

# Nobuyuki Zettsu

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8540025/publications.pdf>

Version: 2024-02-01

84  
papers

1,963  
citations

218677

26  
h-index

265206

42  
g-index

86  
all docs

86  
docs citations

86  
times ranked

2407  
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis, Stability, and Surface Plasmonic Properties of Rhodium Multipods, and Their Use as Substrates for Surface-Enhanced Raman Scattering. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 1288-1292.	13.8	135
2	Plasma assisted polishing of single crystal SiC for obtaining atomically flat strain-free surface. <i>CIRP Annals - Manufacturing Technology</i> , 2011, 60, 571-574.	3.6	135
3	Photo-triggered Surface Relief Grating Formation in Supramolecular Liquid Crystalline Polymer Systems with Detachable Azobenzene Unit. <i>Advanced Materials</i> , 2008, 20, 516-521.	21.0	115
4	Soft Crosslinkable Azo Polymer for Rapid Surface Relief Formation and Persistent Fixation. <i>Advanced Materials</i> , 2001, 13, 1693-1697.	21.0	93
5	Molybdate flux growth of idiomorphic $\text{Li}(\text{Ni}_{1/3}\text{Co}_{1/3}\text{Mn}_{1/3})\text{O}_2$ single crystals and characterization of their capabilities as cathode materials for lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2016, 4, 7289-7296.	10.3	76
6	Towards high-resolution ptychographic x-ray diffraction microscopy. <i>Physical Review B</i> , 2011, 83, .	3.2	71
7	Growth Manner of Octahedral-Shaped $\text{Li}(\text{Ni}_{1/3}\text{Co}_{1/3}\text{Mn}_{1/3})\text{O}_2$ Single Crystals in Molten $\text{Na}_2\text{SO}_4$ . <i>Crystal Growth and Design</i> , 2016, 16, 2618-2623.	3.0	69
8	Highly Photosensitive Surface Relief Gratings Formation in a Liquid Crystalline Azobenzene Polymer: New Implications for the Migration Process. <i>Macromolecules</i> , 2007, 40, 4607-4613.	4.8	63
9	Three-Dimensional Electron Density Mapping of Shape-Controlled Nanoparticle by Focused Hard X-ray Diffraction Microscopy. <i>Nano Letters</i> , 2010, 10, 1922-1926.	9.1	63
10	Highly Efficient Photogeneration of Surface Relief Structure and Its Immobilization in Cross-Linkable Liquid Crystalline Azobenzene Polymers. <i>Macromolecules</i> , 2004, 37, 8692-8698.	4.8	62
11	High-resolution diffraction microscopy using the plane-wave field of a nearly diffraction limited focused x-ray beam. <i>Physical Review B</i> , 2009, 80, .	3.2	59
12	Coherent Diffraction Imaging Analysis of Shape-Controlled Nanoparticles with Focused Hard X-ray Free-Electron Laser Pulses. <i>Nano Letters</i> , 2013, 13, 6028-6032.	9.1	57
13	Dual luminophore polystyrene microspheres for pressure-sensitive luminescent imaging. <i>Measurement Science and Technology</i> , 2006, 17, 1254-1260.	2.6	56
14	Fabrication of $\text{LiCoO}_2$ Crystal Layers Using a Flux Method and Their Application for Additive-Free Lithium-Ion Rechargeable Battery Cathodes. <i>Crystal Growth and Design</i> , 2014, 14, 1882-1887.	3.0	40
15	High-resolution projection image reconstruction of thick objects by hard x-ray diffraction microscopy. <i>Physical Review B</i> , 2010, 82, .	3.2	38
16	Unconventional polarization characteristic of rapid photoinduced material motion in liquid crystalline azobenzene polymer films. <i>Applied Physics Letters</i> , 2003, 83, 4960-4962.	3.3	37
17	Defect Formation Energy in Spinel $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$ Using Ab Initio DFT Calculations. <i>Journal of Physical Chemistry C</i> , 2015, 119, 9117-9124.	3.1	37
18	Flux growth of $\text{Sr}_2\text{Ta}_2\text{O}_7$ crystals and subsequent nitridation to form $\text{SrTaO}_2\text{N}$ crystals. <i>CrystEngComm</i> , 2013, 15, 8133.	2.6	34

#	ARTICLE	IF	CITATIONS
19	Waterproof molecular monolayers stabilize 2D materials. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 20844-20849.	7.1	32
20	Molecular Dynamics Studies on the Lithium Ion Conduction Behaviors Depending on Tilted Grain Boundaries with Various Symmetries in Garnet-Type $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ . Journal of Physical Chemistry C, 2018, 122, 21755-21762.	3.1	31
21	Figuring of plano-elliptical neutron focusing mirror by local wet etching. Optics Express, 2009, 17, 6414.	3.4	30
22	Surface functionalization of PTFE sheet through atmospheric pressure plasma liquid deposition approach. Surface and Coatings Technology, 2008, 202, 5284-5288.	4.8	29
23	Enhanced Red-Light Emission by Local Plasmon Coupling of Au Nanorods in an Organic Light-Emitting Diode. Applied Physics Express, 2011, 4, 032105.	2.4	28
24	High-Integrity Finishing of 4H-SiC (0001) by Plasma-Assisted Polishing. Advanced Materials Research, 2010, 126-128, 423-428.	0.3	27
25	Chloride Flux Growth of $\text{La}_2\text{Ti}_2\text{O}_7$ Crystals and Subsequent Nitridation To Form $\text{LaTiO}_2\text{N}$ Crystals. Crystal Growth and Design, 2015, 15, 124-128.	3.0	27
26	Multiscale element mapping of buried structures by ptychographic x-ray diffraction microscopy using anomalous scattering. Applied Physics Letters, 2011, 99, .	3.3	26
27	Full picture discovery for mixed-fluorine anion effects on high-voltage spinel lithium nickel manganese oxide cathodes. NPG Asia Materials, 2017, 9, e398-e398.	7.9	22
28	Sub-200nm Thick Fluoroalkylsilane Self-Assembled Monolayer-Coated High Voltage Spinel Crystals as Promising Cathode Materials for Lithium Ion Batteries. Scientific Reports, 2016, 6, 31999.	3.3	21
29	Intrinsic electrochemical characteristics of one $\text{LiNi}_0.5\text{Mn}_1.5\text{O}_4$ spinel particle. Journal of Electroanalytical Chemistry, 2017, 799, 468-472.	3.8	20
30	Growth of Individual, Highly Oriented $\text{LiFePO}_4$ Crystals on a SUS Substrate Using $\text{NaCl-KCl}$ Flux Coating. Crystal Growth and Design, 2015, 15, 3922-3928.	3.0	19
31	Three-dimensional electric micro-grid networks for high-energy-density lithium-ion battery cathodes. Journal of Materials Chemistry A, 2017, 5, 22797-22804.	10.3	18
32	Plasma-chemical surface functionalization of flexible substrates at atmospheric pressure. Thin Solid Films, 2008, 516, 6683-6687.	1.8	17
33	Metastable oxysulfide surface formation on $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$ single crystal particles by carbothermal reaction with sulfur-doped heterocarbon nanoparticles: new insight into their structural and electrochemical characteristics, and their potential applications. Journal of Materials Chemistry A, 2020, 8, 22302-22314.	10.3	17
34	Versatile protein-based bifunctional nano-systems (encapsulation and directed assembly): Selective nanoscale positioning of gold nanoparticle-viral protein hybrids. Chemical Physics Letters, 2011, 506, 76-80.	2.6	16
35	Effects of a solid electrolyte coating on the discharge kinetics of a $\text{LiCoO}_2$ electrode: mechanism and potential applications. Journal of Materials Chemistry A, 2020, 8, 20979-20986.	10.3	16
36	Two-Dimensional Manipulation of Poly(3-dodecylthiophene) using Light-Driven Instant Mass Migration as a Molecular Conveyor. Japanese Journal of Applied Physics, 2004, 43, L1169-L1171.	1.5	15

#	ARTICLE	IF	CITATIONS
37	Spontaneous motion observed in highly sensitive surface relief formation system. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2005, 257-258, 123-126.	4.7	13
38	Low-temperature growth of spinel-type $\text{Li}_{1+x}\text{Mn}_{2-x}\text{O}_4$ crystals using a $\text{LiCl}$ - $\text{KCl}$ flux and their performance as a positive active material in lithium-ion rechargeable batteries. <i>CrystEngComm</i> , 2014, 16, 1157-1162.	2.6	13
39	Crystal growth of titania by photocatalytic reaction. <i>Applied Catalysis B: Environmental</i> , 2017, 217, 241-246.	20.2	13
40	One-Dimensional Growth of $\text{Li}_2\text{NiPO}_4\text{F}$ Single Crystals from Intermediate $\text{LiNiPO}_4$ Crystal Surface Using $\text{KCl}$ - $\text{KI}$ Fluxes. <i>Crystal Growth and Design</i> , 2018, 18, 6777-6785.	3.0	11
41	New Insight for Surface Chemistries in Ultra-thin Self-assembled Monolayers Modified High-voltage Spinel Cathodes. <i>Scientific Reports</i> , 2018, 8, 11771.	3.3	11
42	Nanometer-level self-aggregation and three-dimensional growth of copper nanoparticles under dielectric barrier discharge at atmospheric pressure. <i>Current Applied Physics</i> , 2012, 12, S63-S68.	2.4	10
43	Direct Fabrication of Densely Packed Idiomorphic $\text{Li}_4\text{Ti}_5\text{O}_{12}$ Crystal Layers on Substrates by Using a $\text{LiCl}$ - $\text{NaCl}$ Mixed Flux and Their Additive-Free Electrode Characteristics. <i>Crystal Growth and Design</i> , 2014, 14, 5634-5639.	3.0	10
44	Unique Growth Manner of $\text{Li}_5\text{La}_3\text{Ta}_2\text{O}_{12}$ Crystals from Lithium Hydroxide Flux at Low Temperature. <i>Crystal Growth and Design</i> , 2015, 15, 4863-4868.	3.0	10
45	Impact of trace extrinsic defect formation on the local symmetry transition in spinel $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$ systems and their electrochemical characteristics. <i>Journal of Materials Chemistry A</i> , 2018, 6, 22749-22757.	10.3	10
46	Three-dimensional SWCNT and MWCNT hybrid networks for extremely high-loading and high rate cathode materials. <i>Journal of Materials Chemistry A</i> , 2019, 7, 17412-17419.	10.3	10
47	Light-Driven Organized Layer Materials. <i>Molecular Crystals and Liquid Crystals</i> , 2005, 430, 107-114.	0.9	9
48	Damage-Free Dry Polishing of 4H-SiC Combined with Atmospheric-Pressure Water Vapor Plasma Oxidation. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 08JG05.	1.5	9
49	Relationship between peroxide radical species on plasma-treated PFA surface and adhesion strength of PFA/electroless copper-plating film. <i>Current Applied Physics</i> , 2012, 12, S38-S41.	2.4	9
50	The adsorption mechanism of titanium-binding ferritin to amphoteric oxide. <i>Colloids and Surfaces B: Biointerfaces</i> , 2013, 102, 435-440.	5.0	9
51	Photoinduced reorientation of azo-dyes covalently linked to a styrene copolymer in bulk state. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2001, 143, 31-38.	3.9	8
52	Atmospheric pressure plasma liquid deposition of copper nanoparticles on poly(4-vinylpyridine)-grafted-poly(tetrafluoroethylene) surface and their autocatalytic properties. <i>Thin Solid Films</i> , 2010, 518, 3551-3554.	1.8	8
53	Growth of idiomorphic $\text{LiMnPO}_4$ crystals in molten $\text{NaCl}$ - $\text{KCl}$ and $\text{LiF}$ - $\text{NaCl}$ - $\text{KCl}$ fluxes. <i>CrystEngComm</i> , 2017, 19, 93-98.	2.6	8
54	Intrinsic Electrochemical Characteristics in the Individual Needle-like $\text{LiCoO}_2$ Crystals Synthesized by Flux Growth. <i>Electrochemistry</i> , 2017, 85, 72-76.	1.4	8

#	ARTICLE	IF	CITATIONS
55	Exclusive Growth of Low-Aspect Ratio, Polyhedral h-BN Crystals in Molten $\text{Li}_2\text{CO}_3$ as the Reactive Flux. <i>Crystal Growth and Design</i> , 2019, 19, 5720-5728.	3.0	8
56	Control of selective adsorption behavior of Ti-binding ferritin on a $\text{SiO}_2$ substrate by atomic-scale modulation of local surface charges. <i>Applied Physics Letters</i> , 2011, 99, 263701.	3.3	6
57	Gold Nanoparticles Supported on $\text{SrTiO}_3$ by Solution Plasma Sputter Deposition for Enhancing UV- and Visible-light Photocatalytic Efficiency. <i>Materials Research Society Symposia Proceedings</i> , 2013, 1509, 1.	0.1	6
58	Low-temperature growth of idiomorphic cubic-phase $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ crystals using LiOH flux. <i>CrystEngComm</i> , 2015, 17, 3487-3492.	2.6	6
59	Fabrication of discrete array of metallodielectric nanoshells and their surface plasmonic properties. <i>Thin Solid Films</i> , 2010, 518, 3581-3584.	1.8	5
60	Fabrication of Combined One-Dimensional and Three-Dimensional Structure of Potassium Tungstate Crystal Layers by Spray Deposition with Polystyrene Colloidal Crystal Templates. <i>Crystal Growth and Design</i> , 2013, 13, 3294-3298.	3.0	5
61	Effect of Side-Plane Width on Lithium-Ion Transportation in Additive-Free $\text{LiCoO}_2$ Crystal Layer-Based Cathodes for Rechargeable Lithium-Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2016, 120, 18496-18502.	3.1	5
62	Molecular gate effects observed in fluoroalkylsilane self-assembled monolayers grafted on $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$ cathodes: an application to efficient ion-exchange reactions. <i>Materials Advances</i> , 2021, 2, 5406-5414.	5.4	5
63	Atmospheric pressure plasma liquid deposition of copper nanoparticles onto poly(4-vinylpyridine)-grafted-poly(tetrafluoroethylene) surface. <i>Transactions of the Materials Research Society of Japan</i> , 2010, 35, 817-820.	0.2	4
64	Simple and Versatile Route to High Yield Face-to-Face Dimeric Assembly of Ag Nanocubes and Their Surface Plasmonic Properties. <i>Journal of Nanoscience and Nanotechnology</i> , 2011, 11, 2890-2896.	0.9	4
65	Adhesion Strength of Electroless Copper Plated Layer on Fluoropolymer Surface Modified by Medium Pressure Plasma. <i>Key Engineering Materials</i> , 0, 523-524, 262-266.	0.4	4
66	Phase-selective hydrothermal synthesis of hydrous lithium titanates nanoparticles as a precursor to $\text{Li}_4\text{Ti}_5\text{O}_{12}$ anode material for lithium ion rechargeable batteries. <i>Ceramics International</i> , 2015, 41, 10988-10994.	4.8	4
67	Three-dimensional assembly of multiwalled carbon nanotubes for creating a robust electron-conducting network in silicon-carbon microsphere-based electrodes. <i>Scientific Reports</i> , 2020, 10, 2342.	3.3	4
68	Highly efficient damage-free correction of thickness distribution of quartz crystal wafers by atmospheric pressure plasma etching. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2009, 56, 1128-1130.	3.0	3
69	Effect of Substrate Heating in Thickness Correction of Quartz Crystal Wafer by Plasma Chemical Vaporization Machining. <i>Key Engineering Materials</i> , 2010, 447-448, 218-222.	0.4	3
70	Thin and Dense Solid-solid Heterojunction Formation Promoted by Crystal Growth in Flux on a Substrate. <i>Scientific Reports</i> , 2018, 8, 96.	3.3	3
71	Flux-Mediated Topochemical Growth of Platelet-Shaped Perovskite $\text{LiNbO}_3$ Single Crystals from Layered Potassium Niobate Crystals. <i>Crystal Growth and Design</i> , 2018, 18, 4111-4116.	3.0	3
72	Azo Polymers with Oligo(ethylene oxide) Side Chain for Rapid Surface Relief Formation.. <i>Journal of Photopolymer Science and Technology</i> = [Fotoporima Konwakai Shi], 2001, 14, 193-194.	0.3	2

#	ARTICLE	IF	CITATIONS
73	Improvement of thickness uniformity of bulk silicon wafer by numerically controlled local wet etching. <i>Journal of Crystal Growth</i> , 2009, 311, 2560-2563.	1.5	2
74	Practical protein removal using atmospheric-pressure helium plasma for densely packed gold nanoparticle arrays assembled by ferritin-based encapsulation/transport system. <i>Applied Physics Letters</i> , 2012, 101, 073702.	3.3	2
75	Fundamental research on the label-free detection of protein adsorption using near-infrared light-responsive plasmonic metal nanoshell arrays with controlled nanogap. <i>Nanoscale Research Letters</i> , 2013, 8, 274.	5.7	2
76	Surface Modification of Titanium Metal Plate Using Alkali Metal Chlorides. <i>Chemistry Letters</i> , 2016, 45, 729-731.	1.3	2
77	Uniformalization of AT cut quartz crystal wafer thickness using open-air type plasma CVM process. <i>Surface and Interface Analysis</i> , 2008, 40, 1007-1010.	1.8	1
78	Two-dimensional measurement of focused hard X-ray beam profile using coherent X-ray diffraction of isolated nanoparticle. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2010, 616, 266-269.	1.6	0
79	Fabrication of Ultraprecision Millimeter-Thick Elliptical Neutron Focusing Mirror Substrate by Local Wet Etching. <i>Key Engineering Materials</i> , 0, 447-448, 208-212.	0.4	0
80	Improvement in Thickness Uniformity of Thick SOI by Numerically Controlled Local Wet Etching. <i>Journal of Nanoscience and Nanotechnology</i> , 2011, 11, 2910-2915.	0.9	0
81	Fabrication of Discrete Polystyrene Nanoparticle Arrays with Controllable Their Structural Parameters. <i>Journal of Nanoscience and Nanotechnology</i> , 2011, 11, 2956-2961.	0.9	0
82	Finishing of AT-Cut Quartz Crystal Wafer with Nanometric Thickness Uniformity by Pulse-Modulated Atmospheric Pressure Plasma Etching. <i>Journal of Nanoscience and Nanotechnology</i> , 2011, 11, 2922-2927.	0.9	0
83	Evaluation of Surface Roughness of Quartz Glass Substrate in Fabrication Process for Neutron Focusing Mirror. <i>Advanced Materials Research</i> , 2011, 325, 647-652.	0.3	0
84	Internal Flow and Crystal Growth by Crucible Rotation Control. <i>The Proceedings of Conference of Hokuriku-Shinetsu Branch</i> , 2018, 2018.55, F043.	0.0	0