Nadav Amdursky

List of Publications by Year
in descending order

82 papers	3,666 citations	136740 32 h-index	138251 58 g-index
93 all docs	93 docs citations	93 times ranked	4751 citing authors

#	Article	IF	Citations
1	Strong Piezoelectricity in Bioinspired Peptide Nanotubes. ACS Nano, 2010, 4, 610-614.	7.3	370
2	Molecular Rotors: What Lies Behind the High Sensitivity of the Thioflavin-T Fluorescent Marker. Accounts of Chemical Research, 2012, 45, 1548-1557.	7.6	319
3	Blue Luminescence Based on Quantum Confinement at Peptide Nanotubes. Nano Letters, 2009, 9, 3111-3115.	4.5	187
4	Electronic Transport via Proteins. Advanced Materials, 2014, 26, 7142-7161.	11.1	175
5	Elementary Building Blocks of Self-Assembled Peptide Nanotubes. Journal of the American Chemical Society, 2010, 132, 15632-15636.	6.6	174
6	Conductive Scaffolds for Cardiac and Neuronal Tissue Engineering: Governing Factors and Mechanisms. Advanced Functional Materials, 2020, 30, 1901369.	7.8	93
7	Circular Dichroism of Amino Acids: Following the Structural Formation of Phenylalanine. ChemPhysChem, 2015, 16, 2768-2774.	1.0	91
8	Structural Transition in Peptide Nanotubes. Biomacromolecules, 2011, 12, 1349-1354.	2.6	90
9	Quantum Confinement in Selfâ€Assembled Bioinspired Peptide Hydrogels. Advanced Materials, 2010, 22, 2311-2315.	11.1	86
10	Macroscale Biomolecular Electronics and Ionics. Advanced Materials, 2019, 31, e1802221.	11.1	80
11	Efficient Photosensitizing Capabilities and Ultrafast Carrier Dynamics of Doped Carbon Dots. Journal of the American Chemical Society, 2019, 141, 15413-15422.	6.6	74
12	Self-assembled bioinspired quantum dots: Optical properties. Applied Physics Letters, 2009, 94, .	1.5	72
13	Physics and engineering of peptide supramolecular nanostructures. Physical Chemistry Chemical Physics, 2012, 14, 6391.	1.3	67
14	Apoptosis induced by islet amyloid polypeptide soluble oligomers is neutralized by diabetes-associated specific antibodies. Scientific Reports, 2014, 4, 4267.	1.6	67
15	Longâ€Range Proton Conduction across Freeâ€Standing Serum Albumin Mats. Advanced Materials, 2016, 28, 2692-2698.	11.1	65
16	Temperature and Force Dependence of Nanoscale Electron Transport <i>via</i> the Cu Protein Azurin. ACS Nano, 2012, 6, 10816-10824.	7.3	63
17	Processable, Ion-Conducting Hydrogel for Flexible Electronic Devices with Self-Healing Capability. Macromolecules, 2020, 53, 11130-11141.	2.2	63
18	Bioinspired peptide nanotubes as supercapacitor electrodes. Journal of Materials Science, 2010, 45, 6374-6378.	1.7	58

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19	Solid-state electron transport via cytochrome <i>c</i> depends on electronic coupling to electrodes and across the protein. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 5556-5561.	3.3	55
20	Electron Transfer across Helical Peptides. ChemPlusChem, 2015, 80, 1075-1095.	1.3	55
21	Modeling the Nonradiative Decay Rate of Electronically Excited Thioflavin T. Journal of Physical Chemistry A, 2011, 115, 8479-8487.	1.1	53
22	Fabrication of Hemin-Doped Serum Albumin-Based Fibrous Scaffolds for Neural Tissue Engineering Applications. ACS Applied Materials & Interfaces, 2018, 10, 5305-5317.	4.0	53
23	Marked changes in electron transport through the blue copper protein azurin in the solid state upon deuteration. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 507-512.	3.3	51
24	Sequence-Dependent Self-Assembly and Structural Diversity of Islet Amyloid Polypeptide-Derived Î²-Sheet Fibrils. ACS Nano, 2017, 11, 8579-8589.	7.3	48
25	Exploring fast proton transfer events associated with lateral proton diffusion on the surface of membranes. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 2443-2451.	3.3	45
26	Redox activity distinguishes solid-state electron transport from solution-based electron transfer in a natural and artificial protein: cytochrome C and hemin-doped human serum albumin. Physical Chemistry Chemical Physics, 2013, 15, 17142.	1.3	44
27	Use of Photoacids and Photobases To Control Dynamic Self-Assembly of Gold Nanoparticles in Aqueous and Nonaqueous Solutions. Nano Letters, 2019, 19, 3804-3810.	4.5	42
28	Elastic serum-albumin based hydrogels: mechanism of formation and application in cardiac tissue engineering. Journal of Materials Chemistry B, 2018, 6, 5604-5612.	2.9	40
29	Temperature Dependence of the Fluorescence Properties of Thioflavin-T in Propanol, a Glass-Forming Liquid. Journal of Physical Chemistry A, 2011, 115, 2540-2548.	1.1	39
30	Electron Transfer Proteins as Electronic Conductors: Significance of the Metal and Its Binding Site in the Blue Cu Protein, Azurin. Advanced Science, 2015, 2, 1400026.	5.6	39
31	Ferroelectric and Related Phenomena in Biological and Bioinspired Nanostructures. Ferroelectrics, 2010, 399, 107-117.	0.3	36
32	Auramine-O as a Fluorescence Marker for the Detection of Amyloid Fibrils. Journal of Physical Chemistry B, 2012, 116, 13389-13395.	1.2	35
33	Electron Transport via Cytochrome C on Siâ€“H Surfaces: Roles of Fe and Heme. Journal of the American Chemical Society, 2013, 135, 6300-6306.	6.6	35
34	Facet-Dependent Interactions of Islet Amyloid Polypeptide with Gold Nanoparticles: Implications for Fibril Formation and Peptide-Induced Lipid Membrane Disruption. Chemistry of Materials, 2017, 29, 1550-1560.	3.2	35
35	Plasmonic Chirality Imprinting on Nucleobaseâ€Displaying Supramolecular Nanohelices by Metalâ€“Nucleobase Recognition. Angewandte Chemie - International Edition, 2017, 56, 2361-2365.	7.2	32
36	Doping Human Serum Albumin with Retinoate Markedly Enhances Electron Transport across the Protein. Journal of the American Chemical Society, 2012, 134, 18221-18224.	6.6	31

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37	Excited-State Proton Transfer of Photoacids Adsorbed on Biomaterials. Journal of Physical Chemistry B, 2014, 118, 13859-13869.	1.2	31
38	Extracellular Stiffness Modulates the Expression of Functional Proteins and Growth Factors in Endothelial Cells. Advanced Healthcare Materials, 2015, 4, 2056-2063.	3.9	31
39	Probing the Inner Cavities of Hydrogels by Proton Diffusion. Journal of Physical Chemistry C, 2009, 113, 19500-19505.	1.5	29
40	Photoacids as a new fluorescence tool for tracking structural transitions of proteins: following the concentration-induced transition of bovine serum albumin. Physical Chemistry Chemical Physics, 2015, 17, 32023-32032.	1.3	29
41	A Proteinâ€Based Freeâ€Standing Protonâ€Conducting Transparent Elastomer for Largeâ€Scale Sensing Applications. Advanced Materials, 2021, 33, e2101208.	11.1	29
42	Pressure Effect on the Nonradiative Process of Thioflavin-T. Journal of Physical Chemistry A, 2011, 115, 6481-6487.	1.1	28
43	Bioinspired peptide nanotubes: Deposition technology and physical properties. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2010, 169, 62-66.	1.7	27
44	Enhanced solid-state electron transport via tryptophan containing peptide networks. Physical Chemistry Chemical Physics, 2013, 15, 13479.	1.3	27
45	A structural and physical study of solâ€"gel methacrylateâ€"silica hybrids: intermolecular spacing dictates the mechanical properties. Physical Chemistry Chemical Physics, 2015, 17, 29124-29133.	1.3	27
46	Exploring long-range proton conduction, the conduction mechanism and inner hydration state of protein biopolymers. Chemical Science, 2020, 11, 3547-3556.	3.7	27
47	Electron Hopping Across Heminâ€Doped Serum Albumin Mats on Centimeterâ€Length Scales. Advanced Materials, 2017, 29, 1700810.	11.1	26
48	Bioinspired Amyloid Nanodots with Visible Fluorescence. Advanced Optical Materials, 2019, 7, 1801400.	3.6	26
49	Coherence-assisted electron diffusion across the multi-heme protein-based bacterial nanowire. Nanotechnology, 2020, 31, 314002.	1.3	24
50	Study of Thioflavin-T Immobilized in Porous Silicon and the Effect of Different Organic Vapors on the Fluorescence Lifetime. Langmuir, 2011, 27, 7587-7594.	1.6	23
51	Formation of low-dimensional crystalline nucleus region during insulin amyloidogenesis process. Biochemical and Biophysical Research Communications, 2012, 419, 232-237.	1.0	23
52	The porphyrin ring rather than the metal ion dictates long-range electron transport across proteins suggesting coherence-assisted mechanism. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 32260-32266.	3.3	23
53	Strong Thermoâ€Induced Single And Twoâ€Photon Green Luminescence In Selfâ€Organized Peptide Microtubes. Small, 2015, 11, 1156-1160.	5.2	21
54	Temperature and Viscosity Dependence of the Nonradiative Decay Rates of Auramine-O and Thioflavin-T in Glass-Forming Solvents. Journal of Physical Chemistry A, 2012, 116, 12056-12064.	1.1	18

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55	Radiationless Transitions of G4 Wires and dGMP. Journal of Physical Chemistry C, 2008, 112, 12249-12258.	1.5	17
56	Exploring the binding sites and proton diffusion on insulin amyloid fibril surfaces by naphthol-based photoacid fluorescence and molecular simulations. Scientific Reports, 2017, 7, 6245.	1.6	17
57	Noncovalent Interactions with Proteins Modify the Physicochemical Properties of a Molecular Switch. ChemPlusChem, 2016, 81, 44-48.	1.3	14
58	Exploring the inner environment of protein hydrogels with fluorescence spectroscopy towards understanding their drug delivery capabilities. Journal of Materials Chemistry B, 2020, 8, 6964-6974.	2.9	14
59	Adjustable Photoluminescence of Peptide Nanotubes Coatings. Journal of Nanoscience and Nanotechnology, 2011, 11, 9282-9286.	0.9	13
60	Selfâ€Propulsion of Droplets via Lightâ€Stimuli Rapid Control of Their Surface Tension. Advanced Materials Interfaces, 2021, 8, 2100751.	1.9	13
61	Bioorganic nanodots for non-volatile memory devices. APL Materials, 2013, 1, .	2.2	12
62	Probing amylin fibrillation at an early stage via a tetracysteine-recognising fluorophore. Talanta, 2017, 173, 44-50.	2.9	12
63	The role of the proteinâ€"water interface in dictating proton conduction across protein-based biopolymers. Materials Advances, 2021, 2, 1739-1746.	2.6	12
64	Optical transition induced by molecular transformation in peptide nanostructures. Applied Physics Letters, 2012, 100, .	1.5	11
65	Plasmonic Chirality Imprinting on Nucleobaseâ€Displaying Supramolecular Nanohelices by Metalâ€"Nucleobase Recognition. Angewandte Chemie, 2017, 129, 2401-2405.	1.6	10
66	Long-range light-modulated charge transport across the molecular heterostructure doped protein biopolymers. Chemical Science, 2021, 12, 8731-8739.	3.7	10
67	Lightâ€Modulated Cationic and Anionic Transport across Protein Biopolymers**. Angewandte Chemie - International Edition, 2021, 60, 24676-24685.	7.2	10
68	Ferroelectric Properties and Phase Transition in Dipeptide Nanotubes. Ferroelectrics, 2012, 430, 84-91.	0.3	9
69	Enhanced Proton Conductivity across Protein Biopolymers Mediated by Doped Carbon Nanoparticles. Small, 2020, 16, e2005526.	5.2	9
70	Tailoring Quantum Dot Sizes for Optimal Photoinduced Catalytic Activation of Nitrogenase. ChemSusChem, 2021, 14, 5410-5416.	3.6	9
71	Time-resolved emission of retinoic acid. Journal of Photochemistry and Photobiology A: Chemistry, 2013, 258, 30-40.	2.0	8
72	Electron-induced adhesion and patterning of gold nanoparticles. Applied Physics Letters, 2010, 96, 093106.	1.5	7

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73	Nanoseconds-resolved transient FTIR spectroscopy as a tool for studying the photocatalytic behavior of various types of bismuth vanadate. Applied Catalysis B: Environmental, 2020, 278, 119351.	10.8	7
74	Bioinspired Peptide Nanotubes: Ferroelectricity at Nanoscale. Integrated Ferroelectrics, 2012, 134, 48-49.	0.3	5
75	Acid effect on excited Auramine-O molecular rotor relaxations in solution and adsorbed on insulin fibrils. Methods and Applications in Fluorescence, 2015, 3, 034005.	1.1	5
76	Tracking Subtle Membrane Disruptions with a Tethered Photoacid. ChemPhotoChem, 2020, 4, 592-600.	1.5	4
77	Casein proteins as building-blocks for making ion-conductive bioplastics. Journal of Materials Chemistry A, 0, , .	5.2	3
78	Bioferroelectricity and biopiezelectricity. Physics of the Solid State, 2012, 54, 1263-1268.	0.2	2
79	Abstract 342: Serum Albumin Hydrogels Alter Excitation-Contraction Coupling in Neonatal Rat Myocytes and Human Induced Pluripotent Stem Cell Derived Cardiomyocytes. Circulation Research, 2017, 121, .	2.0	2
80	Bioderived electronics: utilizing proteins for making large scale assemblies exhibiting superior electronic and optoelectronic properties. , 2021, , .		0
81	Lightâ€modulated cationic and anionic transport across protein biopolymers. Angewandte Chemie, 2021, 133, 24881.	1.6	0
82	Proton Conductivity: Enhanced Proton Conductivity across Protein Biopolymers Mediated by Doped Carbon Nanoparticles (Small 50/2020). Small, 2020, 16, 2070272.	5.2	0