	11
169	A micro electro mechanical CAD extension for SESES. Journal of Micromechanics and Microengineering, 1993, 3, 118-122.	2.6	10
170	New convergence scheme for self-consistent electromechanical analysis of iMEMS. , 0, , .		10
171	Compact electro-thermal models of semiconductor devices with multiple heat sources. , 0, , .		10
172	Optimization MRI Cylindrical Coils Using Discretized Stream Function With High Order Smoothness. IEEE Transactions on Magnetics, 2012, 48, 1179-1188.	2.1	10
173	Implementation of an in-field CMOS frequency division multiplexer for 9.4-T magnetic resonance applications. International Journal of Circuit Theory and Applications, 2015, 43, 1861-1878.	2.0	10
174	Ink-jet printing technology enables self-aligned mould patterning for electroplating in a single step. Journal of Micromechanics and Microengineering, 2015, 25, 065015.	2.6	10
175	Hollow microcoils made possible with external support structures manufactured with a two-solvent process. Journal of Micromechanics and Microengineering, 2016, 26, 065002.	2.6	10
176	Ink-jet printed fluorescent materials as light sources for planar optical waveguides on polymer foils. Optical Engineering, 2016, 55, 107107.	1.0	10
177	Wireless colorimetric readout to enable resource-limited point-of-care. Lab on A Chip, 2019, 19, 3344-3353.	6.0	10
178	Broadband and multi-resonant sensors for NMR. Progress in Nuclear Magnetic Resonance Spectroscopy, 2019, 112-113, 34-54.	7.5	10
179	Numerical and Experimental Study of Microchannel Performance on Flow Maldistribution. Micromachines, 2020, 11, 323.	2.9	10
180	Simulation toolbox and material parameter data base for CMOS MEMS. , 0, , .		9

#	ARTICLE	IF	CITATIONS
181	Solid Propellant Microthruster: Theory of Operation and Modelling Strategy. , 2002, , .		9
182	Dynamic optimization of valveless micropump. , 2011, , .		9
183	Smoothed particle hydrodynamics simulation of shear-induced powder migration in injection moulding. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 2320-2328.	3.4	9
184	Design of small-scale gradient coils in magnetic resonance imaging by using the topology optimization method. Chinese Physics B, 2018, 27, 050201.	1.4	9
185	A novel passive micromixer with modified asymmetric lateral wall structures. Asia-Pacific Journal of Chemical Engineering, 2018, 13, e2202.	1.5	9
186	Optical tweezers for trapping in a microfluidic environment. Applied Optics, 2018, 57, 5733.	1.8	9
187	Electrodeposition of chitosan enables synthesis of copper/carbon composites for H <sub>2</sub> O <sub>2</sub> sensing. Materials Today Chemistry, 2020, 17, 100338.	3.5	9
188	Topology optimization on two-dimensional manifolds. Computer Methods in Applied Mechanics and Engineering, 2020, 364, 112937.	6.6	9
189	Siphon-Controlled Automation on a Lab-on-a-Disc Using Event-Triggered Dissolvable Film Valves. Biosensors, 2021, 11, 73.	4.7	9
190	Coupled 3D thermo-electro-mechanical simulations of microactuators. , 0, , .		8
191	Simulation of a thermomechanically actuated gas sensor. , 0, , .		8
192	Efficient Reliability-Based Design Optimization for Microelectromechanical Systems. IEEE Sensors Journal, 2010, 10, 1383-1390.	4.7	8
193	A qualitative technique to study stability and dynamics of micro-machined inductive contactless suspensions. , 2017, , .		8
194	Production of self-immobilised enzyme microspheres using microfluidics. Process Biochemistry, 2018, 69, 75-81.	3.7	8
195	Untuned broadband spiral micro-coils achieve sensitive multi-nuclear NMR TX/RX from microfluidic samples. Scientific Reports, 2021, 11, 7798.	3.3	8
196	Model Order Reduction for MEMS: Methodology and Computational Environment for Electro-Thermal Models. Mathematics in Industry, 2008, , 403-419.	0.3	8
197	Deep regression with ensembles enables fast, first-order shimming in low-field NMR. Journal of Magnetic Resonance, 2022, 336, 107151.	2.1	8
198	Solenoidal micro coils manufactured with a wire bonder. Proceedings of the IEEE International Conference on Micro Electro Mechanical Systems (MEMS), 2008, , .	0.0	7

#	ARTICLE	IF	CITATIONS
199	A robust and flexible optimization technique for efficient shrinking of MEMS accelerometers. <i>Microsystem Technologies</i> , 2010, 16, 647-654.	2.0	7
200	Three-dimensional flow characteristics in ventricular assist devices: Impact of valve design and operating conditions. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2011, 142, 1019-1026.	0.8	7
201	Development and Characterization of An Unshielded PatLoc Gradient Coil for Human Head Imaging. <i>Concepts in Magnetic Resonance Part B</i> , 2013, 43, 111-125.	0.7	7
202	Dissipative particle dynamics of diffusion-NMR requires high Schmidt-numbers. <i>Journal of Chemical Physics</i> , 2016, 144, 244101.	3.0	7
203	Resonatory Properties in Professional Tenors Singing Above the Passaggio. <i>Acta Acustica United With Acustica</i> , 2016, 102, 298-306.	0.8	7
204	Design and Simulation of a Wireless SAWâ€Pirani Sensor with Extended Range and Sensitivity. <i>Sensors</i> , 2019, 19, 2421.	3.8	7
205	Micro-textures inversely designed with overlaid-lithography manufacturability for wetting behavior in Cassieâ€Baxter status. <i>Applied Mathematical Modelling</i> , 2019, 74, 621-640.	4.2	7
206	Advanced Numerical Methodology to Analyze High-Temperature Wire-Net Compact Heat Exchangers For a Micro-Combined Heat and Power System Application. <i>Heat Transfer Engineering</i> , 2020, 41, 934-946.	1.9	7
207	Histological Correlates of Diffusion-Weighted Magnetic Resonance Microscopy in a Mouse Model of Mesial Temporal Lobe Epilepsy. <i>Frontiers in Neuroscience</i> , 2020, 14, 543.	2.8	7
208	Pulse Tube Cryocooler: Phasor Analysis and One-Dimensional Numerical Simulation. <i>Journal of Low Temperature Physics</i> , 2020, 199, 1179-1197.	1.4	7
209	Numerical Modelling and Materials Characterisation for Integrated Micro Electro Mechanical Systems. , 1995, , 1-9.		7
210	Skin stimulation and recording: Moving towards metal-free electrodes. <i>Biosensors and Bioelectronics: X</i> , 2022, , 100143.	1.7	7
211	Topology optimization for surface flows. <i>Journal of Computational Physics</i> , 2022, 467, 111415.	3.8	7
212	X3D: 3D X-ray lithography and development simulation for MEMS. , 0, , .		6
213	Adaptive error control in multi-physical thin-structure MEMS FE-simulation. <i>Journal of Computational Physics</i> , 2004, 196, 145-172.	3.8	6
214	Model order reduction of 3D electro-thermal model for a novel micromachined hotplate gas sensor. , 0, , .		6
215	A non-local extension of the Phillips model for shear induced particle migration. <i>Microsystem Technologies</i> , 2011, 17, 265-272.	2.0	6
216	A Comparison of Different Methods to Generate Tooth Surface Models Without Applying Ionizing Radiation for Digital 3-Dimensional Image Fusion With Magnetic Resonance Imagingâ€Based Data of the Head and Neck Region. <i>Journal of Computer Assisted Tomography</i> , 2015, 39, 882-889.	0.9	6

#	ARTICLE	IF	CITATIONS
217	Insertable biplanar gradient coils for magnetic resonance microscopy: theoretical minimization of power dissipation for different fabrication methods. Biomedical Physics and Engineering Express, 2018, 4, 035019.	1.2	6
218	Dual-mode pushbroom hyperspectral imaging using active system components and feed-forward compensation. Review of Scientific Instruments, 2018, 89, 083113.	1.3	6
219	Load sensitive stable current source for complex precision pulsed electroplating. Review of Scientific Instruments, 2019, 90, .	1.3	6
220	Optofluidic Formaldehyde Sensing: Towards On-Chip Integration. Micromachines, 2020, 11, 673.	2.9	6
221	Unraveling the dependency on multiple passes in laser-induced graphene electrodes for supercapacitor and H2O2 sensing. Materials Science for Energy Technologies, 2021, 4, 407-412.	1.8	6
222	SESES: a comprehensive MEMS modelling system. , 0, , .		5
223	<title>Surface tension defects in microfluidic self-alignment</title>. , 2002, 4755, 55.		5
224	Compact electro-thermal model of semiconductor device with nonlinear convection coefficient. , 0, , .		5
225	Micromachined mid-infrared emitter for fast transient temperature operation for optical gas sensing systems. , 2008, , .		5
226	Parametric model order reduction accelerated by subspace recycling. , 2009, , .		5
227	Optimization of an electromagnetic comb drive actuator. Sensors and Actuators A: Physical, 2009, 154, 212-217.	4.1	5
228	Patient Specific Hemodynamics: Combined 4D Flow-Sensitive MRI and CFD. , 2011, , 27-38.		5
229	Advanced Microfluidic Assays for Caenorhabditis elegans. , 0, , .		5
230	A new fully integrated multichannel receiver design for magnetic resonance imaging. Concepts in Magnetic Resonance Part B, 2016, 46B, 134-145.	0.7	5
231	Mechanical Thermal Noise in Micro-Machined Levitated Two-Axis Rate Gyroscopes. IEEE Sensors Journal, 2018, 18, 1390-1402.	4.7	5
232	Pull-in actuation in hybrid micro-machined contactless suspension. Journal of Physics: Conference Series, 2018, 1052, 012035.	0.4	5
233	Improved method for MR microscopy of brain tissue cultured with the interface method combined with Lenz lenses. Magnetic Resonance Imaging, 2018, 52, 24-32.	1.8	5
234	Numerical and experimental investigation of a wire-net compact heat exchanger performance for high-temperature applications. Applied Thermal Engineering, 2019, 154, 208-216.	6.0	5

#	ARTICLE	IF	CITATIONS
235	Inductively coupled magic angle spinning microresonators benchmarked for high-resolution single embryo metabolomic profiling. <i>Analyst, The</i> , 2019, 144, 7192-7199.	3.5	5
236	Microscale 3D imaging by magnetic resonance force microscopy using full-volume Fourier- and Hadamard-encoding. <i>Journal of Magnetic Resonance</i> , 2019, 299, 196-201.	2.1	5
237	Gradient-Induced Mechanical Vibration of Neural Interfaces During MRI. <i>IEEE Transactions on Biomedical Engineering</i> , 2020, 67, 915-923.	4.2	5
238	Multiphysics for Structural Topology Optimization. <i>Sensor Letters</i> , 2006, 4, 191-199.	0.4	5
239	Prototyping a Microfluidic Sensor for Real-Time Detection of Airborne Formaldehyde. <i>International Journal of Chemical Engineering and Applications (IJCEA)</i> , 2020, 11, 23-28.	0.3	5
240	Wall Microstructures of High Aspect Ratio Enabled by Near-Field Electrospinning. <i>Advanced Engineering Materials</i> , 2022, 24, .	3.5	5
241	Net-phase flow NMR for compact applications. <i>Journal of Magnetic Resonance</i> , 2022, 341, 107233.	2.1	5
242	Three-dimensional modelling of capacitive humidity sensors. <i>Sensors and Actuators A: Physical</i> , 1990, 25, 243-247.	4.1	4
243	Automatic adaptive meshing for efficient electrostatic boundary element simulations. , 0, , .		4
244	Simulation procedure to improve piezoresistive microsensors used for monitoring ball bonding. <i>Sensors and Actuators A: Physical</i> , 2001, 92, 299-304.	4.1	4
245	Automatic order reduction of thermo-electric models for MEMS: Arnoldi versus Guyan. , 0, , .		4
246	Dynamic modeling of interactions between fields and matter in MEMS devices. <i>Microsystem Technologies</i> , 2004, 10, 387-392.	2.0	4
247	Design Rule and Orientation Layout for MEMS Curved Beams on Silicon. <i>Journal of Microelectromechanical Systems</i> , 2010, 19, 706-714.	2.5	4
248	Ink Jet Printed Silver Lines Formed in Microchannels Exhibit Lower Resistance Than Their Unstructured Counterparts. <i>Journal of Imaging Science and Technology</i> , 2011, 55, 40302-1-40302-6.	0.5	4
249	Smoothed particle hydrodynamics-based numerical investigation on sessile, oscillating droplets. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2011, 369, 2565-2573.	3.4	4
250	Design issues in electrostatic microplate actuators: Device stability and post pull-in behaviour. , 2011, , .		4
251	Microfluidic channel structures speed up mixing of multiple emulsions by a factor of ten. <i>Biomicrofluidics</i> , 2014, 8, 054101.	2.4	4
252	SYMLER: SYMBOLic Particle simulator with grid-computing interface. <i>Computer Physics Communications</i> , 2014, 185, 1085-1099.	7.5	4

#	ARTICLE	IF	CITATIONS
253	Subthreshold CMOS transistors are largely immune to magnetic field effects when operated above 11 T. Concepts in Magnetic Resonance Part B, 2015, 45, 97-105.	0.7	4
254	Incorporation of image data from a previous examination in 3D serial MR imaging. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2015, 28, 413-425.	2.0	4
255	Dual-mode spectral imaging system employing a focus variable lens. Advanced Optical Technologies, 2016, 5, 167-176.	1.7	4
256	Design of a 3T preamplifier which stability is insensitive to coil loading. Journal of Magnetic Resonance, 2016, 265, 215-223.	2.1	4
257	Automatic Adaptive Gain for Magnetic Resonance Sensitivity Enhancement. Analytical Chemistry, 2019, 91, 2376-2383.	6.5	4
258	Geometrically-differential NMR in a stripline front-end. Journal of Magnetic Resonance, 2020, 310, 106659.	2.1	4
259	Toward a Compact Wireless Surface Acoustic Wave Pirani Microsensor with Extended Range and Sensitivity. Heat Transfer Engineering, 2021, 42, 565-578.	1.9	4
260	Real-time NMR Monitoring of Spatially Segregated Enzymatic Reactions in Multilayered Hydrogel Assemblies**. Angewandte Chemie - International Edition, 2021, 60, 19176-19182.	13.8	4
261	Nuclear Magnetic Resonance Microscopy for In Vivo Metabolomics, Digitally Twinned by Computational Systems Biology, Needs a Sensitivity Boost. Sensors and Materials, 2018, , 157.	0.5	4
262	ArduiTaM: accurate and inexpensive NMR auto tune and match system. Magnetic Resonance, 2020, 1, 105-113.	1.9	4
263	Comparing Carbon Origami from Polyaramid and Cellulose Sheets. Micromachines, 2022, 13, 503.	2.9	4
264	Electrospun carbon nanofibre-assisted patterning of metal oxide nanostructures. Microsystems and Nanoengineering, 2022, 8, .	7.0	4
265	Microsystem CAD. , 1996, 2882, 170.		3
266	Automatic order reduction of thermo-electric model for micro-ignition unit. , 0, , .		3
267	Design and fabrication of a novel low-cost hotplate micro gas sensor. , 2002, 4755, 191.		3
268	A Simulation free Reduction Scheme and Nonlinear Modelling of an Electrostatic Beam. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 713-718.	0.4	3
269	Comdrive Configuration for an Electromagnetic Reluctance Actuator. Journal of Microelectromechanical Systems, 2008, 17, 1164-1171.	2.5	3
270	Magnetic comb drive actuator. Proceedings of the IEEE International Conference on Micro Electro Mechanical Systems (MEMS), 2008, , .	0.0	3



#	ARTICLE	IF	CITATIONS
271	Constrained simulations of flow in haemodynamic devices: towards a computational assistance of magnetic resonance imaging measurements. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 2494-2501.	3.4	3
272	Insight into the micro scale dynamics of a micro fluidic wetting-based conveying system by particle based simulation. Microsystem Technologies, 2012, 18, 523-530.	2.0	3
273	Wire bonded MEMS-scale on-chip transformers. , 2014, , .		3
274	Relationship Between Zero-Rate Output and the MEMS Element in a Closed-Loop System. IEEE Sensors Journal, 2015, 15, 7200-7207.	4.7	3
275	Root Cause Analysis of Zero-Rate Output Sources in an MEMS Gyroscope. IEEE Sensors Journal, 2017, 17, 959-966.	4.7	3
276	The noise factor of receiver coil matching networks in MRI. Magnetic Resonance Imaging, 2017, 37, 252-259.	1.8	3
277	Comparison of Storage Methods for Microfluidically Produced Water-in-Oil Droplets. Chemical Engineering and Technology, 2019, 42, 2028-2034.	1.5	3
278	Porous Silicon Based Rugate Filter Wheel for Multispectral Imaging Applications. ECS Journal of Solid State Science and Technology, 2019, 8, Q43-Q49.	1.8	3
279	Numerical Study of Perturbators Influence on Heat Transfer and Investigation of Collector Performance for a Micro-Combined Heat and Power System Application. Heat Transfer Engineering, 2021, 42, 456-478.	1.9	3
280	Automatic correction of diffraction pattern shift in a pushbroom hyperspectral imager with a piezoelectric internal line-scanning unit. Proceedings of SPIE, 2017, , .	0.8	3
281	Process Simulation System for 3D X-Ray Lithography and Development. IEEJ Transactions on Sensors and Micromachines, 2003, 123, 368-375.	0.1	3
282	Development of Control Circuit for Inductive Levitation Micro-Actuators. Proceedings (mdpi), 2020, 64, .	0.2	3
283	Model Order Reduction for Circuit Level Simulation of RF MEMS Frequency Selective Devices. Sensor Letters, 2008, 6, 1-8.	0.4	3
284	Magnetostatic Modeling Of An Integrated Microconcentrator. , 0, , .		2
285	Smart enumeration in C++: virtual construction, message dispatching and tables. Software - Practice and Experience, 1999, 29, 67-76.	3.6	2
286	Nanometer-scale height measurements in micromachined picoliter vials based on interference fringe analysis. , 0, , .		2
287	Automatic mesh adaptivity for finite element simulation of multilayer MEMS. , 2000, , .		2
288	A general purpose adaptivity driver for FE software. Software - Practice and Experience, 2003, 33, 1097-1116.	3.6	2

#	ARTICLE	IF	CITATIONS
289	Comparison of model order reduction methodologies for thermal problems. , 0, , .		2
290	MODELING, SIMULATION AND OPTIMIZATION OF ELECTROWETTING. , 2006, , 53-84.		2
291	MEMS and NEMS Simulation. , 2006, , 93-186.		2
292	MEMS and NEMS Simulation. , 2006, , 93-186.		2
293	Miniaturization limits of field-effect based MEMS accelerometers. Microsystem Technologies, 2010, 16, 1861-1868.	2.0	2
294	Multilayer phased microcoil array for magnetic resonance imaging. , 2011, , .		2
295	Optimal magnetic susceptibility matching in 3D. Magnetic Resonance in Medicine, 2013, 69, 1146-1156.	3.0	2
296	Reduced order modeling enables system level simulation of a MEMS piezoelectric energy harvester with a self-supplied SSHI-scheme. , 2013, , .		2
297	CMOS 8-channel frequency division multiplexer for 9.4 T magnetic resonance imaging. , 2013, , .		2
298	Molecular Dynamics Simulations of Nanoparticle Interactions with a Planar Wall: Does Shape Matter?. Communications in Computational Physics, 2013, 13, 900-915.	1.7	2
299	Structure preserving model order reduction and system level simulation of MEMS piezoelectric energy harvester. , 2014, , .		2
300	Computationally efficient and stable order reduction method for a large-scale model of MEMS piezoelectric energy harvester. , 2014, , .		2
301	Photolithography: Two-Photon Nanolithography Enhances the Performance of an Ionic Liquid-Polymer Composite Sensor (Adv. Funct. Mater. 11/2015). Advanced Functional Materials, 2015, 25, 1682-1682.	14.9	2
302	A compact parametric model of magnetic resonance micro sensor. , 2015, , .		2
303	A universal and stand-alone datalogger for lab-on-a-disc applications. , 2016, , .		2
304	Optical gauge head to evaluate gradient field induced vibrations of conductive structures during MRI. , 2017, , .		2
305	Wireless closed-loop control of centrifugo-pneumatic valving towards large-scale microfluidic process integration. , 2018, , .		2
306	A Novel Sensor Design and Fabrication for Wireless Interventional MRI Through Induction Coupling. , 2019, , .		2

#	ARTICLE	IF	CITATIONS
307	Numerical Thermal Analysis and 2-D CFD Evaluation Model for An Ideal Cryogenic Regenerator. <i>Micromachines</i> , 2020, 11, 361.	2.9	2
308	Real-time NMR Monitoring of Spatially Segregated Enzymatic Reactions in Multilayered Hydrogel Assemblies**. <i>Angewandte Chemie</i> , 2021, 133, 19325-19331.	2.0	2
309	Inkjet Fabrication of Printed Circuit Boards. <i>Advanced Micro &amp; Nanosystems</i> , 0, , 257-278.	0.2	2
310	Boundary Condition Independent Thermal Model. , 2005, , 345-348.		2
311	Characterization of a Wireless Vacuum Sensor Prototype Based on the SAW-Pirani Principle. <i>Processes</i> , 2020, 8, 1685.	2.8	2
312	Integrated Engineering Development Environment. <i>The Mathematica Journal</i> , 2007, 10, .	0.2	2
313	LIGA. , 2008, , 293-340.		2
314	Printed, flexible wireless temperature logging system. , 2019, , .		2
315	Nanoantennas Inversely Designed to Couple Free Space and a Metal-insulator-metal Waveguide. <i>Nanomaterials</i> , 2021, 11, 3219.	4.1	2
316	Selective excitation enables encoding and measurement of multiple diffusion parameters in a single experiment. <i>Magnetic Resonance</i> , 2021, 2, 835-842.	1.9	2
317	Automated extraction of capacitances and electrostatic forces in MEMS and ULSI interconnects from the mask layout. , 0, , .		1
318	Extraction of noise parameters for the macromodelling of MEMS. , 0, , .		1
319	<title>Analysis of noise and fluctuations in micromachined devices</title>. , 1999, , .		1
320	Volume shrinking in micro-fluidic self-assembly. , 0, , .		1
321	A new computational method for piezoelectric plate modeling: application to membrane microsensors. , 0, , .		1
322	Solving singularities in electrostatics with high-order FEM. , 0, , .		1
323	Model order reduction for scanning electrochemical microscope: the treatment of nonzero initial condition. , 0, , .		1
324	Multiphysics for topology optimization in HEMS. , 0, , .		1

#	ARTICLE	IF	CITATIONS
325	Modeling, Design, and Verification for the Analog Front-end of a MEMS-based Parallel Scanning-probe Storage Device. , 2006, , .		1
326	Darwinism for MEMS. , 2007, , .		1
327	Multiphysics and Multiscale Simulation. , 2008, , 539-557.		1
328	Near-wall velocity of suspended particles in microchannel flow. Proceedings of the IEEE International Conference on Micro Electro Mechanical Systems (MEMS), 2008, , .	0.0	1
329	Reduction of Finite Element Mesh and Model Order for Fast Dynamic Analysis of Global/Local Problem. Journal of Solid Mechanics and Materials Engineering, 2009, 3, 572-583.	0.5	1
330	12&#x00B0; design rule for single crystal silicon curved beam compliant mechanisms with large deformation. , 2010, , .		1
331	Inductively coupled wirebonded microcoils for wireless on-chip NMR. , 2011, , .		1
332	Electrowetting droplets investigated with smoothed particle hydrodynamics and moving least squares. , 2012, , .		1
333	Conductive and transparent gel microstructures fabricated by inkjet printing of ionic liquid based fluids. , 2012, , .		1
334	Micro-NMR probe featuring disposable, self-priming sample-inserts, towards high-throughput profiling. , 2013, , .		1
335	SPH BASED OPTIMIZATION OF ELECTROWETTING-DRIVEN DIGITAL MICROFLUIDICS WITH ADVANCED ACTUATION PATTERNS. International Journal of Modern Physics C, 2013, 24, 1340012.	1.7	1
336	Circuit level simulation of <scp>MRI</scp> receive chain using excitation derived from images. Concepts in Magnetic Resonance Part B, 2014, 44, 102-113.	0.7	1
337	Novel ionic liquid - polymer composite and an approach for its patterning by conventional photolithography. , 2015, , .		1
338	Ink-jet printing of host-guest systems based on acrylates with fluorescent dopants. , 2016, , .		1
339	Micro-NMR elucidates altered metabolites in the Parkinsonâ€™s disease-related catp-6 genotype of Caenorhabditis elegans. Metabolomics, 2017, 13, 1.	3.0	1
340	Development of paper-based wireless communication modules for point-of-care diagnostic applications. , 2017, , .		1
341	Capacitor reâ€design overcomes the rotation rate limit of <scp>MACS</scp> resonators. Concepts in Magnetic Resonance Part B, 2017, 47B, .	0.7	1
342	DPD enables mesoscopic MRI simulation of slow flow. Microfluidics and Nanofluidics, 2018, 22, 1.	2.2	1

#	ARTICLE	IF	CITATIONS
343	DPD of diffusion-weighted MRI. Computers and Fluids, 2018, 172, 467-473.	2.5	1
344	Energy-aware 3D micro-machined inductive suspensions with polymer magnetic composite core. Journal of Physics: Conference Series, 2018, 1052, 012048.	0.4	1
345	Novel concept of a series linear electromagnetic array artificial muscle. Journal of Physics: Conference Series, 2018, 1052, 012047.	0.4	1
346	Fiber bundle topology optimization of hierarchical microtextures for wetting behavior in Cassie-Baxter mode. Structural and Multidisciplinary Optimization, 2020, 61, 2523-2556.	3.5	1
347	Wireless Double Micro-Resonator for Orientation Free Tracking of MR-Catheter During Interventional MRI. IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, 2021, 5, 78-83.	3.4	1
348	Magnetostatic reciprocity for MR magnet design. Magnetic Resonance, 2021, 2, 607-617.	1.9	1
349	A File Format for the Exchange of Nonlinear Dynamical ODE Systems. , 2005, , 317-326.		1
350	Topologically optimized magnetic lens for magnetic resonance applications. Magnetic Resonance, 2020, 1, 225-236.	1.9	1
351	Accurate surface normal representation to facilitate gradient coil optimization on curved surface. Magnetic Resonance Letters, 2023, 3, 67-84.	1.3	1
352	The range of interaction for the characterization of cloudiness of nonwovens. , 0, , .		0
353	Rapid extraction of capacitances and inductances in MMICs. , 0, , .		0
354	Capacitances and inductances extraction for PCBs using exponential expansion method. , 2000, , .		0
355	Numerical Offset Optimization of Magnetic Field Sensor Microsystems (Numerische) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 26 0,7		0
356	Simulator for observing the Si anisotropic chemical etching process in atomic scale. , 0, , .		0
357	Topology Optimization for Stable Non-linear Structures. International Journal of Nonlinear Sciences and Numerical Simulation, 2002, 3, .	1.0	0
358	A new methodology for modeling MEMS structures. , 0, , .		0
359	Verification of etching rule in CAES. , 0, , .		0
360	3D simulation system for moving mask deep X-ray lithography. , 0, , .		0

#	ARTICLE	IF	CITATIONS
361	The computation of electrostatic forces in MEMS: spatial method vs. material method. , 0, , .		0
362	Parametric model order reduction for scanning electrochemical microscopy: fast simulation of cyclic voltammogram. , 0, , .		0
363	Efficient Pre-stressed Harmonic Analysis of RF-Microresonators by Means of Model Order Reduction. , 0, , .		0
364	Numerical Simulation of Ion Drift within Ion Mobility Spectrometers in High Peclet Conditions using FEM Techniques. , 2007, , .		0
365	Contactless Component Handling on PCB Using EWOD Principles. , 2008, , .		0
366	Micromachined multicavity grey body emitter for the use in MIR spectroscopic systems. , 2008, , .		0
367	Robust comb design for inductive displacement sensor with large travel and high sensitivity. , 2009, , .		0
368	MicroStack3D: A Low Cost Production Platform For Micromanufacturing By Inkjet Printing. , 2009, , .		0
369	Simulation approaches for magnetic resonance imaging sensors. , 2009, , .		0
370	3D Ultra-Fast Manufactured Micro Coils on Polymer or Metal Cores. SAIEE Africa Research Journal, 2010, 101, 42-44.	1.2	0
371	Analog circuit synthesis using two-port theory and genetic programming. , 2011, , .		0
372	Particle swarm optimization on a new parametric model of a deformable membrane lens. , 2011, , .		0
373	Zernikeâ€Galerkin method: efficient computational tool for elastically deformable optics. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2011, 28, 2554.	1.5	0
374	3-D microcoils as a metamaterial with electric and magnetic response. , 2011, , .		0
375	THz pulse propagation along inkjet-printed metal stripes: Towards a 3D wire-medium for subwavelength imaging. , 2012, , .		0
376	Top-down vs. bottom-up coarse-graining of graphene and CNTs for nanodevice simulation. , 2012, , .		0
377	Processing of 3D multilevel SU-8 fluidic network assisted by PerMX dry-photoresist lamination. , 2012, , .		0
378	Sub-diffraction imaging in the THz range using wire array metamaterial fibers and stacked layers of inkjet printed wire grids. , 2013, , .		0

#	ARTICLE	IF	CITATIONS
379	Water-soluble sacrificial layer enables ultra low-cost LOC integration of magnetic resonance microcoils with 100% filling factor. , 2013, , .		0
380	Advanced two-photon photolithography for patterning of transparent, electrically conductive ionic liquid-polymer nanostructures. Proceedings of SPIE, 2016, , .	0.8	0
381	A multi-purpose, rolled-up, double-helix resonator. Journal of Magnetic Resonance, 2019, 309, 106599.	2.1	0
382	Motion prediction enables simulated MR-imaging of freely moving model organisms. PLoS Computational Biology, 2019, 15, e1006997.	3.2	0
383	On the application of balanced steady-state free precession to MR microscopy. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2019, 32, 437-447.	2.0	0
384	Analog Front End for a Micromachined Probe Storage Device. , 2008, , 623-643.		0
385	Inkjet-Printing for Maskless Separation of Metal Structures for Back-Contact Silicon Solar Cells. Journal of Imaging Science and Technology, 2014, 58, 404031-404038.	0.5	0
386	Microelectromechanical System-Based Micro Hot-Plate Devices. , 2017, , 257-280.		0
387	10.1063/1.5025896.1. , 2018, , .		0
388	Particle Swarm Optimization for Non-Convex Problems of Size and Shape Optimization of Trusses. , 0, , .		0
389	A Technological Approach for Miniaturization of Three-Dimensional Inductive Levitation Microsuspensions. IEEE Magnetics Letters, 2022, 13, 1-4.	1.1	0
390	Optical waveguides fabricated by combination of ink-jet and flexographic printing. NIP & Digital Fabrication Conference, 2016, 32, 294-297.	0.0	0