

Koji Matsuoka

List of Publications by Year in descending order

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125
papers

2,950
citations

159585

30
h-index

189892

50
g-index

130
all docs

130
docs citations

130
times ranked

2354
citing authors

#	ARTICLE	IF	CITATIONS
1	Systematic synthesis of a series of glycopolymers having N-acetyl-D-glucosamine moieties that can be used for evaluations of lectin-carbohydrate interactions. <i>European Polymer Journal</i> , 2022, 168, 111101.	5.4	4
2	Chemical modification of CNN 1. Complete protection of CNN. <i>Tetrahedron Letters</i> , 2022, , 153986.	1.4	0
3	Synthetic assembly of two β -cyclodextrins through a trehalose moiety as a linker. <i>Tetrahedron Letters</i> , 2021, , 153287.	1.4	0
4	Preparation of lauryl thioglycoside of N-glycolylneuraminic acid (Neu5Gc) as a useful glycosyl donor for assembly of an oligosaccharide containing Neu5Gc. <i>Tetrahedron Letters</i> , 2021, 83, 153403.	1.4	0
5	Preparation of glycopolymers having sialyl β -lactose moieties as the potent inhibitors for mumps virus. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2021, 52, 128389.	2.2	7
6	Neuraminidase-triggered activation of prodrug-type substrate of 4-nitroaniline. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2020, 30, 126883.	2.2	5
7	Impaired O-Glycosylation at Consecutive Threonine TTX Motifs in Mucins Generates Conformationally Restricted Cancer Neopeptides. <i>Biochemistry</i> , 2020, 59, 1221-1241.	2.5	12
8	Verification of suitable ratio of carbohydrate residues in a glycopolymer having GlcNAc moieties for determining the affinity for wheat germ agglutinin. <i>Journal of Molecular Structure</i> , 2020, 1217, 128404.	3.6	9
9	Fluorogenic glycopolymers available for determining the affinity of lectins by intermolecular FRET. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2020, 30, 127024.	2.2	6
10	Self-healing of biobased furan polymers: Recovery of high mechanical strength by mild heating. <i>Polymer Degradation and Stability</i> , 2019, 161, 13-18.	5.8	19
11	Alcohol-assisted self-healing network polymer based on vicinal tricarbonyl chemistry. <i>Polymer</i> , 2019, 161, 101-108.	3.8	13
12	Preparation of Functional Monomers as Precursors of Bioprobes from a Common Styrene Derivative and Polymer Synthesis. <i>Molecules</i> , 2018, 23, 2875.	3.8	9
13	Synthetic construction of sugar-amino acid hybrid polymers involving globotriaose or lactose and evaluation of their biological activities against Shiga toxins produced by <i>Escherichia coli</i> O157:H7. <i>Bioorganic and Medicinal Chemistry</i> , 2018, 26, 5792-5803.	3.0	5
14	2-Benzoylpyridine Ligand Complexation with Gold Critical for Propargyl Ester-Based Protein Labeling. <i>Chemistry - A European Journal</i> , 2018, 24, 10595-10600.	3.3	25
15	Frontispiece: 2-Benzoylpyridine Ligand Complexation with Gold Critical for Propargyl Ester-Based Protein Labeling. <i>Chemistry - A European Journal</i> , 2018, 24, .	3.3	0
16	A constraint scaffold enhances affinity of a bivalent N-acetylglucosamine ligand against wheat germ agglutinin. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2018, 28, 1704-1707.	2.2	5
17	Total Synthesis of Kehokorins A-E, Cytotoxic <i>p</i> -Terphenyls. <i>Journal of Organic Chemistry</i> , 2017, 82, 3159-3166.	3.2	17
18	Synthesis of 3-phenyldibenzo[<i>b,d</i>]furan-type bioprobes utilizing vialinin B as a structural motif. <i>Synthetic Communications</i> , 2017, 47, 22-28.	2.1	2

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19	Iodoacetyl-functionalized pullulan: A supplemental enhancer for single-domain antibody–polyclonal antibody sandwich enzyme-linked immunosorbent assay for detection of survivin. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2017, 27, 4844-4848.	2.2	2
20	DNA-based mutation assay GPMA (genome profiling-based mutation assay): reproducibility, parts-per-billion scale sensitivity, and introduction of a mammalian-cell-based approach. <i>Journal of Biochemistry</i> , 2017, 162, 395-401.	1.7	3
21	Synthetic Assembly of Mannose Moieties Using Polymer Chemistry and the Biological Evaluation of Its Interaction towards Concanavalin A. <i>Molecules</i> , 2017, 22, 157.	3.8	13
22	Synthesis of Fluorinated Polymers and Evaluation of Wettability. <i>Molecules</i> , 2016, 21, 358.	3.8	4
23	Synthetic assembly of novel avidin-biotin-GlcNAc (ABG) complex as an attractive bio-probe and its interaction with wheat germ agglutinin (WGA). <i>Bioorganic Chemistry</i> , 2016, 68, 219-225.	4.1	8
24	Biological Evaluation of Multivalent-Type N-Acetyl-D-Glucosamine (GlcNAc) Conjugates for Wheat Germ Agglutinin (WGA) by the Surface Plasmon Resonance (SPR) Method. <i>SOJ Biochemistry</i> , 2016, 2, 1-7.	0.2	3
25	Effect of Aglycon Structure on Saccharide Elongation by Cells. <i>Chemistry and Biodiversity</i> , 2015, 12, 239-247.	2.1	1
26	l-Fucose-containing arabinogalactan-protein in radish leaves. <i>Carbohydrate Research</i> , 2015, 415, 1-11.	2.3	25
27	Enzymatic fragmentation of carbohydrate moieties of radish arabinogalactan-protein and elucidation of the structures. <i>Bioscience, Biotechnology and Biochemistry</i> , 2014, 78, 818-831.	1.3	26
28	Use of chloromethylstyrene as a supporter for convenient preparation of carbohydrate monomer and glycopolymers. <i>Carbohydrate Polymers</i> , 2014, 107, 209-213.	10.2	7
29	Synthesis and Structural Revision of a Brominated Sesquiterpenoid, Aldingenin C. <i>Journal of Organic Chemistry</i> , 2014, 79, 9373-9380.	3.2	19
30	Synthesis and Influenza Virus Inhibitory Activities of Carbosilane Dendrimers Peripherally Functionalized with Hemagglutinin-Binding Peptide. <i>Journal of Medicinal Chemistry</i> , 2014, 57, 8332-8339.	6.4	47
31	Synthesis of chiral dopants based on carbohydrates. <i>Carbohydrate Research</i> , 2014, 393, 15-22.	2.3	2
32	Structural revision of kynapcin-12 by total synthesis, and inhibitory activities against prolyl oligopeptidase and cancer cells. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014, 24, 3373-3376.	2.2	5
33	Probing Single-Molecule Enzymatic Dynamics of B-Glucosidase using Zero-Mode Waveguides. <i>Biophysical Journal</i> , 2013, 104, 178a.	0.5	0
34	Carbosilane glycodendrimers. <i>Chemical Society Reviews</i> , 2013, 42, 4574-4598.	38.1	70
35	Immobilization of carbohydrate clusters on a quartz crystal microbalance sensor surface. <i>Journal of Colloid and Interface Science</i> , 2013, 393, 257-263.	9.4	9
36	Carbohydrate immobilized on a dendrimer-coated colloidal gold surface for fabrication of a lectin-sensing device based on localized surface plasmon resonance spectroscopy. <i>Biosensors and Bioelectronics</i> , 2013, 41, 465-470.	10.1	20

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37	Inhibitory effects and specificity of synthetic sialyldendrimers toward recombinant human cytosolic sialidase 2 (NEU2). <i>Glycobiology</i> , 2013, 23, 495-504.	2.5	3
38	Total synthesis of the proposed structure for pochonicine and determination of its absolute configuration. <i>Tetrahedron Letters</i> , 2013, 54, 1456-1459.	1.4	22
39	Convenient assembly of trimeric Lex determinants using carbosilane scaffolds by means of Huisgen cycloaddition. <i>Tetrahedron Letters</i> , 2012, 53, 6793-6796.	1.4	6
40	Influence of passage number on glycosylation of alkyl lactosides by Madin-Darby canine kidney (MDCK) cells. <i>Journal of Bioscience and Bioengineering</i> , 2012, 114, 552-555.	2.2	1
41	Synthetic Assembly of Bifluorescence-Labeled Glycopolymers as Substrates for Assaying $\hat{\pm}$ -Amylase by Resonance Energy Transfer. <i>ACS Macro Letters</i> , 2012, 1, 266-269.	4.8	12
42	LARGE SCALE BIOSYNTHESIS OF GANGLIOSIDE ANALOGUES BY RERF-LC-AI CELLS CULTURED IN HYPERFlask. <i>Preparative Biochemistry and Biotechnology</i> , 2012, 42, 378-392.	1.9	3
43	Intricate Recognition of Glycolipid-Like Compounds by HIV-1 Envelope Proteins Evaluated with Surface Plasmon Resonance Imaging. <i>Journal of Carbohydrate Chemistry</i> , 2012, 31, 584-592.	1.1	1
44	Lectin Detection Based on the Aggregation-Induced Emission Effect. <i>Trends in Glycoscience and Glycotechnology</i> , 2012, 24, 78-94.	0.1	7
45	Synthesis and biological evaluation of sialic acid derivatives containing a long hydrophobic chain at the anomeric position and their C-5 linked polymers as potent influenza virus inhibitors. <i>Bioorganic and Medicinal Chemistry</i> , 2012, 20, 446-454.	3.0	10
46	Synthetic studies of bi-fluorescence-labeled maltooligosaccharides as substrates for $\hat{\pm}$ -amylase on the basis of fluorescence resonance energy transfer (FRET). <i>Bioorganic and Medicinal Chemistry</i> , 2012, 20, 435-445.	3.0	14
47	A carbosilane dendrimer and a silacyclopentadiene analog carrying peripheral lactoses as drug-delivery systems. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2012, 22, 3564-3566.	2.2	5
48	A Novel Method for the Production of Glycosphingolipids. <i>Helvetica Chimica Acta</i> , 2012, 95, 67-75.	1.6	4
49	Glyco-silicon Functional Materials as Anti-influenza Virus Agents. <i>Open Glycoscience</i> , 2012, 5, 31-40.	0.4	2
50	Simple and conveniently accessible bi-fluorescence-labeled substrates for amylases. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2010, 20, 1969-1971.	2.2	12
51	Analytical investigations of the behavior of silole-core dendrimers with peripheral globotriaose in water and acetone/water mixed solvent. <i>Tetrahedron Letters</i> , 2010, 51, 1545-1549.	1.4	7
52	Synthetic construction of a fucosyl chitobiose as an allergen-associated carbohydrate epitope and the glycopolymer involving highly clustered trisaccharidic sequences. <i>Tetrahedron Letters</i> , 2010, 51, 2529-2532.	1.4	9
53	Synthesis of sialyllactosamine clusters using carbosilane as core scaffolds by means of chemical and enzymatic approaches. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2010, 20, 4906-4910.	2.2	7
54	Synthesis and Characterization of Photo-Responsive Carbosilane Dendrimers. <i>Molecules</i> , 2009, 14, 2226-2234.	3.8	10

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55	Relapsing fever <i>Borrelia</i> binds to neolacto glycans and mediates rosetting of human erythrocytes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 19280-19285.	7.1	19
56	Systematic syntheses of influenza neuraminidase inhibitors: A series of carbosilane dendrimers uniformly functionalized with thioglycoside-type sialic acid moieties. <i>Bioorganic and Medicinal Chemistry</i> , 2009, 17, 5451-5464.	3.0	45
57	Synthetic construction of a Lex determinant via Gabriel amine synthesis and the glycopolymer involving highly clustered Lex residues. <i>Tetrahedron Letters</i> , 2009, 50, 2593-2596.	1.4	12
58	Fluorescence quenching detection of peanut agglutinin based on photoluminescent silole-core carbosilane dendrimer peripherally functionalized with lactose. <i>Tetrahedron Letters</i> , 2009, 50, 5816-5819.	1.4	27
59	Syntheses and biological evaluations of carbosilane dendrimers uniformly functionalized with sialyl $\hat{\pm}(2\hat{\pm}3)$ lactose moieties as inhibitors for human influenza viruses. <i>Bioorganic and Medicinal Chemistry</i> , 2009, 17, 5465-5475.	3.0	46
60	Synthesis of sialic acid derivatives having a CC double bond substituted at the C-5 position and their glycopolymers. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2009, 19, 5105-5108.	2.2	10
61	Bifunctional cytosolic UDP-glucose 4-epimerases catalyse the interconversion between UDP-D-xylose and UDP-L-arabinose in plants. <i>Biochemical Journal</i> , 2009, 424, 169-177.	3.7	43
62	Properties of family 79 $\hat{2}$ -glucuronidases that hydrolyze $\hat{2}$ -glucuronosyl and 4-O-methyl- $\hat{2}$ -glucuronosyl residues of arabinogalactan-protein. <i>Carbohydrate Research</i> , 2008, 343, 1191-1201.	2.3	54
63	Use of a recycle-type SEC method as a powerful tool for purification of thiosialoside derivatives. <i>Carbohydrate Research</i> , 2008, 343, 2735-2739.	2.3	3
64	Synthesis and lectin-binding activity of luminescent silica particles peripherally functionalized with lactose. <i>Tetrahedron Letters</i> , 2008, 49, 5593-5596.	1.4	3
65	Sialyl $\hat{\pm}(2\hat{\pm}3)$ lactose clusters using carbosilane dendrimer core scaffolds as influenza hemagglutinin blockers. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2008, 18, 4405-4408.	2.2	30
66	A Bifunctional Enzyme with L-Fucokinase and GDP-L-fucose Pyrophosphorylase Activities Salvages Free L-Fucose in Arabidopsis. <i>Journal of Biological Chemistry</i> , 2008, 283, 8125-8135.	3.4	50
67	Sugar Polymers (Dendrimers and Pendant-Type Linear Polymers)., 2008, , 206-209.		0
68	Site-Specific, Covalent Attachment of Poly(dT)-Modified Peptides To Solid Surfaces for Microarrays. <i>Bioconjugate Chemistry</i> , 2007, 18, 1778-1785.	3.6	6
69	Highly luminescent glycocluster: silole-core carbosilane dendrimer having peripheral globotriaose. <i>Tetrahedron Letters</i> , 2007, 48, 4365-4368.	1.4	15
70	Lactotriaose-containing carbosilane dendrimers: Syntheses and lectin-binding activities. <i>Bioorganic and Medicinal Chemistry</i> , 2007, 15, 1606-1614.	3.0	28
71	Novel linear polymers bearing thiosialosides as pendant-type epitopes for influenza neuraminidase inhibitors. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2007, 17, 3826-3830.	2.2	24
72	Practical synthesis of fully protected globotriaose and its glycopolymers. <i>Carbohydrate Polymers</i> , 2007, 69, 326-335.	10.2	16

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91	E3 ubiquitin ligase that recognizes sugar chains. <i>Nature</i> , 2002, 418, 438-442.	27.8	341
92	Improved solubility of β -cyclodextrin inclusion complexes by using liquid ammonia as a solvent and the possibility of asymmetric reduction. <i>Carbohydrate Polymers</i> , 2002, 47, 373-376.	10.2	1
93	Regioselective synthesis of methylated β -cyclodextrins leaving hydroxy groups. <i>Tetrahedron Letters</i> , 2001, 42, 1531-1533.	1.4	15
94	An alternative route for the construction of carbosilane dendrimers uniformly functionalized with lactose or sialyllactose moieties. <i>Tetrahedron Letters</i> , 2001, 42, 3327-3330.	1.4	58
95	Synthesis of Amphiphilic Chitopentaose and Chitoheptaose Derivatives Using a Common Disaccharidic Synthone as the Chain Elongation Unit. <i>Bulletin of the Chemical Society of Japan</i> , 2000, 73, 163-171.	3.2	6
96	Synthetic Assembly of β -CD Moieties Using Carbosilane Dendrimer as the Core Frame. <i>Kobunshi Ronbunshu</i> , 2000, 57, 691-695.	0.2	6
97	Introduction of monosaccharides having functional groups onto a carbosilane dendrimer: A broadly applicable one-pot reaction in liquid ammonia involving Birch reduction and subsequent S_N2 reaction. <i>Carbohydrate Research</i> , 2000, 329, 765-772.	2.3	39
98	Preparation and Characterization of Water-Soluble Polysilanes Bearing Chiral Pendant Ammonium Moieties. <i>Polymer Journal</i> , 2000, 32, 113-117.	2.7	7
99	An Improved Preparation of N-Acetylchitobiose by Continuous Enzymatic Degradation of Colloidal Chitin Using Dialysis Tubing as a Convenient Separator. <i>Biomacromolecules</i> , 2000, 1, 798-800.	5.4	12
100	Novel synthesis of l-iduronic acid using trehalose as the disaccharidic starting material. <i>Tetrahedron Letters</i> , 1999, 40, 1501-1504.	1.4	34
101	Synthetic assembly of trisaccharide moieties of globotriaosyl ceramide using carbosilane dendrimers as cores. A new type of functional glyco-material. <i>Tetrahedron Letters</i> , 1999, 40, 7839-7842.	1.4	95
102	Preparation and Characterization of Carbosilane Dendrimers Carrying Mesogens with Chiral Substituent. <i>Chemistry Letters</i> , 1999, 28, 565-566.	1.3	12
103	Synthetic conversion of cellobiose into the glycal-type monomers and their polymerization. <i>Tetrahedron Letters</i> , 1998, 39, 5789-5792.	1.4	3
104	Efficient Conversion of a 1,6-Anhydro Chitobiose Derivative into the Corresponding Tetradecyl β -Glycoside Derivative by Means of Participation of a Neighboring Tetradecanamide Group. <i>Journal of Carbohydrate Chemistry</i> , 1998, 17, 231-239.	1.1	6
105	Synthesis of Carbosilane Compounds Functionalized with Three or Four β -Cyclodextrin Moieties. Use of a One-Pot Reaction in Liquid Ammonia for Birch Reduction and the Subsequent S_N2 Replacement. <i>Bulletin of the Chemical Society of Japan</i> , 1998, 71, 2709-2713.	3.2	31
106	Preparation of New Carbosilane Dendrimers Carrying Mesogenic Groups. <i>Chemistry Letters</i> , 1998, 27, 59-60.	1.3	31
107	Preparation of Amphiphilic Polysilanes Bearing Chiral Pendant Ammonium Moieties. <i>Chemistry Letters</i> , 1998, 27, 681-682.	1.3	8
108	[26] Preparation of fluorescence-labeled neoglycolipids for ceramide glycanase assays. <i>Methods in Enzymology</i> , 1997, 278, 519-528.	1.0	3

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109	Synthesis of Amphiphilic Chitoheptaose Derivative. <i>Tetrahedron Letters</i> , 1997, 38, 8041-8044.	1.4	9
110	Total Synthesis of a Heptasaccharide Phytoalexine Elicitor through Solid Phase Synthesis.. <i>Trends in Glycoscience and Glycotechnology</i> , 1997, 9, 411-412.	0.1	1
111	Chemical Synthesis of Cellulose. <i>Trends in Glycoscience and Glycotechnology</i> , 1996, 8, 441-442.	0.1	1
112	A Facile and Quantitative Preparation of Activated Cyclic Sugar Derivatives Using HgBr ₂ and 2,4,6-Collidine. <i>Bulletin of the Chemical Society of Japan</i> , 1995, 68, 1715-1720.	3.2	7
113	A New Approach to Assay Endo-Type Carbohydrases: Bifluorescent-Labeled Substrates for Glycoamidases and Ceramide Glycanases. <i>Analytical Biochemistry</i> , 1995, 230, 31-36.	2.4	15
114	A bi-fluorescence-labeled substrate for ceramide glycanase based on fluorescence energy transfer. <i>Carbohydrate Research</i> , 1995, 276, 31-42.	2.3	13
115	Synthetic Glycoconjugates. 5. Polymeric Sugar Ligands Available for Determining the Binding Specificity of Lectins. <i>Macromolecules</i> , 1995, 28, 2961-2968.	4.8	39
116	Chemoenzymatic oligosaccharide synthesis on a soluble polymeric carrier. <i>Tetrahedron Letters</i> , 1994, 35, 5657-5660.	1.4	46
117	Synthesis of bi-fluorescence-labeled lactoside: A substrate for continual assay of ceramide glycanase. <i>Tetrahedron: Asymmetry</i> , 1994, 5, 2335-2338.	1.8	22
118	Comparison of Acid Hydrolytic Conditions for Asn-Linked Oligosaccharides. <i>Analytical Biochemistry</i> , 1994, 219, 375-378.	2.4	48
119	Chemoenzymic Preparation of a Glycoconjugate Polymer Having a Sialyloligosaccharide: Neu5Ac1±(2â†³)Gal1²(1â†³4)GlcNAc. <i>Biochemical and Biophysical Research Communications</i> , 1994, 199, 249-254.	2.1	55
120	Synthetic Glycoconjugates. 4. Use of .omega.-(Acrylamido)alkyl Glycosides for the Preparation of Cluster Glycopolymers. <i>Macromolecules</i> , 1994, 27, 4876-4880.	4.8	75
121	Synthetic glycoconjugates. 3. An efficient synthesis of a glycoprotein model having a Lex-type trisaccharide sequence of tumor-associated carbohydrate antigen. <i>Macromolecules</i> , 1994, 27, 157-163.	4.8	33
122	[22] Preparation of glycoprotein models: Pendant-type oligosaccharide polymers. <i>Methods in Enzymology</i> , 1994, 242, 235-246.	1.0	10
123	Synthetic glycoconjugates. 2. n-Pentenyl glycosides as convenient mediators for the syntheses of new types of glycoprotein models. <i>Macromolecules</i> , 1991, 24, 4236-4241.	4.8	82
124	Synthetic glycoconjugates: simple and potential glycoprotein models containing pendant N-acetyl-D-glucosamine and N,N'-diacetylchitobiose. <i>Macromolecules</i> , 1990, 23, 4182-4184.	4.8	59
125	Site-Specific, Covalent Attachment of Poly(dT)-Modified Peptides To Solid Surfaces for Microarrays. , O, , .		3