

# Tetsuo Asakura

## List of Publications by Citations

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400  
papers

11,274  
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56  
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85  
g-index

423  
ext. papers

12,013  
ext. citations

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6.1  
L-index

#	Paper	IF	Citations
400	Conformational characterization of Bombyx mori silk fibroin in the solid state by high-frequency carbon-13 cross polarization-magic angle spinning NMR, x-ray diffraction, and infrared spectroscopy. <i>Macromolecules</i> , <b>1985</b> , 18, 1841-1845	5.5	290
399	Study of protein conformation and orientation in silkworm and spider silk fibers using Raman microspectroscopy. <i>Biomacromolecules</i> , <b>2004</b> , 5, 2247-57	6.9	256
398	Preparation of non-woven nanofibers of Bombyx mori silk, Samia cynthia ricini silk and recombinant hybrid silk with electrospinning method. <i>Polymer</i> , <b>2003</b> , 44, 841-846	3.9	227
397	A repeated beta-turn structure in poly(Ala-Gly) as a model for silk I of Bombyx mori silk fibroin studied with two-dimensional spin-diffusion NMR under off magic angle spinning and rotational echo double resonance. <i>Journal of Molecular Biology</i> , <b>2001</b> , 306, 291-305	6.5	205
396	Heterogeneous structure of silk fibers from Bombyx mori resolved by <sup>13</sup> C solid-state NMR spectroscopy. <i>Journal of the American Chemical Society</i> , <b>2002</b> , 124, 8794-5	16.4	198
395	Solvent- and mechanical-treatment-induced conformational transition of silk fibroins studies by high-resolution solid-state carbon-13 NMR spectroscopy. <i>Macromolecules</i> , <b>1990</b> , 23, 88-94	5.5	186
394	Solid-state NMR determination of the secondary structure of Samia cynthia ricini silk. <i>Nature</i> , <b>2000</b> , 405, 1077-9	50.4	172
393	Long-term patency of small-diameter vascular graft made from fibroin, a silk-based biodegradable material. <i>Journal of Vascular Surgery</i> , <b>2010</b> , 51, 155-64	3.5	170
392	High-resolution carbon-13 NMR study of silk fibroin in the solid state by the cross-polarization-magic angle spinning method. Conformational characterization of silk I and silk II type forms of Bombyx mori fibroin by the conformation-dependent carbon-13 chemical shifts. <i>Macromolecules</i> , <b>1991</b> , 24, 2334-2340	5.5	170
391	C alpha and C beta carbon-13 chemical shifts in proteins from an empirical database. <i>Journal of Biomolecular NMR</i> , <b>1999</b> , 13, 199-211	3	154
390	Artificial Spinning and Characterization of Silk Fiber from Bombyx mori Silk Fibroin in Hexafluoroacetone Hydrate. <i>Macromolecules</i> , <b>2002</b> , 35, 6-9	5.5	141
389	Carbon-13 NMR spectral assignment of five polyolefins determined from the chemical shift calculation and the polymerization mechanism. <i>Macromolecules</i> , <b>1991</b> , 24, 2334-2340	5.5	137
388	Empirical Comparisons of Models for Chemical-Shift Calculation in Proteins. <i>Journal of Magnetic Resonance Series B</i> , <b>1993</b> , 101, 63-71		127
387	Raman spectroscopic characterization of Bombyx mori silk fibroin: Raman spectrum of Silk I. <i>Journal of Raman Spectroscopy</i> , <b>2001</b> , 32, 103-107	2.3	125
386	Analysis of the Structure of Bombyx mori Silk Fibroin by NMR. <i>Macromolecules</i> , <b>2015</b> , 48, 2345-2357	5.5	123
385	Some observations on the structure and function of the spinning apparatus in the silkworm Bombyx mori. <i>Biomacromolecules</i> , <b>2007</b> , 8, 175-81	6.9	123
384	Very fast magic angle spinning (1)H-(14)N 2D solid-state NMR: sub-micro-liter sample data collection in a few minutes. <i>Journal of Magnetic Resonance</i> , <b>2011</b> , 208, 44-8	3	112

383	Structural characterization and artificial fiber formation of Bombyx mori silk fibroin in hexafluoro-iso-propanol solvent system. <i>Biopolymers</i> , <b>2003</b> , 69, 253-9	2.2	110
382	The relationship between amide proton chemical shifts and secondary structure in proteins. <i>Journal of Biomolecular NMR</i> , <b>1995</b> , 6, 227-36	3	109
381	Immobilization of glucose oxidase with Bombyx mori silk fibroin by only stretching treatment and its application to glucose sensor. <i>Biotechnology and Bioengineering</i> , <b>1989</b> , 33, 598-603	4.9	101
380	Comparative study of silk fibroin porous scaffolds derived from salt/water and sucrose/hexafluoroisopropanol in cartilage formation. <i>Journal of Bioscience and Bioengineering</i> , <b>2009</b> , 108, 68-75	3.3	97
379	NMR of silk fibroin. Carbon-13 NMR study of the chain dynamics and solution structure of Bombyx mori silk fibroin. <i>Macromolecules</i> , <b>1984</b> , 17, 1075-1081	5.5	96
378	Structure of Bombyx mori Silk Fibroin Based on Solid-State NMR Orientational Constraints and Fiber Diffraction Unit Cell Parameters. <i>Journal of the American Chemical Society</i> , <b>1998</b> , 120, 1300-1308	16.4	93
377	<sup>13</sup> C CP/MAS NMR study on structural heterogeneity in Bombyx mori silk fiber and their generation by stretching. <i>Protein Science</i> , <b>2002</b> , 11, 2706-13	6.3	92
376	Improving cell-adhesive properties of recombinant Bombyx mori silk by incorporation of collagen or fibronectin derived peptides produced by transgenic silkworms. <i>Biomacromolecules</i> , <b>2007</b> , 8, 3487-92	6.9	92
375	Comparative structure analysis of tyrosine and valine residues in unprocessed silk fibroin (silk I) and in the processed silk fiber (silk II) from Bombyx mori using solid-state ( <sup>13</sup> C, <sup>15</sup> N, and <sup>2</sup> H) NMR. <i>Biochemistry</i> , <b>2002</b> , 41, 4415-24	3.2	90
374	Structural analysis of silk with <sup>13</sup> C NMR chemical shift contour plots. <i>International Journal of Biological Macromolecules</i> , <b>1999</b> , 24, 167-71	7.9	88
373	NMR study of silk I structure of Bombyx mori silk fibroin with <sup>15</sup> N- and <sup>13</sup> C-NMR chemical shift contour plots <b>1997</b> , 41, 193-203		82
372	Preparation and characterization of silk fibroin powder and its application to enzyme immobilization. <i>Journal of Applied Polymer Science</i> , <b>1990</b> , 40, 127-134	2.9	82
371	The structure of Bombyx mori silk fibroin membrane swollen by water studied with ESR, <sup>13</sup> C-NMR, and FT-IR spectroscopies. <i>Journal of Applied Polymer Science</i> , <b>1990</b> , 40, 1745-1756	2.9	81
370	Structure of Bombyx mori silk fibroin before spinning in solid state studied with wide angle x-ray scattering and ( <sup>13</sup> C) cross-polarization/magic angle spinning NMR. <i>Biopolymers</i> , <b>2001</b> , 58, 521-5	2.2	80
369	Immobilization of biocatalysts with bombyx mori silk fibroin by several kinds of physical treatment and its application to glucose sensors. <i>Biosensors</i> , <b>1989</b> , 4, 361-372		80
368	Structure of Alanine and Glycine Residues of Samia cynthia ricini Silk Fibers Studied with Solid-State <sup>15</sup> N and <sup>13</sup> C NMR. <i>Macromolecules</i> , <b>1999</b> , 32, 4940-4946	5.5	79
367	Binding of amyloid beta-peptide to ganglioside micelles is dependent on histidine-13. <i>Biochemical Journal</i> , <b>2006</b> , 397, 483-90	3.8	78
366	Refinement of Repeated Turn Structure for Silk I Conformation of Bombyx mori Silk Fibroin Using <sup>13</sup> C Solid-State NMR and X-ray Diffraction Methods. <i>Macromolecules</i> , <b>2005</b> , 38, 7397-7403	5.5	76

365	A method for the calculation of protein alpha-CH chemical shifts. <i>Journal of Biomolecular NMR</i> , <b>1992</b> , 2, 83-98	3	76
364	Characterization by Raman microspectroscopy of the strain-induced conformational transition in fibroin fibers from the silkworm <i>Samia cynthia ricini</i> . <i>Biomacromolecules</i> , <b>2006</b> , 7, 2512-21	6.9	74
363	Silk structure studied with nuclear magnetic resonance. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , <b>2013</b> , 69, 23-68	10.4	73
362	Colored Fluorescent Silk Made by Transgenic Silkworms. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 5232-5239	15.4	69
361	A method for studying the structure of uniaxially aligned biopolymers using solid state <sup>15</sup> N-nmr: application to <i>Bombyx mori</i> silk fibroin fibers. <i>Biopolymers</i> , <b>1993</b> , 33, 847-61	2.2	69
360	Use of silk fibroin for enzyme membrane. <i>Journal of Biotechnology</i> , <b>1987</b> , 5, 199-207	3.7	69
359	Structure of Silk studied with NMR. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , <b>2001</b> , 39, 301-352	15.4	67
358	Hydrolysis and condensation mechanisms of a silane coupling agent studied by <sup>13</sup> C and <sup>29</sup> Si NMR. <i>Journal of Applied Polymer Science</i> , <b>1987</b> , 34, 1619-1630	2.9	67
357	Structure determination of a peptide model of the repeated helical domain in <i>Samia cynthia ricini</i> silk fibroin before spinning by a combination of advanced solid-state NMR methods. <i>Journal of the American Chemical Society</i> , <b>2003</b> , 125, 7230-7	16.4	65
356	Preparation of double-raschel knitted silk vascular grafts and evaluation of short-term function in a rat abdominal aorta. <i>Journal of Artificial Organs</i> , <b>2011</b> , 14, 89-99	1.8	64
355	Primary and secondary structures of synthetic polymer systems as studied by <sup>13</sup> C NMR spectroscopy. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , <b>1990</b> , 22, 349-400	10.4	63
354	Porous membrane of <i>Bombyx mori</i> silk fibroin: structure characterization, physical properties and application to glucose oxidase immobilization. <i>Journal of Membrane Science</i> , <b>1991</b> , 59, 39-52	9.6	63
353	Structural role of tyrosine in <i>Bombyx mori</i> silk fibroin, studied by solid-state NMR and molecular mechanics on a model peptide prepared as silk I and II. <i>Magnetic Resonance in Chemistry</i> , <b>2004</b> , 42, 258-66	2.1	62
352	Structural analysis of alanine tripeptide with antiparallel and parallel beta-sheet structures in relation to the analysis of mixed beta-sheet structures in <i>Samia cynthia ricini</i> silk protein fiber using solid-state NMR spectroscopy. <i>Journal of the American Chemical Society</i> , <b>2006</b> , 128, 6231-8	16.4	61
351	Small-diameter silk vascular grafts (3 mm diameter) with a double-raschel knitted silk tube coated with silk fibroin sponge. <i>Advanced Healthcare Materials</i> , <b>2013</b> , 2, 361-8	10.1	60
350	Possible implications of serine and tyrosine residues and intermolecular interactions on the appearance of silk I structure of <i>Bombyx mori</i> silk fibroin-derived synthetic peptides: high-resolution <sup>13</sup> C cross-polarization/magic-angle spinning NMR study. <i>Biomacromolecules</i> , <b>2005</b> , 6, 468-74	6.9	60
349	Heptad configurational analysis of <sup>13</sup> C n.m.r. spectra in highly isotactic polypropylene. <i>Polymer</i> , <b>1988</b> , 29, 138-143	3.9	60
348	NMR of silk fibroin. 3. Assignment of carbonyl carbon resonances and their dependence on sequence and conformation in <i>Bombyx mori</i> silk fibroin using selective isotopic labeling. <i>Macromolecules</i> , <b>1984</b> , 17, 2421-2426	5.5	58

347	Elucidating silk structure using solid-state NMR. <i>Soft Matter</i> , <b>2013</b> , 9, 11440	3.6	57
346	Production and characterization of a silk-like hybrid protein, based on the polyalanine region of <i>Samia cynthia ricini</i> silk fibroin and a cell adhesive region derived from fibronectin. <i>Biomaterials</i> , <b>2004</b> , 25, 617-24	15.6	57
345	The role of irregular unit, GAAS, on the secondary structure of <i>Bombyx mori</i> silk fibroin studied with <sup>13</sup> C CP/MAS NMR and wide-angle X-ray scattering. <i>Protein Science</i> , <b>2002</b> , 11, 1873-7	6.3	57
344	Porous silk fibroin film as a transparent carrier for cultivated corneal epithelial sheets. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>2011</b> , 22, 2261-76	3.5	55
343	Interaction of mastoparan with membranes studied by <sup>1</sup> H-NMR spectroscopy in detergent micelles and by solid-state <sup>2</sup> H-NMR and <sup>15</sup> N-NMR spectroscopy in oriented lipid bilayers. <i>FEBS Journal</i> , <b>2001</b> , 268, 302-9		55
342	Conformational characterization of silk fibroin in intact <i>Bombyx mori</i> and <i>Pilosamia cynthia ricini</i> silkworms by carbon-13 NMR spectroscopy. <i>Macromolecules</i> , <b>1983</b> , 16, 1024-1026	5.5	55
341	Development of Small-Diameter Vascular Grafts Based on Silk Fibroin Fibers from <i>Bombyx mori</i> for Vascular Regeneration. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>2011</b> , 22, 195-206	3.5	53
340	NMR of silk fibroin. 4. Temperature- and urea-induced helix-coil transitions of the -(Ala) <sub>n</sub> - sequence in <i>Philosamia cynthia ricini</i> silk fibroin protein monitored by carbon-13 NMR spectroscopy. <i>Macromolecules</i> , <b>1985</b> , 18, 2614-2619	5.5	53
339	Structures of <i>Bombyx mori</i> and <i>Samia cynthia ricini</i> silk fibroins studied with solid-state NMR. <i>Biomacromolecules</i> , <b>2004</b> , 5, 680-8	6.9	52
338	Structural change of keratin protein in human hair by permanent waving treatment. <i>Polymer</i> , <b>1998</b> , 39, 3835-3840	3.9	51
337	Determination of the torsion angles of alanine and glycine residues of model compounds of spider silk (AGG)(10) using solid-state NMR methods. <i>Journal of Biomolecular NMR</i> , <b>2003</b> , 25, 91-103	3	51
336	Immobilization of peroxidase with a <i>Bombyx mori</i> silk fibroin membrane and its application to biophotosensors. <i>Journal of Biotechnology</i> , <b>1989</b> , 10, 113-119	3.7	51
335	Dynamic features of side chains in tyrosine and serine residues of some polypeptides and fibroins in the solid as studied by high-resolution solid-state carbon-13 NMR spectroscopy. <i>Macromolecules</i> , <b>1990</b> , 23, 83-88	5.5	50
334	Investigation of structural transition of regenerated silk fibroin aqueous solution by Rheo-NMR spectroscopy. <i>Journal of the American Chemical Society</i> , <b>2008</b> , 130, 4182-6	16.4	48
333	High-Resolution <sup>13</sup> C CP/MAS NMR Study on Structure and Structural Transition of <i>Antheraea pernyi</i> Silk Fibroin Containing Poly(l-alanine) and Gly-Rich Regions. <i>Macromolecules</i> , <b>2002</b> , 35, 2393-2400	5.5	48
332	NMR of silk fibroin. 8. Carbon-13 NMR analysis of the conformation and the conformational transition of <i>Philosamia cynthia ricini</i> silk fibroin protein on the basis of Bixon-Scheraga-Lifson theory. <i>Macromolecules</i> , <b>1988</b> , 21, 644-648	5.5	48
331	Mechanical properties of regenerated <i>Bombyx mori</i> silk fibers and recombinant silk fibers produced by transgenic silkworms. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>2010</b> , 21, 395-411	3.5	47
330	Molecular Dynamics Simulation of Conformational Change of Poly(Ala-Gly) from Silk I to Silk II Relation to Fiber Formation Mechanism of <i>Bombyx mori</i> Silk Fibroin. <i>Macromolecules</i> , <b>2003</b> , 36, 6766-6772	5.5	47

329	Carbon-13 NMR spectral assignments of regioirregular polypropylene determined from two-dimensional INADEQUATE spectra and chemical shift calculations. <i>Macromolecules</i> , <b>1992</b> , 25, 4876-4881	5.5	47
328	Preparation and characterization of multilayered hydroxyapatite/silk fibroin film. <i>Journal of Bioscience and Bioengineering</i> , <b>2007</b> , 103, 514-20	3.3	46
327	Solid-state NMR analysis of a peptide (Gly-Pro-Gly-Gly-Ala) <sub>6</sub> -Gly derived from a flagelliform silk sequence of <i>Nephila clavipes</i> . <i>Biomacromolecules</i> , <b>2006</b> , 7, 1210-4	6.9	45
326	Hydrogen-Bonding Structure of Serine Side Chains in <i>Bombyx mori</i> and <i>Samia cynthia ricini</i> Silk Fibroin Determined by Solid-State <sup>2</sup> H NMR. <i>Macromolecules</i> , <b>1999</b> , 32, 7166-7171	5.5	45
325	Distinctive influence of two hexafluoro solvents on the structural stabilization of <i>Bombyx mori</i> silk fibroin protein and its derived peptides: <sup>13</sup> C NMR and CD studies. <i>Biomacromolecules</i> , <b>2006</b> , 7, 18-23	6.9	43
324	Activation energy for permeation of phosphonium cations through phospholipid bilayer membrane. <i>Biochemistry</i> , <b>1994</b> , 33, 4312-8	3.2	43
323	NMR study of the structures of repeated sequences, GAGXGA (X = S, Y, V), in <i>Bombyx mori</i> liquid silk. <i>Biomacromolecules</i> , <b>2014</b> , 15, 104-12	6.9	42
322	<sup>2</sup> H-Labeling of Silk Fibroin Fibers and Their Structural Characterization by Solid-State <sup>2</sup> H NMR. <i>Macromolecules</i> , <b>1997</b> , 30, 2429-2435	5.5	42
321	Role of Hydroxyl Side Chains in <i>Bombyx mori</i> Silk Sericin in Stabilizing Its Solid Structure. <i>Macromolecules</i> , <b>2007</b> , 40, 1562-1569	5.5	40
320	NMR of silk fibroin. 9. Sequence and conformation analyses of the silk fibroins from <i>Bombyx mori</i> and <i>Philosamia cynthia ricini</i> by <sup>15</sup> N NMR spectroscopy. <i>Macromolecules</i> , <b>1988</b> , 21, 2038-2041	5.5	40
319	Nano-mole scale sequential signal assignment by ( <sup>1</sup> H)-detected protein solid-state NMR. <i>Chemical Communications</i> , <b>2015</b> , 51, 15055-8	5.8	39
318	The structure of the melittin tetramer at different temperatures--an NOE-based calculation with chemical shift refinement. <i>FEBS Journal</i> , <b>1998</b> , 257, 479-87		39
317	The Structural Characteristics of <i>Bombyx mori</i> Silk Fibroin before Spinning As Studied with Molecular Dynamics Simulation. <i>Macromolecules</i> , <b>2002</b> , 35, 8831-8838	5.5	39
316	Characterization of low-temperature-plasma treated silk fibroin fabrics by ESCA and the use of the fabrics as an enzyme-immobilization support. <i>Biomaterials</i> , <b>1992</b> , 13, 276-80	15.6	39
315	Adsorption behavior of a silane coupling agent onto a colloidal silica surface studied by <sup>29</sup> Si NMR spectroscopy. <i>Journal of Colloid and Interface Science</i> , <b>1989</b> , 129, 113-119	9.3	39
314	Two different packing arrangements of antiparallel polyalanine. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 1212-5	16.4	38
313	The interaction of amyloid Aβ(1-40) with lipid bilayers and ganglioside as studied by <sup>31</sup> P solid-state NMR. <i>Chemistry and Physics of Lipids</i> , <b>2009</b> , 158, 54-60	3.7	38
312	Rheological properties of native silk fibroins from domestic and wild silkworms, and flow analysis in each spinneret by a finite element method. <i>Biomacromolecules</i> , <b>2009</b> , 10, 929-35	6.9	38

311	Tightly winding structure of sequential model peptide for repeated helical region in <i>Samia cynthia ricini</i> silk fibroin studied with solid-state NMR. <i>Protein Science</i> , <b>2003</b> , 12, 666-71	6.3	38
310	Carbon-13 NMR chemical shift of regioirregular polypropylene. <i>Macromolecules</i> , <b>1987</b> , 20, 616-620	5.5	38
309	Chain-end structures in polypropylene prepared with $\delta$ -TiCl <sub>3</sub> /Et <sub>2</sub> AlCl catalytic system in the presence of hydrogen. <i>Macromolecules</i> , <b>1988</b> , 21, 2675-2684	5.5	38
308	Native Structure and Degradation Pattern of Silk Sericin Studied by <sup>13</sup> C NMR Spectroscopy. <i>Macromolecules</i> , <b>2006</b> , 39, 6-8	5.5	36
307	Raman study of poly(alanine-glycine)-based peptides containing tyrosine, valine, and serine as model for the semicrystalline domains of <i>Bombyx mori</i> silk fibroin. <i>Biopolymers</i> , <b>2004</b> , 75, 314-24	2.2	36
306	<sup>1</sup> H pulsed NMR study of <i>bombyx mori</i> silk fibroin: Dynamics of fibroin and of absorbed water. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>1992</b> , 30, 693-699	2.6	36
305	Silk fibroin-based scaffolds for bone regeneration. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , <b>2013</b> , 101, 295-302	3.5	35
304	Intermolecular Packing in <i>B. mori</i> Silk Fibroin: Multinuclear NMR Study of the Model Peptide (Ala-Gly) <sub>15</sub> Defines a Heterogeneous Antiparallel Antipolar Mode of Assembly in the Silk II Form. <i>Macromolecules</i> , <b>2015</b> , 48, 28-36	5.5	35
303	Small-diameter vascular grafts of <i>Bombyx mori</i> silk fibroin prepared by a combination of electrospinning and sponge coating. <i>Materials Letters</i> , <b>2010</b> , 64, 1786-1788	3.3	35
302	Immobilization of glucose oxidase on nonwoven fabrics with <i>bombyx mori</i> silk fibroin gel. <i>Journal of Applied Polymer Science</i> , <b>1992</b> , 46, 49-53	2.9	35
301	A HIGH RESOLUTION <sup>13</sup> C NMR STUDY OF SILK FIBROIN IN SOLID STATE BY THE CROSS POLARIZATION-MAGIC ANGLE SPINNING METHOD: CONFORMATIONAL CHARACTERIZATION UTILIZING CONFORMATION-DEPENDENT <sup>13</sup> C CHEMICAL SHIFTS. <i>Chemistry Letters</i> , <b>1983</b> , 12, 427-430	1.7	35
300	Structural Determination of an Elastin-Mimetic Model Peptide, (Val-Pro-Gly-Val-Gly) <sub>6</sub> , Studied by <sup>13</sup> C CP/MAS NMR Chemical Shifts, Two-Dimensional off Magic Angle Spinning Spin-Diffusion NMR, Rotational Echo Double Resonance, and Statistical Distribution of Torsion Angles from Protein Data Bank. <i>Macromolecules</i> , <b>2007</b> , 40, 6029-6047	5.5	34
299	Regeneration of the femoral epicondyle on calcium-binding silk scaffolds developed using transgenic silk fibroin produced by transgenic silkworm. <i>Acta Biomaterialia</i> , <b>2011</b> , 7, 1192-201	10.8	33
298	Silklike materials constructed from sequences of <i>Bombyx mori</i> silk fibroin, fibronectin, and elastin. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2008</b> , 84, 353-63	5.4	33
297	Deposition of bone-like apatite on modified silk fibroin films from simulated body fluid. <i>Journal of Applied Polymer Science</i> , <b>2006</b> , 99, 2822-2830	2.9	33
296	NMR of silk fibroin, 6. Structure of <i>bombyx mori</i> silk fibroin in aqueous solution. <i>Die Makromolekulare Chemie Rapid Communications</i> , <b>1986</b> , 7, 755-759		33
295	Biological reaction to small-diameter vascular grafts made of silk fibroin implanted in the abdominal aortae of rats. <i>Annals of Vascular Surgery</i> , <b>2015</b> , 29, 341-52	1.7	32
294	Synthesis and characterization of chimeric silkworm silk. <i>Biomacromolecules</i> , <b>2003</b> , 4, 815-20	6.9	32

293	Dynamics of the Tyrosine Side Chain in Bombyx mori and Samia cynthia ricini Silk Fibroin Studied by Solid State <sup>2</sup> H NMR. <i>Macromolecules</i> , <b>1999</b> , 32, 8491-8495	5.5	32
292	Structural analysis of Bombyx mori silk fibroin peptides with formic acid treatment using high-resolution solid-state <sup>13</sup> C NMR spectroscopy. <i>Biomacromolecules</i> , <b>2004</b> , 5, 1763-9	6.9	31
291	Evidence from <sup>13</sup> C solid-state NMR spectroscopy for a lamella structure in an alanine-glycine copolypeptide: a model for the crystalline domain of Bombyx mori silk fiber. <i>Protein Science</i> , <b>2005</b> , 14, 2654-7	6.3	31
290	Conformation of Crystalline and Noncrystalline Domains of [ <sup>3-13</sup> C]Ala-, [ <sup>3-13</sup> C]Ser-, and [ <sup>3-13</sup> C]Tyr-Bombyx mori Silk Fibroin in a Hydrated State Studied with <sup>13</sup> C DD/MAS NMR. <i>Macromolecules</i> , <b>2015</b> , 48, 8062-8069	5.5	30
289	Design, expression and solid-state NMR characterization of silk-like materials constructed from sequences of spider silk, Samia cynthia ricini and Bombyx mori silk fibroins. <i>Journal of Biochemistry</i> , <b>2005</b> , 137, 721-9	3.1	30
288	Triad Sequence Analysis of Poly(ethylene/butylene terephthalate) Copolymer Using <sup>1</sup> H NMR. <i>Macromolecules</i> , <b>2002</b> , 35, 4664-4668	5.5	30
287	Design and synthesis of C-linked fucosides as inhibitors of E-selectin. <i>Bioorganic and Medicinal Chemistry</i> , <b>1996</b> , 4, 1149-65	3.4	30
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