Motoyuki Iijima

List of Publications by Year in Descending Order

69 papers	1,017 citations	16 h-index	29 g-index
71 ext. papers	1,130 ext. citations	4.3 avg, IF	4.55 L-index

#	Paper	IF	Citations
69	Operando observation of concentrated SiO suspensions by optical coherent tomography during flow curve measurements: The relationship between polymer dispersant structures and surface interactions. *Journal of Colloid and Interface Science*, **2022**, 607, 290-297	9.3	0
68	Polymer Ligand Design and Surface Modification of Ag Nanowires toward Color-Tone-Tunable Transparent Conductive Films. *ACS Applied Materials & Interfaces*, **2021**, 13, 13705-13713	9.5	5
67	3D structuring of dense alumina ceramics using fiber-based stereolithography with interparticle photo-cross-linkable slurry. *Advanced Powder Technology*, **2021**, 32, 72-79	4.6	8
66	Nonaqueous gel casting using multicomponent concentrated slurries through Michael additive reaction for fabricating silicon nitride dense ceramics. *Advanced Powder Technology*, **2021**, 32, 472-479	4.6	3
65	Transparent Y-□SiAlON:Ce3+ Ceramics Fabricated by Low-Temperature Liquid Phase Sintering Technique. *ECS Journal of Solid State Science and Technology*, **2021**, 10, 086008	2	0
64	Dislocation-controlled microscopic mechanical phenomena in single crystal silicon under bending stress at room temperature. *Journal of Materials Science*, **2020**, 55, 7359-7372	4.3	7
63	Multi-scale laser direct writing of conductive metal microstructures using a 405-nm blue laser. *Optics Express*, **2020**, 28, 8363-8370	3.3	10
62	Control of Dispersion and Particle Assembling Structures in Non-aqueous, Dense, and Multicomponent Slurries. *Journal of the Society of Powder Technology, Japan*, **2020**, 57, 19-24	0.3	1
61	Preparation of Nitride Phosphor Particle Dispersed h-BN/Glass Composites. *Journal of the Society of Powder Technology, Japan*, **2020**, 57, 137-143	0.3	
60	Rapid three-dimensional structuring of transparent SiO2 glass using interparticle photo-cross-linkable suspensions. *Communications Materials*, **2020**, 1,	6	13
59	Hetero-assembly of colloidal particles in concentrated non-aqueous suspensions by polymer dispersant design. *Advanced Powder Technology*, **2020**, 31, 746-754	4.6	2
58	Relationship between bending strength of bulk porous silicon carbide ceramics and grain boundary strength measured using microcantilever beam specimens. *Journal of the European Ceramic Society*, **2020**, 40, 2634-2641	6	0
57	Measurement of mechanical properties of BaTiO3 layer in multi-layered ceramic capacitor using a microcantilever beam specimen. *Journal of the Ceramic Society of Japan*, **2019**, 127, 335-338	1	8
56	Simultaneous epoxy grafting on SiO2 nanoparticles during bead milling and their effects on the mechanical properties of epoxy-based composites. *Advanced Powder Technology*, **2019**, 30, 1782-1788	4.6	5
55	Design of nanoscale structured composite particles through mechanical process for fabricating a powder layer with rapid drying properties. *Chemical Engineering Science*, **2019**, 203, 113-121	4.4	2
54	Prediction of strength based on defect analysis in Al2O3 ceramics via non-destructive and three-dimensional observation using optical coherence tomography. *Journal of the Ceramic Society of Japan*, **2019**, 127, 462-468	1	9
53	Complex of polyethyleneimine and anionic surfactant with functional chain: a versatile surface modifier applicable to various particles, solvents, and surface modification processes. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2018**, 545, 110-116	5.1	4

52	Effect of polyethyleneimine-fatty acid complex type dispersant structure on the overall processing chain of Si3N4 ceramics using multicomponent non-aqueous slurries. *Advanced Powder Technology*, **2018**, 29, 3440-3447	4.6	6
51	Microstructural control of green bodies prepared from Si-based multi-component non-aqueous slurries and their effects on fabrication of Si3N4 ceramics through post-reaction sintering. *Advanced Powder Technology*, **2018**, 29, 3199-3209	4.6	5
50	Observation of Internal Structure of Ceramics and Slurry by Optical Coherence Tomography. *Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy*, **2018**, 65, 659-663	0.2	3
49	Degradation evaluation of Si 3 N 4 ceramic surface layer in contact with molten Al using microcantilever beam specimens. *Journal of the European Ceramic Society*, **2017**, 37, 4351-4356	6	3
48	Characterization of Cross-linking Vehicle Effect on Surface Interactions between pH-sensitive Drug Delivery Vehicle and Mucin Layers by Colloid Probe Atomic Force Microscopy. *Journal of the Society of Powder Technology, Japan*, **2017**, 54, 305-310	0.3	0
47	Spark plasma sintering of silicon nitride using nanocomposite particles. *Advanced Powder Technology*, **2017**, 28, 37-42	4.6	16
46	SiO2 nanoparticles surface modified with polyethyleneimine-oleic acid complex as stabilizers of Ni fine particles in dense nonaqueous suspensions. *Advanced Powder Technology*, **2017**, 28, 30-36	4.6	10
45	Surface modification techniques toward controlling the dispersion stability and particle-assembled structures of slurries. *Journal of the Ceramic Society of Japan*, **2017**, 125, 603-607	1	2
44	Pulverization of Y2O3 nanoparticles by using nanocomposite particles prepared by mechanical treatmentPeer review under responsibility of The Ceramic Society of Japan and the Korean Ceramic Society.View all notes. *Journal of Asian Ceramic Societies*, **2016**, 4, 351-356	2.4	
43	Liquid penetration as a simple detection method for structural differences in particulate films prepared from slurries. *Powder Technology*, **2016**, 303, 59-67	5.2	4
42	Effect of fatty acids complexed with polyethyleneimine on the flow curves of TiO2 nanoparticle/toluene suspensionsPeer review under responsibility of The Ceramic Society of Japan and the Korean Ceramic Society.View all notes. *Journal of Asian Ceramic Societies*, **2016**, 4, 277-281	2.4	16
41	Fabrication of Si3N4 ceramics by post-reaction sintering using SiY2O3Al2O3 nanocomposite particles prepared by mechanical treatment. *Ceramics International*, **2016**, 42, 11554-11561	5.1	10
40	Fabrication of c-axis oriented Si3N4 ceramics using multilayered-graphene-coated Si3N4 seeds and their orientation in an innovative low magnetic field. *Advanced Powder Technology*, **2016**, 27, 2005-2011	4.6	7
39	Non-aqueous colloidal processing route for fabrication of highly dispersed aramid nanofibers attached with Ag nanoparticles and their stability in epoxy matrixes. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2015**, 482, 195-202	5.1	7
38	PolyethyleneimineOleic Acid Complex as a Polymeric Dispersant for Si3N4 and Si3N4-Based Multicomponent Nonaqueous Slurries. *Industrial & Engineering Chemistry Research*, **2015**, 54, 12847-12854	3.9	20
37	Fabrication of composite particles by attaching surface-modified nanoparticles to core particles by wet processing in organic solvents. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2014**, 452, 51-58	5.1	6
36	Carbon Nanotube/Nanofibers and Graphite Hybrids for Li-Ion Battery Application. *Journal of Nanomaterials*, **2014**, 2014, 1-7	3.2	4
35	Functionalization of Ag nanoparticles using local hydrophilic pool segment designed on their particle surface **2014**,		1

34	Toward continuous LC-MS analysis: surface modification of magnetic microparticles with TiO2 for phosphate adsorption. *Bioscience, Biotechnology and Biochemistry*, **2014**, 78, 748-54	2.1	1
33	Composites of SnO2/layered SnOx compounds and their electrical properties. *RSC Advances*, **2013**, 3, 22931	3.7	1
32	Effect of structure of cationic dispersants on stability of carbon black nanoparticles and further processability through layer-by-layer surface modification. *Chemical Engineering Science*, **2013**, 85, 30-37	4.4	25
31	Dispersion of inorganic electrolytes in low-polarity solvents assisted by surface modified magnetic nanoparticles and their base catalytic properties. *Chemical Engineering Science*, **2013**, 91, 65-69	4.4	2
30	Free-standing, roll-able, and transparent silicone polymer film prepared by using nanoparticles as cross-linking agents. *Advanced Powder Technology*, **2013**, 24, 625-631	4.6	11
29	Analysis of dispersion and aggregation behavior of carbon black particles in aqueous suspension by colloid probe AFM method. *Advanced Powder Technology*, **2013**, 24, 844-851	4.6	15
28	Hydrophobic Group Functionalization of Polyethyleneimine for Controlling Dispersion Behavior of Silicon Carbide Nanoparticles in Aqueous Suspension. *Journal of the American Ceramic Society*, **2012**, 95, 3448-3454	3.8	9
27	Redispersion Property of TiO2 Nanoparticles Modified with Oleyl-group. *Journal of the Society of Powder Technology, Japan*, **2012**, 49, 108-115	0.3	6
26	Effect of Nanoparticle Concentration on the Property of Silicone Polymer Sheet Cross-linked by Nanoparticles. *Journal of the Society of Powder Technology, Japan*, **2012**, 49, 876-882	0.3	2
25	Effect of additive ratio of mixed silane alkoxides on reactivity with TiO2 nanoparticle surface and their stability in organic solvents. *Advanced Powder Technology*, **2011**, 22, 663-668	4.6	14
24	TiO2 Supported on Porous Aluminosilicate Prepared in Cationic Surfactant Solution for Acetaldehyde Decomposition with a Protection of Organic Base Materials. *Journal of the American Ceramic Society*, **2010**, 93, 2048	3.8	1
23	Electrostatic Deposition of Aerosol Particles Generated from an Aqueous Nanopowder Suspension on a Chemically Treated Substrate. *Japanese Journal of Applied Physics*, **2010**, 49, 06GH17	1.4	9
22	Layer-by-layer surface modification of functional nanoparticles for dispersion in organic solvents. *Langmuir*, **2010**, 26, 17943-8	4	40
21	Surface Modification and Dispersion of Gas Phase Synthesized Oxide Composite Nanoparticles in Organic Solvent by Agitation Milling Process with Small Beads. *Journal of the Society of Powder Technology, Japan*, **2010**, 47, 310-316	0.3	5
20	Surface modification and characterization for dispersion stability of inorganic nanometer-scaled particles in liquid media. *Science and Technology of Advanced Materials*, **2010**, 11, 044304	7.1	66
19	Electrical-driven disaggregation of the two-dimensional assembly of colloidal polymer particles under pulse DC charging. *Advanced Powder Technology*, **2010**, 21, 534-541	4.6	11
18	Electrophoretic packing structure from aqueous nanoparticle suspension in pulse DC charging. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2010**, 360, 13-19	5.1	21
17	Surface Modification for Improving the Stability of Nanoparticles in Liquid Media. *KONA Powder and Particle Journal*, **2009**, 27, 119-129	3.4	92

16	Oxidation-resistant Silica-coating on Highly Dispersed Spindle-type Fe-Co Nanoparticles. *Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy*, **2009**, 56, 232-235	0.2	
15	Iron nanoparticles dispersible in both ethanol and water for direct silica coating. *Powder Technology*, **2009**, 196, 80-84	5.2	11
14	Tuning the stability of TiO2 nanoparticles in various solvents by mixed silane alkoxides. *Journal of Colloid and Interface Science*, **2009**, 337, 61-5	9.3	50
13	Surface modification of BaTiO3 particles by silane coupling agents in different solvents and their effect on dielectric properties of BaTiO3/epoxy composites. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2009**, 352, 88-93	5.1	76
12	Rapid magnetic catch-and-release purification by hydrophobic interactions. *Langmuir*, **2009**, 25, 11043-7	4	10
11	Anionic surfactant with hydrophobic and hydrophilic chains for nanoparticle dispersion and shape memory polymer nanocomposites. *Journal of the American Chemical Society*, **2009**, 131, 16342-3	16.4	61
10	Surface Modification of Silicon Carbide Nanoparticles by Azo Radical Initiators. *Journal of Physical Chemistry C*, **2008**, 112, 11786-11790	3.8	60
9	Direct measurement of interactions between stimulation-responsive drug delivery vehicles and artificial mucin layers by colloid probe atomic force microscopy. *Langmuir*, **2008**, 24, 3987-92	4	36
8	Low-temperature synthesis of redispersible iron oxide nanoparticles under atmospheric pressure and ultradense reagent concentration. *Powder Technology*, **2008**, 181, 45-50	5.2	8
7	Effect of surface interaction of silica nanoparticles modified by silane coupling agents on viscosity of methylethylketone suspension. *Journal of Colloid and Interface Science*, **2007**, 305, 315-23	9.3	40
6	Effect of particle size on surface modification of silica nanoparticles by using silane coupling agents and their dispersion stability in methylethylketone. *Journal of Colloid and Interface Science*, **2007**, 307, 418-24	9.3	82
5	Dispersion Behavior of Barium Titanate Nanoparticles Prepared by Using Various Polycarboxylic Dispersants. *Journal of the American Ceramic Society*, **2007**, 90, 2741-2746	3.8	8
4	Microstructure control of iron hydroxide nanoparticles using surfactants with different molecular structures. *Journal of Colloid and Interface Science*, **2006**, 298, 202-8	9.3	20
3	Microstructure of iron particles reduced from silica-coated hematite in hydrogen. *Advanced Powder Technology*, **2005**, 16, 621-637	4.6	7
2	Preparation of agglomeration-free hematite particles coated with silica and their reduction behavior in hydrogen. *Journal of Colloid and Interface Science*, **2005**, 287, 526-33	9.3	17
1	In situ observation of evolution of internal structure of alumina during sintering by swept-source OCT. *International Journal of Applied Ceramic Technology*,	2	2