

Electron transfer in peptides

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Citation Report

#	ARTICLE	IF	CITATIONS
2	Electronic coupling through natural amino acids. <i>Journal of Chemical Physics</i> , 2015, 143, 225102.	1.2	15
4	Electron Transfer across Helical Peptides. <i>ChemPlusChem</i> , 2015, 80, 1075-1095.	1.3	55
6	Charge Tunneling along Short Oligoglycine Chains. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 14743-14747.	7.2	36
7	Modulation of ultrafast photoinduced electron transfer in H-bonding environment: PET from aniline to coumarin 153 in the presence of an inert co-solvent cyclohexane. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 32556-32563.	1.3	7
8	Methylene blue not ferrocene: Optimal reporters for electrochemical detection of protease activity. <i>Biosensors and Bioelectronics</i> , 2016, 84, 82-88.	5.3	45
9	Turning electron transfer "on-off"™ in peptides through side-bridge gating. <i>Electrochimica Acta</i> , 2016, 209, 65-74.	2.6	10
10	The Strong Influence of Structure Polymorphism on the Conductivity of Peptide Fibrils. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 9988-9992.	7.2	44
11	The Strong Influence of Structure Polymorphism on the Conductivity of Peptide Fibrils. <i>Angewandte Chemie</i> , 2016, 128, 10142-10146.	1.6	9
12	Improvement of catalytic performance of lignin peroxidase for the enhanced degradation of lignocellulose biomass based on the imbedded electron-relay in long-range electron transfer route. <i>Biotechnology for Biofuels</i> , 2016, 9, 247.	6.2	22
13	Photoinduced Electron Transfer and Hole Migration in Nanosized Helical Aromatic Oligoamide Foldamers. <i>Journal of the American Chemical Society</i> , 2016, 138, 13568-13578.	6.6	71
14	Tuning electronic transport via hepta-alanine peptides junction by tryptophan doping. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 10785-10790.	3.3	77
15	Dipole Moment Effect on the Electrochemical Desorption of Self-Assembled Monolayers of 3 ₁₀ -Helicogenic Peptides on Gold. <i>ChemElectroChem</i> , 2016, 3, 2063-2070.	1.7	10
16	Computational Studies on Structural, Excitation, and Charge-Transfer Properties of Ureidopeptidomimetics. <i>Journal of Physical Chemistry B</i> , 2016, 120, 6469-6478.	1.2	9
17	Molecular conductance of double-stranded DNA evaluated by electrochemical capacitance spectroscopy. <i>Nanoscale</i> , 2016, 8, 8931-8938.	2.8	16
18	Distance-Dependent Excited-State Electron Transfer from Tryptophan to Gold Nanoparticles through Polyproline Helices. <i>Journal of Physical Chemistry C</i> , 2017, 121, 4882-4890.	1.5	6
19	Mechanically Controlled Electron Transfer in a Single-Polypeptide Transistor. <i>Scientific Reports</i> , 2017, 7, 39792.	1.6	9
20	Introducing the mean field approximation to CDFT/MMpol method: Statistically converged equilibrium and nonequilibrium free energy calculation for electron transfer reactions in condensed phases. <i>Journal of Chemical Physics</i> , 2017, 146, 154101.	1.2	9
21	Hydrogen-Bond-Assisted, Concentration-Dependent Molecular Dimerization of Ferrocenyl Hydantoins. <i>Organometallics</i> , 2017, 36, 2190-2197.	1.1	6

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22	Elucidating the H-Bonding Environment of Coumarin 102 in a Phenol-Cyclohexane Mixture by Molecular Dynamics Simulation: Implications for H-Bond-Guided Photoinduced Electron Transfer. <i>Journal of Physical Chemistry A</i> , 2017, 121, 616-622.	1.1	3
23	Oligoprolines as Molecular Entities for Controlling Distance in Biological and Material Sciences. <i>Accounts of Chemical Research</i> , 2017, 50, 2420-2428.	7.6	49
24	Multi-dimensional charge transport in supramolecular helical foldamer assemblies. <i>Chemical Science</i> , 2017, 8, 7251-7257.	3.7	38
25	Observation of dielectric universalities in albumin, cytochrome C and <i>Shewanella oneidensis</i> MR-1 extracellular matrix. <i>Scientific Reports</i> , 2017, 7, 15731.	1.6	8
26	Genetically encoded conductive protein nanofibers secreted by engineered cells. <i>RSC Advances</i> , 2017, 7, 32543-32551.	1.7	36
27	Role of Core Electrons in Quantum Dynamics Using TDDFT. <i>Journal of Chemical Theory and Computation</i> , 2017, 13, 77-85.	2.3	15
28	Detecting Electron Transport of Amino Acids by Using Conductance Measurement. <i>Sensors</i> , 2017, 17, 811.	2.1	14
29	Amide Neighbouring-Group Effects in Peptides: Phenylalanine as Relay Amino Acid in Long-Distance Electron Transfer. <i>ChemBioChem</i> , 2018, 19, 922-926.	1.3	29
30	Electron Transport Through Homopeptides: Are They Really Good Conductors?. <i>ACS Omega</i> , 2018, 3, 3778-3785.	1.6	26
31	Microbial nanowires - Electron transport and the role of synthetic analogues. <i>Acta Biomaterialia</i> , 2018, 69, 1-30.	4.1	51
32	Study of electron transfer process in aqueous methanol system by using tryptophan based short peptide - Amino acid pairs. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2018, 356, 556-564.	2.0	2
33	Electronic structure of dipeptides in the gas-phase and as an adsorbed monolayer. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 6860-6867.	1.3	9
34	Mechanistic insight into protein supported biosorption complemented by kinetic and thermodynamics perspectives. <i>Advances in Colloid and Interface Science</i> , 2018, 261, 28-40.	7.0	20
35	Going the Distance: Long-Range Conductivity in Protein and Peptide Bioelectronic Materials. <i>Journal of Physical Chemistry B</i> , 2018, 122, 10403-10423.	1.2	116
36	Peptides as Bio-Inspired Electronic Materials: An Electrochemical and First-Principles Perspective. <i>Accounts of Chemical Research</i> , 2018, 51, 2237-2246.	7.6	28
37	Nanoscale defolding influence of polypeptides in the charge-transfer process through an organic-inorganic nanohybrid system. <i>Nanoscale</i> , 2018, 10, 11143-11149.	2.8	0
38	Achieving biopolymer synergy in systems chemistry. <i>Chemical Society Reviews</i> , 2018, 47, 5444-5456.	18.7	43
39	Tailor-Made Functional Peptide Self-Assembling Nanostructures. <i>Advanced Materials</i> , 2018, 30, e1707083.	11.1	104

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40	Impedance spectroscopy of single bacterial nanofilament reveals water-mediated charge transfer. PLoS ONE, 2018, 13, e0191289.	1.1	8
41	Impact of N-(2-aminoethyl) Glycine Unit on Watson-Crick Base Pairs. Zeitschrift Fur Physikalische Chemie, 2019, 233, 449-469.	1.4	1
42	Self-Assembled Peptide Nanotube Films with High Proton Conductivity. Journal of Physical Chemistry B, 2019, 123, 9882-9888.	1.2	10
43	Supramolecular Host-Guest Inclusion to Regulate Long-Range Electron Transfer at Highly Oriented Molecular Interfaces. Journal of Physical Chemistry C, 2019, 123, 26315-26323.	1.5	3
44	Orientation of Oligopeptides in Self-Assembled Monolayers Inferred from Infrared Reflection-Absorption Spectroscopy. Journal of Physical Chemistry B, 2019, 123, 860-868.	1.2	5
45	Stimuli-responsive poly(phenyl acetylene) microparticles with tunable chirality. European Polymer Journal, 2019, 118, 275-279.	2.6	12
46	Doping hepta-alanine with tryptophan: A theoretical study of its effect on the electrical conductance of peptide-based single-molecule junctions. Journal of Chemical Physics, 2019, 150, 174705.	1.2	10
47	Building Supramolecular DNA-Inspired Nanowires on Gold Surfaces: From 2D to 3D. Angewandte Chemie - International Edition, 2019, 58, 7308-7312.	7.2	10
48	Chirality and its role in the electronic properties of peptides: spin filtering and spin polarization. Current Opinion in Electrochemistry, 2019, 14, 138-142.	2.5	7
49	Building Supramolecular DNA-Inspired Nanowires on Gold Surfaces: From 2D to 3D. Angewandte Chemie, 2019, 131, 7386-7390.	1.6	2
50	Superexchange in the fast lane - intramolecular electron transfer in a molecular triad occurs by conformationally gated superexchange. Chemical Communications, 2019, 55, 5251-5254.	2.2	3
51	Backbone-Constrained Peptides: Temperature and Secondary Structure Affect Solid-State Electron Transport. Journal of Physical Chemistry B, 2019, 123, 10951-10958.	1.2	5
52	Tunable oligo-histidine self-assembled monolayer junction and charge transport by a pH modulated assembly. Physical Chemistry Chemical Physics, 2019, 21, 26058-26065.	1.3	7
53	Dynamic relaying properties of a β -turn peptide in long-range electron transfer. Journal of Computational Chemistry, 2019, 40, 988-996.	1.5	3
54	Electrochemical Sensing of Ovalbumin Based on the Interaction between Lysozyme Origin/Tyrosine-Rich Peptides Modified on Magnetic Beads and Oligothreonine/Ovalbumin-Origin Peptide. Electroanalysis, 2020, 32, 207-216.	1.5	3
55	Mechanically modulated spin-orbit couplings in oligopeptides. Physical Review B, 2020, 102, .	1.1	14
56	Unravelling Structural Dynamics within a Photoswitchable Single Peptide: A Step Towards Multimodal Bioinspired Nanodevices. Angewandte Chemie, 2020, 132, 22743-22751.	1.6	3
57	Electronic transport through single polyalanine molecules. Physical Review B, 2020, 102, .	1.1	4

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58	Unravelling Structural Dynamics within a Photoswitchable Single Peptide: A Step Towards Multimodal Bioinspired Nanodevices. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 22554-22562.	7.2	17
59	Formation of n π^* interaction facilitating dissociative electron transfer in isolated tyrosine-containing molecular peptide radical cations. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 21393-21402.	1.3	8
60	Directed Electron Transfer in Flavin Peptides with Oligoproline α -Type Helical Conformation as Models for Flavin α -Functional Proteins. <i>ChemistryOpen</i> , 2020, 9, 1264-1269.	0.9	2
61	Spin-orbit interaction and spin selectivity for tunneling electron transfer in DNA. <i>Physical Review B</i> , 2020, 101, .	1.1	18
62	Redox Activity of Ce(IV)-Substituted Polyoxometalates toward Amino Acids and Peptides. <i>Inorganic Chemistry</i> , 2020, 59, 10569-10577.	1.9	19
63	Peptide-based electrochemical biosensor for matrix metalloproteinase-14 and protein-overexpressing cancer cells based on analyte-induced cleavage of peptide. <i>Microchemical Journal</i> , 2020, 157, 105103.	2.3	17
64	First principle approach to elucidate transport properties through l-glutamic acid-based molecular devices using symmetrical electrodes. <i>Journal of Molecular Modeling</i> , 2020, 26, 74.	0.8	10
65	Printed-Circuit-Board-Based Two-Electrode System for Electronic Characterization of Proteins. <i>ACS Omega</i> , 2020, 5, 7802-7808.	1.6	5
66	Insights into the Distance Dependence of Electron Transfer through Conformationally Constrained Peptides. <i>ChemElectroChem</i> , 2020, 7, 1225-1237.	1.7	8
67	Prebiotic Peptides: Molecular Hubs in the Origin of Life. <i>Chemical Reviews</i> , 2020, 120, 4707-4765.	23.0	189
68	Filler matrix interfaces of inorganic/biopolymer composites and their applications. , 2020, , 95-112.		6
69	Electronics of peptide- and protein-based biomaterials. <i>Advances in Colloid and Interface Science</i> , 2021, 287, 102319.	7.0	21
70	Nanostructured functional peptide films and their application in C-reactive protein immunosensors. <i>Bioelectrochemistry</i> , 2021, 138, 107692.	2.4	8
71	Conformation-dependent charge transport through short peptides. <i>Nanoscale</i> , 2021, 13, 3002-3009.	2.8	18
72	Expanding the reactivity of inorganic clusters towards proteins: the interplay between the redox and hydrolytic activity of Ce(IV)-substituted polyoxometalates as artificial proteases. <i>Chemical Science</i> , 2021, 12, 10655-10663.	3.7	11
73	Flat, C^{H} - β -Didehydroalanine Foldamers with Ferrocene Pendants: Assessing the Role of β -Peptide Dipolar Moments. <i>ChemPlusChem</i> , 2021, 86, 723-730.	1.3	7
74	Electron Transfer in Films of Atomically Precise Gold Nanoclusters. <i>Chemistry of Materials</i> , 2021, 33, 4177-4187.	3.2	10
75	Implications of the simple chemical structure of the odorant molecules interacting with the olfactory receptor 1A1. <i>Genomics and Informatics</i> , 2021, 19, e18.	0.4	2

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76	A single atom change turns insulating saturated wires into molecular conductors. <i>Nature Communications</i> , 2021, 12, 3432.	5.8	16
77	Ultralong π -Conjugated Bis(terpyridine)metal Polymer Wires Covalently Bound to a Carbon Electrode: Fast Redox Conduction and Redox Diode Characteristics. <i>Molecules</i> , 2021, 26, 4267.	1.7	4
78	Flat, Ferrocenyl π -Conjugated Peptides: A Combined Electrochemical and Spectroscopic Study. <i>ChemElectroChem</i> , 2021, 8, 2693-2700.	1.7	3
79	Electrochemically induced electron transfer through molecular bridges. <i>Current Opinion in Electrochemistry</i> , 2021, 28, 100700.	2.5	2
80	Label-free detection of target proteins using peptide molecular wires as conductive supports. <i>Sensors and Actuators B: Chemical</i> , 2021, 345, 130416.	4.0	2
81	Features of the crystallization of multicomponent solutions: a dipeptide, its salt and potassium carbonate. <i>CrystEngComm</i> , 2021, 23, 6427-6441.	1.3	1
82	Field Effect and Applications. <i>SpringerBriefs in Applied Sciences and Technology</i> , 2018, , 51-81.	0.2	0
83	Molecular electronics behaviour of l-aspartic acid using symmetrical metal electrodes. <i>Journal of Molecular Modeling</i> , 2021, 27, 335.	0.8	9
84	Effects of Peptide-Functionalized Surfaces on the Electrochemical Hydrogen Evolution Reaction. <i>Journal of Electrochemical Energy Conversion and Storage</i> , 2020, 17, .	1.1	3
85	Effect of macromolecular crowding on protein oxidation: Consequences on the rate, extent and oxidation pathways. <i>Redox Biology</i> , 2021, 48, 102202.	3.9	14
86	Electrochemical One-Step Immunoassay Based on Switching Peptides and Pyrolyzed Carbon Electrodes. <i>ACS Sensors</i> , 2022, 7, 215-224.	4.0	8
87	Conformational Analysis and Through π -Chain Charge Propagation in Ferrocenyl π -Conjugated Homopeptides of 2,3 π -Diaminopropionic acid (Dap). <i>European Journal of Inorganic Chemistry</i> , 0, , .	1.0	2
88	Molecular electronics sensors on a scalable semiconductor chip: A platform for single-molecule measurement of binding kinetics and enzyme activity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	3.3	34
89	Molecular Geometry Dependent Electronic Coupling and Reorganization Energy for Electron Transfer between Dye Molecule Adsorbed on TiO ₂ Electrode and Co Complex in Electrolyte Solutions. <i>Journal of Physical Chemistry C</i> , 0, , .	1.5	2
91	L-Glutamic acid (i.e. L-amino acid) based molecular junction as rectifiers. <i>Materials Today: Proceedings</i> , 2022, 67, 31-35.	0.9	5
92	$\hat{\pi}$ -Helix in Cystathionine $\hat{\pi}$ -Synthase Enzyme Acts as an Electron Reservoir. <i>Journal of Physical Chemistry B</i> , 0, , .	1.2	1
93	Food as a countermeasure to SARS-COV-2. <i>Science Technologies Innovation</i> , 2022, , 36-46.	0.1	0
94	Quantum rate efficiency of the charge transfer mediated by quantum capacitive states. <i>Electrochimica Acta</i> , 2022, 434, 141194.	2.6	4

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95	Helical versus Flat Bis-Ferrocenyl End-Capped Peptides: The Influence of the Molecular Skeleton on Redox Properties. <i>Molecules</i> , 2022, 27, 6128.	1.7	2
96	L-Aspartic acid based molecular rectifier using dissimilar electrodes. <i>Materials Today: Proceedings</i> , 2022, 71, 408-413.	0.9	4
97	Electron transport <i>via</i> tyrosine-doped oligo-alanine peptide junctions: role of charges and hydrogen bonding. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 28878-28885.	1.3	1
98	Non-Conventional Peptide Self-Assembly into a Conductive Supramolecular Rope. <i>Nanomaterials</i> , 2023, 13, 333.	1.9	1
99	Photoinduced Processes in Lysine-Tryptophan-Lysine Tripeptide with L and D Tryptophan. <i>International Journal of Molecular Sciences</i> , 2023, 24, 3331.	1.8	0
100	Computational evaluation of transport parameters and logic circuit designing of L-Lysine amino acid stringed to Au, Ag, Cu, Pt, and Pd electrodes. <i>Journal of Molecular Modeling</i> , 2023, 29, .	0.8	2
101	L-Histidine-based computation devices. <i>Pramana - Journal of Physics</i> , 2023, 97, .	0.6	1