

# Hisayuki Suematsu

## List of Publications by Year in descending order

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papers

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docs citations

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times ranked

645  
citing authors

#	ARTICLE	IF	CITATIONS
1	Hydration process of $\text{Y}^{2+}\text{-MoO}_3$ powder prepared by pulsed wire discharge method. Japanese Journal of Applied Physics, 2022, 61, SB1018.	1.5	1
2	Color centers in $\text{K}^+\text{Na}^+\text{Cl}$ crystals induced by pulsed intense relativistic electron beam at 77 K. Japanese Journal of Applied Physics, 2022, 61, SB1013.	1.5	0
3	Synthesis of $\text{Y}^{2+}\text{-MoO}_3$ whiskers by the thermal evaporation method with flowing oxygen gas. Journal of the American Ceramic Society, 2022, 105, 1622-1628.	3.8	8
4	Nanosecond pulse used to enhance the electrocoagulation of municipal wastewater treatment with low specific energy consumption. Environmental Technology (United Kingdom), 2021, 42, 2154-2162.	2.2	3
5	Synthesis of $\text{Y}^{2+}\text{-MoO}_3$ 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
6	Improving self-healing ability and flexural strength of ytterbium silicate-based nanocomposites with silicon carbide nanoparticulates and whiskers. Journal of the Ceramic Society of Japan, 2021, 129, 209-216.	1.1	12
7	Nanoparticle synthesis of transition metal borides by pulsed discharge of compacted powder. Journal of the American Ceramic Society, 2021, 104, 4351-4367.	3.8	3
8	Pore-forming process in dehydration of metakaolin-based geopolymer. International Journal of Ceramic Engineering & Science, 2021, 3, 211-216.	1.2	5
9	Effect of the Interphase and Agglomeration on the Tensile Properties of Epoxy/Alumina Nanocomposites. , 2021, , .		0
10	Investigation on Surface Condition of the Corona-Aged Silicone Rubber Nanocomposite Adopting Wavelet and LIBS Technique. IEEE Transactions on Plasma Science, 2021, 49, 2294-2304.	1.3	12
11	Titanium Nitride and Yttrium Titanate Nanocomposites, Endowed with Renewable Self-Healing Ability. Advanced Materials Interfaces, 2021, 8, 2100979.	3.7	4
12	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
13	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
14	Formation of tungsten carbide nanoparticles by wire explosion process. International Journal of Applied Ceramic Technology, 2020, 17, 304-310.	2.1	9
15	Synthesis of metastable monoclinic beta molybdenum trioxide nanoparticles by pulsed wire discharge. Japanese Journal of Applied Physics, 2020, 59, SCCC02.	1.5	5
16	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
17	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. Advanced Engineering Materials, 2020, 22, 2000157.	3.5	8
18	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

#	ARTICLE	IF	CITATIONS
19	Understanding the impact of space charge variations with UV and water aged epoxy alumina nanocomposites adopting pulsed electroacoustic techniques. <i>Micro and Nano Letters</i> , 2020, 15, 1059-1064.	1.3	2
20	Self-crack 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
21	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
22	Self-healing behavior and strength recovery of ytterbium disilicate ceramic reinforced with silicon carbide nanofillers. <i>Journal of the European Ceramic Society</i> , 2019, 39, 3139-3152.	5.7	26
23	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
24	Preparation of Ti-Al-N-O Ceramics by Mechanical Alloying and Spark Plasma Sintering. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 2019, 83, 136-142.	0.4	0
25	Size reduction of submicron magnesium particles prepared by pulsed wire discharge. <i>Japanese Journal of Applied Physics</i> , 2018, 57, 02CC04.	1.5	4
26	Characterization of CrN-Based Hard Coating Materials with Addition of GaN. <i>Materials Transactions</i> , 2018, 59, 1574-1577.	1.2	5
27	Improvement in Hardness of CrN Thin Film by Adding GaN and Evaluation of Its Solubility Limit. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 2018, 82, 89-93.	0.4	0
28	Preparation of Mg Nanoparticles by Pulsed Wire Discharge in Mineral Oil. <i>Nanoscience and Nanotechnology Letters</i> , 2018, 10, 858-861.	0.4	1
29	Strength improvement and purification of $\text{Yb}_2\text{Si}_2\text{O}_7$ SiC nanocomposites by surface oxidation treatment. <i>Journal of the American Ceramic Society</i> , 2017, 100, 3122-3131.	3.8	18
30	Characterization of $\text{ZrN}$ , $\text{ZrO}_2$ and $\text{Zr}_7\text{O}_{11}\text{N}_2$ nanoparticles synthesized by pulsed wire discharge. <i>Journal of the American Ceramic Society</i> , 2017, 100, 4884-4892.	3.8	6
31	Enhanced magnetic irreversibility characteristics by expansion of blocking block for $\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_8$ high- $T_c$ superconductor. <i>Japanese Journal of Applied Physics</i> , 2017, 56, 083101.	1.5	1
32	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
33	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
34	High-pressure synthesis and superconducting properties of $\text{Sr}_2(\text{Ca}_{1-x}\text{Sr}_x)\text{Cu}_2\text{O}_y$ ( $x=0-0.75$ ). <i>Japanese Journal of Applied Physics</i> , 2016, 55, 02BC16.	1.5	1
35	Superconducting water derivatives of $\text{Sr}_2\text{Ca}_{n-1}\text{Cu}_n\text{O}_{2+2n-1}$ ( $n=2-4$ ) high- $T_c$ superconductors. <i>Materials Chemistry and Physics</i> , 2016, 177, 67-72.	4.0	3
36	Low thermal conductivity $\text{Y}_2\text{Ti}_2\text{O}_7$ as a candidate material for thermal/environmental barrier coatings. <i>Ceramics International</i> , 2016, 42, 11314-11323.	4.8	25

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37	Texture-controlled hybrid materials fabricated using nanosecond technology. Journal of the Ceramic Society of Japan, 2016, 124, 197-202.	1.1	5
38	High-speed camera analysis for nanoparticles produced by using a pulsed wire-discharge method. Journal of the Korean Physical Society, 2016, 69, 36-39.	0.7	2
39	Synthesis of zirconium carbide nanosized powders by pulsed wire discharge in oleic acid. Journal of the Korean Physical Society, 2016, 68, 345-350.	0.7	3
40	Role of voltage and gas in determining the mean diameter in Sn-58 Bi intermetallic compound nanoparticles for pulsed wire discharge. Metals and Materials International, 2016, 22, 319-323.	3.4	2
41	Nanotwin hardening in a cubic chromium oxide thin film. APL Materials, 2015, 3, 096105.	5.1	3
42	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
43	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
44	Preparation of palladium nanoparticles and a grain-size determining equation of pulsed wire discharge in N <sub>2</sub> , Ar, and He ambient gasses. Japanese Journal of Applied Physics, 2015, 54, 045002.	1.5	9
45	Synthesis of C <sub>x</sub> Sr <sub>2</sub> Ca <sub>(n-1)</sub> Cu <sub>n</sub> O <sub>z</sub> superconductors using high-pressure-synthesized Sr <sub>2</sub> Ca <sub>(n-1)</sub> Cu <sub>n</sub> O <sub>y</sub> precursors (n= 2, 4). Japanese Journal of Applied Physics, 2014, 53, 02BC06.	1.5	3
46	Oxidation of nanodiamonds and modulation of their assembly in polymer-based nanohybrids by field-inducement. Journal of Materials Science, 2013, 48, 4151-4162.	3.7	10
47	Synthesis of C <sub>x</sub> Sr <sub>2</sub> Ca <sub>2</sub> Cu <sub>3</sub> O <sub>z</sub> Superconductor from Sr <sub>2</sub> Ca <sub>2</sub> Cu <sub>3</sub> O <sub>y</sub> Precursor. Japanese Journal of Applied Physics, 2013, 52, 073101.	1.5	4
48	Generation of Sr <sub>2</sub> Ca <sub>(n-1)</sub> Cu <sub>n</sub> O <sub>y</sub> phases (n=5-7) by high pressure synthesis. Journal of Applied Physics, 2013, 114, 193903.	2.5	5
49	Particle Size Determining Equation in Metallic Nanopowder Preparation by Pulsed Wire Discharge. Japanese Journal of Applied Physics, 2013, 52, 055001.	1.5	17
50	Dye-sensitized solar cells using purified squid ink nanoparticles coated on TiO <sub>2</sub> /nanotubes/nanoparticles. Journal of the Ceramic Society of Japan, 2013, 121, 123-127.	1.1	11
51	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
52	Epitaxial Growth of Chromium Oxynitride Thin Films on Magnesium Oxide (100) Substrates and Their Oxidation Behavior. Materials Transactions, 2013, 54, 1957-1961.	1.2	12
53	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
54	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

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55	Phase Control of Ti-Fe Nanoparticles Prepared by Pulsed Wire Discharge. Japanese Journal of Applied Physics, 2011, 50, 01BJ06.	1.5	4
56	Fabrication of .BETA.-SiC micropatterns from a facile replication process. Journal of the Ceramic Society of Japan, 2011, 119, 362-366.	1.1	0
57	Two-step heating in the formation of nanosized alumina particles by a pulsed wire discharge method. Scripta Materialia, 2011, 64, 110-113.	5.2	9
58	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
59	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
60	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
61	Formation of thick cubic boron nitride films in noble gases. Journal of the Ceramic Society of Japan, 2010, 118, 164-166.	1.1	3
62	Preparation of titanium nanopowders covered with organics by pulsed wire discharge. Scripta Materialia, 2010, 63, 937-940.	5.2	15
63	Synthesis of Aluminum Nitride Nanopowder with Particle Size Less than 10 nm by Pulsed Wire Discharge in Nitrogen Gas. Japanese Journal of Applied Physics, 2010, 49, 116201.	1.5	12
64	Tetragonal Phase Change by Copper Solution in Nickel Oxide. Transactions of the Materials Research Society of Japan, 2010, 35, 167-170.	0.2	0
65	Synthesis, Ferroelectric and Electrooptic Properties of Transparent Crystallized Glasses with Sr <sub>x</sub> Ba <sub>1-x</sub> Nb <sub>2</sub> O <sub>6</sub> Nanocrystals. Journal of the American Ceramic Society, 2009, 92, 2924-2930.	3.8	39
66	Measurement of metal vapor cooling speed during nanoparticle formation by pulsed wire discharge. Transactions of Nonferrous Metals Society of China, 2009, 19, s183-s188.	4.2	9
67	Fabrication of the finestructured alumina materials with nanoimprint method. Journal of the Ceramic Society of Japan, 2009, 117, 534-536.	1.1	4
68	Synthesis of TiO <sub>2</sub> Nanosized Powder by Pulsed Wire Discharge. Japanese Journal of Applied Physics, 2008, 47, 760.	1.5	26
69	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
70	Determination of Submicrometer Particle Content in Copper Powder Prepared by Pulsed Wire Discharge. Japanese Journal of Applied Physics, 2008, 47, 605-608.	1.5	2
71	Effect of Wire Diameter on Particle Size of Metal Nanosized Powder Prepared by Pulsed Wire Discharge. Funtai Oyobi Fumatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2008, 55, 192-197.	0.2	6
72	Synthesis of Al <sub>2</sub> O <sub>3</sub> Nanosized Powder by Pulsed Wire Discharge Using Gas Puff. Funtai Oyobi Fumatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2007, 54, 180-185.	0.2	4

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73	Performance and Controllability of Pulsed Ion Beam Ablation Propulsion. AIP Conference Proceedings, 2006, , .	0.4	0
74	Nanosized Ferrite Particles Synthesized by Pulsed Wire Discharge. IEEJ Transactions on Fundamentals and Materials, 2006, 126, 51-54.	0.2	0
75	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
76	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
77	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
78	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
79	Nanosized Powder Synthesis by Pulsed Wire Discharge in High-Speed Gas Flow. IEEJ Transactions on Fundamentals and Materials, 2005, 125, 727-732.	0.2	3
80	Novel Method to Synthesize Nanosized ZnFe <sub>2</sub> O <sub>4</sub> Powders. Journal of the Ceramic Society of Japan, 2005, 113, 663-665.	1.3	4
81	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
82	Synthesis of Light-emitting Silicon Nanoparticles by Intense Pulsed ion-beam Esvaporation. Journal of Nanoparticle Research, 2005, 7, 669-673.	1.9	7
83	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
84	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
85	Particle Size Distribution of SnO <sub>2</sub> Nano-Particles Synthesized by Pulsed Wire Discharge. Journal of the Ceramic Society of Japan, 2004, 112, 355-362.	1.3	17
86	Modification of Graphite Surface by Intense Pulsed Ion-beam Irradiation. IEEJ Transactions on Fundamentals and Materials, 2004, 124, 47-51.	0.2	2
87	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
88	Oxidation Resistance of Cr-N-O Thin Films Prepared by Pulsed Laser Deposition. IEEJ Transactions on Fundamentals and Materials, 2004, 124, 496-500.	0.2	8
89	Nanosize Powders of Aluminum Nitride Synthesized by Pulsed Wire Discharge. Journal of the American Ceramic Society, 2003, 86, 420-424.	3.8	59
90	Increase in Phase Transition Temperature of Activated Alumina with Nano-Zirconia Synthesized by Pulsed Wire Discharge. Journal of the American Ceramic Society, 2003, 86, 1522-1526.	3.8	8

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91	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
92	Synthesis and High Temperature Thermoelectric Properties of Alkaline-Earth Metal Hexaborides $MB_6$ (M=Ca, Sr, Ba). Materials Research Society Symposia Proceedings, 2003, 793, 20.	0.1	5
93	Nanosized Powder Preparation by Pulsed Wire Discharge. The Proceedings of the Materials and Processing Conference, 2003, 2003.11, 379-380.	0.0	0
94	Synthesis of Novel Materials using Pulsed Power Technology. IEEJ Transactions on Fundamentals and Materials, 2003, 123, 823-826.	0.2	0
95	Characteristics of Cr-Al-N-O Thin Films Prepared by Pulsed Laser Deposition. AIP Conference Proceedings, 2002, , .	0.4	0
96	Thermoelectric Properties of $B_{12+x}C_3-x$ Thin Films Prepared by Pulsed Ion-Beam Evaporation. Materials Research Society Symposia Proceedings, 2001, 697, 8261.	0.1	0
97	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
98	Characteristics of Polycrystalline Silicon thin Films Prepared by Pulsed Ion-Beam Evaporation. Materials Research Society Symposia Proceedings, 2001, 697, 5151.	0.1	0
99	Preparation of TiFe thin Films by Pulsed Ion Beam Evaporation. Materials Research Society Symposia Proceedings, 2001, 697, 5171.	0.1	1
100	Nano-Particulate of Aluminum Nitride Prepared by Pulsed Wire Discharge. Materials Research Society Symposia Proceedings, 2001, 704, 541.	0.1	0
101	Characteristics of Cr-Al-N-O Thin Films Prepared by Pulsed Laser Deposition. Materials Research Society Symposia Proceedings, 2001, 697, 771.	0.1	0
102	Preparation of iron nanosized powder by pulsed wire discharge. Japanese Journal of Applied Physics, 0, , .	1.5	1
103	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
104	Organic molecule intercalation sites in $Sr_2CaCu_2O_y$ superconductor. International Journal of Applied Ceramic Technology, 0, , .	2.1	0
105	Constituent Phases of Nanosized Alumina Powders Synthesized by Pulsed Wire Discharge. Ceramic Engineering and Science Proceedings, 0, , 89-98.	0.1	1
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