

Jörg Töpfer

List of Publications by Year in descending order

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109
papers

3,718
citations

126907

33
h-index

144013

57
g-index

110
all docs

110
docs citations

110
times ranked

4034
citing authors

#	ARTICLE	IF	CITATIONS
1	LaMnO ₃ + $\hat{\Gamma}$ Revisited. Journal of Solid State Chemistry, 1997, 130, 117-128.	2.9	418
2	Synthesis and physical characterization of magnetite nanoparticles for biomedical applications. Materials Chemistry and Physics, 2008, 110, 426-433.	4.0	198
3	Transport and Magnetic Properties of the Perovskites La _{1-y} MnO ₃ and LaMn _{1-z} O ₃ . Chemistry of Materials, 1997, 9, 1467-1474.	6.7	146
4	Point defects and cation tracer diffusion in (Cr _x Fe _{1 - x}) ₃ $\hat{\Gamma}$ O ₄ spinels. Solid State Ionics, 1995, 81, 251-266.	2.7	135
5	Hysteresis losses of magnetic nanoparticle powders in the single domain size range. Journal of Magnetism and Magnetic Materials, 2007, 308, 305-312.	2.3	120
6	Cation Valencies and Distribution in the Spinel NiMn ₂ O ₄ and M _z NiMn ₂ $\hat{\Gamma}$ zO ₄ (M = Li, Cu) Studied by XPS. Physica Status Solidi A, 1992, 134, 405-415.	1.7	116
7	Synthesis of magnetite nanoparticles by thermal decomposition of ferrous oxalate dihydrate. Journal of Materials Science, 2008, 43, 5123-5130.	3.7	102
8	Synthesis and magnetic properties of La-substituted M-type Sr hexaferrites. Journal of Magnetism and Magnetic Materials, 2009, 321, 4045-4051.	2.3	98
9	Structural properties of (Bi _{0.5} Na _{0.5}) ₁ $\hat{\Gamma}$ _x Ba _x TiO ₃ lead-free piezoelectric ceramics. Journal of the European Ceramic Society, 2010, 30, 3445-3453.	5.7	90
10	Oxygen stoichiometry and expansion behavior of Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O ₃ $\hat{\Gamma}$. Solid State Ionics, 2010, 181, 64-70.	2.7	85
11	Ni-Cu-Zn Ferrites for low temperature firing: II. Effects of powder morphology and Bi ₂ O ₃ addition on microstructure and permeability. Journal of Electroceramics, 2006, 16, 199-205.	2.0	81
12	Influence of dextran coating on the magnetic behaviour of iron oxide nanoparticles. Journal of Magnetism and Magnetic Materials, 2007, 311, 51-54.	2.3	67
13	Ni-Cu-Zn Ferrites for Low Temperature Firing: I. Ferrite Composition and its Effect on Sintering Behavior and Permeability. Journal of Electroceramics, 2005, 15, 215-221.	2.0	63
14	Evolution of an Oxygen Near-Edge X-ray Absorption Fine Structure Transition in the Upper Hubbard Band in $\hat{\Gamma}$ -Fe ₂ O ₃ upon Electrochemical Oxidation. Journal of Physical Chemistry C, 2011, 115, 5619-5625.	3.1	62
15	Microstructure and Electric Properties of CaCu ₃ Ti ₄ O ₁₂ Multilayer Capacitors. Journal of the American Ceramic Society, 2015, 98, 141-147.	3.8	61
16	Influence of SiO ₂ and CaO additions on the microstructure and magnetic properties of sintered Sr-hexaferrite. Journal of the European Ceramic Society, 2005, 25, 1681-1688.	5.7	60
17	Conductivity data and preparation routes for NiMn ₂ O ₄ thermistor ceramics. Journal of the European Ceramic Society, 1992, 9, 187-191.	5.7	57
18	Nanocrystalline magnetite and Mn $\hat{\Gamma}$ Zn ferrite particles via the polyol process: Synthesis and magnetic properties. Materials Chemistry and Physics, 2011, 129, 337-342.	4.0	56

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19	Reinvestigation of the Fe-rich part of the pseudo-binary system SrO-Fe ₂ O ₃ . Journal of Solid State Chemistry, 2009, 182, 2409-2416.	2.9	50
20	Thermoelectric properties of Ca ₃ Co ₄ O ₉ ceramics prepared by an alternative pressure-less sintering/annealing method. Journal of Alloys and Compounds, 2016, 659, 122-126.	5.5	49
21	High permeability Ni-Cu-Zn ferrites through additive-free low-temperature sintering of nanocrystalline powders. Journal of the European Ceramic Society, 2012, 32, 1091-1098.	5.7	47
22	Preparation and physical properties of the solid solutions Cu _{1+x} Mn _{1-x} O ₂ (). Journal of Solid State Chemistry, 2005, 178, 2751-2758.	2.9	46
23	Synthesis of nanocrystalline Mn-Zn ferrite powders through thermolysis of mixed oxalates. Ceramics International, 2011, 37, 995-1002.	4.8	46
24	Microstructure and phase development in NiMn ₂ O ₄ spinel ceramics during isothermal sintering. Journal of the European Ceramic Society, 1990, 6, 351-359.	5.7	44
25	Nonstoichiometry, point defects and magnetic properties in Sr ₂ FeMoO ₆ double perovskites. Journal of Solid State Chemistry, 2012, 185, 76-81.	2.9	44
26	Effect of sintering conditions on microstructure and dielectric properties of CaCu ₃ Ti ₄ O ₁₂ (CCTO) ceramics. Journal of Electroceramics, 2015, 34, 241-248.	2.0	44
27	Rare-Earth-Substituted Sr _{1-x} Ln _x Fe ₁₂ O ₁₉ Hexagonal Ferrites. Journal of the American Ceramic Society, 2011, 94, 2109-2118.	3.8	42
28	Low-temperature sintering and magnetic properties of Sc- and In-substituted M-type hexagonal barium ferrites for microwave applications. Materials Research Bulletin, 2017, 86, 19-23.	5.2	40
29	NdFeB thick films prepared by tape casting. Journal of Magnetism and Magnetic Materials, 2003, 265, 337-344.	2.3	39
30	On the thermal stability of Co ₂ Z hexagonal ferrites for low-temperature ceramic cofiring technologies. Journal of Magnetism and Magnetic Materials, 2008, 320, 1370-1376.	2.3	36
31	Low temperature sintering of sub-stoichiometric Ni-Cu-Zn ferrites: Shrinkage, microstructure and permeability. Journal of Magnetism and Magnetic Materials, 2012, 324, 578-583.	2.3	36
32	Investigations on electronically conducting oxide systems XXIV[1]: Preparation and electrical properties of the spinel series Cu _z NiMn _{2-z} O ₄ . Solid State Ionics, 1993, 59, 249-256.	2.7	34
33	Soft Ferrite Materials for Multilayer Inductors. International Journal of Applied Ceramic Technology, 2006, 3, 455-462.	2.1	34
34	Highly sinter-active (Mg-Cu)-Zn ferrite nanoparticles prepared by flame spray synthesis. Acta Materialia, 2007, 55, 1955-1964.	7.9	34
35	Nanocrystalline Mn-Zn ferrites from mixed oxalates: Synthesis, stability and magnetic properties. Journal of Alloys and Compounds, 2010, 508, 433-439.	5.5	34
36	Hexagonal ferrites of X-, W-, and M-type in the system Sr-Fe-O: A comparative study. Journal of Solid State Chemistry, 2015, 226, 133-141.	2.9	34

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37	Integration of Ni-Cu-Zn Ferrite in Low Temperature Co-fired Ceramics (<sc>LTCC</sc>) Modules. International Journal of Applied Ceramic Technology, 2012, 9, 18-28.	2.1	32
38	Sintering, microwave properties, and circulator applications of textured Sc-substituted M-type ferrite thick films. Journal of the European Ceramic Society, 2019, 39, 3077-3081.	5.7	32
39	Room Temperature Chemical Oxidation of Delafossite-Type Oxides. Journal of Solid State Chemistry, 1994, 111, 104-110.	2.9	30
40	Magnetic Nanoparticles for Biomedical Heating Applications. Zeitschrift Fur Physikalische Chemie, 2006, 220, 145-151.	2.8	29
41	Zn- and Cu-substituted Co ₂ Y hexagonal ferrites: Sintering behavior and permeability. Journal of Magnetism and Magnetic Materials, 2012, 324, 1804-1808.	2.3	29
42	Sintering and electrical properties of Cu-substituted Zn-Co-Ni-Mn spinel ceramics for NTC thermistors thick films. Journal of the European Ceramic Society, 2022, 42, 2261-2267.	5.7	29
43	Chemical and structural effects on the high-temperature mechanical behavior of (1-x)(Na _{1/2} Bi _{1/2})TiO ₃ -xBaTiO ₃ ceramics. Journal of Applied Physics, 2015, 117, .	2.5	27
44	Structure, nonstoichiometry and magnetic properties of the perovskites Sr _{1-x} Ca _x MnO ₃ . Solid State Sciences, 2004, 6, 647-654.	3.2	26
45	Co/Ti-substituted M-type hexagonal ferrites for high-frequency multilayer inductors. Journal of Magnetism and Magnetic Materials, 2015, 384, 1-5.	2.3	25
46	Investigations on electronically conducting oxide systems XXVI. Preparation and properties of Ni ₆ MnO ₈ and NiMnO ₃ - δ ($\delta \approx 0.02$). Journal of Alloys and Compounds, 1993, 196, 75-79.	5.5	24
47	Microstructural effects in low loss power ferrites. Journal of the European Ceramic Society, 2005, 25, 3045-3049.	5.7	24
48	Evaluation of soft chemistry methods to synthesize Gd-doped CaMnO ₃ with improved thermoelectric properties. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2017, 223, 185-193.	3.5	24
49	Thermopower analysis of substituted nickel manganite spinels. Materials Research Bulletin, 1994, 29, 225-232.	5.2	23
50	Complex additive systems for Mn-Zn ferrites with low power loss. Journal of Applied Physics, 2015, 117, .	2.5	23
51	Integration of CaCu ₃ Ti ₄ O ₁₂ capacitors into LTCC multilayer modules. Journal of the European Ceramic Society, 2015, 35, 3043-3049.	5.7	23
52	Flame pyrolysis: A preparation route for ultrafine powders of metastable SrMnO ₃ and NiMn ₂ O ₄ . Journal of Materials Science Letters, 1994, 13, 1111-1113.	0.5	22
53	Synthesis, sintering behavior and magnetic properties of Cu-substituted Co ₂ Z hexagonal ferrites. Journal of Materials Science: Materials in Electronics, 2011, 22, 467-473.	2.2	21
54	Charge localization and magnetocrystalline anisotropy in La, Pr, and Nd substituted Sr hexaferrites. Physical Review B, 2015, 92, .	3.2	21

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55	A Mössbauer investigation of $\text{Sr}_{1-x}\text{La}_x\text{Fe}_{12}\text{O}_{19}$ ($0 \leq x \leq 1$) M-type hexaferrites. <i>Physica B: Condensed Matter</i> , 2015, 470-471, 33-38.	2.7	21
56	Investigations on the charge transport in LaMnO_3 at low temperatures. <i>Journal of Materials Chemistry</i> , 1996, 6, 1511-1516.	6.7	20
57	Multi-pole magnetization of NdFeB sintered magnets and thick films for magnetic micro-actuators. <i>Sensors and Actuators A: Physical</i> , 2004, 113, 257-263.	4.1	19
58	Thermal decomposition of mixed crystals $\text{Ni}_x\text{Mn}_{3-x}(\text{C}_2\text{O}_4)_3 \cdot 6\text{H}_2\text{O}$. <i>Thermochimica Acta</i> , 1992, 202, 281-289.	2.7	18
59	Mg?Cu?Zn Ferrites for Multilayer Inductors. <i>International Journal of Applied Ceramic Technology</i> , 2007, 4, 415-422.	2.1	18
60	Sintering behavior, microstructure and thermoelectric properties of calcium cobaltite thick films for transversal thermoelectric multilayer generators. <i>Journal of the European Ceramic Society</i> , 2018, 38, 1600-1607.	5.7	18
61	Phase formation, magnetic properties, and phase stability in reducing atmosphere of M-type strontium hexaferrite nanoparticles synthesized via a modified citrate process. <i>Journal of Materials Science</i> , 2019, 54, 1136-1146.	3.7	18
62	Low-Temperature Firing of Substituted M-Type Hexagonal Ferrites for Multilayer Inductors. <i>IEEE Transactions on Magnetics</i> , 2012, 48, 1556-1559.	2.1	17
63	Thermoelectric properties of Gd/W double substituted calcium manganite. <i>Journal of Alloys and Compounds</i> , 2017, 699, 788-795.	5.5	17
64	Phase formation and magnetic properties of $\text{CoFe}_2\text{O}_4/\text{CoFe}_2$ nanocomposites. <i>Materials Chemistry and Physics</i> , 2019, 227, 83-89.	4.0	15
65	Synthesis and properties of lead-free BNT-BT-xCZ ceramics as high-temperature dielectrics. <i>Materials Research Bulletin</i> , 2022, 145, 111560.	5.2	15
66	Integration of additive-free Ni-Cu-Zn ferrite layers into LTCC multilayer modules. <i>Journal of the European Ceramic Society</i> , 2016, 36, 1931-1937.	5.7	14
67	Effect of Carbon Nanotubes on Thermoelectric Properties in $\text{Zn}_{0.98}\text{Al}_{0.02}\text{O}$. <i>Journal of Electronic Materials</i> , 2016, 45, 1459-1463.	2.2	14
68	Preparation, thermal stability and permeability behavior of substituted Z-type hexagonal ferrites for multilayer inductors. <i>Journal of Electroceramics</i> , 2009, 22, 227-232.	2.0	13
69	A Monolithic Oxide-Based Transversal Thermoelectric Energy Harvester. <i>Journal of Electronic Materials</i> , 2016, 45, 1966-1969.	2.2	13
70	LTCC-Modules with Integrated Ferrite Layers—Strategies for Material Development and Co-Sintering. <i>Journal of Microelectronics and Electronic Packaging</i> , 2009, 6, 49-53.	0.7	13
71	Low-Temperature Sintered NTC Thermistor Ceramics for Thick-Film Temperature Sensors. <i>International Journal of Applied Ceramic Technology</i> , 2013, 10, 428-434.	2.1	12
72	Preparation and physical properties of $\text{CuAl}_{1-x}\text{Mn}_x\text{O}_2$ ($0 \leq x \leq 0.2$) delafossites. <i>Solid State Sciences</i> , 2007, 9, 236-239.	3.2	11

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73	Fabrication of a transversal multilayer thermoelectric generator with substituted calcium manganite. Journal of the American Ceramic Society, 2017, 100, 5700-5708.	3.8	11
74	Low pO ₂ sintering and reoxidation of lead-free KNNLT piezoceramic laminates. Journal of the European Ceramic Society, 2021, 41, 344-351.	5.7	11
75	Permanent magnetic thick films from remanence optimized NdFeB-inks. Journal of Materials Science: Materials in Electronics, 2004, 15, 165-168.	2.2	10
76	Multi-pole magnetization of NdFeB magnets for magnetic micro-actuators and its characterization with a magnetic field mapping device. Journal of Magnetism and Magnetic Materials, 2004, 270, 124-129.	2.3	10
77	Point defects and deviation from stoichiometry in (Zn ^x y/4Mn ^{1-x} 3y/4Fe _{2+y}) ¹ /3O ₄ . Journal of the European Ceramic Society, 2004, 24, 603-612.	5.7	10
78	Mixed-metal carbonates as precursors for the synthesis of nanocrystalline Mn-Zn ferrites. Journal of Magnetism and Magnetic Materials, 2010, 322, 3455-3459.	2.3	10
79	Integration of High-Frequency M-Type Hexagonal Ferrite Inductors in <sc>LTCC</sc> Multilayer Modules. International Journal of Applied Ceramic Technology, 2016, 13, 540-548.	2.1	10
80	Electron spin resonance (ESR) of magnetic sublattices in Sc-substituted barium hexaferrite. AIP Advances, 2016, 6, .	1.3	10
81	Phase formation and saturation magnetization of La-Zn-substituted M-type strontium ferrites. Journal of Magnetism and Magnetic Materials, 2020, 508, 166887.	2.3	10
82	Investigations on electronically conducting oxide systems XXV. Electrical and crystallographic studies of the system Li ₂ Cu ^{1-x} zMn ₂ O ₄ . Journal of Alloys and Compounds, 1993, 202, 231-235.	5.5	9
83	Synthesis, doping and electrical bulk response of (Bi _{1/2} Na _{1/2}) _x Ba _{1-x} TiO ₃ + CaO -based ceramics with positive temperature coefficient of resistivity (PTCR). Journal of Alloys and Compounds, 2018, 762, 209-215.	5.5	9
84	Synthesis and magnetic properties of hard/soft SrAl ₂ Fe ₁₀ O ₁₉ /Fe(FeCo ₂) nanocomposites. Journal of Magnetism and Magnetic Materials, 2019, 480, 40-46.	2.3	9
85	Cation distribution in NiMn ₂ O ₄ spinel probed by high temperature thermopower measurements. Journal of Alloys and Compounds, 2021, 865, 158909.	5.5	9
86	Effect of SiO ₂ sintering additive on the positive temperature coefficient of resistivity (PTCR) behavior of (Bi _{1/2} Na _{1/2}) _{0.10} Ba _{0.90} TiO ₃ + CaO ceramics. Materials Research Bulletin, 2017, 89, 217-223.	5.2	8
87	Phase stability and magnetic properties of SrFe ₁₈ O ₂₇ W-type hexagonal ferrite. Journal of the American Ceramic Society, 2020, 103, 324-334.	3.8	8
88	Cofiring of LTCC multilayer assemblies with integrated NTC thermistor temperature sensor layers. Ceramics International, 2021, 47, 27849-27853.	4.8	8
89	Deviation from stoichiometry and point defects in (Zn _x Mn _{1-x} Fe ₂) ¹ /3O ₄ . Solid State Ionics, 2003, 159, 397-404.	2.7	7
90	Phase Formation, Sintering Behavior, and Magnetic Properties of Low-Temperature Fired Mg-Cu-Zn Ferrites. Journal of the American Ceramic Society, 2012, 95, 3883-3888.	3.8	7

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91	Oxide multilayer thermoelectric generators. International Journal of Applied Ceramic Technology, 2018, 15, 716-722.	2.1	7
92	Variation of the oxygen content and point defects in tephroite, Mn ₂ SiO ₄ +Î. Solid State Ionics, 2010, 181, 479-488.	2.7	6
93	Ga-, Y-, and Sc-substituted M-type ferrites for self-biasing circulators in LTCC microwave modules. AIP Advances, 2020, 10, 025315.	1.3	6
94	Effect of oxygen partial pressure on co-firing behavior and magnetic properties of LTCC modules with integrated NiCuZn ferrite layers. Journal of Electroceramics, 2016, 37, 100-109.	2.0	5
95	Niâ€Cuâ€Zn ferrites with high Curie temperature for multilayer inductors with increased operating temperatures. International Journal of Applied Ceramic Technology, 2021, 18, 129-137.	2.1	5
96	Low-temperature sintered Niâ€Znâ€Coâ€Mnâ€O spinel oxide ceramics for multilayer NTC thermistors. Journal of Materials Science: Materials in Electronics, 2021, 32, 10761-10768.	2.2	5
97	Hexavalent (<i>Me</i> â€W/Mo)â€modified (Ba,Ca)TiO₃â€Bi(Mg,<i>Me</i>)O₃ perovskites for highâ€temperature dielectrics. Journal of the American Ceramic Society, 2020, 103, 6881-6892.	3.8	4
98	Transversal Oxide-Metal Thermoelectric Device for Low-Power Energy Harvesting. Energy Harvesting and Systems, 2015, 2, 25-35.	2.7	3
99	Transverse thermoelectric multilayer generator with bismuth-substituted calcium cobaltite: Design optimization through variation of tilt angle. Journal of the European Ceramic Society, 2019, 39, 2923-2929.	5.7	3
100	Multilayer ferrite inductors for the use at high temperatures. Microelectronics International, 2020, 37, 73-78.	0.6	3
101	Structure, properties and cation distribution of spinels of the series Fe ₂ Ni _{1-2z} Mn ₂ O ₄ (0â€½z â€½ 2/3). Journal of Alloys and Compounds, 1994, 215, 97-103.	5.5	2
102	Integration of Ni-Cu-Zn and Hexagonal Ferrites into LTCC Modules: Cofiring Strategies and Magnetic Properties. Funtai Oyobi Fumatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2014, 61, S214-S217.	0.2	1
103	Low-temperature sintering of BaTiO ₃ positive temperature coefficient of resistivity (PTCR) ceramics. Journal of Materials Science: Materials in Electronics, 2018, 29, 17881-17886.	2.2	1
104	Phase Formation, Microstructure and Permeability of Fe-Deficient Ni-Cu-Zn Ferrites, (I): Effect of Sintering Temperature. Magnetochemistry, 2021, 7, 118.	2.4	1
105	A Design Approach for an Integrated Self-Biased Ka-Band Isolator. , 2021, , .		1
106	Large Thermal Expansion LTCC System for Cofiring with Integrated Functional Ceramics Layers. Materials, 2022, 15, 564.	2.9	1
107	Preparation, thermal stability and permeability behaviour of Z-type hexagonal ferrites for multilayer inductors. International Journal of Materials and Product Technology, 2011, 40, 15.	0.2	0
108	Integration Concept for a Self-Biased Ka-Band Circulator. , 2020, , .		0

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109	Tuning of high-temperature dielectric properties in the system $(\text{Bi}_{0.5}\text{Na}_{0.5})\text{TiO}_3\text{-BaTiO}_3\text{-CaZrO}_3$. Ceramics International, 2022, , .	4.8	0