

Jari A Juuti

List of Publications by Year in descending order

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127
papers

2,672
citations

201674

27
h-index

223800

46
g-index

130
all docs

130
docs citations

130
times ranked

2929
citing authors

#	ARTICLE	IF	CITATIONS
1	High performance piezoelectric composite fabricated at ultra low temperature. Composites Part B: Engineering, 2022, 229, 109486.	12.0	11
2	Enhanced piezoelectric performance of ceramic-polymer composite cantilevers with thin metal substrates. Applied Physics Letters, 2022, 120, 052903.	3.3	2
3	Wood-based composite materials for ultralight lens antennas in 6G systems. Materials Advances, 2022, 3, 1687-1694.	5.4	4
4	Design and development of poly-L/D-lactide copolymer and barium titanate nanoparticle 3D composite scaffolds using breath figure method for tissue engineering applications. Colloids and Surfaces B: Biointerfaces, 2021, 199, 111530.	5.0	10
5	Ultra-low permittivity ULTCC composite materials. Applied Physics Letters, 2021, 118, .	3.3	8
6	Vacancy-Induced Niobate Perovskite-Tungsten Bronze Composite for Synergetic Tuning of Ferroelectricity and Band Gaps. Journal of Physical Chemistry C, 2021, 125, 8890-8898.	3.1	8
7	The impact of lanthanum doping on the microstructure and colossal permittivity in $BaxSr(1-x)TiO_3$. Open Ceramics, 2021, 6, 100120.	2.0	2
8	All-Around Universal and Photoelastic Self-Healing Elastomer with High Toughness and Resilience. Advanced Science, 2021, 8, e2103235.	11.2	19
9	A Non-Invasive Method for Hydration Status Measurement With a Microwave Sensor Using Skin Phantoms. IEEE Sensors Journal, 2020, 20, 1095-1104.	4.7	10
10	A Simulation Model for Narrow Band Gap Ferroelectric Materials. Advanced Theory and Simulations, 2020, 3, 2000052.	2.8	6
11	A Single-Material Multi-Source Energy Harvester, Multifunctional Sensor, and Integrated Harvester-Sensor System Demonstration of Concept. Energy Technology, 2020, 8, 2000461.	3.8	9
12	Current Modulation by Optoelectric Control of Ferroelectric Domains. ACS Applied Electronic Materials, 2020, 2, 2829-2836.	4.3	12
13	Coalition of Thermo-Opto-Electric Effects in Ferroelectrics for Enhanced Cyclic Multienergy Conversion. Energy Technology, 2020, 8, 2000500.	3.8	6
14	PRINTED GNSS AND BLUETOOTH ANTENNAS EMBEDDED ON FLEXIBLE LOW LOSS SUBSTRATES FOR WEARABLE APPLICATIONS. Progress in Electromagnetics Research M, 2020, 94, 189-199.	0.9	2
15	Visible-Light-Absorbing Potassium Niobate-Titanate-Molybdate Ferroelectrics. Physical Review Applied, 2020, 14, .	3.8	9
16	Direct integration of dielectric all-ceramic thick films on a polymer substrate using room temperature fabrication. Journal of the European Ceramic Society, 2020, 40, 3984-3988.	5.7	1
17	Nanoparticle activated neutrophils-on-a-chip: A label-free capacitive sensor to monitor cells at work. Sensors and Actuators B: Chemical, 2020, 313, 128020.	7.8	6
18	A printable P(VDF-TrFE)-PZT Composite with Very High Piezoelectric Coefficient. Applied Materials Today, 2020, 20, 100696.	4.3	7

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19	Evaluation of Printed P(VDF-TrFE) Pressure Sensor Signal Quality in Arterial Pulse Wave Measurement. <i>IEEE Sensors Journal</i> , 2019, 19, 11072-11080.	4.7	18
20	Multi-functional perovskites – an investigation of compositional and processing influence on microstructure, dielectric and ferroelectric properties. <i>European Physical Journal: Special Topics</i> , 2019, 228, 1555-1573.	2.6	13
21	Upside - down composites: Fabricating piezoceramics at room temperature. <i>Journal of the European Ceramic Society</i> , 2019, 39, 3301-3306.	5.7	19
22	Solid Air – Low Temperature Manufacturing of Ultra-Low Permittivity Composite Materials for Future Telecommunication Systems. <i>Frontiers in Materials</i> , 2019, 6, .	2.4	6
23	Ferroelectric Oxides for Solar Energy Conversion, Multi-Source Energy Harvesting/Sensing, and Opto-Ferroelectric Applications. <i>ChemSusChem</i> , 2019, 12, 2540-2549.	6.8	30
24	Optical Control of Ferroelectric Domains: Nanoscale Insight into Macroscopic Observations. <i>Advanced Optical Materials</i> , 2019, 7, 1800858.	7.3	44
25	Microfluidic Microwave Sensor for Detecting Saline in Biological Range. <i>Sensors</i> , 2019, 19, 819.	3.8	30
26	The effect of titanium excess and deficiency on the microstructure and dielectric properties of lanthanum doped Ba _{0.55} Sr _{0.45} TiO ₃ with colossal permittivity. <i>Journal of the European Ceramic Society</i> , 2019, 39, 1110-1115.	5.7	4
27	Upside-down composites: Electroceramics without sintering. <i>Applied Materials Today</i> , 2019, 15, 83-86.	4.3	18
28	Characterization of PMMA/BaTiO ₃ Composite Layers Through Printed Capacitor Structures for Microwave Frequency Applications. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2018, 66, 1736-1743.	4.6	4
29	Sintering behavior, microstructure and dielectric performance of BaTiO ₃ with 60 – 65 wt% addition of B ₂ O ₃ -Bi ₂ O ₃ -SiO ₂ -ZnO glass. <i>Journal of Alloys and Compounds</i> , 2018, 737, 392-397.	5.5	9
30	The effects of substrate layer thickness on piezoelectric vibration energy harvesting with a bimorph type cantilever. <i>Mechanical Systems and Signal Processing</i> , 2018, 106, 114-118.	8.0	34
31	Piezoelectric Flexible LCP – PZT Composites for Sensor Applications at Elevated Temperatures. <i>Electronic Materials Letters</i> , 2018, 14, 113-123.	2.2	17
32	Room temperature densified ceramics for weight optimized circular polarized GPS antenna design. <i>Microwave and Optical Technology Letters</i> , 2018, 60, 1061-1066.	1.4	11
33	LTCC Packaged Ring Oscillator Based Sensor for Evaluation of Cell Proliferation. <i>Sensors</i> , 2018, 18, 3346.	3.8	11
34	Hybrid, Multi-Source, and Integrated Energy Harvesters. <i>Frontiers in Materials</i> , 2018, 5, .	2.4	33
35	3D printed dielectric ceramic without a sintering stage. <i>Scientific Reports</i> , 2018, 8, 15955.	3.3	19
36	Boosting Photovoltaic Output of Ferroelectric Ceramics by Optoelectric Control of Domains. <i>Advanced Materials</i> , 2018, 30, e1803821.	21.0	53

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37	Simulation and validation of temperature-dependent ferroelectric properties of multifunctional BCZT and KNBNNO ceramics. <i>Materials Research Express</i> , 2018, 5, 116305.	1.6	3
38	Energy Harvesting Research: The Road from Single Source to Multisource. <i>Advanced Materials</i> , 2018, 30, e1707271.	21.0	203
39	Room-temperature-densified Li_2MoO_4 ceramic patch antenna and the effect of humidity. <i>International Journal of Applied Ceramic Technology</i> , 2017, 14, 50-55.	2.1	32
40	Tape casting system for ULTCs to fabricate multilayer and multimaterial 3D electronic packages with embedded electrodes. <i>Journal of the American Ceramic Society</i> , 2017, 100, 1257-1260.	3.8	13
41	Ferroelectric, pyroelectric, and piezoelectric properties of a photovoltaic perovskite oxide. <i>Applied Physics Letters</i> , 2017, 110, .	3.3	79
42	Li_2MoO_4 -based composite ceramics fabricated from temperature- and atmosphere-sensitive MnZn ferrite at room temperature. <i>Journal of the American Ceramic Society</i> , 2017, 100, 3626-3635.	3.8	32
43	Sintering behavior and characteristics study of BaTiO_3 with 50 wt% of $\text{B}_2\text{O}_3\text{-Bi}_2\text{O}_3\text{-SiO}_2\text{-ZnO}$ glass. <i>Journal of the European Ceramic Society</i> , 2017, 37, 1495-1500.	5.7	14
44	Microwave Characterization of Printed Inductors With Ferrimagnetic $\text{BaFe}_{12}\text{O}_{19}$ Composite Layers. <i>IEEE Transactions on Magnetics</i> , 2017, 53, 1-6.	2.1	4
45	Novel genetically optimised high-displacement piezoelectric actuator with efficient use of active material. <i>Smart Materials and Structures</i> , 2017, 26, 095022.	3.5	6
46	3D Printed and Photonicallly Cured Graphene UHF RFID Tags on Textile, Wood, and Cardboard Substrates. <i>International Journal of Antennas and Propagation</i> , 2017, 2017, 1-8.	1.2	12
47	A Game Changer: A Multifunctional Perovskite Exhibiting Giant Ferroelectricity and Narrow Bandgap with Potential Application in a Truly Monolithic Multienergy Harvester or Sensor. <i>Advanced Materials</i> , 2017, 29, 1700767.	21.0	100
48	Energy Harvesting with a Bimorph Type Piezoelectric Diaphragm Multilayer Structure and Mechanically Induced Pre-stress. <i>Energy Technology</i> , 2016, 4, 620-624.	3.8	14
49	Fully printed memristors for a self-sustainable recorder of mechanical energy. <i>Flexible and Printed Electronics</i> , 2016, 1, 025002.	2.7	19
50	SiC MOSFET Soot Sensor in a Co-fired LTCC Package. <i>Procedia Engineering</i> , 2016, 168, 27-30.	1.2	3
51	Cellulose Nanofibril Film as a Piezoelectric Sensor Material. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 15607-15614.	8.0	219
52	Room-temperature fabrication of microwave dielectric $\text{Li}_2\text{MoO}_4\text{-TiO}_2$ composite ceramics. <i>Ceramics International</i> , 2016, 42, 11442-11446.	4.8	45
53	Development of planar dielectric passive microwave circuits and antennas. , 2016, , .		0
54	Dielectric properties of novel polyurethane-PZT-graphite foam composites. <i>Smart Materials and Structures</i> , 2016, 25, 095039.	3.5	9

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55	Microwave properties of sphere-, flake-, and disc-shaped BaFe ₁₂ O ₁₉ nanoparticle inks for high-frequency applications on printed electronics. <i>Journal of Magnetism and Magnetic Materials</i> , 2016, 419, 218-224.	2.3	8
56	End cap profile optimization of a piezoelectric Cymbal actuator for quasi-static operation by using a genetic algorithm. <i>Journal of Intelligent Material Systems and Structures</i> , 2016, 27, 444-452.	2.5	2
57	The effect of BaTiO ₃ particle shape on complex permittivity of 0.98MgTiO ₃ + 0.02BaTiO ₃ composite powders at GHz frequencies. <i>Materials Research Bulletin</i> , 2016, 76, 300-304.	5.2	5
58	Printable Planar Dielectric Antennas. <i>IEEE Transactions on Antennas and Propagation</i> , 2016, 64, 403-413.	5.1	43
59	Performance of LTCC embedded SiC gas sensors. <i>Procedia Engineering</i> , 2015, 120, 253-256.	1.2	6
60	Flash reduction of inkjet printed graphene oxide on flexible substrates for electronic applications. , 2015, , .		0
61	LTCC, New Packaging Approach for Toxic Gas and Particle Detection. <i>Procedia Engineering</i> , 2015, 120, 484-487.	1.2	2
62	Printable planar dielectric passive microwave components. , 2015, , .		0
63	Improvements and Modifications to Room-Temperature Fabrication Method for Dielectric Li ₂ MoO ₄ Ceramics. <i>Journal of the American Ceramic Society</i> , 2015, 98, 687-689.	3.8	66
64	Electromechanical properties of PZT/P(VDF-TrFE) composite ink printed on a flexible organic substrate. <i>Composites Part B: Engineering</i> , 2015, 80, 217-222.	12.0	24
65	Polymer-ceramic composite filler selection using mixing rules. <i>Journal of Applied Physics</i> , 2015, 117, 064103.	2.5	4
66	Dielectric Properties of Ultra-Low Sintering Temperature Al ₂ O ₃ -BBSZ Glass Composite. <i>Journal of the American Ceramic Society</i> , 2015, 98, 1133-1136.	3.8	35
67	Cobalt Nanoparticle Inks for Printed High Frequency Applications on Polycarbonate. <i>Journal of Electronic Materials</i> , 2015, 44, 4884-4890.	2.2	7
68	Decreasing the relative permittivity of LTCC by porosification with poly(methyl methacrylate) microspheres. <i>Ceramics International</i> , 2015, 41, 10871-10877.	4.8	8
69	Loading efficiency equation for the estimation of dielectric properties of ceramic-polymer composites. <i>Materials Today Communications</i> , 2015, 5, 60-63.	1.9	1
70	Printable Planar Dielectric Waveguides Based on High-Permittivity Films. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2015, 63, 2720-2729.	4.6	9
71	BaTiO ₃ -P(VDF-TrFE) composite ink properties for printed decoupling capacitors. <i>Composites Part B: Engineering</i> , 2015, 70, 201-205.	12.0	18
72	Dielectric BaTiO ₃ -BBSZ glass ceramic composition with ultra-low sintering temperature. <i>Journal of the European Ceramic Society</i> , 2015, 35, 139-144.	5.7	39

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73	ERRATA TO "FORMULATION OF SCREEN PRINTABLE COBALT NANOPARTICLE INK FOR HIGH FREQUENCY APPLICATIONS" BY M. NELO, A. SOWPATI, V. K. PALUKURU, J. JUUTI, AND H. JANTUNEN, IN PROGRESS IN ELECTROMAGNETICS RESEARCH, VOL. 110, 253-266, 2010. Progress in Electromagnetics Research Letters, 2014, 50, 99-100.	0.7	1
74	ERRATA TO "UTILIZATION OF SCREEN PRINTED LOW CURING TEMPERATURE COBALT NANOPARTICLE INK FOR MINIATURIZATION OF PATCH ANTENNAS" BY M. NELO, A. SOWPATI, V. K. PALUKURU, J. JUUTI, AND H. JANTUNEN, IN PROGRESS IN ELECTROMAGNETICS RESEARCH, VOL. 127, 427-444, 2012. Progress in Electromagnetics Research Letters, 2014, 50, 101-102.	0.7	1
75	A co-fired LTCC/PZT monomorph bridge type acceleration sensor. Sensors and Actuators A: Physical, 2014, 216, 370-375.	4.1	18
76	An indirectly coupled open-ended resonator applied to characterize dielectric properties of MgTiO ₃ /CaTiO ₃ powders. Journal of Applied Physics, 2014, 115, .	2.5	14
77	Dielectric Properties of Lithium Molybdate Ceramic Fabricated at Room Temperature. Journal of the American Ceramic Society, 2014, 97, 3378-3379.	3.8	124
78	Combined electrical and electromechanical simulations of a piezoelectric cymbal harvester for energy harvesting from walking. Journal of Intelligent Material Systems and Structures, 2014, 25, 391-400.	2.5	25
79	Characterization of graphene-based inkjet printed samples on flexible substrate for wireless sensing applications. , 2014, , .		7
80	Characterization of laser-sintered thick-film paste on polycarbonate substrates. Optics and Lasers in Engineering, 2014, 56, 19-27.	3.8	4
81	Piezoelectric circular diaphragm with mechanically induced pre-stress for energy harvesting. Smart Materials and Structures, 2014, 23, 085025.	3.5	30
82	Determination of complex permittivity of surfactant treated powders using an open-ended coaxial cavity resonator. Powder Technology, 2014, 256, 140-145.	4.2	8
83	Characterization of ash particles with a microheater and gas-sensitive SiC field-effect transistors. Journal of Sensors and Sensor Systems, 2014, 3, 305-313.	0.9	2
84	Radio Frequency Characteristics of Printed Meander Inductors and Interdigital Capacitors. Japanese Journal of Applied Physics, 2013, 52, 05DC08.	1.5	0
85	Miniaturisation of dual band monopole antennas loaded with screen printed cobalt nanoparticle ink. IET Microwaves, Antennas and Propagation, 2013, 7, 180-186.	1.4	12
86	Preparation of $\text{Li}^{\pm}\text{-MnMoO}_4$ at ultra-low temperature on an organic substrate. Materials Research Bulletin, 2013, 48, 2403-2405.	5.2	6
87	Inkjet-Printed Memristor: Printing Process Development. Japanese Journal of Applied Physics, 2013, 52, 05DB21.	1.5	9
88	Materials for Electronics by Thermal Spraying. Materials Science Forum, 2013, 762, 451-456.	0.3	2
89	Method to characterize dielectric properties of powdery substances. Journal of Applied Physics, 2013, 114, .	2.5	18
90	Use of an open-ended coaxial cavity method to characterize powdery substances exposed to humidity. Applied Physics Letters, 2013, 103, .	3.3	10

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91	A piezoelectric active mirror suspension system embedded into low-temperature cofired ceramic. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2012, 59, 1990-1995.	3.0	3
92	UTILIZATION OF SCREEN PRINTED LOW CURING TEMPERATURE COBALT NANOPARTICLE INK FOR MINIATURIZATION OF PATCH ANTENNAS. Progress in Electromagnetics Research, 2012, 127, 427-444.	4.4	8
93	Energy harvesting with a cymbal type piezoelectric transducer from low frequency compression. Journal of Electroceramics, 2012, 28, 214-219.	2.0	69
94	Piezoelectric active mirror suspension embedded into Low Temperature Co-fired Ceramic. , 2011, , .		1
95	ORGANIC-INORGANIC RF COMPOSITES WITH ENHANCED PERMITTIVITY BY NANOPARTICLE ADDITIONS. Progress in Electromagnetics Research, 2011, 115, 147-157.	4.4	8
96	Synthesis of cobalt nanoparticles to enhance magnetic permeability of metal-polymer composites. Advanced Powder Technology, 2011, 22, 649-656.	4.1	11
97	Non-uniform electric field in poling of structurally graded monolithic piezoactuator. Journal of Electroceramics, 2011, 27, 20-23.	2.0	0
98	High performance thin film PZT ultrasonic transducer by CSD for distance measurements in water. Journal of Electroceramics, 2011, 27, 24-28.	2.0	5
99	Effect of surface modification on dielectric and magnetic properties of metal powder/polymer nanocomposites. Journal of Magnetism and Magnetic Materials, 2011, 323, 2281-2286.	2.3	14
100	Monomorph piezoelectric wideband energy harvester integrated into LTCC. Journal of the European Ceramic Society, 2011, 31, 789-794.	5.7	14
101	Fabrication and properties of composites from BST and polypropylene-graft-poly(styrene-stat-divinylbenzene). Journal of the European Ceramic Society, 2010, 30, 381-384.	5.7	16
102	Modification of the dielectric properties of 0-3 ceramic-polymer composites by introducing surface active agents onto the ceramic filler surface. Composite Structures, 2010, 92, 1052-1058.	5.8	45
103	Layered dielectric-magnetic composite structures for Rf-applications. Composite Structures, 2010, 93, 179-183.	5.8	21
104	Moderate anisotropy in the electrical conductivity of bulk MWCNT/epoxy composites. Carbon, 2010, 48, 1918-1925.	10.3	29
105	Thermoplastic 0-3 Ceramic-Polymer Composites With Adjustable Magnetic and Dielectric Characteristics for Radio Frequency Applications. International Journal of Applied Ceramic Technology, 2010, 7, 452-460.	2.1	13
106	Recent Patents on Piezoelectric Energy Harvester Transducer Structures. Recent Patents on Electrical Engineering, 2010, 3, 19-24.	0.4	1
107	FORMULATION OF SCREEN PRINTABLE COBALT NANOPARTICLE INK FOR HIGH FREQUENCY APPLICATIONS. Progress in Electromagnetics Research, 2010, 110, 253-266.	4.4	24
108	Electrical and electromechanical characteristics of LTCC embedded piezoelectric bulk actuators. Advances in Applied Ceramics, 2010, 109, 135-138.	1.1	11

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109	Multilayer BST-COC Composite with Enhanced High Frequency Dielectric Properties. <i>Ferroelectrics</i> , 2009, 387, 210-215.	0.6	16
110	Characteristics of thin film piezoelectric ultrasonic transducer array by chemical solution deposition. , 2009, , .		0
111	Structurally Graded Monolithic Piezoelectric Actuators, Modeling and Optimization with FEM. <i>Journal of Intelligent Material Systems and Structures</i> , 2009, 20, 759-766.	2.5	4
112	Carbonâ€Nanotubeâ€Based Electrical Brush Contacts. <i>Advanced Materials</i> , 2009, 21, 2054-2058.	21.0	73
113	Piezoelectric unimorph valve assembled on an LTCC substrate. <i>Sensors and Actuators A: Physical</i> , 2009, 149, 315-319.	4.1	27
114	Electromechanical performance of structurally graded monolithic piezoelectric actuator. <i>Journal of Electroceramics</i> , 2009, 22, 156-162.	2.0	8
115	Extrinsic Influences of the Polymer Matrix on Electrical Properties of High Frequency Composites. <i>Ferroelectrics</i> , 2009, 387, 70-76.	0.6	3
116	Displacement characteristics of a monolithic PRESTO actuator with multiple active regions. <i>Sensors and Actuators A: Physical</i> , 2008, 148, 129-133.	4.1	1
117	Micropositioning. , 2008, , 319-340.		2
118	RF properties of BSTâ€PPS composites. <i>Journal of the European Ceramic Society</i> , 2007, 27, 2923-2926.	5.7	43
119	Dielectric properties of BST/polymer composite. <i>Journal of the European Ceramic Society</i> , 2007, 27, 3997-4001.	5.7	129
120	Characteristics of piezoelectric cantilevers embedded in LTCC. <i>Journal of the European Ceramic Society</i> , 2007, 27, 4135-4138.	5.7	15
121	Interface circuit for resistive sensors utilizing digital potentiometers. <i>Sensors and Actuators A: Physical</i> , 2007, 138, 97-104.	4.1	9
122	Manufacturing of prestressed piezoelectric unimorphs using a postfired biasing layer. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2006, 53, 838-846.	3.0	15
123	Mechanically amplified large displacement piezoelectric actuators. <i>Sensors and Actuators A: Physical</i> , 2005, 120, 225-231.	4.1	72
124	Characterization and modelling of 3D piezoelectric ceramic structures with ATILA software. <i>Journal of the European Ceramic Society</i> , 2005, 25, 2467-2470.	5.7	37
125	Poling Conditions of Pre-Stressed Piezoelectric Actuators and Their Displacement. <i>Journal of Electroceramics</i> , 2005, 15, 57-64.	2.0	11
126	Displacement, stiffness and load behaviour of laser-cut RAINBOW actuators. <i>Journal of the European Ceramic Society</i> , 2004, 24, 1901-1904.	5.7	16

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127	LTCC compatible PLZT thick-films for piezoelectric devices. Sensors and Actuators A: Physical, 2004, 110, 361-364.	4.1	14