Hitoshi Sumiya

List of Publications by Year
in descending order

158 papers	7,640 citations	66234 42 h-index	54797 84 g-index
160 all docs	160 docs citations	160 times ranked	6337 citing authors

#	Article	IF	Citations
1	Observation of discrete time-crystalline order in a disordered dipolar many-body system. Nature, 2017, 543, 221-225.	13.7	689
2	Ultrahard polycrystalline diamond from graphite. Nature, 2003, 421, 599-600.	13.7	676
3	High-Precision Nanoscale Temperature Sensing Using Single Defects in Diamond. Nano Letters, 2013, 13, 2738-2742.	4.5	572
4	Hybrid Quantum Circuit with a Superconducting Qubit Coupled to a Spin Ensemble. Physical Review Letters, 2011, 107, 220501.	2.9	335
5	Subpicotesla Diamond Magnetometry. Physical Review X, 2015, 5, .	2.8	279
6	Nanoscale nuclear magnetic resonance with chemical resolution. Science, 2017, 357, 67-71.	6.0	240
7	All-Optical Initialization, Readout, and Coherent Preparation of Single Silicon-Vacancy Spins in Diamond. Physical Review Letters, 2014, 113, 263602.	2.9	216
8	High-pressure synthesis of high-purity diamond crystal. Diamond and Related Materials, 1996, 5, 1359-1365.	1.8	193
9	Real-Time Background-Free Selective Imaging of Fluorescent Nanodiamonds in Vivo. Nano Letters, 2012, 12, 5726-5732.	4.5	177
10	Electronic structure of the negatively charged silicon-vacancy center in diamond. Physical Review B, 2014, 89, .	1.1	175
11	Hardness and deformation microstructures of nano-polycrystalline diamonds synthesized from various carbons under high pressure and high temperature. Journal of Materials Research, 2007, 22, 2345-2351.	1.2	168
12	Crystalline perfection of high purity synthetic diamond crystal. Journal of Crystal Growth, 1997, 178, 485-494.	0.7	120
13	Formation of pure polycrystalline diamond by direct conversion of graphite at high pressure and high temperature. Physics of the Earth and Planetary Interiors, 2004, 143-144, 593-600.	0.7	118
14	Title is missing!. Journal of Materials Science, 2000, 35, 1181-1186.	1.7	115
15	Microstructure features of polycrystalline diamond synthesized directly from graphite under static high pressure. Journal of Materials Science, 2004, 39, 445-450.	1.7	112
16	Indentation hardness of nano-polycrystalline diamond prepared from graphite by direct conversion. Diamond and Related Materials, 2004, 13, 1771-1776.	1.8	109
17	Critical Thermalization of a Disordered Dipolar Spin System in Diamond. Physical Review Letters, 2018, 121, 023601.	2.9	107
18	Superradiant emission from colour centres in diamond. Nature Physics, 2018, 14, 1168-1172.	6.5	106

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19	Growth rate of high-quality large diamond crystals. Journal of Crystal Growth, 2002, 237-239, 1281-1285.	0.7	95
20	Distinctive mechanical properties of nano-polycrystalline diamond synthesized by direct conversion sintering under HPHT. Diamond and Related Materials, 2012, 24, 44-48.	1.8	91
21	Glitch-free X-ray absorption spectrum under high pressure obtained using nano-polycrystalline diamond anvils. Journal of Synchrotron Radiation, 2012, 19, 768-772.	1.0	88
22	Depolarization Dynamics in a Strongly Interacting Solid-State Spin Ensemble. Physical Review Letters, 2017, 118, 093601.	2.9	86
23	Mechanical properties of synthetic type IIa diamond crystal. Diamond and Related Materials, 1997, 6, 1841-1846.	1.8	78
24	Multimode Storage and Retrieval of Microwave Fields in a Spin Ensemble. Physical Review X, 2014, 4, .	2.8	77
25	Large Defect-Free Synthetic Type IIa Diamond Crystals Synthesized via High Pressure and High Temperature. Japanese Journal of Applied Physics, 2012, 51, 090102.	0.8	74
26	Conditions and mechanism of formation of nano-polycrystalline diamonds on direct transformation from graphite and non-graphitic carbon at high pressure and temperature. High Pressure Research, 2006, 26, 63-69.	0.4	68
27	Observation of higher stiffness in nanopolycrystal diamond than monocrystal diamond. Nature Communications, 2013, 4, 2343.	5.8	68
28	Robust and Accurate Electric Field Sensing with Solid State Spin Ensembles. Nano Letters, 2019, 19, 4904-4910.	4.5	68
29	Optically induced dynamic nuclear spin polarisation in diamond. New Journal of Physics, 2016, 18, 013040.	1.2	65
30	Cutting performance of nano-polycrystalline diamond. Diamond and Related Materials, 2012, 24, 78-82.	1.8	64
31	High-resolution spectroscopy of single nuclear spins via sequential weak measurements. Nature Communications, 2019, 10, 594.	5.8	60
32	Integrated and Portable Magnetometer Based on Nitrogenâ€Vacancy Ensembles in Diamond. Advanced Quantum Technologies, 2021, 4, 2000111.	1.8	60
33	Zero-Field Magnetometry Based on Nitrogen-Vacancy Ensembles in Diamond. Physical Review Applied, 2019, 11, .	1.5	58
34	Micromachining and surface processing of the super-hard nano-polycrystalline diamond by three types of pulsed lasers. Applied Physics A: Materials Science and Processing, 2009, 96, 833-842.	1.1	56
35	Compact integrated magnetometer based on nitrogen-vacancy centres in diamond. Diamond and Related Materials, 2019, 93, 59-65.	1.8	56
36	Nonvolatile nuclear spin memory enables sensor-unlimited nanoscale spectroscopy of small spin clusters. Nature Communications, 2017, 8, 834.	5.8	53

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37	Solid-state electron spin lifetime limited by phononic vacuum modes. Nature Materials, 2018, 17, 313-317.	13.3	53
38	High pressure synthesis of cubic boron nitride from amorphous state. Materials Research Bulletin, 1983, 18, 1203-1207.	2.7	52
39	Elastic constants of cubic and wurtzite boron nitrides. Applied Physics Letters, 2013, 102, 241909.	1.5	52
40	Quantum Metrology with Strongly Interacting Spin Systems. Physical Review X, 2020, 10, .	2.8	52
41	Diamond Magnetometry and Gradiometry Towards Subpicotesla dc Field Measurement. Physical Review Applied, 2021, 15, .	1.5	49
42	Large Defect-Free Synthetic Type IIa Diamond Crystals Synthesized via High Pressure and High Temperature. Japanese Journal of Applied Physics, 2012, 51, 090102.	0.8	44
43	Micro-/nanostructural investigation of laser-cut surfaces of single- and polycrystalline diamonds. Diamond and Related Materials, 2010, 19, 1040-1051.	1.8	43
44	Boron-doped diamond heater and its application to large-volume, high-pressure, and high-temperature experiments. Review of Scientific Instruments, 2009, 80, 023907.	0.6	41
45	New diamond anvil cell for single-crystal analysis. Review of Scientific Instruments, 2001, 72, 1458.	0.6	39
46	HPHT synthesis and crystalline quality of large high-quality (001) and (111) diamond crystals. Diamond and Related Materials, 2015, 58, 221-225.	1.8	39
47	Heterodyne sensing of microwaves with a quantum sensor. Nature Communications, 2021, 12, 2737.	5.8	38
48	Pulsed laser processing of nano-polycrystalline diamond: A comparative study with single crystal diamond. Diamond and Related Materials, 2009, 18, 877-880.	1.8	37
49	Mechanical properties of nano-polycrystalline cBN synthesized by direct conversion sintering under HPHT. Diamond and Related Materials, 2014, 41, 14-19.	1.8	37
50	Microwave-Free Vector Magnetometry with Nitrogen-Vacancy Centers along a Single Axis in Diamond. Physical Review Applied, 2020, 13, .	1.5	36
51	Electron spin resonance detected by a superconducting qubit. Physical Review B, 2012, 86, .	1.1	35
52	Cutting performance of a binder-less sintered cubic boron nitride tool in the high-speed milling of gray cast iron. Journal of Materials Processing Technology, 2002, 127, 217-221.	3.1	34
53	Generation of Multi-Megabar Pressure Using Nano-Polycrystalline Diamond Anvils. Japanese Journal of Applied Physics, 2007, 46, L640-L641.	0.8	34
54	Towards a spin-ensemble quantum memory for superconducting qubits. Comptes Rendus Physique, 2016, 17, 693-704.	0.3	34

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55	Tracking the 3D Rotational Dynamics in Nanoscopic Biological Systems. Journal of the American Chemical Society, 2020, 142, 7542-7554.	6.6	34
56	Probing Quantum Thermalization of a Disordered Dipolar Spin Ensemble with Discrete Time-Crystalline Order. Physical Review Letters, 2019, 122, 043603.	2.9	33
57	Nanolayered Diamond Sintered Compact Obtained by Direct Conversion from Highly Oriented Graphite under High Pressure and High Temperature. Journal of Nanomaterials, 2013, 2013, 1-6.	1.5	32
58	Polishing mechanism and surface damage analysis of type IIa single crystal diamond processed by mechanical and chemical polishing methods. Diamond and Related Materials, 2016, 63, 80-85.	1.8	32
59	Ultrahard diamond indenter prepared from nanopolycrystalline diamond. Review of Scientific Instruments, 2008, 79, 056102.	0.6	31
60	Influence of graphite crystallinity on the microtexture of nano-polycrystalline diamond obtained by direct conversion. Physics and Chemistry of Minerals, 2012, 39, 543-552.	0.3	31
61	Super-hard diamond indenter prepared from high-purity synthetic diamond crystal. Review of Scientific Instruments, 2005, 76, 026112.	0.6	30
62	Synchrotron X-ray topography of dislocations in high-pressure high-temperature-grown single-crystal diamond with low dislocation density. Applied Physics Express, 2014, 7, 125501.	1.1	30
63	Real indentation hardness of nano-polycrystalline cBN synthesized by direct conversion sintering under HPHT. Diamond and Related Materials, 2014, 48, 47-51.	1.8	30
64	Note: High-pressure generation using nano-polycrystalline diamonds as anvil materials. Review of Scientific Instruments, 2011, 82, 066104.	0.6	27
65	Collective strong coupling with homogeneous Rabi frequencies using a 3D lumped element microwave resonator. Applied Physics Letters, 2016, 109, 033508.	1.5	27
66	Ultrathin fiber-taper coupling with nitrogen vacancy centers in nanodiamonds at cryogenic temperatures. Optics Letters, 2015, 40, 5702.	1.7	26
67	Single spin optically detected magnetic resonance with 60â€“90 GHz (E-band) microwave resonators. Review of Scientific Instruments, 2015, 86, 064704.	0.6	26
68	Pressure generation in a 6-8-2 type multi-anvil system: a performance test for third-stage anvils with various diamonds. High Pressure Research, 2008, 28, 237-244.	0.4	25
69	Optical Characteristics of Nano-Polycrystalline Diamond Synthesized Directly from Graphite under High Pressure and High Temperature. Japanese Journal of Applied Physics, 2009, 48, 120206.	0.8	23
70	Electron momentum distributions in elemental semiconductors probed by positrons. Physical Review B, 1998, 57, 12219-12228.	1.1	22
71	Deformation microstructure of high-quality synthetic diamond crystal subjected to Knoop indentation. Applied Physics Letters, 2006, 88, 161904.	1.5	22
72	Design of a high-temperature and high-pressure liquid flow cell for x-ray absorption fine structure measurements under catalytic reaction conditions. Review of Scientific Instruments, 2008, 79, 014101.	0.6	21

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73	Density-dependent exciton kinetics in synthetic diamond crystals. Physical Review B, 2009, 80, .	1.1	21
74	Application of nano-polycrystalline diamond to laser-heated diamond anvil cell experiments. High Pressure Research, 2010, 30, 142-150.	0.4	21
75	Noncollinear Spin Structure in Feâ€“Ni Invar Alloy Probed by Magnetic EXAFS at High Pressure. Journal of the Physical Society of Japan, 2011, 80, 023709.	0.7	21
76	Synthesis of polycrystalline diamond with new non-metallic catalyst under high pressure and high temperature. International Journal of Refractory Metals and Hard Materials, 1999, 17, 345-350.	1.7	20
77	Micro milling tool made of nano-polycrystalline diamond for precision cutting of SiC. CIRP Annals - Manufacturing Technology, 2017, 66, 93-96.	1.7	20
78	Formation of stacking fault and dislocation behavior during the high-temperature annealing of single-crystal HPHT diamond. Diamond and Related Materials, 2017, 75, 155-160.	1.8	20
79	Optically Detected Magnetic Resonance of Nanodiamonds <I>In Vivo</I>; Implementation of Selective Imaging and Fast Sampling. Journal of Nanoscience and Nanotechnology, 2015, 15, 1014-1021.	0.9	18
80	Optical properties of ultrapure nano-polycrystalline diamond. Japanese Journal of Applied Physics, 2016, 55, 120306.	0.8	18
81	Elasticity and hardness of nano-polycrystalline boron nitrides: The apparent Hall-Petch effect. Applied Physics Letters, 2014, 105, .	1.5	17
82	Enhancing fluorescence excitation and collection from the nitrogen-vacancy center in diamond through a micro-concave mirror. Applied Physics Letters, 2018, 113, 041107.	1.5	17
83	Exploratory study of the new B-doped diamond heater at high pressure and temperature and its application to in situ XRD experiments on hydrous Mg-silicate melt. High Pressure Research, 2008, 28, 255-264.	0.4	16
84	High wear-resistance characteristic of boron-doped nano-polycrystalline diamond on optical glass. Diamond and Related Materials, 2016, 70, 7-11.	1.8	16
85	Applications of nano-polycrystalline diamond anvils to X-ray absorption spectroscopy under high pressure. High Pressure Research, 2016, 36, 381-390.	0.4	16
86	On the improvement of subsurface quality of CaF2 single crystal machined by boron-doped nano-polycrystalline diamond tools. Precision Engineering, 2018, 52, 73-83.	1.8	16
87	Photoluminescence at the ground-state level anticrossing of the nitrogen-vacancy center in diamond: A comprehensive study. Physical Review B, 2021, 103, .	1.1	16
88	Novel superhard nanopolycrystalline materials synthesized by direct conversion sintering under high pressure and high temperature. MRS Bulletin, 2017, 42, 729-733.	1.7	15
89	Loop-gap microwave resonator for hybrid quantum systems. Applied Physics Letters, 2018, 112, .	1.5	15
90	p-n Junction diode by B-doped diamond heteroepitaxially grown on Si-doped c-BN. Diamond and Related Materials, 1994, 3, 1389-1392.	1.8	14

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91	High-Quality Synthetic Diamond Crystals.. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 1998, 7, 960-965.	0.1	14
92	Real hardness of high-purity ultra-fine nano-polycrystalline diamond synthesized by direct conversion sintering under HPHT. Diamond and Related Materials, 2019, 100, 107560.	1.8	14
93	Wear resistance of nano-polycrystalline diamond with various hexagonal diamond contents. Journal of Superhard Materials, 2012, 34, 343-349.	0.5	13
94	Determination of the type of stacking faults in single-crystal high-purity diamond with a low dislocation density of <50 cm^{â^'2} by synchrotron X-ray topography. Japanese Journal of Applied Physics, 2016, 55, 040303.	0.8	13
95	Behavior of crystal defects in synthetic type-IIa single-crystalline diamond at high temperatures under normal pressure. Journal of Crystal Growth, 2017, 458, 27-30.	0.7	13
96	Thermally activated deformation under Knoop indentations in super-hard directions of high-quality synthetic type-IIa diamond crystals. Diamond and Related Materials, 2006, 15, 1576-1579.	1.8	12
97	Pressure dependence of the optical-absorption edge of diamond. Physical Review B, 1991, 44, 12176-12179.	1.1	11
98	<math xmlns="http://www.w3.org/1998/Math/MathML"><mi>Î±</mi><mo>â^'</mo><mi>Îµ</mi></math> transition pathway of iron under quasihydrostatic pressure conditions. Physical Review B, 2014, 90, .	1.1	11
99	Plastic deformation and optical behavior of high-purity synthetic diamond crystal subjected to high stress load at room temperature. Applied Physics Letters, 2008, 93, 101915.	1.5	10
100	Lowering P, T boundary for synthesis of pure nano-polycrystalline diamond. Journal of Physics: Conference Series, 2010, 215, 012136.	0.3	10
101	Diamond radiation detector made of an ultrahigh-purity type IIa diamond crystal grown by high-pressure and high-temperature synthesis. Review of Scientific Instruments, 2001, 72, 1406.	0.6	9
102	Charge density analysis of SiO2under pressures over 50 GPa using a new diamond anvil cell for single-crystal structure analysis. Journal of Physics Condensed Matter, 2002, 14, 10545-10551.	0.7	9
103	<title>High-quality synthetic diamonds for the monochromator of synchrotron radiation beams</title>. , 1997, , .		8
104	Nanopolycrystalline Diamond without Binder and its Application to Various High-Pressure Apparatus. , 2014, , 173-191.		8
105	Element-selective elastic properties of Fe65Ni35 Invar alloy and Fe72Pt28 alloy studied by extended X-ray absorption fine structure. High Pressure Research, 2020, 40, 130-139.	0.4	8
106	Determination of metallic impurities in high-purity type IIa diamond grown by high-pressure and high-temperature synthesis using neutron activation analysis. Diamond and Related Materials, 2000, 9, 2019-2023.	1.8	7
107	Laser heating in nano-polycrystalline diamond anvil cell. Journal of Physics: Conference Series, 2010, 215, 012192.	0.3	7
108	Determination of partial dislocations of stacking fault in (111) single crystal diamond grown on (111) seed crystal by synchrotron X-ray topography. Journal of Crystal Growth, 2017, 468, 439-442.	0.7	7

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109	Detection and control of single proton spins in a thin layer of diamond grown by chemical vapor deposition. Applied Physics Letters, 2020, 117, .	1.5	7
110	Characterization of boron-doped diamonds using 11B high-resolution NMR at high magnetic fields. Diamond and Related Materials, 2008, 17, 1835-1839.	1.8	6
111	Elastic constant C11 of 12C diamond between 10 and 613â€‰K. Applied Physics Letters, 2016, 108, 221902.	1.5	6
112	High-Pressure Synthesis of High-Purity and High-Performance Diamond and cBN Ceramics. Advances in Science and Technology, 2006, 45, 885-892.	0.2	5
113	HPHT Synthesis of Large, High-Quality, Single Crystal Diamonds. , 2014, , 195-215.		5
114	Growing Method of a Large Synthetic Diamond Single Crystal.. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 1993, 2, 315-320.	0.1	4
115	Microstructure and Properties of High-purity Polycrystalline cBN.. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2002, 49, 327-332.	0.1	4
116	High Pressure Synthesis of High-Purity Polycrystalline Diamonds by Direct Conversion from Various Carbon Materials and their Characterization. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 2006, 16, 207-215.	0.1	4
117	Formation Mechanism and Some Properties of Super-hard Nano-polycrystalline Diamond Synthesized by Direct Conversion Sintering. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2006, 53, 452-458.	0.1	4
118	Dry Grinding of Nano-Polycrystalline Diamond Using Thermochemical Reaction. Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C, 2013, 79, 4513-4523.	0.2	4
119	Cutting Performance of Binder-Less Nano-Polycrystalline cBN Tool. Advanced Materials Research, 2014, 1017, 389-392.	0.3	4
120	Wear Characteristics of Binder-Less Nano-Polycrystalline Diamond and Cubic Boron Nitride. Advanced Materials Research, 0, 1017, 406-410.	0.3	4
121	Crystalline quality distributions of the type IIa diamond substrate and the CVD diamond layer processed by chemical mechanical polishing using a SiO₂ wheel. Japanese Journal of Applied Physics, 2018, 57, 105503.	0.8	4
122	Note: Evaluation of microfracture strength of diamond materials using nano-polycrystalline diamond spherical indenter. Review of Scientific Instruments, 2018, 89, 056102.	0.6	4
123	Elongation of Fe-Fe atomic pairs in the Invar alloy <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Fe</mml:mi><mml:mn>65</mml:mn></mml:msub></mml:mrow></mml:math> Physical Review B, 2021, 103, .	1.6	4
124	Improvement of Properties in High-purity Polycrystalline cBN by Microstructure Management.. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 2003, 13, 24-30.	0.1	4
125	Reaction sintering of polycrystalline cubic boron nitride at high pressure and temperature.. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 1989, 36, 752-755.	0.1	3
126	High-pressure generation using high-purity synthetic type IIa diamond anvils. High Pressure Research, 2008, 28, 217-223.	0.4	3

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127	Recent Advances in High Pressure Apparatus for Diamond Synthesis. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 2009, 19, 264-269.	0.1	3
128	Microball Endmill Made of Nano-Polycrystalline Diamond(Machine Elements, Design and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 707 Td (I Mechanical Engineers, Part C, 2010, 76, 768-776.	0.2	3
129	Effect of Cutting Fluid on Diamond Tool Life under Micro V-Groove Turning of Cobalt-Free Tungsten Carbide. Advanced Materials Research, 0, 1017, 181-186.	0.3	3
130	Negatively charged boron vacancy center in diamond. Physical Review B, 2022, 105, .	1.1	3
131	Multiple shock compression of diamond foils with a shaped laser pulse over 1 TPa. Journal of Physics: Conference Series, 2008, 112, 042023.	0.3	2
132	Wear Characteristics of Various Diamond Tools in Cutting of Tungsten Carbide. Advanced Materials Research, 2011, 325, 153-158.	0.3	2
133	Cutting Performances of Nano-Polycrystalline Diamond. Key Engineering Materials, 0, 523-524, 105-108.	0.4	2
134	Performance of Newly Developed Single-Point Diamond Dresser in Terms of Cutting-Point Rake Angle. Advanced Materials Research, 0, 565, 205-210.	0.3	2
135	Magnetic EXAFS study of Fe-Ni invar alloy under high pressure using nano-polycrystalline diamond anvils. Journal of Physics: Conference Series, 2012, 377, 012039.	0.3	2
136	Linear machining technique using nanosecond pulsed laser for forming single-point cutting tool made of nano-polycrystalline diamond. Transactions of the JSME (in Japanese), 2017, 83, 16-00573-16-00573.	0.1	2
137	The luminescence emitted from the type Ib and IIa diamonds under the SiO2 polishing process. Diamond and Related Materials, 2018, 83, 104-108.	1.8	2
138	Microstructure and Mechanical Behaviors of Nano-polycrystalline Diamonds Synthesized by Direct Conversion Sintering under HPHT. Materials Research Society Symposia Proceedings, 2006, 987, 1.	0.1	1
139	Crystal Growth. , 2007, , 329-445.		1
140	Development of Super-hard Nano-polycrystalline Diamond. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2008, 55, 575-581.	0.1	1
141	Novel Development of High-pressure Synthetic Diamond. Journal of the Japan Society for Precision Engineering, 2010, 76, 1319-1323.	0.0	1
142	Application of Nano-Polycrystalline Diamond (NPD) to DAC. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 2011, 21, 285-291.	0.1	1
143	Synthesis of Nano-Polycrystalline Diamond (NPD) and Its Application to Ultrahigh-Pressure Studies. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 2011, 21, 278-284.	0.1	1
144	Thermochemical Reactions between Nano-Polycrystalline Diamond and Grinding Tool Made of Polycrystalline Diamond. Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C, 2011, 77, 4704-4717.	0.2	1

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145	Grinding techniques for fabricating micro-lens array mold made of cemented carbide (Polycrystalline) Tj ETQq1 1 0.784314 rgBT /Overlo 21-00216-21-00216.	0.1	1
146	Novel Magnetic-Sensing Modalities with Nitrogen-Vacancy Centers in Diamond. , 0, , .		1
147	Synthesis of Super-Hard Materials by Direct Conversion Sintering under High Pressure and High Temperature and Their Mechanical Properties. Zairyo/Journal of the Society of Materials Science, Japan, 2012, 61, 412-418.	0.1	1
148	Micro-scale abrasion investigations of single-crystal diamonds using nano-polycrystalline diamond wheels. Diamond and Related Materials, 2022, , 109108.	1.8	1
149	OS02-2-5 Picosecond Ultrasound Spectroscopy for High Purity Boron Nitrides. The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2011, 2011.10, _OS02-2-5-.	0.0	0
150	Development of Indentation Tester for the Evaluation of Adhesion Properties of Diamond Films. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2012, 63, 764-768.	0.1	0
151	High-Pressure Synthesis and Properties of Nano-Polycrystalline Super-Hard Materials. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 2012, 22, 121-128.	0.1	0
152	Development of Novel Diamond/cBN Materials via Ultra-high Pressure and High Temperature. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2014, 61, 349-354.	0.1	0
153	Ultrathin fiber-taper coupling with nitrogen vacancy centers in nanodiamonds at cryogenic temperatures. Proceedings of SPIE, 2016, , .	0.8	0
154	Synthesis of diamonds by a high temperature/high pressure process. Tanso, 2011, 2011, 218-225.	0.1	0
155	OS02F023 Picosecond Ultrasound Spectroscopy for High Purity Boron Nitrides. The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2011, 2011.10, _OS02F023--_OS02F023-.	0.0	0
156	Practical Development of Binderless Nano-polycrystalline Diamond. Journal of the Japan Society for Precision Engineering, 2012, 78, 108-111.	0.0	0
157	Episode 1. Journal of the Japan Society for Precision Engineering, 2012, 78, 122-123.	0.0	0
158	Optimization of optical spin readout of the nitrogen-vacancy center in diamond based on spin relaxation model. AIP Advances, 2022, 12, 055215.	0.6	0