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G-63 **Production of D-Allulose from D-Fructose by Recombinant Enzyme D-Allulose 3-Epimerase in *Corynebacterium Glutamicum* Using Permeabilization**

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G-64 **Characterization of Highly Efficient Sorbitol Dehydrogenase from *Gluconobacter oxydans* G624**

Tae-Su KIM[1], Ha Young JUNG[1], Jae Youn BAE[1], Jung-Kul LEE[3] and Jae Kyung SOHNG*[1,2]

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G-65 **Cloning of Cold-Adapted Protease from Antarctic *Enterobacter* sp.**

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G-66 **Crystallization & X-ray Diffraction of SAM-Dependent Methyltransferase**

In-Hwan OH[1], Woo-Ri SHIN[1], Simranjeet Singh SEKHON[1], Sung-Keun RHEE[1], Ji-Young AHN[1], Jiho MIN[2] and Yang-Hoon KIM*[1]

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G-67 **Microbial Production of Polyhydroxyalkanoates Using Sucrose by Metabolically Engineered *Ralstonia eutropha***

Hye Mi KIM[1], So Young CHOI[1], Si Hae PARK[2], Seung Hwan LEE[3] and Sang Yup LEE*[1]

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G-68 **Isolation of *Klebsiella Michiganensis* to Produce Alginate Lyase from Gut Microflora of Sea Cucumber**

Eun-Bee KIM[1], Bipin VAIDYA[1,2] and Du Woon KIM*[1]

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G-69 **New Chemico-Physical Method for the Transformation of Various Bacterial Species**

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G-70 **An Enzymatic Production of Resveratrol Glycosides Derivatives with UDP-Glucose Recycling *in vitro***

Ramesh Prasad PANDEY[1,2], Samir Bahadur THAPA[1], Puspalata BASHYAL[1] and Jae Kyung SOHNG*[1,2]

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G-71 **Enhancement of 1-Deoxynojirimycin by Metabolic Engineering**

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G-72 **The Use of Membrane Separate Technique for the Production of Alginate Lyase**

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G-73 **Disulfide Bond-Mediated Spatial Reconstitution Enhances Affinity for Pyridoxal 5-phosphate of Lysine Decarboxylase from *Selenomonas ruminantium***

Hye-Young SAGONG, Hwaseok HONG and Kyung-Jin KIM*

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G-74 **Novel glycoside Hydrolase Gene Clusters and Hydrolysis of Various β-linked Polysaccharides in Hyperthermophilic Archaea**

Mi Sook DOH[1,2], Kyu Bee LEE[1,2], Ji In YANG[1,2], Jae Kyu LIM[1,2], Hyun Sook LEE[1,2], Sung Gyun KANG[1,2], Jung-Hyun LEE[1,2] and Yun Jae KIM*[1,2]

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H-6 **Development of High-Resolution Microchip SSCP Analysis System Using Pluronic Polymer Matrix**
Giyoung SHIN[1] and Gyoo Yeol JUNG*[1,2]
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H-7 **Green Synthesis of Silver-Silver Chloride Nanoparticles Using Plant-Extract and Their Growth Inhibitory Effect on Pathogenic Bacteria**
Eun-Joo KIM, Maheshkumar Prakash PATIL and Gun-do KIM*
Department of Microbiology, College of Natural Sciences, Pukyong National University, Busan, Korea.

H-8 **Optimization of Synthetic Small Regulatory RNA Level for Effective RNA Silencing in Metabolic Engineering**
Minhui SUNG[1], Sang Yup LEE[2], Seungmin YOO[2], Ren JUN[1], Jae Eun LEE[3] and Dokyun NA*[1]
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H-9 **Activity Test Platform of Antimicrobial Peptides for Engineering Using Cell-Free Protein Synthesis System**
Yeonjae JANG and Dong-Myung KIM*
Department of Chemical Engineering and Applied Chemistry, Chungnam National University, Daejeon, Korea.

H-10 **Targeted Gene Delivery of Polymeric Nanoparticle with RGD-Dendrimeric Peptide in Integrin-Overexpressing Tumor Cells**
Eun-Ji KIM, Seong-Cheol PARK and Mi-Kyeong JANG*
Depa. of Polymer Science and Engineering, Sunchon National University, Suncheon, Korea.

H-11 **Using the Self-Repression Mechanism of Pathway Specific Regulator for Enhancement of Daunorubicin Production in *bldA* Deficient *Streptomyces peucetius* ATCC 27952**
Hue NGUYEN THI[3], Anaya RAJ POKHREL[1], Dipesh DHAKAL[1] and Jae Kyung SOHNG*[1,2]
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H-12 ***De novo* Biosynthesis of Pterostilbene in an *Escherichia coli* Strain Using a New Resveratrol-O-Methyltransferase from *Arabidopsis***
Kyung Taek HEO[1,2], Sun-Young KANG[1] and Young-Soo HONG*[1]
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H-13 **A Ganglioside-Embedded Nanoparticle Inhibits Influenza A Virus Replication through Abortive RNA Release in the Endosome**
Yuna KIM, Byoungjae KONG, Seokoh MOON, Seok-Hyeon YU and Dae-Hyuk KWEON*
Department of Biotechnology and Bioengineering, Sungkyunkwan University, Suwon, Korea.

H-14 **Engineering of *P. putida* KT2440 for Heterologous Protein Expression and Secretion**
Siseon LEE, Seonghun IM, Ji-Yeun YI, Du-Kyeong KANG, Minsik KANG, Jung-Hoon BAE, Jung-Hoon SOHN and Bong Hyun SUNG*
Cell Factory Research Center, KRIBB, Daejeon, Korea.

H-15 **A Highly Efficient CRISPR-Cas9-Mediated Large Genomic Deletion in *Bacillus subtilis***
Younju SO[1,2], Soo-Young PARK[3], Eun-Hye PARK[3], Seung-Hwan PARK[1,2], Eui-Joong KIM[3], Jae-Gu PAN[1] and Soo-Keun CHOI*[1,2]
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H-16 ***In vivo* Models for the Preclinical Study of PC Nanogel**
Dong Hwan CHOI[1], Hana YU[1], Jae Chul CHOI[1], Kwang KIM[1], Haryong POO[3], Chul-Joong KIM[4] and Moon Hee SUNG*[1,2]
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H-17 **Construction of Vector for Repression of Multiple Gene in *E. coli***
Biplav SHRESTHA[1], Ramesh Prasad PANDEY[1,2], Sumangala DARSANDHARI[1], Puspalata BASHYAL[1] and Jae Kyung SOHNG*[1,2]
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