List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Multiple Label-Free Detection of Antigenâ^'Antibody Reaction Using Localized Surface Plasmon Resonance-Based Coreâ^'Shell Structured Nanoparticle Layer Nanochip. Analytical Chemistry, 2006, 78, 6465-6475.	6.5	337
2	Label-Free Detection of Peptide Nucleic Acidâ^'DNA Hybridization Using Localized Surface Plasmon Resonance Based Optical Biosensor. Analytical Chemistry, 2005, 77, 6976-6984.	6.5	311
3	Label-Free DNA Biosensor Based on Localized Surface Plasmon Resonance Coupled with Interferometry. Analytical Chemistry, 2007, 79, 1855-1864.	6.5	144
4	A localized surface plasmon resonance based immunosensor for the detection of casein in milk. Science and Technology of Advanced Materials, 2007, 8, 331-338.	6.1	137
5	A novel enhancement assay for immunochromatographic test strips using gold nanoparticles. Analytical and Bioanalytical Chemistry, 2006, 385, 1414-1420.	3.7	134
6	Stimuli-responsive hydrogel–silver nanoparticles composite for development of localized surface plasmon resonance-based optical biosensor. Analytica Chimica Acta, 2008, 611, 205-211.	5.4	119
7	Localized surface plasmon resonance based optical biosensor using surface modified nanoparticle layer for label-free monitoring of antigen–antibody reaction. Science and Technology of Advanced Materials, 2005, 6, 491-500.	6.1	118
8	Colorimetric detection of volatile organic compounds using a colloidal crystal-based chemical sensor for environmental applications. Sensors and Actuators B: Chemical, 2007, 125, 589-595.	7.8	116
9	Quantum dot-based immunosensor for the detection of prostate-specific antigen using fluorescence microscopy. Talanta, 2007, 71, 1494-1499.	5.5	104
10	Au nanoparticle-modified DNA sensor based on simultaneous electrochemical impedance spectroscopy and localized surface plasmon resonance. Biosensors and Bioelectronics, 2014, 53, 513-518.	10.1	81
11	Super-sensitivity in label-free protein sensing using a nanoslot nanolaser. Optics Express, 2011, 19, 17683.	3.4	79
12	Gold Nanoparticleâ€Based Redox Signal Enhancement for Sensitive Detection of Human Chorionic Gonadotropin Hormone. Electroanalysis, 2008, 20, 14-21.	2.9	77
13	Gold nanoparticle-based novel enhancement method for the development of highly sensitive immunochromatographic test strips. Science and Technology of Advanced Materials, 2006, 7, 270-275.	6.1	74
14	Quantitative determination of hydrogen peroxide using polymer coated Ag nanoparticles. Measurement: Journal of the International Measurement Confederation, 2008, 41, 1045-1053.	5.0	71
15	Label-free cell-based assay using localized surface plasmon resonance biosensor. Analytica Chimica Acta, 2008, 614, 182-189.	5.4	70
16	On-chip micro-flow polystyrene bead-based immunoassay for quantitative detection of tacrolimus (FK506). Analytical Biochemistry, 2004, 334, 111-116.	2.4	69
17	Reflectometric detection of influenza virus in human saliva using nanoimprint lithography-based flexible two-dimensional photonic crystal biosensor. Sensors and Actuators B: Chemical, 2010, 148, 269-276.	7.8	69
18	Label-Free Detection of Melittin Binding to a Membrane Using Electrochemical-Localized Surface Plasmon Resonance. Analytical Chemistry, 2008, 80, 1859-1864.	6.5	59

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19	Fluorescence-based assay with enzyme amplification on a micro-flow immunosensor chip for monitoring coplanar polychlorinated biphenyls. Analytica Chimica Acta, 2005, 531, 7-13.	5.4	54
20	Optical-transparent and flexible glucose sensor with ITO electrode. Biosensors and Bioelectronics, 2003, 19, 67-71.	10.1	53
21	Rapid and sensitive visual detection of residual pesticides in food using acetylcholinesterase-based disposable membrane chips. Food Control, 2007, 18, 914-920.	5.5	37
22	Photonic crystals on copolymer film for label-free detection of DNA hybridization. Biosensors and Bioelectronics, 2018, 103, 158-162.	10.1	37
23	Printed two-dimensional photonic crystals for single-step label-free biosensing of insulin under wet conditions. Lab on A Chip, 2012, 12, 1995.	6.0	33
24	Bulk- and surface-modified combinable PDMS capillary sensor array as an easy-to-use sensing device with enhanced sensitivity to elevated concentrations of multiple serum sample components. Lab on A Chip, 2012, 12, 1522.	6.0	33
25	Core–Shell-Structured Gold Nanocone Array for Label-Free DNA Sensing. ACS Applied Nano Materials, 2019, 2, 4983-4990.	5.0	33
26	Gold nanoparticle based immunochromatography using a resin modified micropipette tip for rapid and simple detection of human chorionic gonadotropin hormone and prostate-specific antigen. Science and Technology of Advanced Materials, 2006, 7, 276-281.	6.1	32
27	Signal amplified two-dimensional photonic crystal biosensor immobilized with glyco-nanoparticles. Journal of Materials Chemistry B, 2014, 2, 3324-3332.	5.8	27
28	Localized surface plasmon resonance optical characteristics for hydrogen peroxide using polyvinylpyrrolidone coated silver nanoparticles. Materials Letters, 2010, 64, 2105-2108.	2.6	26
29	Combinable poly(dimethyl siloxane) capillary sensor array for single-step and multiple enzyme inhibitor assays. Lab on A Chip, 2012, 12, 204-208.	6.0	26
30	A single-step enzyme immunoassay capillary sensor composed of functional multilayer coatings for the diagnosis of marker proteins. Analyst, The, 2015, 140, 1459-1465.	3.5	25
31	Fabrication of core-shell structured nanoparticle layer substrate for excitation of localized surface plasmon resonance and its optical response for DNA in aqueous conditions. Analytica Chimica Acta, 2010, 661, 200-205.	5.4	24
32	Plasticized Poly(vinyl chloride)-Based Photonic Crystal for Ion Sensing. Analytical Chemistry, 2014, 86, 11986-11991.	6.5	23
33	Labelâ€free optical detection of Câ€reactive protein by nanoimprint lithographyâ€based 2Dâ€photonic crystal film. Biotechnology Journal, 2016, 11, 831-837.	3.5	23
34	Capillary-based enzyme-linked immunosorbent assay for highly sensitive detection of thrombin-cleaved osteopontin in plasma. Analytical Biochemistry, 2013, 440, 137-141.	2.4	22
35	Resin-based micropipette tip for immunochromatographic assays in urine samples. Journal of Immunological Methods, 2006, 312, 54-60.	1.4	21
36	Integration of neuraminidase inhibitor assay into a single-step operation using a combinable poly(dimethylsiloxane) capillary sensor. Analyst, The, 2013, 138, 3158.	3.5	21

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37	Fabrication of gold-deposited plasmonic crystal based on nanoimprint lithography for label-free biosensing application. Japanese Journal of Applied Physics, 2016, 55, 08RE02.	1.5	21
38	Excitation of localized surface plasmon resonance using a core–shell structured nanoparticle layer substrate and its application for label-free detection of biomolecular interactions. Journal of Physics Condensed Matter, 2007, 19, 215201.	1.8	20
39	Uniform Ni–P Film Using an Electroless Plating Method with an Emulsion of Supercritical Carbon Dioxide. Journal of the Electrochemical Society, 2007, 154, E91.	2.9	20
40	Metallization on polymer by catalyzation in supercritical CO2 and electroless plating in dense CO2 emulsion. Surface and Coatings Technology, 2008, 202, 3921-3926.	4.8	20
41	Open-type capillary-assembled microchip for rapid, single-step, simultaneous multi-component analysis of serum sample. RSC Advances, 2012, 2, 9525.	3.6	20
42	Enhancement of the fluorescence intensity of DNA intercalators using nano-imprinted 2-dimensional photonic crystal. Mikrochimica Acta, 2013, 180, 929-934.	5.0	19
43	Photonic crystals on copolymer film for bacteria detection. Biosensors and Bioelectronics, 2013, 41, 354-358.	10.1	19
44	Study of electrical field distribution of gold-capped nanoparticle for excitation of localized surface plasmon resonance. Applied Surface Science, 2011, 257, 2560-2566.	6.1	17
45	Single-Step Sandwich Immunoreaction in a Square Glass Capillary Immobilizing Capture and Enzyme-linked Antibodies for Simplified Enzyme-linked Immunosorbent Assay. Analytical Sciences, 2012, 28, 51.	1.6	17
46	Fast and single-step immunoassay based on fluorescence quenching within a square glass capillary immobilizing graphene oxide–antibody conjugate and fluorescently labelled antibody. Analyst, The, 2016, 141, 3389-3394.	3.5	17
47	Nanostructured biochip for label-free and real-time optical detection of polymerase chain reaction. Analytica Chimica Acta, 2010, 661, 111-116.	5.4	16
48	Advancements in Capillary-Assembled Microchip (CAs-CHIP) Development for Multiple Analyte Sensing and Microchip Electrophoresis. Analytical Sciences, 2014, 30, 7-15.	1.6	16
49	Ionic liquid-based dye: A "Dyed plasticizer―for rapid and highly sensitive anion optodes based on a plasticized PVC membrane. Sensors and Actuators B: Chemical, 2018, 258, 1125-1130.	7.8	16
50	Design of a single-step immunoassay principle based on the combination of an enzyme-labeled antibody release coating and a hydrogel copolymerized with a fluorescent enzyme substrate in a microfluidic capillary device. Lab on A Chip, 2013, 13, 4304.	6.0	15
51	Imprinted Photonic Crystal-Film-Based Smartphone-Compatible Label-Free Optical Sensor for SARS-CoV-2 Testing. Biosensors, 2022, 12, 200.	4.7	15
52	Development of Novel Protease Assay Device Using a Nanoimprinted Two-dimensional Photonic Crystal. Chemistry Letters, 2014, 43, 1728-1730.	1.3	14
53	Lipophilic Fluorescent Dye Liquids: Förster Resonance Energy Transfer-Based Fluorescence Amplification for Ion Selective Optical Sensors Based on a Solvent Polymeric Membrane. Analytical Chemistry, 2021, 93, 4143-4148.	6.5	14
54	Photonic Crystal Nanolaser Biosensors. IEICE Transactions on Electronics, 2012, E95-C, 188-198.	0.6	13

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55	Efficient immobilization of the enzyme and substrate for a single-step caspase-3 inhibitor assay using a combinable PDMS capillary sensor array. RSC Advances, 2014, 4, 7682-7687.	3.6	13
56	Development of optical biosensor based on photonic crystal made of TiO ₂ using liquid phase deposition. Japanese Journal of Applied Physics, 2016, 55, 08RE01.	1.5	13
57	Development of a polymer/TiO2 hybrid two-dimensional photonic crystal for highly sensitive fluorescence-based ion sensing applications. Sensors and Actuators B: Chemical, 2018, 269, 257-263.	7.8	13
58	Fabrication of Optical Devices Based on Printable Photonics Technology and Its Application for Biosensor. IEEJ Transactions on Sensors and Micromachines, 2010, 130, 450-451.	0.1	13
59	Novel fluorescent probe for highly sensitive bioassay using sequential enzyme-linked immunosorbent assay-capillary isoelectric focusing (ELISA-cIEF). Analyst, The, 2013, 138, 3139.	3.5	12
60	A lipophilic ionic liquid-based dye for anion optodes: importance of dye lipophilicity and application to heparin measurement. Analyst, The, 2020, 145, 5430-5437.	3.5	12
61	Size Sorting of Exosomes by Tuning the Thicknesses of the Electric Double Layers on a Micro-Nanofluidic Device. Micromachines, 2020, 11, 458.	2.9	12
62	A sensitive immunochromatographic assay using gold nanoparticles for the semiquantitative detection of prostate-specific antigen in serum. Nanobiotechnology, 2006, 2, 79-86.	1.2	11
63	Highly Sensitive and Multiple Enzyme Activity Assay Using Reagent-release Capillary-Isoelectric Focusing with Rhodamine 110-based Substrates. Analytical Sciences, 2015, 31, 1155-1161.	1.6	10
64	Fabrication and packaging of a mass-producible capillary-assembled microchip for simple and multiplexed bioassay. Sensors and Actuators B: Chemical, 2015, 218, 245-252.	7.8	10
65	Polymer-based Photonic Crystal Cavity Sensor for Optical Detection in the Visible Wavelength Region. Analytical Sciences, 2016, 32, 117-120.	1.6	10
66	Double Sweeping: Highly Effective Sample Preconcentration Using Cationic and Anionic Micelles and Its Application to a Multiple Enzyme Activity Assay. Analytical Chemistry, 2017, 89, 6505-6512.	6.5	10
67	An ionic liquid composed of purely functional sensing molecules: a colorimetrically calcium responsive ionic liquid. Analyst, The, 2019, 144, 6858-6861.	3.5	10
68	Highly sensitive optical ion sensor with ionic liquid-based colorimetric membrane/photonic crystal hybrid structure. Scientific Reports, 2020, 10, 16739.	3.3	10
69	Enzyme-responsive Fluorescent Ionic Liquid. Analytical Sciences, 2020, 36, 143-145.	1.6	10
70	Fast and Single-step Fluorescence-based Competitive Bioassay Microdevice Combined PDMS Microchannel Arrays Separately Immobilizing Graphene Oxide–Analyte Conjugates and Fluorescently-labelled Receptor Proteins. Analytical Sciences, 2017, 33, 969-972.	1.6	9
71	Angle-Sensitive Photonic Crystals for Simultaneous Detection and Photocatalytic Degradation of Hazardous Diazo Compounds. Micromachines, 2020, 11, 93.	2.9	9
72	Regioselective Immobilization of a PVC Membrane Composed of an Ionic Liquid-based Dye on Convex-shaped PDMS Surface for Multiplexed Microanalytical Devices. Analytical Sciences, 2018, 34, 517-519.	1.6	8

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73	Enhancement of Thermal Properties of Polyvinylpyrrolidone (PVP)-Coated Silver Nanoparticles by Using Plasmid DNA and their Localized Surface Plasmon Resonance (LSPR) Characteristics. Nanobiotechnology, 2008, 4, 36-42.	1.2	7
74	Design and fabrication of a dielectrophoresis-based cell-positioning and cell-culture device for construction of cell networks. Microchemical Journal, 2009, 91, 232-238.	4.5	7
75	TiN-contained polymer-metal core-shell structured nanocone array: Engineering of sensor performance by controlling plasmonic properties. Sensors and Actuators B: Chemical, 2019, 299, 126932.	7.8	7
76	Template Stripping Method-Based Au Nanoarray for Surface-Enhanced Raman Scattering Detection of Antiepileptic Drug. Micromachines, 2020, 11, 936.	2.9	7
77	Development of a single-step immunoassay microdevice based on a graphene oxide-containing hydrogel possessing fluorescence quenching and size separation functions. Analyst, The, 2017, 142, 472-477.	3.5	5
78	Origin of the Optical Response of a Dye-doped Plasticized Poly(vinyl chloride)-based Photonic Crystal Ion Sensor. Analytical Sciences, 2017, 33, 1247-1251.	1.6	5
79	Enzyme-responsive fluorescent nanoemulsion based on lipophilic dye liquid. Analyst, The, 2021, 146, 4121-4124.	3.5	5
80	Direct Observation of Nodule Growth on Electroless Ni-P Deposition in Supercritical CO ₂ Emulsion. Journal of the Electrochemical Society, 2011, 159, D114-D118.	2.9	4
81	Development of Nanophotonics-based Bioanalytical Devices. Bunseki Kagaku, 2015, 64, 751-757.	0.2	4
82	Direct Measurement of Initial Rate of Enzyme Reaction by Electrokinetic Filtration Using a Hydrogel-plugged Capillary Device. Analytical Sciences, 2021, 37, 1439-1446.	1.6	4
83	Evaluation of Cell Adhesion Characteristics on the Porous Silicon Substrates with Various Surface Structures. Electrochemistry, 2008, 76, 559-562.	1.4	3
84	TiO2-coated 2D photonic crystals for reflectometric determination of malachite green. Mikrochimica Acta, 2019, 186, 844.	5.0	3
85	Graphene/polyethylene glycol hybrids for single-step immunoassay microdevice. FlatChem, 2019, 13, 34-39.	5.6	3
86	Evaluation of the interactions between oligonucleotides and small molecules by partial filling–nonequilibrium affinity capillary electrophoresis. Analytical Sciences, 2022, 38, 851-859.	1.6	3
87	DNA Binding and Bending Protein-Based DNA Actuator and its Practical Realization. Nanobiotechnology, 2008, 4, 43-49.	1.2	2
88	Design and fabrication of cell alignment device based on electrolytically-generated air bubbles, and its practical realization using polystyrene microbeads. Mikrochimica Acta, 2009, 164, 263-268.	5.0	2
89	High sensitivity biosensing using nano-slot nanolaser. , 2010, , .		2
90	A Simple and Rapid Immunoassay Based on Microchip Electrophoresis Using a Reagent-Release Cartridge. Chromatography, 2016, 37, 29-33.	1.7	2

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91	Effectiveness of surface enhanced Raman spectroscopy of tear fluid with soft substrate for point-of-care therapeutic drug monitoring. Proceedings of SPIE, 2016, , .	0.8	2
92	Label-Free Optical Detection of Fibrinogen in Visible Region Using Nanoimprint Lithography-Based Two-Dimensional Photonic Crystal. IEICE Transactions on Electronics, 2017, E100.C, 166-170.	0.6	2
93	Design and Fabrication of a Visible-Light-Compatible, Polymer-Based Photonic Crystal Resonator and Waveguide for Sensing Applications. Micromachines, 2018, 9, 410.	2.9	2
94	Development of a Rapid and Highly Sensitive Plasticized PVC Membrane Optode Utilizing an Ionic Liquid Material Composed of Bromothymol Blue. Bunseki Kagaku, 2019, 68, 945-951.	0.2	2
95	Inkjet Printing-Based Immobilization Method for a Single-Step and Homogeneous Competitive Immunoassay in Microchannel Arrays. Frontiers in Chemistry, 2020, 8, 612132.	3.6	2
96	Fractionation of Single-stranded DNAs with/without Stable Preorganized Structures Using Capillary Sieving Electrophoresis for Aptamer Selection. Analytical Sciences, 2021, 37, 799-802.	1.6	2
97	Development of Plasmonic Chemical Sensor for Detection of Aldehyde Compounds. IEEJ Transactions on Sensors and Micromachines, 2013, 133, 372-373.	0.1	2
98	Development of Microchip Electrophoresis-Integrated Nanoimprinted Photonic Crystal. Sensors and Materials, 2015, , .	0.5	2
99	Broadband Light Source and Its Application to Near-Infrared Spectroscopy. Sensors and Materials, 2015, , .	0.5	2
100	Fabrication of Metal-Insulator-Metal Nanostructures Composed of Au-MgF2-Au and Its Potential in Responding to Two Different Factors in Sample Solutions Using Individual Plasmon Modes. Micromachines, 2022, 13, 257.	2.9	2
101	Au nanorods-TiO2 photonic crystal plasmonic-photonic hybrid sensor for label-free detection and identification of DNA molecules with single nucleotide polymorphisms. Sensors and Actuators B: Chemical, 2022, 361, 131747.	7.8	2
102	Localized surface plasmon resonance based label-free optical biosensor for monitoring peptide nucleic acid-DNA hybridization. , 0, , .		1
103	Photonic crystal based optical chemical sensor for environmental monitoring. , 2007, , .		1
104	Design and Fabrication of Nanostructures Based on DNA Ring–Protein Complex. Japanese Journal of Applied Physics, 2008, 47, 4810-4814.	1.5	1
105	Functionalized polymer-based photonic devices for biosensing application. , 2017, , .		1
106	Development of Element Technology for 1 STEP Biomarker Protein Analysis Device Using Silver Nanoparticle–Contained Hydrogel and Reagentâ€Immobilized Cartridge. Electronics and Communications in Japan, 2017, 100, 45-53.	0.5	1
107	Smart Golden Leaves Fabricated by Integrating Au Nanoparticles and Cellulose Nanofibers. ChemNanoMat, 2019, 5, 581-585.	2.8	1
108	Single-step Trypsin Inhibitor Assay on a Microchannel Array Device Immobilizing Enzymes and Fluorescent Substrates by Inkjet Printing. Analytical Sciences, 2021, 37, 1473-1476.	1.6	1

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109	Development of a Single-step Bioassay Microdevice Using a Reagent Immobilization Method Based on Inkjet Printing. Bunseki Kagaku, 2021, 70, 125-131.	0.2	1
110	Au "Edged Hole Array" for Sensor Application. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2019, 32, 101-105.	0.3	1
111	Development of Cartridge-Based Wash-Free Single-Step Plasmonic Enzyme-Linked Immunosorbent Assay Using Poly(vinylpyrrolidinone)-Coated Silver Nanoparticles as a Chromogenic Substrate. Sensors and Materials, 2017, , 1247.	0.5	1
112	Chloride ion-selective dye liquid nanoemulsion: improved sensor performance due to intermolecular interactions between dye and ionophore. Analyst, The, 2022, 147, 1529-1533.	3.5	1
113	Quantum dots / TiO2 hybrid photonic crystal: Fabrication and application for highly sensitive and visible region-responsive biosensor. Microelectronic Engineering, 2022, 263, 111842.	2.4	1
114	Nanostructure and molecular interface for biosensing devices. Proceedings of SPIE, 2007, , .	0.8	0
115	Design and fabrication of DNA-based nanostructures using plasmid-protein complex for bio device. , 2007, , .		0
116	Label-free Electrochemical-optical Detection of Peptide Toxins Binding to a Membrane Based on Core-Shell Nanoparticles Substrates. ECS Meeting Abstracts, 2008, , .	0.0	0
117	Nanoimprinted two-dimensional photonic crystal for detection of fibrinogen using antigen-antibody reaction. , 2015, , .		Ο
118	Development of optical biosensor based on photonic crystal made of TiO2 using liquid phase deposition. , 2015, , .		0
119	Fabrication of gold-deposited plasmonic crystal based on nanoimprint lithography for label-free biosensing application. , 2015, , .		Ο
120	Nanoimprint lithography-based plasmonic crystal-surface enhanced Raman scattering substrate for point of care testing application. Proceedings of SPIE, 2017, , .	0.8	0
121	A Simple and Easy-to-Use Capillary Isoelectric Focusing Technique Using Reagent-Release Hydrogels. Chromatography, 2017, 38, 79-83.	1.7	Ο
122	Development of High Sensitive Bioanalytical Devices Based on Nanophotonics. The Review of Laser Engineering, 2012, 40, 926.	0.0	0
123	Fabrication Electron Beam Lithography Pattern-based Plasmonic Crystal for Sensing Application. IEEJ Transactions on Sensors and Micromachines, 2013, 133, 374-375.	0.1	Ο
124	Localized Surface Plasmon Resonance-Based Biosensor for Label-Free Detection of Biomolecular Interactions. , 2013, , 377-392.		0
125	Development of Element Technology for 1 STEP Biomarker Protein Analysis Device using Silver Nanoparticle Contained Hydrogel and Reagent Immobilized Cartridge. IEEJ Transactions on Electronics, Information and Systems, 2015, 135, 1307-1313.	0.2	0
126	Modulating Optical Characteristics of Nanoimprinted Plasmonic Device by Re-Shaping Process of Polymer Mold. Micromachines, 2021, 12, 1323.	2.9	0

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127	Fabrication of Plasmonic Membrane for Sensor Application using Membrane Filter as a Template. IEEJ Transactions on Sensors and Micromachines, 2020, 140, 382-383.	0.1	0
128	Fabrication and Characterization of YAG:Ce ³⁺ Phosphor Powder-Contained Photonic Crystal for Optical Sensor. IEEJ Transactions on Sensors and Micromachines, 2022, 142, 29-30.	0.1	0
129	Development of Capillary Devices for Digital Molecular Sieving Electrophoresis. Bunseki Kagaku, 2022, 71, 325-331.	0.2	0