

Hiroyuki Muto

List of Publications by Year in descending order

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papers

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times ranked

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#	ARTICLE	IF	CITATIONS
1	Mechanical properties of alumina matrix composite reinforced with carbon nanofibers affected by small interfacial sliding shear stress. <i>Ceramics International</i> , 2022, 48, 8466-8472.	4.8	7
2	Transparent conductive polymer composites obtained via electrostatically assembled carbon nanotubes/poly (methyl methacrylate) composite particles. <i>Advanced Powder Technology</i> , 2022, 33, 103528.	4.1	8
3	Ionic Conduction and Electric Modulus in Li^{2+} -CaS and Ca^{2+} -X $^{2+}$ ($\text{X} = \text{F}, \text{Cl}, \text{Br}, \text{and I}$) Nanocomposites. <i>Electrochemistry</i> , 2022, 90, 067005-067005.	1.4	4
4	Ordered arrays of electrostatically assembled SiO_2 composite particles by electrophoresis-induced stimulation. <i>Journal of Sol-Gel Science and Technology</i> , 2022, 104, 548-557.	2.4	1
5	Controlled formation of carbon nanotubes incorporated ceramic composite granules by electrostatic integrated nano-assembly. <i>Nanoscale</i> , 2022, 14, 9669-9674.	5.6	4
6	Current progress in the development of Fe-air batteries and their prospects for next-generation batteries. , 2021, , 59-83.		5
7	Nanomaterial Fabrication through the Modification of Sol-Gel Derived Coatings. <i>Nanomaterials</i> , 2021, 11, 181.	4.1	36
8	Electrostatically assembled SiC - Al_2O_3 composite particles for direct selective laser sintering. <i>Advanced Powder Technology</i> , 2021, 32, 2074-2084.	4.1	8
9	Development of liquid-phase fabrication of nanotube array-based multiferroic nanocomposite film. <i>Journal of Alloys and Compounds</i> , 2021, 869, 159219.	5.5	2
10	Nanoporous anodic Nb_2O_5 with pore-in-pore structure formation and its application for the photoreduction of Cr(VI). <i>Chemosphere</i> , 2021, 283, 131231.	8.2	13
11	Preparation of catalytically active Au nanoparticles by sputter deposition and their encapsulation in metal-organic framework of $\text{Cu}_3(\text{BTC})_2$. <i>Materials Letters</i> , 2020, 261, 127124.	2.6	8
12	Incorporation of titanium pyrophosphate in polybenzimidazole membrane for medium temperature dry PEFC application. <i>Solid State Ionics</i> , 2020, 344, 115140.	2.7	16
13	Fe_3O_4 -embedded rGO composites as anode for rechargeable FeO_x -air batteries. <i>Materials Today Communications</i> , 2020, 25, 101540.	1.9	18
14	Formation of Fe-embedded graphitic carbon network composites as anode materials for rechargeable Fe-air batteries. <i>Energy Storage</i> , 2020, 2, e196.	4.3	4
15	Electrostatic Assembly Technique for Novel Composites Fabrication. <i>Journal of Composites Science</i> , 2020, 4, 155.	3.0	15
16	Catalytically active PdRu and CuRu bimetallic nanoparticle formation in the mesoporous SiO_2 by supercritical CO_2 -assisted immobilization. <i>Journal of Supercritical Fluids</i> , 2020, 160, 104818.	3.2	1
17	Improved green body strength using $\text{PMMA}/\text{Al}_2\text{O}_3$ composite particles fabricated via electrostatic assembly. <i>Nano Express</i> , 2020, 1, 030001.	2.4	4
18	Formation of porous $\text{Al}_2\text{O}_3/\text{SiO}_2$ composite ceramics by electrostatic assembly. <i>Journal of the Ceramic Society of Japan</i> , 2020, 128, 605-610.	1.1	7

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19	Design of Heat-Conductive hBN/PMMA Composites by Electrostatic Nano-Assembly. <i>Nanomaterials</i> , 2020, 10, 134.	4.1	12
20	Antibacterial and antifungal properties of Ag nanoparticle-loaded cellulose nanofiber aerogels prepared by supercritical CO ₂ drying. <i>Journal of Supercritical Fluids</i> , 2019, 143, 1-7.	3.2	39
21	Nanotube array-based barium titanate/cobalt ferrite composite film for affordable magnetoelectric multiferroics. <i>Journal of Materials Chemistry C</i> , 2019, 7, 10066-10072.	5.5	19
22	Effect of mixed alkali metal ions in highly proton conductive K/Cs-hydrogen sulfate-phosphotungstic acid composites prepared by mechanical milling. <i>Solid State Ionics</i> , 2019, 340, 115022.	2.7	4
23	Controlled microstructure and mechanical properties of Al ₂ O ₃ -based nanocarbon composites fabricated by electrostatic assembly method. <i>Nanoscale Research Letters</i> , 2019, 14, 245.	5.7	12
24	PMMA-ITO Composite Formation via Electrostatic Assembly Method for Infra-Red Filtering. <i>Nanomaterials</i> , 2019, 9, 886.	4.1	20
25	Facile formation of Fe ₃ O ₄ -particles decorated carbon paper and its application for all-solid-state rechargeable Fe-air battery. <i>Applied Surface Science</i> , 2019, 486, 257-264.	6.1	17
26	Fabrication of an all-solid-state Zn-air battery using electroplated Zn on carbon paper and KOH-ZrO ₂ solid electrolyte. <i>Applied Surface Science</i> , 2019, 487, 343-348.	6.1	21
27	Anhydrous proton conductive xCHS-(1-x)WSiA composites prepared via liquid-phase shaking. <i>Solid State Ionics</i> , 2019, 337, 1-6.	2.7	3
28	Investigation of the anchor layer formation on different substrates and its feasibility for optical properties control by aerosol deposition. <i>Applied Surface Science</i> , 2019, 483, 212-218.	6.1	13
29	Effects of cesium-substituted silicotungstic acid doped with polybenzimidazole membrane for the application of medium temperature polymer electrolyte fuel cells. <i>E3S Web of Conferences</i> , 2019, 83, 01008.	0.5	4
30	Fabrication of Carbon-decorated Al ₂ O ₃ Composite Powders using Cellulose Nanofiber for Selective Laser Sintering. <i>Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy</i> , 2019, 66, 168-173.	0.2	7
31	Micro- and Nano-assembly of Composite Particles by Electrostatic Adsorption. <i>Nanoscale Research Letters</i> , 2019, 14, 297.	5.7	25
32	Electrical and Thermal Properties of PMMA/h-BN Composite Material Produced by Electrostatic Adsorption Method. <i>IEEJ Transactions on Fundamentals and Materials</i> , 2019, 139, 60-65.	0.2	4
33	Preparation of LiNi _{1/3} Mn _{1/3} Co _{1/3} O ₂ /Li ₃ S ₂ S ₇ cathode composite particles using a new liquid-phase process and application to all-solid-state lithium batteries. <i>Journal of the Ceramic Society of Japan</i> , 2018, 126, 826-831.	1.1	8
34	Cell performance enhancement with titania-doped polybenzimidazole based composite membrane in intermediate temperature fuel cell under anhydrous condition. <i>Journal of the Ceramic Society of Japan</i> , 2018, 126, 789-793.	1.1	11
35	Sol-gel template synthesis of BaTiO ₃ films with nano-periodic structures. <i>Materials Letters</i> , 2018, 227, 120-123.	2.6	7
36	Multiferroic nanocomposite fabrication via liquid phase using anodic alumina template. <i>Science and Technology of Advanced Materials</i> , 2018, 19, 535-542.	6.1	5

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37	Nano/Microcomposite Particles: Preparation Processes and Applications. , 2018, , 781-785.		1
38	Ag nanoparticle-filled TiO ₂ nanotube arrays prepared by anodization and electrophoretic deposition for dye-sensitized solar cells. Nanotechnology, 2017, 28, 135207.	2.6	25
39	Development of Iron-Based Rechargeable Batteries with Sintered Porous Iron Electrodes. ECS Transactions, 2017, 75, 111-116.	0.5	5
40	Supercritical fluid-assisted immobilization of Pd nanoparticles in the mesopores of hierarchical porous SiO ₂ for catalytic applications. Journal of Supercritical Fluids, 2017, 130, 140-146.	3.2	21
41	Electrochemical Performance of Sintered Porous Negative Electrodes Fabricated with Atomized Powders for Iron-Based Alkaline Rechargeable Batteries. Journal of the Electrochemical Society, 2017, 164, A2049-A2055.	2.9	14
42	Influence of Orientation of Flaky Boron Nitride on Electrical and Thermal Properties of Polymethylmethacrylate / Boron Nitride Electrical Insulating Composite Material Produced by Electrostatic Adsorption Method. IEEJ Transactions on Fundamentals and Materials, 2017, 137, 202-207.	0.2	1
43	Chemical synthesis of Li ₃ PS ₄ precursor suspension by liquid-phase shaking. Solid State Ionics, 2016, 285, 2-5.	2.7	69
44	Catalytically active Pt nanoparticles immobilized inside the pores of metal organic framework using supercritical CO ₂ solutions. Microporous and Mesoporous Materials, 2016, 225, 26-32.	4.4	39
45	Production of Thermal Conductive PMMA/BN Electric Insulating Composite Material using Electrostatic Adsorption Method. IEEJ Transactions on Fundamentals and Materials, 2016, 136, 186-192.	0.2	2
46	Ag nanoparticle-deposited TiO ₂ nanotube arrays for electrodes of Dye-sensitized solar cells. Nanoscale Research Letters, 2015, 10, 219.	5.7	33
47	Blue-emitting photoluminescence of rod-like and needle-like ZnO nanostructures formed by hot-water treatment of sol-gel derived coatings. Journal of Luminescence, 2015, 158, 44-49.	3.1	14
48	Preparation of Exoergic Insulating Composite Material using Electrostatic Adsorption Method. IEEJ Transactions on Fundamentals and Materials, 2015, 135, 217-222.	0.2	4
49	Preparation of hydroxide ion conductive KOH-ZrO ₂ electrolyte for all-solid state iron/air secondary battery. Solid State Ionics, 2014, 262, 188-191.	2.7	9
50	Preparation of hydroxide ion conductive KOH-layered double hydroxide electrolytes for an all-solid-state iron-air secondary battery. Journal of Asian Ceramic Societies, 2014, 2, 165-168.	2.3	16
51	Enhanced dye-sensitized solar cells performance of ZnO nanorod arrays grown by low-temperature hydrothermal reaction. International Journal of Energy Research, 2013, 37, n/a-n/a.	4.5	12
52	Characterization of mechanochemically synthesized MHSO ₄ -H ₄ SiW ₁₂ O ₄₀ composites (M=K, NH ₄ , Cs). Materials Research Bulletin, 2012, 47, 2931-2935.	5.2	6
53	Anhydrous proton conductivity of KHSO ₄ -H ₃ PW ₁₂ O ₄₀ composites and the correlation with hydrogen bonding distance under ambient pressure. Electrochimica Acta, 2011, 56, 9364-9369.	5.2	18
54	Solid-state mechanochemical synthesis of CsHSO ₄ and 1,2,4-triazole inorganic-organic composite electrolytes for dry fuel cells. Electrochimica Acta, 2011, 56, 2364-2371.	5.2	12

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55	Mechanochemically synthesized CsH ₂ PO ₄ ·H ₃ PW ₁₂ O ₄₀ composites as proton-conducting electrolytes for fuel cell systems in a dry atmosphere. <i>Science and Technology of Advanced Materials</i> , 2011, 12, 034402.	6.1	14
56	Inorganic-organic composite electrolytes consisting of polybenzimidazole and Cs-substituted heteropoly acids and their application for medium temperature fuel cells. <i>Journal of Materials Chemistry</i> , 2010, 20, 6359.	6.7	77
57	Three-dimensional hydrogen-bonding networks and proton conductivities under non-humidified conditions of CsHSO ₄ ·WPA composites. <i>Solid State Ionics</i> , 2010, 181, 180-182.	2.7	15
58	Mechanochemically synthesized cesium-ion-substituted phosphotungstic acid using several types of cesium-containing salts. <i>Solid State Ionics</i> , 2008, 179, 1174-1177.	2.7	19