

Yoshihiro Kikkawa

List of Publications by Year in descending order

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100
papers

3,380
citations

126708

33
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106
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106
docs citations

106
times ranked

3451
citing authors

#	ARTICLE	IF	CITATIONS
1	Compatibilization Effect of Poly(μ -caprolactone)-b-poly(ethylene glycol) Block Copolymers and Phase Morphology Analysis in Immiscible Poly(lactide)/Poly(μ -caprolactone) Blends. <i>Biomacromolecules</i> , 2002, 3, 1179-1186.	2.6	206
2	Morphological and Kinetic Analyses of Regime Transition for Poly[(S)-lactide] Crystal Growth. <i>Biomacromolecules</i> , 2001, 2, 1007-1014.	2.6	172
3	Control over Hierarchy Levels in the Self-Assembly of Stackable Nanotoroids. <i>Journal of the American Chemical Society</i> , 2012, 134, 18205-18208.	6.6	143
4	Self-Organization of Hydrogen-Bonding Naphthalene Chromophores into π -Type Nanorings and H -Type Nanorods: Impact of Regioisomerism. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 6643-6647.	7.2	140
5	Supramolecularly Engineered Perylene Bisimide Assemblies Exhibiting Thermal Transition from Columnar to Multilamellar Structures. <i>Journal of the American Chemical Society</i> , 2012, 134, 7983-7994.	6.6	127
6	Toroidal Nanoobjects from Rosette Assemblies of Melamine-Linked Oligo(<i>p</i> -phenyleneethynylene)s and Cyanurates. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 4691-4694.	7.2	125
7	Crystallization, Stability, and Enzymatic Degradation of Poly(L-lactide) Thin Film. <i>Biomacromolecules</i> , 2002, 3, 350-356.	2.6	107
8	Enzymatic Degradation of Poly(L-lactide) Film by Proteinase K: Å Quartz Crystal Microbalance and Atomic Force Microscopy Study. <i>Biomacromolecules</i> , 2005, 6, 850-857.	2.6	99
9	Reversible Transformation between Rings and Coils in a Dynamic Hydrogen-Bonded Self-Assembly. <i>Journal of the American Chemical Society</i> , 2009, 131, 5408-5410.	6.6	92
10	Supramolecularly Engineered Aggregation of a Dipolar Dye: Vesicular and Ribbonlike Architectures. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 9990-9994.	7.2	73
11	Biosynthesis and Compositional Regulation of Poly[(3-hydroxybutyrate)-co-(3-hydroxyhexanoate)] in Recombinant <i>Ralstonia eutropha</i> Expressing Mutated Polyhydroxyalkanoate Synthase Genes. <i>Macromolecular Bioscience</i> , 2004, 4, 238-242.	2.1	70
12	Rational Construction of Perylene Bisimide Columnar Superstructures with a Biased Helical Sense. <i>Chemistry - A European Journal</i> , 2011, 17, 3598-3608.	1.7	68
13	Rational Design of Nanofibers and Nanorings through Complementary Hydrogen-Bonding Interactions of Functional π Systems. <i>Chemistry - A European Journal</i> , 2010, 16, 8652-8661.	1.7	67
14	Crystal Growth in Poly(L-lactide) Thin Film Revealed by in situ Atomic Force Microscopy. <i>Macromolecular Chemistry and Physics</i> , 2003, 204, 1822-1831.	1.1	62
15	In Situ Observation of Crystal Growth for Poly[(S)-lactide] by Temperature-Controlled Atomic Force Microscopy. <i>Biomacromolecules</i> , 2001, 2, 940-945.	2.6	60
16	Interconvertible Oligothiophene Nanorods and Nanotapes with High Charge-Carrier Mobilities. <i>Chemistry - A European Journal</i> , 2009, 15, 9320-9324.	1.7	60
17	Microscopic visualization on crystalline morphologies of thin films for poly[(R)-3-hydroxybutyric acid] and its copolymer. <i>Polymer</i> , 2000, 41, 867-874.	1.8	57
18	Effective production and kinetic characterization of ultra-high-molecular-weight poly[(R)-3-hydroxybutyrate] in recombinant <i>Escherichia coli</i> . <i>Polymer Degradation and Stability</i> , 2005, 87, 161-169.	2.7	57

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19	Biosynthesis of Polyhydroxyalkanoate (PHA) Copolymer from Fructose Using Wild-Type and Laboratory-Evolved PHA Synthases. <i>Macromolecular Bioscience</i> , 2005, 5, 112-117.	2.1	56
20	Photoreversible Supramolecular Polymerisation and Hierarchical Organization of Hydrogen-Bonded Supramolecular Co-polymers Composed of Diarylethenes and Oligothiophenes. <i>Chemistry - A European Journal</i> , 2012, 18, 2244-2253.	1.7	53
21	A complementary guest induced morphology transition in a two-component multiple H-bonding self-assembly. <i>Chemical Communications</i> , 2010, 46, 1076-1078.	2.2	50
22	Enzymatic Degradation Processes of Lamellar Crystals in Thin Films for Poly[(R)-3-hydroxybutyric acid] and Its Copolymers Revealed by Real-Time Atomic Force Microscopy. <i>Biomacromolecules</i> , 2004, 5, 2186-2194.	2.6	45
23	Crystal Growth and Solid-State Structure of Poly(lactide) Stereocopolymers. <i>Biomacromolecules</i> , 2005, 6, 457-467.	2.6	45
24	Enzymatic Degradation Processes of Poly[(R)-3-hydroxybutyric acid] and Poly[(R)-3-hydroxybutyric acid-co-(R)-3-hydroxyvaleric acid] Single Crystals Revealed by Atomic Force Microscopy: Effects of Molecular Weight and Second-Monomer Composition on Erosion Rates. <i>Biomacromolecules</i> , 2005, 6, 2008-2016.	2.6	44
25	Odd-even effect and metal induced structural convergence in self-assembled monolayers of bipyridine derivatives. <i>Chemical Communications</i> , 2007, , 1343-1345.	2.2	41
26	Supramolecular Engineering of Oligothiophene Nanorods without Insulators: Hierarchical Association of Rosettes and Photovoltaic Properties. <i>Chemistry - A European Journal</i> , 2014, 20, 16128-16137.	1.7	41
27	Effect of Water on the Surface Molecular Mobility of Poly(lactide) Thin Films: An Atomic Force Microscopy Study. <i>Biomacromolecules</i> , 2004, 5, 1187-1193.	2.6	38
28	Bipyridine Derivatives at a Solid/Liquid Interface: Effects of the Number and Length of Peripheral Alkyl Chains. <i>Langmuir</i> , 2010, 26, 3376-3381.	1.6	36
29	Mutation Effects of a Conserved Alanine (Ala510) in Type I Polyhydroxyalkanoate Synthase from <i>Ralstonia eutropha</i> on Polyester Biosynthesis. <i>Macromolecular Bioscience</i> , 2004, 4, 963-970.	2.1	35
30	Phase Structure and Enzymatic Degradation of Poly(l-lactide)/Atactic Poly(3-hydroxybutyrate) Blends: An Atomic Force Microscopy Study. <i>Biomacromolecules</i> , 2006, 7, 1921-1928.	2.6	35
31	High-fidelity self-assembly pathways for hydrogen-bonding molecular semiconductors. <i>Scientific Reports</i> , 2017, 7, 43098.	1.6	34
32	Unconventional hydrogen-bond-directed hierarchical co-assembly between perylene bisimide and azobenzene-functionalized melamine. <i>Organic and Biomolecular Chemistry</i> , 2009, 7, 3926.	1.5	33
33	Enzymatic degradation of polyester films by a cutinase-like enzyme from <i>Pseudozyma antarctica</i> : surface plasmon resonance and atomic force microscopy study. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 8591-8598.	1.7	33
34	Effect of Phase Structure on Enzymatic Degradation in Poly(l-lactide)/Atactic Poly(3-hydroxybutyrate) Blends with Different Miscibility. <i>Biomacromolecules</i> , 2009, 10, 1013-1018.	2.6	32
35	Adsorption of Biopolyester Depolymerase on Silicon Wafer and Poly[(R)-3-hydroxybutyric acid] Single Crystal Revealed by Real-Time AFM. <i>Macromolecular Bioscience</i> , 2006, 6, 41-50.	2.1	31
36	Catenation of Self-Assembled Nanorings. <i>Chemistry - A European Journal</i> , 2011, 17, 13657-13660.	1.7	31

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37	Two-Dimensional Structure Control by Molecular Width Variation with Metal Coordination. <i>Langmuir</i> , 2006, 22, 6910-6914.	1.6	29
38	Dynamic Adsorption Behavior of Poly(3-hydroxybutyrate) Depolymerase onto Polyester Surface Investigated by QCM and AFM. <i>Biomacromolecules</i> , 2005, 6, 2084-2090.	2.6	28
39	Interaction Force of Chitin-Binding Domains onto Chitin Surface. <i>Biomacromolecules</i> , 2008, 9, 2126-2131.	2.6	26
40	Direct Observation of Poly(3-hydroxybutyrate) Depolymerase Adsorbed on Polyester Thin Film by Atomic Force Microscopy. <i>Biomacromolecules</i> , 2004, 5, 1642-1646.	2.6	22
41	Polyhydroxyalkanoate Film Formation and Synthase Activity During In Vitro and In Situ Polymerization on Hydrophobic Surfaces. <i>Biomacromolecules</i> , 2008, 9, 2811-2818.	2.6	22
42	Synthesis, characterization and emission properties of yttrium(III) and europium(III) complexes of a tripodal heptadentate Schiff-base ligand N[CH ₂ CH ₂ NCH(2-OH-3-MeC ₆ H ₃)] ₃ . <i>Inorganica Chimica Acta</i> , 2011, 367, 225-229.	1.2	22
43	Atomic Force Microscopic Observation of in Vitro Polymerized Poly[(R)-3-hydroxybutyrate]: Insight into Possible Mechanism of Granule Formation. <i>Biomacromolecules</i> , 2005, 6, 2671-2677.	2.6	21
44	Structural and Electronic Properties of Extremely Long Perylene Bisimide Nanofibers Formed through a Stoichiometrically Mismatched, Hydrogen-Bonded Complexation. <i>Small</i> , 2010, 6, 2731-2740.	5.2	21
45	Controlled Stacking and Unstacking of Peripheral Chlorophyll Units Drives the Spring-Like Contraction and Expansion of a Semi-Artificial Helical Polymer. <i>Chemistry - A European Journal</i> , 2013, 19, 1592-1598.	1.7	20
46	Nanoscopic Imaging of <i>meso</i> -Tetraalkylporphyrins Prepared in High Yields Enabled by Montmorillonite K10 and β -Cyclodextrin Molecular Sieves. <i>Chemistry - A European Journal</i> , 2013, 19, 11293-11300.	1.7	20
47	Hexagonal array formation by intermolecular halogen bonding using a binary blend of linear building blocks: STM study. <i>Chemical Communications</i> , 2019, 55, 3955-3958.	2.2	20
48	Fabrication and transformation of novel two-dimensional tripod structures: structural modulation by alkyl chain length and tandem Claisen rearrangement. <i>Chemical Communications</i> , 2010, 46, 8008.	2.2	19
49	Crystal morphologies and enzymatic degradation of melt-crystallized thin films of random copolyesters of (R)-3-hydroxybutyric acid with (R)-3-hydroxyalkanoic acids. <i>Polymer Degradation and Stability</i> , 2002, 76, 467-478.	2.7	18
50	Effects of alkyl chain length, solvent and tandem Claisen rearrangement on two-dimensional structures of noncyclic isobutenyl compounds: scanning tunnelling microscopic study. <i>Organic and Biomolecular Chemistry</i> , 2012, 10, 8087.	1.5	18
51	Two-Dimensional Structures of Anthracene Derivatives: Photodimerization and Host-Guest Chemistry. <i>Journal of Physical Chemistry B</i> , 2010, 114, 16718-16722.	1.2	17
52	Rationally controlled helical organization of a multiple-hydrogen-bonding oligothiophene: guest-induced transition of helical-to-twisted ribbons. <i>Chemical Communications</i> , 2011, 47, 454-456.	2.2	17
53	Synthesis, Isolation, and Properties of All Head-to-Tail Cyclic Poly(3-hexylthiophene): Fully Delocalized Exciton over the Defect-Free Ring Polymer. <i>Macromolecules</i> , 2018, 51, 9284-9293.	2.2	17
54	In-Situ Atomic Force Microscopy Observation of Enzymatic Degradation in Poly(hydroxyalkanoic acid) Thin Films: Normal and Constrained Conditions. <i>Macromolecular Bioscience</i> , 2004, 4, 276-285.	2.1	16

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55	Effects of oligoDNA template length and sequence on binary self-assembly of a nucleotide bolaamphiphile. <i>Organic and Biomolecular Chemistry</i> , 2007, 5, 3450.	1.5	16
56	Transformation of two-dimensional structures of noncyclic isobutenyl diamide compounds by tandem Claisen rearrangement. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2010, 356, 58-62.	2.3	16
57	Low Molecular Weight Gelators Based on Biosurfactants, Cellobiose Lipids by <i>Cryptococcus humicola</i> . <i>Journal of Oleo Science</i> , 2012, 61, 659-664.	0.6	16
58	Photo-triggered enzymatic degradation of biodegradable polymers. <i>RSC Advances</i> , 2017, 7, 55720-55724.	1.7	16
59	Formation of 2D structures and their transformation by external stimuli: a scanning tunneling microscopy study. <i>Polymer Journal</i> , 2013, 45, 255-260.	1.3	15
60	Coordination-Driven Construction of Porphyrin Nanoribbons at a Highly Oriented Pyrolytic Graphite (HOPG)/Liquid Interface. <i>Journal of the American Chemical Society</i> , 2019, 141, 10137-10141.	6.6	15
61	Crystallization behavior and thermal properties of melt-crystallized poly[(R)-3-hydroxybutyric acid-co-6-hydroxyhexanoic acid] films. <i>International Journal of Biological Macromolecules</i> , 1999, 25, 177-183.	3.6	14
62	Real-time enzymatic degradation study of poly[(R)-3-hydroxybutyric acid] copolymer thin film by atomic force microscopy in buffer solution. <i>Macromolecular Bioscience</i> , 2002, 2, 189.	2.1	14
63	Microbial synthesis and enzymatic degradation of renewable poly[(R)-3-hydroxybutyrate-co-(R)-3-hydroxyhexanoate]. <i>Science and Technology of Advanced Materials</i> , 2004, 5, 449-453.	2.8	14
64	Self-assembly of bipyridine derivatives at solid/liquid interface: Effects of the number of peripheral alkyl chains and metal coordination on the two-dimensional structures. <i>Surface Science</i> , 2007, 601, 2520-2524.	0.8	14
65	Dynamic Assembly of Porphyrin Wires Trapped on a Highly Oriented Pyrolytic Graphite Surface. <i>Organic Letters</i> , 2012, 14, 1998-2001.	2.4	14
66	In situ observation of lamellar growth in thin films for poly[(R)-3-hydroxybutyric acid-co-6-hydroxyhexanoic acid] at a high crystallization temperature of 110°C by atomic force microscopy. <i>Polymer</i> , 2001, 42, 2707-2710.	1.8	12
67	Real-time Observations of Oriented Crystallization of Poly(ϵ -prolactone) Thin Film, Induced by an AFM Tip. <i>Macromolecular Chemistry and Physics</i> , 2007, 208, 1862-1870.	1.1	12
68	In vitro synthesis of polyhydroxyalkanoate catalyzed by class II and III PHA synthases: a useful technique for surface coatings of a hydrophobic support with PHA. <i>Journal of Chemical Technology and Biotechnology</i> , 2009, 85, 779-782.	1.6	12
69	Tuning the enzymatic hydrolysis of biodegradable polyesters and its application to surface patterning. <i>Journal of Materials Chemistry A</i> , 2013, 1, 4667.	5.2	12
70	Bicomponent blend-directed amplification of the alkyl chain effect on the 2D structures. <i>Chemical Communications</i> , 2014, 50, 13146-13149.	2.2	12
71	Atomic Force Microscopic Study of Chitinase Binding onto Chitin and Cellulose Surfaces. <i>Biomacromolecules</i> , 2014, 15, 1074-1077.	2.6	12
72	Organization of Polyhydroxyalkanoate Synthase for In Vitro Polymerization as Revealed by Atomic Force Microscopy. <i>Macromolecular Bioscience</i> , 2005, 5, 929-935.	2.1	11

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73	Au/SiO ₂ nanocomposite film substrates with a high number density of Au nanoparticles for molecular conductance measurement. <i>Nanotechnology</i> , 2007, 18, 205501.	1.3	11
74	Synthesis and Study at a Solid/Liquid Interface of Porphyrin Dimers Linked by Metal Ions. <i>Inorganic Chemistry</i> , 2017, 56, 15081-15090.	1.9	10
75	Surface Patterning of Poly(ϵ -caprolactone): Epitaxial Crystallization and Enzymatic Degradation. <i>Macromolecular Chemistry and Physics</i> , 2010, 211, 2480-2483.	1.1	9
76	Effect of Surface Properties on the Photo-Induced Crawling Motion of Azobenzene Crystals on Glass Surfaces. <i>Frontiers in Chemistry</i> , 2021, 9, 684767.	1.8	8
77	Well-organised two-dimensional self-assembly controlled by in situ formation of a Cu(ii)-coordinated rufigallol derivative: a scanning tunnelling microscopy study. <i>Chemical Communications</i> , 2022, 58, 1752-1755.	2.2	8
78	Dynamic host-guest behavior in halogen-bonded two-dimensional molecular networks investigated by scanning tunneling microscopy at the solid/liquid interface. <i>Nanoscale Advances</i> , 2020, 2, 4895-4901.	2.2	7
79	Two-Dimensional Organization of Mono- and Bisurea Supramolecular Polymers Studied by Scanning Tunneling Microscopy. <i>Journal of Nanoscience and Nanotechnology</i> , 2010, 10, 803-808.	0.9	6
80	Noncyclic Isobutenyl Compounds with Esters and Amides: Effect of Intramolecular Hydrogen Bonds Tuned by Tandem Claisen Rearrangement on the Two-dimensional Structures. <i>Chemistry Letters</i> , 2010, 39, 1039-1041.	0.7	6
81	Solvent-induced morphological diversification in poly(l-lactide-b- ϵ -caprolactone) block copolymer thin films. <i>Polymer Degradation and Stability</i> , 2010, 95, 1414-1420.	2.7	6
82	Binding ability of chitinase onto cellulose: an atomic force microscopy study. <i>Polymer Journal</i> , 2011, 43, 742-744.	1.3	6
83	Self-organized porphyrin arrays on surfaces: the case of hydrophilic side chains and polar surfaces. <i>Journal of Porphyrins and Phthalocyanines</i> , 2014, 18, 67-75.	0.4	6
84	Trapping Nanostructures on Surfaces through Weak Interactions. <i>Chemistry - A European Journal</i> , 2015, 21, 13437-13444.	1.7	6
85	Odd-even effect in two dimensions induced by the bicomponent blends of isobutenyl compounds. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 13579-13584.	1.3	6
86	Metallation of bipyridine derivatives substituted at meta position by alkyl chains: effects on the 2D structures. <i>Supramolecular Chemistry</i> , 2011, 23, 9-12.	1.5	5
87	Two-dimensional Structures of Isobutenyl Ether Compounds Possessing Dodecyl and Tridecyl Chains: Effects of Solvent and Tandem Claisen Rearrangement. <i>Chemistry Letters</i> , 2012, 41, 1196-1198.	0.7	5
88	Self-assembled 2D patterns of structural isomers in isobutenyl compounds revealed by STM at solid/liquid interface. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2018, 537, 580-590.	2.3	5
89	Halogen bond-directed self-assembly in bicomponent blends at the solid/liquid interface: Effect of the alkyl chain substitution position. <i>Physical Chemistry Chemical Physics</i> , 0, , .	1.3	5
90	2D Structural Modulation by Odd-Even Effect of Alkyl Chains Revealed by Scanning Tunneling Microscopy at Solid/Liquid Interface. <i>Transactions of the Materials Research Society of Japan</i> , 2014, 39, 99-104.	0.2	4

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91	Ester-Linked Alkyl Chain Effect on the 2D Structures of Isobutenyl Compounds: Scanning Tunneling Microscopic Study. <i>Bulletin of the Chemical Society of Japan</i> , 2015, 88, 834-842.	2.0	3
92	Supramolecular Organization of Model Polycyclic Aromatic Molecules: Comparison of 2D and 3D Assemblies. <i>ChemNanoMat</i> , 2020, 6, 68-72.	1.5	3
93	Photo-Induced Crawling Motion of Azobenzene Crystals on Modified Gold Surfaces. <i>Langmuir</i> , 2021, 37, 14177-14185.	1.6	3
94	Controlled Growth of Porphyrin Wires at a Solid-Liquid Interface. <i>Helvetica Chimica Acta</i> , 2019, 102, e1900058.	1.0	2
95	Two-dimensional structures of pyrimido[5,4-d]pyrimidine derivatives at solid/liquid interface. <i>Applied Surface Science</i> , 2008, 254, 7576-7580.	3.1	1
96	The Mutual Separation of Rare Earth Elements Utilizing the Reaction of Corresponding Complexes Coordinated by Tris(2-aminoethyl)amine with 3-Ethoxysalicylaldehyde. <i>Waste and Biomass Valorization</i> , 2012, 3, 451-458.	1.8	1
97	Photo-responsive hole formation in the monolayer membrane wall of a supramolecular nanotube for quick recovery of encapsulated protein. <i>Nanoscale Advances</i> , 0, , .	2.2	1
98	Synthesis of porphyrins bearing alkynyl- or arylalkynyl-meso-groups. <i>Journal of Porphyrins and Phthalocyanines</i> , 2016, 20, 292-301.	0.4	0
99	Scanning Probe Microscopy (SPM). , 2019, , 155-164.		0
100	<i>meso</i> -Free dipyrins: Formation of assembled structures including a 2D ordered pattern. <i>Journal of Porphyrins and Phthalocyanines</i> , 2020, 24, 75-83.	0.4	0