# Gurusamy Balakrishnan

List of Publications by Year
in descending order



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|---|---|---|---|
| 43 papers | 1,419 citations | 361413 20 h-index | 330143 37 g-index |
| 44 all docs | 44 docs citations | 44 times ranked | 1708 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | An Interlaboratory Comparison on the Characterization of a Sub-micrometer Polydisperse Particle Dispersion. Journal of Pharmaceutical Sciences, 2022, 111, 699-709. | 3.3 | 6 |
| 2 | A Detailed Protocol for Generation of Therapeutic Antibodies with Galactosylated Glycovariants at Laboratory Scale Using In-Vitro Glycoengineering Technology. Journal of Pharmaceutical Sciences, 2021, 110, 935-945. | 3.3 | 1 |
| 3 | Bridging size and charge variants of a therapeutic monoclonal antibody by two-dimensional liquid chromatography. Journal of Pharmaceutical and Biomedical Analysis, 2020, 183, 113178. | 2.8 | 10 |
| 4 | Computational Studies of Catalytic Loop Dynamics in Yersinia Protein Tyrosine Phosphatase Using Pathway Optimization Methods. Journal of Physical Chemistry B, 2019, 123, 7840-7851. | 2.6 | 4 |
| 5 | Biogenic and Synthetic MnO<sub>2</sub> Nanoparticles: Size and Growth Probed with Absorption and Raman Spectroscopies and Dynamic Light Scattering. Environmental Science & Technology, 2019, 53, 4185-4197. | 10.0 | 63 |
| 6 | Quadrupole Dalton-Based Controlled Proteolysis Method for Characterization of Higher Order Protein Structure. Analytical Chemistry, 2019, 91, 5339-5345. | 6.5 | 6 |
| 7 | Probing the Tryptophan Environment in Therapeutic Proteins: Implications for Higher Order Structure on Tryptophan Oxidation. Journal of Pharmaceutical Sciences, 2019, 108, 1944-1952. | 3.3 | 20 |
| 8 | Enhanced Precision of Circular Dichroism Spectral Measurements Permits Detection of Subtle Higher Order Structural Changes in Therapeutic Proteins. Journal of Pharmaceutical Sciences, 2018, 107, 2559-2569. | 3.3 | 15 |
| 9 | Detection and Identification of the Vibrational Markers for the Quantification of Methionine Oxidation in Therapeutic Proteins. Analytical Chemistry, 2018, 90, 6959-6966. | 6.5 | 19 |
| 10 | Understanding the vibrational mode-specific polarization effects in femtosecond Raman-induced Kerr-effect spectroscopy. Optics Letters, 2016, 41, 5357. | 3.3 | 2 |
| 11 | Temperature-Jump Fluorescence Provides Evidence for Fully Reversible Microsecond Dynamics in a Thermophilic Alcohol Dehydrogenase. Journal of the American Chemical Society, 2015, 137, 10060-10063. | 13.7 | 19 |
| 12 | Ultrafast Charge Transfer in Nickel Phthalocyanine Probed by Femtosecond Raman-Induced Kerr Effect Spectroscopy. Journal of the American Chemical Society, 2014, 136, 8746-8754. | 13.7 | 23 |
| 13 | Distinguishing unfolding and functional conformational transitions of calmodulin using ultraviolet resonance <scp>R</scp>aman spectroscopy. Protein Science, 2014, 23, 1094-1101. | 7.6 | 6 |
| 14 | Differential Control of Heme Reactivity in Alpha and Beta Subunits of Hemoglobin: A Combined Raman Spectroscopic and Computational Study. Journal of the American Chemical Society, 2014, 136, 10325-10339. | 13.7 | 34 |
| 15 | CO, NO and O2 as vibrational probes of heme protein interactions. Coordination Chemistry Reviews, 2013, 257, 511-527. | 18.8 | 128 |
| 16 | Ultraviolet Resonance Raman (UVRR) Spectroscopy Studies of Structure and Dynamics of Proteins. , 2013, , 2697-2707. | | 2 |
| 17 | His26 Protonation in Cytochrome c Triggers Microsecond Î²-Sheet Formation and Heme Exposure: Implications for Apoptosis. Journal of the American Chemical Society, 2012, 134, 19061-19069. | 13.7 | 38 |
| 18 | Mode Recognition in UV Resonance Raman Spectra of Imidazole: Histidine Monitoring in Proteins. Journal of Physical Chemistry B, 2012, 116, 9387-9395. | 2.6 | 15 |

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|---|---|---|---|
| 19 | Heme Reactivity is Uncoupled from Quaternary Structure in Gel-Encapsulated Hemoglobin: A Resonance Raman Spectroscopic Study. Journal of the American Chemical Society, 2012, 134, 3461-3471. | 13.7 | 26 |
| 20 | Early Steps in Cytochrome C Unfolding Probed by Nanosecond Laser Induced T-jumpâˆ•UV Resonance Raman Spectroscopy. , 2010, , . | | 0 |
| 21 | Linking conformation change to hemoglobin activation via chain-selective time-resolved resonance Raman spectroscopy of protoheme/mesoheme hybrids. Journal of Biological Inorganic Chemistry, 2009, 14, 741-750. | 2.6 | 13 |
| 22 | Subunit-Selective Interrogation of CO Recombination in Carbonmonoxy Hemoglobin by Isotope-Edited Time-Resolved Resonance Raman Spectroscopy. Biochemistry, 2009, 48, 3120-3126. | 2.5 | 10 |
| 23 | MCR-ALS analysis of two-way UV resonance Raman spectra to resolve discrete protein secondary structural motifs. Analyst, The, 2009, 134, 138-147. | 3.5 | 24 |
| 24 | Cu(I) recognition via cation-Ï€ and methionine interactions in CusF. Nature Chemical Biology, 2008, 4, 107-109. | 8.0 | 220 |
| 25 | Protein dynamics from time resolved UV Raman spectroscopy. Current Opinion in Structural Biology, 2008, 18, 623-629. | 5.7 | 68 |
| 26 | A Conformational Switch to Î²-Sheet Structure in Cytochrome c Leads to Heme Exposure. Implications for Cardiolipin Peroxidation and Apoptosis. Journal of the American Chemical Society, 2007, 129, 504-505. | 13.7 | 59 |
| 27 | Enthalpic and Entropic Stages in Î±-Helical Peptide Unfolding, from LaserT-Jump/UV Raman Spectroscopy. Journal of the American Chemical Society, 2007, 129, 12801-12808. | 13.7 | 33 |
| 28 | Microsecond Melting of a Folding Intermediate in a Coiled-Coil Peptide, Monitored by T-jump/UV Raman Spectroscopyâ€. Journal of Physical Chemistry B, 2006, 110, 19877-19883. | 2.6 | 24 |
| 29 | Temperature-Jump Apparatus with Raman Detection Based on a Solid-State Tunable (1.80â€“2.05 Î¼m) kHz Optical Parametric Oscillator Laser. Applied Spectroscopy, 2006, 60, 347-351. | 2.2 | 19 |
| 30 | Dynamics of Allostery in Hemoglobin: Roles of the Penultimate Tyrosine H bonds. Journal of Molecular Biology, 2006, 356, 335-353. | 4.2 | 37 |
| 31 | Protein secondary structure from deep-UV resonance Raman spectroscopy. Journal of Raman Spectroscopy, 2006, 37, 277-282. | 2.5 | 125 |
| 32 | Tunable kHz Deep Ultraviolet (193â€“210 nm) Laser for Raman Applications. Applied Spectroscopy, 2005, 59, 776-781. | 2.2 | 53 |
| 33 | Dynamics of Carbon Monoxide Binding to CooA. Journal of Biological Chemistry, 2004, 279, 21096-21108. | 3.4 | 62 |
| 34 | Time-Resolved Resonance Raman Study of HbA with 220 nm Excitation:Â Probing Phenylalanine. Journal of Physical Chemistry B, 2004, 108, 15919-15927. | 2.6 | 9 |
| 35 | Time-resolved Absorption and UV Resonance Raman Spectra Reveal Stepwise Formation of T Quaternary Contacts in the Allosteric Pathway of Hemoglobin. Journal of Molecular Biology, 2004, 340, 843-856. | 4.2 | 74 |
| 36 | Hemoglobin Site-mutants Reveal Dynamical Role of Interhelical H-bonds in the Allosteric Pathway: Time-resolved UV Resonance Raman Evidence for Intra-dimer Coupling. Journal of Molecular Biology, 2004, 340, 857-868. | 4.2 | 41 |

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|---|---|---|---|
| 37 | Histidine Photodegradation during UV Resonance Raman Spectroscopyâ€. Journal of Physical Chemistry A, 2003, 107, 8047-8051. | 2.5 | 22 |
| 38 | Electron Delocalization in the Radical Cation of 1,3,6,8-Tetraazatricyclo[4.4.1.13,8]dodecane, a 4-Nitrogen-7-Electron System. Journal of the American Chemical Society, 2002, 124, 159-167. | 13.7 | 20 |
| 39 | Kinetics of hemoglobin allostery from time-resolved UV resonance Raman spectroscopy: effect of a chemical cross-link. Journal of Raman Spectroscopy, 2000, 31, 349-352. | 2.5 | 7 |
| 40 | Evidence of Dynamical Jahnâ^'Teller Effect on Triphenylene Radical Cation:Â Resonance Raman Spectrum and ab Initio Quantum-Chemical Calculations. Journal of Physical Chemistry A, 2000, 104, 9121-9129. | 2.5 | 19 |
| 41 | The Radical Cation and Lowest Rydberg States of 1,4-Diaza[2.2.2]bicyclooctane (DABCO). Journal of Physical Chemistry A, 2000, 104, 1834-1841. | 2.5 | 25 |
| 42 | Radical Cation of 2,5-Dimethyl-2,4-hexadiene:Â Resonance Raman Spectrum and Molecular Orbital Calculations. Journal of Physical Chemistry A, 1999, 103, 10798-10804. | 2.5 | 2 |
| 43 | Time-resolved resonance Raman spectroscopic studies on the triplet excited state of fluoranil. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 4125-4130. | 1.7 | 12 |