

### **Advancement in valorization technologies to improve utilization of bio-based waste in bioeconomy context**

**Usmani, Zeba; Sharma, Minaxi; Karpichev, Yevgen** Renewable and sustainable energy reviews 2020 / art. 109965, 16 p. : ill  
<https://doi.org/10.1016/j.rser.2020.109965> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Biobased natural deep eutectic system as versatile solvents : structure, interaction and advanced applications**

**Usmani, Zeba; Sharma, Minaxi; Tripathi, Manikant; Lukk, Tiit; Karpichev, Yevgen; Gathergood, Nicholas; Singh, Brahma N.; Thakur, Vijay Kumar; Tabatabaei, Meisam; Gupta, Vijai Kumar** Science of the total environment 2023 / art. 163002  
<https://doi.org/10.1016/j.scitotenv.2023.163002>

### **Biodegradability of deep eutectic solvents in treatment of pomace fruits**

**Usmani, Zeba; Husanu, Elena; Gathergood, Nicholas; Guazzelli, Lorenzo; Pomelli, Christian; Karpichev, Yevgen** 14th Baltic Conference on Food Science and Technology "Sustainable Food for Conscious Consumer" : FoodBalt 2021 : book of abstracts 2021 / p. 156

### **Biological nanofactories : using living forms for metal nanoparticle synthesis**

Srivastava, Shilpi; **Usmani, Zeba; Atanasov, Atanas G.; Singh, Vinod Kumar; Singh, Nagendra Pratap; Abdel-Azeem, Ahmed M.** Mini-Reviews in Medicinal Chemistry 2021 / p. 245 - 265 <https://doi.org/10.2174/1389557520999201116163012> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Bioprocessing of waste biomass for sustainable product development and minimizing environmental impact**

**Usmani, Zeba; Sharma, Minaxi; Awasthi, Abhishek Kumar; Sivakumar, Nallusamy; Lukk, Tiit** Bioresource technology 2021 / art. 124548, 12 p. : ill <https://doi.org/10.1016/j.biortech.2020.124548> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Bioremediation of lindane contaminated soil: Exploring the potential of Actinobacterial strains**

**Usmani, Zeba; Kulp, Maria; Lukk, Tiit** Chemosphere 2021 / art. 130468, 12 p. : ill <https://doi.org/10.1016/j.chemosphere.2021.130468> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Biosafe sustainable antimicrobial encapsulation and coatings for targeted treatment and infections prevention: Preparation for another pandemic**

**Usmani, Zeba; Lukk, Tiit; Mohanachandran, Dileep Kumar** Current Research in Green and Sustainable Chemistry 2021 / art. 100074 <https://doi.org/10.1016/j.crgsc.2021.100074> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **A comparative evaluation towards the potential of Klebsiella sp. and Enterobacter sp. in plant growth promotion, oxidative stress tolerance and chromium uptake in Helianthus annuus (L.)**

Gupta, Pratishtha; Kumar, Vipin; Usmani, Zeba; Rani, Rupa; Chandra, Avantika; **Gupta, Vijai Kumar** Journal of hazardous materials 2019 / 7 p. : ill <https://doi.org/10.1016/j.jhazmat.2019.05.054> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Deciphering the omics of plant-microbe interaction: perspectives and new insights**

Sharma, Minaxi; Sudheer, Surya; **Usmani, Zeba; Rani, Rupa; Gupta, Pratishtha** Current genomics 2020 / p. 343-362  
<https://doi.org/10.2174/1389202921999200515140420> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Developments in enzyme and microalgae based biotechniques to remediate micropollutants from aqueous systems - a review**

**Usmani, Zeba; Sharma, Minaxi; Lukk, Tiit; Karpichev, Yevgen** Critical reviews in environmental science and technology 2022 / p. 1684-1729 <https://doi.org/10.1080/10643389.2020.1862551> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Engineered microbes for pigment production using waste biomass**

**Usmani, Zeba; Sharma, Minaxi; Sudheer, Surya; Gupta, Vijai Kumar; Bhat, Rajeev** Current genomics 2020 / p. 80-95  
<https://doi.org/10.2174/1389202921999200330152007> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Enhanced bioremediation of pulp effluents through improved enzymatic treatment strategies : a greener approach**

Dixit, Mandeep; Gupta, Guddu Kumar; **Usmani, Zeba; Sharma, Minaxi; Shukla, Pratyosh** Renewable and Sustainable Energy Reviews 2021 / Art. 111664 <https://doi.org/10.1016/j.rser.2021.111664> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **An example of green surfactant systems based on inherently biodegradable IL-derived amphiphilic oximes**

Pandya, Subhashree Jayesh; **Kapitanov, Illia; Usmani, Zeba; Sahu, Reshma; Sinha, Deepak; Gathergood, Nicholas; Ghosh, Kallol K; Karpichev, Yevgen** Journal of molecular liquids 2020 / art. 112857 <https://doi.org/10.1016/j.molliq.2020.112857> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Implications of plant growth promoting Klebsiella sp. CPSB4 and Enterobacter sp. CPSB49 in luxuriant growth of tomato**

### **plants under chromium stress**

Gupta, Pratishtha; Kumar, Vipin; Usmani, Zeba; Rani, Rupa; Chandra, Avantika; **Gupta, Vijai Kumar** Chemosphere 2020 / Art. nr. 124944 <https://doi.org/10.1016/j.chemosphere.2019.124944> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Insights on engineered microbes in sustainable agriculture : biotechnological developments and future prospects**

Sudheer, Surya; Bai, Renu Geetha; **Usmani, Zeba**; Sharma, Minaxi Current Genomics 2020 / p. 321-333  
<https://doi.org/10.2174/1389202921999200603165934> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Ionic liquid based pretreatment of lignocellulosic biomass for enhanced bioconversion**

**Usmani, Zeba**; Sharma, Minaxi; Gupta, Pratishtha; **Karpichev, Yevgen**; **Gathergood, Nicholas**; Bhat, Rajeev; **Gupta, Vijai Kumar** Bioresource technology 2020 / art. 123003, 13 p <https://doi.org/10.1016/j.biortech.2020.123003> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Lignocellulosic biorefineries : the current state of challenges and strategies for efficient commercialization**

**Usmani, Zeba**; Sharma, Minaxi; Awasthi, Abhishek Kumar; **Lukk, Tiit**; Tuohy, Maria G.; Gong, Liang; Nguyen-Tri, Phuong; Goddard, Alan D.; Bill, Roslyn M.; Nayak, S. Chandra; Gupta, Vijai Kumar Renewable and sustainable energy reviews 2021 / art. 111258, 14 p. : ill <https://doi.org/10.1016/j.rser.2021.111258> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Microbial cancer therapeutics : a promising approach**

Diwan, Deepti; Cheng, Lei; **Usmani, Zeba**; Sharma, Minaxi; Holden, Nicola; Willoughby, Nicholas; Sangwan, Neelam; Baadhe, Rama Raju; Liu, Chenchen; Gupta, Vijai Kumar Seminars in Cancer Biology 2022 / p. 931 - 950  
<https://doi.org/10.1016/j.semcancer.2021.05.003> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Phytomanagement of chromium contaminated brown fields**

Kumar, Adarsh; **Usmani, Zeba**; Ahirwal, Jitendra; Tripti; Rani, Poonam Phytomanagement of polluted sites : Market opportunities in sustainable phytoremediation 2019 / p. 447-469 <https://doi.org/10.1016/B978-0-12-813912-7.00018-1>

### **Plant cell wall degrading enzymes in biomass bioprocessing to biorefineries: a review. Chapter 21**

Srivastava, Shilpi; Sharma, Minaxi; **Usmani, Zeba**; **Dubey, Saijasi** Recent developments in bioenergy research 2020 / p. 415-432  
<https://doi.org/10.1016/B978-0-12-819597-0.00022-2>

### **Pretreatment of plant feedstocks and agrofood waste using ionic liquids**

**Usmani, Zeba**; Sharma, Minaxi; **Karpichev, Yevgen**; **Gathergood, Nicholas**; Bhat, Rajeev; Gupta, Vijai Kumar Recent developments in bioenergy research 2020 / p. 393-413 <https://doi.org/10.1016/B978-0-12-819597-0.00021-0>

### **Recent advances in essential oils-based metal nanoparticles : a review on recent developments and biopharmaceutical applications**

Sana, Siva Sankar; Li, Huizhen; Zhang, Zhijun; Sharma, Minaxi; Usmani, Zeba; Hou, Tianyu; Netala, Vasudeva Reddy; Wang, Xin; **Gupta, Vijai Kumar** Journal of Molecular Liquids 2021 / Art. nr. 115951 <https://doi.org/10.1016/j.molliq.2021.115951> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Scope for Applying Transgenic Plant Technology for Remediation and Fortification of Selenium**

**Usmani, Zeba**; Kumar, Adarsh; Tripti Transgenic plant technology for remediation of toxic metals and metalloids 2018 / p. 429-461 : ill <http://doi.org/10.1016/B978-0-12-814389-6.00020-1>

### **Shaping the gut microbiota by bioactive phytochemicals : an emerging approach for the prevention and treatment of human diseases**

Sudheer, Surya; Gangwar, Prateeksha; **Usmani, Zeba**; Sharma, Minaxi; Sharma, Vivek Kumar; Sana, Siva Sankar; Almeida, Fausto; Dubey, Nawal Kishore; Singh, Dhananjaya Pratap; Dilbaghi, Neeraj; Khayat Kashani, Hamid Reza; Gupta, Vijai Kumar; Singh, Brahma Nand; Khayat Kashani, Maryam; Nabavi, Seyed Mohammad Biochimie 2022 / p. 38 - 63  
<https://doi.org/10.1016/j.biochi.2021.10.010> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Valorization of fruits and vegetable wastes and by-products to produce natural pigments**

Sharma, Minaxi; **Usmani, Zeba**; **Gupta, Vijai Kumar**; Bhat, Rajeev Critical Reviews in Biotechnology 2021 / p. 535-563 : ill <https://doi.org/10.1080/07388551.2021.1873240> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)