Phuong H Nguyen

List of Publications by Year
in descending order

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61 papers	3,738 citations	172457 29 h-index	128289 60 g-index
61 all docs	61 docs citations	61 times ranked	2820 citing authors

#	Article	IF	Citations
1	Amyloid Î² Protein and Alzheimerâ€™s Disease: When Computer Simulations Complement Experimental Studies. Chemical Reviews, 2015, 115, 3518-3563.	47.7	530
2	Amyloid Oligomers: A Joint Experimental/Computational Perspective on Alzheimerâ€™s Disease, Parkinsonâ€™s Disease, Type II Diabetes, and Amyotrophic Lateral Sclerosis. Chemical Reviews, 2021, 121, 2545-2647.	47.7	406
3	Monomer adds to preformed structured oligomers of Abeta-peptides by a two-stage dock-lock mechanism. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 111-116.	7.1	344
4	Why Is Research on Amyloid-Î² Failing to Give New Drugs for Alzheimerâ€™s Disease?. ACS Chemical Neuroscience, 2017, 8, 1435-1437.	3.5	201
5	Energy transport in peptide helices. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 12749-12754.	7.1	179
6	Effects of all-atom force fields on amyloid oligomerization: replica exchange molecular dynamics simulations of the AÎ²16â€“22 dimer and trimer. Physical Chemistry Chemical Physics, 2011, 13, 9778.	2.8	162
7	High-Resolution Structures of the Amyloid-Î² 1â€“42 Dimers from the Comparison of Four Atomistic Force Fields. Journal of Physical Chemistry B, 2017, 121, 5977-5987.	2.6	120
8	Understanding Amyloid Fibril Nucleation and AÎ² Oligomer/Drug Interactions from Computer Simulations. Accounts of Chemical Research, 2014, 47, 603-611.	15.6	118
9	Effects of All-Atom Molecular Mechanics Force Fields on Amyloid Peptide Assembly: The Case of AÎ²_{16â€“22} Dimer. Journal of Chemical Theory and Computation, 2019, 15, 1440-1452.	5.3	102
10	Structures of AÎ²17â€“42 Trimers in Isolation and with Five Small-Molecule Drugs Using a Hierarchical Computational Procedure. Journal of Physical Chemistry B, 2012, 116, 8412-8422.	2.6	95
11	Energy Transport in Peptide Helices: A Comparison between High- and Low-Energy Excitations. Journal of Physical Chemistry B, 2008, 112, 9091-9099.	2.6	92
12	Structures of the intrinsically disordered AÎ², tau and Î±-synuclein proteins in aqueous solution from computer simulations. Biophysical Chemistry, 2020, 264, 106421.	2.8	85
13	Effect of the Tottori Familial Disease Mutation (D7N) on the Monomers and Dimers of AÎ²₄₀ and AÎ²₄₂. ACS Chemical Neuroscience, 2013, 4, 1446-1457.	3.5	83
14	Structures of the Alzheimerâ€™s Wild-Type AÎ²1-40 Dimer from Atomistic Simulations. Journal of Physical Chemistry B, 2015, 119, 10478-10487.	2.6	81
15	Nonequilibrium molecular dynamics simulation of the energy transport through a peptide helix. Journal of Chemical Physics, 2010, 132, 025102.	3.0	66
16	Familial Alzheimer A2 V Mutation Reduces the Intrinsic Disorder and Completely Changes the Free Energy Landscape of the AÎ²1â€“28 Monomer. Journal of Physical Chemistry B, 2014, 118, 501-510.	2.6	65
17	Nonequilibrium molecular dynamics simulation of a photoswitchable peptide. Chemical Physics, 2006, 323, 36-44.	1.9	60
18	Impact of the A2V Mutation on the Heterozygous and Homozygous AÎ²1â€“40 Dimer Structures from Atomistic Simulations. ACS Chemical Neuroscience, 2016, 7, 823-832.	3.5	51

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19	Photoinduced Conformational Dynamics of a Photoswitchable Peptide: A Nonequilibrium Molecular Dynamics Simulation Study. Biophysical Journal, 2006, 91, 1224-1234.	0.5	49
20	Effect of the English Familial Disease Mutation (H6R) on the Monomers and Dimers of AÎ²40 and AÎ²42. ACS Chemical Neuroscience, 2014, 5, 646-657.	3.5	49
21	Communication: Simulated tempering with fast on-the-fly weight determination. Journal of Chemical Physics, 2013, 138, 061102.	3.0	43
22	Tetrameric AÎ²40 and AÎ²42 Î²-Barrel Structures by Extensive Atomistic Simulations. I. In a Bilayer Mimicking a Neuronal Membrane. Journal of Physical Chemistry B, 2019, 123, 3643-3648.	2.6	42
23	Molecular dynamics simulation of cooling: Heat transfer from a photoexcited peptide to the solvent. Journal of Chemical Physics, 2009, 131, 184503.	3.0	41
24	Picosecond dissociation of amyloid fibrils with infrared laser: A nonequilibrium simulation study. Journal of Chemical Physics, 2015, 143, 155101.	3.0	41
25	Importance of the Ion-Pair Interactions in the OPEP Coarse-Grained Force Field: Parametrization and Validation. Journal of Chemical Theory and Computation, 2013, 9, 4574-4584.	5.3	38
26	Folding Atomistic Proteins in Explicit Solvent Using Simulated Tempering. Journal of Physical Chemistry B, 2015, 119, 6941-6951.	2.6	38
27	Dimerization Mechanism of Alzheimer AÎ²₄₀ Peptides: The High Content of Intrapeptide-Stabilized Conformations in A2V and A2T Heterozygous Dimers Retards Amyloid Fibril Formation. Journal of Physical Chemistry B, 2016, 120, 12111-12126.	2.6	38
28	Conformational Ensembles of the Wild-Type and S8C AÎ²1â€“42 Dimers. Journal of Physical Chemistry B, 2017, 121, 2434-2442.	2.6	31
29	Tetrameric AÎ²40 and AÎ²42 Î²-Barrel Structures by Extensive Atomistic Simulations. II. In Aqueous Solution. Journal of Physical Chemistry B, 2019, 123, 6750-6756.	2.6	31
30	Conformational Ensemble and Polymorphism of the All-Atom Alzheimerâ€™s AÎ²_{37â€“42} Amyloid Peptide Oligomers. Journal of Physical Chemistry B, 2013, 117, 5831-5840.	2.6	30
31	Nonequilibrium all-atom molecular dynamics simulation of the bubble cavitation and application to dissociate amyloid fibrils. Journal of Chemical Physics, 2016, 145, 174113.	3.0	30
32	Tau R3â€“R4 Domain Dimer of the Wild Type and Phosphorylated Ser356 Sequences. I. In Solution by Atomistic Simulations. Journal of Physical Chemistry B, 2020, 124, 2975-2983.	2.6	30
33	Multi-scale simulations of biological systems using the OPEP coarse-grained model. Biochemical and Biophysical Research Communications, 2018, 498, 296-304.	2.1	26
34	Molecular Mechanism of the Cell Membrane Pore Formation Induced by Bubble Stable Cavitation. Journal of Physical Chemistry B, 2019, 123, 71-78.	2.6	25
35	Rayleigh-Plesset equation of the bubble stable cavitation in water: A nonequilibrium all-atom molecular dynamics simulation study. Journal of Chemical Physics, 2018, 148, .	3.0	22
36	Lattice model for amyloid peptides: OPEP force field parametrization and applications to the nucleus size of Alzheimerâ€™s peptides. Journal of Chemical Physics, 2016, 144, 205103.	3.0	21

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37	Stability of AÎ²11â€“40 Trimers with Parallel and Antiparallel Î²-Sheet Organizations in a Membrane-Mimicking Environment by Replica Exchange Molecular Dynamics Simulation. Journal of Physical Chemistry B, 2020, 124, 617-626.	2.6	21
38	Combined Experimental and Simulation Studies Suggest a Revised Mode of Action of the Antiâ€Alzheimer Disease Drug NQâ€Trp. Chemistry - A European Journal, 2015, 21, 12657-12666.	3.3	20
39	Aggregation of disease-related peptides. Progress in Molecular Biology and Translational Science, 2020, 170, 435-460.	1.7	19
40	Impact of A2T and D23N Mutations on Tetrameric AÎ²42 Barrel within a Dipalmitoylphosphatidylcholine Lipid Bilayer Membrane by Replica Exchange Molecular Dynamics. Journal of Physical Chemistry B, 2020, 124, 1175-1182.	2.6	18
41	Infrared Laser-Induced Amyloid Fibril Dissociation: A Joint Experimental/Theoretical Study on the GNNQQNY Peptide. Journal of Physical Chemistry B, 2020, 124, 6266-6277.	2.6	16
42	Molecular mechanism of ultrasound interaction with a blood brain barrier model. Journal of Chemical Physics, 2020, 153, 045104.	3.0	15
43	Picosecond melting of peptide nanotubes using an infrared laser: a nonequilibrium simulation study. Physical Chemistry Chemical Physics, 2015, 17, 27275-27280.	2.8	14
44	Amyloid-Î²(29â€“42) Dimeric Conformations in Membranes Rich in Omega-3 and Omega-6 Polyunsaturated Fatty Acids. Journal of Physical Chemistry B, 2019, 123, 2687-2696.	2.6	14
45	Small Oligomers of AÎ²42 Protein in the Bulk Solution with AlphaFold2. ACS Chemical Neuroscience, 2022, 13, 711-713.	3.5	14
46	AÎ²41 Aggregates More Like AÎ²40 than Like AÎ²42: In Silico and in Vitro Study. Journal of Physical Chemistry B, 2016, 120, 7371-7379.	2.6	13
47	Effect of Cholesterol Molecules on AÎ²1-42 Wild-Type and Mutants Trimers. Molecules, 2022, 27, 1395.	3.8	13
48	Cholesterol Molecules Alter the Energy Landscape of Small AÎ²1â€“42 Oligomers. Journal of Physical Chemistry B, 2021, 125, 2299-2307.	2.6	12
49	Interaction mechanism between the focused ultrasound and lipid membrane at the molecular level. Journal of Chemical Physics, 2019, 150, 215101.	3.0	11
50	Molecular Dynamics Simulations of the Tau R3â€“R4 Domain Monomer in the Bulk Solution and at the Surface of a Lipid Bilayer Model. Journal of Physical Chemistry B, 2022, 126, 3431-3438.	2.6	11
51	Elastic moduli of normal and cancer cell membranes revealed by molecular dynamics simulations. Physical Chemistry Chemical Physics, 2022, 24, 6225-6237.	2.8	10
52	Molecular Dynamics Simulations of the Tau Amyloid Fibril Core Dimer at the Surface of a Lipid Bilayer Model: I. In Alzheimerâ€™s Disease. Journal of Physical Chemistry B, 2022, 126, 4849-4856.	2.6	10
53	Communication: Multiple atomistic force fields in a single enhanced sampling simulation. Journal of Chemical Physics, 2015, 143, 021101.	3.0	9
54	Picosecond infrared laser-induced all-atom nonequilibrium molecular dynamics simulation of dissociation of viruses. Physical Chemistry Chemical Physics, 2016, 18, 11951-11958.	2.8	9

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55	Breaking down cellulose fibrils with a mid-infrared laser. Cellulose, 2018, 25, 5553-5568.	4.9	8
56	Molecular Mechanism of Ultrasound-Induced Structural Defects in Liposomes: A Nonequilibrium Molecular Dynamics Simulation Study. Langmuir, 2021, 37, 7945-7954.	3.5	5
57	Nonequilibrium atomistic molecular dynamics simulation of tubular nanomotor propelled by bubble propulsion. Journal of Chemical Physics, 2019, 151, 024103.	3.0	4
58	Impact of the Rat R5G, Y10F, and H13R Mutations on Tetrameric AÎ²42 Î²-Barrel in a Lipid Bilayer Membrane Model. Journal of Physical Chemistry B, 2021, 125, 3105-3113.	2.6	3
59	Nonequilibrium molecular dynamics simulations of infrared laser-induced dissociation of a tetrameric AÎ²42 Î²-barrel in a neuronal membrane model. Chemistry and Physics of Lipids, 2021, 234, 105030.	3.2	2
60	Computer Simulations Aimed at Exploring Protein Aggregation and Dissociation. Methods in Molecular Biology, 2022, 2340, 175-196.	0.9	1
61	Dynamics of Amyloid Formation from Simplified Representation to Atomistic Simulations. Methods in Molecular Biology, 2022, 2405, 95-113.	0.9	1