

List of Publications of Dr. Prabhat K. Singh

Total citations: **3160**

H-Index: **36**

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Note: Asterik (*) indicates that P. K. Singh is the corresponding author in these publications

129. Expanding the Scope of Self-Assembled Supramolecular Biosensors: A Highly Selective and Sensitive Enzyme-Responsive AIE-Based Fluorescent Biosensor for Trypsin Detection and Inhibitor Screening

J. Kaur, H. Mirgane, V. Patil, G. Ahlawat, S. V. Bhosale, **P. K. Singh***

J. Mat. Chem. B, 2024, DOI: 10.1039/D4TB00264D [IF: 7.0]

128. Thioflavin-T Enhanced Fluorescence in Cerium-ATP Coordination Polymer Nanoparticles for Selective and Sensitive Cu(II) Detection in E-Waste and Biological Samples

S. Kadlag, M. Ghosh, **P. K. Singh***, K. K. Swain

ACS Appl. Nano Mater., 7 (2024) 1425-1436 [IF: 5.9]

127. Prospects of charged cyclodextrins in biomedical applications

V. Sehgal, S. P. Pandey, **P. K. Singh***

Carbohydrate Polymers, 323 (2024), 121348 [IF: 11.2]

126. A novel approach to supramolecular Aggregation-Induced emission using tetracationic tetraphenylethylene and sulfated β -Cyclodextrin

T. P. Shaima, H. A. Mirgane, A. H. Upadhaya, S. V. Bhosale, **P. K. Singh***

J. Photochem. Photobiol. A: Chem. 448 (2024) 115328 [IF: 5.14]

125. Targeting Amyloids with coated Nanoparticles: A review on lucrative combinations of Nanoparticles and its Bio-compatible coating"

O. D. Warkerkar, N. H. Mudliar, M. Momin, **P. K. Singh***

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124. Synthesis of octa-benzothiazole functionalized tetraphenylethylene and their explosive sensing properties

D. I. Bhusanur, **P. K. Singh**, M. Al Kobaisi, S. V. Bhosale, S. V. Bhosale

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123. Synthesis, Photophysical Properties and Self-Assembly of a Tetraphenylethylene-Naphthalene Diimide Donor-Acceptor Molecule

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122. Al³⁺-Responsive Ratiometric Fluorescent Sensor for Creatinine Detection: Thioflavin-T and Sulfated-β-Cyclodextrin Synergy
S. Bais, P. K. Singh*
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121. A turn-on fluorescence sensor for detection of heparinase with heparin templated aggregation of tetracationic porphyrin derivative
S. P. Pandey, P. K. Singh,* P. Jha, R. Jobby
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120. Mitochondria Directing Fluorogenic Probe: An Efficient Amyloid Marker for Imaging Lipid Metabolite Induced Protein Aggregation in Live Cells and *C. elegans*
S. P. Pandey, P. Kavyashree, T. Dutta, B. Chakraborty, A. L. Koner, P. K. Singh*
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118. Thioflavin-T-Incorporated Cerium-ATP Coordination Polymer Nanoparticles: A Promising System for Detection of Uranyl Ion (UO₂²⁺) in Aqueous Medium
M. Ghosh, K. K. Swain, P. K. Singh*
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R. Thorave, V. Kalyani, A. Shelar, R. Patil, P. K. Singh*, D. D. Malkhede
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114. AIE-Active ‘Turn-On’ Sensors for Highly Selective Detection of Bovine Serum Albumin
V. K. Gawade, R. W. Jadhav, P. K. Singh, S. V. Bhosale
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111. Sensitive Turn-off Detection of Nitroaromatics Using Fluorescent Tetraphenylethylene Phosphonate Derivative

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110. Aminobenzothiazole fused tetraphenylethene AIEgen: Ag⁺, Hg²⁺ and Fe³⁺ Sensing Applications in Aqueous Medium

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A. K. Mora, P. K. Singh*, S Nath
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S. P. Pandey, A. M. Desai, P. K. Singh*
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Book Chapters

1. Aptamer based approaches for sensing harmful synthetic and natural toxins

J. Kaur, [P. K. Singh*](#)

Book Chapter (Elsevier), in "Sensing of Deadly Toxic Chemical Warfare Agents, Nerve Agent Simulants and their Toxicological Aspects" 247-268, [2023]"

2. Polysaccharides for Biosensing

S.P. Pandey, [P. K. Singh*](#)

Book Chapter (Elsevier) in "Handbook of Natural Polymers, Volume 3". (Accepted), [2023]

Invited Talks

13. Fluorescence based sensors for clinically relevant bio-analytes

[P K. Singh](#)

Innovative Inclinations and Sustainable Technologies in Chemical Sciences (IISTCS),
Deogiri College, Aurangabad, India

February 2023

12. Fluorescence based sensors for various clinically relevant bio-analytes

[P K. Singh](#)

Recent Trends in Multidisciplinary research involving Chemistry-Biology Interface, Mithibai
College, Mumbai

February 2023

11. Fluorescence based sensors for various clinically relevant bio-analytes

[P K. Singh](#)

National Workshop on Modern Tools and Techniques in Chemical and Biological Sciences,
CEBS Raipur

[February 2023](#)

10. Fluorescence based sensors for various clinically relevant bio-analytes

[P K. Singh](#)

International Conference on Recent Advances in Chemistry and Their Applications in
Emerging Areas (ICRAC-2023), Swami Ramanand Teerth Marathwada University, Nanded,
[January, 2023](#)

9. Aggregation induced emission based sensors for Heparin: A widely used blood anti-coagulant

[P K. Singh](#)

“International Conference on Aggregation-induced Emission from Fundamental to
Applications” (IC-AIE-FA 2022), BITS Pilani, Goa Campus
December, 2022

8. Sensing using Absorption and Fluorescence Spectroscopy

[P K. Singh](#)

Online Faculty Development Programme (FDP) On Molecular Characterization Techniques, SRM University, India

February 2022

7. Molecular rotor based fluorescence sensors for Heparin

[P K. Singh](#)

58th Annual Convention of Chemists and International Conference on Recent Trends in Chemical Sciences, Indian Chemical Society

December 2021

6. Fluorescent sensors for Heparin: A widely used blood anti-coagulant

[P K. Singh](#)

Online Faculty Development Programme (FDP) On Development and applications of Sensors in Modern life, NIT Arunachal Pradesh

October 2021

5. A Molecular rotor based sensor for Heparin

[P K. Singh](#)

3rd Asian Conference on Chemosensors and Imaging Probes-2019, Amritsar, India.

November 2019

4. Protein Aggregates: Biophysical Characterization and Detection

[P K. Singh](#)

Invited guest lecture series, Department of Lifesciences, University of Mumbai, November 2018

3. Biophysics and Protein Diseases

[P K. Singh](#)

Mini Symposium-Workshop on Biophysics, Department of Biophysics, University of Mumbai, September 2018

2. Exploring Nano-confined water using a symmetric ion : A 2D IR Investigation

[P K. Singh](#)

Trombay Symposium on Radiation and Photochemistry (TSRP-2014), Mumbai, 2014

1. 2D IR Investigation of Nano-confined Water using an Infrared Reporter Probe

[P K. Singh](#)

2nd DAE-BRNS Theme meeting on Ultrafast Science (UFS-2014), Manipal University, Manipal, November-2014