# Albert J Markvoort

List of Publications by Year
in descending order



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|---|---|---|---|
| 69 papers | 4,119 citations | 126907 33 h-index | 114465 63 g-index |
| 80 all docs | 80 docs citations | 80 times ranked | 4386 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Proximity-induced caspase-9 activation on a DNA origami-based synthetic apoptosome. Nature Catalysis, 2020, 3, 295-306. | 34.4 | 62 |
| 2 | Designed Asymmetric Protein Assembly on a Symmetric Scaffold. Angewandte Chemie, 2020, 132, 12211-12219. | 2.0 | 2 |
| 3 | Photodynamic Control of the Chain Length in Supramolecular Polymers: Switching an Intercalator into a Chain Capper. Journal of the American Chemical Society, 2020, 142, 6295-6303. | 13.7 | 47 |
| 4 | Designed Asymmetric Protein Assembly on a Symmetric Scaffold. Angewandte Chemie - International Edition, 2020, 59, 12113-12121. | 13.8 | 8 |
| 5 | Pathway Complexity in the Stacking of Imine-Linked Macrocycles Related to Two-Dimensional Covalent Organic Frameworks. Chemistry of Materials, 2019, 31, 7104-7111. | 6.7 | 22 |
| 6 | Tuning the Length of Cooperative Supramolecular Polymers under Thermodynamic Control. Journal of the American Chemical Society, 2019, 141, 18278-18285. | 13.7 | 52 |
| 7 | Counterion-Dependent Mechanisms of DNA Origami Nanostructure Stabilization Revealed by Atomistic Molecular Simulation. ACS Nano, 2019, 13, 10798-10809. | 14.6 | 44 |
| 8 | Detailed Approach to Investigate Thermodynamically Controlled Supramolecular Copolymerizations. Macromolecules, 2019, 52, 7430-7438. | 4.8 | 25 |
| 9 | Equilibrium Model for Supramolecular Copolymerizations. Journal of Physical Chemistry B, 2019, 123, 6627-6642. | 2.6 | 36 |
| 10 | Unexpectedly Strong Chiral Amplification of Chiral/Achiral and Chiral/Chiral Copolymers of Biphenylylacetylenes and Further Enhancement/Inversion and Memory of the Macromolecular Helicity. Journal of the American Chemical Society, 2019, 141, 7605-7614. | 13.7 | 92 |
| 11 | Multivalency in a Dendritic Hostâ€“Guest System. Macromolecules, 2019, 52, 2778-2788. | 4.8 | 4 |
| 12 | Mass-Balance Models for Scrutinizing Supramolecular (Co)polymerizations in Thermodynamic Equilibrium. Accounts of Chemical Research, 2019, 52, 3465-3474. | 15.6 | 12 |
| 13 | Elucidation of the origin of chiral amplification in discrete molecular polyhedra. Nature Communications, 2018, 9, 488. | 12.8 | 51 |
| 14 | Photoisomerization induced scission of rod-like micelles unravelled with multiscale modeling. Journal of Colloid and Interface Science, 2018, 510, 357-367. | 9.4 | 11 |
| 15 | Supramolecular Block Copolymers under Thermodynamic Control. Journal of the American Chemical Society, 2018, 140, 7168-7175. | 13.7 | 119 |
| 16 | Competing Interactions in Hierarchical Porphyrin Self-Assembly Introduce Robustness in Pathway Complexity. Journal of the American Chemical Society, 2018, 140, 7810-7819. | 13.7 | 123 |
| 17 | Supramolecular Copolymers: Structure and Composition Revealed by Theoretical Modeling. Journal of the American Chemical Society, 2017, 139, 7036-7044. | 13.7 | 64 |
| 18 | Non-equilibrium supramolecular polymerization. Chemical Society Reviews, 2017, 46, 5476-5490. | 38.1 | 429 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Fragmentation and Coagulation in Supramolecular (Co)polymerization Kinetics. ACS Central Science, 2016, 2, 232-241. | 11.3 | 35 |
| 20 | Coarse-grained modelling of urea-adamantyl functionalised poly(propylene imine) dendrimers. Molecular Simulation, 2016, 42, 882-895. | 2.0 | 11 |
| 21 | Allosterically Controlled Threading of Polymers through Macrocyclic Dimers. Journal of the American Chemical Society, 2015, 137, 3915-3923. | 13.7 | 40 |
| 22 | Programmable chemical reaction networks: emulating regulatory functions in living cells using a bottom-up approach. Chemical Society Reviews, 2015, 44, 7465-7483. | 38.1 | 123 |
| 23 | Kinetic Analysis as a Tool to Distinguish Pathway Complexity in Molecular Assembly: An Unexpected Outcome of Structures in Competition. Journal of the American Chemical Society, 2015, 137, 12677-12688. | 13.7 | 92 |
| 24 | Proteomic Analysis in Type 2 Diabetes Patients before and after a Very Low Calorie Diet Reveals Potential Disease State and Intervention Specific Biomarkers. PLoS ONE, 2014, 9, e112835. | 2.5 | 19 |
| 25 | Threshold Sensing through a Synthetic Enzymatic Reactionâ€“Diffusion Network. Angewandte Chemie - International Edition, 2014, 53, 8066-8069. | 13.8 | 46 |
| 26 | Molecular Simulation of Protein Encapsulation in Vesicle Formation. Journal of Physical Chemistry B, 2014, 118, 3346-3354. | 2.6 | 16 |
| 27 | Computer simulations of cellular group selection reveal mechanism for sustaining cooperation. Journal of Theoretical Biology, 2014, 357, 123-133. | 1.7 | 17 |
| 28 | Conformational Analysis of Chiral Supramolecular Aggregates: Modeling the Subtle Difference between Hydrogen and Deuterium. Journal of the American Chemical Society, 2013, 135, 16497-16506. | 13.7 | 31 |
| 29 | Mechanism and microkinetics of the Fischerâ€“Tropsch reaction. Physical Chemistry Chemical Physics, 2013, 15, 17038. | 2.8 | 233 |
| 30 | Ultrasensitivity by Molecular Titration in Spatially Propagating Enzymatic Reactions. Biophysical Journal, 2013, 105, 1057-1066. | 0.5 | 25 |
| 31 | Evaporative self-assembly of single-chain, polymeric nanoparticles. Chemical Communications, 2013, 49, 3122. | 4.1 | 16 |
| 32 | Monomer Formation Model versus Chain Growth Model of the Fischerâ€“Tropsch Reaction. Journal of Physical Chemistry C, 2013, 117, 4488-4504. | 3.1 | 55 |
| 33 | Chain Growth by CO Insertion in the Fischerâ€“Tropsch Reaction. ChemCatChem, 2013, 5, 3384-3397. | 3.7 | 37 |
| 34 | Catalyst nano-particle size dependence of the Fischerâ€“Tropsch reaction. Faraday Discussions, 2013, 162, 267. | 3.2 | 16 |
| 35 | Model-driven optimization of multicomponent self-assembly processes. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 17205-17210. | 7.1 | 57 |
| 36 | Methods for Multiscale Modeling of Membranes. Behavior Research Methods, 2012, 15, 139-170. | 4.0 | 4 |

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|---|---|---|---|
| 37 | Directional interactions in semiflexible single-chain polymer folding. Soft Matter, 2012, 8, 7610. | 2.7 | 16 |
| 38 | On Protein Crowding and Bilayer Bulging in Spontaneous Vesicle Formation. Journal of Physical Chemistry B, 2012, 116, 12677-12683. | 2.6 | 12 |
| 39 | An Equilibrium Model for Chiral Amplification in Supramolecular Polymers. Journal of Physical Chemistry B, 2012, 116, 5291-5301. | 2.6 | 175 |
| 40 | Protonation and the Matrix Effect of Oleate Vesicles, a Coarse Grained Molecular Dynamics Study. Biophysical Journal, 2012, 102, 397a. | 0.5 | 0 |
| 41 | Pathway complexity in supramolecular polymerization. Nature, 2012, 481, 492-496. | 27.8 | 812 |
| 42 | Consequences of Cooperativity in Racemizing Supramolecular Systems. Angewandte Chemie - International Edition, 2012, 51, 6426-6431. | 13.8 | 35 |
| 43 | Kinetics of the Fischerâ€“Tropsch Reaction. Angewandte Chemie - International Edition, 2012, 51, 9015-9019. | 13.8 | 55 |
| 44 | The CUMULUS Coarse Graining Method: Transferable Potentials for Water and Solutes. Journal of Physical Chemistry B, 2011, 115, 10001-10012. | 2.6 | 20 |
| 45 | Reproduction of Vesicles upon Fatty Acid Addition. Biophysical Journal, 2011, 100, 330a. | 0.5 | 0 |
| 46 | A novel Method for Coarse Graining of Atomistic Simulations Using Boltzmann Inversion. Biophysical Journal, 2011, 100, 309a. | 0.5 | 2 |
| 47 | Theoretical models of nonlinear effects in two-component cooperative supramolecular copolymerizations. Nature Communications, 2011, 2, 509. | 12.8 | 184 |
| 48 | Lipid Acrobatics in the Membrane Fusion Arena. Current Topics in Membranes, 2011, 68, 259-294. | 0.9 | 60 |
| 49 | Coarse Grained Molecular Dynamics Simulations of Transmembrane Protein-Lipid Systems. International Journal of Molecular Sciences, 2010, 11, 2393-2420. | 4.1 | 25 |
| 50 | A Coarse Grained Molecular Dynamics Study of Self-Reproduction of Fatty Acid Vesicles. Biophysical Journal, 2010, 98, 272a. | 0.5 | 0 |
| 51 | Reproduction of Fatty Acid Vesicles. Biophysical Journal, 2010, 98, 272a. | 0.5 | 0 |
| 52 | Self-Reproduction of Fatty Acid Vesicles: A Combined Experimental andÂSimulation Study. Biophysical Journal, 2010, 99, 1520-1528. | 0.5 | 50 |
| 53 | Computation of accommodation coefficients and the use of velocity correlation profiles in molecular dynamics simulations. Physical Review E, 2010, 81, 011203. | 2.1 | 72 |
| 54 | Vesicle Deformation by Draining: Geometrical and Topological Shape Changes. Journal of Physical Chemistry B, 2009, 113, 8731-8737. | 2.6 | 41 |

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|---|---|---|---|
| 55 | Velocity Correlations Between Impinging and Reflecting Particles Using MD Simulations and Different Wall Models. , 2008, , . | | 1 |
| 56 | Velocity Correlations and Accommodation Coefficients for Gas-Wall Interactions in Nanochannels. , 2008, , . | | 5 |
| 57 | New Derivation of a Particle Wall Boundary Condition in Molecular Dynamics. , 2007, , 767. | | 0 |
| 58 | Lipid-Based Mechanisms for Vesicle Fission. Journal of Physical Chemistry B, 2007, 111, 5719-5725. | 2.6 | 54 |
| 59 | Coarse-Grained Transmembrane Proteins:â€‰ Hydrophobic Matching, Aggregation, and Their Effect on Fusion. Journal of Physical Chemistry B, 2006, 110, 13614-13623. | 2.6 | 32 |
| 60 | Vesicle Shapes from Molecular Dynamics Simulations. Journal of Physical Chemistry B, 2006, 110, 22780-22785. | 2.6 | 62 |
| 61 | A Detailed Look at Vesicle Fusion. Journal of Physical Chemistry B, 2006, 110, 13212-13219. | 2.6 | 103 |
| 62 | Density distribution for a dense hard-sphere gas in micro/nano-channels: Analytical and simulation results. Journal of Computational Physics, 2006, 219, 532-552. | 3.8 | 11 |
| 63 | Molecular dynamics study of the influence of wall-gas interactions on heat flow in nanochannels. Physical Review E, 2005, 71, 066702. | 2.1 | 82 |
| 64 | The Bilayerâ”Vesicle Transition Is Entropy Driven. Journal of Physical Chemistry B, 2005, 109, 22649-22654. | 2.6 | 80 |
| 65 | Fully local orbital-free calculation of electronic structure using pseudopotentials. Physica B: Condensed Matter, 2003, 339, 119-129. | 2.7 | 2 |
| 66 | Local functional derivative of the total energy and the shell structure in atoms and molecules. Computational and Theoretical Chemistry, 2003, 638, 91-98. | 1.5 | 1 |
| 67 | Local Thomasâ€“Fermi approximation for modeling the electronic structure of planar devices. Physica B: Condensed Matter, 2003, 325, 149-156. | 2.7 | 9 |
| 68 | Laterally coupled jellium-like two-dimensional quantum dots. Journal of Physics Condensed Matter, 2003, 15, 6977-6984. | 1.8 | 3 |
| 69 | Reflection of finite-width edge channels. Physical Review B, 1996, 54, 2806-2812. | 3.2 | 0 |