

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	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
2	Orientation distribution-Lotgering 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
3	Particle Oriented Bismuth Titanate Ceramics Made in High Magnetic Field. <i>Journal of the Ceramic Society of Japan</i> , 2003, 111, 702-704.	1.3	72
4	Fabrication of c-axis oriented polycrystalline ZnO by using a rotating magnetic field and following sintering. <i>Journal of Materials Research</i> , 2006, 21, 703-707.	2.6	62
5	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
6	Orientation dependence of transport property and microstructural characterization of Al-doped ZnO ceramics. <i>Acta Materialia</i> , 2007, 55, 4753-4757.	7.9	49
7	Self-assemblies of linearly aligned diamond fillers in polysiloxane/diamond composite films with enhanced thermal conductivity. <i>Composites Science and Technology</i> , 2011, 72, 112-118.	7.8	49
8	Sintering deformation caused by particle orientation in uniaxially and isostatically pressed alumina compacts. <i>Journal of the European Ceramic Society</i> , 2002, 22, 311-316.	5.7	43
9	Interface topology for distinguishing stages of sintering. <i>Scientific Reports</i> , 2017, 7, 11106.	3.3	41
10	C-Axis Orientation of K ₂ Sr ₂ Nb ₅ O ₁₅ Using a Rotating Magnetic Field. <i>Journal of the American Ceramic Society</i> , 2007, 90, 3503-3506.	3.8	39
11	Crystal-Oriented Bi ₄ Ti ₃ O ₁₂ Ceramics Fabricated by High-Magnetic-Field Method. <i>Japanese Journal of Applied Physics</i> , 2004, 43, 6645-6648.	1.5	36
12	Fabrication of c-axis Oriented Zn _{0.98} Al _{0.02} O by a High-Magnetic-Field via Gelcasting and its Thermoelectric Properties. <i>Journal of the Ceramic Society of Japan</i> , 2006, 114, 1085-1088.	1.3	34
13	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
14	Effect of Organic Binder Segregation on Sintered Strength of Dry-Pressed Alumina. <i>Journal of the American Ceramic Society</i> , 2006, 89, 1903-1907.	3.8	31
15	Coarse pore evolution in dry-pressed alumina ceramics during sintering. <i>Advanced Powder Technology</i> , 2016, 27, 1006-1012.	4.1	31
16	Preparation and Thermoelectric Property of Highly Oriented Al-Doped ZnO Ceramics by a High Magnetic Field. <i>Japanese Journal of Applied Physics</i> , 2006, 45, L1212-L1214.	1.5	30
17	Linear Assemblies of BN Nanosheets, Fabricated in Polymer/BN Nanosheet Composite Film. <i>Journal of Nanomaterials</i> , 2011, 2011, 1-7.	2.7	30
18	Effect of internal binder on microstructure in compacts made from granules. <i>Journal of the European Ceramic Society</i> , 2007, 27, 873-877.	5.7	28

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19	Epoxy resin-based nanocomposite films with highly oriented BN nanosheets prepared using a nanosecond-pulse electric field. <i>Materials Letters</i> , 2011, 65, 2426-2428.	2.6	28
20	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
21	3D multiscale-imaging of processing-induced defects formed during sintering of hierarchical powder packings. <i>Scientific Reports</i> , 2019, 9, 11595.	3.3	27
22	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
23	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
24	Grain Oriented Microstructure Made in High Magnetic Field. <i>Key Engineering Materials</i> , 2002, 206-213, 445-448.	0.4	24
25	Crystal-Oriented La-Substituted Sr ₂ NaNb ₅ O ₁₅ Ceramics Fabricated Using High-Magnetic-Field Method. <i>Japanese Journal of Applied Physics</i> , 2006, 45, 7460-7464.	1.5	23
26	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
27	Kinetics of property change associated with atmospheric humidity changes in alumina powder granules with PVA binder. <i>Journal of the European Ceramic Society</i> , 2002, 22, 2835-2840.	5.7	20
28	Particle Oriented Strontium Bismuth Titanate Ceramics Prepared by Using High Magnetic Field and Subsequent Reaction Sintering. <i>Journal of the Ceramic Society of Japan</i> , 2007, 115, 237-240.	1.3	20
29	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
30	Fabrication of <i>c</i> -axis oriented higher manganese silicide by a high-magnetic-field and its thermoelectric properties. <i>Journal of Materials Research</i> , 2007, 22, 2917-2923.	2.6	19
31	Microstructural Evidence of Hall Mobility Anisotropy in <i>c</i> -Axis Textured Al-Doped ZnO. <i>Journal of the American Ceramic Society</i> , 2011, 94, 2339-2343.	3.8	19
32	Infrared Microscopy for Examination of Structure in Spray-Dried Granules and Compacts. <i>Journal of the American Ceramic Society</i> , 2001, 84, 254-256.	3.8	18
33	Particle Orientation Distribution in Alumina Compact Body Prepared by the Slip Casting Method. <i>Journal of the Ceramic Society of Japan</i> , 2004, 112, 276-279.	1.3	18
34	Fabrication of <i>c</i> -axis-oriented potassium strontium niobate (KSr 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
35	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
36	A quantitative evaluation method for particle orientation structure in alumina powder compacts. <i>Journal of the European Ceramic Society</i> , 2007, 27, 3399-3406.	5.7	17

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37	Direct observation of aggregates and agglomerates in alumina granules. Powder Technology, 2003, 129, 153-155.	4.2	16
38	Fabrication of crystal-oriented barium-bismuth titanate ceramics in high magnetic field and subsequent reaction sintering. Science and Technology of Advanced Materials, 2009, 10, 014602.	6.1	16
39	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
40	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
41	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
42	Direct Evidence for Low-Density Regions in Compacted Spray-Dried Powders. Journal of the American Ceramic Society, 2001, 84, 2454-2456.	3.8	14
43	Estimation of Weibull modulus from coarser defect distribution in dry-pressed alumina ceramics. Journal of the Ceramic Society of Japan, 2009, 117, 742-747.	1.1	14
44	Particle sedimentation monitoring in high-concentration slurries. AIP Advances, 2016, 6, .	1.3	14
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	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
47	Colloidal processing using UV curable resin under high magnetic field for textured ceramics. Journal of the European Ceramic Society, 2016, 36, 2739-2743.	5.7	12
48	The effect of packing structure of powder particles on warping during sintering. Journal of the European Ceramic Society, 2008, 28, 21-25.	5.7	10
49	Evolution of Discontinuity in Particle Orientation in Ceramic Tape Casting. Journal of the American Ceramic Society, 2008, 91, 3181-3184.	3.8	9
50	High-Power Piezoelectric Characteristics of C-Axis Crystal-Oriented (Sr,Ca) ₂ NaNb ₅ O ₁₅ Ceramics. Japanese Journal of Applied Physics, 2012, 51, 09LD02.	1.5	9
51	Evaluation of dispersability of gamma alumina prepared by homogeneous precipitation. Journal of the Ceramic Society of Japan, 2012, 120, 290-294.	1.1	9
52	Densely Packed Linear Assemblies of Carbon Nanotube Bundles in Polysiloxane-Based Nanocomposite Films. Journal of Nanomaterials, 2013, 2013, 1-10.	2.7	9
53	Crystal-oriented (Bi _{0.5}) _{Tj} ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 112 Td (Na _{0.5}) _{alt} ceramics prepared by colloidal processing in rotating high magnetic field. Journal of the Ceramic Society of Japan, 2015, 123, 340-344.	1.1	9
54	High-power properties of crystal-oriented (Sr,Ca) ₂ NaNb ₅ O ₁₅ piezoelectric ceramics and their application to ultrasonic motors. Japanese Journal of Applied Physics, 2019, 58, SGG A07.	1.5	9

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55	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
56	Effect of Segregation of a Polyacrylic Acid (PAA) Binder on the Green Strength of Dry-Pressed Alumina Compacts. Journal of the American Ceramic Society, 2008, 91, 3896-3902.	3.8	8
57	Effect of polyacrylic acid (PAA) binder system on particle orientation during dry-pressing. Powder Technology, 2009, 196, 133-138.	4.2	8
58	Formation and Structural Characteristic of Perpendicularly Aligned Boron Nitride Nanosheet Bridges in Polymer/Boron Nitride Composite Film and Its Thermal Conductivity. Japanese Journal of Applied Physics, 2011, 50, 01BJ05.	1.5	8
59	Development of Packing Structure of Powder Particles in Tape Casting. Journal of the Ceramic Society of Japan, 2007, 115, 136-140.	1.3	7
60	Stochastic analysis on ceramic granule collapse in powder compact during cold isostatic pressing. Advanced Powder Technology, 2016, 27, 940-947.	4.1	7
61	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
62	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
63	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
64	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
65	High-power properties of (Sr,Ca) ₂ NaNb ₅ O ₁₅ piezoelectric ceramics in a longitudinal mode. Japanese Journal of Applied Physics, 2020, 59, SKKA07.	1.5	6
66	High-Power Piezoelectric Characteristics of c-Axis Crystal-Oriented (Sr,Ca) ₂ NaNb ₅ O ₁₅ Ceramics. Japanese Journal of Applied Physics, 2012, 51, 09LD02.	1.5	6
67	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
68	Polyepoxide-based nanohybrid films with self-assembled linear assemblies of nanodiamonds. Acta Materialia, 2012, 60, 7249-7257.	7.9	5
69	Anisotropic sintering behavior of grain-oriented strontium barium niobate ceramics. Journal of the Ceramic Society of Japan, 2013, 121, 411-415.	1.1	5
70	Observation of Particle Motion in High-Concentration Ceramic Slurries Under Low Shear Rate. Journal of the American Ceramic Society, 2015, 98, 1429-1436.	3.8	5
71	Particle Rotation in Colloidal Processing under a Strong Rotating Magnetic Field. Langmuir, 2018, 34, 6462-6469.	3.5	5
72	Influence of tetragonality on crystal orientation induced by a strong magnetic field and on the piezoelectric properties of the (Bi _{0.5}) _{1-x} Ti _x QqO _{0.0rgBT} /Overlock 10 Tf 50 62 Td (Na _{0.5}) _{1-x} system. Journal of the Ceramic Society of Japan, 2018, 126, 655-661.	1.1	5

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73	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
74	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
75	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
76	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
77	Quantitative analysis of de-aggregation behavior in alumina suspension by beads milling. Powder Technology, 2012, 217, 619-623.	4.2	4
78	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
79	Formation and Structural Characteristic of Perpendicularly Aligned Boron Nitride Nanosheet Bridges in Polymer/Boron Nitride Composite Film and Its Thermal Conductivity. Japanese Journal of Applied Physics, 2011, 50, 01BJ05.	1.5	4
80	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
81	Piezoelectric Properties of c -Axis-Oriented $(\text{Sr,Ca})_{2}\text{NaNb}_5\text{O}_{15}$ 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
82	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
83	Influence of granule characteristics on fabrication of translucent alumina ceramics with high strength and reliability. Journal of the Ceramic Society of Japan, 2016, 124, 426-431.	1.1	3
84	[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
85	Characterization of Internal Structure of a Green Body Made by Dry-Pressing. Key Engineering Materials, 2004, 264-268, 189-192.	0.4	2
86	Evaluation of Bubble Content in Aqueous Alumina Slurries. Journal of the Ceramic Society of Japan, 2005, 113, 449-451.	1.3	2
87	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
88	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
89	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
90	Fractography for Alumina Ceramics Using a Confocal Scanning Laser Microscope.. Journal of the Ceramic Society of Japan, 2001, 109, 1055-1056.	1.3	1

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91	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
92	Improvement of Second-Order Optical Nonlinearity in Transparent Ba ₂ TiGe ₂ O ₈ Crystallized Glasses Prepared in High Magnetic Field. Advanced Materials Research, 2006, 11-12, 193-196.	0.3	1
93	Zinc Oxide Ceramics with High Mobility as n-Type Thermoelectric Materials. Materials Science Forum, 2007, 561-565, 581-586.	0.3	1
94	Elastic Analysis on Homogenization Process in Ceramic Powder Compact during Repeated Cold Isostatic Pressing by Multiple Shell Model. Journal of the Society of Powder Technology, Japan, 2014, 51, 153-162.	0.1	1
95	Effect of Slurry Temperature on Particle Orientation in Magnetic Field Assisted Forming Method. Journal of the Society of Powder Technology, Japan, 2016, 53, 791-796.	0.1	1
96	Complicated Flow Behavior of Silica Particles in Concentrated Slurry. Journal of the Society of Powder Technology, Japan, 2016, 53, 294-300.	0.1	1
97	Effective oriented direction for enhancement of the piezoelectric properties of crystal-oriented (Li, Tj) ETQq1 1 0.784314 rgBT ₁ / Overlock 2.3	0.23	1
98	Development of Functional Ceramics by Colloidal Processing in Rotating High Magnetic Field. Funtai Oyobi Fummatu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2021, 68, 113-120.	0.2	1
99	Fabrication of Crystal-Oriented Bulk Piezoelectric Ceramics by Stereolithography in Magnetic Field. Funtai Oyobi Fummatu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2020, 67, 621-628.	0.2	1
100	Anisotropic sintering of oriented ceramics prepared in a rotating magnetic field. IOP Conference Series: Materials Science and Engineering, 2011, 21, 012008.	0.6	0
101	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
102	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
103	Stress Estimation for Multiphase Ceramics Laminates During Sintering. Ceramic Engineering and Science Proceedings, 2015, , 101-106.	0.1	0
104	Evaluation of Macroscopic Mechanical Properties from 3-D Visualization of Microstructure in Sintering. Funtai Oyobi Fummatu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2017, 64, 495-500.	0.2	0
105	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
106	Anisotropic Properties of Al Doped ZnO Ceramics Fabricated by the High Magnetic Field. , 0, , 113-120.		0
107	Evaluation of Macroscopic Mechanical Properties from 3-D Visualization of Microstructure in Sintering. Funtai Oyobi Fummatu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2019, 66, 604-610.	0.2	0
108	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