

# Mihai Peterca

## List of Publications by Year in descending order

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72  
papers

7,481  
citations

50170

46  
h-index

71532

76  
g-index

78  
all docs

78  
docs citations

78  
times ranked

5048  
citing authors

#	ARTICLE	IF	CITATIONS
1	Dendron-Mediated Self-Assembly, Disassembly, and Self-Organization of Complex Systems. <i>Chemical Reviews</i> , 2009, 109, 6275-6540.	23.0	1,131
2	Self-assembly of amphiphilic dendritic dipeptides into helical pores. <i>Nature</i> , 2004, 430, 764-768.	13.7	613
3	Modular Synthesis of Amphiphilic Janus Glycodendrimers and Their Self-Assembly into Glycodendrimersomes and Other Complex Architectures with Bioactivity to Biomedically Relevant Lectins. <i>Journal of the American Chemical Society</i> , 2013, 135, 9055-9077.	6.6	261
4	Nanomechanical Function from Self-Organizable Dendronized Helical Polyphenylacetylenes. <i>Journal of the American Chemical Society</i> , 2008, 130, 7503-7508.	6.6	224
5	Thermoreversible Cis $\rightarrow$ Cisoidal to Cis $\rightarrow$ Transoidal Isomerization of Helical Dendronized Polyphenylacetylenes. <i>Journal of the American Chemical Society</i> , 2005, 127, 15257-15264.	6.6	218
6	Self-Assembly of Dendronized Triphenylenes into Helical Pyramidal Columns and Chiral Spheres. <i>Journal of the American Chemical Society</i> , 2009, 131, 7662-7677.	6.6	169
7	Steric Communication of Chiral Information Observed in Dendronized Polyacetylenes. <i>Journal of the American Chemical Society</i> , 2006, 128, 16365-16372.	6.6	166
8	Predicting the Structure of Supramolecular Dendrimers via the Analysis of Libraries of AB <sub>3</sub> and Constitutional Isomeric AB <sub>2</sub> Biphenylpropyl Ether Self-Assembling Dendrons. <i>Journal of the American Chemical Society</i> , 2009, 131, 17500-17521.	6.6	165
9	Predicting the Size and Properties of Dendrimersomes from the Lamellar Structure of Their Amphiphilic Janus Dendrimers. <i>Journal of the American Chemical Society</i> , 2011, 133, 20507-20520.	6.6	165
10	Selective Transport of Water Mediated by Porous Dendritic Dipeptides. <i>Journal of the American Chemical Society</i> , 2007, 129, 11698-11699.	6.6	160
11	Self-Assembly of Semifluorinated Janus-Dendritic Benzamides into Bilayered Pyramidal Columns. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 4739-4745.	7.2	158
12	Self-Assembly of Dendritic Crowns into Chiral Supramolecular Spheres. <i>Journal of the American Chemical Society</i> , 2009, 131, 1294-1304.	6.6	158
13	Synthesis and Retrostructural Analysis of Libraries of AB <sub>3</sub> and Constitutional Isomeric AB <sub>2</sub> Phenylpropyl Ether-Based Supramolecular Dendrimers. <i>Journal of the American Chemical Society</i> , 2006, 128, 3324-3334.	6.6	154
14	A supramolecular helix that disregards chirality. <i>Nature Chemistry</i> , 2016, 8, 80-89.	6.6	147
15	Expanding the Structural Diversity of Self-Assembling Dendrons and Supramolecular Dendrimers via Complex Building Blocks. <i>Journal of the American Chemical Society</i> , 2007, 129, 11265-11278.	6.6	146
16	Molecular Structure of Helical Supramolecular Dendrimers. <i>Journal of the American Chemical Society</i> , 2008, 130, 14840-14852.	6.6	130
17	Principles of self-assembly of helical pores from dendritic dipeptides. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 2518-2523.	3.3	126
18	Self-Organizable Vesicular Columns Assembled from Polymers Dendronized with Semifluorinated Janus Dendrimers Act As Reverse Thermal Actuators. <i>Journal of the American Chemical Society</i> , 2012, 134, 4408-4420.	6.6	123

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19	Self-Assembly of Dendronized Perylene Bisimides into Complex Helical Columns. <i>Journal of the American Chemical Society</i> , 2011, 133, 12197-12219.	6.6	120
20	Self-Assembly of Semifluorinated Dendrons Attached to Electron-Donor Groups Mediates Their $\pi$ -Stacking via a Helical Pyramidal Column. <i>Chemistry - A European Journal</i> , 2006, 12, 6298-6314.	1.7	116
21	Hollow Spherical Supramolecular Dendrimers. <i>Journal of the American Chemical Society</i> , 2008, 130, 13079-13094.	6.6	113
22	Programming the Internal Structure and Stability of Helical Pores Self-Assembled from Dendritic Dipeptides via the Protective Groups of the Peptide. <i>Journal of the American Chemical Society</i> , 2005, 127, 17902-17909.	6.6	108
23	Transfer, Amplification, and Inversion of Helical Chirality Mediated by Concerted Interactions of $C_3$ -Supramolecular Dendrimers. <i>Journal of the American Chemical Society</i> , 2011, 133, 2311-2328.	6.6	100
24	Transformation from Kinetically into Thermodynamically Controlled Self-Organization of Complex Helical Columns with 3D Periodicity Assembled from Dendronized Perylene Bisimides. <i>Journal of the American Chemical Society</i> , 2013, 135, 4129-4148.	6.6	98
25	Self-Assembly in Action. <i>Science</i> , 2006, 313, 55-56.	6.0	96
26	Self-Assembly, Structural, and Retrostructural Analysis of Dendritic Dipeptide Pores Undergoing Reversible Circular to Elliptical Shape Change. <i>Journal of the American Chemical Society</i> , 2006, 128, 6713-6720.	6.6	96
27	Exploring and Expanding the Structural Diversity of Self-Assembling Dendrons through Combinations of AB, Constitutional Isomeric AB <sub>2</sub> , and AB <sub>3</sub> Biphenyl-4-Methyl Ether Building Blocks. <i>Chemistry - A European Journal</i> , 2006, 12, 6216-6241.	1.7	88
28	Onion-like glycodendrimersomes from sequence-defined Janus glycodendrimers and influence of architecture on reactivity to a lectin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 1162-1167.	3.3	86
29	Programming the Supramolecular Helical Polymerization of Dendritic Dipeptides via the Stereochemical Information of the Dipeptide. <i>Journal of the American Chemical Society</i> , 2011, 133, 5135-5151.	6.6	82
30	Self-Repairing Complex Helical Columns Generated via Kinetically Controlled Self-Assembly of Dendronized Perylene Bisimides. <i>Journal of the American Chemical Society</i> , 2011, 133, 18479-18494.	6.6	82
31	Helical Pores Self-Assembled from Homochiral Dendritic Dipeptides Based on L-Tyr and Nonpolar $\alpha$ -Amino Acids. <i>Journal of the American Chemical Society</i> , 2007, 129, 5992-6002.	6.6	81
32	Self-Assembling Phenylpropyl Ether Dendronized Helical Polyphenylacetylenes. <i>Chemistry - A European Journal</i> , 2007, 13, 9572-9581.	1.7	81
33	Low-temperature permittivity of insulating perovskite manganites. <i>Physical Review B</i> , 2004, 70, .	1.1	76
34	Self-Assembly of Semifluorinated Minidendrons Attached to Electron-Acceptor Groups into Pyramidal Columns. <i>Chemistry - A European Journal</i> , 2007, 13, 3330-3345.	1.7	74
35	The Internal Structure of Helical Pores Self-Assembled from Dendritic Dipeptides is Stereochemically Programmed and Allosterically Regulated. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 6516-6521.	7.2	72
36	Self-Assembly of Hybrid Dendrons into Doubly Segregated Supramolecular Polyhedral Columns and Vesicles. <i>Journal of the American Chemical Society</i> , 2010, 132, 11288-11305.	6.6	70

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37	Synthesis, Structural Analysis, and Visualization of a Library of Dendronized Polyphenylacetylenes. <i>Chemistry - A European Journal</i> , 2006, 12, 5731-5746.	1.7	66
38	Deconstruction as a Strategy for the Design of Libraries of Self-Assembling Dendrons. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 7002-7005.	7.2	64
39	Thixotropic Twin-Dendritic Organogelators. <i>Chemistry - A European Journal</i> , 2008, 14, 909-918.	1.7	61
40	Synthesis, structural, and retrostructural analysis of helical dendronized poly(1-naphthylacetylene)s. <i>Journal of Polymer Science Part A</i> , 2007, 45, 4974-4987.	2.5	58
41	Dendronized supramolecular polymers self-assembled from dendritic ionic liquids. <i>Journal of Polymer Science Part A</i> , 2009, 47, 4165-4193.	2.5	58
42	Dendronized Poly(2-oxazoline) Displays within only Five Monomer Repeat Units Liquid Quasicrystal, A15 and $\sqrt{3}$ Frank-Kasper Phases. <i>Journal of the American Chemical Society</i> , 2018, 140, 16941-16947.	6.6	57
43	Hierarchical Self-Organization of Perylene Bisimides into Supramolecular Spheres and Periodic Arrays Thereof. <i>Journal of the American Chemical Society</i> , 2016, 138, 14798-14807.	6.6	56
44	Self-Assembly of Hybrid Dendrons with Complex Primary Structure Into Functional Helical Pores. <i>Chemistry - A European Journal</i> , 2007, 13, 3989-4007.	1.7	52
45	Elucidating the Structure of the $Pm\bar{3}n$ Cubic Phase of Supramolecular Dendrimers through the Modification of their Aliphatic to Aromatic Volume Ratio. <i>Chemistry - A European Journal</i> , 2009, 15, 8994-9004.	1.7	51
46	Self-organisation of dodeca-dendronized fullerene into supramolecular discs and helical columns containing a nanowire-like core. <i>Chemical Science</i> , 2015, 6, 3393-3401.	3.7	49
47	Helical Porous Protein Mimics Self-Assembled from Amphiphilic Dendritic Dipeptides. <i>Australian Journal of Chemistry</i> , 2005, 58, 472.	0.5	47
48	Supramolecular Structural Diversity among First-Generation Hybrid Dendrimers and Twin Dendrons. <i>Chemistry - A European Journal</i> , 2008, 14, 3355-3362.	1.7	45
49	Recasting Metal Alloy Phases with Block Copolymers. <i>Science</i> , 2010, 330, 333-334.	6.0	44
50	Complex Arrangement of Orthogonal Nanoscale Columns via a Supramolecular Orientational Memory Effect. <i>ACS Nano</i> , 2016, 10, 10480-10488.	7.3	42
51	Supramolecular Spheres Self-Assembled from Conical Dendrons Are Chiral. <i>Journal of the American Chemical Society</i> , 2019, 141, 6162-6166.	6.6	42
52	Proton Transport from Dendritic Helical-Pore-Incorporated Polymersomes. <i>Advanced Functional Materials</i> , 2009, 19, 2930-2936.	7.8	40
53	Increasing 3D Supramolecular Order by Decreasing Molecular Order. A Comparative Study of Helical Assemblies of Dendronized Nonchlorinated and Tetrachlorinated Perylene Bisimides. <i>Journal of the American Chemical Society</i> , 2015, 137, 5210-5224.	6.6	40
54	Supramolecular spheres assembled from covalent and supramolecular dendritic crowns dictate the supramolecular orientational memory effect mediated by Frank-Kasper phases. <i>Giant</i> , 2020, 1, 100001.	2.5	40

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55	Why Do Membranes of Some Unhealthy Cells Adopt a Cubic Architecture?. ACS Central Science, 2016, 2, 943-953.	5.3	37
56	Monodisperse Macromolecules by Self-Interrupted Living Polymerization. Journal of the American Chemical Society, 2020, 142, 15265-15270.	6.6	37
57	Giant dielectric permittivity of electron-doped manganite thin films, $\text{Ca}_{1-x}\text{La}_x\text{MnO}_3$ ( $0 \leq x \leq 0.03$ ). Journal of Applied Physics, 2005, 97, 034102.	1.1	36
58	A Tetragonal Phase Self-Organized from Unimolecular Spheres Assembled from a Substituted Poly(2-oxazoline). Macromolecules, 2017, 50, 375-385.	2.2	34
59	Hierarchical Self-Organization of Chiral Columns from Chiral Supramolecular Spheres. Journal of the American Chemical Society, 2018, 140, 13478-13487.	6.6	34
60	Tetrahedral Arrangements of Perylene Bisimide Columns <i>via</i> Supramolecular Orientational Memory. ACS Nano, 2017, 11, 983-991.	7.3	33
61	Demonstrating the 8 <sub>1</sub> -Helicity and Nanomechanical Function of Self-Organizable Dendronized Polymethacrylates and Polyacrylates. Macromolecules, 2017, 50, 5271-5284.	2.2	32
62	Complex Columnar Hexagonal Polymorphism in Supramolecular Assemblies of a Semifluorinated Electron-Accepting Naphthalene Bisimide. Journal of the American Chemical Society, 2015, 137, 807-819.	6.6	31
63	Long-range electron transport in a self-organizing n-type organic material. Applied Physics Letters, 2008, 92, 113312.	1.5	27
64	Self-Assembling Dendronized Dendrimers. Israel Journal of Chemistry, 2009, 49, 55-70.	1.0	26
65	An Accelerated Modular-Orthogonal Ni-Catalyzed Methodology to Symmetric and Nonsymmetric Constitutional Isomeric AB <sub>2</sub> to AB <sub>9</sub> Dendrons Exhibiting Unprecedented Self-Organizing Principles. Journal of the American Chemical Society, 2021, 143, 17724-17743.	6.6	25
66	Screening Libraries of Semifluorinated Arylene Bisimides to Discover and Predict Thermodynamically Controlled Helical Crystallization. ACS Combinatorial Science, 2016, 18, 723-739.	3.8	23
67	Self-Organization of Rectangular Bipyramidal Helical Columns by Supramolecular Orientational Memory Epitaxially Nucleated from a Frank-Kasper $\Gamma_f$ Phase. Giant, 2021, , 100084.	2.5	21
68	Losing supramolecular orientational memory <i>via</i> self-organization of a misfolded secondary structure. Polymer Chemistry, 2018, 9, 2370-2381.	1.9	15
69	Self-organisation of rhombitruncated cuboctahedral hexagonal columns from an amphiphilic Janus dendrimer. Molecular Physics, 2021, 119, .	0.8	13
70	Conformationally flexible dendronized cyclotetrameratrylenes (CTTV)s self-organize a large diversity of chiral columnar, Frank-Kasper and quasicrystal phases. Giant, 2022, 10, 100096.	2.5	12
71	Molecular parameters including fluorination program order during hierarchical helical self-organization of self-assembling dendrons. Giant, 2022, 11, 100103.	2.5	10
72	Enhancing conformational flexibility of dendronized triphenylene via diethylene glycol linkers lowers transitions of helical columnar, Frank-Kasper, and quasicrystal phases. Giant, 2022, 10, 100098.	2.5	9