Tohru Kawamoto

List of Publications by Year
in descending order

120 papers	2,668 citations	209248 26 h-index	214353 47 g-index
124 all docs	124 docs citations	124 times ranked	2460 citing authors

#	Article	IF	Citations
1	Adsorption removal of cesium from drinking waters: A mini review on use of biosorbents and other adsorbents. Bioresource Technology, 2014, 160, 142-149.	9.7	190
2	Simple synthesis of three primary colour nanoparticle inks of Prussian blue and its analogues. Nanotechnology, 2007, 18, 345609.	2.7	164
3	Historical Pigment Exhibiting Ammonia Gas Capture beyond Standard Adsorbents with Adsorption Sites of Two Kinds. Journal of the American Chemical Society, 2016, 138, 6376-6379.	14.6	137
4	Selective removal of cesium ions from wastewater using copper hexacyanoferrate nanofilms in an electrochemical system. Electrochimica Acta, 2013, 87, 119-125.	5.4	118
5	Dealing with the Aftermath of Fukushima Daiichi Nuclear Accident: Decontamination of Radioactive Cesium Enriched Ash. Environmental Science & Technology, 2013, 47, 3800-3806.	10.5	89
6	Novel Mechanism of Photoinduced Reversible Phase Transitions in Molecule-Based Magnets. Physical Review Letters, 2001, 86, 348-351.	8.0	80
7	Comparative study of the factors associated with the application of metal hexacyanoferrates for environmental Cs decontamination. Chemical Engineering Journal, 2016, 283, 1322-1328.	13.0	79
8	Prussian blue (PB) granules for cesium (Cs) removal from drinking water. Separation and Purification Technology, 2015, 143, 146-151.	8.1	75
9	Thermodynamics and Mechanism Studies on Electrochemical Removal of Cesium Ions from Aqueous Solution Using a Nanoparticle Film of Copper Hexacyanoferrate. ACS Applied Materials & Interfaces, 2013, 5, 12984-12990.	8.3	63
10	Unveiling Cs-adsorption mechanism of Prussian blue analogs: Cs⁺-percolation via vacancies to complete dehydrated state. RSC Advances, 2018, 8, 34808-34816.	3.7	60
11	Thermal hysteresis loop of the spin-state in nanoparticles of transition metal complexes: Monte Carlo simulations on an Ising-like model. Chemical Communications, 2005, , 3933.	4.2	59
12	Preparation of electrochromic Prussian blue nanoparticles dispersible into various solvents for realisation of printed electronics. Green Chemistry, 2012, 14, 1537.	9.4	59
13	Preparation of a film of copper hexacyanoferrate nanoparticles for electrochemical removal of cesium from radioactive wastewater. Electrochemistry Communications, 2012, 25, 23-25.	4.8	58
14	Electrochromic Thin Film of Prussian Blue Nanoparticles Fabricated using Wet Process. Japanese Journal of Applied Physics, 2007, 46, L945.	1.6	51
15	Rapid measurement of radiocesium in water using a Prussian blue impregnated nonwoven fabric. Journal of Nuclear Science and Technology, 2013, 50, 674-681.	1.3	49
16	Application of Prussian blue nanoparticles for the radioactive Cs decontamination in Fukushima region. Journal of Environmental Radioactivity, 2016, 151, 233-237.	1.8	49
17	Efficient Cesium Adsorbent Using Prussian Blue Nanoparticles Immobilized on Cotton Matrices. Chemistry Letters, 2012, 41, 1473-1474.	1.4	47
18	Prussian blue non-woven filter for cesium removal from drinking water. Separation and Purification Technology, 2015, 153, 37-42.	8.1	46

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19	Water processable Prussian blueâ€“polyaniline:polystyrene sulfonate nanocomposite (PBâ€“PANI:PSS) for multi-color electrochromic applications. Journal of Materials Chemistry C, 2016, 4, 10293-10300.	5.6	45
20	Color-Switchable Glass and Display Devices Fabricated by Liquid Processes with Electrochromic Nanoparticle â€œInkâ€• Applied Physics Express, 0, 1, 104002.	2.4	44
21	Electrochromic Thin Film Fabricated Using a Water-Dispersible Ink of Prussian Blue Nanoparticles. Japanese Journal of Applied Physics, 2008, 47, 1242.	1.6	43
22	Rapid quantification of radiocesium dissolved in water by using nonwoven fabric cartridge filters impregnated with potassium zinc ferrocyanide. Journal of Nuclear Science and Technology, 2015, 52, 792-800.	1.3	43
23	Accelerated coloration of electrochromic device with the counter electrode of nanoparticulate Prussian blue-type complexes. Electrochimica Acta, 2015, 163, 288-295.	5.4	42
24	Efficient synthesis of size-controlled open-framework nanoparticles fabricated with a micro-mixer: route to the improvement of Cs adsorption performance. Green Chemistry, 2015, 17, 4228-4233.	9.4	38
25	Pressure effect in TDAE-C60ferromagnet: Mechanism and polymerization. Physical Review B, 2001, 63, .	3.3	32
26	Improved adsorption properties of granulated copper hexacyanoferrate with multi-scale porous networks. RSC Advances, 2016, 6, 16234-16238.	3.7	32
27	Variation in available cesium concentration with parameters during temperature induced extraction of cesium from soil. Journal of Environmental Radioactivity, 2015, 140, 78-83.	1.8	30
28	Trace Ammonia Removal from Air by Selective Adsorbents Reusable with Water. ACS Applied Materials & Interfaces, 2020, 12, 15115-15119.	8.3	30
29	Radioactive cesium removal from ash-washing solution with high pH and high K+-concentration using potassium zinc hexacyanoferrate. Chemical Engineering Research and Design, 2016, 109, 513-518.	5.7	28
30	Prospective Application of Copper Hexacyanoferrate for Capturing Dissolved Ammonia. Industrial & Engineering Chemistry Research, 2016, 55, 6708-6715.	3.8	26
31	Cesium removal from drinking water using Prussian blue adsorption followed by anion exchange process. Separation and Purification Technology, 2017, 172, 147-151.	8.1	26
32	Adsorption States of Dialkyl Ditelluride Autooxidized Monolayers on Au(111). Langmuir, 2005, 21, 3344-3353.	3.7	23
33	High performance sorption and desorption behaviours at high working temperatures of ammonia gas in a cobalt-substituted Prussian blue analogue. Chemical Communications, 2018, 54, 11961-11964.	4.2	23
34	Column study on electrochemical separation of cesium ions from wastewater using copper hexacyanoferrate film. Journal of Radioanalytical and Nuclear Chemistry, 2015, 303, 1491-1495.	1.5	21
35	Cobalt hexacyanoferrate nanoparticles for wet-processed brownâ€“bleached electrochromic devices with hybridization of high-spin/low-spin phases. Journal of Materials Chemistry C, 2017, 5, 8921-8926.	5.6	21
36	High-capacity and selective ammonium removal from water using sodium cobalt hexacyanoferrate. RSC Advances, 2018, 8, 34573-34581.	3.7	21

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37	Green fabrication of a complementary electrochromic device using water-based ink containing nanoparticles of WO₃ and Prussian blue. RSC Advances, 2020, 10, 2562-2565.	3.7	21
38	Dynamical Phase Transition in a Spinâ€“Crossover Complex. Journal of the Physical Society of Japan, 2003, 72, 1615-1618.	1.6	19
39	Systematic Bathochromic Shift of Charge-transfer Bands of Mixed-metal Prussian-blue Nanoparticles Depending on Their Composition Ratios of Fe and Ni. Chemistry Letters, 2010, 39, 762-763.	1.4	18
40	Preparation of Yellow Coreâ€“Blue Shell Coordination Polymer Nanoparticles Using Active Surface Coordination Sites on a Prussian-blue Analog. Chemistry Letters, 2009, 38, 1058-1059.	1.4	17
41	Monitoring low-radioactivity caesium in Fukushima waters. Environmental Sciences: Processes and Impacts, 2014, 16, 28-32.	3.4	17
42	Development of a copper-substituted, Prussian blue-impregnated, nonwoven cartridge filter to rapidly measure radiocesium concentration in seawater. Journal of Nuclear Science and Technology, 2016, 53, 1243-1250.	1.3	16
43	FeNi-Layered Double-Hydroxide Nanoflakes with Potential for Intrinsically High Water-Oxidation Catalytic Activity. ACS Applied Energy Materials, 2020, 3, 9040-9050.	5.3	16
44	Theoretical Study of Pressure Effect on TDAE-C60. Journal of the Physical Society of Japan, 2001, 70, 1892-1895.	1.6	15
45	Crucial effects of intramolecular charge distribution on the neutral-ionic transition of tetrathiafulvaleneâ€“p-chloranil. Physical Review B, 2001, 64, .	3.3	15
46	Effects of the variation of metal substitution and electrolyte on the electrochemical reaction of metal hexacyanoferrates. RSC Advances, 2018, 8, 37356-37364.	3.7	15
47	Synthesis and characterization of mixed Co-Zn-ZIF for arsenic(V) adsorption. Inorganica Chimica Acta, 2020, 502, 119311.	2.5	15
48	Thermal Decomposition Behavior of Prussian Blue in Various Conditions. Materials, 2021, 14, 1151.	3.0	15
49	Conceptual design of nanostructures for efficient photoinduced phase transitions. Applied Physics Letters, 2002, 80, 2562-2564.	3.2	14
50	Improvement of redox reactions by miniaturizing nanoparticles of zinc Prussian blue analog. Applied Physics Letters, 2013, 102, .	3.2	13
51	Assessment of the measures for the extraction or fixation of radiocesium in soil. Geoderma, 2016, 267, 169-173.	5.2	12
52	Battery-type column for caesium ions separation using electroactive film of copper hexacyanoferrate nanoparticles. Separation and Purification Technology, 2017, 173, 44-48.	8.1	12
53	Decontamination of very dilute Cs in seawater by a coagulationâ€“precipitation method using a nanoparticle slurry of copper hexacyanoferrate. Environmental Science: Water Research and Technology, 2019, 5, 1328-1338.	2.2	12
54	Electrochemical control of the elution property of Prussian blue nanoparticle thin films: mechanism and applications. Physical Chemistry Chemical Physics, 2009, 11, 10500.	2.9	11

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55	Dispersion Control of Surface-charged Prussian Blue Nanoparticles into Greener Solvents. Chemistry Letters, 2010, 39, 138-139.	1.4	11
56	Synthesis of Water-Dispersible Copper Hexacyanoferrate Nanoparticles and Electrochromism of the Thin Films. Molecular Crystals and Liquid Crystals, 2011, 539, 18/[358]-22/[362].	0.9	11
57	Simultaneous Enhancement of Cs-Adsorption and Magnetic Properties of Prussian Blue by Thermal Partial Oxidation. Bulletin of the Chemical Society of Japan, 2015, 88, 69-73.	3.3	11
58	High contrast gasochromism of wet processable thin film with chromic and catalytic nanoparticles. Journal of Materials Chemistry C, 2018, 6, 4760-4764.	5.6	11
59	Highly Sensitive and Exceptionally Wide Dynamic Range Detection of Ammonia Gas by Indium Hexacyanoferrate Nanoparticles Using FTIR Spectroscopy. Analytical Chemistry, 2018, 90, 4856-4862.	6.8	11
60	Electrochromic properties of sputter-deposited rhodium oxide thin films of varying thickness. Thin Solid Films, 2020, 709, 138226.	1.9	11
61	Electrochromic properties of WO₃ thin films fabricated by magnetron sputtering, ion plating, and spin coating: A comparative investigation. Journal of the Ceramic Society of Japan, 2020, 128, 381-386.	1.3	11
62	The mechanism of the photo-induced magnetic transition in Coâ€“Fe cyanide with ab initio calculations. Journal of Luminescence, 2000, 87-89, 658-660.	3.2	10
63	Simulations with an Ising-like Model for Dynamical Phase Transitions under Strong Excitation. Journal of the Physical Society of Japan, 2004, 73, 3471-3478.	1.6	10
64	Stability of the staging structure of charge-transfer complexes showing a neutralâ€“ionic transition. Physical Review B, 2004, 70, .	3.3	10
65	Trace Alcohol Adsorption by Metal Hexacyanocobaltate Nanoparticles and the Adsorption Mechanism. Journal of Physical Chemistry C, 2018, 122, 11918-11925.	3.3	10
66	H2O2-sensing abilities of mixed-metal (Fe-Ni) Prussian blue analogs in a wide pH range. Inorganica Chimica Acta, 2020, 502, 119314.	2.5	10
67	Apparatus for ammonia removal in livestock farms based on copper hexacyanoferrate granules. Biosystems Engineering, 2022, 216, 98-107.	4.3	10
68	Dipole-Dipole Interaction and Field-Induced Phase Transition in Molecular Antiferromagnet MOTMP. Journal of the Physical Society of Japan, 1994, 63, 3158-3162.	1.6	9
69	Adsorption ofÂng L^{â˜'1}-level arsenic by ZIF-8 nanoparticles: application to the monitoring of environmental water. RSC Advances, 2018, 8, 36360-36368.	3.7	9
70	Life Cycle Assessment of Nitrogen Circular Economy-Based NOx Treatment Technology. Sustainability, 2021, 13, 7826.	3.3	9
71	Ammonium removal and recovery from sewage water using column-system packed highly selective ammonium adsorbent. Environmental Pollution, 2021, 284, 117495.	7.7	9
72	Ammonium salt production in NH3-CO2-H2O system using a highly selective adsorbent, copper hexacyanoferrate. Environmental Pollution, 2021, 288, 117763.	7.7	9

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73	Pressure Effects in Ferromagnetism of Orbital Ordering Ferromagnet. Journal of the Physical Society of Japan, 1997, 66, 2487-2495.	1.6	9
74	Harvesting a Solid Fertilizer Directly from Fetid Air. ACS Sustainable Chemistry and Engineering, 2021, 9, 16865-16869.	6.9	8
75	Mechanism of reversible photo-induced magnetization in prussian blue analogues. Phase Transitions, 2001, 74, 209-233.	1.3	7
76	Photoinduced phase transition accelerated by use of two-component nanostructures: A computational study on an Ising-type model. Physical Review B, 2003, 68, .	3.3	7
77	Uniaxial strain study in purely organic ferromagnet Î±-TDAE-C60 â€“ Mechanism and structure. Polyhedron, 2005, 24, 2173-2175.	2.3	7
78	Fineâ€Tunable Electronic Energy Levels of Mixedâ€Metal Prussianâ€Blue Alloy Nanoparticles. ChemNanoMat, 2017, 3, 288-291.	2.9	7
79	Inversion analysis on vertical radiocesium distribution in pond sediment from Î³-ray count measurement. Journal of Environmental Radioactivity, 2017, 175-176, 158-163.	1.8	7
80	One million cyclable blue/colourless electrochromic device using K₂Zn₃[Fe(CN)₆]₂ nanoparticles synthesized with a micromixer. RSC Advances, 2019, 9, 41083-41087.	3.7	7
81	Electrochromic Thin Film of Water-Dispersible Prussian-Blue Nanoparticles. IEICE Transactions on Electronics, 2008, E91-C, 1887-1888.	0.6	7
82	Radiocesium removal system for environmental water and drainage. Water Research, 2016, 107, 29-36.	11.4	6
83	Interpretation of the Role of Composition on the Inclusion Efficiency of Monovalent Cations into Cobalt Hexacyanoferrate. Chemistry - A European Journal, 2019, 25, 5950-5958.	3.9	6
84	Unique adsorption and desorption behaviour of ammonia gas at heating temperature using the Prussian blue analogue Zn3[Co(CN)6]2. Inorganica Chimica Acta, 2020, 501, 119273.	2.5	6
85	Single Open Sites on Fe^{II} Ions Stabilized by Coupled Metal Ions in CN-Deficient Prussian Blue Analogues for High Catalytic Activity in the Hydrolysis of Organophosphates. Inorganic Chemistry, 2020, 59, 16000-16009.	4.2	6
86	Roll-to-roll production of Prussian blue/Pt nanocomposite films for flexible gasochromic applications. Inorganica Chimica Acta, 2020, 505, 119466.	2.5	6
87	Effective removal of hexacyanoferrate anions using quaternary amine type ion exchange resin. Journal of Environmental Chemical Engineering, 2015, 3, 2448-2452.	6.9	5
88	Analysis of Cs-adsorption behavior using a column filled with microcapsule beads of potassium copper hexacyanoferrate. Journal of Nuclear Science and Technology, 2017, 54, 1157-1162.	1.3	5
89	Differences in NH3 gas adsorption behaviors of metal-hexacyanoferrate nanoparticles (M [FeII(CN)6]) Tj ETQq1 1 0.784314 rgBT /Ove	3.0	5
90	Technology for radioactive cesium decontamination from ash. Synthesiology, 2016, 9, 139-153.	0.1	5

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91	Growth of Pt Subnano Clusters on Limited Surface Areas of Prussian Blue Nanoparticles. Journal of Inorganic and Organometallic Polymers and Materials, 2013, 23, 216-222.	3.7	4
92	Numerical evaluation of Cs adsorption in PB column by extended Langmuir formula and one-dimensional adsorption model. Journal of Radioanalytical and Nuclear Chemistry, 2015, 303, 1287-1290.	1.5	4
93	Prussian Blue Nanoparticles and Nanocomposites for Cs Decontamination. , 2019, , 217-242.		4
94	The development of a rapid monitoring method for radiocesium in seawater in the Fukushima region. Environmental Science: Water Research and Technology, 2022, 8, 1547-1560.	2.2	4
95	Estimation of the Potential Global Nitrogen Flow in a Nitrogen Recycling System with Industrial Countermeasures. Sustainability, 2023, 15, 6042.	3.3	4
96	Monte Carlo simulations of an Ising-like model for photoinduced spin-state switching in nanoparticles of transition metal complexes. Journal of Physics: Conference Series, 2005, 21, 56-60.	0.4	3
97	Sequential Structural Control of Open-Framework Nanoparticles Both in Dispersion and in Film for Electrochemical Performance Tuning. Bulletin of the Chemical Society of Japan, 2015, 88, 1561-1566.	3.3	3
98	Pre-enrichment of radioactive cesium in muddy water separated into suspended and dissolved substances for trace analysis. Water Research, 2019, 154, 28-33.	11.4	3
99	First-Principles Band Structure Calculation for Organic Molecular Crystals. Molecular Crystals and Liquid Crystals, 1995, 272, 161-165.	0.3	2
100	Monte Carlo Simulation for the Photoinduced Phase Transition on a Two-Dimensional Stripe-Structure. Phase Transitions, 2002, 75, 753-758.	1.3	2
101	Theoretical Study of the Charge Transfer Absorption in Cobalt-Iron Cyanide. Molecular Crystals and Liquid Crystals, 2002, 376, 423-429.	0.9	2
102	STM images of molecules on a metallic surface: a fast calculation based on a self-consistent semiempirical molecular orbital method. Physical Chemistry Chemical Physics, 2004, 6, 4913.	2.9	2
103	Fixed spin effect on a phase switching of an Ising model under constant excitation: Study for impurity effect on photoinduced spin-state switching in transition metal complexes. Polyhedron, 2005, 24, 2676-2679.	2.3	2
104	Metal hexacyanochromate coordination nanopolymers: Surface ligand effect on their magnetism. Chemical Physics Letters, 2009, 480, 231-236.	2.7	2
105	Radioactive cesium decontamination technology for ash. Synthesiology, 2016, 9, 139-154.	0.2	2
106	Decomposition of Iron Hexacyanoferrate Microcapsule Beads Using Superheated Steam. Chemistry Letters, 2016, 45, 670-672.	1.4	2
107	Cesium uptake ability of a nonwoven fabric supporting iron hexacyanoferrate nanoparticles from solutions of coexisting alkali metal ions. Inorganica Chimica Acta, 2020, 503, 119401.	2.5	2
108	Desorption of Ammonia Adsorbed on Prussian Blue Analogs by Washing with Saturated Ammonium Hydrogen Carbonate Solution. Molecules, 2022, 27, 8840.	3.9	2

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109	Recovery of Pure Methanol from Humid Gas Using Mnâ€“Co Prussian Blue Analogue. ACS Applied Materials & Interfaces, 2023, 15, 11977-11982.	8.3	2
110	Selective Adsorption of Potassium in Seawater by CoHCF Thin Film Electrode and Its Electrochemical Desorption/Regeneration. Materials, 2021, 14, 3592.	3.0	1
111	Surface modification enhances the bulk proton conductivity of Prussian blue. Chemical Communications, 2023, 59, 4927-4930.	4.2	1
112	Ammonia Concentrator for Repeatable Adsorption/Desorption Using Nickel Hexacyanoferrate as Adsorbent and Production of Solid Ammonium Bicarbonate. ACS Sustainable Chemistry and Engineering, 2024, 12, 2183-2190.	6.9	1
113	Spin-Polarized Band Sturcture for Organic Molecular Crystals. Molecular Crystals and Liquid Crystals, 1996, 286, 211-216.	0.3	0
114	Theoretical Study for Pressure Effects in Orbital Ordering Ferromagnets. Molecular Crystals and Liquid Crystals, 1997, 306, 169-176.	0.3	0
115	Magnetic properties of TDAE-C[sub 60] under pressure. AIP Conference Proceedings, 2001, , .	1.0	0
116	Interchain interactions and the staging structure in charge-transfer complexes with neutral-ionic transitions. Synthetic Metals, 2003, 135-136, 629-630.	4.1	0
117	Theoretical study for photoinduced phase transition in superstructures. Synthetic Metals, 2003, 137, 1223-1224.	4.1	0
118	An Apparatus for Vertical Distribution Measurement of Radiocaesium in Pond Sediment Using Commercially Available Parts. Radioisotopes, 2018, 67, 329-338.	0.2	0
119	A Model of a Switching Molecular Junction with a Ring-shaped Molecule. Journal of the Physical Society of Japan, 2005, 74, 686-689.	1.6	0
120	Highly selective methanol adsorption from dilute aqueous solutions using Mn₃[Fe(CN)₆]₂: a Prussian blue analog. Chemical Communications, 0, , .	4.2	0