Mihai Peterca

List of Publications by Year in descending order

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72 papers

7,481 citations

50276 46 h-index 71685 **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. Chemical Reviews, 2009, 109, 6275-6540. | 47.7 | 1,131 |
| 2 | Self-assembly of amphiphilic dendritic dipeptides into helical pores. Nature, 2004, 430, 764-768. | 27.8 | 613 |
| 3 | Modular Synthesis of Amphiphilic Janus Glycodendrimers and Their Self-Assembly into Glycodendrimersomes and Other Complex Architectures with Bioactivity to Biomedically Relevant Lectins. Journal of the American Chemical Society, 2013, 135, 9055-9077. | 13.7 | 261 |
| 4 | Nanomechanical Function from Self-Organizable Dendronized Helical Polyphenylacetylenes. Journal of the American Chemical Society, 2008, 130, 7503-7508. | 13.7 | 224 |
| 5 | Thermoreversible Cisâ^'Cisoidal to Cisâ^'Transoidal Isomerization of Helical Dendronized Polyphenylacetylenes. Journal of the American Chemical Society, 2005, 127, 15257-15264. | 13.7 | 218 |
| 6 | Self-Assembly of Dendronized Triphenylenes into Helical Pyramidal Columns and Chiral Spheres. Journal of the American Chemical Society, 2009, 131, 7662-7677. | 13.7 | 169 |
| 7 | Steric Communication of Chiral Information Observed in Dendronized Polyacetylenes. Journal of the American Chemical Society, 2006, 128, 16365-16372. | 13.7 | 166 |
| 8 | Predicting the Structure of Supramolecular Dendrimers via the Analysis of Libraries of AB ₃ and Constitutional Isomeric AB ₂ Biphenylpropyl Ether Self-Assembling Dendrons. Journal of the American Chemical Society, 2009, 131, 17500-17521. | 13.7 | 165 |
| 9 | Predicting the Size and Properties of Dendrimersomes from the Lamellar Structure of Their Amphiphilic Janus Dendrimers. Journal of the American Chemical Society, 2011, 133, 20507-20520. | 13.7 | 165 |
| 10 | Selective Transport of Water Mediated by Porous Dendritic Dipeptides. Journal of the American Chemical Society, 2007, 129, 11698-11699. | 13.7 | 160 |
| 11 | Self-Assembly of Semifluorinated Janus-Dendritic Benzamides into Bilayered Pyramidal Columns. Angewandte Chemie - International Edition, 2005, 44, 4739-4745. | 13.8 | 158 |
| 12 | Self-Assembly of Dendritic Crowns into Chiral Supramolecular Spheres. Journal of the American Chemical Society, 2009, 131, 1294-1304. | 13.7 | 158 |
| 13 | Synthesis and Retrostructural Analysis of Libraries of AB3and Constitutional Isomeric AB2Phenylpropyl Ether-Based Supramolecular Dendrimers. Journal of the American Chemical Society, 2006, 128, 3324-3334. | 13.7 | 154 |
| 14 | A supramolecular helix that disregards chirality. Nature Chemistry, 2016, 8, 80-89. | 13.6 | 147 |
| 15 | Expanding the Structural Diversity of Self-Assembling Dendrons and Supramolecular Dendrimers via Complex Building Blocks. Journal of the American Chemical Society, 2007, 129, 11265-11278. | 13.7 | 146 |
| 16 | Molecular Structure of Helical Supramolecular Dendrimers. Journal of the American Chemical Society, 2008, 130, 14840-14852. | 13.7 | 130 |
| 17 | Principles of self-assembly of helical pores from dendritic dipeptides. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 2518-2523. | 7.1 | 126 |
| 18 | Self-Organizable Vesicular Columns Assembled from Polymers Dendronized with Semifluorinated Janus Dendrimers Act As Reverse Thermal Actuators. Journal of the American Chemical Society, 2012, 134, 4408-4420. | 13.7 | 123 |

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| 19 | Self-Assembly of Dendronized Perylene Bisimides into Complex Helical Columns. Journal of the American Chemical Society, 2011, 133, 12197-12219. | 13.7 | 120 |
| 20 | Self-Assembly of Semifluorinated Dendrons Attached to Electron-Donor Groups Mediates Their π-Stacking via a Helical Pyramidal Column. Chemistry - A European Journal, 2006, 12, 6298-6314. | 3.3 | 116 |
| 21 | Hollow Spherical Supramolecular Dendrimers. Journal of the American Chemical Society, 2008, 130, 13079-13094. | 13.7 | 113 |
| 22 | Programming the Internal Structure and Stability of Helical Pores Self-Assembled from Dendritic Dipeptides via the Protective Groups of the Peptide. Journal of the American Chemical Society, 2005, 127, 17902-17909. | 13.7 | 108 |
| 23 | Transfer, Amplification, and Inversion of Helical Chirality Mediated by Concerted Interactions of C ₃ -Supramolecular Dendrimers. Journal of the American Chemical Society, 2011, 133, 2311-2328. | 13.7 | 100 |
| 24 | Transformation from Kinetically into Thermodynamically Controlled Self-Organization of Complex Helical Columns with 3D Periodicity Assembled from Dendronized Perylene Bisimides. Journal of the American Chemical Society, 2013, 135, 4129-4148. | 13.7 | 98 |
| 25 | Self-Assembly in Action. Science, 2006, 313, 55-56. | 12.6 | 96 |
| 26 | Self-Assembly, Structural, and Retrostructural Analysis of Dendritic Dipeptide Pores Undergoing Reversible Circular to Elliptical Shape Change. Journal of the American Chemical Society, 2006, 128, 6713-6720. | 13.7 | 96 |
| 27 | Exploring and Expanding the Structural Diversity of Self-Assembling Dendrons through Combinations of AB, Constitutional Isomeric AB2, and AB3 Biphenyl-4-Methyl Ether Building Blocks. Chemistry - A European Journal, 2006, 12, 6216-6241. | 3.3 | 88 |
| 28 | Onion-like glycodendrimersomes from sequence-defined Janus glycodendrimers and influence of architecture on reactivity to a lectin. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 1162-1167. | 7.1 | 86 |
| 29 | Programming the Supramolecular Helical Polymerization of Dendritic Dipeptides via the Stereochemical Information of the Dipeptide. Journal of the American Chemical Society, 2011, 133, 5135-5151. | 13.7 | 82 |
| 30 | Self-Repairing Complex Helical Columns Generated via Kinetically Controlled Self-Assembly of Dendronized Perylene Bisimides. Journal of the American Chemical Society, 2011, 133, 18479-18494. | 13.7 | 82 |
| 31 | Helical Pores Self-Assembled from Homochiral Dendritic Dipeptides Based onl-Tyr and Nonpolar $\hat{l}\pm$ -Amino Acids. Journal of the American Chemical Society, 2007, 129, 5992-6002. | 13.7 | 81 |
| 32 | Selfâ€Assembling Phenylpropyl Ether Dendronized Helical Polyphenylacetylenes. Chemistry - A European Journal, 2007, 13, 9572-9581. | 3.3 | 81 |
| 33 | Low-temperature permittivity of insulating perovskite manganites. Physical Review B, 2004, 70, . | 3.2 | 76 |
| 34 | Self-Assembly of Semifluorinated Minidendrons Attached to Electron-Acceptor Groups into Pyramidal Columns. Chemistry - A European Journal, 2007, 13, 3330-3345. | 3.3 | 74 |
| 35 | The Internal Structure of Helical Pores Self-Assembled from Dendritic Dipeptides is Stereochemically Programmed and Allosterically Regulated. Angewandte Chemie - International Edition, 2005, 44, 6516-6521. | 13.8 | 72 |
| 36 | Self-Assembly of Hybrid Dendrons into Doubly Segregated Supramolecular Polyhedral Columns and Vesicles. Journal of the American Chemical Society, 2010, 132, 11288-11305. | 13.7 | 70 |

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|----|--|------|-----------|
| 37 | Synthesis, Structural Analysis, and Visualization of a Library of Dendronized Polyphenylacetylenes. Chemistry - A European Journal, 2006, 12, 5731-5746. | 3.3 | 66 |
| 38 | Deconstruction as a Strategy for the Design of Libraries of Selfâ€Assembling Dendrons. Angewandte Chemie - International Edition, 2010, 49, 7002-7005. | 13.8 | 64 |
| 39 | Thixotropic Twinâ€Dendritic Organogelators. Chemistry - A European Journal, 2008, 14, 909-918. | 3.3 | 61 |
| 40 | Synthesis, structural, and retrostructural analysis of helical dendronized poly(1â€naphthylacetylene)s. Journal of Polymer Science Part A, 2007, 45, 4974-4987. | 2.3 | 58 |
| 41 | Dendronized supramolecular polymers selfâ€assembled from dendritic ionic liquids. Journal of Polymer Science Part A, 2009, 47, 4165-4193. | 2.3 | 58 |
| 42 | Dendronized Poly(2-oxazoline) Displays within only Five Monomer Repeat Units Liquid Quasicrystal, A15 and σ Frank–Kasper Phases. Journal of the American Chemical Society, 2018, 140, 16941-16947. | 13.7 | 57 |
| 43 | Hierarchical Self-Organization of Perylene Bisimides into Supramolecular Spheres and Periodic Arrays Thereof. Journal of the American Chemical Society, 2016, 138, 14798-14807. | 13.7 | 56 |
| 44 | Self-Assembly of Hybrid Dendrons with Complex Primary Structure Into Functional Helical Pores. Chemistry - A European Journal, 2007, 13, 3989-4007. | 3.3 | 52 |
| 45 | Elucidating the Structure of the <i>Pm</i> \$ar 3\$ <i>n</i> Cubic Phase of Supramolecular Dendrimers through the Modification of their Aliphatic to Aromatic Volume Ratio. Chemistry - A European Journal, 2009, 15, 8994-9004. | 3.3 | 51 |
| 46 | Self-organisation of dodeca-dendronized fullerene into supramolecular discs and helical columns containing a nanowire-like core. Chemical Science, 2015, 6, 3393-3401. | 7.4 | 49 |
| 47 | Helical Porous Protein Mimics Self-Assembled from Amphiphilic Dendritic Dipeptides. Australian Journal of Chemistry, 2005, 58, 472. | 0.9 | 47 |
| 48 | Supramolecular Structural Diversity among Firstâ€Generation Hybrid Dendrimers and Twin Dendrons. Chemistry - A European Journal, 2008, 14, 3355-3362. | 3.3 | 45 |
| 49 | Recasting Metal Alloy Phases with Block Copolymers. Science, 2010, 330, 333-334. | 12.6 | 44 |
| 50 | Complex Arrangement of Orthogonal Nanoscale Columns <i>via</i> a Supramolecular Orientational Memory Effect. ACS Nano, 2016, 10, 10480-10488. | 14.6 | 42 |
| 51 | Supramolecular Spheres Self-Assembled from Conical Dendrons Are Chiral. Journal of the American Chemical Society, 2019, 141, 6162-6166. | 13.7 | 42 |
| 52 | Proton Transport from Dendritic Helicalâ€Poreâ€Incorporated Polymersomes. Advanced Functional Materials, 2009, 19, 2930-2936. | 14.9 | 40 |
| 53 | Increasing 3D Supramolecular Order by Decreasing Molecular Order. A Comparative Study of Helical Assemblies of Dendronized Nonchlorinated and Tetrachlorinated Perylene Bisimides. Journal of the American Chemical Society, 2015, 137, 5210-5224. | 13.7 | 40 |
| 54 | Supramolecular spheres assembled from covalent and supramolecular dendritic crowns dictate the supramolecular orientational memory effect mediated by Frank–Kasper phases. Giant, 2020, 1, 100001. | 5.1 | 40 |

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| 55 | Why Do Membranes of Some Unhealthy Cells Adopt a Cubic Architecture?. ACS Central Science, 2016, 2, 943-953. | 11.3 | 37 |
| 56 | Monodisperse Macromolecules by Self-Interrupted Living Polymerization. Journal of the American Chemical Society, 2020, 142, 15265-15270. | 13.7 | 37 |
| 57 | Giant dielectric permittivity of electron-doped manganite thin films, Ca1â^'xLaxMnO3 (0⩽x⩽0.03). Journa of Applied Physics, 2005, 97, 034102. | 2.5 | 36 |
| 58 | A Tetragonal Phase Self-Organized from Unimolecular Spheres Assembled from a Substituted Poly(2-oxazoline). Macromolecules, 2017, 50, 375-385. | 4.8 | 34 |
| 59 | Hierarchical Self-Organization of Chiral Columns from Chiral Supramolecular Spheres. Journal of the American Chemical Society, 2018, 140, 13478-13487. | 13.7 | 34 |
| 60 | Tetrahedral Arrangements of Perylene Bisimide Columns <i>via</i> Supramolecular Orientational Memory. ACS Nano, 2017, 11, 983-991. | 14.6 | 33 |
| 61 | Demonstrating the 8 ₁ -Helicity and Nanomechanical Function of Self-Organizable Dendronized Polymethacrylates and Polyacrylates. Macromolecules, 2017, 50, 5271-5284. | 4.8 | 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. | 13.7 | 31 |
| 63 | Long-range electron transport in a self-organizing n-type organic material. Applied Physics Letters, 2008, 92, 113312. | 3.3 | 27 |
| 64 | Selfâ€Assembling Dendronized Dendrimers. Israel Journal of Chemistry, 2009, 49, 55-70. | 2.3 | 26 |
| 65 | An Accelerated Modular-Orthogonal Ni-Catalyzed Methodology to Symmetric and Nonsymmetric Constitutional Isomeric AB ₂ to AB ₉ Dendrons Exhibiting Unprecedented Self-Organizing Principles. Journal of the American Chemical Society, 2021, 143, 17724-17743. | 13.7 | 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 İf Phase. Giant, 2021, , 100084. | 5.1 | 21 |
| 68 | Losing supramolecular orientational memory <i>via</i> self-organization of a misfolded secondary structure. Polymer Chemistry, 2018, 9, 2370-2381. | 3.9 | 15 |
| 69 | Self-organisation of rhombitruncated cuboctahedral hexagonal columns from an amphiphilic Janus dendrimer. Molecular Physics, 2021, 119, . | 1.7 | 13 |
| 70 | Conformationally flexible dendronized cyclotetraveratrylenes (CTTV)s self-organize a large diversity of chiral columnar, Frank-Kasper and quasicrystal phases. Giant, 2022, 10, 100096. | 5.1 | 12 |
| 71 | Molecular parameters including fluorination program order during hierarchical helical self-organization of self-assembling dendrons. Giant, 2022, 11, 100103. | 5.1 | 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. | 5.1 | 9 |