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Titolo	Lung cancer and imaging / / edited by Ayman El-Baz, Jasjit S. Suri
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Descrizione fisica	1 online resource (various pagings) : illustrations (some color)
Collana	IOP ebooks. [2020 collection] IPEM-IOP series in physics and engineering in medicine and biology
Disciplina	616.99/424075
Soggetti	Lungs - Cancer - Imaging Lung Neoplasms - diagnostic imaging Radiography Diagnostic Imaging - methods Medical imaging MEDICAL / Allied Health Services / Imaging Technologies
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Version: 20191201"--Title page verso.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	1. Early diagnosis system for lung nodules based on the integration of a higher-order MGRF appearance feature model and 3D-CNN -- 1.1. Introduction -- 1.2. Methods -- 1.3. Experimental results -- 1.4. Conclusion 2. Capsule networks for lung cancer screening -- 2.1. Introduction -- 2.2. Capsule network -- 2.3. Fast capsule network -- 2.4. Dataset -- 2.5. Experiments -- 2.6. Results and discussion -- 2.7. Conclusions 3. Quantitative malignancy recognition of lung cancer using non-invasive image modalities -- 3.1. Introduction -- 3.2. Materials and methods -- 3.3. Conclusion 4. Epidemiology of lung cancer -- 4.1. Descriptive epidemiology of lung cancer -- 4.2. Risk factors of lung cancer -- 4.3. Lung cancer in never-smokers -- 4.4. Screening -- 4.5. Conclusion 5. Use of biomarkers in lung cancer diagnosis, prognosis, and treatment -- 5.1. Introduction -- 5.2. Histological subtypes and respective personalized medicine -- 5.3. Available screening assays to

detect molecular alterations and genetic rearrangements -- 5.4.  
Molecular methods used to detect mutations -- 5.5. Genomic markers  
-- 5.6. Proteomic markers -- 5.7. Metabolic markers -- 5.8.  
Immunotherapy markers -- 5.9. The emerging role of microRNAs --  
5.10. Clinical trials with targetable oncogenic drivers -- 5.11.

Conclusion

6. Radiomics and lung cancer : promising news for early detection of nodules -- 6.1. Introduction -- 6.2. Interpretation of small lung nodules -- 6.3. Computer-aided detection/diagnosis (CAD) -- 6.4.  
Radiomics -- 6.5. Conclusion

7. Photodynamic diagnosis and treatment of lung cancer -- 7.1.  
Introduction -- 7.2. Cancer -- 7.3. Photodynamic diagnosis -- 7.4.  
Photodynamic therapy -- 7.5. Conclusion

8. Cold atmospheric plasma and iron oxide based magnetic nanoparticles for synergetic lung cancer therapy -- 8.1. Introduction -- 8.2. Therapeutic effect of cold atmospheric plasma in lung cancer -- 8.3. The therapeutic effect of magnetic iron oxide nanoparticles in lung cancer -- 8.4. Synergistic therapeutic effects of cold atmospheric plasma and magnetic iron oxide nanoparticles in lung cancer -- 8.5.  
The synergistic therapeutic effect of cold atmospheric plasma and drug-loaded magnetic nanoparticles in lung cancer -- 8.6. Conclusions

9. Exploiting exhaled aerosol fingerprints to detect lung cancers and obstructive respiratory diseases -- 9.1. Introduction -- 9.2. Methods and materials -- 9.3. Results -- 9.4. Discussion -- 9.5. Conclusion

10. A study of ground-glass opacity (GGO) nodules in the automated detection of lung cancer -- 10.1. Introduction -- 10.2. Ground-glass opacity (GGO) nodules -- 10.3. Computer-aided detection of GGO nodules -- 10.4. Different ways to handle GGOs in automated detection -- 10.5. Conclusion

11. Electromagnetic imaging and lung ablation -- 11.1. Introduction -- 11.2. Electrical impedance tomography -- 11.3. Magnetic induction tomography -- 11.4. Microwave imaging -- 11.5. Lung ablation -- 11.6. Current trends and future perspectives -- 11.7. Conclusion.

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### Sommario/riassunto

Lung cancer is one of the most common cancers in both men and women worldwide. Early diagnosis of lung cancer can significantly increase the chances of a patient's survival, yet early detection has historically been difficult. As a result, there has been a great deal of progress in the development of accurate and fast diagnostic tools in recent years. Lung Cancer and Imaging provides an introduction to both the methods currently used in lung cancer diagnosis and the promising new techniques that are emerging. Areas covered include the major trends and challenges in lung cancer detection and diagnosis, classification of cancer types, lung feature extraction in joint PET/CT images, and algorithms in the area of low dosage CT lung cancer images. Part of Series in Physics and Engineering in Medicine and Biology.

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2. Record Nr.	UNINA9910698364903321
Autore	Hecker JayEtta Z
Titolo	Freight railroads [[electronic resource]] : updated information on rates and other industry trends
Pubbl/distr/stampa	Washington, DC : , : U.S. Govt. Accountability Office, , [2007]
Descrizione fisica	14 pages : digital, PDF file
Soggetti	Railroads - Freight - Rates - United States
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from title screen (viewed on Sept. 19, 2007). Author: JayEtta Z. Hecker. "August 15, 2007." Paper version available from: U.S. Govt. Accountability Office, 441 G St., NW, Rm. LM, Washington, D.C. 20548. "GAO-07-291R."
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