

# Ravindra Kumar

## List of Publications by Year in descending order

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Version: 2024-02-01

57  
papers

4,092  
citations

109264

35  
h-index

143943

57  
g-index

60  
all docs

60  
docs citations

60  
times ranked

3677  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Next generation applications of lignin derived commodity products, their life cycle, techno-economics and societal analysis. International Journal of Biological Macromolecules, 2022, 197, 179-200.        | 3.6 | 29        |
| 2  | Understanding the effects of low enzyme dosage and high solid loading on the enzyme inhibition and strategies to improve hydrolysis yields of pilot scale pretreated rice straw. Fuel, 2022, 327, 125114.   | 3.4 | 20        |
| 3  | 2G waste lignin to fuel and high value-added chemicals: Approaches, challenges and future outlook for sustainable development. Chemosphere, 2021, 268, 129326.  | 4.2 | 44        |
| 4  | Pretreatment process and its effect on enzymatic hydrolysis of biomass. , 2021, , 145-169.  |     | 6         |
| 5  | Process optimization and mass balance studies of pilot scale steam explosion pretreatment of rice straw for higher sugar release. Biomass and Bioenergy, 2019, 130, 105390.                                 | 2.9 | 28        |
| 6  | The impact of particle size of cellulosic residue and solid loadings on enzymatic hydrolysis with a mass balance. Fuel, 2019, 245, 514-520.   | 3.4 | 20        |
| 7  | Characterization of ionic liquid pretreated plant cell wall for improved enzymatic digestibility. Bioresource Technology, 2018, 249, 139-145.   | 4.8 | 37        |
| 8  | The Pretreatment Technologies for Deconstruction of Lignocellulosic Biomass. Energy, Environment, and Sustainability, 2018, , 395-421.  | 0.6 | 9         |
| 9  | Synergistic Enzyme Cocktail to Enhance Hydrolysis of Steam Exploded Wheat Straw at Pilot Scale. Frontiers in Energy Research, 2018, 6, .  | 1.2 | 50        |
| 10 | Improved Enzymatic Hydrolysis of Pilot Scale Pretreated Rice Straw at High Total Solids Loading. Frontiers in Energy Research, 2018, 6, .   | 1.2 | 38        |
| 11 | Life cycle assessment and life cycle costing of conventional and modified dilute acid pretreatment for fuel ethanol production from rice straw in India. Journal of Cleaner Production, 2018, 197, 732-741. | 4.6 | 43        |
| 12 | Impact of Conditioning Prior to Dilute Acid Deconstruction of Biomass for the Production of Fermentable Sugars. ACS Sustainable Chemistry and Engineering, 2017, 5, 4285-4292.                              | 3.2 | 8         |
| 13 | Life cycle assessment of rice straw utilization practices in India. Bioresource Technology, 2017, 228, 89-98.   | 4.8 | 90        |
| 14 | Pilot scale dilute acid pretreatment of rice straw and fermentable sugar recovery at high solid loadings. Bioresource Technology, 2017, 224, 688-693.   | 4.8 | 72        |
| 15 | Intensification of steam explosion and structural intricacies impacting sugar recovery. Bioresource Technology, 2017, 241, 692-700.   | 4.8 | 16        |
| 16 | Ionic liquid pretreatment of biomass for sugars production: Driving factors with a plausible mechanism for higher enzymatic digestibility. Carbohydrate Polymers, 2016, 149, 369-381.                       | 5.1 | 66        |
| 17 | Structural Features of Dilute Acid Pretreated <i>Acacia mangium</i> and Impact of Sodium Sulfite Supplementation on Enzymatic Hydrolysis. ACS Sustainable Chemistry and Engineering, 2016, 4, 4635-4644.    | 3.2 | 9         |
| 18 | Global warming potential and energy analysis of second generation ethanol production from rice straw in India. Applied Energy, 2016, 184, 353-364.  | 5.1 | 80        |

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|----|--|-----|-----------|
| 19 | Bench scale dilute acid pretreatment optimization for producing fermentable sugars from cotton stalk and physicochemical characterization. <i>Industrial Crops and Products</i> , 2016, 83, 104-112.             | 2.5 | 32        |
| 20 | The cellulose structural transformation for higher enzymatic hydrolysis by ionic liquids and predicting their solvating capabilities. <i>Journal of Cleaner Production</i> , 2016, 113, 1005-1014.               | 4.6 | 33        |
| 21 | Pilot scale pretreatment of wheat straw and comparative evaluation of commercial enzyme preparations for biomass saccharification and fermentation. <i>Biochemical Engineering Journal</i> , 2015, 102, 54-61.   | 1.8 | 69        |
| 22 | Life cycle assessment of fuel ethanol from sugarcane molasses in northern and western India and its impact on Indian biofuel programme. <i>Energy</i> , 2015, 83, 307-315.                                       | 4.5 | 59        |
| 23 | Structural features of dilute acid, steam exploded, and alkali pretreated mustard stalk and their impact on enzymatic hydrolysis. <i>Carbohydrate Polymers</i> , 2015, 124, 265-273.                             | 5.1 | 100       |
| 24 | Evaluation of recalcitrant features impacting enzymatic saccharification of diverse agricultural residues treated by steam explosion and dilute acid. <i>RSC Advances</i> , 2015, 5, 60754-60762.                | 1.7 | 33        |
| 25 | Physical and Chemical Characterization of Various Indian Agriculture Residues for Biofuels Production. <i>Energy &amp; Fuels</i> , 2015, 29, 3111-3118.  | 2.5 | 164       |
| 26 | Improved saccharification of pilot-scale acid pretreated wheat straw by exploiting the synergistic behavior of lignocellulose degrading enzymes. <i>RSC Advances</i> , 2015, 5, 71462-71471.                     | 1.7 | 47        |
| 27 | Pilot scale study on steam explosion and mass balance for higher sugar recovery from rice straw. <i>Bioresource Technology</i> , 2015, 175, 350-357.   | 4.8 | 66        |
| 28 | Response Factor Correction for Estimation of Ester Content in Biodiesel. <i>Chromatographia</i> , 2014, 77, 165-169.   | 0.7 | 8         |
| 29 | Investigating <i>Jatropha</i> prunings as a feedstock for producing fermentable sugars and chemical treatment for process optimization. <i>Journal of Renewable and Sustainable Energy</i> , 2014, 6, 033118.    | 0.8 | 10        |
| 30 | Characterization of Indian origin oil shale using advanced analytical techniques. <i>Fuel</i> , 2013, 113, 610-616.  | 3.4 | 56        |
| 31 | Quality Control Aspects: A Simple Method for Estimation of Ethyl Alcohol in Oxy Diesel by NMR Spectroscopy. <i>Petroleum Science and Technology</i> , 2013, 31, 819-828.   | 0.7 | 1         |
| 32 | <sup>1</sup> H Nuclear Magnetic Resonance (NMR) Determination of the Iodine Value in Biodiesel Produced from Algal and Vegetable Oils. <i>Energy &amp; Fuels</i> , 2012, 26, 7005-7008.                          | 2.5 | 22        |
| 33 | Hydrogen transportation in Delhi? Investigating the hydrogen-compressed natural gas (H-CNG) option. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 644-654.   | 3.8 | 13        |
| 34 | Determination of Polyunsaturated Fatty Esters (PUFA) in Biodiesel by GC/GC-MS and <sup>1</sup> H-NMR Techniques. <i>JAOCs, Journal of the American Oil Chemists' Society</i> , 2011, 88, 1285-1296.              | 0.8 | 16        |
| 35 | Estimation of Glycerides and Free Fatty Acid in Oils Extracted From Various Seeds from the Indian Region by NMR Spectroscopy. <i>JAOCs, Journal of the American Oil Chemists' Society</i> , 2011, 88, 1675-1685. | 0.8 | 40        |
| 36 | Biodiesel surrogates: Achieving performance demands. <i>Bioresource Technology</i> , 2009, 100, 3022-3028.   | 4.8 | 44        |

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|----|--|-----|-----------|
| 37 | Platform for Controlled Supramolecular Nanoassembly. <i>Nano Letters</i> , 2009, 9, 2482-2486.   | 4.5 | 19        |
| 38 | A Very Stable Cyclic DNA Miniduplex with Just Two Base Pairs. <i>ChemBioChem</i> , 2008, 9, 50-52.   | 1.3 | 61        |
| 39 | Controlled Release of Chol-TEG-DNA from Nano- and Micropatterned SU-8 Surfaces by a Spreading Lipid Film. <i>Nano Letters</i> , 2008, 8, 227-231.  | 4.5 | 20        |
| 40 | Template-Directed Oligonucleotide Strand Ligation, Covalent Intramolecular DNA Circularization and Catenation Using Click Chemistry. <i>Journal of the American Chemical Society</i> , 2007, 129, 6859-6864.   | 6.6 | 248       |
| 41 | Triplex Addressability as a Basis for Functional DNA Nanostructures. <i>Nano Letters</i> , 2007, 7, 3832-3839.   | 4.5 | 60        |
| 42 | Addressable high-information-density DNA nanostructures. <i>Chemical Physics Letters</i> , 2007, 440, 125-129.   | 1.2 | 55        |
| 43 | NMR Studies of Fully Modified Locked Nucleic Acid (LNA) Hybrids: A Solution Structure of an LNA:RNA Hybrid and Characterization of an LNA:DNA Hybrid. <i>Bioconjugate Chemistry</i> , 2004, 15, 449-457.   | 1.8 | 94        |
| 44 | Inhibition of HIV-1 Tat-Dependent Transactivation by Steric Block Chimeric 2'-O-Methyl/LNA Oligoribonucleotides. <i>Biochemistry</i> , 2001, 40, 14645-14654.  | 1.2 | 132       |
| 45 | A comparison of the solution structures of an LNA:DNA duplex and the unmodified DNA:DNA duplex. <i>Perkin Transactions II RSC</i> , 2001, , 1224-1232.   | 1.1 | 39        |
| 46 | LNA (LOCKED NUCLEIC ACID) AND THE DIASTEREOISOMERIC $\hat{I}\pm$ -L-LNA: CONFORMATIONAL TUNING AND HIGH-AFFINITY RECOGNITION OF DNA/RNA TARGETS. <i>Nucleosides, Nucleotides and Nucleic Acids</i> , 2001, 20, 389-396.  | 0.4 | 57        |
| 47 | The Eight Stereoisomers of LNA (Locked Nucleic Acid): A Remarkable Family of Strong RNA Binding Molecules. <i>Angewandte Chemie - International Edition</i> , 2000, 39, 1656-1659.   | 7.2 | 98        |
| 48 | Structural Studies of LNA:RNA Duplexes by NMR: Conformations and Implications for RNase H Activity. <i>Chemistry - A European Journal</i> , 2000, 6, 2687-2695.  | 1.7 | 179       |
| 49 | Synthesis of Abasic Locked Nucleic Acid and Twoseco-LNA Derivatives and Evaluation of Their Hybridization Properties Compared with Their More Flexible DNA Counterparts. <i>Journal of Organic Chemistry</i> , 2000, 65, 5167-5176.  | 1.7 | 44        |
| 50 | Structural Studies of LNA:RNA Duplexes by NMR: Conformations and Implications for RNase H Activity. <i>Chemistry - A European Journal</i> , 2000, 6, 2687-2695.  | 1.7 | 7         |
| 51 | High-affinity nucleic acid recognition using $\hat{I}\pm$ -LNA <sup>TM</sup> (locked nucleic acid, $\hat{I}^2$ -D-ribo configured LNA), $\hat{I}\pm$ -xylo-LNA <sup>TM</sup> ( $\hat{I}^2$ -D-xylo configured LNA) or $\hat{I}\pm$ -L-LNA <sup>TM</sup> ( $\hat{I}^1$ -L-ribo configured LNA). <i>Chemical Communications</i> , 1999, 40, 2073-2074. |     |           |
| 52 | Lna (Locked Nucleic Acid). <i>Nucleosides &amp; Nucleotides</i> , 1999, 18, 1365-1370.   | 0.5 | 38        |
| 53 | LNA (Locked Nucleic Acids): Synthesis of the adenine, cytosine, guanine, 5-methylcytosine, thymine and uracil bicyclonucleoside monomers, oligomerisation, and unprecedented nucleic acid recognition. <i>Tetrahedron</i> , 1998, 54, 3607-3630.   | 1.0 | 960       |
| 54 | The first analogues of LNA (Locked Nucleic Acids): Phosphorothioate-LNA and 2-thio-LNA. <i>Bioorganic and Medicinal Chemistry Letters</i> , 1998, 8, 2219-2222.  | 1.0 | 216       |

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|----|---|-----|-----------|
| 55 | Synthesis of 2'-Amino-LNA: A Novel Conformationally Restricted High-Affinity Oligonucleotide Analogue with a Handle. <i>Journal of Organic Chemistry</i> , 1998, 63, 10035-10039. | 1.7 | 136       |
| 56 | Synthesis of Novel Bicyclo[2.2.1] Ribonucleosides: 2'-Amino- and 2'-Thio-LNA Monomeric Nucleosides. <i>Journal of Organic Chemistry</i> , 1998, 63, 6078-6079.                    | 1.7 | 87        |
| 57 | A homoisoflavanone from <i>Pterocarpus marsupium</i> . <i>Phytochemistry</i> , 1997, 44, 765-766.   | 1.4 | 17        |