

# Ken Hirota

## List of Publications by Year in descending order

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71  
papers

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471509

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all docs

72  
docs citations

72  
times ranked

934  
citing authors

#	ARTICLE	IF	CITATIONS
1	Formation of Zirconia Solid Solutions Containing Alumina Prepared by New Preparation Method. Journal of the American Ceramic Society, 1994, 77, 1391-1395.	3.8	79
2	Fabrication, Mechanical Properties, and Electrical Conductivity of Co <sub>3</sub> O <sub>4</sub> Ceramics. Journal of the American Ceramic Society, 1997, 80, 267-268.	3.8	78
3	Thermal expansion and mechanical properties of phenolic resin/ZrW <sub>2</sub> O <sub>8</sub> composites. Journal of Applied Polymer Science, 2007, 106, 3343-3347.	2.6	66
4	Hot Isostatic Pressing and Characterization of Sol-Gel-Derived Chromium(III) Oxide. Journal of the American Ceramic Society, 1995, 78, 2271-2273.	3.8	54
5	Formation and Sintering of TiO <sub>2</sub> (Anatase) Solid Solution in the System TiO <sub>2</sub> -SiO <sub>2</sub> . Journal of the American Ceramic Society, 1997, 80, 2749-2753.	3.8	51
6	Characterization and Sintering of Reactive Cerium(IV) Oxide Powders Prepared by the Hydrazine Method. Journal of the American Ceramic Society, 1997, 80, 3221-3224.	3.8	39
7	Fabrication of carbon nanofiber(CNF)-dispersed Al <sub>2</sub> O <sub>3</sub> composites by pulsed electric-current pressure sintering and their mechanical and electrical properties. Journal of Materials Science, 2007, 42, 4792-4800.	3.7	36
8	Crystal Structure of Zirconia Prepared with Alumina by Coprecipitation. Journal of the American Ceramic Society, 2002, 85, 721-723.	3.8	32
9	Hot Isostatic Pressing of Chromium Nitrides (Cr <sub>2</sub> N and CrN) Prepared by Self-Propagating High-Temperature Synthesis. Journal of the American Ceramic Society, 2001, 84, 2120-2122.	3.8	27
10	Mechanical Properties of Hot Isostatically Pressed Zirconia-Toughened Alumina Ceramics Prepared from Coprecipitated Powders. Journal of the American Ceramic Society, 1993, 76, 2677-2680.	3.8	26
11	The Study on Carbon Nanofiber (CNF)-Dispersed B <sub>4</sub> C Composites. International Journal of Applied Ceramic Technology, 2009, 6, 607-616.	2.1	25
12	Fabrication of (Ca <sub>1-x</sub> La <sub>x</sub> )MnO <sub>3</sub> Ceramics with a High Relative Density and their Power Factor. Journal of the American Ceramic Society, 2010, 93, 3009-3011.	3.8	24
13	Formation, Characterization, and Hot Isostatic Pressing of Cr <sub>2</sub> O <sub>3</sub> -Doped ZrO <sub>2</sub> (0,3 mol% Y <sub>2</sub> O <sub>3</sub> ) Prepared by Hydrazine Method. Journal of the American Ceramic Society, 1996, 79, 171-176.	3.8	21
14	Fabrication and Mechanical Properties of Titanium Boride Ceramics. Journal of the American Ceramic Society, 1999, 82, 1627-1628.	3.8	21
15	Formation and Sintering of Yttria-Doped Tetragonal Zirconia with 50 mol% Alumina Prepared by the Hydrazine Method. Journal of the American Ceramic Society, 1994, 77, 1694-1696.	3.8	20
16	Novel Synthesis of Mullite Powder with High Surface Area. Journal of the American Ceramic Society, 1998, 81, 1537-1540.	3.8	20
17	Formation of Alumina/Zirconia (3 mol% Yttria) Composite Powders Prepared by the Hydrazine Methods. Journal of the American Ceramic Society, 1994, 77, 2207-2208.	3.8	17
18	Hot Isostatic Pressing of Reactive SnO <sub>2</sub> Powder. Journal of the American Ceramic Society, 1999, 82, 216-218.	3.8	17

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19	Low-temperature Sintering of Mullite/Yttria-Doped Zirconia Composites in the Mullite-Rich Region. Journal of the American Ceramic Society, 1998, 81, 1050-1052.	3.8	14
20	Formation and sintering of 8 mol % Y <sub>2</sub> O <sub>3</sub> -substituted La <sub>2</sub> Zr <sub>2</sub> O <sub>7</sub> by the hydrazine method. Journal of Materials Science Letters, 1997, 17, 199-201.	0.5	12
21	Hole Doping Effects on Spin-gapped Na <sub>2</sub> Cu <sub>2</sub> TeO <sub>6</sub> via Topochemical Na Deficiency. Journal of the Physical Society of Japan, 2006, 75, 083709.	1.6	12
22	Solid solutions of metastable tetragonal ZrO <sub>2</sub> and Ce <sub>3</sub> ZrO <sub>8</sub> in the system ZrO <sub>2</sub> -CeO <sub>2</sub> . Journal of Materials Science, 1996, 31, 4945-4949.	3.7	11
23	Toughening and Strengthening of NiAl with Al <sub>2</sub> O <sub>3</sub> by the Addition of ZrO <sub>2</sub> (3Y). Journal of the American Ceramic Society, 2000, 83, 1311-1313.	3.8	11
24	Crystal structure and methane oxidation on perovskite-type (La <sub>1-x</sub> Nd <sub>x</sub> )CoO <sub>3</sub> synthesized using citric acid. Journal of Materials Science, 2009, 44, 5732-5736.	3.7	11
25	Co-precipitation of tapioca starch and hydroxyapatite. Effects of phosphorylation of starch on mechanical properties of the composites. Results in Materials, 2019, 3, 100035.	1.8	11
26	Preparation of pure and fully dense lanthanum nickelates La <sub>n+1</sub> Ni <sub>n</sub> O <sub>3n+1</sub> (n = 2, 3) by post-sintering oxidation process. Journal of the American Ceramic Society, 2019, 102, 7077-7088.	3.8	11
27	Formation of PbZrO <sub>3</sub> by Transformation of Cubic ZrO <sub>2</sub> Solid Solution. Journal of the American Ceramic Society, 1995, 78, 3163-3164.	3.8	10
28	Methane Oxidation on Perovskite-Type Ca(Mn <sub>1-x</sub> Ti <sub>x</sub> )O <sub>3</sub> . Journal of the American Ceramic Society, 2008, 91, 308-310.	3.8	10
29	Crystallisation of hydroxyapatite in phosphorylated poly(vinyl alcohol) as a synthetic route to tough mechanical hybrid materials. Materials Science and Engineering C, 2017, 70, 487-493.	7.3	10
30	Nonbrittle Nanocomposite Materials Prepared by Coprecipitation of TEMPO-Oxidized Cellulose Nanofibers and Hydroxyapatite. ACS Sustainable Chemistry and Engineering, 2021, 9, 158-167.	6.7	9
31	Title is missing!. Journal of Materials Synthesis and Processing, 1999, 7, 107-111.	0.3	8
32	Mechanical Properties of CoAl Materials with the Combined Additions of ZrO <sub>2</sub> and Al <sub>2</sub> O <sub>3</sub> . Journal of the American Ceramic Society, 2001, 84, 2445-2447.	3.8	8
33	Title is missing!. Journal of Materials Science, 1997, 32, 583-587.	3.7	7
34	Processing and Mechanical Behavior of CrN/ZrO <sub>2</sub> (2Y) Composites. Journal of the American Ceramic Society, 2000, 83, 448-450.	3.8	7
35	Phase Separation and Collection of Annular Flow by Phase Transformation. Analytical Sciences, 2019, 35, 1279-1282.	1.6	7
36	Formation and Characterization of Ce <sub>3</sub> ZrO <sub>8</sub> Prepared by the Hydrazine Method. Journal of the American Ceramic Society, 1995, 78, 1414-1416.	3.8	5

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37	Preparation of ZnO Powders with Strong Antibacterial Activity under Dark Conditions. Funtai Oyobi Fummtsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2018, 65, 316-324.	0.2	5
38	Consecutive Sample Injection Analysis in Tube Radial Distribution Chromatography. Analytical Sciences, 2021, 37, 1373-1377.	1.6	5
39	In Situ Crystallization of Hydroxyapatite on Carboxymethyl Cellulose as a Biomimetic Approach to Biomass-Derived Composite Materials. ACS Omega, 2022, 7, 12127-12137.	3.5	5
40	Enhanced toughness of hydroxyapatite/poly(ethylene terephthalate) composites by immersion in water. Materials Advances, 2021, 2, 5691-5703.	5.4	4
41	Effects of Hydration on Mechanical Properties of Acylated Hydroxyapatite/Starch Composites. ACS Applied Polymer Materials, 2022, 4, 1666-1674.	4.4	4
42	Development of Tube Radial Distribution Chromatography Based on Phase-Separation Multiphase Flow Created via Pressure Loss. Analytical Sciences, 2019, 35, 803-806.	1.6	3
43	Title is missing!. Journal of Materials Science Letters, 1999, 18, 497-499.	0.5	2
44	Fabrication and Mechanical Properties of Continuously Graded MoSi <sub>2</sub> /ZrO <sub>2</sub> (2Y) Materials Using Wet Molding. Journal of the American Ceramic Society, 1997, 80, 2168-2170.	3.8	2
45	Synthesis of perovskite-type (La <sub>1-x</sub> Cax)CoO <sub>3</sub> at low temperature using ethylene glycol and citric acid. Journal of Materials Science, 2006, 41, 7978-7982.	3.7	2
46	Fabrication of Full-Density Mg-Ferrite/Fe-Ni Permalloy Nanocomposites with a High-Saturation Magnetization Density of 1 T. International Journal of Applied Ceramic Technology, 2012, 9, 1085-1097.	2.1	2
47	Fabrication of perovskite-type Ba(Sn <sub>1-x</sub> Tax)O <sub>3</sub> ceramics and their power factors. Journal of Materials Science, 2015, 50, 476-481.	3.7	2
48	Fabrication of B <sub>4</sub> C/TiB <sub>2</sub> Composite Ceramics Using Pulsed Electric Current Pressure Sintering. Funtai Oyobi Fummtsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2017, 64, 538-546.	0.2	2
49	Experimental validation of high electrical conductivity in Ni-rich LaNi <sub>1-x</sub> Fe <sub>x</sub> O <sub>3</sub> solid solutions (x=0.4) in high-temperature oxidizing atmospheres. Materials Advances, 2021, 2, 3257-3263.	5.4	2
50	Separation of Dansyl-DL-Amino Acids Through Tube Radial Distribution Chromatography by Using a Commercially Available HPLC System with a Capillary Tube Manufactured for GC as a Separation Column. Chromatography, 2021, 42, 67-71.	1.7	2
51	Dependence of Antibacterial Activity of ZnO Powders on Their Physico-chemical Properties. Funtai Oyobi Fummtsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2019, 66, 434-441.	0.2	2
52	Simultaneous Synthesis and Sintering of Ti-Al(N) (O) Tj ETQqO O O rgBT /Overlock 10 Ceramic Society, 2004, 87, 2042-2046.	3.8	1
53	Fabrication of Al-Added TiN Materials by the Combination of Double Self-Propagating High-Temperature Synthesis and Pulsed Electric-Current Pressure Sintering. International Journal of Applied Ceramic Technology, 2007, 4, 175-183.	2.1	1
54	Fabrication of Full-Density Mg-Ferrite/Fe-Ni Permalloy Nanocomposites with a High-Saturation Magnetization Density of 1 T. International Journal of Applied Ceramic Technology, 2011, 9, n/a-n/a.	2.1	1

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55	Simultaneous Synthesis and Densification of $\text{ZrO}_2$ -Zr (N) by Self Propagating Combustion under Nitrogen Pressure. International Journal of the Society of Materials Engineering for Resources, 1999, 7, 188-194.	0.1	1
56	Characterization and Sintering of Alkoxy-Derived Vanadium Pentaoxide.. International Journal of the Society of Materials Engineering for Resources, 1997, 5, 9-14.	0.1	1
57	Additive Manufacturing of Ceramics Using a Fused Deposition Modeling (FDM)-Type 3D Printer and Their Microwave Sintering and HIP Treatment. Funtai Oyobi Fummatsumu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2020, 67, 431-440.	0.2	1
58	Preparation of $\text{B}_2\text{O}_3$ -site Mn-doped Spinel $\text{Fe}(\text{Al}_{1-x}\text{Mn}_x)_2\text{O}_4$ (0 $\leq$ x $\leq$ 0.9) Ferrite Powders using a Modified Citric Acid Route. Funtai Oyobi Fummatsumu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2017, 64, 383-391.	0.2	0
59	Strongly-Correlated Electron Behavior and Metal-Insulator Crossover in Ru-Based Oxides with Pyrochlore-Type Structure. Zairyo/Journal of the Society of Materials Science, Japan, 2018, 67, 545-550.	0.2	0
60	Fabrication of Diamond/SiC Composites Using HIP from Mixtures of Diamond and Si Powders. Funtai Oyobi Fummatsumu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2019, 66, 37-45.	0.2	0
61	Fabrication of High Density Soft Magnetic Fe-3mass%Si/ferrite Composites with a High Saturation Magnetization Density of 1.5 T. Funtai Oyobi Fummatsumu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2021, 68, 356-366.	0.2	0
62	Fabrication of Structural Materials by the Combination of Self-Propagating High-Temperature Synthesis(SHS) and High-Pressure Technology.. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 2000, 10, 319-325.	0.0	0
63	Hot Isostatic Pressing of Composite Powder in the System $\text{ZrO}_2$ - $\text{WSi}_2$ . Part 2. Electrical and Mechanical Properties of $\text{ZrO}_2$ (2mol% $\text{Y}_2\text{O}_3$ )/ $\text{WSi}_2$ Composites in the $\text{ZrO}_2$ Rich Region and Their Laminated Materials.. Journal of the Society of Materials Engineering for Resources of Japan, 1995, 8, 36-41.	0.2	0
64	Hot Isostatic Pressing of Composite Powder in the System $\text{ZrO}_2$ - $\text{WSi}_2$ . Part 1. Microstructure and Mechanical Properties of $\text{ZrO}_2$ (2mol% $\text{Y}_2\text{O}_3$ )-Reinforced $\text{WSi}_2$ Composites.. Journal of the Society of Materials Engineering for Resources of Japan, 1995, 8, 30-35.	0.2	0
65	IMPROVEMENT OF MAGNETIC AND ELECTRIC PROPERTIES OF LOW-TEMPERATURE SINTERING Mn-Zn FERRITE BY ADDING $\text{B}_2\text{O}_3$ . Zairyo/Journal of the Society of Materials Science, Japan, 1996, 45, 275-276.	0.2	0
66	Microstructure, Mechanical Properties, and Ionic Conductivity of $\text{ZrO}_2$ -based Ceramics Fabricated by Hot Isostic Pressing.. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 1996, 5, 257-264.	0.0	0
67	FORMATION AND CHARACTERIZATION OF STOICHIOMETRIC MULLITE ( $3\text{Al}_2\text{O}_3 \cdot 2\text{SiO}_2$ ) PREPARED BY THE HYDRAZINE METHOD. Zairyo/Journal of the Society of Materials Science, Japan, 1997, 46, 258-259.	0.2	0
68	Simultaneous Synthesis and Sintering of Dense $\text{B}_4\text{C}$ /CNF Composites using a Pulsed Electric-Current Pressure Sintering and Evaluation of Their Thermal Properties. , 0, , 279-291.		0
69	Metal-insulator Crossover in Pb-Ru Based Oxides with Pyrochlore-type Structure. Funtai Oyobi Fummatsumu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2018, 65, 249-254.	0.2	0
70	Fabrication of Dense $\text{TiB}_2$ /[ $\text{ZrO}_2$ - $\text{Al}_2\text{O}_3$ ] Composites with Both High Hardness ( $\approx 20$ GPa) and Fracture Toughness ( $\approx 12 \text{ MPa}\cdot\text{m}^{1/2}$ ) Simultaneously by Pulsed Electric-current Pressure Sintering. Funtai Oyobi Fummatsumu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2019, 66, 339-348.	0.2	0
71	Fabrication of Dense $\text{ZrO}_2$ - $\text{Al}_2\text{O}_3$ Ceramics by Pressure-less Sintering Using Neutralization Co-Precipitated Powders with Cellulose Nano-Fiber. Funtai Oyobi Fummatsumu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2020, 67, 381-390.	0.2	0