Taro Nagahama

List of Publications by Year in descending order

98 papers	5,669 citations	346980 22 h-index	84171 75 g-index
98 all docs	98 docs citations	98 times ranked	5279 citing authors

#	Article	IF	Citations
1	Synthesis of Boron Nitride Nanotubes Using Plasma-Assisted CVD Catalyzed by Cu Nanoparticles and Oxygen. Nanomaterials, 2021, 11, 651.	1.9	8
2	Large Inverse Tunnel Magnetoresistance in Magnetic Tunnel Junctions with an Fe3O4 Electrode. Physical Review Applied, 2021, 15, .	1.5	16
3	Ultrahigh-Pressure Preparation and Catalytic Activity of MOF-Derived Cu Nanoparticles. Nanomaterials, 2021, 11, 1040.	1.9	10
4	DFT calculation of square MoS2 nanotubes. Physica E: Low-Dimensional Systems and Nanostructures, 2021, 130, 114693.	1.3	3
5	Single Crystal Growth of Ï€-Conjugated Large Molecules without Solubilizing Alkyl Chains via the Naphthalene Flux Method. Crystal Growth and Design, 2021, 21, 4683-4689.	1.4	6
6	Interaction between alkali metals and diamond: Etching and charge states of NV centers. Carbon, 2021, 182, 585-592.	5.4	4
7	Characterization of magnetic properties of ultrathin CoFe2O4 films by utilizing magnetic proximity effect. Solid State Communications, 2020, 306, 113762.	0.9	2
8	Healing Sulfur Vacancies in Monolayer MoS₂ by High-Pressure Sulfur and Selenium Annealing: Implication for High-Performance Transistors. ACS Applied Nano Materials, 2020, 3, 10462-10469.	2.4	24
9	NiCo2O4 films fabricated by reactive molecular beam epitaxy and annealing in various oxygen atmospheres. Applied Physics Letters, 2020, 116, .	1.5	12
10	Controlling the magnetic proximity effect and anomalous Hall effect in CoFe₂O₄/Pt by ionic gating. Applied Physics Express, 2020, 13, 063004.	1.1	4
11	Post-annealed graphite carbon nitride nanoplates obtained by sugar-assisted exfoliation with improved visible-light photocatalytic performance. Journal of Colloid and Interface Science, 2020, 567, 369-378.	5.0	14
12	Sugar-assisted mechanochemical exfoliation of graphitic carbon nitride for enhanced visible-light photocatalytic performance. International Journal of Hydrogen Energy, 2020, 45, 8444-8455.	3.8	14
13	Tunnel magnetoresistance effect in a magnetic tunnel junction with a B2-Fe3Sn electrode. AIP Advances, 2019, 9, .	0.6	7
14	Growth Kinetics and Magnetic Property of Single-Crystal Fe Nanowires Grown via Vaporâ€“Solid Mechanism Using Chemically Synthesized FeO Nanoparticle Catalysts. Crystal Growth and Design, 2019, 19, 7257-7263.	1.4	1
15	Synthesis of Carbon Nanotubes by Plasma-Enhanced Chemical Vapor Deposition Using Fe1â^'xMnxO Nanoparticles as Catalysts: How Does the Catalytic Activity of Graphitization Affect the Yields and Morphology?. Journal of Carbon Research, 2019, 5, 46.	1.4	8
16	Synthesis of carbon-doped boron nitride nanosheets and enhancement of their room-temperature ferromagnetic properties. Journal of Alloys and Compounds, 2019, 792, 1206-1212.	2.8	11
17	Single crystal growth, structural analysis and electronic band structure of a nitrogen-containing polyacene Benzo[i]benzo[6â€²,7â€²]quinoxalino[2â€²,3â€²:9,10]phenanthro[4,5-abc]phenazine. Japanese Journal of Applied Physics, 2019, 58, SBBG08.	0.8	3
18	Search for new nitrogen-doped carbon materials by compressing molecular crystals. Japanese Journal of Applied Physics, 2019, 58, SBBG13.	0.8	2

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19	Synthesis of Mo1â^'xNbxS2 thin films by separate-flow chemical vapor deposition with chloride sources. Thin Solid Films, 2018, 649, 171-176.	0.8	4
20	Semitransparent conductive carbon films synthesized by sintering spin-coated sp3-based network polymer. Japanese Journal of Applied Physics, 2018, 57, 030302.	0.8	0
21	Catalytic chemical vapor deposition and structural analysis of MoS₂nanotubes. Japanese Journal of Applied Physics, 2018, 57, 030304.	0.8	10
22	Rich interfacial chemistry and properties of carbon-doped hexagonal boron nitride nanosheets revealed by electronic structure calculations. Japanese Journal of Applied Physics, 2018, 57, 04FL11.	0.8	3
23	Robustness of Voltage-induced Magnetocapacitance. Scientific Reports, 2018, 8, 14709.	1.6	12
24	Synthesis of metastable B2-type Feâ€“Sn alloy epitaxial films and study of their magnetic properties. Japanese Journal of Applied Physics, 2018, 57, 120302.	0.8	9
25	A thermocouple-based remote temperature controller of an electrically-floated sample for plasma CVD of nanocarbons with bias voltage. Measurement: Journal of the International Measurement Confederation, 2017, 102, 244-248.	2.5	4
26	Inverse Tunnel Magnetocapacitance in Fe/Al-oxide/Fe3O4. Scientific Reports, 2017, 7, 2682.	1.6	15
27	Switching of the products by changing the size and shape of catalytic nanoparticles during CVD growth of MoS2 nanotubes. CrystEngComm, 2017, 19, 3915-3920.	1.3	11
28	Fabrication of Epitaxial Fe3O4 Film on a Si(111) Substrate. Scientific Reports, 2017, 7, 7009.	1.6	10
29	N₂plasma etching processes of microscopic single crystals of cubic boron nitride. Japanese Journal of Applied Physics, 2017, 56, 06HF01.	0.8	1
30	The magnetic properties of Fe3O4/nonmagnetic metal/Fe hybrid systems. Applied Physics Letters, 2017, 110, 212402.	1.5	2
31	Carbon-Doped Hexagonal Boron Nitride: Analysis as Ï€-Conjugate Molecules Embedded in Two Dimensional Insulator. Journal of Carbon Research, 2016, 2, 2.	1.4	9
32	Accurate and stable equal-pressure measurements of water vapor transmission rate reaching the 10â^'6â€‰g mâ^'2 dayâ^'1 range. Scientific Reports, 2016, 6, 35408.	1.6	15
33	Chemical Vapor Deposition of MoS₂: Insight Into the Growth Mechanism by Separated Gas Flow Experiments. Journal of Nanoscience and Nanotechnology, 2016, 16, 3223-3227.	0.9	7
34	Formation of bismuth-core-carbon-shell nanoparticles by bismuth immersion during plasma CVD synthesis of thin diamond films. Diamond and Related Materials, 2016, 69, 127-132.	1.8	4
35	Chemical Vapor Deposition of NbS₂ from a Chloride Source with H₂ Flow: Orientation Control of Ultrathin Crystals Directly Grown on SiO₂/Si Substrate and Charge Density Wave Transition. Crystal Growth and Design, 2016, 16, 4467-4472.	1.4	27
36	Investigation of epitaxial growth and tunnel magnetoresistance effects in magnetic tunnel junctions including spinel ferrite layers. Japanese Journal of Applied Physics, 2015, 54, 118003.	0.8	27

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37	Colorful Carbon Nanopopcorns Formed by Codepositing C60 with Diamond-like Carbon Followed by Reaction with Water Vapor. Chemistry Letters, 2015, 44, 1205-1207.	0.7	4
38	Large magnetocapacitance effect in magnetic tunnel junctions based on Debye-FrÃ¶hlich model. Applied Physics Letters, 2015, 107, .	1.5	21
39	Multilayered MoS2 nanoflakes bound to carbon nanotubes as electron acceptors in bulk heterojunction inverted organic solar cells. Organic Electronics, 2015, 17, 275-280.	1.4	21
40	Fabrication of Fe nanowires on yittrium-stabilized zirconia single crystal substrates by thermal CVD methods. Journal of Applied Physics, 2015, 117, 17D506.	1.1	14
41	Magnetic properties of epitaxial Fe3O4 films with various crystal orientations and tunnel magnetoresistance effect at room temperature. Applied Physics Letters, 2014, 105, .	1.5	40
42	Diamond-like carbon doped with highly Ï€-conjugated molecules by plasma-assisted CVD. Japanese Journal of Applied Physics, 2014, 53, 010203.	0.8	4
43	Electrostatic model of solid-state capacitor with ionizable charge traps. Japanese Journal of Applied Physics, 2014, 53, 088004.	0.8	1
44	Formation of graphite zigzag edges by cathodic electrochemical etching in acidic solution. Carbon, 2014, 67, 300-303.	5.4	7
45	Fe whisker growth revisited: effect of Au catalysis for [021Ì„] oriented nanowires with 100 nm diameter. RSC Advances, 2014, 4, 27620-27624.	1.7	4
46	Versatile Simple Doping Technique for Diamond by Solid Dopant Source Immersion during Microwave Plasma CVD. Chemistry Letters, 2014, 43, 1569-1571.	0.7	3
47	Estimation of Gas Permeation Characteristics of Ultrahigh Barrier Edge Sealing Materials from Asymptotic Solution of Diffusion Equation. Japanese Journal of Applied Physics, 2013, 52, 05DA12.	0.8	2
48	In-Plane Orientation Control of 2,7-Diphenyl[1]benzothieno[3,2-b][1]benzothiophene Monolayer on Bismuth-Terminated Si(111) Vicinal Surfaces with Wettability Optimization. Journal of Physical Chemistry C, 2013, 117, 11555-11561.	1.5	2
49	Influence of molecular structure on plasma carbonization of organic semiconductor molecules. Journal of Physics: Conference Series, 2013, 441, 012041.	0.3	0
50	Fabrication and characterization of photo-responsive organic p-type/n-type/piezoelectric tricolor superlattices. Applied Physics Letters, 2013, 103, 133305.	1.5	2
51	Fabrication of Piezoelectric Polyurea Films by Alternating Deposition. Japanese Journal of Applied Physics, 2012, 51, 041603.	0.8	6
52	Solvent Effects on the Transient Characteristics of Liquid-Gate Field Effect Transistors with Silicon Substrate. Japanese Journal of Applied Physics, 2012, 51, 111803.	0.8	0
53	Fabrication of ZnO Nanorods by Atmospheric-Pressure Solid-Source CVD Using Ethanol-Assisted Low-Temperature Vaporization. Bulletin of the Chemical Society of Japan, 2012, 85, 1287-1292.	2.0	1
54	Change in the Morphology of the Terrace Edges on Graphite Surfaces by Electrochemical Reduction. Chemistry Letters, 2012, 41, 187-188.	0.7	2

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55	Growth and magnetic properties of ultrathin Ni1+xFe2âˆ’xO4 films for spin filter junctions. Thin Solid Films, 2011, 519, 8239-8242.	0.8	4
56	Quantitative Analysis of Coherent and Incoherent Tunneling Currents in MgO-Based Epitaxial Magnetic Tunnel Junctions. Japanese Journal of Applied Physics, 2011, 50, 063003.	0.8	1
57	Origin of perpendicular magnetic anisotropy and evolution of magnetic domain structure of amorphous Prâ€“TMâ€“B (TM=Fe, Co) films. Journal of Magnetism and Magnetic Materials, 2010, 322, 900-908.	1.0	18
58	Hot electron transport in magnetic tunnel transistors with an epitaxial MgO tunnel barrier. Applied Physics Letters, 2010, 96, 112509.	1.5	9
59	High Magnetoresistance Ratio and Low Resistanceâ€“Area Product in Magnetic Tunnel Junctions with Perpendicularly Magnetized Electrodes. Applied Physics Express, 2010, 3, 053003.	1.1	80
60	Ultrathin Co/Pt and Co/Pd superlattice films for MgO-based perpendicular magnetic tunnel junctions. Applied Physics Letters, 2010, 97, .	1.5	255
61	Spin-dependent tunneling in epitaxial Fe/Cr/MgO/Fe magnetic tunnel junctions with an ultrathin Cr(001) spacer layer. Physical Review B, 2009, 79, .	1.1	31
62	Inelastic tunneling spectra of MgO barrier magnetic tunneling junctions showing large magnon contribution. Journal of Applied Physics, 2009, 105, .	1.1	16
63	Spin-torque-induced switching and precession in fully epitaxial Fe/MgO/Fe magnetic tunnel junctions. Physical Review B, 2009, 80, .	1.1	32
64	Quantitative measurement of voltage dependence of spin-transfer torque in MgO-based magnetic tunnel junctions. Nature Physics, 2008, 4, 37-41.	6.5	485
65	Controlled synthesis and characterization of Ag2S films with varied microstructures and its role as asymmetric barrier layer in trilayer junctions with dissimilar electrodes. Journal of Applied Physics, 2008, 103, .	1.1	21
66	Enhanced Magnetotransport at High Bias in Quasimagnetic Tunnel Junctions with EuS Spin-Filter Barriers. Physical Review Letters, 2007, 99, 016602.	2.9	94
67	In situ scanning tunneling microscopy observations of polycrystalline MgO(001) tunneling barriers grown on amorphous CoFeB electrode. Applied Physics Letters, 2007, 91, 012507.	1.5	9
68	Bactericidal Effect of TiO2 on the Selected Vibrio Parahaemolyticus and Optimization Using Response Surface Methodology. Journal of Nanoscience and Nanotechnology, 2007, 7, 3709-3712.	0.9	2
69	Oscillation of giant tunneling magnetoresistance with respect to tunneling barrier thickness in fully epitaxial Feâ•MgOâ•Fe magnetic tunnel junctions. Applied Physics Letters, 2007, 90, 252506.	1.5	43
70	Dependence on annealing temperatures of tunneling spectra in high-resistance CoFeB/MgO/CoFeB magnetic tunnel junctions. Solid State Communications, 2007, 143, 574-578.	0.9	23
71	Differential conductance measurements of low-resistance CoFeB/MgO/CoFeB magnetic tunnel junctions. Journal of Magnetism and Magnetic Materials, 2007, 310, e649-e651.	1.0	7
72	The phenomena of spin-filter tunnelling. Journal of Physics Condensed Matter, 2007, 19, 165202.	0.7	214

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73	Tunneling spectroscopy of magnetic tunnel junctions: Comparison between CoFeBâˆ•MgOâˆ•CoFeB and CoFeBâˆ•Alâ€“Oâˆ•CoFeB. Journal of Applied Physics, 2006, 99, 08T309.	1.1	8
74	Giant tunneling magnetoresistance in MgO-based magnetic tunnel junctions and its industrial applications. , 2006, , .		0
75	Microscopic structures of MgO barrier layers in single-crystal Feâˆ•MgOâˆ•Fe magnetic tunnel junctions showing giant tunneling magnetoresistance. Applied Physics Letters, 2006, 88, 251901.	1.5	8
76	Scanning tunneling microscopy observations of single-crystal Feâˆ•MgOâˆ•Fe magnetic tunnel junctions. Journal of Applied Physics, 2006, 99, 08T308.	1.1	2
77	Magnetic Tunnel Junctions with Magnesium Oxide Barriers. Journal of Magnetics, 2006, 11, 170-181.	0.2	5
78	Tunneling spectra of sputter-deposited CoFeB/MgO/CoFeB magnetic tunnel junctions showing giant tunneling magnetoresistance effect. Solid State Communications, 2005, 136, 611-615.	0.9	36
79	Giant tunneling magnetoresistance in fully epitaxial body-centered-cubic Coâˆ•MgOâˆ•Fe magnetic tunnel junctions. Applied Physics Letters, 2005, 87, 222508.	1.5	73
80	Atomically flat aluminum-oxide barrier layers constituting magnetic tunnel junctions observed by in situ scanning tunneling microscopy. Applied Physics Letters, 2005, 87, 171909.	1.5	10
81	Spin-Dependent Tunneling in Magnetic Tunnel Junctions with a Layered Antiferromagnetic Cr(001) Spacer: Role of Band Structure and Interface Scattering. Physical Review Letters, 2005, 95, 086602.	2.9	46
82	High Tunnel Magnetoresistance at Room Temperature in Fully Epitaxial Fe/MgO/Fe Tunnel Junctions due to Coherent Spin-Polarized Tunneling. Japanese Journal of Applied Physics, 2004, 43, L588-L590.	0.8	269
83	Giant room-temperature magnetoresistance in single-crystal Fe/MgO/Fe magnetic tunnel junctions. Nature Materials, 2004, 3, 868-871.	13.3	2,907
84	X-ray absorption and X-ray magnetic circular dichroism studies of a Co(0 0 1) monatomic layer at the interface with Al2O3. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E1489-E1490.	1.0	6
85	Quantum size effect in magnetic tunnel junctions with ultrathin Fe(001) electrodes. Journal of Applied Physics, 2002, 91, 7035.	1.1	14
86	Spin-Polarized Resonant Tunneling in Magnetic Tunnel Junctions. Science, 2002, 297, 234-237.	6.0	238
87	Cobalt spin arrangement in Co/Nd multilayers with depth-selectively inserted57Fe probe layer. Journal Physics D: Applied Physics, 2002, 35, 2479-2483.	1.3	0
88	A large quantum-well oscillation of the TMR effect. Journal Physics D: Applied Physics, 2002, 35, 2427-2431.	1.3	6
89	Quantum-well effect in magnetic tunnel junctions with ultrathin single-crystal Fe(100) electrodes. Applied Physics Letters, 2001, 79, 4381-4383.	1.5	31
90	Electric resistance of magnetic domain wall in NiFe wires with CoSm pinning pads. Journal of Applied Physics, 2000, 87, 5648-5650.	1.1	13

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91	Magnetic Anisotropy in Co/Nd Multilayers with Depth-Selectively Inserted⁵⁷Fe Probe Layer. Acta Physica Polonica A, 2000, 97, 439-442.	0.2	1
92	Magnetoresistance of quasi-Bloch-wall induced in NiFe/CoSm exchange-spring bilayers. Journal of Magnetism and Magnetic Materials, 1998, 177-181, 1267-1268.	1.0	4
93	The magnetization process and magnetoresistance of exchange-spring bilayer systems. Journal Physics D: Applied Physics, 1998, 31, 43-49.	1.3	48
94	Magnetoresistance of Bloch-wall-type magnetic structures induced in NiFe/CoSm exchange-spring bilayers. Physical Review B, 1998, 58, 6442-6446.	1.1	66
95	Magnetoresistance studies of multilayers including hard magnetic CoSm layers. Journal of Magnetism and Magnetic Materials, 1996, 156, 299-300.	1.0	4
96	Reversible magnetization process and magnetoresistance of soft-magnetic (NiFe) /hard-magnetic (CoSm) bilayers. Journal of Magnetism and Magnetic Materials, 1996, 163, 75-79.	1.0	54
97	Quantum size effect in magnetic tunnel junctions with single-crystal ultrathin electrodes. , 0, , .		0
98	Spin-Transfer Switching and Thermal Stability in an FePt/Au/FePt Nanopillar Prepared by Alternate Monatomic Layer Deposition. Applied Physics Express, 0, 1, 041302.	1.1	23