

Sayaka Uchida

List of Publications by Year in descending order

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95
papers

3,625
citations

117625

34
h-index

144013

57
g-index

112
all docs

112
docs citations

112
times ranked

2810
citing authors

#	ARTICLE	IF	CITATIONS
1	Oxygen Evolution Reaction Driven by Charge Transfer from a Cr Complex to Co-Containing Polyoxometalate in a Porous Ionic Crystal. <i>Journal of the American Chemical Society</i> , 2022, 144, 2980-2986.	13.7	32
2	Photocatalytic Water Oxidation by Phosphotungstate and Mg-Al Layered Double Hydroxide Hybrid. <i>Chemistry Letters</i> , 2022, 51, 107-110.	1.3	1
3	Macrocyclic Polyoxometalates: Selective Polyanion Binding and Ultrahigh Proton Conduction. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	24
4	Proton conduction in ionic crystals based on polyoxometalates. <i>Coordination Chemistry Reviews</i> , 2022, 462, 214524.	18.8	48
5	Basicity of isostructural porous ionic crystals composed of Nb/Ta-substituted Keggin-type polyoxotungstates. <i>Dalton Transactions</i> , 2022, 51, 8186-8191.	3.3	4
6	Polyoxocationic antimony oxide cluster with acidic protons. <i>Science Advances</i> , 2022, 8, .	10.3	5
7	Proton-Conductive Crystals Based on Polyoxometalates. <i>Bulletin of Japan Society of Coordination Chemistry</i> , 2022, 79, 106-111.	0.2	0
8	Structure-function Relationships of Porous Ionic Crystals (PICs) Based on Polyoxometalate Anions and Oxo-centered Trinuclear Metal Carboxylates as Counter Cations. <i>Chemistry Letters</i> , 2021, 50, 21-30.	1.3	20
9	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. <i>Nanoscale</i> , 2021, 13, 8049-8057.	5.6	21
10	Formation of Mixed-valence Luminescent Silver Clusters via Cation-Coupled Electron Transfer in a Redox-Active Ionic Crystal Based on a Dawson-type Polyoxometalate with Closed Pores. <i>European Journal of Inorganic Chemistry</i> , 2021, 2021, 1531-1535.	2.0	5
11	Ultrahigh Proton Conduction via Extended Hydrogen-Bonding Network in a Preyssler-Type Polyoxometalate-Based Framework Functionalized with a Lanthanide Ion. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 19138-19147.	8.0	25
12	Isomeric effects on the acidity of Al ₁₃ Keggin clusters in porous ionic crystals. <i>Chemical Communications</i> , 2021, 57, 8893-8896.	4.1	8
13	Incorporating highly basic polyoxometalate anions comprising Nb or Ta into nanoscale reaction fields of porous ionic crystals. <i>Nanoscale</i> , 2021, 13, 18451-18457.	5.6	17
14	Porous Layered Inorganic-Organic Hybrid Frameworks Constructed from Polyoxovanadate and Bolaamphiphiles. <i>Crystal Growth and Design</i> , 2021, 21, 7230-7239.	3.0	3
15	Flame spray pyrolysis makes highly loaded Cu nanoparticles on ZrO ₂ for CO ₂ -to-methanol hydrogenation. <i>Chemical Engineering Journal</i> , 2020, 381, 122750.	12.7	54
16	Effect of molecular weights of confined single-chain poly(allylamine) toward proton conduction in inorganic frameworks based on Preyssler-type polyoxometalate. <i>Inorganica Chimica Acta</i> , 2020, 499, 119204.	2.4	7
17	Development of CO ₂ -to-Methanol Hydrogenation Catalyst by Focusing on the Coordination Structure of the Cu Species in Spinel-Type Oxide Mg _{1-x} Cu _x Al ₂ O ₄ . <i>ACS Catalysis</i> , 2020, 10, 15186-15194.	11.2	19
18	Amorphous High-Surface-Area Aluminum Hydroxide-Bicarbonates for Highly Efficient Methyl Orange Removal from Water. <i>Langmuir</i> , 2020, 36, 6277-6285.	3.5	11

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19	Isostructural mesoporous ionic crystals as a tunable platform for acid catalysis. Dalton Transactions, 2020, 49, 10328-10333.	3.3	7
20	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
21	Confinement of Polymers in Polyoxometalate-based Ion Crystals for Enhanced Proton Conductivity. Hamon, 2020, 30, 106-109.	0.0	0
22	Conductive Inorganic-Organic Hybrid Layered Crystals Composed of Keggin-Type Polyoxotungstates and a Heterocyclic Surfactant. European Journal of Inorganic Chemistry, 2019, 2019, 442-447.	2.0	5
23	Frontiers and progress in cation-uptake and exchange chemistry of polyoxometalate-based compounds. Chemical Science, 2019, 10, 7670-7679.	7.4	57
24	Confinement of poly(allylamine) in Preyssler-type polyoxometalate and potassium ion framework for enhanced proton conductivity. Communications Chemistry, 2019, 2, .	4.5	31
25	Guest encapsulations in non-porous crystals of fully fluorinated dinuclear metal complexes with the M_2O_2 core ($M = Fe^{3+}, Co^{2+}, Ni^{2+}$). Dalton Transactions, 2019, 48, 9062-9066.	3.3	2
26	Structure-Function Relationships in Fructose Dehydration to 5-Hydroxymethylfurfural under Mild Conditions by Porous Ionic Crystals Constructed with Analogous Building Blocks. ChemCatChem, 2019, 11, 3745-3749.	3.7	5
27	Rapid formation of small mixed-valence luminescent silver clusters <i>via</i> cation-coupled electron-transfer in a redox-active porous ionic crystal based on dodecamolybdophosphate. Nanoscale, 2019, 11, 5460-5466.	5.6	13
28	Highly pH-dependent Facile-preparation of Amorphous High Surface Area Aluminum Hydroxide-bicarbonates with $[\mu-Al_{13}O_4(OH)_{24}(H_2O)_{12}]^{7+}$. Chemistry Letters, 2018, 47, 668-670.	1.3	1
29	Cu Species Incorporated into Amorphous ZrO_2 with High Activity and Selectivity in CO_2 -to-Methanol Hydrogenation. Journal of Physical Chemistry C, 2018, 122, 5430-5442.	3.1	83
30	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
31	Solid-State Umbrella-Type Inversion of a VO ₅ Square-Pyramidal Unit in a Bowl-Type Dodecavanadate Induced by Insertion and Elimination of a Guest Molecule. Angewandte Chemie, 2018, 130, 16283-16287.	2.0	6
32	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
33	Solid-State Umbrella-Type Inversion of a VO ₅ Square-Pyramidal Unit in a Bowl-Type Dodecavanadate Induced by Insertion and Elimination of a Guest Molecule. Angewandte Chemie - International Edition, 2018, 57, 16051-16055.	13.8	18
34	Conductive hybrid crystal composed of polyoxovanadate and deprotonatable ionic-liquid surfactant. Inorganic Chemistry Communication, 2018, 96, 24-29.	3.9	8
35	Porous Cubic Cesium Salts of Silicododecatungstate(molybdate)/Borododecatungstate Blends: Synthesis and Molecular Adsorption Properties. Inorganic Chemistry, 2018, 57, 8821-8830.	4.0	6
36	Spatial-Temporal Characteristics of Confined Polymer Motion Determine Proton Conduction of Polyoxometalate-Poly(ethylene glycol) Hybrid Nanocomposites. Journal of Physical Chemistry Letters, 2018, 9, 5772-5777.	4.6	32

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37	Synergetic effect in heterogeneous acid catalysis by a porous ionic crystal based on Al(salphen) polyoxometalate . Dalton Transactions, 2017, 46, 3105-3109.	3.3	16
38	Porous Ionic Crystals Based on Polyoxometalates. Structure and Bonding, 2017, , 65-87.	1.0	3
39	Proton conduction in alkali metal ion-exchanged porous ionic crystals. Physical Chemistry Chemical Physics, 2017, 19, 29077-29083.	2.8	32
40	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
41	Conductive Hybrid Crystal Composed from Polyoxomolybdate and Deprotonatable Ionic-Liquid Surfactant. International Journal of Molecular Sciences, 2016, 17, 994.	4.1	12
42	Reduction-Induced Highly Selective Uptake of Cesium Ions by an Ionic Crystal Based on Silicododecamolybdate. Angewandte Chemie, 2016, 128, 4055-4059.	2.0	7
43	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
44	Reduction-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
45	A functional mesoporous ionic crystal based on polyoxometalate. Dalton Transactions, 2016, 45, 2805-2809.	3.3	28
46	Crystalline polyoxometalate (POM)-polyethylene glycol (PEG) composites aimed as non-humidified intermediate-temperature proton conductors. Journal of Solid State Chemistry, 2016, 234, 9-14.	2.9	37
47	High CO ₂ /CH ₄ Separation Performance Exhibited at Room Temperature by a Nonporous Ionic Crystal with 3-Methylpyridinium Cation. Chemistry Letters, 2015, 44, 1179-1181.	1.3	4
48	Redox-Induced Reversible Uptake-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
49	Morphology-Controlled Synthesis of Cubic Cesium Hydrogen Silicododecatungstate Crystals. Crystal Growth and Design, 2014, 14, 6620-6626.	3.0	14
50	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
51	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
52	Porous Ionic Crystals Modified by Post-Synthesis of K ₂ [Cr ₃ O(OOCH) ₆ (etpy) ₃] ₂ ·[±-SiW ₁₂ O ₄₀], through Single-Crystal-to-Single-Crystal Transformation. Inorganic Chemistry, 2013, 52, 9320-9326.	4.0	24
53	Synthesis and Structural Characterization of Inorganic-Organic-Inorganic Hybrids of Dipalladium-Substituted β -Keggin Silicododecatungstates. Inorganic Chemistry, 2013, 52, 2662-2670.	4.0	13
54	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

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55	Highly selective sorption and unique packing geometries of unsaturated hydrocarbons and CO ₂ in a fluorine-substituted organic–inorganic ionic crystal. <i>Dalton Transactions</i> , 2013, 42, 16209.	3.3	17
56	Enrichment of tritiated water using mesoporous silica. <i>Microporous and Mesoporous Materials</i> , 2013, 179, 217-223.	4.4	3
57	Structural and dynamical aspects of alkylammonium salts of a silicodecatungstate as heterogeneous epoxidation catalysts. <i>Dalton Transactions</i> , 2012, 41, 9979.	3.3	20
58	Highly Selective Sorption and Separation of CO ₂ from a Gas Mixture of CO ₂ and CH ₄ at Room Temperature by a Zeolitic Organic–Inorganic Ionic Crystal and Investigation of the Interaction with CO ₂ . <i>Journal of Physical Chemistry C</i> , 2012, 116, 16105-16110.	3.1	35
59	Selective Sorption of Olefins by Halogen-Substituted Macroanion-Polyoxometalate Porous Ionic Crystals. <i>Chemistry of Materials</i> , 2012, 24, 325-330.	6.7	35
60	Polyoxotungstate-Surfactant Layered Crystal toward Conductive Inorganic-Organic Hybrid. <i>Crystals</i> , 2012, 2, 362-373.	2.2	14
61	Ionic Crystals [M ₃ O(OCC ₆ H ₅) ₆ (H ₂ O) ₃] ₄ [±SiW ₁₂ O ₄₂] ₃ (M = Cr, Fe) as Heterogeneous Catalysts for Pinacol Rearrangement. <i>Inorganic Chemistry</i> , 2012, 51, 775-777.	4.0	31
62	Three-Dimensional Ordered Arrays of 58Å–58Å–58Å ³ Hollow Frameworks in Ionic Crystals of M ₂ Zn ₂ Substituted Polyoxometalates. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 1597-1601.	13.8	69
63	Inverse and High CO ₂ /C ₂ H ₂ Sorption Selectivity in Flexible Organic–Inorganic Ionic Crystals. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 1635-1639.	13.8	102
64	Zeotype Organic–Inorganic Ionic Crystals: Facile Cation Exchange and Controllable Sorption Properties. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 9930-9934.	13.8	50
65	A Flexible Nonporous Heterogeneous Catalyst for Size-Selective Oxidation through a Bottom-Up Approach. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 9972-9976.	13.8	55
66	Hierarchical design of nanostructured materials based on polyoxometalates. <i>Pure and Applied Chemistry</i> , 2009, 81, 2369-2376.	1.9	13
67	A Tin–Tungsten Mixed Oxide as an Efficient Heterogeneous Catalyst for C–C Bond-Forming Reactions. <i>Chemistry - A European Journal</i> , 2009, 15, 4343-4349.	3.3	58
68	Size-Selective Sorption of Small Organic Molecules in One-Dimensional Channels of an Ionic Crystalline Organic–Inorganic Hybrid Compound Stabilized by H–H Interactions. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 6160-6164.	13.8	32
69	Micelles and Vesicles Formed by Polyoxometalate–Block Copolymer Composites. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 8281-8284.	13.8	100
70	Cucurbit[uril]–Polyoxoanion Hybrids. <i>Journal of the American Chemical Society</i> , 2009, 131, 432-433.	13.7	154
71	Control of Structures and Sorption Properties of Ionic Crystals of A ₂ [Cr ₃ O(OCC ₂ H ₅) ₆ (H ₂ O) ₃] ₂ (A = Na, K, Rb, NH ₄ , Cs, TMA). <i>Inorganic Chemistry</i> , 2008, 47, 3349-3357.	3.0	35
72	Highly Selective Sorption of Small Unsaturated Hydrocarbons by Nonporous Flexible Framework with Silver Ion. <i>Journal of the American Chemical Society</i> , 2008, 130, 12370-12376.	13.7	99

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73	Synthesis of a Dialuminum-Substituted Silicotungstate and the Diastereoselective Cyclization of Citronellal Derivatives. <i>Journal of the American Chemical Society</i> , 2008, 130, 15872-15878.	13.7	99
74	Self-Organization of All-Inorganic Dodecatungstophosphate Nanocrystallites. <i>Journal of the American Chemical Society</i> , 2007, 129, 7378-7384.	13.7	63
75	States of Water in Ionic Crystals of [Cr ₃ O(OOCH) ₆ (H ₂ O) ₃] ⁺ Macrocation with $\hat{I}\pm$ -Keggin-Type Polyoxometalates. <i>Journal of Physical Chemistry C</i> , 2007, 111, 8218-8227.	3.1	20
76	Preparation of Monodispersed Nanoparticles by Electrostatic Assembly of Keggin-Type Polyoxometalates and 1,4,7-Triazacyclononane-Based Transition-Metal Complexes. <i>Chemistry of Materials</i> , 2007, 19, 4694-4701.	6.7	30
77	Design and syntheses of nano-structured ionic crystals with selective sorption properties. <i>Coordination Chemistry Reviews</i> , 2007, 251, 2537-2546.	18.8	103
78	Recognition of Small Polar Molecules with an Ionic Crystal of $\hat{I}\pm$ -Keggin-Type Polyoxometalate with a Macrocation. <i>Inorganic Chemistry</i> , 2006, 45, 5136-5144.	4.0	58
79	Channel-Selective Independent Sorption and Collection of Hydrophilic and Hydrophobic Molecules by Cs ₂ [Cr ₃ O(OOCC ₂ H ₅) ₆ (H ₂ O) ₃] ₂ [$\hat{I}\pm$ -SiW ₁₂ O ₄₀] Ionic Crystal. <i>Journal of the American Chemical Society</i> , 2006, 128, 14240-14241.	13.7	90
80	Structures and Sorption Properties of Ionic Crystals of Polyoxometalates with Macrocation. <i>Chemistry Letters</i> , 2006, 35, 688-693.	1.3	18
81	[\hat{I}^3 -1,2-H ₂ SiV ₂ W ₁₀ O ₄₀] Immobilized on Surface-Modified SiO ₂ as a Heterogeneous Catalyst for Liquid-Phase Oxidation with H ₂ O ₂ . <i>Chemistry - A European Journal</i> , 2006, 12, 4176-4184.	3.3	118
82	Amphiphilic Guest Sorption of K ₂ [Cr ₃ O(OOCC ₂ H ₅) ₆ (H ₂ O) ₃] ₂ [$\hat{I}\pm$ -SiW ₁₂ O ₄₀] Ionic Crystal. <i>Journal of the American Chemical Society</i> , 2005, 127, 10560-10567.	13.7	107
83	Peroxytungstate Immobilized on Ionic Liquid-Modified Silica as a Heterogeneous Epoxidation Catalyst with Hydrogen Peroxide. <i>Journal of the American Chemical Society</i> , 2005, 127, 530-531.	13.7	275
84	Structures and Sorption Properties of Ionic Crystals of Macrocation-Dawson-Type Polyoxometalates with Different Charges. <i>Chemistry of Materials</i> , 2005, 17, 1367-1375.	6.7	52
85	Zeotype Ionic Crystal of Cs ₅ [Cr ₃ O(OOCH) ₆ (H ₂ O) ₃] $\hat{I}\pm$ -CoW ₁₂ O ₄₀ ·7.5H ₂ O with Shape-Selective Adsorption of Water. <i>Journal of the American Chemical Society</i> , 2004, 126, 1602-1603.	13.7	111
86	Unique Guest-Inclusion Properties of a Breathing Ionic Crystal of K ₃ [Cr ₃ O(OOCH) ₆ (H ₂ O) ₃] $\hat{I}\pm$ -SiW ₁₂ O ₄₀ ·16H ₂ O. <i>Chemistry - A European Journal</i> , 2003, 9, 5850-5857.	3.3	59
87	A Breathing Ionic Crystal Displaying Selective Binding of Small Alcohols and Nitriles: K ₃ [Cr ₃ O(OOCH) ₆ (H ₂ O) ₃]-SiW ₁₂ O ₄₀ ·16H ₂ O. <i>Angewandte Chemie - International Edition</i> , 2002, 41, 2814-2817.	13.8	118
88	A Breathing Ionic Crystal Displaying Selective Binding of Small Alcohols and Nitriles: K ₃ [Cr ₃ O(OOCH) ₆ (H ₂ O) ₃] $\hat{I}\pm$ -SiW ₁₂ O ₄₀ ·16H ₂ O. , 2002, 41, 2814.		1
89	Tunable One-Pot Syntheses of Hexagonal-, Cubic-, and Lamellar-Mesostructured Vanadium~Phosphorus Oxides. <i>Chemistry of Materials</i> , 2001, 13, 179-184.	6.7	57
90	Origin of Microporosity of Ammonium Dodecatungstophosphate Unveiled by Single Crystal Structure Analysis. <i>Chemistry Letters</i> , 2001, 30, 1272-1273.	1.3	10

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91	States and Dynamic Behavior of Protons and Water Molecules in H ₃ PW ₁₂ O ₄₀ Pseudoliquid Phase Analyzed by Solid-State MAS NMR. <i>Journal of Physical Chemistry B</i> , 2000, 104, 8108-8115.	2.6	117
92	Inhomogeneity in the interaction between methanol molecules and Brønsted acid sites of H-ZSM-5 directly detected by 2D CPMAS ¹³ C NMR spectroscopy. <i>Chemical Communications</i> , 1998, , 1489-1490.	4.1	4
93	The First Direct Detection of Rapid Migration of Acidic Protons between Heteropolyanions in H ₃ PW ₁₂ O ₄₀ ·nH ₂ O (n < 6) by ³¹ P NMR. <i>Chemistry Letters</i> , 1998, 27, 643-644.	1.3	19
94	Syntheses, Polymorphic Transformations, and Functions of Ionic Crystals Based on Mononuclear Bismuth(III) Complexes and Polyoxometalates. <i>ChemNanoMat</i> , 0, , .	2.8	0
95	Macrocyclic Polyoxometalates: Selective Polyanion Binding and Ultrahigh Proton Conduction. <i>Angewandte Chemie</i> , 0, , .	2.0	2