

Influence of interference effects on the spectral quality and histological classification by FT-IR imaging in transflection geometry

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Metric calculation

For each defined spectral range (given below) a linear baseline was done separately and then parameter calculation was done (max intensity, center of gravity or integral of the region). Metrics were calculated by making ratios of parameters in spectroscopically defined regions and the corresponding parameter of Amide I region (1600 – 1710 cm⁻¹).

Metric no.	Description:
1.	max intensity between 940 and 980 / max intensity between 1600 and 1710
2.	max intensity between 1015 and 1040 / max intensity between 1600 and 1710
3.	max intensity between 1040 and 1070 / max intensity between 1600 and 1710
4.	max intensity between 1010 and 1155 / max intensity between 1600 and 1710
5.	max intensity between 1160 and 1180 / max intensity between 1600 and 1710
6.	max intensity between 1190 and 1210 / max intensity between 1600 and 1710
7.	max intensity between 1210 and 1280 / max intensity between 1600 and 1710
8.	max intensity between 1190 and 1290 / max intensity between 1600 and 1710
9.	max intensity between 1295 and 1320 / max intensity between 1600 and 1710
10.	max intensity between 1340 and 1360 / max intensity between 1600 and 1710
11.	max intensity between 1360 and 1390 / max intensity between 1600 and 1710
12.	max intensity between 1360 and 1425 / max intensity between 1600 and 1710
13.	max intensity between 1425 and 1480 / max intensity between 1600 and 1710
14.	max intensity between 1490 and 1590 / max intensity between 1600 and 1710
15.	max intensity between 1710 and 1760 / max intensity between 1600 and 1710
16.	max intensity between 2800 and 2880 / max intensity between 1600 and 1710
17.	max intensity between 2800 and 3025 / max intensity between 1600 and 1710
18.	max intensity between 3000 and 3025 / max intensity between 1600 and 1710
19.	max intensity between 3025 and 3100 / max intensity between 1600 and 1710
20.	max intensity between 3100 and 3600 / max intensity between 1600 and 1710
21.	center of gravity between 940 and 980 / center of gravity between 1600 and 1710
22.	center of gravity between 1015 and 1040 / center of gravity between 1600 and 1710
23.	center of gravity between 1040 and 1070 / center of gravity between 1600 and 1710
24.	center of gravity between 1010 and 1155 / center of gravity between 1600 and 1710
25.	center of gravity between 1160 and 1180 / center of gravity between 1600 and 1710
26.	center of gravity between 1190 and 1210 / center of gravity between 1600 and 1710
27.	center of gravity between 1210 and 1280 / center of gravity between 1600 and 1710
28.	center of gravity between 1190 and 1290 / center of gravity between 1600 and 1710
29.	center of gravity between 1295 and 1320 / center of gravity between 1600 and 1710
30.	center of gravity between 1340 and 1360 / center of gravity between 1600 and 1710
31.	center of gravity between 1360 and 1390 / center of gravity between 1600 and 1710
32.	center of gravity between 1360 and 1425 / center of gravity between 1600 and 1710

33. center of gravity between 1425 and 1480 / center of gravity between 1600 and 1710
34. center of gravity between 1490 and 1590 / center of gravity between 1600 and 1710
35. center of gravity between 1710 and 1760 / center of gravity between 1600 and 1710
36. center of gravity between 2800 and 2880 / center of gravity between 1600 and 1710
37. center of gravity between 2800 and 3025 / center of gravity between 1600 and 1710
38. center of gravity between 3000 and 3025 / center of gravity between 1600 and 1710
39. center of gravity between 3025 and 3100 / center of gravity between 1600 and 1710
40. center of gravity between 3100 and 3600 / center of gravity between 1600 and 1710
41. integral between 940 and 980 / integral between 1600 and 1710
42. integral between 1015 and 1040 / integral between 1600 and 1710
43. integral between 1040 and 1070 / integral between 1600 and 1710
44. integral between 1010 and 1155 / integral between 1600 and 1710
45. integral between 1160 and 1180 / integral between 1600 and 1710
46. integral between 1190 and 1210 / integral between 1600 and 1710
47. integral between 1210 and 1280 / integral between 1600 and 1710
48. integral between 1190 and 1290 / integral between 1600 and 1710
49. integral between 1295 and 1320 / integral between 1600 and 1710
50. integral between 1340 and 1360 / integral between 1600 and 1710
51. integral between 1360 and 1390 / integral between 1600 and 1710
52. integral between 1360 and 1425 / integral between 1600 and 1710
53. integral between 1425 and 1480 / integral between 1600 and 1710
54. integral between 1490 and 1590 / integral between 1600 and 1710
55. integral between 1710 and 1760 / integral between 1600 and 1710
56. integral between 2800 and 2880 / integral between 1600 and 1710
57. integral between 2800 and 3025 / integral between 1600 and 1710
58. integral between 3000 and 3025 / integral between 1600 and 1710
59. integral between 3025 and 3100 / integral between 1600 and 1710
60. integral between 3100 and 3600 / integral between 1600 and 1710

Paraffin bands (were not used in classification)