

H Peter Lu

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8151776/publications.pdf>

Version: 2024-02-01

105
papers

3,606
citations

126907

33
h-index

144013

57
g-index

110
all docs

110
docs citations

110
times ranked

3763
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Probing Functional Conformation-State Fluctuation Dynamics in Recognition Binding between Calmodulin and Target Peptide. <i>Journal of Chemical Physics</i> , 2022, 156, 055102. | 3.0 | 1 |
| 2 | Unraveling the mechanism of tau protein aggregation in presence of zinc ion: The earliest step of tau aggregation. <i>Chemical Physics Impact</i> , 2022, 4, 100060. | 3.5 | 2 |
| 3 | Probing Proteinâ€™DNA Conformational Dynamics in DNA Damage Recognition: Xeroderma Pigmentosum Group A Stabilizes the Damaged DNA-RPA14 Complex by Controlling Conformational Fluctuation Dynamics. <i>Journal of Physical Chemistry B</i> , 2022, 126, 997-1003. | 2.6 | 0 |
| 4 | Ultra-sensitive lock-in amplifier coupled oscillatory magnetic tweezers for piconewton force manipulation applications. <i>Journal of Applied Physics</i> , 2021, 130, 014504. | 2.5 | 0 |
| 5 | Effect of Bis-diazirine-Mediated Photo-Crosslinking on Polyvinylcarbazole and Solution-Processed Polymer LEDs. <i>ACS Applied Electronic Materials</i> , 2021, 3, 3365-3371. | 4.3 | 9 |
| 6 | Conformational States and Fluctuations in Endothelial Nitric Oxide Synthase under Calmodulin Regulation. <i>Biophysical Journal</i> , 2021, 120, 5196-5206. | 0.5 | 1 |
| 7 | Compressive-force induced activation of apo-calmodulin in protein signalling. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 1092-1096. | 2.8 | 4 |
| 8 | Diazirine-based photo-crosslinkers for defect free fabrication of solution processed organic light-emitting diodes. <i>Journal of Materials Chemistry C</i> , 2020, 8, 11988-11996. | 5.5 | 15 |
| 9 | Spontaneous Rupture and Entanglement of Human Neuronal Tau Protein Induced by Piconewton Compressive Force. <i>ACS Chemical Neuroscience</i> , 2019, 10, 4061-4067. | 3.5 | 6 |
| 10 | Probing Activated and Non-Activated Single Calmodulin Molecules under a Piconewton Compressive Force. <i>Biochemistry</i> , 2018, 57, 1945-1948. | 2.5 | 4 |
| 11 | Revealing dynamically-organized receptor ion channel clusters in live cells by a correlated electric recording and super-resolution single-molecule imaging approach. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 8088-8098. | 2.8 | 7 |
| 12 | Revealing Abrupt and Spontaneous Ruptures of Protein Native Structure under picoNewton Compressive Force Manipulation. <i>ACS Nano</i> , 2018, 12, 2448-2454. | 14.6 | 9 |
| 13 | Ratiometric Near-Infrared Fluorescent Probes Based On Through-Bond Energy Transfer and Î€-Conjugation Modulation between Tetraphenylethene and Hemicyanine Moieties for Sensitive Detection of pH Changes in Live Cells. <i>Bioconjugate Chemistry</i> , 2018, 29, 1406-1418. | 3.6 | 61 |
| 14 | Probing Dynamic Heterogeneity in Aggregated Ion Channels in Live Cells. <i>Journal of Physical Chemistry C</i> , 2018, 122, 13716-13723. | 3.1 | 1 |
| 15 | Raman spectroscopy probing of redox states and mechanism of flavin coenzyme. <i>Journal of Raman Spectroscopy</i> , 2018, 49, 1311-1322. | 2.5 | 9 |
| 16 | Exploration of Multistate Conformational Dynamics upon Ligand Binding of a Monomeric Enzyme Involved in Pyrophosphoryl Transfer. <i>Journal of Physical Chemistry B</i> , 2018, 122, 1885-1897. | 2.6 | 3 |
| 17 | Oscillating Piconewton Force Manipulation on Single-Molecule Enzymatic Conformational and Reaction Dynamics. <i>Journal of Physical Chemistry B</i> , 2018, 122, 12312-12321. | 2.6 | 1 |
| 18 | Raman Spectroscopic Analysis of Signaling Moleculesâ€™Dopamine Receptors Interactions in Living Cells. <i>ACS Omega</i> , 2018, 3, 14849-14857. | 3.5 | 8 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 19 | Single-Molecule Spectroscopy Study of Crowding-Induced Protein Spontaneous Denature and Crowding-Perturbed Unfolding/Folding Conformational Fluctuation Dynamics. <i>Journal of Physical Chemistry B</i> , 2018, 122, 6724-6732. | 2.6 | 8 |
| 20 | Mode-Selective Raman Imaging of Dopamine/Human Dopamine Transporter Interaction in Live Cells. <i>ACS Chemical Neuroscience</i> , 2018, 9, 3117-3127. | 3.5 | 8 |
| 21 | Molecular mechanism of multispecific recognition of Calmodulin through conformational changes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E3927-E3934. | 7.1 | 37 |
| 22 | Revealing Multiple Pathways in T4 Lysozyme Substep Conformational Motions by Single-Molecule Enzymology and Modeling. <i>Journal of Physical Chemistry B</i> , 2017, 121, 5017-5024. | 2.6 | 8 |
| 23 | Probing single-molecule electron/hole transfer dynamics at a molecule/NiO semiconductor nanocrystalline interface. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 17216-17223. | 2.8 | 4 |
| 24 | Tracking the Energy Flow on Nanoscale <i>via</i> Sample-Transmitted Excitation Photoluminescence Spectroscopy. <i>ACS Nano</i> , 2017, 11, 4191-4197. | 14.6 | 15 |
| 25 | Raman Spectroscopic Signature Markers of Dopamine/Human Dopamine Transporter Interaction in Living Cells. <i>ACS Chemical Neuroscience</i> , 2017, 8, 1510-1518. | 3.5 | 27 |
| 26 | Manipulating motions of targeted single cells in solution by an integrated double-ring magnetic tweezers imaging microscope. <i>Review of Scientific Instruments</i> , 2017, 88, 073703. | 1.3 | 4 |
| 27 | Tunneling Electron Induced Charging and Light Emission of Single Porphyrin Molecules. <i>Journal of Physical Chemistry C</i> , 2016, 120, 21099-21103. | 3.1 | 13 |
| 28 | Probing conformational dynamics of an enzymatic active site by an in situ single fluorogenic probe under piconewton force manipulation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 15006-15011. | 7.1 | 20 |
| 29 | Electronic Coupling/Decoupling-Dependent Single-Molecule Interfacial Electron Transfer Dynamics in Electrostatically Attached Porphyrin on TiO ₂ Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2016, 120, 12313-12324. | 3.1 | 3 |
| 30 | Inhomogeneous and Complex Interfacial Electron-Transfer Dynamics: A Single-Molecule Perspective. <i>ACS Energy Letters</i> , 2016, 1, 773-791. | 17.4 | 10 |
| 31 | Single-Molecule Patch-Clamp FRET Anisotropy Microscopy Studies of NMDA Receptor Ion Channel Activation and Deactivation under Agonist Ligand Binding in Living Cells. <i>Journal of the American Chemical Society</i> , 2016, 138, 8789-8801. | 13.7 | 18 |
| 32 | Simultaneous Spectroscopic and Topographic Imaging of Single-Molecule Interfacial Electron-Transfer Reactivity and Local Nanoscale Environment. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 2221-2227. | 4.6 | 9 |
| 33 | Raman mode-selective spectroscopic imaging of coenzyme and enzyme redox states. <i>Journal of Raman Spectroscopy</i> , 2016, 47, 801-807. | 2.5 | 9 |
| 34 | Probing Electric Field Effect on Covalent Interactions at a Molecule/Semiconductor Interface. <i>Journal of the American Chemical Society</i> , 2016, 138, 1536-1542. | 13.7 | 20 |
| 35 | Probing Single-Molecule Ion Channel Conformational Dynamics in Living Cells. <i>Biophysical Journal</i> , 2016, 110, 6a. | 0.5 | 1 |
| 36 | Probing Driving Force and Electron Accepting State Density Dependent Interfacial Electron Transfer Dynamics: Suppressed Fluorescence Blinking of Single Molecules on Indium Tin Oxide Semiconductor. <i>Journal of Physical Chemistry B</i> , 2016, 120, 1685-1697. | 2.6 | 9 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 37 | Protein-fluctuation-induced water-pore formation in ion channel voltage-sensor translocation across a lipid bilayer membrane. <i>Physical Review E</i> , 2015, 92, 052719. | 2.1 | 3 |
| 38 | Interrogating the activities of conformational deformed enzyme by single-molecule fluorescence-magnetic tweezers microscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 13904-13909. | 7.1 | 34 |
| 39 | Probing Single-Molecule Protein Spontaneous Foldingâ€“Unfolding Conformational Fluctuation Dynamics: The Multiple-State and Multiple-Pathway Energy Landscape. <i>Journal of Physical Chemistry B</i> , 2015, 119, 6366-6378. | 2.6 | 13 |
| 40 | Single-molecule interfacial electron transfer dynamics of porphyrin on TiO ₂ nanoparticles: dissecting the interfacial electric field and electron accepting state density dependent dynamics. <i>Chemical Communications</i> , 2015, 51, 16821-16824. | 4.1 | 22 |
| 41 | Single-molecule spectroscopy reveals how calmodulin activates NO synthase by controlling its conformational fluctuation dynamics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 11835-11840. | 7.1 | 42 |
| 42 | Growth of colloidal PbS nanosheets and the enhancement of their photoluminescence. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 23303-23307. | 2.8 | 20 |
| 43 | Single-Molecule Interfacial Electron Transfer Dynamics of Porphyrin on TiO ₂ Nanoparticles: Dissecting the Complex Electronic Coupling Dependent Dynamics. <i>Journal of Physical Chemistry C</i> , 2014, 118, 20209-20221. | 3.1 | 32 |
| 44 | Single-Molecule Enzymatic Conformational Dynamics: Spilling Out the Product Molecules. <i>Journal of Physical Chemistry B</i> , 2014, 118, 9128-9140. | 2.6 | 18 |
| 45 | Single-Molecule Patch-Clamp FRET Microscopy Studies of NMDA Receptor Ion Channel Dynamics in Living Cells: Revealing the Multiple Conformational States Associated with a Channel at Its Electrical Off State. <i>Journal of the American Chemical Society</i> , 2014, 136, 12998-13005. | 13.7 | 32 |
| 46 | Thickness-Controlled Synthesis of Colloidal PbS Nanosheets and Their Thickness-Dependent Energy Gaps. <i>Chemistry of Materials</i> , 2014, 26, 5433-5436. | 6.7 | 73 |
| 47 | Probing Protein Multidimensional Conformational Fluctuations by Single-Molecule Multiparameter Photon Stamping Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2014, 118, 11943-11955. | 2.6 | 18 |
| 48 | Manipulating and probing enzymatic conformational fluctuations and enzymeâ€“substrate interactions by single-molecule FRET-magnetic tweezers microscopy. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 13052-13058. | 2.8 | 22 |
| 49 | Sizing up single-molecule enzymatic conformational dynamics. <i>Chemical Society Reviews</i> , 2014, 43, 1118-1143. | 38.1 | 61 |
| 50 | Suspended Lipid Bilayer for Optical and Electrical Measurements of Single Ion Channel Proteins. <i>Analytical Chemistry</i> , 2013, 85, 8951-8955. | 6.5 | 18 |
| 51 | Single-molecule photon stamping FRET spectroscopy study of enzymatic conformational dynamics. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 770-775. | 2.8 | 24 |
| 52 | Combined topographic, spectroscopic, and model analyses of inhomogeneous energetic coupling of linear light harvesting complex II aggregates in native photosynthetic membranes. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 5636. | 2.8 | 3 |
| 53 | Revealing the secondary structural changes of amyloid Î² peptide by probing the spectral fingerprint characters. <i>Journal of Raman Spectroscopy</i> , 2013, 44, 670-674. | 2.5 | 29 |
| 54 | Single-Cell Imaging and Spectroscopic Analyses of Cr(VI) Reduction on the Surface of Bacterial Cells. <i>Langmuir</i> , 2013, 29, 950-956. | 3.5 | 44 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 55 | Enzymes in Coherent Motion. <i>Science</i> , 2012, 335, 300-301. | 12.6 | 7 |
| 56 | Correlated AFM-Spectroscopy Imaging of Linear Light Harvesting Protein Aggregates in Bacterial Native Photosynthetic Membrane. <i>Biophysical Journal</i> , 2012, 102, 166a-167a. | 0.5 | 0 |
| 57 | Total internal reflection fluorescence microscopy imaging-guided confocal single-molecule fluorescence spectroscopy. <i>Review of Scientific Instruments</i> , 2012, 83, 013110. | 1.3 | 10 |
| 58 | Manipulating Protein Conformations by Single-Molecule AFM-FRET Nanoscopy. <i>ACS Nano</i> , 2012, 6, 1221-1229. | 14.6 | 68 |
| 59 | Revealing time bunching effect in single-molecule enzyme conformational dynamics. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 6734. | 2.8 | 18 |
| 60 | Probing Single-Molecule Enzyme Active-Site Conformational State Intermittent Coherence. <i>Journal of the American Chemical Society</i> , 2011, 133, 14389-14395. | 13.7 | 45 |
| 61 | Simultaneous Spectroscopic and Topographic Near-Field Imaging of TiO ₂ Single Surface States and Interfacial Electronic Coupling. <i>Nano Letters</i> , 2011, 11, 1490-1494. | 9.1 | 33 |
| 62 | Probing Ground-State Single-Electron Self-Exchange across a Molecule-Metal Interface. <i>Journal of the American Chemical Society</i> , 2011, 133, 6989-6996. | 13.7 | 23 |
| 63 | Energy Transfer from Fluorescent Proteins to Metal Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2011, 115, 17587-17593. | 3.1 | 49 |
| 64 | Extracellular Reduction of Hexavalent Chromium by Cytochromes MtrC and OmcA of <i>Shewanella oneidensis</i> MR-1. <i>Applied and Environmental Microbiology</i> , 2011, 77, 4035-4041. | 3.1 | 140 |
| 65 | Acquiring a nano-view of single molecules in actions. <i>Nano Reviews</i> , 2010, 1, 5052. | 3.7 | 1 |
| 66 | AFM-Raman Imaging and Raman Spectral Fluctuation Analysis of Single-Molecule Interfacial Electron Transfer Dynamics. , 2010, , . | | 0 |
| 67 | Combined Single-Molecule Photon-Stamping Spectroscopy and Femtosecond Transient Absorption Spectroscopy Studies of Interfacial Electron Transfer Dynamics. <i>Journal of the American Chemical Society</i> , 2010, 132, 1999-2004. | 13.7 | 46 |
| 68 | Revealing Linear Aggregates of Light Harvesting Antenna Proteins in Photosynthetic Membranes. <i>Langmuir</i> , 2010, 26, 307-313. | 3.5 | 5 |
| 69 | Bunching Effect in Single-Molecule T4 Lysozyme Nonequilibrium Conformational Dynamics under Enzymatic Reactions. <i>Journal of Physical Chemistry B</i> , 2010, 114, 6669-6674. | 2.6 | 31 |
| 70 | Probing Single-Molecule Interfacial Geminate Electron-Cation Recombination Dynamics. <i>Journal of the American Chemical Society</i> , 2009, 131, 9020-9025. | 13.7 | 32 |
| 71 | Probing Single-Molecule Interfacial Electron Transfer Dynamics of Porphyrin on TiO ₂ Nanoparticles. <i>Journal of the American Chemical Society</i> , 2009, 131, 1479-1487. | 13.7 | 81 |
| 72 | Single-Molecule Protein Interaction Conformational Dynamics. <i>Current Pharmaceutical Biotechnology</i> , 2009, 10, 522-531. | 1.6 | 10 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 73 | 2D Regional Correlation Analysis of Single-Molecule Time Trajectories. <i>Journal of Physical Chemistry B</i> , 2008, 112, 14920-14926. | 2.6 | 14 |
| 74 | Chapter 19 Combined Single-Molecule Electrical Recording and Single-Molecule Spectroscopy Studies of Ion Channel Conformational Dynamics. <i>Methods in Cell Biology</i> , 2008, 90, 435-451. | 1.1 | 4 |
| 75 | Exploring the Mechanism of Flexible Biomolecular Recognition with Single Molecule Dynamics. <i>Physical Review Letters</i> , 2007, 98, 128105. | 7.8 | 60 |
| 76 | Fluctuating Two-State Light Harvesting in a Photosynthetic Membrane. <i>Journal of Physical Chemistry C</i> , 2007, 111, 8948-8956. | 3.1 | 14 |
| 77 | Combined Spectroscopic and Topographic Characterization of Nanoscale Domains and Their Distributions of a Redox Protein on Bacterial Cell Surfaces. <i>Langmuir</i> , 2007, 23, 1333-1338. | 3.5 | 51 |
| 78 | Revealing Two-State Protein-Protein Interactions of Calmodulin by Single-Molecule Spectroscopy. <i>Journal of the American Chemical Society</i> , 2006, 128, 10034-10042. | 13.7 | 69 |
| 79 | Single-Molecule Dynamics Reveals Cooperative Binding-Folding in Protein Recognition. <i>PLoS Computational Biology</i> , 2006, 2, e78. | 3.2 | 41 |
| 80 | Tip-enhanced near-field Raman spectroscopy probing single dye-sensitized TiO ₂ nanoparticles. <i>Applied Physics Letters</i> , 2006, 88, 093121. | 3.3 | 30 |
| 81 | Single-Molecule Study of Protein-Protein and Protein-DNA Interaction Dynamics. , 2005, 305, 385-414. | | 9 |
| 82 | Site-specific Raman spectroscopy and chemical dynamics of nanoscale interstitial systems. <i>Journal of Physics Condensed Matter</i> , 2005, 17, R333-R355. | 1.8 | 22 |
| 83 | Probing Single-Molecule Protein Conformational Dynamics. <i>Accounts of Chemical Research</i> , 2005, 38, 557-565. | 15.6 | 89 |
| 84 | Single-Molecule Triplet-State Photon Antibunching at Room Temperature. <i>Journal of Physical Chemistry B</i> , 2005, 109, 9861-9864. | 2.6 | 17 |
| 85 | Probing Inhomogeneous Vibrational Reorganization Energy Barriers of Interfacial Electron Transfer. <i>Journal of Physical Chemistry B</i> , 2005, 109, 16390-16395. | 2.6 | 29 |
| 86 | Single-Molecule Spectroscopy Studies of Conformational Change Dynamics in Enzymatic Reactions. <i>Current Pharmaceutical Biotechnology</i> , 2004, 5, 261-269. | 1.6 | 26 |
| 87 | Probing ion channel conformational dynamics using simultaneous single-molecule ultrafast spectroscopy and patch-clamp electric recording. <i>Applied Physics Letters</i> , 2004, 84, 1792-1794. | 3.3 | 26 |
| 88 | Probing nanosecond protein motions of calmodulin by single-molecule fluorescence anisotropy. <i>Applied Physics Letters</i> , 2004, 85, 2420-2422. | 3.3 | 29 |
| 89 | Correlated atomic force microscopy and fluorescence lifetime imaging of live bacterial cells. <i>Colloids and Surfaces B: Biointerfaces</i> , 2004, 34, 205-212. | 5.0 | 56 |
| 90 | Finite Element Method Simulations of the Near-Field Enhancement at the Vicinity of Fractal Rough Metallic Surfaces. <i>Journal of Physical Chemistry B</i> , 2004, 108, 2939-2947. | 2.6 | 13 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 91 | Single-Molecule Study of Protein-Protein Interaction Dynamics in a Cell Signaling System. <i>Journal of Physical Chemistry B</i> , 2004, 108, 737-744. | 2.6 | 51 |
| 92 | Intermittent Single-Molecule Interfacial Electron Transfer Dynamics. <i>Journal of the American Chemical Society</i> , 2004, 126, 9374-9381. | 13.7 | 102 |
| 93 | Placing Single-Molecule T4 Lysozyme Enzymes on a Bacterial Cell Surface: Toward Probing Single-Molecule Enzymatic Reaction in Living Cells. <i>Biophysical Journal</i> , 2004, 87, 656-661. | 0.5 | 33 |
| 94 | Probing nanoscale surface enhanced Raman-scattering fluctuation dynamics using correlated AFM and confocal ultramicroscopy. <i>Ultramicroscopy</i> , 2003, 97, 89-102. | 1.9 | 47 |
| 95 | Single-Molecule Nanosecond Anisotropy Dynamics of Tethered Protein Motions. <i>Journal of Physical Chemistry B</i> , 2003, 107, 618-626. | 2.6 | 42 |
| 96 | Finite Element Method Simulation of the Field Distribution for AFM Tip-Enhanced Surface-Enhanced Raman Scanning Microscopy. <i>Journal of Physical Chemistry B</i> , 2003, 107, 1574-1584. | 2.6 | 129 |
| 97 | Probing Conformational Changes of Gramicidin Ion Channels by Single-Molecule Patch-Clamp Fluorescence Microscopy. <i>Biophysical Journal</i> , 2003, 85, 1826-1838. | 0.5 | 114 |
| 98 | Probing Single-Molecule T4 Lysozyme Conformational Dynamics by Intramolecular Fluorescence Energy Transfer. <i>Journal of Physical Chemistry B</i> , 2003, 107, 7947-7956. | 2.6 | 92 |
| 99 | Correlated topographic and spectroscopic imaging beyond diffraction limit by atomic force microscopy metallic tip-enhanced near-field fluorescence lifetime microscopy. <i>Review of Scientific Instruments</i> , 2003, 74, 3347-3355. | 1.3 | 46 |
| 100 | Single-Molecule Conformational Dynamics of Fluctuating Noncovalent DNA-Protein Interactions in DNA Damage Recognition. <i>Journal of the American Chemical Society</i> , 2001, 123, 9184-9185. | 13.7 | 46 |
| 101 | Statistical Analyses and Theoretical Models of Single-Molecule Enzymatic Dynamics. <i>Journal of Physical Chemistry A</i> , 1999, 103, 10477-10488. | 2.5 | 130 |
| 102 | Single-molecule Enzymology. <i>Journal of Biological Chemistry</i> , 1999, 274, 15967-15970. | 3.4 | 235 |
| 103 | Single-Molecule Spectroscopy Studies of Molecular Dynamics in Chemical and Biological Systems*. <i>Zeitschrift Fur Physikalische Chemie</i> , 1999, 212, 59-66. | 2.8 | 6 |
| 104 | Single-Molecule Kinetics of Interfacial Electron Transfer. <i>Journal of Physical Chemistry B</i> , 1997, 101, 2753-2757. | 2.6 | 129 |
| 105 | Single-molecule spectral fluctuations at room temperature. <i>Nature</i> , 1997, 385, 143-146. | 27.8 | 334 |