Masakazu Mukaida

List of Publications by Year
in descending order

68	1,997	331670 21	243625 44
papers	citations	h-index	g-index

68	68	68	2611
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Morphological Change and Mobility Enhancement in PEDOT:PSS by Adding Coâ€solvents. Advanced Materials, 2013, 25, 2831-2836.	21.0	380
2	Recent Progress on PEDOT-Based Thermoelectric Materials. Materials, 2015, 8, 732-750.	2.9	194
3	Polymer thermoelectric modules screen-printed on paper. RSC Advances, 2014, 4, 28802-28806.	3.6	143
4	Experimental Studies on the Anisotropic Thermoelectric Properties of Conducting Polymer Films. ACS Macro Letters, 2014, 3, 948-952.	4.8	118
5	Electronic structures of semiconducting alkaline-earth metal silicides. Journal of Alloys and Compounds, 2003, 358, 257-263.	5.5	109
6	Thermoelectric power enhancement of PEDOT:PSS in high-humidity conditions. Applied Physics Express, 2014, 7, 031601.	2.4	78
7	Thermoelectric power generation using nonwoven fabric module impregnated with conducting polymer PEDOT:PSS. Synthetic Metals, 2017, 225, 41-48.	3.9	58
8	Hydrogen diffusion coefficient and mobility in palladium as a function of equilibrium pressure evaluated by permeation measurement. Journal of Membrane Science, 2012, 421-422, 355-360.	8.2	52
9	Pressure-Dependent Hydrogen Permeability Extended for Metal Membranes Not Obeying the Square-Root Law. Journal of Physical Chemistry B, 2009, 113, 9795-9801.	2.6	51
10	Comparison of density of states of transition metal disilicides and their related compounds systematically calculated by a first-principle pseudopotential method using plane-wave basis. Intermetallics, 2000, 8, 381-390.	3.9	49
11	Measurement of in-plane thermal conductivity in polymer films. AIP Advances, 2016, 6, .	1.3	45
12	Calculation of electronic energy and density of state of iron-disilicides using a total-energy pseudopotential method, CASTEP. Thin Solid Films, 2001, 381, 176-182.	1.8	42
13	Stoichiometry of tantalum oxide films prepared by KrF excimer laser-induced chemical vapor deposition. Thin Solid Films, 1995, 261, 76-82.	1.8	41
14	Screening of the possible boron-based n-type thermoelectric conversion materials on the basis of the calculated densities of states of metal borides and doped Î²-boron. Intermetallics, 2001, 9, 721-734.	3.9	40
15	Outstanding Electrode-Dependent Seebeck Coefficients in Ionic Hydrogels for Thermally Chargeable Supercapacitor near Room Temperature. ACS Applied Materials & Interfaces, 2020, 12, 43674-43683.	8.0	39
16	Photoinduced Dedoping of Conducting Polymers: An Approach to Precise Control of the Carrier Concentration and Understanding Transport Properties. ACS Applied Materials & Interfaces, 2016, 8, 2054-2060.	8.0	35
17	High-rate supercapacitor using magnetically aligned graphene. Journal of Power Sources, 2021, 482, 228995.	7.8	34
18	Calculation of the density of states of transition metal monosilicides by a first-principle pseudopotential method using plane-wave basis. Intermetallics, 2001, 9, 261-268.	3.9	33

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19	Thermal stability, glass-forming ability and hydrogen permeability of amorphous Ni64Zr36â˜XMX (M=Ti,) Tj ETQq1 1 0.784314 rgBT /Ov	7.9	32
20	Band-calculation of the electronic densities of states and the total energies of boronâ€“silicon system. Journal of Alloys and Compounds, 2002, 347, 244-251.	5.5	24
21	Self-Aligned Formation of Sub 1 nm Gaps Utilizing Electromigration during Metal Deposition. ACS Applied Materials & Interfaces, 2013, 5, 12869-12875.	8.0	23
22	Reversible Protonic Doping in Poly(3,4-Ethylenedioxythiophene). Polymers, 2018, 10, 1065.	4.5	22
23	Stable organic thermoelectric devices for self-powered sensor applications. Journal of Materials Chemistry A, 2020, 8, 22544-22556.	10.3	22
24	Densification of Ta2O5 film prepared by KrF excimer laser CVD. Thin Solid Films, 1993, 232, 180-184.	1.8	18
25	Formation energies of two-dimensional nuclei randomly-generated on (001), (110), and (111) planes of a face-centered-cubic crystal. Thin Solid Films, 1997, 300, 305-313.	1.8	18
26	Morphology and structure of tantalum oxide deposit prepared by KrF excimer laser CVD. Journal of Materials Science, 1993, 28, 5363-5368.	3.7	15
27	Deposits obtained by photolysis of hexamethyldisilane by ArF excimer laser (SiC thin film preparation) Tj ETQq1 1 0.784314 rgBT /Ove	1.8	15
28	Hydrogen solution properties in a series of amorphous Zrâ€“Hfâ€“Ni alloys at elevated temperatures. Journal of Alloys and Compounds, 2008, 458, 307-312.	5.5	14
29	Polymer thermoelectric devices prepared by thermal lamination. Synthetic Metals, 2017, 225, 64-69.	3.9	14
30	Reduction of specific contact resistance between the conducting polymer PEDOT:PSS and a metal electrode by addition of a second solvent during film formation and a post-surface treatment. Synthetic Metals, 2018, 246, 289-296.	3.9	14
31	Enhanced Power Output in Polymer Thermoelectric Devices through Thermal and Electrical Impedance Matching. ACS Applied Energy Materials, 2019, 2, 6973-6978.	5.1	14
32	Thermoelectric properties of Ru- or Ge-doped Î²-FeSi2 films prepared by electron beam deposition. Thin Solid Films, 2001, 381, 296-302.	1.8	13
33	Water-processable n-type doping of carbon nanotubes via charge transfer with imidazolium chloride salt. Chemical Physics Letters, 2020, 755, 137801.	2.6	13
34	Preparation for defect-free self-supported Pd membranes by an electroless plating method. Journal of Membrane Science, 2010, 365, 378-381.	8.2	12
35	Composition dependence of morphology, structure, and thermoelectric properties of FeSi2 films prepared by sputtering deposition. Journal of Materials Research, 1996, 11, 2062-2070.	2.6	11
36	Preparation of Î²-FeSi2 films by chemical vapor deposition. Thin Solid Films, 2001, 381, 214-218.	1.8	11

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37	Application of Extended Permeability to a Thick Palladium Membrane. Advanced Materials Research, 2010, 117, 81-85.	0.3	11
38	Extracting carrier mobility using a photoinduced charge transfer reaction: From conducting polymers to nanocarbon materials. Organic Electronics, 2020, 78, 105615.	2.6	11
39	Electrical conduction and thermoelectric properties of tetrathiafulvalene-tetracyanoquinodimethane cast films prepared with N,N-dimethylacetamide. Synthetic Metals, 2017, 230, 12-17.	3.9	11
40	Hydrogen separation from dry gas mixtures using a membrane module consisting of palladium-coated amorphous-alloy. Desalination, 2008, 234, 293-299.	8.2	10
41	An accurate method to determine the through-plane electrical conductivity and to study transport properties in film samples. Organic Electronics, 2016, 38, 264-270.	2.6	10
42	SiC thin film preparation by ArF excimer laser chemical vapor deposition Part 1: Rate of photolysis of alkylsilanes by ArF excimer laser and their decomposition products. Thin Solid Films, 1996, 274, 70-75.	1.8	9
43	Electrical transport and thermoelectric properties of boron carbide nanowires. Nanotechnology, 2017, 28, 145404.	2.6	9
44	Synthesis and thermopower of poly(3-methoxythiophene-2,5-diyl-co-3,4-ethylenedioxythiophene-2,5-diyl)/tosylate. Polymer, 2015, 66, 38-42.	3.8	8
45	Humidity control in a closed system utilizing conducting polymers. RSC Advances, 2018, 8, 12540-12546.	3.6	8
46	Poly(3,4â€Ethylene Dioxythiophene)/Poly(Styrene Sulfonate) Electrodes in Electrochemical Cells for Harvesting Waste Heat. Energy Technology, 2020, 8, 1900998.	3.8	8
47	Thermoelectric power of titanate and ferrite with the cubic perovskite structure. Solid State Ionics, 2001, 144, 315-320.	2.7	7
48	Extracting Carrier Mobility in Conducting Polymers Using a Photoinduced Charge Transfer Reaction. Journal of Physical Chemistry C, 2018, 122, 15922-15928.	3.1	7
49	Anomalous n-type conversion of thermoelectric polarity in ionic hydrogels using PEDOT:PSS electrodes. Journal of Materials Chemistry C, 2021, 9, 15813-15819.	5.5	7
50	Thermoelectrochemical Cells Based on Ferricyanide/Ferrocyanide/Guanidinium: Application and Challenges. ACS Applied Materials & Interfaces, 2022, , .	8.0	7
51	Recovery of stoichiometry of Ta2O5 prepared by KrF excimer laser CVD from tantalum methoxide using microwave discharge of oxygen gas. Journal of Materials Science, 1995, 30, 4603-4608.	3.7	6
52	Control of anisotropic conduction of carbon nanotube sheets and their use as planar-type thermoelectric conversion materials. Science and Technology of Advanced Materials, 2021, 22, 272-279.	6.1	5
53	Formation of accurate 1-nm gaps using the electromigration method during metal deposition. Applied Physics Express, 2016, 9, 035201.	2.4	4
54	Seebeck coefficients of iron group elements borides. Intermetallics, 2004, 12, 55-58.	3.9	3

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55	Poly(3,4â€Ethylene Dioxythiophene)/Poly(Styrene Sulfonate) Electrodes in Electrochemical Cells for Harvesting Waste Heat. Energy Technology, 2020, 8, 2070053.	3.8	3
56	Theoretical Vâ€“I characteristics of the solid-oxide thermocell using the oxide ion and electronic mixed conductors. Solid State Ionics, 2002, 154-155, 101-107.	2.7	2
57	Effect of Operating Conditions of KrF Excimer Laser on Crystallinity of Deposits in LCVD from Mo(CO)₆. Electrochemistry, 1992, 60, 1009-1011.	0.3	2
58	Electrostatic Potential and Temperature Distribution in Case of a Series and a Parallel Configuration of Two Thermoelectric Conversion Phases. Journal of the Ceramic Society of Japan, 1996, 104, 361-370.	1.3	1
59	Preparation of Silicon Oxide Films by CVD Using Fluorotriethoxysilane. Journal of the Ceramic Society of Japan, 1997, 105, 433-435.	1.3	1
60	Thermoelectric materials-based on organic semiconductors. , 2021, , 333-345.		1
61	Preparation of Fe-Si thin films by chemical vapor deposition. , 0, , .		0
62	Electronic energy of Fe-Si alloys calculated by a density-functional method using a pseudopotential approach. , 0, , .		0
63	Electronic densities of states of Silicon-Boron system. , 0, , .		0
64	Influence of structures and compositions on thermoelectric properties of silicon borides. , 0, , .		0
65	Electronic structures of semiconducting alkaline-earth metal silicides. , 0, , .		0
66	Effects of metallic elements on thermoelectric properties of silicon borides. , 0, , .		0
67	Conducting polymer electrodes in electrochemical cells for waste heat harvesting. , 2019, , .		0
68	Thickness optimization of the output power and effective thermoelectric figure of merit of thin thermoelectric generator. Japanese Journal of Applied Physics, 2022, 61, 080903.	1.5	0