Masato Ikeda

List of Publications by Year in descending order

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104 papers	5,840 citations	87723 38 h-index	74018 75 g-index
120 all docs	120 docs citations	120 times ranked	5568 citing authors

#	Article	IF	Citations
1	Positive Allosteric Systems Designed on Dynamic Supramolecular Scaffolds:â€‰ Toward Switching and Amplification of Guest Affinity and Selectivity. Accounts of Chemical Research, 2001, 34, 494-503.	7.6	402
2	Installing logic-gate responses to a variety of biological substances in supramolecular hydrogelâ€“enzyme hybrids. Nature Chemistry, 2014, 6, 511-518.	6.6	370
3	A Colorimetric and Ratiometric Fluorescent Chemosensor with Three Emission Changes: Fluoride Ion Sensing by a Triarylboraneâ€“ Porphyrin Conjugate. Angewandte Chemie - International Edition, 2003, 42, 2036-2040.	7.2	369
4	Molecular Design of Artificial Molecular and Ion Recognition Systems with Allosteric Guest Responses. Accounts of Chemical Research, 2001, 34, 865-873.	7.6	307
5	Supramolecular Hydrogel Exhibiting Four Basic Logic Gate Functions To Fine-Tune Substance Release. Journal of the American Chemical Society, 2009, 131, 5580-5585.	6.6	295
6	Photo Gelâ€“Sol/Solâ€“Gel Transition and Its Patterning of a Supramolecular Hydrogel as Stimuliâ€Responsive Biomaterials. Chemistry - A European Journal, 2008, 14, 3977-3986.	1.7	208
7	In situ real-time imaging of self-sorted supramolecular nanofibres. Nature Chemistry, 2016, 8, 743-752.	6.6	191
8	Rational Molecular Design of Stimulusâ€Responsive Supramolecular Hydrogels Based on Dipeptides. Advanced Materials, 2011, 23, 2819-2822.	11.1	183
9	MCMâ€”Enzymeâ€”Supramolecular Hydrogel Hybrid as a Fluorescence Sensing Material for Polyanions of Biological Significance. Journal of the American Chemical Society, 2009, 131, 5321-5330.	6.6	168
10	Construction of Double-Stranded Metallosupramolecular Polymers with a Controlled Helicity by Combination of Salt Bridges and Metal Coordination. Journal of the American Chemical Society, 2006, 128, 6806-6807.	6.6	164
11	An Attempt to Predict the Gelation Ability of Hydrogen-bond-based Gelators Utilizing a Glycoside Library. Tetrahedron, 2000, 56, 9595-9599.	1.0	161
12	Montmorilloniteâ€”Supramolecular Hydrogel Hybrid for Fluorocolorimetric Sensing of Polyamines. Journal of the American Chemical Society, 2011, 133, 1670-1673.	6.6	159
13	[60]Fullerene Can Reinforce the Organogel Structure of Porphyrin-Appended Cholesterol Derivatives:â€‰ Novel Oddâ€”Even Effect of the (CH2)n Spacer on the Organogel Stability. Langmuir, 2001, 17, 5825-5833.	1.6	140
14	Unusual emission properties of a triphenylene-based organogel systemElectronic supplementary information (ESI) available: Characterization data for 1 and 2. Fig. S1: UV-Vis spectra of 1 and 2. Fig. S2: X-ray powder diffractograms of xerogels 1 and 2. Fig. S3: Transient fluorescence spectra and fluorescence decays of cyclohexane gel 1. See http://www.rsc.org/suppdata/cc/b3/b302415f/. Chemical Communications, 2003, , 1354.	2.2	124
15	Cooperative C60Binding to a Porphyrin Tetramer Arranged around ap-Terphenyl Axis in 1:2 Hostâ€”Guest Stoichiometry. Organic Letters, 2002, 4, 925-928.	2.4	96
16	Supramolecular hydrogel-based protein and chemosensor array. Lab on A Chip, 2010, 10, 3325.	3.1	89
17	A Luminescent Poly(phenylenevinylene)â€“Amylose Composite with Supramolecular Liquid Crystallinity. Angewandte Chemie - International Edition, 2006, 45, 6491-6495.	7.2	88
18	Synthesis of Complementary Double-Stranded Helical Oligomers through Chiral and Achiral Amidiniumâ€”Carboxylate Salt Bridges and Chiral Amplification in Their Double-Helix Formation. Journal of the American Chemical Society, 2011, 133, 3419-3432.	6.6	88

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19	First Successful Molecular Design of an Artificial Lewis Oligosaccharide Binding System Utilizing Positive Homotropic Allosterism. Journal of the American Chemical Society, 2001, 123, 10239-10244.	6.6	86
20	Novel Oligosaccharide Binding to the Cerium(IV) Bis(porphyrinate) Double Decker: Effective Amplification of a Binding Signal through Positive Homotropic Allosterism. Angewandte Chemie - International Edition, 2000, 39, 3839-3842.	7.2	84
21	Allosteric Binding of an Ag+ Ion to Cerium(IV) Bis-porphyrinates Enhances the Rotational Activity of Porphyrin Ligands. Chemistry - A European Journal, 2002, 8, 5541-5550.	1.7	84
22	Supramolecular hydrogel capsule showing prostate specific antigen-responsive function for sensing and targeting prostate cancer cells. Chemical Science, 2010, 1, 491.	3.7	75
23	Instantaneous Inclusion of a Polynucleotide and Hydrophobic Guest Molecules into a Helical Core of Cationic Î²-1,3-Glucan Polysaccharide. Journal of the American Chemical Society, 2007, 129, 3979-3988.	6.6	73
24	Efficient chirality transcription utilizing a cerium(IV) double decker porphyrin: a prototype for development of a molecular memory system. Journal of the Chemical Society Perkin Transactions 1, 1999, , 3259-3264.	0.9	72
25	Photo-responsive gel droplet as a nano- or pico-litre container comprising a supramolecular hydrogel. Chemical Communications, 2008, , 1545.	2.2	72
26	Allosteric Silver(I) Ion Binding with Peripheral Ï€ Clefts of a Ce(IV) Double Decker Porphyrin. Organic Letters, 2000, 2, 1803-1805.	2.4	68
27	Title is missing!. Angewandte Chemie, 2003, 115, 2082-2086.	1.6	68
28	Hierarchical Self-Assembly of a Bow-Shaped Molecule Bearing Self-Complementary Hydrogen Bonding Sites into Extended Supramolecular Assemblies. Chemistry - A European Journal, 2005, 11, 662-668.	1.7	64
29	A supramolecular hydrogel containing boronic acid-appended receptor for fluorocolorimetric sensing of polyols with a paper platform. Chemical Communications, 2012, 48, 2716.	2.2	59
30	A porphyrin-based gelator assembly which is reinforced by peripheral urea groups and chirally twisted by chiral urea additives. Tetrahedron Letters, 2002, 43, 3751-3755.	0.7	57
31	Twoâ€Photonâ€Responsive Supramolecular Hydrogel for Controlling Materials Motion in Micrometer Space. Angewandte Chemie - International Edition, 2014, 53, 7264-7267.	7.2	57
32	Meterâ€Long and Robust Supramolecular Strands Encapsulated in Hydrogel Jackets. Angewandte Chemie - International Edition, 2012, 51, 1553-1557.	7.2	55
33	Rod-like architecture and helicity of the poly(C)/schizophyllan complex observed by AFM and SEM. Carbohydrate Research, 2004, 339, 251-258.	1.1	51
34	Photoresponsive double-stranded helices composed of complementary strands. Chemical Communications, 2007, , 3174.	2.2	48
35	Synthesis of New Diaryl-Substituted Triple-Decker and Tetraaryl-substituted Double-Decker Lanthanum(III) Porphyrins and Their Porphyrin Ring Rotational Speed as Compared with that of Double-Decker Cerium(IV) Porphyrins. Bulletin of the Chemical Society of Japan, 2001, 74, 739-746.	2.0	45
36	Heatâ€Induced Morphological Transformation of Supramolecular Nanostructures by Retroâ€Dielsâ€“Alder Reaction. Chemistry - A European Journal, 2012, 18, 13091-13096.	1.7	45

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37	Supramolecular hydrogels based on bola-amphiphilic glycolipids showing color change in response to glycosidases. Chemical Communications, 2013, 49, 2115-2117.	2.2	45
38	The First Example of Positive Allosterism in an Aqueous Saccharide-Binding System Designed on a Ce(IV) Bis(porphyrinate) Double Decker Scaffold. Tetrahedron, 2000, 56, 4717-4723.	1.0	43
39	Mesoâ€“meso-linked porphyrin dimer as a novel scaffold for the selective binding of oligosaccharides. Chemical Communications, 2000, , 1047-1048.	2.2	40
40	Stimuli-responsive supramolecular systems guided by chemical reactions. Polymer Journal, 2019, 51, 371-380.	1.3	39
41	Strong Positive Allosterism which Appears in Molecular Recognition with Cerium(IV) Double Decker Porphyrins: Correlation between the Number of Binding Sites and Hill Coefficients. Supramolecular Chemistry, 2000, 12, 321-345.	1.5	38
42	Stiff, Multistimuliâ€Responsive Supramolecular Hydrogels as Unique Molds for 2D/3D Microarchitectures of Live Cells. Chemistry - an Asian Journal, 2011, 6, 2368-2375.	1.7	37
43	Allosteric Binding of K+to Crown Ether Macrocycles Appended to a Lanthanum Double Decker System. Bulletin of the Chemical Society of Japan, 2001, 74, 883-888.	2.0	35
44	Preparation of supramolecular hydrogelâ€“enzyme hybrids exhibiting biomolecule-responsive gel degradation. Nature Protocols, 2016, 11, 1744-1756.	5.5	35
45	Self-assembly and hydrogel formation ability of Fmoc-dipeptides comprising Î±-methyl-L-phenylalanine. Polymer Journal, 2020, 52, 923-930.	1.3	35
46	Threeâ€Dimensional Encapsulation of Live Cells by Using a Hybrid Matrix of Nanoparticles in a Supramolecular Hydrogel. Chemistry - A European Journal, 2008, 14, 10808-10815.	1.7	33
47	The effect of carbohydrate structures on the hydrogelation ability and morphology of self-assembled structures of peptideâ€“carbohydrate conjugates in water. Organic and Biomolecular Chemistry, 2017, 15, 4595-4600.	1.5	32
48	Ring rotation controversy in cerium(IV) bis(tetraarylporphyrinate) double deckers: HPLC evidence for the question to rotate or not to rotate. Tetrahedron Letters, 1998, 39, 7897-7900.	0.7	31
49	Imaging-Based Study on Control Factors over Self-Sorting of Supramolecular Nanofibers Formed from Peptide- and Lipid-type Hydrogelators. Bioconjugate Chemistry, 2018, 29, 2058-2067.	1.8	29
50	Metal ion induced allosteric transition in the catalytic activity of an artificial phosphodiesteraseElectronic supplementary information (ESI) available: synthesis of 1, characterization of complexes by 1H-NMR and ESI-MS spectroscopies and the analysis of the kinetic data. See http://www.rsc.org/suppdata/cc/b3/b314032f/. Chemical Communications, 2004, , 420.	2.2	28
51	Fluidic supramolecular nano- and microfibres as molecular rails for regulated movement of nanosubstances. Nature Communications, 2010, 1, 20.	5.8	28
52	Metal ion induced allosteric transition in the catalytic activity of an artificial phosphodiesterase. Organic and Biomolecular Chemistry, 2008, 6, 493-499.	1.5	26
53	A porphyrin tetramer for a positive homotropic allosteric recognition system: efficient binding information transduction through butadiynyl axis rotation. Tetrahedron Letters, 2001, 42, 7435-7438.	0.7	23
54	Î²-1,3-Glucan (Schyzophyllan) Can Act as a One-Dimensional Host for Creating Chirally Twisted Poly(p-phenylene Ethynylene). Supramolecular Chemistry, 2007, 19, 107-113.	1.5	23

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55	Efficient Anion Binding to Cerium(IV) Bis(porphyrinate) Double Decker Utilizing Positive Homotropic Allosterism. Chemistry Letters, 2001, 30, 520-521.	0.7	22
56	TICT Induced Fluorescence Color Change Actualized in an Organogel System. Chemistry Letters, 2004, 33, 1124-1125.	0.7	22
57	Chemical stimulus-responsive supramolecular hydrogel formation and shrinkage of a hydrazone-containing short peptide derivative. Soft Matter, 2020, 16, 899-906.	1.2	21
58	Hybrid Soft Nanomaterials Composed of DNA Microspheres and Supramolecular Nanostructures of Semiâ€artificial Glycopeptides. Chemistry - A European Journal, 2019, 25, 11955-11962.	1.7	20
59	Design of peptide-based bolaamphiphiles exhibiting heat-set hydrogelation via retro-Dielsâ€“Alder reaction. Journal of Materials Chemistry B, 2014, 2, 1464.	2.9	18
60	Reductionâ€Responsive Guanine Incorporated into Gâ€Quadruplexâ€Forming DNA. ChemBioChem, 2016, 17, 1304-1307.	1.3	17
61	Mechanical Reinforcement of Supramolecular Hydrogel through Incorporation of Multiple Noncovalent Interactions. Chemistry Letters, 2011, 40, 198-200.	0.7	16
62	Chemically Caged Nucleic Acids. Chemistry Letters, 2017, 46, 634-640.	0.7	16
63	A stimuli-responsive DNAzyme displaying Boolean logic-gate responses. Chemical Communications, 2019, 55, 1959-1962.	2.2	16
64	Complex formation between cationic Î²-1,3-glucan and hetero-sequence oligodeoxynucleotide and its delivery into macrophage-like cells to induce cytokine secretion. Organic and Biomolecular Chemistry, 2007, 5, 2219-2224.	1.5	14
65	Development of an Amino Sugar-Based Supramolecular Hydrogelator with Reduction Responsiveness. Jacs Au, 2021, 1, 1639-1646.	3.6	13
66	Controlled Stability of the Tripleâ€Stranded Helical Structure of a Î²â€1,3â€Glucan with a Chromophoric Aromatic Moiety at a Peripheral Position. Chemistry - an Asian Journal, 2007, 2, 1290-1298.	1.7	12
67	Bioinspired Supramolecular Materials. Bulletin of the Chemical Society of Japan, 2013, 86, 10-24.	2.0	12
68	Allosteric saccharide sensing by a phenylboronic-acids-appended 5,15-Bis(triarylethynyl)porphyrin. Journal of Supramolecular Chemistry, 2002, 2, 133-142.	0.4	11
69	Electropolymerization of Bithienyl-appended Cerium(III) Triple Decker Porphyrin Complex. Chemistry Letters, 2003, 32, 264-265.	0.7	11
70	One-Pot Construction of Multicomponent Supramolecular Materials Comprising Self-Sorted Supramolecular Architectures of DNA and Semi-Artificial Glycopeptides. ACS Applied Bio Materials, 2020, 3, 9082-9092.	2.3	11
71	Dynamic Rotational Oscillation of Cerium(IV) Bis(porphyrinate) and Its Control by Diamine Guest Binding with Positive Homotropic Allosterism. European Journal of Organic Chemistry, 2007, 2007, 1883-1886.	1.2	10
72	Supramolecular Architectures of Nucleic Acid/Peptide Hybrids. International Journal of Molecular Sciences, 2020, 21, 9458.	1.8	10

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73	Mechanical Reinforcement of a Supramolecular Hydrogel Comprising an Artificial Glycoâ€Lipid through Supramolecular Copolymerization. Macromolecular Bioscience, 2008, 8, 1019-1025.	2.1	9
74	Reduction-Responsive DNA Duplex Containing O⁶-Nitrobenzyl-Guanine. ACS Omega, 2018, 3, 9267-9275.	1.6	9
75	Structural diversification of bola-amphiphilic glycolipid-type supramolecular hydrogelators exhibiting colour changes along with the gelâ€“sol transition. Soft Matter, 2020, 16, 7274-7278.	1.2	9
76	Synthesis of ethynylbenzene-substituted glycol as a versatile probe for labeling oligonucleotides. Bioorganic and Medicinal Chemistry Letters, 2014, 24, 1519-1522.	1.0	8
77	New solid phase submonomer synthesis of arylopeptoid oligomers using reductive amination. Tetrahedron Letters, 2015, 56, 6726-6729.	0.7	8
78	Practical and Reliable Synthesis of 1,2-Dideoxy-<scp>d</scp>-ribofuranose and its Application in RNAi Studies. Nucleosides, Nucleotides and Nucleic Acids, 2016, 35, 64-75.	0.4	8
79	Application of Soluble Poly(phenylenevinylene) Wrapped in Amylose to Organic Light-Emitting Diodes. Molecular Crystals and Liquid Crystals, 2007, 471, 29-38.	0.4	7
80	Cyclic arylopeptoid oligomers: synthesis and conformational propensities of peptide-mimetic aromatic macrocycles. Organic and Biomolecular Chemistry, 2018, 16, 8505-8512.	1.5	7
81	Nucleic acid-based fluorescent sensor systems: a review. Polymer Journal, 2022, 54, 751-766.	1.3	7
82	Porphyrin Polygons: A New Synthetic Strategy for Cyclic Porphyrin Oligomers Utilizing a Porphyrin Double Decker Structure. Chemistry Letters, 2001, 30, 1266-1267.	0.7	6
83	Construction of a reduction-responsive oligonucleotide via a post-modification approach utilizing 4-nitrophenyl diazomethane. Polymer Journal, 2021, 53, 741-746.	1.3	6
84	Nucleobase azideâ€“ethynylribose click chemistry contributes to stabilizing oligonucleotide duplexes and stem-loop structures. Bioorganic and Medicinal Chemistry Letters, 2017, 27, 2655-2658.	1.0	5
85	Introduction of 2- O -benzyl abasic nucleosides to the 3â€²-overhang regions of siRNAs greatly improves nuclease resistance. Bioorganic and Medicinal Chemistry Letters, 2017, 27, 5454-5456.	1.0	5
86	Effect of side chain phenyl group on the selfâ€assembled morphology of dipeptide hydrazides. Peptide Science, 2021, 113, e24200.	1.0	5
87	Construction of Nonlinear Response Systems Utilizing Molecular Machines.. Yuki Gosei Kagaku Kyokaishi/Journal of Synthetic Organic Chemistry, 2002, 60, 1201-1209.	0.0	5
88	Construction of a Reductionâ€responsive DNA Microsphere using a Reductionâ€cleavable Spacer based on a Nitrobenzene Scaffold. Chemistry - an Asian Journal, 2022, 17, .	1.7	5
89	Pro-apoptotic Peptide Amphiphile Self-assembled with the Assistance of Polycations. Chemistry Letters, 2015, 44, 1137-1139.	0.7	4
90	Synthesis of self-assembling arylopeptoid bearing hydrophilic polymer on the basis of soluble polymer-supported liquid-phase synthesis. Tetrahedron, 2016, 72, 6886-6891.	1.0	4

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91	Polymer-based biosensor for estrogenic endocrine-disrupting chemicals in water. International Journal of Environmental Analytical Chemistry, 2022, 102, 1963-1986.	1.8	4
92	Synthesis and Self-Assembly Properties of Bola-Amphiphilic Glycosylated Lipopeptide-Type Supramolecular Hydrogels Showing Colour Changes Along with Gelâ€“Sol Transition. International Journal of Molecular Sciences, 2021, 22, 1860.	1.8	4
93	Sulfonamide antibiotics inhibit RNAi by binding to human Argonaute protein 2 PAZ. Bioorganic and Medicinal Chemistry Letters, 2020, 30, 127637.	1.0	3
94	Feasible study on poly(Pyrrole-co-Pyrrole-3-Carboxylic Acid)-modified electrode for detection of 17Î²-Estradiol. Chemical Papers, 2021, 75, 3493-3503.	1.0	3
95	Introduction of an Oxidation-responsive 4-Boronobenzyl Group into an Oligonucleotide through a Postmodification Approach. Chemistry Letters, 2021, 50, 1412-1415.	0.7	3
96	Installing Reduction Responsiveness into Biomolecules by Introducing Nitroaryl Groups. Chemistry - A European Journal, 2022, 28, .	1.7	3
97	Additions and corrections published in 2011. Organic and Biomolecular Chemistry, 2011, 9, 8504.	1.5	2
98	Allosteric binding of an Ag+ ion to cerium(IV) bis-porphyrinates enhances the rotational activity of porphyrin ligands. Chemistry - A European Journal, 2002, 8, 5542-50.	1.7	2
99	Formation of Supramolecular Nanostructures through in Situ Selfâ€Assembly and Postâ€Assembly Modification of a Biocatalytically Constructed Dipeptide Hydrazide**. Chemistry - A European Journal, 2022, 28, .	1.7	1
100	Construction of Nonlinear Response Systems Utilizing Molecular Machines. ChemInform, 2003, 34, no.	0.1	0
101	2P-157 BIOMIMETIC FUNCTIONAL FIBROUS GEL CONSTRUCTED BY HIERARCHICAL SUPRAMOLECULAR ASSEMBLY OF ORGANIC MOLECULES(Cell biology,The 47th Annual Meeting of the Biophysical Society of) Tj ETQq1 1 0.784314 rgBT /Overlock	0.1	0
102	MEMS meets supramolecules: Aligning supramolecular fibers within hydrogel strand using a microfluidic channel. , 2010, , .		0
103	Titelbild: Meter-Long and Robust Supramolecular Strands Encapsulated in Hydrogel Jackets (Angew.) Tj ETQq1 1 0.784314 rgBT /Overlock	1.6	0
104	(Invited) Stimuli-Responsive Supramolecular Hydrogels. ECS Meeting Abstracts, 2018, , .	0.0	0