


[DOWNLOAD](#)


Biosorption and bioaccumulation of Cu (II) from aqueous solution

By Mohmad, Osama / Elfeil, Wael

Book Condition: New. Publisher/Verlag: LAP Lambert Academic Publishing | using Mesorhizobium amorphae strain CCNWGS0123 isolated from mine tailing | Our studies showed that both dead and live cells of M. amorphae CCNWGS0123 are effective absorbents for copper removal from aqueous solution. The removal of copper increased significantly by increasing the pH up to 5.0, agitation speed 150 rpm and temperature 28°C. Equilibrium was reached within 30 min. The absorption isotherms could be well fitted by the Langmuir equation followed by the Freundlich equation. The highest removal of initial copper concentration was achieved at a dosage of 100 mg/L and the highest biosorption capacity was found at an initial concentration of 0.5 g/L Cu (II). Fourier transform-infrared spectroscopy (FT-IR) analysis indicated that many functional groups, such as O-H, N-H, C-H, C=O, -NH, -CN, C-N, C-O, amide (-I, -II, -III), and unsaturated alkenes, alkyls and aromatic groups on the cell surface, were involved in the interaction between CCNWGS0123 and Cu ion. Scanning electron microscope (SEM) results showed deformation, aggregation and cell-surface damage due to the precipitation of copper on the cell surface. Energy Dispersive X-ray Scanning (EDX) showed three distinct peaks at 1.1 keV, 8.1 keV and 8.9 keV, implying that copper...



[READ ONLINE](#)

[7.76 MB]

Reviews

Comprehensive information for book fans. It is one of the most amazing book i actually have read. Once you begin to read the book, it is extremely difficult to leave it before concluding.

-- **Yoshiko Okuneva**

If you need to adding benefit, a must buy book. I am quite late in start reading this one, but better then never. I am happy to inform you that this is the best book i have read through during my own lifestyle and can be he best publication for at any time.

-- **Mrs. Phoebe Schimmel**

See Also



[Childrens Educational Book Junior Vincent van Gogh A Kids Introduction to the Artist and his Paintings. Age 7 8 9 10 year-olds SMART READS for . - Expand Inspire Young Minds Volume 1](#)

CreateSpace Independent Publishing Platform. Paperback. Book Condition: New. This item is printed on demand. Paperback. 26 pages. Dimensions: 9.8in. x 6.7in. x 0.2in.Van Gogh for Kids 9. 754. 99-PaperbackABOUT SMART READS for Kids. . . Love Art, Love LearningWelcome. Designed to expand...



[Children s Educational Book: Junior Leonardo Da Vinci: An Introduction to the Art, Science and Inventions of This Great Genius. Age 7 8 9 10 Year-Olds. \[Us English\]](#)

Createspace, United States, 2013. Paperback. Book Condition: New. 254 x 178 mm. Language: English . Brand New Book ***** Print on Demand *****.ABOUT SMART READS for Kids . Love Art, Love Learning Welcome. Designed to expand and inspire young minds; this is...



[Children s Educational Book Junior Leonardo Da Vinci : An Introduction to the Art, Science and Inventions of This Great Genius Age 7 8 9 10 Year-Olds. \[British English\]](#)

Createspace, United States, 2013. Paperback. Book Condition: New. 248 x 170 mm. Language: English . Brand New Book ***** Print on Demand *****.ABOUT SMART READS for Kids . Love Art, Love Learning Welcome. Designed to expand and inspire young minds; this is...



[Cloverleaf Kids: Kids and adults alike will enjoy these hilarious stories and antics of me,my siblings and our friends growing up in a small town in . over & over and always got a good laugh.](#)

CreateSpace Independent Publishing Platform. PAPERBACK. Book Condition: New. 1482737256 Special order direct from the distributor.



[The First Epistle of H. N. a Crying-Voyce of the Holye Spirit of Loue. Translated Out of Base-Almayne Into English. \(1574\)](#)

Eebo Editions, Proquest, United States, 2010. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.EARLY HISTORY OF RELIGION. Imagine holding history in your hands. Now you can. Digitally preserved and previously accessible...



[Index to the Classified Subject Catalogue of the Buffalo Library; The Whole System Being Adopted from the Classification and Subject Index of Mr. Melvil Dewey, with Some Modifications .](#)

Rarebooksclub.com, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.This historic book may have numerous typos and missing text. Purchasers can usually download a free scanned copy of the...