Katsuhiko Sato

List of Publications by Year
in descending order

76 papers	1,664 citations	304368 22 h-index	301761 39 g-index
78 all docs	78 docs citations	78 times ranked	1668 citing authors

#	Article	IF	Citations
1	pH- and sugar-sensitive layer-by-layer films and microcapsules for drug delivery. Advanced Drug Delivery Reviews, 2011, 63, 809-821.	6.6	169
2	Sugar-Induced Disintegration of Layer-by-Layer Assemblies Composed of Concanavalin A and Glycogen. Langmuir, 2005, 21, 797-799.	1.6	122
3	Disintegration of Layer-by-Layer Assemblies Composed of 2-Iminobiotin-Labeled Poly(ethyleneimine) and Avidin. Biomacromolecules, 2005, 6, 27-29.	2.6	94
4	Layer-by-layer construction of protein architectures through avidinâ€“biotin and lectinâ€“sugar interactions for biosensor applications. Analytical and Bioanalytical Chemistry, 2012, 402, 1749-1758.	1.9	92
5	Layer-by-layer deposited nano- and micro-assemblies for insulin delivery: A review. Materials Science and Engineering C, 2014, 34, 384-392.	3.8	71
6	Layer-by-layer polyelectrolyte films containing insulin for pH-triggered release. Journal of Materials Chemistry, 2010, 20, 1546-1552.	6.7	68
7	Layer-by-layer Thin Films and Microcapsules for Biosensors and Controlled Release. Analytical Sciences, 2012, 28, 929-938.	0.8	68
8	Layer-by-layer assembled thin films composed of carboxyl-terminated poly(amidoamine) dendrimer as a pH-sensitive nano-device. Journal of Colloid and Interface Science, 2008, 326, 35-40.	5.0	66
9	Dendrimers in Layer-by-Layer Assemblies: Synthesis and Applications. Molecules, 2013, 18, 8440-8460.	1.7	59
10	Electrochemically Induced Disintegration of Layer-by-Layer-Assembled Thin Films Composed of 2-Iminobiotin-Labeled Poly(ethyleneimine) and Avidin. Biomacromolecules, 2006, 7, 3302-3305.	2.6	57
11	Preparation of Polyelectrolyte-Layered Assemblies Containing Cyclodextrin and Their Binding Properties. Langmuir, 2003, 19, 7406-7412.	1.6	53
12	Multilayer films composed of phenylboronic acid-modified dendrimers sensitive to glucose under physiological conditions. Journal of Materials Chemistry B, 2014, 2, 5809.	2.9	42
13	H₂O₂-Induced Decomposition of Layer-by-Layer Films Consisting of Phenylboronic Acid-Bearing Poly(allylamine) and Poly(vinyl alcohol). Langmuir, 2014, 30, 9247-9250.	1.6	41
14	Preparation of Insulin-Containing Microcapsules by a Layer-by-Layer Deposition of Concanavalin A and Glycogen. Journal of Nanoscience and Nanotechnology, 2009, 9, 386-390.	0.9	40
15	Fluorometric determination of sugars using fluorescein-labeled concanavalin Aâ€“glycogen conjugates. Analytical and Bioanalytical Chemistry, 2006, 384, 1297-1301.	1.9	35
16	Insulin-containing layer-by-layer films deposited on poly(lactic acid) microbeads for pH-controlled release of insulin. Colloids and Surfaces B: Biointerfaces, 2012, 89, 242-247.	2.5	33
17	Layer-by-layer films composed of poly(allylamine) and insulin for pH-triggered release of insulin. Colloids and Surfaces B: Biointerfaces, 2012, 91, 274-279.	2.5	29
18	pH-Dependent Release of Insulin from Layer-by-Layer-Deposited Polyelectrolyte Microcapsules. Polymers, 2015, 7, 1269-1278.	2.0	27

#	Article	IF	Citations
19	Glucose-induced decomposition of layer-by-layer films composed of phenylboronic acid-bearing poly(allylamine) and poly(vinyl alcohol) under physiological conditions. Journal of Materials Chemistry B, 2015, 3, 7796-7802.	2.9	27
20	Sugar-Sensitive Thin Films Composed of Concanavalin A and Glycogen. Analytical Sciences, 2004, 20, 1247-1248.	0.8	25
21	Phenylboronic Acid-Functionalized Layer-by-Layer Assemblies for Biomedical Applications. Polymers, 2017, 9, 202.	2.0	25
22	pH- and sugar-sensitive multilayer films composed of phenylboronic acid (PBA)-modified poly(allylamine hydrochloride) (PBA-PAH) and poly(vinyl alcohol) (PVA): A significant effect of PBA content on the film stability. Materials Science and Engineering C, 2016, 62, 474-479.	3.8	24
23	Loading and release of fluorescent dye from layer-by-layer film-coated magnetic particles in response to hydrogen peroxide. Journal of Colloid and Interface Science, 2014, 432, 92-97.	5.0	22
24	Electrochemical Determination of Dâ€Glucose Using Nortropineâ€Nâ€oxyl under Physiological Conditions. Electroanalysis, 2015, 27, 2272-2274.	1.5	18
25	Sugar-Sensitive Thin Films Composed of Concanavalin A and Sugar-Bearing Polymers. Analytical Sciences, 2005, 21, 1375-1378.	0.8	17
26	Electrochemical determination of sugars by use of multilayer thin films of ferrocene-appended glycogen and concanavalin A. Analytical and Bioanalytical Chemistry, 2006, 386, 1899-1904.	1.9	17
27	Electrochemically controlled release of -tetrakis(4-N-methylpyridyl)porphine from layer-by-layer thin films. Journal of Colloid and Interface Science, 2009, 333, 141-144.	5.0	16
28	Electrochemical Oxidation of Amines Using a Nitroxyl Radical Catalyst and the Electroanalysis of Lidocaine. Catalysts, 2018, 8, 649.	1.6	16
29	Preparation of poly(methyl methacrylate) microcapsules by in situ polymerization on the surface of calcium carbonate particles. Journal of Colloid and Interface Science, 2012, 387, 123-126.	5.0	15
30	Preparation of avidin-containing polyelectrolyte microcapsules and their uptake and release properties. Polymer Bulletin, 2011, 66, 711-720.	1.7	14
31	Avidin/PSS membrane microcapsules with biotin-binding activity. Journal of Colloid and Interface Science, 2011, 360, 519-524.	5.0	14
32	Release of Insulin from Calcium Carbonate Microspheres with and without Layer-by-Layer Thin Coatings. Polymers, 2014, 6, 2157-2165.	2.0	14
33	Lactate-induced decomposition of layer-by-layer films composed of phenylboronic acid-modified poly(allylamine) and poly(vinyl alcohol) under extracellular tumor conditions. Journal of Colloid and Interface Science, 2018, 510, 302-307.	5.0	14
34	Sugar-dependent solubility and fluorescence property of copolymers consisting of phenylboronic acid and 2-hydroxyethyl methacrylate moieties. Polymer Bulletin, 2010, 65, 807-814.	1.7	12
35	Preparation of dendrimer-loaded microcapsules by a layer-by-layer deposition of polyelectrolytes. Materials Science and Engineering C, 2009, 29, 2024-2028.	3.8	11
36	Sugar-Sensitive Polyelectrolyte Microcapsules Containing Insulin. Kobunshi Ronbunshu, 2010, 67, 544-548.	0.2	10

#	Article	IF	Citations
37	Preparation of polyelectrolyte giant capsules using cross-linked alginate gels as core material. Polymer Bulletin, 2012, 68, 891-900.	1.7	10
38	Dual pH-sensitive layer-by-layer films containing amphoteric poly(diallylamine-co-maleic acid). Journal of Colloid and Interface Science, 2013, 399, 26-32.	5.0	10
39	Catalysis of electro-oxidation of antibiotics by nitroxyl radicals and the electrochemical sensing of vancomycin. RSC Advances, 2021, 11, 21622-21628.	1.7	10
40	Electrocatalytic Oxidation of Carbohydrates Mediated by Nitroxyl Radicalâ€modified Electrodes in Aqueous Solution. Electroanalysis, 2018, 30, 24-26.	1.5	9
41	Electrochemical determination of choline using nortropine-N-oxyl for a non-enzymatic system. Sensing and Bio-Sensing Research, 2020, 27, 100302.	2.2	9
42	Use of Amphoteric Copolymer Films as Sacrificial Layers for Constructing Free-Standing Layer-by-Layer Films. Materials, 2013, 6, 2351-2359.	1.3	8
43	Poly(lactic acid) Microparticles Coated with Insulin-Containing Layer-by-Layer Films and Their pH-Dependent Insulin Release. Journal of Nanoscience and Nanotechnology, 2014, 14, 3100-3105.	0.9	8
44	Preparation of Microparticles Capable of Glucose-Induced Insulin Release under Physiological Conditions. Polymers, 2018, 10, 1164.	2.0	8
45	Polyelectrolyte layered assemblies containing azobenzene-modified polymer and anionic cyclodextrins. Materials Science and Engineering C, 2003, 23, 579-583.	3.8	7
46	Use of anionic polysaccharides for the preparation of insulin-containing layer-by-layer films and their pH stability. Polymer Bulletin, 2012, 69, 229-239.	1.7	7
47	Preparation of Nafion/Polycation Layer-by-Layer Films for Adsorption and Release of Insulin. Polymers, 2018, 10, 812.	2.0	7
48	Preparation of multilayer films using the negative charge of phenylboronic acid and its response to pH change, fructose, and hydrogen peroxide. Colloid and Polymer Science, 2018, 296, 1573-1580.	1.0	7
49	Layered assemblies composed of sulfonated cyclodextrin and poly(allylamine). Colloid and Polymer Science, 2004, 282, 287-290.	1.0	6
50	Preparation of multilayer films consisting of glucose oxidase and poly(amidoamine) dendrimer and their stability. Colloid and Polymer Science, 2015, 293, 2713-2718.	1.0	6
51	Voltammetric pH Measurements Using Azure A-Containing Layer-by-Layer Film Immobilized Electrodes. Polymers, 2020, 12, 2328.	2.0	6
52	Decomposition of Glucose-Sensitive Layer-by-Layer Films Using Hemin, DNA, and Glucose Oxidase. Polymers, 2020, 12, 319.	2.0	6
53	pH-Sensitive Thin Films Composed of Poly(methacrylic acid) and Carboxyl-Terminated Dendrimer. Sensor Letters, 2008, 6, 250-252.	0.4	6
54	Effects of hydrogen peroxide on the electrochemical decomposition of layer-by-layer thin films composed of 2-iminobiotin-labeled poly(ethyleneimine) and avidin. Journal of Colloid and Interface Science, 2007, 315, 396-399.	5.0	5

#	Article	IF	Citations
55	Ion Permeability of Free-Suspended Layer-by-Layer (LbL) Films Prepared Using an Alginate Scaffold. Polymers, 2013, 5, 696-705.	2.0	5
56	Preparation of H2O2-induced poly (amidoamine) dendrimer-release multilayer films. Colloid and Polymer Science, 2017, 295, 877-882.	1.0	5
57	Comparison of NAD with NADPâ€dependent Glutamate Dehydrogenase, and CNT with rGOâ€modified Electrodes, for the Construction of Glutamate Sensors. Electroanalysis, 2018, 30, 2237-2240.	1.5	5
58	Electrochemical Detection of Triglycerides Based on an Enzymatic Reaction and Electrocatalytic Oxidation with Nortropineâ€Nâ€oxyl. Electroanalysis, 2019, 31, 603-606.	1.5	5
59	Electrode potential-dependent colorimetric response of fluorescein-modified layer-by-layer films in the presence of hydrogen peroxide. Journal of Colloid and Interface Science, 2010, 348, 441-445.	5.0	4
60	Colorimetric response of fluorescein-modified multilayer thin films induced by electrolysis of water. Materials Science and Engineering C, 2011, 31, 258-261.	3.8	4
61	pH-Stability of Layer-by-Layer Thin Films Composed of Carboxyl-Terminated Poly(amidoamine) Dendrimer and Poly(acrylic acid). Kobunshi Ronbunshu, 2009, 66, 75-78.	0.2	3
62	Preparation of Hydrogen Peroxide Sensitive Nanofilms by a Layer-by-Layer Technique. Nanomaterials, 2018, 8, 941.	1.9	3
63	Carbon Nanotube Immobilized Electrode Using Amphiphilic Phospholipid Polymer with Antiâ€fouling and Dispersion Property for Electrochemical Analysis. Electroanalysis, 2020, 32, 898-901.	1.5	3
64	Adsorption and Release of Rose Bengal on Layer-by-Layer Films of Poly(Vinyl Alcohol) and Poly(Amidoamine) Dendrimers Bearing 4-Carboxyphenylboronic Acid. Polymers, 2020, 12, 1854.	2.0	3
65	Development of Functional Surfaces by Layered Thin Films Containing Proteins. Bunseki Kagaku, 2007, 56, 387-395.	0.1	2
66	Electrochemical Quantitative Evaluation of the Surface Charge of a Poly(1â€Vinylimidazole) Multilayer Film and Application to Nanopore pH Sensor. Electroanalysis, 2021, 33, 1633-1638.	1.5	2
67	Electropolymerization of Azure A and pH Sensing Using Poly(azure A)-modified Electrodes. Analytical Sciences, 2021, 37, 893-896.	0.8	2
68	Nitroxyl Radical/Copper-Catalyzed Electrooxidation of Alcohols and Amines at Low Potentials. Chemical and Pharmaceutical Bulletin, 2021, 69, 1005-1009.	0.6	2
69	Preparation of free-suspended polyelectrolyte multilayer films using an alginate scaffold and their ion permeability. Materials Science and Engineering C, 2012, 32, 2649-2653.	3.8	1
70	Preparation of a PVA/PBA dispersion and its response to glucose, fructose, and hydrogen peroxide. Colloid and Polymer Science, 2017, 295, 1521-1525.	1.0	1
71	Electrochemical Detection of Sesamol Dimer and its Application to Measurement of Radicals. Analytical Sciences, 2021, 37, 633-635.	0.8	1
72	Pyridoxine-selective Fluorescence Quenching by Graphite Oxide-containing Molecularly Imprinted Polymers. Bunseki Kagaku, 2014, 63, 311-315.	0.1	0

#	Article	IF	Citations
73	Enhancement of Hydrogen Peroxide Reduction Current by an Electrode Modified with Hybrid Polymer/Silica Particles and N , N â€diethylâ€•N â€(2â€•methoxyâ€•ethyl)â€•N â€•methylammonium bis(trifluoromethylsulfonyl)imide. Electroanalysis, 2020, 32, 2113-2117.	1.5	0
74	Electrochemical Cleavage of the Carbonâ€“Boron Bond in <i>p</i>-Acetamidophenylboronic Acid at Neutral pH Conditions. Chemical and Pharmaceutical Bulletin, 2021, 69, 1206-1208.	0.6	0
75	Electrochemical Polymerization of Nitroxyl Radical Precursor Containing Phenol Side Chain in Aqueous Solution and Its Application to Electrochemical Analysis of Glucose. Bunseki Kagaku, 2022, 71, 191-196.	0.1	0
76	FAB-MS Measurement of 2-Hydroxyestrone and Monosaccharides Assisted by 4-Pyridineboronic Ester Derivatization. Heterocycles, 2022, 104, 1074.	0.4	0