## Karunakar Kar

List of Publications by Year in descending order

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Version: 2024-02-01

43 1,831 papers citations

279798 23 h-index 276875 41 g-index

44 all docs 44
docs citations

44 times ranked 2230 citing authors

| #                    | Article  | IF                 | CITATIONS                  |
|----------------------|--|--------------------|----------------------------|
| 1                    | Amyloid-mimicking toxic nanofibers generated <i>via</i> self-assembly of dopamine. Nanoscale, 2022, 14, 8649-8662.   | 5.6                | 9                          |
| 2                    | Analyzing organophosphate pesticide-serum albumin binding interaction: a combined STD NMR and molecular docking study. Journal of Biomolecular Structure and Dynamics, 2021, 39, 1865-1878.  | 3.5                | 8                          |
| 3                    | Osmoprotectant Coated Thermostable Gold Nanoparticles Efficiently Restrict Temperature-Induced Amyloid Aggregation of Insulin. Journal of Physical Chemistry Letters, 2021, 12, 1803-1813.   | 4.6                | 14                         |
| 4                    | Genesis of Neurotoxic Hybrid Nanofibers from the Coassembly of Aromatic Amino Acids. ACS Applied Materials & Samp; Interfaces, 2021, 13, 36722-36736.  | 8.0                | 13                         |
| 5                    | Evidence of Anti-amyloid Characteristics of Plumbagin via Inhibition of Protein Aggregation and Disassembly of Protein Fibrils. Biomacromolecules, 2021, 22, 3692-3703.  | 5.4                | 15                         |
| 6                    | The intrinsic amyloidogenic propensity of cofilin-1 is aggravated by Cys-80 oxidation: A possible link with neurodegenerative diseases. Biochemical and Biophysical Research Communications, 2021, 569, 187-192.   | 2.1                | 5                          |
| 7                    | In vitro interaction of organophosphate metabolites with bovine serum albumin: A comparative 1H NMR, fluorescence and molecular docking analysis. Pesticide Biochemistry and Physiology, 2020, 163, 39-50.   | 3.6                | 18                         |
| 8                    | Myricetin inhibits amyloid fibril formation of globular proteins by stabilizing the native structures. Colloids and Surfaces B: Biointerfaces, 2020, 186, 110640.  | 5.0                | 22                         |
| 9                    | Piperine-Coated Gold Nanoparticles Alleviate Paraquat-Induced Neurotoxicity in <i>Drosophila melanogaster</i> . ACS Chemical Neuroscience, 2020, 11, 3772-3785.  | 3.5                | 24                         |
|                      | The land 6 distert 41717 to 5 of termical recursoristies, Bobs, 11, 577 B 57 55.   |                    |                            |
| 10                   | Protein Aggregation, Related Pathologies, and Aging., 2020, , 419-441.   |                    | o                          |
| 10                   |  | 10.9               | 0 43                       |
|                      | Protein Aggregation, Related Pathologies, and Aging. , 2020, , 419-441.  Amyloid cross-seeding raises new dimensions to understanding of amyloidogenesis mechanism. Ageing   | 10.9               |                            |
| 11                   | Protein Aggregation, Related Pathologies, and Aging., 2020, , 419-441.  Amyloid cross-seeding raises new dimensions to understanding of amyloidogenesis mechanism. Ageing Research Reviews, 2019, 56, 100937.  Self-Assembly of Artificial Sweetener Aspartame Yields Amyloid-like Cytotoxic Nanostructures. ACS   |                    | 43                         |
| 11 12                | Protein Aggregation, Related Pathologies, and Aging., 2020, , 419-441.  Amyloid cross-seeding raises new dimensions to understanding of amyloidogenesis mechanism. Ageing Research Reviews, 2019, 56, 100937.  Self-Assembly of Artificial Sweetener Aspartame Yields Amyloid-like Cytotoxic Nanostructures. ACS Nano, 2019, 13, 6033-6049.  AÎ2 1-40 mediated aggregation of proteins and metabolites unveils the relevance of amyloid cross-seeding in amyloidogenesis. Biochemical and Biophysical Research Communications, 2018, 501,  | 14.6               | 43<br>37                   |
| 11<br>12<br>13       | Protein Aggregation, Related Pathologies, and Aging. , 2020, , 419-441.  Amyloid cross-seeding raises new dimensions to understanding of amyloidogenesis mechanism. Ageing Research Reviews, 2019, 56, 100937.  Self-Assembly of Artificial Sweetener Aspartame Yields Amyloid-like Cytotoxic Nanostructures. ACS Nano, 2019, 13, 6033-6049.  Aî² 1-40 mediated aggregation of proteins and metabolites unveils the relevance of amyloid cross-seeding in amyloidogenesis. Biochemical and Biophysical Research Communications, 2018, 501, 158-164.  An Aggregate Weight-Normalized Thioflavin-T Measurement Scale for Characterizing Polymorphic  | 14.6<br>2.1        | 43<br>37<br>18             |
| 11<br>12<br>13       | Protein Aggregation, Related Pathologies, and Aging., 2020, , 419-441.  Amyloid cross-seeding raises new dimensions to understanding of amyloidogenesis mechanism. Ageing Research Reviews, 2019, 56, 100937.  Self-Assembly of Artificial Sweetener Aspartame Yields Amyloid-like Cytotoxic Nanostructures. ACS Nano, 2019, 13, 6033-6049.  AÎ2 1-40 mediated aggregation of proteins and metabolites unveils the relevance of amyloid cross-seeding in amyloidogenesis. Biochemical and Biophysical Research Communications, 2018, 501, 158-164.  An Aggregate Weight-Normalized Thioflavin-T Measurement Scale for Characterizing Polymorphic Amyloids and Assembly Intermediates. Methods in Molecular Biology, 2018, 1777, 121-144.  Tyrosine-Generated Nanostructures Initiate Amyloid Cross-Seeding in Proteins Leading to a Lethal   | 14.6<br>2.1<br>0.9 | 43<br>37<br>18<br>23       |
| 11<br>12<br>13<br>14 | Protein Aggregation, Related Pathologies, and Aging., 2020, , 419-441.  Amyloid cross-seeding raises new dimensions to understanding of amyloidogenesis mechanism. Ageing Research Reviews, 2019, 56, 100937.  Self-Assembly of Artificial Sweetener Aspartame Yields Amyloid-like Cytotoxic Nanostructures. ACS Nano, 2019, 13, 6033-6049.  Aβ 1-40 mediated aggregation of proteins and metabolites unveils the relevance of amyloid cross-seeding in amyloidogenesis. Biochemical and Biophysical Research Communications, 2018, 501, 158-164.  An Aggregate Weight-Normalized Thioflavin-T Measurement Scale for Characterizing Polymorphic Amyloids and Assembly Intermediates. Methods in Molecular Biology, 2018, 1777, 121-144.  Tyrosine-Generated Nanostructures Initiate Amyloid Cross-Seeding in Proteins Leading to a Lethal Aggregation Trap. Biochemistry, 2018, 57, 5202-5209.  Biophysical Characterization of SG2NA Variants and their Interaction with DJ-1 and Calmodulin in | 14.6<br>2.1<br>0.9 | 43<br>37<br>18<br>23<br>28 |

| #  | Article  | IF           | CITATIONS |
|----|--|--------------|-----------|
| 19 | Backbone Engineering within a Latent $\hat{l}^2$ -Hairpin Structure to Design Inhibitors of Polyglutamine Amyloid Formation. Journal of Molecular Biology, 2017, 429, 308-323.                 | 4.2          | 21        |
| 20 | Intrinsic property of phenylalanine to trigger protein aggregation and hemolysis has a direct relevance to phenylketonuria. Scientific Reports, 2017, 7, 11146.                                | 3.3          | 53        |
| 21 | Strategically Designed Antifibrotic Gold Nanoparticles to Prevent Collagen Fibril Formation.<br>Langmuir, 2017, 33, 13252-13261.   | 3 <b>.</b> 5 | 13        |
| 22 | Rapid $\hat{l}\pm$ -oligomer formation mediated by the A $\hat{l}^2$ C terminus initiates an amyloid assembly pathway. Nature Communications, 2016, 7, 12419.                                  | 12.8         | 51        |
| 23 | Capsaicin-Coated Silver Nanoparticles Inhibit Amyloid Fibril Formation of Serum Albumin.<br>Biochemistry, 2016, 55, 3345-3348.   | 2.5          | 42        |
| 24 | Huntingtin exon 1 fibrils feature an interdigitated β-hairpin–based polyglutamine core. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 1546-1551. | 7.1          | 143       |
| 25 | Huntingtin N-Terminal Fragment Fibrils have a Rigid Amyloid Core Flanked by Non-Amyloid Domains with Increased Dynamics. Biophysical Journal, 2015, 108, 385a-386a.                            | 0.5          | 0         |
| 26 | Capsaicin inhibits collagen fibril formation and increases the stability of collagen fibers. European Biophysics Journal, 2015, 44, 69-76.   | 2.2          | 24        |
| 27 | Tyrosine- and tryptophan-coated gold nanoparticles inhibit amyloid aggregation of insulin. Amino Acids, 2015, 47, 2551-2560.   | 2.7          | 90        |
| 28 | Evidence of Rapid Coaggregation of Globular Proteins during Amyloid Formation. Biochemistry, 2014, 53, 8001-8004.  | 2.5          | 41        |
| 29 | Polyglutamine Amyloid Core Boundaries and Flanking Domain Dynamics in Huntingtin Fragment Fibrils<br>Determined by Solid-State Nuclear Magnetic Resonance. Biochemistry, 2014, 53, 6653-6666.  | 2.5          | 74        |
| 30 | Type I collagen prevents amyloid aggregation of hen egg white lysozyme. Biochemical and Biophysical Research Communications, 2014, 448, 480-484.   | 2.1          | 19        |
| 31 | d-Polyglutamine Amyloid Recruits l-Polyglutamine Monomers and Kills Cells. Journal of Molecular<br>Biology, 2014, 426, 816-829.  | 4.2          | 36        |
| 32 | Levels of supramolecular chirality of polyglutamine aggregates revealed by vibrational circular dichroism. FEBS Letters, 2013, 587, 1638-1643.   | 2.8          | 31        |
| 33 | Structural and Motional Investigations of Polyglutamine-Containing Amyloid Fibrils by Magic-Angle-Spinning Solid-State NMR. Biophysical Journal, 2013, 104, 181a.                              | 0.5          | 1         |
| 34 | $\hat{l}^2$ -Hairpin-Mediated Nucleation of Polyglutamine Amyloid Formation. Journal of Molecular Biology, 2013, 425, 1183-1197.   | 4.2          | 91        |
| 35 | Assays for studying nucleated aggregation of polyglutamine proteins. Methods, 2011, 53, 246-254.   | 3.8          | 29        |
| 36 | Critical nucleus size for disease-related polyglutamine aggregation is repeat-length dependent. Nature Structural and Molecular Biology, 2011, 18, 328-336.                                    | 8.2          | 187       |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 37 | Thermodynamic properties of aqueous 4-hydroxyproline at different temperatures. Journal of Chemical Thermodynamics, 2010, 42, 597-604.                      | 2.0 | 16        |
| 38 | Aromatic Interactions Promote Self-Association of Collagen Triple-Helical Peptides to Higher-Order Structures. Biochemistry, 2009, 48, 7959-7968.           | 2.5 | 102       |
| 39 | Tripleâ€helical peptides: An approach to collagen conformation, stability, and selfâ€association.<br>Biopolymers, 2008, 89, 345-353.                        | 2.4 | 165       |
| 40 | Sequence dependence of kinetics and morphology of collagen model peptide selfâ€assembly into higher order structures. Protein Science, 2008, 17, 1086-1095. | 7.6 | 31        |
| 41 | Enhancement of thermal stability and inhibition of protein aggregation by osmolytic effect of hydroxyproline. Biopolymers, 2007, 87, 339-351.               | 2.4 | 55        |
| 42 | Self-association of Collagen Triple Helic Peptides into Higher Order Structures. Journal of Biological Chemistry, 2006, 281, 33283-33290.                   | 3.4 | 121       |
| 43 | Thermodynamics of the interactions of calcium chloride with $\hat{l}_{\pm}$ -chymotrypsin. Journal of Chemical Thermodynamics, 2002, 34, 319-336.           | 2.0 | 24        |