

Mendeley is a really good option if you have a huge list of papers. Once you narrow it down to a few really good papers, it might be worth printing them out and putting them in a binder.

When you open mendeley on windows you get something like this:

You can see the Raman-ML group on the left. There are also some sub folders for better organizing the documents. To add new papers, you can drag and drop new PDF documents from windows. Don't forget to sync occasionally to upload the papers.

The screenshot shows the Mendeley Desktop application interface. On the left, there is a sidebar with a tree view of folders. Under 'My Publications', there are folders like 'Unsorted', 'Airfoil Exp', 'Blood Flow', 'Electronics', 'Organ On a Chip', 'Porous Silicon', 'Raman Spectroscopy', and 'Thermal Expansion'. Under 'External Library', there are 'Groups' including 'LoaC Senior Sem' and 'Raman-ML'. The 'Raman-ML' group is expanded, showing subfolders like 'Machine Learning', 'Raman', 'Similar to Stanford', and 'Spectrum Processing'. The main pane displays a list of documents with columns for Authors, Title, Year, and Published In. The right pane shows the details of a selected document, including its title, authors, journal information, and an abstract.

Authors	Title	Year	Published In
Boardman, Anna K.; Wong, Winnie S.; Premasri, W. Rang...	HHS Public Access	2017	
Krishnamoorthi, Arjun	a Novel Spectroscopic Instrument for the Rapid	2020	
Boardman, Anna K.; Wong, Winnie S.; Premasri, W. Ra...	Rapid detection of bacteria from blood with surface-enhanced Raman spectroscopy	2016	Analytical Chemistry
Mathey, R.; Dupuy, M.; Espagnon, J.; Leroux, D.; M...	Viability of 3h grown bacterial micro-colonies after direct Raman identification	2015	Journal of Microbiological ...
Chen, Yingkan	Graz University of Technology Invoice Recipient	2014	PHD
Anjad, Arslan; Ullah, Rahat; Khan, Saranjam; Bilal, Muha...	Raman spectroscopy based analysis of milk using random forest classification	2018	Vibrational Spectroscopy
Li, Qifeng; Ma, Xiangyun; Sun, Xueqing; Wang, Huijie; ...	A spectral recovery method for Raman spectroscopy utilizing prior datasets	2020	Spectrochimica Acta - Part A: ...
Kerr, Laura T.; Byrne, Hugh J.; Hennelly, Bryan M.	Optimal choice of sample substrate and laser wavelength for Raman spectroscopic analysis of biological specimen	2015	Analytical Methods
Paret, Mathews L.; Sharma, Shiv K.; Green, Lisa M.; Alv...	Biochemical characterization of Gram-positive and Gram-negative plant-associated bacteria with micro-Raman spec...	2010	Applied Spectroscopy
Jehlička, Oren; Vitek - 2012 - Use of Raman spectroscopy for identification of compatible solutes in halophilic bacteri...			
Rothhaar, Katja; Zhang, Dongmao; Xie, Yong; Ben-a...	New Substrate for Raman , Infrared , and		
Ezzat, Dalia; Hassanien, Aboul Ella; Hassan, Hassan	An optimized deep learning architecture for the diagnosis of COVID-19 disease based on gravitational search optimiza...	2021	Applied Soft Computing
Ryabchikov, Oleg; Bockdtz, Thomas; Ramoji, Anuradha; ...	Automatization of spike correction in Raman spectra of biological samples	2016	Chemometrics and Intelligent ...
Pahlow, Susanne; Meisel, Susann; Cialla-May, Dana; ...	Isolation and identification of bacteria by means of Raman spectroscopy	2015	Advanced Drug Delivery Reviews
Zhou, Lan; Poggesi, Simone; Bariani, Giulio Cesare Casari; ...	Robust SERS platforms based on annealed gold nanostructures formed on ultrafine glass substrates for v...	2019	Biosensors

The right pane shows the details of a selected document:

Type: Journal Article

Combination of an Artificial Intelligence Approach and Laser Tweezers Raman Spectroscopy for Microbial ...

Authors: W. Lu, X. Chen, L. Wang e...

Journal: *Analytical Chemistry*

Year: 2020

Volume: 92

Issue: 9

Pages: 6288-6296

Abstract:
Raman spectroscopy is a nondestructive, label-free, highly specific approach that provides the chemical information on materials. Thus, it is suitable to be used as an effective analytical tool to characterize biological samples. Here we introduce a novel method that uses artificial intelligence to analyze biological Raman spectra and identify the microbes at a single-cell level. The combination of a framework of convolutional neural network (ConvNet) and Raman spectroscopy allows the extraction of the Raman spectral features of a single microbial cell and then categorizes cells according to their spectral features. As the proof of concept, we measured Raman spectra of 14 microbial species at a single-cell level a...

If you click on one of the subfolders, you can see the documents that were placed in it. If you click one of the documents, it will open some details as shown on the right. You can add notes and tags from this window. Later on you can use the tags to further organize the documents. For example, in the past, I've made tags for the laser's wavelength, the bacteria they use, the type of ML algorithm, etc.

The screenshot shows a file manager interface with a sidebar on the left containing 'My Publications' and 'External Library'. The main pane displays a list of documents under the heading 'Similar to Stanford in Raman-ML'. The selected document is 'Classification of pathogens by Raman spectroscopy combined with generative adversarial networks' by S. Yu, H. Li, X. Li et al., published in 'Science of the Total Environment' in 2020. A details pane on the right shows the journal information and an abstract.

Authors	Title	Year	Published In	Add
Boardman, Anna K; Wong, Winnie S; Premasri, W Ranj...	HHS Public Access	2017		9:0
Krishnamoorthi, Arjun	a Novel Spectroscopic Instrument for the Rapid	2020		9:0
Lu, Wella; Chen, Xiuqiang; Wang, Lu; Li, Hanfei; Fu, Yu...	Combination of an Artificial Intelligence Approach and Laser Tweezers Raman Spectroscopy for Microbial Identification	2020	Analytical Chemistry	9:0
Yu, Shixiang; Li, Hanfei; Li, Xin; Fu, Yu Vincent; Liu, Fan...	Classification of pathogens by Raman spectroscopy combined with generative adversarial networks	2020	Science of the Total Environ...	9:0
Yan, Shuashuai; Wang, Shuying; Qiu, Jingxuan; Li, ...	Raman spectroscopy combined with machine learning for rapid detection of food-borne pathogens at the single-cel...	2021	Talanta	9:0
Zhao, Y.; Tian, Sh; Yu, L.; Zhang, Zh; Zhang, W.	Analysis and Classification of Hepatitis Infections Using Raman Spectroscopy and Multiscale Convolutional Neural ...	2021	Journal of Applied Spectroscopy	9:0
Ho, Chi Sing; Jean, Neal; Hogan, Catherine A.; Black...	Rapid identification of pathogenic bacteria using Raman spectroscopy and deep learning	2019	Nature Communications	Jur

If you double click a document it will open up the document. From there you can add comments and highlights...

The screenshot shows a document viewer interface with a toolbar at the top. The document content is displayed in the main pane, including the journal information, title, authors, and abstract. The abstract text is: 'Rapid identification of marine pathogens is very important in marine ecology. Artificial intelligence combined with Raman spectroscopy is a promising choice for identifying marine pathogens due to its rapidity and efficiency. However, considering the cost of sample collection and the challenging nature of the experimental environment, only limited spectra are typically available to build a classification model, which hinders qualitative analysis. In this paper, we propose a novel method to classify marine pathogens by means of Raman spectroscopy combined with generative adversarial networks (GANs). Three marine strains, namely, Staphylococcus hominis, Vibrio...'