Kenichi Nagase

List of Publications by Year
in descending order

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92 papers	3,883 citations	81900 39 h-index	133252 59 g-index
101 all docs	101 docs citations	101 times ranked	2998 citing authors

#	Article	IF	Citations
1	Poly(N-isopropylacrylamide)-based thermoresponsive surfaces provide new types of biomedical applications. Biomaterials, 2018, 153, 27-48.	11.4	297
2	Temperature-responsive intelligent interfaces for biomolecular separation and cell sheet engineering. Journal of the Royal Society Interface, 2009, 6, S293-309.	3.4	214
3	Cell sheet approach for tissue engineering and regenerative medicine. Journal of Controlled Release, 2014, 190, 228-239.	9.9	203
4	Effects of Graft Densities and Chain Lengths on Separation of Bioactive Compounds by Nanolayered Thermoresponsive Polymer Brush Surfaces. Langmuir, 2008, 24, 511-517.	3.5	160
5	Interfacial Property Modulation of Thermoresponsive Polymer Brush Surfaces and Their Interaction with Biomolecules. Langmuir, 2007, 23, 9409-9415.	3.5	143
6	Preparation of Thermoresponsive Cationic Copolymer Brush Surfaces and Application of the Surface to Separation of Biomolecules. Biomacromolecules, 2008, 9, 1340-1347.	5.4	119
7	Thermoresponsive-polymer-based materials for temperature-modulated bioanalysis and bioseparations. Journal of Materials Chemistry B, 2016, 4, 6381-6397.	5.8	94
8	Thermoâ€Responsive Polymer Brushes as Intelligent Biointerfaces: Preparation via ATRP and Characterization. Macromolecular Bioscience, 2011, 11, 400-409.	4.1	85
9	Thermo-responsive polymer brush-grafted porous polystyrene beads for all-aqueous chromatography. Journal of Chromatography A, 2010, 1217, 522-529.	3.7	79
10	Thermally-modulated on/off-adsorption materials for pharmaceutical protein purification. Biomaterials, 2011, 32, 619-627.	11.4	78
11	Thermoresponsive Cationic Copolymer Brushes for Mesenchymal Stem Cell Separation. Biomacromolecules, 2015, 16, 532-540.	5.4	71
12	Dynamically cell separating thermo-functional biointerfaces with densely packed polymer brushes. Journal of Materials Chemistry, 2012, 22, 19514.	6.7	67
13	Influence of Graft Interface Polarity on Hydration/Dehydration of Grafted Thermoresponsive Polymer Brushes and Steroid Separation Using All-Aqueous Chromatography. Langmuir, 2008, 24, 10981-10987.	3.5	62
14	Thermoresponsive Polymer Brush Surfaces with Hydrophobic Groups for All-Aqueous Chromatography. ACS Applied Materials & Interfaces, 2010, 2, 1247-1253.	8.0	61
15	High Stability of Thermoresponsive Polymer-Brush-Grafted Silica Beads as Chromatography Matrices. ACS Applied Materials & Interfaces, 2012, 4, 1998-2008.	8.0	61
16	Selfâ€Oscillating Polymer Brushes. Angewandte Chemie - International Edition, 2013, 52, 7468-7471.	13.8	61
17	Real-time observation of coil-to-globule transition in thermosensitive poly(N-isopropylacrylamide) brushes by quartz crystal microbalance. Polymer, 2007, 48, 5713-5720.	3.8	57
18	Simultaneous Enhancement of Cell Proliferation and Thermally Induced Harvest Efficiency Based on Temperature-Responsive Cationic Copolymer-Grafted Microcarriers. Biomacromolecules, 2012, 13, 1765-1773.	5.4	56

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19	Poly(N-isopropylacrylamide) based thermoresponsive polymer brushes for bioseparation, cellular tissue fabrication, and nano actuators. Nano Structures Nano Objects, 2018, 16, 9-23.	3.5	56
20	Hydrophobized Thermoresponsive Copolymer Brushes for Cell Separation by Multistep Temperature Change. Biomacromolecules, 2013, 14, 3423-3433.	5.4	55
21	Thermoresponsive Polymer Brush on Monolithic-Silica-Rod for the High-Speed Separation of Bioactive Compounds. Langmuir, 2011, 27, 10830-10839.	3.5	51
22	Thermo-responsive protein adsorbing materials for purifying pharmaceuticalprotein on exposed charging surface. Journal of Materials Chemistry, 2011, 21, 2590-2593.	6.7	47
23	Phenotypic traits of mesenchymal stem cell sheets fabricated by temperature-responsive cell culture plate: structural characteristics of MSC sheets. Stem Cell Research and Therapy, 2019, 10, 353.	5.5	47
24	Monolithic Silica Rods Grafted with Thermoresponsive Anionic Polymer Brushes for High-Speed Separation of Basic Biomolecules and Peptides. Biomacromolecules, 2014, 15, 1204-1215.	5.4	46
25	Artificial cilia as autonomous nanoactuators: Design of a gradient self-oscillating polymer brush with controlled unidirectional motion. Science Advances, 2016, 2, e1600902.	10.3	46
26	Local Release of VEGF Using Fiber Mats Enables Effective Transplantation of Layered Cardiomyocyte Sheets. Macromolecular Bioscience, 2017, 17, 1700073.	4.1	45
27	Preparation of thermo-responsive polymer brushes on hydrophilic polymeric beads by surface-initiated atom transfer radical polymerization for a highly resolutive separation of peptides. Journal of Chromatography A, 2010, 1217, 5978-5985.	3.7	44
28	Effect of Polymer Phase Transition Behavior on Temperature-Responsive Polymer-Modified Liposomes for siRNA Transfection. International Journal of Molecular Sciences, 2019, 20, 430.	4.1	43
29	Thermoresponsive interfaces obtained using poly(N-isopropylacrylamide)-based copolymer for bioseparation and tissue engineering applications. Advances in Colloid and Interface Science, 2021, 295, 102487.	14.7	43
30	Effect of reaction solvent on the preparation of thermo-responsive stationary phase through a surface initiated atom transfer radical polymerization. Journal of Chromatography A, 2011, 1218, 8617-8628.	3.7	42
31	Thermally Modulated Cationic Copolymer Brush on Monolithic Silica Rods for High-Speed Separation of Acidic Biomolecules. ACS Applied Materials & Interfaces, 2013, 5, 1442-1452.	8.0	42
32	Thermoresponsive Copolymer Brushes Possessing Quaternary Amine Groups for Strong Anion-Exchange Chromatographic Matrices. Biomacromolecules, 2014, 15, 1031-1043.	5.4	42
33	Thermoresponsive hydrophobic copolymer brushes modified porous monolithic silica for high-resolution bioseparation. RSC Advances, 2015, 5, 66155-66167.	3.6	42
34	Control of swellingâ€“deswelling behavior of a self-oscillating gel by designing the chemical structure. RSC Advances, 2015, 5, 5781-5787.	3.6	42
35	Preparation of Thermoresponsive Anionic Copolymer Brush Surfaces for Separating Basic Biomolecules. Biomacromolecules, 2010, 11, 215-223.	5.4	41
36	Thermoresponsive Anionic Copolymer Brushes Containing Strong Acid Moieties for Effective Separation of Basic Biomolecules and Proteins. Biomacromolecules, 2014, 15, 3846-3858.	5.4	40

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37	Thermoresponsive polymer-modified microfibers for cell separations. Acta Biomaterialia, 2017, 53, 81-92.	8.3	40
38	Protein purification using solid-phase extraction on temperature-responsive hydrogel-modified silica beads. Journal of Chromatography A, 2018, 1568, 38-48.	3.7	40
39	Effective separation of peptides using highly dense thermo-responsive polymer brush-grafted porous polystyrene beads. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2010, 878, 2191-2198.	2.3	39
40	Micro/nano-imprinted substrates grafted with a thermoresponsive polymer for thermally modulated cell separation. Journal of Materials Chemistry B, 2017, 5, 5924-5930.	5.8	39
41	Thermally Modulated Retention of Lymphoctytes on Polymerâ€Brushâ€Grafted Glass Beads. Macromolecular Bioscience, 2012, 12, 333-340.	4.1	38
42	Protein separations via thermally responsive ionic block copolymer brush layers. RSC Advances, 2016, 6, 26254-26263.	3.6	38
43	Stereoregulation of Thermoresponsive Polymer Brushes by Surface-Initiated Living Radical Polymerization and the Effect of Tacticity on Surface Wettability.. Langmuir, 2010, 26, 17781-17784.	3.5	35
44	Design of Self-Oscillating Polymer Brushes and Control of the Dynamic Behaviors. Chemistry of Materials, 2015, 27, 7395-7402.	6.7	32
45	LAT1-Targeting Thermoresponsive Fluorescent Polymer Probes for Cancer Cell Imaging. International Journal of Molecular Sciences, 2018, 19, 1646.	4.1	32
46	Liposomes with temperature-responsive reversible surface properties. Colloids and Surfaces B: Biointerfaces, 2019, 176, 309-316.	5.0	32
47	Thermoresponsive anionic copolymer brush-grafted surfaces for cell separation. Colloids and Surfaces B: Biointerfaces, 2020, 185, 110565.	5.0	32
48	Thermoresponsive Cationic Block Copolymer Brushes for Temperatureâ€Modulated Stem Cell Separation. Macromolecular Rapid Communications, 2020, 41, e2000308.	3.9	32
49	Characteristic differences of cell sheets composed of mesenchymal stem cells with different tissue origins. Regenerative Therapy, 2019, 11, 34-40.	3.0	31
50	LAT1-Targeting Thermoresponsive Liposomes for Effective Cellular Uptake by Cancer Cells. ACS Omega, 2019, 4, 6443-6451.	3.5	31
51	Temperature-responsive chromatography for bioseparations: A review. Analytica Chimica Acta, 2020, 1138, 191-212.	5.4	31
52	Fabrication of Micropatterned Selfâ€Oscillating Polymer Brush for Direction Control of Chemical Waves. Small, 2017, 13, 1700041.	10.0	29
53	Antibody drug separation using thermoresponsive anionic polymer brush modified beads with optimised electrostatic and hydrophobic interactions. Scientific Reports, 2020, 10, 11896.	3.3	29
54	Rearrangement of hollow fibers for enhancing oxygen transfer in an artificial gill using oxygen carrier solution. Journal of Membrane Science, 2005, 254, 207-217.	8.2	28

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55	Enhanced Wettability Changes by Synergistic Effect of Micro/Nanoimprinted Substrates and Grafted Thermoresponsive Polymer Brushes. Macromolecular Rapid Communications, 2015, 36, 1965-1970.	3.9	26
56	Mixed polymer brush as a functional ligand of silica beads for temperature-modulated hydrophobic and electrostatic interactions. Analytica Chimica Acta, 2020, 1095, 1-13.	5.4	26
57	Oxygen transfer performance of a membrane oxygenator composed of crossed and parallel hollow fibers. Biochemical Engineering Journal, 2005, 24, 105-113.	3.6	24
58	Temperature-modulated cell-separation column using temperature-responsive cationic copolymer hydrogel-modified silica beads. Colloids and Surfaces B: Biointerfaces, 2019, 178, 253-262.	5.0	24
59	Selective capture and non-invasive release of cells using a thermoresponsive polymer brush with affinity peptides. Biomaterials Science, 2021, 9, 663-674.	5.4	23
60	Aspects of the Belousovâ€“Zhabotinsky Reaction inside a Self-Oscillating Polymer Brush. Langmuir, 2018, 34, 1673-1680.	3.5	22
61	Mesenchylmal Stem Cell Culture on Poly(N-isopropylacrylamide) Hydrogel with Repeated Thermo-Stimulation. International Journal of Molecular Sciences, 2018, 19, 1253.	4.1	21
62	Thermoresponsive anionic block copolymer brushes with a strongly anionic bottom segment for effective interactions with biomolecules. RSC Advances, 2016, 6, 93169-93179.	3.6	20
63	Temperature-responsive mixed-mode column containing temperature-responsive polymer-modified beads and anionic polymer-modified beads. Analytica Chimica Acta, 2019, 1079, 220-229.	5.4	19
64	Enhanced mechanical properties and cell separation with thermal control of PIPAAm-brushed polymer-blend microfibers. Journal of Materials Chemistry B, 2020, 8, 6017-6026.	5.8	18
65	Thermally-modulated cell separation columns using a thermoresponsive block copolymer brush as a packing material for the purification of mesenchymal stem cells. Biomaterials Science, 2021, 9, 7054-7064.	5.4	18
66	Green analytical method for the simultaneous analysis of cytochrome P450 probe substrates by poly(N-isopropylacrylamide)-based temperature-responsive chromatography. Scientific Reports, 2020, 10, 8828.	3.3	16
67	Design of Tetra-arm PEG-crosslinked Thermoresponsive Hydrogel for 3D Cell Culture. Analytical Sciences, 2016, 32, 1203-1205.	1.6	15
68	Adsorptionâ€“Desorption Control of Fibronectin in Real Time at the Liquid/Polymer Interface on a Quartz Crystal Microbalance by Thermoresponsivity. Biomacromolecules, 2019, 20, 1748-1755.	5.4	15
69	Simultaneous analysis of multiple oligonucleotides by temperature-responsive chromatography using a poly(N-isopropylacrylamide)-based stationary phase. Analytical and Bioanalytical Chemistry, 2020, 412, 5341-5351.	3.7	15
70	Effect of pore diameter on the elution behavior of analytes from thermoresponsive polymer grafted beads packed columns. Scientific Reports, 2021, 11, 9976.	3.3	15
71	Anion species-triggered antibody separation system utilizing a thermo-responsive polymer column under optimized constant temperature. Colloids and Surfaces B: Biointerfaces, 2021, 205, 111890.	5.0	15
72	Visualization of Oxygen Partial Pressure and Numerical Simulation of a Running Polymer Electrolyte Fuel Cell with Straight Flow Channels to Elucidate Reaction Distributions. ChemElectroChem, 2015, 2, 1495-1501.	3.4	13

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73	Development of a compact artificial gill using concentrated hemoglobin solution as the oxygen carrier. Journal of Membrane Science, 2003, 215, 281-292.	8.2	12
74	Real-time visualization of oxygen partial pressures in straight channels of running polymer electrolyte fuel cell with water plugging. Journal of Power Sources, 2015, 273, 873-877.	7.8	12
75	Stable and Prolonged Autonomous Oscillation in a Self-Oscillating Polymer Brush Prepared on a Porous Glass Substrate. Langmuir, 2019, 35, 9794-9801.	3.5	11
76	Crosslinked Poly(N â€Isopropylacrylamide)â€Based Microfibers as Cell Manipulation Materials with Prompt Cell Detachment. Macromolecular Rapid Communications, 2019, 40, 1900464.	3.9	10
77	Autonomous Nanoscale Chemomechanical Oscillation on the Self-Oscillating Polymer Brush Surface by Precise Control of Graft Density. Langmuir, 2021, 37, 4380-4386.	3.5	10
78	Viral vector purification with thermoresponsive-anionic mixed polymer brush modified beads-packed column. Separation and Purification Technology, 2022, 286, 120445.	7.9	9
79	Hydration of poly(N-isopropylacrylamide) brushes on micro-silica beads measured by a fluorescent probe. Chemical Physics Letters, 2010, 491, 193-198.	2.6	8
80	Effective Separation for New Therapeutic Modalities Utilizing Temperature-responsive Chromatography. Analytical Sciences, 2021, 37, 651-660.	1.6	8
81	Temperature responsive chromatography for therapeutic drug monitoring with an aqueous mobile phase. Scientific Reports, 2021, 11, 23508.	3.3	8
82	Dynamic electrical behaviour of a thermoresponsive polymer in well-defined poly(N-isopropylacrylamide)-grafted semiconductor devices. RSC Advances, 2017, 7, 34517-34521.	3.6	7
83	Temperature-responsive spin column for sample preparation using an all-aqueous eluent. Analytica Chimica Acta, 2021, 1179, 338806.	5.4	7
84	The photoresponse of a molybdenum porphyrin makes an artificial gill feasible. Journal of Membrane Science, 2005, 249, 235-243.	8.2	6
85	Two-dimensional temperature-responsive chromatography using a poly(N-isopropylacrylamide) brush-modified stationary phase for effective therapeutic drug monitoring. Scientific Reports, 2022, 12, 2653.	3.3	6
86	Temperature-responsive mixed-mode column for the modulation of multiple interactions. Scientific Reports, 2022, 12, 4434.	3.3	5
87	Liquid Chromatography-Mass Spectrometric Analysis of Dehydroepiandrosterone and Related Steroids Utilizing a Temperature-Responsive Stationary Phase. Chromatography, 2014, 35, 131-138.	1.7	4
88	Design of Functional Thermoresponsive Polymer Brushes and Their Application to Bioseparation. Kobunshi Ronbunshu, 2018, 75, 143-154.	0.2	1
89	Design of two complementary copolymers that work as a glue for cell-laden collagen gels. Chemical Communications, 2020, 56, 10545-10548.	4.1	1
90	Stem cell separation using thermoresponsive copolymer brushes having cationic charge. , 2015, , .		0

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91	Correction: Thermoresponsive-polymer-based materials for temperature-modulated bioanalysis and bioseparations. Journal of Materials Chemistry B, 2017, 5, 2198-2198.	5.8	0
92	Design of VEGF Releasing Fiber Mat for Effective Transplantation of Cardiomyocyte Sheets. Drug Delivery System, 2019, 34, 173-178.	0.0	0