

Satoshi Tanaka

List of Publications by Year in descending order

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108
papers

1,648
citations

257450

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361022

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115
all docs

115
docs citations

115
times ranked

1377
citing authors

#	ARTICLE	IF	CITATIONS
1	Domain coarsening in viscous sintering as a result of topological pore evolution. Journal of the European Ceramic Society, 2022, 42, 729-733.	5.7	5
2	Direct observation of the deformation behavior of agglomerates in a highly concentrated slurry under startup shear flow. Open Ceramics, 2022, 9, 100209.	2.0	2
3	Hardening of $(\text{Ba}_{0.5}\text{Na}_{0.5})_{0.85}\text{Ba}_{0.15}\text{TiO}_3$ lead-free piezoelectric ceramics by adding $(\text{Bi}_{0.5}\text{Na}_{0.5})\text{MnO}_3$. Japanese Journal of Applied Physics, 2022, 61, SG1058.	1.5	4
4	Development of Functional Ceramics by Colloidal Processing in Rotating High Magnetic Field. Funtai Oyobi Fumatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2021, 68, 113-120.	0.2	1
5	Graded evolution of anisotropic microstructure during sintering from crystal-oriented powder compact. International Journal of Applied Ceramic Technology, 2020, 17, 677-684.	2.1	0
6	High-power properties of $(\text{Sr,Ca})_2\text{NaNb}_5\text{O}_{15}$ piezoelectric ceramics in a longitudinal mode. Japanese Journal of Applied Physics, 2020, 59, SKKA07.	1.5	6
7	Fabrication of c-axis oriented hydroxyapatite ceramics in a rotating high magnetic field using photopolymerization. Journal of the European Ceramic Society, 2020, 40, 4332-4339.	5.7	9
8	Preparation and gas permeance of c-axis oriented zeolite membrane using ion-exchanged mordenite zeolite crystals oriented in magnetic field. Journal of the European Ceramic Society, 2020, 40, 5984-5990.	5.7	2
9	Effective oriented direction for enhancement of the piezoelectric properties of crystal-oriented $(\text{Li,Ti})\text{NbO}_3$. Journal of Applied Physics, 2020, 123, 084101.	2.3	14
10	Defect formation and strength reliability during powder compaction and sintering process observed by Synchrotron X-ray CT. The Proceedings of the Materials and Processing Conference, 2020, 2020.28, 307.	0.0	0
11	Fabrication of Crystal-Oriented Bulk Piezoelectric Ceramics by Stereolithography in Magnetic Field. Funtai Oyobi Fumatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2020, 67, 621-628.	0.2	1
12	3D multiscale-imaging of processing-induced defects formed during sintering of hierarchical powder packings. Scientific Reports, 2019, 9, 11595.	3.3	27
13	Determination of sintering stress and bulk viscosity from sinter-forging and X-ray microtomography methods: a Review. Materials Today: Proceedings, 2019, 16, 42-48.	1.8	2
14	High-power properties of crystal-oriented $(\text{Sr,Ca})_2\text{NaNb}_5\text{O}_{15}$ piezoelectric ceramics and their application to ultrasonic motors. Japanese Journal of Applied Physics, 2019, 58, SGGA07.	1.5	9
15	Effects of ammonium molybdate additive and sintering temperature on the properties of foam ceramics based on ceramic tile polishing waste. Journal of the Ceramic Society of Japan, 2019, 127, 318-326.	1.1	4
16	[101]-Oriented $(\text{Li,Na,K})\text{NbO}_3$ ceramics prepared by magnetic field-assisted forming, sintering, and electric poling. Journal of the Ceramic Society of Japan, 2019, 127, 887-892.	1.1	3
17	Evaluation of Macroscopic Mechanical Properties from 3-D Visualization of Microstructure in Sintering. Funtai Oyobi Fumatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2019, 66, 604-610.	0.2	0
18	Influence of binder layer of spray-dried granules on occurrence and evolution of coarse defects in alumina ceramics during sintering. Journal of the European Ceramic Society, 2018, 38, 1846-1852.	5.7	15

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19	Particle Rotation in Colloidal Processing under a Strong Rotating Magnetic Field. <i>Langmuir</i> , 2018, 34, 6462-6469.	3.5	5
20	Influence of tetragonality on crystal orientation induced by a strong magnetic field and on the piezoelectric properties of the $(\text{Bi}_{0.5}\text{Ti}_{0.5})_{1-x}\text{Ba}_x\text{TiO}_3$ system. <i>Journal of the Ceramic Society of Japan</i> , 2018, 126, 655-661.	1.1	5
21	Computation of sintering stress and bulk viscosity from microtomographic images in viscous sintering of glass particles. <i>Journal of the American Ceramic Society</i> , 2017, 100, 867-875.	3.8	20
22	Interface topology for distinguishing stages of sintering. <i>Scientific Reports</i> , 2017, 7, 11106.	3.3	41
23	Evaluation of Macroscopic Mechanical Properties from 3-D Visualization of Microstructure in Sintering. <i>Funtai Oyobi Fumatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy</i> , 2017, 64, 495-500.	0.2	0
24	Effect of Slurry Temperature on Particle Orientation in Magnetic Field Assisted Forming Method. <i>Journal of the Society of Powder Technology, Japan</i> , 2016, 53, 791-796.	0.1	1
25	Complicated Flow Behavior of Silica Particles in Concentrated Slurry. <i>Journal of the Society of Powder Technology, Japan</i> , 2016, 53, 294-300.	0.1	1
26	Influence of granule characteristics on fabrication of translucent alumina ceramics with high strength and reliability. <i>Journal of the Ceramic Society of Japan</i> , 2016, 124, 426-431.	1.1	3
27	Colloidal processing using UV curable resin under high magnetic field for textured ceramics. <i>Journal of the European Ceramic Society</i> , 2016, 36, 2739-2743.	5.7	12
28	Stochastic analysis on ceramic granule collapse in powder compact during cold isostatic pressing. <i>Advanced Powder Technology</i> , 2016, 27, 940-947.	4.1	7
29	Fabrication of Transparent Grain-Oriented Polycrystalline Alumina by Colloidal Processing. <i>Journal of the American Ceramic Society</i> , 2016, 99, 3217-3219.	3.8	18
30	Particle sedimentation monitoring in high-concentration slurries. <i>AIP Advances</i> , 2016, 6, .	1.3	14
31	Coarse pore evolution in dry-pressed alumina ceramics during sintering. <i>Advanced Powder Technology</i> , 2016, 27, 1006-1012.	4.1	31
32	Crystal-oriented $(\text{Bi}_{0.5}\text{Ti}_{0.5})_{1-x}\text{Ba}_x\text{TiO}_3$ ceramics prepared by colloidal processing in rotating high magnetic field. <i>Journal of the Ceramic Society of Japan</i> , 2015, 123, 340-344.	1.1	9
33	Stress Estimation for Multiphase Ceramics Laminates During Sintering. <i>Ceramic Engineering and Science Proceedings</i> , 2015, , 101-106.	0.1	0
34	Observation of Particle Motion in High-Concentration Ceramic Slurries Under Low Shear Rate. <i>Journal of the American Ceramic Society</i> , 2015, 98, 1429-1436.	3.8	5
35	Fabrication of transparent crystal-oriented polycrystalline strontium barium niobate ceramics for electro-optical application. <i>Journal of the European Ceramic Society</i> , 2014, 34, 3723-3728.	5.7	26
36	Elastic Analysis on Homogenization Process in Ceramic Powder Compact during Repeated Cold Isostatic Pressing by Multiple Shell Model. <i>Journal of the Society of Powder Technology, Japan</i> , 2014, 51, 153-162.	0.1	1

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37	Enhancing the contrast of low-density packing regions in images of ceramic powder compacts using a contrast agent for micro-X-ray computed tomography. Journal of the Ceramic Society of Japan, 2014, 122, 574-576.	1.1	6
38	Influence of Aggregates in Al_2O_3 Slurry on Orientation Degree of Powder Compact Fabricated by Magnetic Forming Method. Journal of the American Ceramic Society, 2013, 96, 2411-2418.	3.8	3
39	Thermal anisotropy of epoxy resin-based nano-hybrid films containing BN nanosheets under a rotating superconducting magnetic field. Materials Chemistry and Physics, 2013, 139, 355-359.	4.0	15
40	Controlled Linear Assemblies of Graphite Flakes Anchoring Polysiloxane-Based Nanocomposite Films and Enhancement of Thermal Properties. Japanese Journal of Applied Physics, 2013, 52, 028005.	1.5	0
41	Densely Packed Linear Assemblies of Carbon Nanotube Bundles in Polysiloxane-Based Nanocomposite Films. Journal of Nanomaterials, 2013, 2013, 1-10.	2.7	9
42	Anisotropic sintering behavior of grain-oriented strontium barium niobate ceramics. Journal of the Ceramic Society of Japan, 2013, 121, 411-415.	1.1	5
43	High-Power Piezoelectric Characteristics of C-Axis Crystal-Oriented $(\text{Sr,Ca})_2\text{NaNb}_5\text{O}_{15}$ Ceramics. Japanese Journal of Applied Physics, 2012, 51, 09LD02.	1.5	9
44	Evaluation of dispersability of gamma alumina prepared by homogeneous precipitation. Journal of the Ceramic Society of Japan, 2012, 120, 290-294.	1.1	9
45	Electric-field-assisted fabrication of linearly stretched bundles of microdiamonds in polysiloxane-based composite material. Diamond and Related Materials, 2012, 26, 7-14.	3.9	13
46	Polyepoxide-based nanohybrid films with self-assembled linear assemblies of nanodiamonds. Acta Materialia, 2012, 60, 7249-7257.	7.9	5
47	Quantitative analysis of de-aggregation behavior in alumina suspension by beads milling. Powder Technology, 2012, 217, 619-623.	4.2	4
48	High-Power Piezoelectric Characteristics of <i>c</i> -Axis Crystal-Oriented $(\text{Sr,Ca})_2\text{NaNb}_5\text{O}_{15}$ Ceramics. Japanese Journal of Applied Physics, 2012, 51, 09LD02.	1.5	6
49	Anisotropic sintering of oriented ceramics prepared in a rotating magnetic field. IOP Conference Series: Materials Science and Engineering, 2011, 21, 012008.	0.6	0
50	Fabrication of highly particle-oriented alumina green compact from non-aqueous slurry. Journal of the Ceramic Society of Japan, 2011, 119, 198-202.	1.1	6
51	Compatibility of PVB of Mixed Organic Solvents in Alumina Slurries and its Effect on Morphology of Green Sheets. Journal of the American Ceramic Society, 2011, 94, 2819-2824.	3.8	4
52	Microstructural Evidence of Hall Mobility Anisotropy in <i>c</i> -Axis Textured Al-Doped ZnO. Journal of the American Ceramic Society, 2011, 94, 2339-2343.	3.8	19
53	Epoxy resin-based nanocomposite films with highly oriented BN nanosheets prepared using a nanosecond-pulse electric field. Materials Letters, 2011, 65, 2426-2428.	2.6	28
54	Self-assemblies of linearly aligned diamond fillers in polysiloxane/diamond composite films with enhanced thermal conductivity. Composites Science and Technology, 2011, 72, 112-118.	7.8	49

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55	Facile orientation of unmodified BN nanosheets in polysiloxane/BN composite films using a high magnetic field. <i>Journal of Materials Science</i> , 2011, 46, 2318-2323.	3.7	27
56	Modification of BN nanosheets and their thermal conducting properties in nanocomposite film with polysiloxane according to the orientation of BN. <i>Composites Science and Technology</i> , 2011, 71, 1046-1052.	7.8	105
57	Formation and Structural Characteristic of Perpendicularly Aligned Boron Nitride Nanosheet Bridges in Polymer/Boron Nitride Composite Film and Its Thermal Conductivity. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 01BJ05.	1.5	8
58	Linear Assemblies of BN Nanosheets, Fabricated in Polymer/BN Nanosheet Composite Film. <i>Journal of Nanomaterials</i> , 2011, 2011, 1-7.	2.7	30
59	Formation and Structural Characteristic of Perpendicularly Aligned Boron Nitride Nanosheet Bridges in Polymer/Boron Nitride Composite Film and Its Thermal Conductivity. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 01BJ05.	1.5	4
60	Orientation distribution-Logtering factor relationship in a polycrystalline material-as an example of bismuth titanate prepared by a magnetic field. <i>Journal of the Ceramic Society of Japan</i> , 2010, 118, 921-926.	1.1	84
61	Fabrication of c-axis-oriented potassium strontium niobate (K ₂ Sr ₂ Nb ₅ O ₁₅) ceramics by a rotating magnetic field and electrical property. <i>Journal of the Ceramic Society of Japan</i> , 2010, 118, 722-725.	1.1	18
62	Facile preparation of a polysiloxane-based hybrid composite with highly-oriented boron nitride nanosheets and an unmodified surface. <i>Composites Science and Technology</i> , 2010, 70, 1681-1686.	7.8	59
63	Strength-Processing Defects Relationship Based on Micrographic Analysis and Fracture Mechanics in Alumina Ceramics. <i>Journal of the American Ceramic Society</i> , 2009, 92, 688-693.	3.8	34
64	c-axis oriented ZnO formed in a rotating magnetic field with various rotation speeds. <i>Journal of the European Ceramic Society</i> , 2009, 29, 955-959.	5.7	25
65	Effect of polyacrylic acid (PAA) binder system on particle orientation during dry-pressing. <i>Powder Technology</i> , 2009, 196, 133-138.	4.2	8
66	Fabrication of crystal-oriented barium-bismuth titanate ceramics in high magnetic field and subsequent reaction sintering. <i>Science and Technology of Advanced Materials</i> , 2009, 10, 014602.	6.1	16
67	Estimation of Weibull modulus from coarser defect distribution in dry-pressed alumina ceramics. <i>Journal of the Ceramic Society of Japan</i> , 2009, 117, 742-747.	1.1	14
68	The effect of packing structure of powder particles on warping during sintering. <i>Journal of the European Ceramic Society</i> , 2008, 28, 21-25.	5.7	10
69	Evolution of Discontinuity in Particle Orientation in Ceramic Tape Casting. <i>Journal of the American Ceramic Society</i> , 2008, 91, 3181-3184.	3.8	9
70	Effect of Segregation of a Polyacrylic Acid (PAA) Binder on the Green Strength of Dry-Pressed Alumina Compacts. <i>Journal of the American Ceramic Society</i> , 2008, 91, 3896-3902.	3.8	8
71	C-axis-Oriented (Sr,Ca) ₂ NaNb ₅ O ₁₅ Multilayer Piezoelectric Ceramics Fabricated Using High-Magnetic-Field Method. <i>Japanese Journal of Applied Physics</i> , 2008, 47, 7693.	1.5	22
72	Zinc Oxide Ceramics with High Mobility as n-Type Thermoelectric Materials. <i>Materials Science Forum</i> , 2007, 561-565, 581-586.	0.3	1

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73	Fabrication of <i>c</i> -axis oriented higher manganese silicide by a high-magnetic-field and its thermoelectric properties. Journal of Materials Research, 2007, 22, 2917-2923.	2.6	19
74	Development of Packing Structure of Powder Particles in Tape Casting. Journal of the Ceramic Society of Japan, 2007, 115, 136-140.	1.3	7
75	Particle Oriented Strontium Bismuth Titanate Ceramics Prepared by Using High Magnetic Field and Subsequent Reaction Sintering. Journal of the Ceramic Society of Japan, 2007, 115, 237-240.	1.3	20
76	Orientation dependence of transport property and microstructural characterization of Al-doped ZnO ceramics. Acta Materialia, 2007, 55, 4753-4757.	7.9	49
77	A quantitative evaluation method for particle orientation structure in alumina powder compacts. Journal of the European Ceramic Society, 2007, 27, 3399-3406.	5.7	17
78	Packing Structure of Particles in a Green Compact and Its Influence on Sintering Deformation. Journal of the American Ceramic Society, 2007, 90, 3717-3719.	3.8	12
79	C-Axis Orientation of $\text{KSr}_2\text{Nb}_5\text{O}_{15}$ Using a Rotating Magnetic Field. Journal of the American Ceramic Society, 2007, 90, 3503-3506.	3.8	39
80	Effect of internal binder on microstructure in compacts made from granules. Journal of the European Ceramic Society, 2007, 27, 873-877.	5.7	28
81	Fabrication of <i>c</i> -axis Oriented $\text{Zn}_{0.98}\text{Al}_{0.02}\text{O}$ by a High-Magnetic-Field via Gelcasting and its Thermoelectric Properties. Journal of the Ceramic Society of Japan, 2006, 114, 1085-1088.	1.3	34
82	Design of Packing Structures through Direct Characterization of Ceramics Green Bodies. Journal of the Ceramic Society of Japan, 2006, 114, 141-146.	1.3	6
83	Effect of Organic Binder Segregation on Sintered Strength of Dry-Pressed Alumina. Journal of the American Ceramic Society, 2006, 89, 1903-1907.	3.8	31
84	Observation of the granule packing structure using a confocal laser-scanning microscope. Journal of the European Ceramic Society, 2006, 26, 683-687.	5.7	4
85	Crystal-Oriented La-Substituted $\text{Sr}_2\text{NaNb}_5\text{O}_{15}$ Ceramics Fabricated Using High-Magnetic-Field Method. Japanese Journal of Applied Physics, 2006, 45, 7460-7464.	1.5	23
86	Improvement of Second-Order Optical Nonlinearity in Transparent $\text{Ba}_2\text{TiGe}_2\text{O}_8$ Crystallized Glasses Prepared in High Magnetic Field. Advanced Materials Research, 2006, 11-12, 193-196.	0.3	1
87	Preparation and Thermoelectric Property of Highly Oriented Al-Doped ZnO Ceramics by a High Magnetic Field. Japanese Journal of Applied Physics, 2006, 45, L1212-L1214.	1.5	30
88	Fabrication of <i>c</i> -axis oriented polycrystalline ZnO by using a rotating magnetic field and following sintering. Journal of Materials Research, 2006, 21, 703-707.	2.6	62
89	Evaluation of Bubble Content in Aqueous Alumina Slurries. Journal of the Ceramic Society of Japan, 2005, 113, 449-451.	1.3	2
90	Characterization of Internal Structure of a Green Body Made by Dry-Pressing. Key Engineering Materials, 2004, 264-268, 189-192.	0.4	2

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91	Crystal-Oriented Bi ₄ Ti ₃ O ₁₂ Ceramics Fabricated by High-Magnetic-Field Method. Japanese Journal of Applied Physics, 2004, 43, 6645-6648.	1.5	36
92	Infrared Microscopy as a Powerful Tool for the Examination of Internal Microstructure of Nano-Powder Compact-Yttria Stabilized Zirconia as a Model-. Journal of the Ceramic Society of Japan, 2004, 112, 114-116.	1.3	5
93	Particle Orientation Distribution in Alumina Compact Body Prepared by the Slip Casting Method. Journal of the Ceramic Society of Japan, 2004, 112, 276-279.	1.3	18
94	Influence of Dehydration Rate on the Degree of Particle Orientation in Alumina Green Body Made by Slip Casting. Journal of the Ceramic Society of Japan, 2004, 112, 641-645.	1.3	4
95	Direct observation of aggregates and agglomerates in alumina granules. Powder Technology, 2003, 129, 153-155.	4.2	16
96	Morphological Change of Large Pores in Alumina Ceramics in the Final Stage of Densification. Journal of the Ceramic Society of Japan, 2003, 111, 525-527.	1.3	6
97	Particle Oriented Bismuth Titanate Ceramics Made in High Magnetic Field. Journal of the Ceramic Society of Japan, 2003, 111, 702-704.	1.3	72
98	Grain Oriented Microstructure Made in High Magnetic Field. Key Engineering Materials, 2002, 206-213, 445-448.	0.4	24
99	New characterization method for pore and packing structure in powder compacts using confocal laser scanning microscope. Journal of Electron Microscopy, 2002, 51, 215-223.	0.9	1
100	Effect of Cold Isostatic Pressing on Microstructure and Shrinkage Anisotropy during Sintering of Uniaxially Pressed Alumina Compacts.. Journal of the Ceramic Society of Japan, 2002, 110, 264-269.	1.3	15
101	Sintering deformation caused by particle orientation in uniaxially and isostatically pressed alumina compacts. Journal of the European Ceramic Society, 2002, 22, 311-316.	5.7	43
102	Kinetics of property change associated with atmospheric humidity changes in alumina powder granules with PVA binder. Journal of the European Ceramic Society, 2002, 22, 2835-2840.	5.7	20
103	Fractography for Alumina Ceramics Using a Confocal Scanning Laser Microscope.. Journal of the Ceramic Society of Japan, 2001, 109, 1055-1056.	1.3	1
104	Infrared Microscopy for Examination of Structure in Spray-Dried Granules and Compacts. Journal of the American Ceramic Society, 2001, 84, 254-256.	3.8	18
105	Direct Evidence for Low-Density Regions in Compacted Spray-Dried Powders. Journal of the American Ceramic Society, 2001, 84, 2454-2456.	3.8	14
106	Piezoelectric Properties of c -Axis-Oriented (Sr,Ca) ₂ NaNb ₅ O ₁₅ Piezoelectric Ceramics with Single-Plate Type and Multilayered Type Fabricated Using Crystal-Oriented Sheet Forming. Key Engineering Materials, 0, 421-422, 21-25.	0.4	3
107	Linear Assembly of Oxidized Surface Treated Nanodiamonds in Polymer-Based Nanohybrids by Electric Field Inducement. Materials Science Forum, 0, 761, 107-111.	0.3	0
108	Anisotropic Properties of Al Doped ZnO Ceramics Fabricated by the High Magnetic Field. , 0, , 113-120.		0