

# Hisayuki Suematsu

## List of Publications by Year in descending order

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papers

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516710

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112  
docs citations

112  
times ranked

645  
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#	ARTICLE	IF	CITATIONS
1	Nanosize Powders of Aluminum Nitride Synthesized by Pulsed Wire Discharge. Journal of the American Ceramic Society, 2003, 86, 420-424.	3.8	59
2	Field-Induced Orientation of Hexagonal Boron Nitride Nanosheets Using Microscopic Mold for Thermal Interface Materials. Journal of the American Ceramic Society, 2012, 95, 369-373.	3.8	48
3	Enhancement of Nitridation in Synthesis of Aluminum Nitride Nanosize Powders by Pulsed Wire Discharge. Japanese Journal of Applied Physics, 2003, 42, 1763-1765.	1.5	43
4	Synthesis, Ferroelectric and Electrooptic Properties of Transparent Crystallized Glasses with $\text{SrBa}_2\text{Nb}_2\text{O}_6$ Nanocrystals. Journal of the American Ceramic Society, 2009, 92, 2924-2930.	3.8	39
5	Particle Size Controllability of Ambient Gas Species for Copper Nanoparticles Prepared by Pulsed Wire Discharge. Japanese Journal of Applied Physics, 2008, 47, 3726.	1.5	35
6	Particle Size Distribution of Copper Nanosized Powders Prepared by Pulsed Wire Discharge. IEEJ Transactions on Fundamentals and Materials, 2005, 125, 39-44.	0.2	34
7	Thermoelectric properties of boron-carbide thin film and thin film based thermoelectric device fabricated by intense-pulsed ion beam evaporation. Science and Technology of Advanced Materials, 2005, 6, 181-184.	6.1	34
8	Facile orientation of unmodified BN nanosheets in polysiloxane/BN composite films using a high magnetic field. Journal of Materials Science, 2011, 46, 2318-2323.	3.7	27
9	Synthesis of $\text{TiO}_2$ Nanosized Powder by Pulsed Wire Discharge. Japanese Journal of Applied Physics, 2008, 47, 760.	1.5	26
10	Self-healing behavior and strength recovery of ytterbium disilicate ceramic reinforced with silicon carbide nanofillers. Journal of the European Ceramic Society, 2019, 39, 3139-3152.	5.7	26
11	Low thermal conductivity $\text{Y}_2\text{Ti}_2\text{O}_7$ as a candidate material for thermal/environmental barrier coatings. Ceramics International, 2016, 42, 11314-11323.	4.8	25
12	Anisotropic alignment of non-modified BN nanosheets in polysiloxane matrix under nano pulse width electricity. Journal of the Ceramic Society of Japan, 2010, 118, 66-69.	1.1	24
13	Strength improvement and purification of $\text{Yb}_2\text{Si}_2\text{O}_7$ nanocomposites by surface oxidation treatment. Journal of the American Ceramic Society, 2017, 100, 3122-3131.	3.8	18
14	Particle Size Distribution of $\text{SnO}_2$ Nano-Particles Synthesized by Pulsed Wire Discharge. Journal of the Ceramic Society of Japan, 2004, 112, 355-362.	1.3	17
15	Particle Size Determining Equation in Metallic Nanopowder Preparation by Pulsed Wire Discharge. Japanese Journal of Applied Physics, 2013, 52, 055001.	1.5	17
16	Controlling Oxygen Content by Varying Oxygen Partial Pressure in Chromium Oxynitride Thin Films Prepared by Pulsed Laser Deposition. Materials Transactions, 2013, 54, 1140-1144.	1.2	17
17	Preparation of titanium nanopowders covered with organics by pulsed wire discharge. Scripta Materialia, 2010, 63, 937-940.	5.2	15
18	Synthesis of molten-metal corrosion resistant yttria-based refractory by hot-pressing and densification. Journal of the European Ceramic Society, 2015, 35, 2651-2662.	5.7	15

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19	Self-healing ability and strength recovery in ytterbium disilicate/silicon carbide nanocomposites. <i>International Journal of Applied Ceramic Technology</i> , 2019, 16, 39-49.	2.1	15
20	Synthesis of Aluminum Nitride Nanopowder with Particle Size Less than 10 nm by Pulsed Wire Discharge in Nitrogen Gas. <i>Japanese Journal of Applied Physics</i> , 2010, 49, 116201.	1.5	12
21	Epitaxial Growth of Chromium Oxynitride Thin Films on Magnesium Oxide (100) Substrates and Their Oxidation Behavior. <i>Materials Transactions</i> , 2013, 54, 1957-1961.	1.2	12
22	Improving self-healing ability and flexural strength of ytterbium silicate-based nanocomposites with silicon carbide nanoparticulates and whiskers. <i>Journal of the Ceramic Society of Japan</i> , 2021, 129, 209-216.	1.1	12
23	Investigation on Surface Condition of the Corona-Aged Silicone Rubber Nanocomposite Adopting Wavelet and LIBS Technique. <i>IEEE Transactions on Plasma Science</i> , 2021, 49, 2294-2304.	1.3	12
24	Dye-sensitized solar cells using purified squid ink nanoparticles coated on TiO <sub>2</sub> /nanotubes/nanoparticles. <i>Journal of the Ceramic Society of Japan</i> , 2013, 121, 123-127.	1.1	11
25	Oxidation of nanodiamonds and modulation of their assembly in polymer-based nanohybrids by field-inducement. <i>Journal of Materials Science</i> , 2013, 48, 4151-4162.	3.7	10
26	Measurement of metal vapor cooling speed during nanoparticle formation by pulsed wire discharge. <i>Transactions of Nonferrous Metals Society of China</i> , 2009, 19, s183-s188.	4.2	9
27	Two-step heating in the formation of nanosized alumina particles by a pulsed wire discharge method. <i>Scripta Materialia</i> , 2011, 64, 110-113.	5.2	9
28	Preparation of palladium nanoparticles and a grain-size determining equation of pulsed wire discharge in N <sub>2</sub> , Ar, and He ambient gasses. <i>Japanese Journal of Applied Physics</i> , 2015, 54, 045002.	1.5	9
29	Formation of tungsten carbide nanoparticles by wire explosion process. <i>International Journal of Applied Ceramic Technology</i> , 2020, 17, 304-310.	2.1	9
30	Increase in Phase Transition Temperature of Activated Alumina with Nano-Zirconia Synthesized by Pulsed Wire Discharge. <i>Journal of the American Ceramic Society</i> , 2003, 86, 1522-1526.	3.8	8
31	Synthesis of molybdenum carbide nanoparticles using pulsed wire discharge in mixed atmosphere of kerosene and argon. <i>Journal of the American Ceramic Society</i> , 2019, 102, 7108-7115.	3.8	8
32	Recycling of a Healing Agent by a Water Vapor Treatment to Enhance the Self-Repair Ability of Ytterbium Silicate-Based Nanocomposite in Multiple Crack-Healing Test. <i>Advanced Engineering Materials</i> , 2020, 22, 2000157.	3.5	8
33	Oxidation Resistance of Cr-N-O Thin Films Prepared by Pulsed Laser Deposition. <i>IEEJ Transactions on Fundamentals and Materials</i> , 2004, 124, 496-500.	0.2	8
34	Synthesis of HfMoO <sub>3</sub> whiskers by the thermal evaporation method with flowing oxygen gas. <i>Journal of the American Ceramic Society</i> , 2022, 105, 1622-1628.	3.8	8
35	Synthesis of Light-emitting Silicon Nanoparticles by Intense Pulsed ion-beam Evaporation. <i>Journal of Nanoparticle Research</i> , 2005, 7, 669-673.	1.9	7
36	Characterization of ZrN, ZrO <sub>2</sub> and Zr <sub>7</sub> O <sub>11</sub> N <sub>2</sub> nanoparticles synthesized by pulsed wire discharge. <i>Journal of the American Ceramic Society</i> , 2017, 100, 4884-4892.	3.8	6

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37	Synthesis of $\text{MoO}_3$ nanowhiskers from core/shell molybdenum/molybdenum oxide wire by pulsed wire discharge. International Journal of Applied Ceramic Technology, 2021, 18, 889-901.	2.1	6
38	Effect of Wire Diameter on Particle Size of Metal Nanosized Powder Prepared by Pulsed Wire Discharge. Funtai Oyobi Fummtsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2008, 55, 192-197.	0.2	6
39	Synthesis and High Temperature Thermoelectric Properties of Alkaline-Earth Metal Hexaborides $\text{MB}_6$ (M=Ca, Sr, Ba). Materials Research Society Symposia Proceedings, 2003, 793, 20.	0.1	5
40	Generation of $\text{Sr}_2\text{Ca}_{(n-1)}\text{Cu}_n\text{O}_y$ phases ( $n=5-7$ ) by high pressure synthesis. Journal of Applied Physics, 2013, 114, 193903.	2.5	5
41	Epitaxial growth of chromium nitride thin films with addition of silicon. Physica Status Solidi C: Current Topics in Solid State Physics, 2015, 12, 545-548.	0.8	5
42	Texture-controlled hybrid materials fabricated using nanosecond technology. Journal of the Ceramic Society of Japan, 2016, 124, 197-202.	1.1	5
43	Characterization of CrN-Based Hard Coating Materials with Addition of GaN. Materials Transactions, 2018, 59, 1574-1577.	1.2	5
44	Synthesis of metastable monoclinic beta molybdenum trioxide nanoparticles by pulsed wire discharge. Japanese Journal of Applied Physics, 2020, 59, SCCC02.	1.5	5
45	Pore-forming process in dehydration of metakaolin-based geopolymer. International Journal of Ceramic Engineering & Science, 2021, 3, 211-216.	1.2	5
46	Novel Method to Synthesize Nanosized $\text{ZnFe}_2\text{O}_4$ Powders. Journal of the Ceramic Society of Japan, 2005, 113, 663-665.	1.3	4
47	Fabrication of the finestructured alumina materials with nanoimprint method. Journal of the Ceramic Society of Japan, 2009, 117, 534-536.	1.1	4
48	Fine-structured ZnO patterns with sub-micrometer on the ceramic surface fabricated by a replication method. Journal of the Ceramic Society of Japan, 2010, 118, 1140-1143.	1.1	4
49	Phase Control of $\text{Fe}$ Nanoparticles Prepared by Pulsed Wire Discharge. Japanese Journal of Applied Physics, 2011, 50, 01BJ06.	1.5	4
50	Synthesis of ferromagnetic nickel ferrite nanofibers via electrospinning with iron acetate as an iron precursor. Metals and Materials International, 2012, 18, 505-508.	3.4	4
51	Synthesis of $\text{C}_x\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_z$ Superconductor from $\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_y$ Precursor. Japanese Journal of Applied Physics, 2013, 52, 073101.	1.5	4
52	Size reduction of submicron magnesium particles prepared by pulsed wire discharge. Japanese Journal of Applied Physics, 2018, 57, 02CC04.	1.5	4
53	Preparation of potassium and metakaolin based geopolymer foam with millimeter sized open pores for hydrogen recombining catalyst supports. Journal of the Ceramic Society of Japan, 2020, 128, 96-100.	1.1	4
54	Synthesis of $\text{Al}_2\text{O}_3$ Nanosized Powder by Pulsed Wire Discharge Using Gas Puff. Funtai Oyobi Fummtsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2007, 54, 180-185.	0.2	4

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55	Titanium Nitride and Yttrium Titanate Nanocomposites, Endowed with Renewable Self-Healing Ability. <i>Advanced Materials Interfaces</i> , 2021, 8, 2100979.	3.7	4
56	Nanosized Powder Synthesis by Pulsed Wire Discharge in High-Speed Gas Flow. <i>IEEJ Transactions on Fundamentals and Materials</i> , 2005, 125, 727-732.	0.2	3
57	Formation of thick cubic boron nitride films in noble gases. <i>Journal of the Ceramic Society of Japan</i> , 2010, 118, 164-166.	1.1	3
58	Synthesis of $C_xSr_2Ca_{n-1}Cu_nO_z$ superconductors using high-pressure-synthesized $Sr_2Ca_{n-1}Cu_nO_y$ precursors ( $n=2, 4$ ). <i>Japanese Journal of Applied Physics</i> , 2014, 53, 02BC06.	1.5	3
59	Nanotwin hardening in a cubic chromium oxide thin film. <i>APL Materials</i> , 2015, 3, 096105.	5.1	3
60	Superconducting water derivatives of $Sr_2Ca_{n-1}Cu_nO_{2+2n-1}$ ( $n=2, 4$ ) high- $T_c$ superconductors. <i>Materials Chemistry and Physics</i> , 2016, 177, 67-72.	4.0	3
61	Synthesis of zirconium carbide nanosized powders by pulsed wire discharge in oleic acid. <i>Journal of the Korean Physical Society</i> , 2016, 68, 345-350.	0.7	3
62	Preparation of Mg Submicron Particles by Pulsed Wire Discharge. <i>Journal of the Society of Powder Technology, Japan</i> , 2017, 54, 514-518.	0.1	3
63	Color centers in NaCl single crystals induced by pulsed intense relativistic electron beams to simulate radiation bursts in Europa. <i>Japanese Journal of Applied Physics</i> , 2019, 58, 046003.	1.5	3
64	Nanosecond pulse used to enhance the electrocoagulation of municipal wastewater treatment with low specific energy consumption. <i>Environmental Technology (United Kingdom)</i> , 2021, 42, 2154-2162.	2.2	3
65	Nanoparticle synthesis of transition-metal borides by pulsed discharge of compacted powder. <i>Journal of the American Ceramic Society</i> , 2021, 104, 4351-4367.	3.8	3
66	Synthesis of $Sn-Bi-Cu$ Intermetallic Compound Nanoparticles by Pulsed Wire Discharge of $Sn-Bi$ and $Cu$ Wires. <i>Journal of Nanoscience and Nanotechnology</i> , 2017, 17, 7714-7718.	0.9	3
67	Modification of Graphite Surface by Intense Pulsed Ion-beam Irradiation. <i>IEEJ Transactions on Fundamentals and Materials</i> , 2004, 124, 47-51.	0.2	2
68	Determination of Submicrometer Particle Content in Copper Powder Prepared by Pulsed Wire Discharge. <i>Japanese Journal of Applied Physics</i> , 2008, 47, 605-608.	1.5	2
69	High-speed camera analysis for nanoparticles produced by using a pulsed wire-discharge method. <i>Journal of the Korean Physical Society</i> , 2016, 69, 36-39.	0.7	2
70	Role of voltage and gas in determining the mean diameter in $Sn-Bi$ intermetallic compound nanoparticles for pulsed wire discharge. <i>Metals and Materials International</i> , 2016, 22, 319-323.	3.4	2
71	Understanding the impact of space charge variations with UV- and water-cured epoxy alumina nanocomposites adopting pulsed electroacoustic techniques. <i>Micro and Nano Letters</i> , 2020, 15, 1059-1064.	1.3	2
72	Preparation of TiFe thin Films by Pulsed Ion Beam Evaporation. <i>Materials Research Society Symposia Proceedings</i> , 2001, 697, 5171.	0.1	1

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73	Blue Light Emission from Ultrafine Nanosized Powder of Silicon Produced by Intense Pulsed Ion-Beam Evaporation. Japanese Journal of Applied Physics, 2005, 44, L92-L94.	1.5	1
74	High-pressure synthesis and superconducting properties of Sr <sub>2</sub> (Ca <sub>1-x</sub> Sr <sub>x</sub> )Cu <sub>2</sub> O <sub>y</sub> (x= 0~0.75). Japanese Journal of Applied Physics, 2016, 55, 02BC16.	1.5	1
75	Enhanced magnetic irreversibility characteristics by expansion of blocking block for Sr <sub>2</sub> Ca <sub>2</sub> Cu <sub>3</sub> O <sub>8</sub> T <sub>high-T<sub>c</sub></sub> superconductor. Japanese Journal of Applied Physics, 2017, 56, 083101.	1.5	1
76	Comparison between Nanosecond Pulse and Direct Current Electrocoagulation for Textile Wastewater Treatment. Journal of Water and Environment Technology, 2020, 18, 147-156.	0.7	1
77	Preparation of iron nanosized powder by pulsed wire discharge. Japanese Journal of Applied Physics, 0, , .	1.5	1
78	Hydration process of $\text{H}^{2-}\text{MoO}_3$ powder prepared by pulsed wire discharge method. Japanese Journal of Applied Physics, 2022, 61, SB1018.	1.5	1
79	Preparation of Hf-Si-O Thin Films by Simultaneous Deposition and Reaction Process using Pulsed Ion-Beam Evaporation. IEEJ Transactions on Fundamentals and Materials, 2004, 124, 255-259.	0.2	1
80	Preparation of Mg Nanoparticles by Pulsed Wire Discharge in Mineral Oil. Nanoscience and Nanotechnology Letters, 2018, 10, 858-861.	0.4	1
81	Constituent Phases of Nanosized Alumina Powders Synthesized by Pulsed Wire Discharge. Ceramic Engineering and Science Proceedings, 0, , 89-98.	0.1	1
82	Thermoelectric Properties of B <sub>12</sub> +x <sub>3</sub> -x Thin Films Prepared by Pulsed Ion-Beam Evaporation. Materials Research Society Symposia Proceedings, 2001, 697, 8261.	0.1	0
83	Novel Preparation Method of Thin Films by Ablation Plasma produced by Intense Pulsed Ion Beam Evaporation. Materials Research Society Symposia Proceedings, 2001, 697, 491.	0.1	0
84	Characteristics of Polycrystalline Silicon thin Films Prepared by Pulsed Ion-Beam Evaporation. Materials Research Society Symposia Proceedings, 2001, 697, 5151.	0.1	0
85	Nano-Particulate of Aluminum Nitride Prepared by Pulsed Wire Discharge. Materials Research Society Symposia Proceedings, 2001, 704, 541.	0.1	0
86	Characteristics of Cr-Al-N-O Thin Films Prepared by Pulsed Laser Deposition. Materials Research Society Symposia Proceedings, 2001, 697, 771.	0.1	0
87	Characteristics of Cr-Al-N-O Thin Films Prepared by Pulsed Laser Deposition. AIP Conference Proceedings, 2002, , .	0.4	0
88	Preparation of Ti-Fe Hydrogen Storage Alloy Thin Films by Pulsed Laser Deposition. IEEJ Transactions on Fundamentals and Materials, 2004, 124, 769-772.	0.2	0
89	Performance and Controllability of Pulsed Ion Beam Ablation Propulsion. AIP Conference Proceedings, 2006, , .	0.4	0
90	Fabrication of .BETA.-SiC micropatterns from a facile replication process. Journal of the Ceramic Society of Japan, 2011, 119, 362-366.	1.1	0

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91	Improvement in Hardness of CrN Thin Film by Adding GaN and Evaluation of Its Solubility Limit. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2018, 82, 89-93.	0.4	0
92	Preparation of Ti-Al-N-O Ceramics by Mechanical Alloying and Spark Plasma Sintering. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2019, 83, 136-142.	0.4	0
93	Effect of the Interphase and Agglomeration on the Tensile Properties of Epoxy/Alumina Nanocomposites. , 2021, , .		0
94	Color centers in K <sup>+</sup> Na <sup>+</sup> Cl crystals induced by pulsed intense relativistic electron beam at 77 K. Japanese Journal of Applied Physics, 2022, 61, SB1013.	1.5	0
95	Nanosized Powder Preparation by Pulsed Wire Discharge. The Proceedings of the Materials and Processing Conference, 2003, 2003.11, 379-380.	0.0	0
96	Synthesis of Novel Materials using Pulsed Power Technology. IEEJ Transactions on Fundamentals and Materials, 2003, 123, 823-826.	0.2	0
97	Nanosized Ferrite Particles Synthesized by Pulsed Wire Discharge. IEEJ Transactions on Fundamentals and Materials, 2006, 126, 51-54.	0.2	0
98	Formation and Expansion of Ablation Plasmas Produced by Pulsed Ion Beams for Thin Films Production. IEEJ Transactions on Fundamentals and Materials, 2006, 126, 45-50.	0.2	0
99	Effects of He Ambient on Formation of Si Particles Using Pulsed Ion-Beam Evaporation. IEEJ Transactions on Fundamentals and Materials, 2006, 126, 915-918.	0.2	0
100	Effect of Ambient Gas Temperature on Synthesis of Fe-N Nanosized Powders by Pulsed Wire Discharge. IEEJ Transactions on Fundamentals and Materials, 2006, 126, 55-59.	0.2	0
101	Tetragonal Phase Change by Copper Solution in Nickel Oxide. Transactions of the Materials Research Society of Japan, 2010, 35, 167-170.	0.2	0
102	Effect of dehydration time and air tightness on pore distribution of potassium and metakaolin-based geopolymer. Japanese Journal of Applied Physics, 0, , .	1.5	0
103	Equation to determine the sizes of various light and heavy metallic nanoparticles prepared by pulsed wire discharge. Journal of Applied Physics, 2021, 130, 185901.	2.5	0
104	Titanium Nitride and Yttrium Titanate Nanocomposites, Endowed with Renewable Self-Healing Ability (Adv. Mater. Interfaces 22/2021). Advanced Materials Interfaces, 2021, 8, 2170126.	3.7	0
105	Organic molecule intercalation sites in Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>y</sub> superconductor. International Journal of Applied Ceramic Technology, 0, , .	2.1	0
106	Fabrication of the Finestructured Alumina Porous Materials with Nanoimprint Method. Ceramic Engineering and Science Proceedings, 0, , 61-65.	0.1	0
107	Structure Control of the Nanotube/Nanoparticle Hybrid Materials with Sonochemical Processing. Ceramic Engineering and Science Proceedings, 0, , 67-75.	0.1	0