Akihito Imanishi

List of Publications by Year
in descending order

33	798	623734	501196
papers	citations	14 h-index	28 g-index

33	33	33	1178
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Mechanism of Water Photooxidation Reaction at Atomically Flat TiO₂ (Rutile) (110) and (100) Surfaces:â€‰ Dependence on Solution pH. Journal of the American Chemical Society, 2007, 129, 11569-11578.	13.7	236
2	Formation of Au nanoparticles in an ionic liquid by electron beam irradiation. Chemical Communications, 2009, , 1775.	4.1	79
3	Platinum nanoparticle immobilization onto carbon nanotubes using Pt-sputtered room-temperature ionic liquid. RSC Advances, 2012, 2, 8262.	3.6	59
4	Efficient Solar Water Splitting with a Composite â€œn-Si/p-CuI/n-i-p a-Si/n-p GaP/RuO₂â€•Semiconductor Electrode. Journal of Physical Chemistry C, 2009, 113, 14575-14581.	3.1	46
5	Size and shape of Au nanoparticles formed in ionic liquids by electron beam irradiation. Physical Chemistry Chemical Physics, 2011, 13, 14823.	2.8	39
6	Structural investigation of ionic liquid/rubrene single crystal interfaces by using frequency-modulation atomic force microscopy. Chemical Communications, 2013, 49, 10596.	4.1	38
7	Atomic-Scale Surface Local Structure of TiO₂ and Its Influence on the Water Photooxidation Process. Journal of Physical Chemistry Letters, 2014, 5, 2108-2117.	4.6	25
8	Three-dimensional micro/nano-scale structure fabricated by combination of non-volatile polymerizable RTIL and FIB irradiation. Scientific Reports, 2014, 4, 3722.	3.3	24
9	Influence of Surface Roughening of Rutile Single-Crystalline TiO₂ on Photocatalytic Activity for Oxygen Photoevolution from Water in Acidic and Alkaline Solutions. Journal of Physical Chemistry C, 2014, 118, 5406-5413.	3.1	22
10	Crystal-Face Dependence and Photoetching-Induced Increases of Dye-Sensitized Photocurrents at Single-Crystal Rutile TiO2Surfaces. Journal of Physical Chemistry B, 2006, 110, 21050-21054.	2.6	20
11	Molecularly clean ionic liquid/rubrene single-crystal interfaces revealed by frequency modulation atomic force microscopy. Physical Chemistry Chemical Physics, 2015, 17, 6794-6800.	2.8	17
12	Si(111) Surface Modified with Î±,Î²-Unsaturated Carboxyl Groups Studied by MIR-FTIR. Langmuir, 2008, 24, 10755-10761.	3.5	16
13	Preparation of gold nanoparticles using reactive species produced in room-temperature ionic liquids by accelerated electron beam irradiation. RSC Advances, 2012, 2, 11801.	3.6	15
14	Clean surface processing of rubrene single crystal immersed in ionic liquid by using frequency modulation atomic force microscopy. Applied Physics Letters, 2014, 104, .	3.3	15
15	Gradual improvements of charge carrier mobility at ionic liquid/rubrene single crystal interfaces. Applied Physics Letters, 2016, 108, .	3.3	13
16	Microscopic properties of ionic liquid/organic semiconductor interfaces revealed by molecular dynamics simulations. Physical Chemistry Chemical Physics, 2018, 20, 13075-13083.	2.8	13
17	Ionic-Liquid-Originated Carrier Trapping Dynamics at the Interface in Electric Double-Layer Organic FET Revealed by Operando Interfacial Analyses. Journal of Physical Chemistry C, 2020, 124, 2543-2552.	3.1	12
18	In-situ FTIR Studies on Self-Assembled Monolayers of Surfactant Molecules Adsorbed on H-Terminated Si(111) Surfaces in Aqueous Solutions. Langmuir, 2006, 22, 1706-1710.	3.5	10

#	Article	IF	Citations
19	In Situ AFM Studies on Self-Assembled Monolayers of Adsorbed Surfactant Molecules on Well-Defined H-Terminated Si(111) Surfaces in Aqueous Solutions. Langmuir, 2007, 23, 12966-12972.	3.5	10
20	Nano-Sized Structures on Atomically-Flat Semiconductor and Metal Surfaces, Formed by Chemical and Electrochemical Methods. Electrochemistry, 2000, 68, 556-561.	1.4	10
21	Highly active photocatalyst BixTiyVxO4x+2y(xâ‰ˆy) for oxygen evolution under visible-light illumination. Physica Status Solidi (B): Basic Research, 2008, 245, 1807-1815.	1.5	9
22	Pretreatment Dependence of Adsorption Properties of Merocyanine Dye at Rutile (110) and (100) TiO₂ Surfaces Studied by C K-Edge NEXAFS. Journal of Physical Chemistry C, 2009, 113, 17254-17261.	3.1	9
23	Lithium-ion battery performance enhanced by the combination of Si thin flake anodes and binary ionic liquid systems. Materials Advances, 2020, 1, 625-631.	5.4	9
24	Fine Patterning of Silver Metal by Electron Beam Irradiation onto Room-temperature Ionic Liquid. Chemistry Letters, 2015, 44, 312-314.	1.3	8
25	Preferential Formation of Layered Structure of Ionic Liquid at Ionic Liquid Aqueous Solution / Graphite Electrode Interfaces Observed by Frequency-Modulation Atomic Force Microscopy. E-Journal of Surface Science and Nanotechnology, 2014, 12, 89-96.	0.4	8
26	In-situ MIR-IR Observation of Peroxo Species on Anatase TiO2 Particle during Oxygen Photoevolution Reaction. Electrochemistry, 2011, 79, 787-789.	1.4	7
27	Structural Effects on the Incident Photon-to-Current Conversion Efficiency of Zn Porphyrin Dyes on the Low-Index Planes of TiO₂. ACS Omega, 2017, 2, 128-135.	3.5	7
28	Temperature Dependence of Formation of Nanorods and Dots of Iodine Compounds on an H-Terminated Si(111) Surface in a Concentrated HI Solution. Langmuir, 2004, 20, 4604-4608.	3.5	6
29	Rapid improvements in charge carrier mobility at ionic liquid/pentacene single crystal interfaces by self-cleaning. Physical Chemistry Chemical Physics, 2020, 22, 6131-6135.	2.8	6
30	Introduction of Ionic Liquid to Vacuum Conditions for Development of Material Productions and Analyses. Electrochemistry, 2012, 80, 498-503.	1.4	5
31	Operando atomic force microscopy study of electric double-layer transistors based on ionic liquid/rubrene single crystal interfaces. Applied Physics Letters, 2021, 118, .	3.3	5
32	Photoinduced Reactions on Atomically Flat TiO₂ Single Crystal Surface in Aqueous Solution. Hyomen Kagaku, 2012, 33, 328-333.	0.0	0
33	Interpretation and Use of Mott-Schottky Plots at the Semiconductor-liquid Interfaces. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2021, 72, 479-486.	0.2	0