

1. Record Nr.	UNINA9910828520003321
Titolo	Corynebacterium glutamicum : from systems biology to biotechnological applications // edited by Andreas Burkovski
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Descrizione fisica	1 online resource (210 p.)
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Soggetti	Corynebacterium glutamicum - Metabolism
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Contents; Contributors; Current Books of Interest; Preface; 1: Trends in Corynebacterium glutamicum Research and Application; From glutamate producer to a biotechnology workhorse; Systems biology; Corynebacterium glutamicum as a synthetic biology platform; Corynebacterium glutamicum-based green technology; 2: Proteomics of Corynebacterium glutamicum; Introduction; Understanding Corynebacterium glutamicum physiology with proteomics: application examples; Methods of Corynebacterium glutamicum proteomics; Conclusion and outlook 3: Developing Interpretation of Intracellular Metabolism of Corynebacterium glutamicum by Using Flux Analysis Technology Introduction; Understanding the physiology of Corynebacterium glutamicum lysine production and glutamate production through conventional metabolic flux analysis; Fractional <sup>13</sup> C enrichment-based metabolic flux analysis; Improvement in metabolic flux analysis precision; Conclusion; 4: Growth and Production Capabilities of Corynebacterium glutamicum: Interrogating a Genome-scale Metabolic Network Model; Introduction; The metabolic network of Corynebacterium glutamicum Stoichiometric modelling fundamentals Model validation; Predicting production capabilities for amino acids; Uncertainties in metabolic network models; Metabolic flux analysis; Conclusions; 5: Metabolic Engineering of Corynebacterium glutamicum for Alternative Carbon

Source Utilization; Introduction; Engineering of *Corynebacterium glutamicum* for alternative carbon sources; Complex carbon sources; Summary and outlook; 6: Manipulation of Nitrogen Metabolism and Alternative Nitrogen Sources for *Corynebacterium glutamicum*; Ammonium assimilation in *Corynebacterium glutamicum* Regulation of nitrogen metabolism Manipulation of nitrogen metabolism for amino acid production; Overexpression, deletion and heterologous expression of glutamate dehydrogenase; Overexpression of glutamine synthetases; Influence of glutamate synthase on L-glutamate biosynthesis; Changing ammonium assimilation and amino acid production by manipulation of  $\alpha$ -ketoglutarate supply; Influence of ammonium and glutamate transport systems on amino acid production; Manipulation of nitrogen regulation: influences on metabolite pools; Assimilation of alternative nitrogen sources; Concluding remarks

7: Transport, Degradation and Assimilation of Aromatic Compounds and their Regulation in *Corynebacterium glutamicum* Introduction; What do the *Corynebacterium glutamicum* genomes predict for degradation and assimilation of aromatic compounds?; *Corynebacterium glutamicum* grows on various aromatic compounds; Physiological adaptation of *Corynebacterium glutamicum* growing on aromatic compounds compared with carbohydrates; Uptake and transport of aromatic compounds in *Corynebacterium glutamicum*; Aromatic compounds degraded via protocatechuate branch of the  $\alpha$ -ketoacid pathway  
Aromatic compounds degraded via the catechol branch of the  $\alpha$ -ketoacid pathway

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Sommario/riassunto

*Corynebacterium glutamicum* is most widely known for its role in the industrial production of L-glutamate and L-lysine and as a platform organism for the production of a variety of fine chemicals, biofuels and polymers. The organism's accessibility to genetic manipulation has resulted in a wealth of data on its metabolism and regulatory networks; this in turn makes *C. glutamicum* the model organism of choice in white biotechnology. A key development in recent years has been the engineering of *C. glutamicum* to utilize a broader spectrum of carbon sources (e.g. glycerol, galactose and pentose sugars)

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2. Record Nr.	UNISANNIOMIL0148401
Autore	Cova, Alberto <1932- >
Titolo	La Cassa di risparmio delle provincie lombarde dalla fondazione al 1940 : finanza e sviluppo economico-sociale / Alberto Cova, Anna Maria Galli
Pubbl/distr/stampa	Milano, : Cariplo Roma ; Bari, : Laterza, [1991]
Titolo uniforme	La Cassa di risparmio delle provincie lombarde dalla fondazione al 1940
ISBN	8842038970
Descrizione fisica	4 volumi ; 24 cm
Collana	Economia e società in Lombardia dall'età delle riforme alla grande crisi ; 7
Classificazione	IT/X430.8 IT/X435.3 Se.i.5.0 X31.0
Altri autori (Persone)	Galli, Anna Maria
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Soggetti	CASSA DI RISPARMIO DELLE PROVINCIE LOMBARDE - 1822-1940
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