Sayaka Uchida

List of Publications by Year
in descending order

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95	3,625	117625	144013
papers	citations	34 h-index	57 g-index

112	112	112	2810
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Peroxotungstate Immobilized on Ionic Liquid-Modified Silica as a Heterogeneous Epoxidation Catalyst with Hydrogen Peroxide. Journal of the American Chemical Society, 2005, 127, 530-531.	13.7	275
2	Cucurbit[n]urilâ^'Polyoxoanion Hybrids. Journal of the American Chemical Society, 2009, 131, 432-433.	13.7	154
3	A Breathing Ionic Crystal Displaying Selective Binding of Small Alcohols and Nitriles: K3[Cr3O(OOCH)6(H2O)3][-SiW12O40]â‹…16â€‰H2O. Angewandte Chemie - International Edition, 2002, 41, 2814-2817.	13.8	118
4	[Î³-1,2-H2SiV2W10O40] Immobilized on Surface-Modified SiO2 as a Heterogeneous Catalyst for Liquid-Phase Oxidation with H2O2. Chemistry - A European Journal, 2006, 12, 4176-4184.	3.3	118
5	States and Dynamic Behavior of Protons and Water Molecules in H3PW12O40Pseudoliquid Phase Analyzed by Solid-State MAS NMR. Journal of Physical Chemistry B, 2000, 104, 8108-8115.	2.6	117
6	Zeotype Ionic Crystal of Cs5[Cr3O(OOCH)6(H2O)3][Î±-CoW12O40]Â·7.5H2O with Shape-Selective Adsorption of Water. Journal of the American Chemical Society, 2004, 126, 1602-1603.	13.7	111
7	Amphiphilic Guest Sorption of K2[Cr3O(OOCC2H5)6(H2O)3]2[Î±-SiW12O40] Ionic Crystal. Journal of the American Chemical Society, 2005, 127, 10560-10567.	13.7	107
8	Design and syntheses of nano-structured ionic crystals with selective sorption properties. Coordination Chemistry Reviews, 2007, 251, 2537-2546.	18.8	103
9	Inverse and High CO₂/C₂H₂ Sorption Selectivity in Flexible Organicâ€“Inorganic Ionic Crystals. Angewandte Chemie - International Edition, 2012, 51, 1635-1639.	13.8	102
10	Micelles and Vesicles Formed by Polyoxometalateâ€“Block Copolymer Composites. Angewandte Chemie - International Edition, 2009, 48, 8281-8284.	13.8	100
11	Highly Selective Sorption of Small Unsaturated Hydrocarbons by Nonporous Flexible Framework with Silver Ion. Journal of the American Chemical Society, 2008, 130, 12370-12376.	13.7	99
12	Synthesis of a Dialuminum-Substituted Silicotungstate and the Diastereoselective Cyclization of Citronellal Derivatives. Journal of the American Chemical Society, 2008, 130, 15872-15878.	13.7	99
13	Channel-Selective Independent Sorption and Collection of Hydrophilic and Hydrophobic Molecules by Cs2[Cr3O(OOCC2H5)6(H2O)3]2[Î±-SiW12O40] Ionic Crystal. Journal of the American Chemical Society, 2006, 128, 14240-14241.	13.7	90
14	Cu Species Incorporated into Amorphous ZrO₂ with High Activity and Selectivity in CO₂-to-Methanol Hydrogenation. Journal of Physical Chemistry C, 2018, 122, 5430-5442.	3.1	83
15	Threeâ€Dimensional Ordered Arrays of 58Ã—58Ã—58â€…Ã…³ Hollow Frameworks in Ionic Crystals of M₂Zn₂â€Substituted Polyoxometalates. Angewandte Chemie - International Edition, 2012, 51, 1597-1601.	13.8	69
16	Self-Organization ofAll-InorganicDodecatungstophosphate Nanocrystallites. Journal of the American Chemical Society, 2007, 129, 7378-7384.	13.7	63
17	Unique Guest-Inclusion Properties of a Breathing Ionic Crystal of K3[Cr3O(OOCH)6(H2O)3][Î±-SiW12O40]â‹…16â€‰H2O. Chemistry - A European Journal, 2003, 9, 5850-5857.	3.3	59
18	Recognition of Small Polar Molecules with an Ionic Crystal of Î±-Keggin-Type Polyoxometalate with a Macrocation. Inorganic Chemistry, 2006, 45, 5136-5144.	4.0	58

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19	A Tinâ€“Tungsten Mixed Oxide as an Efficient Heterogeneous Catalyst for Cï£¿C Bondâ€Forming Reactions. Chemistry - A European Journal, 2009, 15, 4343-4349.	3.3	58
20	Tunable One-Pot Syntheses of Hexagonal-, Cubic-, and Lamellar-Mesostructured Vanadiumâ^'Phosphorus Oxides. Chemistry of Materials, 2001, 13, 179-184.	6.7	57
21	High Proton Conduction in Crystalline Composites Based on Preyssler-Type Polyoxometalates and Polymers under Nonhumidified or Humidified Conditions. Inorganic Chemistry, 2017, 56, 15187-15193.	4.0	57
22	Frontiers and progress in cation-uptake and exchange chemistry of polyoxometalate-based compounds. Chemical Science, 2019, 10, 7670-7679.	7.4	57
23	A Flexible Nonporous Heterogeneous Catalyst for Sizeâ€Selective Oxidation through a Bottomâ€Up Approach. Angewandte Chemie - International Edition, 2010, 49, 9972-9976.	13.8	55
24	Flame spray pyrolysis makes highly loaded Cu nanoparticles on ZrO2 for CO2-to-methanol hydrogenation. Chemical Engineering Journal, 2020, 381, 122750.	12.7	54
25	Structures and Sorption Properties of Ionic Crystals of Macrocation-Dawson-Type Polyoxometalates with Different Charges. Chemistry of Materials, 2005, 17, 1367-1375.	6.7	52
26	Zeotype Organicâ€“Inorganic Ionic Crystals: Facile Cation Exchange and Controllable Sorption Properties. Angewandte Chemie - International Edition, 2010, 49, 9930-9934.	13.8	50
27	Proton conduction in ionic crystals based on polyoxometalates. Coordination Chemistry Reviews, 2022, 462, 214524.	18.8	48
28	Reductionâ€Induced Highly Selective Uptake of Cesium Ions by an Ionic Crystal Based on Silicododecamolybdate. Angewandte Chemie - International Edition, 2016, 55, 3987-3991.	13.8	44
29	Cubic Cesium Hydrogen Silicododecatungstate with Anisotropic Morphology and Polyoxometalate Vacancies Exhibiting Selective Water Sorption and Cation-Exchange Properties. Chemistry of Materials, 2013, 25, 905-911.	6.7	42
30	Redox-Induced Reversible Uptakeâ€“Release of Cations in Porous Ionic Crystals Based on Polyoxometalate: Cooperative Migration of Electrons with Alkali Metal Ions. Chemistry of Materials, 2015, 27, 2092-2099.	6.7	40
31	Crystalline polyoxometalate (POM)â€“polyethylene glycol (PEG) composites aimed as non-humidified intermediate-temperature proton conductors. Journal of Solid State Chemistry, 2016, 234, 9-14.	2.9	37
32	Control of Structures and Sorption Properties of Ionic Crystals of A₂[Cr₃O(OOCC₂H₅)₆(H₂O)₃]₂ (A = Na, K, Rb, NH₄, Cs, TMA). Inorganic Chemistry, 2008, 47, 3349-3357.	4.6	36
33	Highly Selective Sorption and Separation of CO₂ from a Gas Mixture of CO₂ and CH₄ at Room Temperature by a Zeolitic Organicâ€“Inorganic Ionic Crystal and Investigation of the Interaction with CO₂. Journal of Physical Chemistry C, 2012, 116, 16105-16110.	3.1	35
34	Selective Sorption of Olefins by Halogen-Substituted Macrocation-Polyoxometalate Porous Ionic Crystals. Chemistry of Materials, 2012, 24, 325-330.	6.7	35
35	Sizeâ€Selective Sorption of Small Organic Molecules in Oneâ€Dimensional Channels of an Ionic Crystalline Organicâ€“Inorganic Hybrid Compound Stabilized by Ï€â€“Ï€ Interactions. Angewandte Chemie - International Edition, 2009, 48, 6160-6164.	13.8	32
36	Proton conduction in alkali metal ion-exchanged porous ionic crystals. Physical Chemistry Chemical Physics, 2017, 19, 29077-29083.	2.8	32

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37	Spatial-Temporal Characteristics of Confined Polymer Motion Determine Proton Conduction of Polyoxometalateâ€“Poly(ethylene glycol) Hybrid Nanocomposites. Journal of Physical Chemistry Letters, 2018, 9, 5772-5777.	4.6	32
38	Oxygen Evolution Reaction Driven by Charge Transfer from a Cr Complex to Co-Containing Polyoxometalate in a Porous Ionic Crystal. Journal of the American Chemical Society, 2022, 144, 2980-2986.	13.7	32
39	Ionic Crystals [M₃O(OOCC₆H₅)₆(H₂O)₃]₄[Î±-SiW<sub> (M = Cr, Fe) as Heterogeneous Catalysts for Pinacol Rearrangement. Inorganic Chemistry, 2012, 51, 775-777.	4.0	31
40	Confinement of poly(allylamine) in Preyssler-type polyoxometalate and potassium ion framework for enhanced proton conductivity. Communications Chemistry, 2019, 2, .	4.5	31
41	Preparation of Monodispersed Nanoparticles by Electrostatic Assembly of Keggin-Type Polyoxometalates and 1,4,7-Triazacyclononane-Based Transition-Metal Complexes. Chemistry of Materials, 2007, 19, 4694-4701.	6.7	30
42	A functional mesoporous ionic crystal based on polyoxometalate. Dalton Transactions, 2016, 45, 2805-2809.	3.3	28
43	Concerted Functions of Anions and Cations in a Molecular Ionic Crystal with Stable Three-Dimensional Micropores. Inorganic Chemistry, 2014, 53, 3655-3661.	4.0	27
44	Porous Ionic Crystals Modified by Post-Synthesis of K₂[Cr₃O(OOCH)₆(etpy)₃]₂[Î±-SiW₁₂O₄₀] through Single-Crystal-to-Single-Crystal Transformation. Inorganic Chemistry, 2013, 52, 9320-9326.	4.0	26
45	Ultrahigh Proton Conduction via Extended Hydrogen-Bonding Network in a Preyssler-Type Polyoxometalate-Based Framework Functionalized with a Lanthanide Ion. ACS Applied Materials & Interfaces, 2021, 13, 19138-19147.	8.0	25
46	Macrocyclic Polyoxometalates: Selective Polyanion Binding and Ultrahigh Proton Conduction. Angewandte Chemie - International Edition, 2022, 61, .	13.8	24
47	Control of Polymorphisms and Functions in All-Inorganic Ionic Crystals Based on Polyaluminum Hydroxide and Polyoxometalates. Crystal Growth and Design, 2016, 16, 4968-4974.	3.0	22
48	Integrating molecular design and crystal engineering approaches in non-humidified intermediate-temperature proton conductors based on a Dawson-type polyoxometalate and poly(ethylene glycol) derivatives. Nanoscale, 2021, 13, 8049-8057.	5.6	21
49	States of Water in Ionic Crystals of [Cr3O(OOCH)6(H2O)3]+Macrocation with Î±-Keggin-Type Polyoxometalates. Journal of Physical Chemistry C, 2007, 111, 8218-8227.	3.1	20
50	Structural and dynamical aspects of alkylammonium salts of a silicodecatungstate as heterogeneous epoxidation catalysts. Dalton Transactions, 2012, 41, 9979.	3.3	20
51	Structure-function Relationships of Porous Ionic Crystals (PICs) Based on Polyoxometalate Anions and Oxo-centered Trinuclear Metal Carboxylates as Counter Cations. Chemistry Letters, 2021, 50, 21-30.	1.3	20
52	The First Direct Detection of Rapid Migration of Acidic Protons between Heteropolyanions in H3PW12O40Â·nH2O (n < 6) by31P NMR. Chemistry Letters, 1998, 27, 643-644.	1.3	19
53	Development of CO₂-to-Methanol Hydrogenation Catalyst by Focusing on the Coordination Structure of the Cu Species in Spinel-Type Oxide Mg_{1â€“x}Cu_xAl₂O₄. ACS Catalysis, 2020, 10, 15186-15194.	11.2	19
54	Structures and Sorption Properties of Ionic Crystals of Polyoxometalates with Macrocation. Chemistry Letters, 2006, 35, 688-693.	1.3	18

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55	Solidâ€State Umbrellaâ€type Inversion of a VO 5 Squareâ€Pyramidal Unit in a Bowlâ€type Dodecavanadate Induced by Insertion and Elimination of a Guest Molecule. Angewandte Chemie - International Edition, 2018, 57, 16051-16055.	13.8	18
56	Highly selective sorption and unique packing geometries of unsaturated hydrocarbons and CO2 in a fluorine-substituted organicâ€“inorganic ionic crystal. Dalton Transactions, 2013, 42, 16209.	3.3	17
57	Incorporating highly basic polyoxometalate anions comprising Nb or Ta into nanoscale reaction fields of porous ionic crystals. Nanoscale, 2021, 13, 18451-18457.	5.6	17
58	Synergetic effect in heterogeneous acid catalysis by a porous ionic crystal based on Al(<scp>iii</scp>)â€“salphen and polyoxometalate. Dalton Transactions, 2017, 46, 3105-3109.	3.3	16
59	Polyoxotungstate-Surfactant Layered Crystal toward Conductive Inorganic-Organic Hybrid. Crystals, 2012, 2, 362-373.	2.2	14
60	Morphology-Controlled Synthesis of Cubic Cesium Hydrogen Silicododecatungstate Crystals. Crystal Growth and Design, 2014, 14, 6620-6626.	3.0	14
61	Hierarchical design of nanostructured materials based on polyoxometalates. Pure and Applied Chemistry, 2009, 81, 2369-2376.	1.9	13
62	Synthesis and Structural Characterization of Inorganic-Organic-Inorganic Hybrids of Dipalladium-Substituted Î³-Keggin Silicodecatungstates. Inorganic Chemistry, 2013, 52, 2662-2670.	4.0	13
63	Rapid Uptake/Release of Cs⁺ in Isostructural Redox-Active Porous Ionic Crystals with Large-Molecular-Size and Easily Reducible Dawson-Type Polyoxometalates as Building Blocks. Inorganic Chemistry, 2018, 57, 4833-4836.	4.0	13
64	Rapid formation of small mixed-valence luminescent silver clusters via cation-coupled electron-transfer in a redox-active porous ionic crystal based on dodecamolybdophosphate. Nanoscale, 2019, 11, 5460-5466.	5.6	13
65	Conductive Hybrid Crystal Composed from Polyoxomolybdate and Deprotonatable Ionic-Liquid Surfactant. International Journal of Molecular Sciences, 2016, 17, 994.	4.1	12
66	Amorphous High-Surface-Area Aluminum Hydroxideâ€“Bicarbonates for Highly Efficient Methyl Orange Removal from Water. Langmuir, 2020, 36, 6277-6285.	3.5	11
67	Origin of Microporosity of Ammonium Dodecatungstophosphate Unveiled by Single Crystal Structure Analysis. Chemistry Letters, 2001, 30, 1272-1273.	1.3	10
68	Effect of the ammonium ion on proton conduction in porous ionic crystals based on Keggin-type silicododecatungstate. Acta Crystallographica Section C, Structural Chemistry, 2018, 74, 1289-1294.	0.5	9
69	Conductive hybrid crystal composed of polyoxovanadate and deprotonatable ionic-liquid surfactant. Inorganic Chemistry Communication, 2018, 96, 24-29.	3.9	8
70	Isomeric effects on the acidity of Al₁₃ Keggin clusters in porous ionic crystals. Chemical Communications, 2021, 57, 8893-8896.	4.1	8
71	Reductionâ€Induced Highly Selective Uptake of Cesium Ions by an Ionic Crystal Based on Silicododecamolybdate. Angewandte Chemie, 2016, 128, 4055-4059.	2.0	7
72	Effect of molecular weights of confined single-chain poly(allylamine) toward proton conduction in inorganic frameworks based on Preyssler-type polyoxometalate. Inorganica Chimica Acta, 2020, 499, 119204.	2.4	7

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73	Isostructural mesoporous ionic crystals as a tunable platform for acid catalysis. Dalton Transactions, 2020, 49, 10328-10333.	3.3	7
74	Solidâ€State Umbrellaâ€type Inversion of a VO 5 Squareâ€Pyramidal Unit in a Bowlâ€type Dodecavanadate Induced by Insertion and Elimination of a Guest Molecule. Angewandte Chemie, 2018, 130, 16283-16287.	2.0	6
75	Porous Cubic Cesium Salts of Silicododecatungstate(molybdate)/Borododecatungstate Blends: Synthesis and Molecular Adsorption Properties. Inorganic Chemistry, 2018, 57, 8821-8830.	4.0	6
76	Porous Ionic Crystals Modified via Coordination Programming through Single-crystal-to-single-crystal Transformation: Effect of Basicity. Chemistry Letters, 2014, 43, 1192-1194.	1.3	5
77	Conductive Inorganicâ€“Organic Hybrid Layered Crystals Composed of Kegginâ€Type Polyoxotungstates and a Heterocyclic Surfactant. European Journal of Inorganic Chemistry, 2019, 2019, 442-447.	2.0	5
78	Structureâ€Function Relationships in Fructose Dehydration to 5â€Hydroxymethylfurfural under Mild Conditions by Porous Ionic Crystals Constructed with Analogous Building Blocks. ChemCatChem, 2019, 11, 3745-3749.	3.7	5
79	Formation of Mixedâ€Valence Luminescent Silver Clusters via Cationâ€Coupled Electronâ€Transfer in a Redoxâ€Active Ionic Crystal Based on a Dawsonâ€type Polyoxometalate with Closed Pores. European Journal of Inorganic Chemistry, 2021, 2021, 1531-1535.	2.0	5
80	Polyoxocationic antimony oxide cluster with acidic protons. Science Advances, 2022, 8, .	10.3	5
81	Inhomogeneity in the interaction between methanol molecules and BrÃ¸nsted acid sites of H-ZSM-5 directly detected by 2D CPMAS 13C NMR spectroscopy. Chemical Communications, 1998, , 1489-1490.	4.1	4
82	High CO2/CH4 Separation Performance Exhibited at Room Temperature by a Nonporous Ionic Crystal with 3-Methylpyridinium Cation. Chemistry Letters, 2015, 44, 1179-1181.	1.3	4
83	Selective Convergence to Atropisomers of a Porphyrin Derivative Having Bulky Substituents at the Periphery. Journal of Organic Chemistry, 2020, 85, 12856-12869.	3.2	4
84	Basicity of isostructural porous ionic crystals composed of Nb/Ta-substituted Keggin-type polyoxotungstates. Dalton Transactions, 2022, 51, 8186-8191.	3.3	4
85	Enrichment of tritiated water using mesoporous silica. Microporous and Mesoporous Materials, 2013, 179, 217-223.	4.4	3
86	Porous Ionic Crystals Based on Polyoxometalates. Structure and Bonding, 2017, , 65-87.	1.0	3
87	Porous Layered Inorganicâ€“Organic Hybrid Frameworks Constructed from Polyoxovanadate and Bolaamphiphiles. Crystal Growth and Design, 2021, 21, 7230-7239.	3.0	3
88	Guest encapsulations in non-porous crystals of fully fluorinated dinuclear metal complexes with the M₂O₂ core (M = Fe³⁺, Co²⁺, Ni²⁺). Dalton Transactions, 2019, 48, 9062-9066.	3.3	2
89	Macrocyclic Polyoxometalates: Selective Polyanion Binding and Ultrahigh Proton Conduction. Angewandte Chemie, 0, , .	2.0	2
90	Highly pH-dependent Facile-preparation of Amorphous High Surface Area Aluminum Hydroxide-bicarbonates with [Îµ-Al₁₃O₄(OH)₂₄(H₂O)₁₂]⁷⁺. Chemistry Letters, 2018, 47, 668-670.	1.3	1

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91	A Breathing Ionic Crystal Displaying Selective Binding of Small Alcohols and Nitriles: K3[Cr3O(OOCH)6(H2O)3][l±-SiW12O40]â‹…16â€‰H2O. , 2002, 41, 2814.		1
92	Photocatalytic Water Oxidation by Phosphotungstate and Mg-Al Layered Double Hydroxide Hybrid. Chemistry Letters, 2022, 51, 107-110.	1.3	1
93	Confinement of Polymers in Polyoxometalate-based Ion Crystals for Enhanced Proton Conductivity. Hamon, 2020, 30, 106-109.	0.0	0
94	Syntheses, Polymorphic Transformations, and Functions of Ionic Crystals Based on Mononuclear Bismuth(III) Complexes and Polyoxometalates. ChemNanoMat, 0, , .	2.8	0
95	Proton-Conductive Crystals Based on Polyoxometalates. Bulletin of Japan Society of Coordination Chemistry, 2022, 79, 106-111.	0.2	0