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	Cellulose Nanofibril Film as a Piezoelectric Sensor Material. ACS Applied Materials & Interfaces, 2016, 8, 15607-15614.	8.0	219
2	Energy Harvesting Research: The Road from Single Source to Multisource. Advanced Materials, 2018, 30, e1707271.	21.0	203
3	Dielectric properties of BST/polymer composite. Journal of the European Ceramic Society, 2007, 27, 3997-4001.	5.7	129
4	Dielectric Properties of Lithium Molybdate Ceramic Fabricated at Room Temperature. Journal of the American Ceramic Society, 2014, 97, 3378-3379.	3.8	124
5	A Game Changer: A Multifunctional Perovskite Exhibiting Giant Ferroelectricity and Narrow Bandgap with Potential Application in a Truly Monolithic Multienergy Harvester or Sensor. Advanced Materials, 2017, 29, 1700767.	21.0	100
6	Ferroelectric, pyroelectric, and piezoelectric properties of a photovoltaic perovskite oxide. Applied Physics Letters, 2017, 110, .	3.3	79
7	Carbonâ€Nanotubeâ€Based Electrical Brush Contacts. Advanced Materials, 2009, 21, 2054-2058.	21.0	73
8	Mechanically amplified large displacement piezoelectric actuators. Sensors and Actuators A: Physical, 2005, 120, 225-231.	4.1	72
9	Energy harvesting with a cymbal type piezoelectric transducer from low frequency compression. Journal of Electroceramics, 2012, 28, 214-219.	2.0	69
10	Improvements and Modifications to Roomâ€Temperature Fabrication Method for Dielectric <scp>Li</scp>₂<scp>MoO</scp>₄ Ceramics. Journal of the American Ceramic Society, 2015, 98, 687-689.	3.8	66
11	Boosting Photovoltaic Output of Ferroelectric Ceramics by Optoelectric Control of Domains. Advanced Materials, 2018, 30, e1803821.	21.0	53
12	Modification of the dielectric properties of 0â€“3 ceramicâ€“polymer composites by introducing surface active agents onto the ceramic filler surface. Composite Structures, 2010, 92, 1052-1058.	5.8	45
13	Room-temperature fabrication of microwave dielectric Li2MoO4â€“TiO2 composite ceramics. Ceramics International, 2016, 42, 11442-11446.	4.8	45
14	Optical Control of Ferroelectric Domains: Nanoscale Insight into Macroscopic Observations. Advanced Optical Materials, 2019, 7, 1800858.	7.3	44
15	RF properties of BSTâ€“PPS composites. Journal of the European Ceramic Society, 2007, 27, 2923-2926.	5.7	43
16	Printable Planar Dielectric Antennas. IEEE Transactions on Antennas and Propagation, 2016, 64, 403-413.	5.1	43
17	Dielectric BaTiO3â€“BBSZ glass ceramic composition with ultra-low sintering temperature. Journal of the European Ceramic Society, 2015, 35, 139-144.	5.7	39
18	Characterization and modelling of 3D piezoelectric ceramic structures with ATILA software. Journal of the European Ceramic Society, 2005, 25, 2467-2470.	5.7	37

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19	Dielectric Properties of Ultraâ€Low Sintering Temperature Al₂O₃â€“<scp>BBSZ</scp> Glass Composite. Journal of the American Ceramic Society, 2015, 98, 1133-1136.	3.8	35
20	The effects of substrate layer thickness on piezoelectric vibration energy harvesting with a bimorph type cantilever. Mechanical Systems and Signal Processing, 2018, 106, 114-118.	8.0	34
21	Hybrid, Multi-Source, and Integrated Energy Harvesters. Frontiers in Materials, 2018, 5, .	2.4	33
22	Roomâ€temperatureâ€densified Li₂MoO₄ ceramic patch antenna and the effect of humidity. International Journal of Applied Ceramic Technology, 2017, 14, 50-55.	2.1	32
23	Li₂MoO₄â€based composite ceramics fabricated from temperatureâ€and atmosphereâ€sensitive MnZn ferrite at room temperature. Journal of the American Ceramic Society, 2017, 100, 3626-3635.	3.8	32
24	Piezoelectric circular diaphragm with mechanically induced pre-stress for energy harvesting. Smart Materials and Structures, 2014, 23, 085025.	3.5	30
25	Ferroelectric Oxides for Solar Energy Conversion, Multiâ€Source Energy Harvesting/Sensing, and Optoâ€Ferroelectric Applications. ChemSusChem, 2019, 12, 2540-2549.	6.8	30
26	Microfluidic Microwave Sensor for Detecting Saline in Biological Range. Sensors, 2019, 19, 819.	3.8	30
27	Moderate anisotropy in the electrical conductivity of bulk MWCNT/epoxy composites. Carbon, 2010, 48, 1918-1925.	10.3	29
28	Piezoelectric unimorph valve assembled on an LTCC substrate. Sensors and Actuators A: Physical, 2009, 149, 315-319.	4.1	27
29	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
30	FORMULATION OF SCREEN PRINTABLE COBALT NANOPARTICLE INK FOR HIGH FREQUENCY APPLICATIONS. Progress in Electromagnetics Research, 2010, 110, 253-266.	4.4	24
31	Electromechanical properties of PZT/P(VDF-TrFE) composite ink printed on a flexible organic substrate. Composites Part B: Engineering, 2015, 80, 217-222.	12.0	24
32	Layered dielectricâ€“magnetic composite structures for Rf-applications. Composite Structures, 2010, 93, 179-183.	5.8	21
33	Fully printed memristors for a self-sustainable recorder of mechanical energy. Flexible and Printed Electronics, 2016, 1, 025002.	2.7	19
34	3D printed dielectric ceramic without a sintering stage. Scientific Reports, 2018, 8, 15955.	3.3	19
35	Upside - down composites: Fabricating piezoceramics at room temperature. Journal of the European Ceramic Society, 2019, 39, 3301-3306.	5.7	19
36	Allâ€Around Universal and Photoelastic Selfâ€Healing Elastomer with High Toughness and Resilience. Advanced Science, 2021, 8, e2103235.	11.2	19

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37	Method to characterize dielectric properties of powdery substances. Journal of Applied Physics, 2013, 114, .	2.5	18
38	A co-fired LTCCâ€“PZT monomorph bridge type acceleration sensor. Sensors and Actuators A: Physical, 2014, 216, 370-375.	4.1	18
39	BaTiO3â€“P(VDF-TrFE) composite ink properties for printed decoupling capacitors. Composites Part B: Engineering, 2015, 70, 201-205.	12.0	18
40	Evaluation of Printed P(VDF-TrFE) Pressure Sensor Signal Quality in Arterial Pulse Wave Measurement. IEEE Sensors Journal, 2019, 19, 11072-11080.	4.7	18
41	Upside-down composites: Electroceramics without sintering. Applied Materials Today, 2019, 15, 83-86.	4.3	18
42	Piezoelectric Flexible LCPâ€“PZT Composites for Sensor Applications at Elevated Temperatures. Electronic Materials Letters, 2018, 14, 113-123.	2.2	17
43	Displacement, stiffness and load behaviour of laser-cut RAINBOW actuators. Journal of the European Ceramic Society, 2004, 24, 1901-1904.	5.7	16
44	Multilayer BST-COC Composite with Enhanced High Frequency Dielectric Properties. Ferroelectrics, 2009, 387, 210-215.	0.6	16
45	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
46	Manufacturing of prestressed piezoelectric unimorphs using a postfired biasing layer. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2006, 53, 838-846.	3.0	15
47	Characteristics of piezoelectric cantilevers embedded in LTCC. Journal of the European Ceramic Society, 2007, 27, 4135-4138.	5.7	15
48	LTCC compatible PLZT thick-films for piezoelectric devices. Sensors and Actuators A: Physical, 2004, 110, 361-364.	4.1	14
49	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
50	Monomorph piezoelectric wideband energy harvester integrated into LTCC. Journal of the European Ceramic Society, 2011, 31, 789-794.	5.7	14
51	An indirectly coupled open-ended resonator applied to characterize dielectric properties of MgTiO3â€“CaTiO3 powders. Journal of Applied Physics, 2014, 115, .	2.5	14
52	Energy Harvesting with a Bimorph Type Piezoelectric Diaphragm Multilayer Structure and Mechanically Induced Preâ€stress. Energy Technology, 2016, 4, 620-624.	3.8	14
53	Sintering behavior and characteristics study of BaTiO3 with 50 wt% of B2O3-Bi2O3-SiO2-ZnO glass. Journal of the European Ceramic Society, 2017, 37, 1495-1500.	5.7	14
54	Thermoplastic 0â€“3 Ceramicâ€“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

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55	Tape casting system for ULTCCs to fabricate multilayer and multimaterial 3D electronic packages with embedded electrodes. Journal of the American Ceramic Society, 2017, 100, 1257-1260.	3.8	13
56	Multi-functional perovskites â€“ an investigation of compositional and processing influence on microstructure, dielectric and ferroelectric properties. European Physical Journal: Special Topics, 2019, 228, 1555-1573.	2.6	13
57	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
58	3D Printed and Photonically Cured Graphene UHF RFID Tags on Textile, Wood, and Cardboard Substrates. International Journal of Antennas and Propagation, 2017, 2017, 1-8.	1.2	12
59	Current Modulation by Optoelectric Control of Ferroelectric Domains. ACS Applied Electronic Materials, 2020, 2, 2829-2836.	4.3	12
60	Poling Conditions of Pre-Stressed Piezoelectric Actuators and Their Displacement. Journal of Electroceramics, 2005, 15, 57-64.	2.0	11
61	Electrical and electromechanical characteristics of LTCC embedded piezoelectric bulk actuators. Advances in Applied Ceramics, 2010, 109, 135-138.	1.1	11
62	Synthesis of cobalt nanoparticles to enhance magnetic permeability of metalâ€“polymer composites. Advanced Powder Technology, 2011, 22, 649-656.	4.1	11
63	Room temperature densified ceramics for weight optimized circular polarized GPS antenna design. Microwave and Optical Technology Letters, 2018, 60, 1061-1066.	1.4	11
64	LTCC Packaged Ring Oscillator Based Sensor for Evaluation of Cell Proliferation. Sensors, 2018, 18, 3346.	3.8	11
65	High performance piezoelectric composite fabricated at ultra low temperature. Composites Part B: Engineering, 2022, 229, 109486.	12.0	11
66	Use of an open-ended coaxial cavity method to characterize powdery substances exposed to humidity. Applied Physics Letters, 2013, 103, .	3.3	10
67	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
68	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
69	Interface circuit for resistive sensors utilizing digital potentiometers. Sensors and Actuators A: Physical, 2007, 138, 97-104.	4.1	9
70	Inkjet-Printed Memristor: Printing Process Development. Japanese Journal of Applied Physics, 2013, 52, 05DB21.	1.5	9
71	Printable Planar Dielectric Waveguides Based on High-Permittivity Films. IEEE Transactions on Microwave Theory and Techniques, 2015, 63, 2720-2729.	4.6	9
72	Dielectric properties of novel polyurethaneâ€“PZTâ€“graphite foam composites. Smart Materials and Structures, 2016, 25, 095039.	3.5	9

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73	Sintering behavior, microstructure and dielectric performance of BaTiO3 with 60â€“65Âwt% addition of B2O3-Bi2O3-SiO2-ZnO glass. Journal of Alloys and Compounds, 2018, 737, 392-397.	5.5	9
74	A Singleâ€Material Multiâ€Source Energy Harvester, Multifunctional Sensor, and Integrated Harvesterâ€“Sensor Systemâ€”Demonstration of Concept. Energy Technology, 2020, 8, 2000461.	3.8	9
75	Visible-Light-Absorbing Potassium Niobate-Titanate-Molybdate Ferroelectrics. Physical Review Applied, 2020, 14, .	3.8	9
76	Electromechanical performance of structurally graded monolithic piezoelectric actuator. Journal of Electroceramics, 2009, 22, 156-162.	2.0	8
77	ORGANIC-INORGANIC RF COMPOSITES WITH ENHANCED PERMITTIVITY BY NANOPARTICLE ADDITIONS. Progress in Electromagnetics Research, 2011, 115, 147-157.	4.4	8
78	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
79	Determination of complex permittivity of surfactant treated powders using an open-ended coaxial cavity resonator. Powder Technology, 2014, 256, 140-145.	4.2	8
80	Decreasing the relative permittivity of LTCC by porosification with poly(methyl methacrylate) microspheres. Ceramics International, 2015, 41, 10871-10877.	4.8	8
81	Microwave properties of sphere-, flake-, and disc-shaped BaFe12O19 nanoparticle inks for high-frequency applications on printed electronics. Journal of Magnetism and Magnetic Materials, 2016, 419, 218-224.	2.3	8
82	Ultra-low permittivity ULTCC composite materials. Applied Physics Letters, 2021, 118, .	3.3	8
83	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
84	Characterization of graphene-based inkjet printed samples on flexible substrate for wireless sensing applications. , 2014, , .		7
85	Cobalt Nanoparticle Inks for Printed High Frequency Applications on Polycarbonate. Journal of Electronic Materials, 2015, 44, 4884-4890.	2.2	7
86	A printable P(VDF-TrFE)-PZT Composite with Very High Piezoelectric Coefficient. Applied Materials Today, 2020, 20, 100696.	4.3	7
87	Preparation of Î±-MnMoO4 at ultra-low temperature on an organic substrate. Materials Research Bulletin, 2013, 48, 2403-2405.	5.2	6
88	Performance of LTCC embedded SiC gas sensors. Procedia Engineering, 2015, 120, 253-256.	1.2	6
89	Novel genetically optimised high-displacement piezoelectric actuator with efficient use of active material. Smart Materials and Structures, 2017, 26, 095022.	3.5	6
90	Solid Airâ€”Low Temperature Manufacturing of Ultra-Low Permittivity Composite Materials for Future Telecommunication Systems. Frontiers in Materials, 2019, 6, .	2.4	6

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91	A Simulation Model for Narrow Band Gap Ferroelectric Materials. Advanced Theory and Simulations, 2020, 3, 2000052.	2.8	6
92	Coalition of Thermoâ€“Optoâ€“Electric Effects in Ferroelectrics for Enhanced Cyclic Multienergy Conversion. Energy Technology, 2020, 8, 2000500.	3.8	6
93	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
94	High performance thin film PZT ultrasonic transducer by CSD for distance measurements in water. Journal of Electroceramics, 2011, 27, 24-28.	2.0	5
95	The effect of BaTiO 3 particle shape on complex permittivity of 0.98MgTiO 3 â€“0.02BaTiO 3 composite powders at GHz frequencies. Materials Research Bulletin, 2016, 76, 300-304.	5.2	5
96	Structurally Graded Monolithic Piezoelectric Actuators, Modeling and Optimization with FEM. Journal of Intelligent Material Systems and Structures, 2009, 20, 759-766.	2.5	4
97	Characterization of laser-sintered thick-film paste on polycarbonate substrates. Optics and Lasers in Engineering, 2014, 56, 19-27.	3.8	4
98	Polymer-ceramic composite filler selection using mixing rules. Journal of Applied Physics, 2015, 117, 064103.	2.5	4
99	Microwave Characterization of Printed Inductors With Ferrimagnetic BaFe₁₂O₁₉Composite Layers. IEEE Transactions on Magnetics, 2017, 53, 1-6.	2.1	4
100	Characterization of PMMA/BaTiO₃ Composite Layers Through Printed Capacitor Structures for Microwave Frequency Applications. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 1736-1743.	4.6	4
101	The effect of titanium excess and deficiency on the microstructure and dielectric properties of lanthanum doped Ba0.55Sr0.45TiO3 with colossal permittivity. Journal of the European Ceramic Society, 2019, 39, 1110-1115.	5.7	4
102	Wood-based composite materials for ultralight lens antennas in 6G systems. Materials Advances, 2022, 3, 1687-1694.	5.4	4
103	Extrinsic Influences of the Polymer Matrix on Electrical Properties of High Frequency Composites. Ferroelectrics, 2009, 387, 70-76.	0.6	3
104	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
105	SiC MOSFET Soot Sensor in a Co-fired LTCC Package. Procedia Engineering, 2016, 168, 27-30.	1.2	3
106	Simulation and validation of temperature-dependent ferroelectric properties of multifunctional BCZT and KNBNNO ceramics. Materials Research Express, 2018, 5, 116305.	1.6	3
107	Materials for Electronics by Thermal Spraying. Materials Science Forum, 2013, 762, 451-456.	0.3	2
108	LTCC, New Packaging Approach for Toxic Gas and Particle Detection. Procedia Engineering, 2015, 120, 484-487.	1.2	2

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109	End cap profile optimization of a piezoelectric Cymbal actuator for quasi-static operation by using a genetic algorithm. Journal of Intelligent Material Systems and Structures, 2016, 27, 444-452.	2.5	2
110	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
111	The impact of lanthanum doping on the microstructure and colossal permittivity in BaxSr(1-x)TiO3. Open Ceramics, 2021, 6, 100120.	2.0	2
112	Micropositioning. , 2008, , 319-340.		2
113	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
114	Enhanced piezoelectric performance of ceramic-polymer composite cantilevers with thin metal substrates. Applied Physics Letters, 2022, 120, 052903.	3.3	2
115	Displacement characteristics of a monolithic PRESTO actuator with multiple active regions. Sensors and Actuators A: Physical, 2008, 148, 129-133.	4.1	1
116	Recent Patents on Piezoelectric Energy Harvester Transducer Structures. Recent Patents on Electrical Engineering, 2010, 3, 19-24.	0.4	1
117	Piezoelectric active mirror suspension embedded into Low Temperature Co-fired Ceramic. , 2011, , .		1
118	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
119	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
120	Loading efficiency equation for the estimation of dielectric properties of ceramicâ€“polymer 0â€“3 composites. Materials Today Communications, 2015, 5, 60-63.	1.9	1
121	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
122	Characteristics of thin film piezoelectric ultrasonic transducer array by chemical solution deposition. , 2009, , .		0
123	Non-uniform electric field in poling of structurally graded monolithic piezoactuator. Journal of Electroceramics, 2011, 27, 20-23.	2.0	0
124	Radio Frequency Characteristics of Printed Meander Inductors and Interdigital Capacitors. Japanese Journal of Applied Physics, 2013, 52, 05DC08.	1.5	0
125	Flash reduction of inkjet printed graphene oxide on flexible substrates for electronic applications. , 2015, , .		0
126	Printable planar dielectric passive microwave components. , 2015, , .		0

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127	Development of planar dielectric passive microwave circuits and antennas. , 2016, , .		0