

# 原子光谱分析文献题录

(三)

★ 国外原子吸收光谱分析 ★

1984

中国光学学会光谱专业委员会咨询服务部

# 原子吸收光谱分析文献题录分类索引

(第 2—3 册)

## A. 农业试样

### 1. 一般问题和其他

8, 21, 254, 404, 523, 526, 2169, 2889, 2910, 3506,  
3904, 4194, 4591,

### 2. 土 壤

15, 19, 172, 608, 719, 725, 765, 766, 775, 807,  
900, 1017, 1059, 1078, 1138, 1284, 1432, 1498, 1641, 1659,  
1700, 1765, 1815, 1837, 1898, 1956, 1959, 1965, 1983, 2027,  
2045, 2061, 2080, 2101, 2240, 2177, 2240, 2241, 2256, 2290,  
2322, 2329, 2467, 2469, 2474, 2549, 2618, 2623, 2650, 2730,  
2757, 2796, 2798, 2861, 2869, 2899, 2904, 2905, 2916, 2926,  
2928, 2941, 2977, 2994, 3054, 3135, 3197, 3239, 3267, 3343,  
3357, 3433, 3495, 3519, 3588, 3622, 3732, 3737, 3805, 3833,  
3841, 3854, 3954, 3988, 3994, 4078, 4155, 4185, 4291, 4314,  
4373, 4382, 4416, 4459, 4508, 4591, 4629, 4633, 4663,

### 3. 肥 料

172, 202a, 332, 373a, 708, 724, 772, 773, 984, 1032,  
1385, 1966, 1967, 2220, 2355, 2814, 2847, 2929, 3081, 3331,  
3380, 3470, 3625, 3737, 4548, 4577,

### 4. 农药、除草剂

704, 1655, 1688,

## B. 生物样品

### 1. 一般问题和其他

19, 35, 68, 73, 131, 133, 155, 160, 161, 171,  
178, 183, 220, 222, 223, 246, 260, 280, 323, 335,  
359, 399, 411, 433, 446, 461, 481, 492, 491, 507,  
513, 532, 538, 555, 556, 557, 558, 564, 567, 575,  
577, 579, 580, 612, 626, 659, 674, 681, 688, 690,  
691, 692, 693, 694, 703, 723, 730, 754, 757, 793,

825, 832, 856, 898, 912, 916, 925, 939, 940, 946,  
 957, 963, 1026, 1031, 1049, 1094, 1096, 1101, 1106, 1110,  
 1111, 1123, 1137, 1163, 1169, 1199, 1225, 1231, 1239, 1277,  
 1286, 1307, 1308, 1360, 1386, 1392, 1401, 1402, 1411, 1442,  
 1499, 1505, 1517, 1521, 1601, 1631, 1632, 1663, 1680, 1689,  
 1712, 1720, 1804, 1807, 1825, 1826, 1828, 1904, 1910, 1922,  
 1945, 1958, 1986, 1990, 1997, 2001, 2090, 2091, 2117, 2122,  
 2125, 2130, 2138, 2171, 2187, 2197, 2219, 2238, 2244, 2245,  
 2246, 2252, 2263, 2266, 2287, 2293, 2300, 2301, 2313, 2326,  
 2347, 2352, 2362, 2364, 2391, 2399, 2404, 2415, 2442, 2447,  
 2454, 2458, 2490, 2516, 2517, 2520, 2534, 2548, 2563, 2572,  
 2594, 2617, 2626, 2638, 2639, 2646, 2666, 2675, 2688, 2691,  
 2697, 2721, 2731, 2737, 2768, 2797, 2801, 2817, 2838, 2935,  
 2970, 2976, 3012, 3020, 3029, 3077, 3080, 3093, 3099, 3142,  
 3158, 3172,  
 3173, 3202, 3223, 3272, 3273, 3276, 3279, 3322, 3366, 3373,  
 3426, 3477, 3478, 3518, 3533, 3538, 3568, 3570, 3582, 3587,  
 3599, 3608, 3615, 3662, 3738, 3748, 3877, 3878, 3956, 3961,  
 4000, 4019, 4027, 4028, 4030, 4058, 4081, 4099, 4112, 4114,  
 4131, 4153, 4156, 4173, 4177, 4195, 4203, 4244, 4265, 4289,  
 4327, 4380, 4418, 4420, 4456, 4465, 4478, 4496, 4516, 4533,  
 4537, 4545, 4667, 4682, 4683, 4684, 4717, 4733, 4761, 4771,  
 4784, 4792, 3535,

## 2. 植 物

13, 14, 70, 71, 72, 92, 152, 172, 246, 277,  
 287, 308, 320, 398, 451, 483, 489, 633, 669, 729,  
 735, 915, 956, 1076, 1231, 1291, 1304, 1315, 1316, 1371,  
 1426, 1486, 1522, 1605, 1657, 1796, 1815, 1853, 1898, 2010,  
 2027, 2080, 2100, 2103, 2113, 2177, 2258, 2306, 2323, 2332,  
 2393, 2496, 2537, 2571, 2578, 2618, 2650, 2789, 2797, 2856,  
 2868, 2905, 2954, 2972, 2685, 3011, 3044, 3059, 3060, 3148,  
 3181, 3203, 3269, 3277, 3376, 3397, 3410, 3519, 3528, 3532,  
 3588, 3602, 3707, 3711, 3737, 3775, 3981, 4039, 4078, 4136,  
 4137, 4181, 4202, 4211, 4213, 4236, 4396, 4488, 4538, 4544,  
 4602, 4626, 4702, 4728, 4737, 4738, 4746, 4753, 4763, 4811,

## 3. 动物组织

64, 149, 176, 319, 357, 363, 370, 414, 493, 507,  
 709, 722, 760, 772, 811, 853, 886, 912, 925, 927,

1107, 1129, 1294, 1296, 1037, 1403, 1552, 1613, 2000, 2133,  
 2170, 2286, 2410, 2436, 2552, 2594, 2598, 2611, 2769, 2884,  
 2948, 2949, 2961, 3025, 3034, 3050, 3065, 3152, 3294, 3369,  
 3400, 3418, 3450, 3484, 3494, 3507, 3509, 3527, 3906, 3960,  
 4048, 4142, 4210, 4229, 4323, 4371, 4387, 4400, 4515, 4534,  
 4575, 4665, 4702, 4768, 4807,

#### 4. 动物体液

49, 50, 51, 52, 53, 64, 93, 137, 148, 178,  
 179, 181, 185, 240, 253, 264, 284, 305, 340, 342,  
 346, 350, 423, 426, 434, 469, 511, 515, 520, 524,  
 576, 621, 624, 640, 654, 688, 701, 718, 756, 813,  
 887, 890, 903, 929, 970, 975, 992, 1061, 1062, 1064,  
 1084, 1091, 1094, 1163, 1173, 1174, 1198, 1199, 1217, 1238,  
 1244, 1251, 1261, 1288, 1307, 1311, 1354, 1356, 1373, 1406,  
 1423, 1431, 1444, 1461, 1465, 1497, 1506, 1528, 1620, 1630,  
 1724, 1763, 1768, 1791, 1793, 1825, 1828, 1838, 1857, 1900,  
 1969, 1971, 2066, 2077, 2085, 2095, 2105, 2165, 2200, 2218,  
 2243, 2283, 2293, 2325, 2326, 2345, 2346, 2354, 2371, 2475,  
 2493, 2536, 2555, 2558, 2579, 2582, 2593, 2629, 2631, 2653,  
 2659, 2672, 2681, 2696, 2709, 2772, 2821, 2825, 2826, 2841,  
 2864, 2872, 2878, 2912, 2913, 2937, 2938, 2955, 2969, 2975,  
 2981, 2996, 3025, 3041, 3111, 3136, 3151, 3154, 3155, 3182,  
 3188, 3199, 3208, 3216, 3226, 3227, 3265, 3272, 3273, 3274,  
 3320, 3351, 3425, 3427, 3428, 3429, 3430, 3431, 3432, 3441,  
 3464, 3468, 3473, 3479, 3481, 3523, 3525, 3540, 3596, 3600,  
 3601, 3607, 3683, 3692, 3705, 3764, 3785, 3796, 3815, 3816,  
 3836, 3849, 3892, 3928, 3936, 3953, 3955, 3972, 4003, 4011,  
 4020, 4062, 4065, 4090, 4104, 4110, 4111, 4142, 513, 1167,  
 4147, 4149, 4154, 4157, 4164, 4165, 4187, 4210, 4214, 4225,  
 4239, 4258, 4284, 4299, 4330, 4378, 4386, 4389, 4401, 4403,  
 4405, 4405, 4406, 4407, 4468, 4473, 4501, 4531, 4534, 4542,  
 4576, 4579, 4603, 4631, 4634, 4645, 4654, 4655, 4658, 4666,  
 4672, 4676, 4686, 4709, 4710, 4714, 4754, 4762, 4777, 4799,  
 4805, 4822,

#### 5. 动物排泄物

54, 55, 64, 132, 148, 240, 252, 253, 305, 342,  
 349, 468, 631, 654, 688, 757, 761, 868, 929, 1093,  
 1109, 1174, 1191, 1244, 1245, 1246, 1261, 1288, 1331, 1355,

1356, 1391, 1431, 1461, 1538, 1620, 1633, 1675, 1678, 1700,  
1724, 1729, 1800, 1825, 1843, 1844, 1892, 1969, 1986, 2127,  
2191, 2251, 2293, 2326, 2401, 2428, 2493, 2629, 2655, 2709,  
2825, 2937, 2969, 2996, 3049, 3063, 3138, 3208, 3226, 3272,  
3273, 3352, 3389, 3423, 3424, 3430, 3485, 3523, 3525, 3583,  
3680, 3683, 3685, 3687, 3696, 3705, 3886, 3951, 4011, 4080,  
4110, 4234, 4346, 4386, 4398, 4468, 4539, 4568, 4658, 4710,

#### 6. 动物毛发指甲

3569, 3640, 3712, 3856, 3857, 3883, 4250, 4397, 4441, 4549,  
4798,

#### 7. 动物齿骨壳

3534, 3560, 3882, 4100, 4311, 4434, 4814,

### C. 环境试样

#### 1. 一般问题和其他

917, 918, 1189, 1317, 1818, 1989, 1995, 2190, 2219, 2513,  
2557, 2571, 2914, 2967, 3395, 3398, 3660,

#### 2. 大 气

838, 864, 900, 1192, 1215, 1256, 1463, 1499, 1586, 1628,  
1701, 1772, 1807, 1941, 2075, 2079, 2149, 2161, 2336, 2539,  
2629, 2661, 2895, 2933, 2976, 3037, 3102, 3336, 3344, 3550,  
3606, 3620, 3685, 3688, 3798, 3866, 3900, 3942, 3952, 4013,  
4022, 4033, 4044, 4063, 4073, 4166, 4184, 4313, 4428, 4512,  
4715, 4727, 4776, 4784,

#### 3. 污 染 物

2789, 2793, 2842, 2895, 2943, 2944, 2969, 2972, 3027, 3038,  
3135, 3143, 3220, 3224, 3237, 3254, 3315, 3337, 3463, 3471,  
3505, 3509, 3588, 3723, 3871, 3889, 3949, 4022, 4153, 4163,  
4242, 4297, 4439, 4444, 4554, 4608, 4644, 4655, 4689, 4805

#### 4. 水

21, 1506, 154, 250, 288, 299, 300, 309, 325, 354,  
374, 380, 398, 472, 504, 505, 625, 642, 643, 646,  
676, 685, 743, 764, 791, 838, 877, 888, 907, 917,  
922, 923, 953, 958, 993, 995, 1034, 1085, 1219, 1221,  
1222, 1430, 1446, 1473, 1481, 1482, 1516, 1537, 1544, 1583,  
1587, 1587, 1594, 1596, 1597, 1671, 1704, 1726, 1761, 1807,  
1824, 1847, 1884, 1989, 2023, 2044, 2057, 2083, 2091, 2096,  
2215, 2228, 2316, 2335, 2339, 2350, 2358, 2410, 2423, 2488,

2510, 2535, 2543, 2568, 2576, 2629, 2655, 2684, 2702, 2743,  
 2749, 2829, 2836, 2854, 2879, 2883, 2890, 2946, 2950, 2976,  
 2979, 3005, 3015, 3030, 3053, 3064, 3083, 3086, 3097, 3133,  
 3147, 3150, 3153, 3176, 3190, 3197, 3198, 3215, 3290, 3297,  
 3298, 3317, 3329, 3411, 3421, 3438, 3486, 3491, 3514, 3584,  
 3586, 3590, 3597, 3609, 3622, 3626, 3629, 3632, 3649, 3663,  
 3685, 3702, 3715, 3734, 3741, 3757, 3774, 3807, 3829, 3832,  
 3855, 3376, 3885, 3886, 3889, 3933, 3937, 3986, 3987, 3997,  
 4014, 4051, 4076, 4095, 4119, 4133, 4201, 4204, 4219, 4222,  
 4224, 4242, 4243, 4275, 4312, 4318, 4322, 4396, 4438, 4445,  
 4453, 4484, 4461, 4494, 4509, 4565, 4569, 4578, 4581, 4591,  
 4612, 4614, 4635, 4646, 4647, 4648, 4650, 4661, 4678, 4708,  
 4711, 4715, 4755, 4787, 4803, 4810.

5. 工业用水和废水

296, 400, 1072, 1279, 1446, 1928, 1989, 2118, 2141, 2249,  
 2335, 2459,

6. 浮粒飞灰(飘尘)

1329, 4553.

7. 沉积物

1241, 2570, 2589, 2741, 2762, 2763, 2778, 2783, 2798, 2899,  
 3120, 3122, 3318, 3763, 3795, 3896, 4155, 4396, 4493, 4633,

8. 废渣

2767, 3150, 3715, 3734, 3759, 3980, 3988, 3999, 4221, 4298,

D. 食物试样

1. 一般问题和其他

420, 806, 994, 1092, 1400, 1404, 1589, 1696, 1814, 1832,  
 1986, 1988, 2082, 2152, 2154, 2447, 2457, 2728, 2733, 2742,

2. 饮 料

136, 170, 211, 467, 636, 686, 792, 854, 983, 1051,  
 1428, 1451, 1519, 1545, 1578, 1585, 1690, 1798, 1874, 1876,  
 2036, 2111, 2292, 2372, 2377, 2459, 2727, 2732, 2777, 2882,  
 2986, 3031, 3090, 3268, 3281, 3348, 3350, 3391, 3422, 3496,  
 3589, 3612, 3614, 3645, 3664, 3752, 3870, 3886, 4008, 4015,  
 4106, 4133, 4257, 4392, 4435, 4467, 4475, 4497, 4517, 4595,  
 4607,

3. 粮食及其制品

586, 2758, 2782, 2819, 2840, 2885, 2886, 2904, 2965, 2981,

3040, 3072, 3117, 3123, 3124, 3150, 3185, 3222, 3280, 3281,  
 3359, 3376, 3384, 3388, 3475, 3488, 3492, 3503, 3528, 3632,  
 3635, 3654, 3691, 3756, 3770, 3794, 3822, 3965, 3990, 4009,  
 4087, 4088, 4191, 4249, 4252, 4286, 4297, 4339, 4369, 4391,  
 4436, 4467, 4519, 4551, 4557, 4577, 4585, 4592, 4594, 4628,  
 4662, 4698, 4740, 4817, 4818,

#### 4. 植物源食物

568, 584, 852, 869, 952, 995, 1080, 1304, 1484, 2577,

#### 5. 动物源食物

267, 336, 403, 427, 470, 500, 705, 806, 812, 1235,  
 1269, 1304, 1500, 1565, 1745, 1797, 1854, 1872, 2239, 2247,  
 2309, 2464, 2561, 2673, 2683, 2709, 2729, 2760, 2795, 2833,  
 2851, 2852, 2855, 2858, 2887, 2889, 2974, 3006, 3045, 3186,  
 3305, 3400, 3413, 3555, 3595, 3605, 3699, 3753, 3766, 3809,  
 3884, 3934, 4230, 4237, 4255, 4296, 4498, 4609, 4632, 4759,

#### 6. 饲料

103, 716, 785, 973, 1087, 1524, 1686, 1953, 1954, 2001,  
 2092, 2137,

### E. 地质样品

#### 1. 一般问题和其他

150a, 248, 297, 312, 419, 428, 449, 547, 565, 597,  
 613, 624, 647, 689, 818, 819, 827, 873, 897, 904,  
 964, 968, 1000, 1018, 1020, 1024, 1097, 1140, 1195, 1240,  
 1310, 1345, 1347, 1348, 1349, 1384, 1407, 1501, 1534, 1557,  
 1564, 1567, 1622, 1652, 1705, 1747, 1758, 1934, 1957, 2450,  
 2468, 2521, 2523, 2544, 2573, 2587, 2643, 2830, 2959, 3183,  
 3212, 3244, 3285, 3505, 3674, 3686, 3706, 3890, 3958, 4120,  
 4300, 4597, 4705, 4745, 4812,

#### 2. 岩 矿

37, 108, 146, 150, 230, 248, 261, 262, 310, 327,  
 337, 396, 417, 443, 447, 483, 484, 486, 503, 506,  
 525, 554, 598, 615, 623, 645, 707, 727, 749, 833,  
 835, 892, 893, 900, 911, 959, 960, 1001, 1003, 1060,  
 1122, 1133, 1139, 1259, 1280, 1282, 1283, 1308, 1312, 1351,  
 1370, 1397, 1413, 1421, 1452, 1472, 1507, 1508, 1509, 1527,  
 1642, 1661, 1672, 1673, 1691, 1695, 1706, 1708, 1737, 1750,

1751, 1795, 1809, 1810, 1827, 1830, 1870, 1902, 1919, 1920,  
 1938, 1979, 2016, 2017, 2021, 2034, 2045, 2049, 2084, 2110,  
 2121, 2138, 2144, 2166, 2173, 2235, 2248, 2254, 2255, 2280,  
 2295, 2298, 2303, 2304, 2322, 2337, 2360, 2376, 2392, 2417,  
 2439, 2440, 2466, 2489, 2495, 2508, 2537, 2542, 2588, 2590,  
 2567, 2601, 2605, 2608, 2609, 2640, 2687, 2689, 2690, 2693,  
 2695, 2719, 2763, 2765, 2775, 2808, 2844, 2853, 2894, 2916,  
 3003, 3051, 3056, 3127, 3184, 3201, 3308, 3309, 3321, 3343,  
 3345, 3375, 3383, 3408, 3414, 3434, 3453, 3497, 3515, 3526,  
 3530, 3592, 3653, 3673, 3731, 3761, 3782, 3810, 3842, 3852,  
 3865, 3945, 3948, 3974, 4029, 4037, 4050, 4064, 4102, 4103,  
 4138, 4189, 4208, 4223, 4319, 4320, 4381, 4491, 4495, 4514,  
 4518, 4524, 4612, 4622, 4623, 4629, 4659, 4685, 4731, 4734,  
 4769, 4774, 4786,

### 3. 硅酸盐

2748, 2792, 2800, 2803, 2862, 3069, 3863, 3922, 3995, 4025,  
 4206, 4208, 4310, 4414, 4447, 4474, 4598, 4645, 4716, 4809,

## F. 冶金试样

### 1. 一般问题和其他

25, 26, 85, 2026, 217, 218, 452, 453, 530, 650,  
 651, 702, 1067, 1230, 1325, 1714, 1730, 1747, 1848, 1891,  
 2071, 2072, 2114, 2174, 2304, 2409, 2442, 2465, 2491, 2518,  
 2523, 2682, 2726, 2809, 2845, 2901, 3007, 3079, 3109, 3141,  
 3164, 3169, 3233, 3234, 3236, 3289, 3304, 3360, 3386, 3402,  
 3435, 3440, 3451, 3504, 3516, 3575, 3590, 3628, 3637, 3657,  
 3672, 3695, 3717, 3730, 4118, 4132, 4540, 4547,

### 2. 金属

167, 393, 582, 1719, 2108, 2586, 3767, 3776, 3984, 4016,  
 4036, 4060, 4145, 4205, 4212, 4251, 4274, 4301, 4345, 4458,  
 4507, 4601, 4610, 4641, 4703, 4718, 4743, 4747, 4770,

### 3. 合金

10, 20, 25, 29, 80, 101, 117, 125, 128, 163,  
 205, 249, 257, 288, 303, 321, 327, 348, 386, 463,  
 476, 479, 531, 539, 546, 550, 619, 620, 622, 715,  
 744, 750, 763, 797, 800, 842, 845, 865, 901, 902,  
 1095, 1116, 1119, 1160, 1216, 1250, 1274, 1287, 1289, 1301,  
 1309, 1415, 1427, 1443, 1462, 1463, 1504, 1513, 1518, 1584,



1592, 1660, 1693, 1702, 1708, 1715, 1716, 1759, 1769, 1808,  
1921, 1961, 1968, 2035, 2099, 2109, 2135, 2139, 2175, 2179,  
2207, 2226, 2227, 2281, 2285, 2319, 2320, 2321, 2353, 2402,  
2403, 2433, 2472, 2499, 2511, 2547, 2580, 2668, 2701, 2734,  
2779, 2816, 2859, 2873, 2875, 2877, 2894, 2908, 3039, 3087,  
3103, 3131, 3179, 3191, 3263, 3302, 3382, 3390, 3501, 3520,  
3701, 3762, 3789, 3793, 3799, 3898, 3957, 3985, 4084, 4113,  
4146, 4212, 4245, 4373, 4425, 4476, 4573, 4593, 4695,

#### 4. 钢 铁

20, 25, 63, 96, 101, 143, 188, 189, 251, 256,  
295, 315, 321, 338, 388, 429, 441, 475, 583, 610,  
619, 620, 771, 797, 858, 865, 1022, 1104, 1184, 1260,  
1305, 1336, 1338, 1339, 1427, 1496, 1592, 1667, 1669, 1670,  
1684, 1685, 1691, 1731, 1751, 1840, 1883, 1885, 1911, 1942,  
1943, 2002, 2094, 2150, 2151, 2160, 2172, 2213, 2216, 2211,  
2327, 2438, 2443, 2531, 2569, 2585, 2599, 2600, 2703, 2725,  
2736, 2773, 2807, 2874, 2909, 2963, 2993, 3157, 3213, 3221,  
3288, 3458, 3522, 3566, 3771, 3779, 3834, 3835, 3864, 3910,  
3989, 4040, 4068, 4115, 4128, 4134, 4170, 4207, 4218, 4240,  
4246, 4264, 4503, 4535, 4567, 4584, 4623, 4696, 4699, 4725,  
4773, 4778,

#### 5. 耐火材料及其制品

1471, 2049, 2254, 2808, 2897, 2898, 2983, 2988, 2989, 3019,  
3046, 3062, 3196, 3205, 3231, 3235, 3295, 3296, 3311, 3362,  
3452, 3935, 3946, 3976, 4001, 4127, 4232, 4241, 4267, 4409,  
4446, 4485, 4505,

#### 6. 炉 渣

2049, 2173, 2381, 2449,

### G. 工业试样

#### 1. 一般问题和其他

106, 141, 418, 880, 962, 1019, 1214, 1342, 1357, 1409,  
1459, 1460, 1468, 1549, 1608, 1638, 1664, 1674, 1761, 1888,  
1889, 1899, 1932, 2034, 2088, 2141, 2311, 2312, 2351, 2431,  
2460, 2463, 2525, 2662, 2834, 2863, 2940, 2942, 2962, 2995,  
3078, 3118, 3119, 3137, 3139, 3355, 3363, 3474, 3571, 3572,  
3609, 3721, 3872, 3894, 3895, 3903, 3973, 4565, 4614, 4615,  
4616,

## 2. 原 材 料

147, 313, 502, 675, 1258, 1645, 1801, 1802, 1803,

## 3. 催 化 剂

1434, 2641, 2715

## 4. 纤维及其制品

247, 473, 482, 677, 714, 971, 1112, 1197, 1531, 1636,  
2201, 2076, 2229, 2237, 2363, 2417, 2685, 2738, 2831, 3947,  
4200,

## 5. 硅酸盐制品及含硅材料

122, 258, 281, 353, 397, 560, 649, 655, 695, 795,  
906, 947, 1344, 1353, 1427, 1449, 1762, 2086, 2288, 2328,  
2407, 2408, 2602, 2654, 2720, 2982, 3170, 3171, 3270, 3412,  
3454, 3529, 3580, 3781, 3844, 3851, 3922, 4122, 4126, 4178,  
4215, 4238, 4248, 4302, 4595, 4629, 4679, 4790, 4802,

## 6. 煤碳、固体燃料

142, 219, 628, 671, 862, 1396, 1567, 2006, 2674, 2716,  
3209, 3242, 3482, 3511, 3603, 3804, 4075, 4423, 4612,

## 7. 油类 石油及其制品

41, 61, 62, 121, 153a, 157, 208, 263, 315, 360,  
315, 360, 387, 425, 444, 587, 609, 759, 799, 1103,  
1186, 1556, 1606, 1723, 1755, 1841, 1923, 2032, 2136, 2153,  
2192, 2194, 2012, 2136, 2192, 2278, 2299, 2330, 2416, 2437,  
2503, 2559, 2583, 2607, 2616, 2678, 2752, 2788, 2794, 2864,  
2867, 2922, 2934, 2936, 2944, 3067, 3154, 3240, 3284, 3319,  
3328, 3349, 3356, 3407, 3465, 3490, 3521, 3644, 3682, 3765,  
3811, 3838, 3907, 4075, 4242, 4253, 4272, 4279, 4303, 4342,  
4343, 4399, 4469, 4546, 4612, 4669, 4673, 4674, 4677, 4943,

## 8. 医用药物

1045, 1234, 1562, 1582, 1760, 1778, 1910, 1917, 1930, 2131,  
2333, 2415, 2426, 2980, 3035, 3047, 3048, 3069, 3243, 3247,  
3367, 3370, 3371, 3536, 3563, 3564, 3624, 3806, 4053, 4059,  
4260, 4261, 4375, 4480, 4732,

## 9. 塑料及其制品

390, 440, 668, 794, 1383, 1829, 1949, 2334, 2670, 3718,

## 10. 橡胶及其产品

786, 1677, 2168, 2669, 2670,

## 11. 油墨涂料、染料

1640, 2087, 2553, 3531, 4007, 4247, 4349, 4618,

## 12. 化工产品

250, 283, 352, 498, 595, 599, 735, 738, 783, 831,  
850, 855, 859, 966, 982, 994, 1011, 1100, 1148, 1151,  
1159, 1268, 1318, 1346, 1362, 1388, 1395, 1399, 1400, 1472,  
1494, 1707, 1708, 1710, 1746, 1794, 1850, 1873, 1878, 1907,  
1908, 1944, 1952, 1987, 2087, 2124, 2265, 2284, 2296, 2297,  
2310, 2317, 2395, 2415, 2450, 2530, 2556, 2610, 2628, 2636,  
2647, 2680, 2686, 2745, 2865, 2870, 3043, 3073, 3084, 3174,  
3194, 3197, 3346, 3368, 3374, 3378, 3405, 3437, 3457, 3544,  
3565, 3573, 3623, 3648, 3719, 3720, 3851, 3860, 3912, 3913,  
3930, 3941, 3967, 3968, 4024, 4049, 4057, 4067, 4091, 4121,  
4271, 4273, 4277, 4315, 4347, 4415, 4526, 4556, 4558, 4559,  
4574, 4627, 4692, 4697, 4775, 4782, 4820, 4821,

## 13. 核工业和放射性物质

385, 706, 802, 1273, 1365, 1447, 2407,

## 14. 电镀液

234, 266, 2344, 2632, 2633, 3813, 3940, 3948, 4527, 4651,  
4781,

## H. 纯物质试样

### 1. 单 质

56, 100, 174, 175, 221, 305, 516, 695, 1030, 1206,  
2479,

## I. 法学和社会科学中的应用

913, 983, 1077, 1081, 1467, 1580, 1855, 2208, 3341, 3859,  
4085, 4216, 4256, 4596, 4652, 4653, 4750, 4766,

## J. 仪器设备和装置

1, 2, 11, 24, 27, 33, 43, 69, 94, 109,  
115, 116, 153, 184, 191, 223, 265, 311, 324, 375,  
405, 422, 458, 527, 553, 566, 575, 578, 711, 717,  
741, 767, 815, 839, 866, 891, 908, 928, 941, 961,  
988, 1005, 1025, 1043, 1132, 1275, 1292, 1293, 1299, 1321,  
1350, 1368, 1393, 1402, 1425, 1523, 1533, 1609, 1648, 1662,  
1665, 1679, 1709, 1754, 1856, 1871, 1965, 2013, 2022, 2053,  
2061, 2062, 2089, 2129, 2140, 2142, 2143, 2145, 2176, 2180,  
2212, 2231, 2299, 2307, 2342, 2412, 2424, 2430, 2506, 2512,

2560, 2565, 2592, 2596, 2624, 2671, 2709, 2746, 2747,

### K. 燃烧器和火焰、雾化器和原子化器

12, 66, 79, 82, 91, 97, 113, 180, 182, 190,  
194, 197, 213, 228, 238, 270, 279, 282, 301, 302,  
322, 331, 364, 365, 366, 371, 378, 385, 402, 424,  
437, 438, 455, 478, 487, 563, 579, 592, 641, 678,  
682, 683, 782, 801, 804, 810, 841, 844, 846, 876,  
881, 889, 950, 952, 974, 980, 1002, 1046, 1048, 1052,  
1054, 1056, 1066, 1086, 1121, 1126, 1141, 1143, 1145, 1187,  
1205, 1300, 1340, 1380, 1453, 1485, 1489, 1490, 1491, 1503,  
1541, 1550, 1559, 1627, 1717, 1735, 1742, 1749, 1784, 1860,  
1897, 1905, 1926, 1927, 1950, 1951, 1955, 1974, 1979, 2098,  
2119, 2120, 2323, 2384, 2462, 2502, 2504, 2522, 2529, 2550,  
2603, 2622, 2692, 2707, 2708, 2713, 2740, 2751, 2753, 2756,  
2771, 2774, 2781, 2822, 2921, 2922, 2930, 2936, 2966, 2992,  
2993, 2997, 2998, 2999, 3002, 3011, 3042, 3058, 3092, 3104  
3106, 3115, 3165, 3193, 3210, 3257, 3292, 3299, 3300, 3301,  
3303, 3331, 3333, 3339, 3340, 3342, 3353, 3354, 3375, 3377,  
3394, 3472, 3631, 3634, 3636, 3638, 3655, 3668, 3676, 3679,  
3714, 3729, 3749, 3858, 3879, 3880, 3899, 3918, 3991, 4004,  
4017, 4023, 4056, 4089, 4169, 4254, 4290, 4333, 4374, 409,  
4384, 4408, 4454, 4492, 4510, 4523, 4587, 4588, 4606, 4630,  
4691, 4674, 4765,

### L. 自动化和计算机联用

324, 384, 571, 587, 754, 755, 756, 757, 851, 941,  
1035, 1036, 1055, 1084, 1152, 1218, 1224, 1234, 1328, 1379,  
1381, 1424, 1515, 1521, 1556, 1566, 1571, 1576, 1600, 1650,  
1654, 1718, 1766, 1773, 1777, 1783, 1871, 1894, 1936, 1946,  
2000, 2005, 2023, 2043, 2103, 2104, 2180, 2197, 2354, 2706,  
2709, 2718, 2765, 2958, 2971, 3015, 3066, 3267, 3356, 3417,  
3510, 3512, 3514, 3551, 3558, 3778, 3881, 4069, 4123, 4134,  
4141, 4180, 4270, 4285, 4404, 4432, 4566, 4619, 4620, 4621,  
4666, 4700, 4712, 4742, 4750,

## M. 光源和检测器

### 1. 光源

26, 44, 65, 84, 87, 102, 123, 124, 165, 190,  
206, 232, 235, 245, 290, 317, 328, 334, 351, 352,  
376, 377, 395, 421, 430, 445, 448, 450, 489, 490,  
508, 522, 528, 529, 544, 590, 601, 602, 616, 629,  
634, 644, 657, 658, 662, 665, 670, 684, 698, 700,  
712, 735, 736, 737, 739, 762, 768, 770, 774, 776,  
780, 783, 830, 840, 930, 934, 935, 936, 938, 1014,  
1042, 1053, 1074, 1082, 1083, 1089, 1105, 1108, 1120, 1124,  
1127, 1128, 1130, 1131, 1133, 1141, 1147, 1154, 1155, 1170,  
1175, 1176, 1183, 1190, 1200, 1207, 1208, 1209, 1212, 1233,  
1254, 1267, 1278, 1281, 1306, 1314, 1313, 1359, 1361, 1387,  
1429, 1450, 1526, 1536, 1551, 1554, 1560, 1574, 1531, 1611,  
1639, 1658, 1664, 1683, 1744, 1771, 1787, 1790, 1833, 1839,  
1882, 1890, 1901, 1912, 1914, 1915, 1929, 1932, 1940, 1942,  
1972, 1973, 1978, 1980, 1992, 2015, 2033, 2039, 2054, 2063,  
2078, 2102, 2134, 2147, 2196, 2206, 2225, 2248, 2253, 2327,  
2362, 2369, 2383, 2398, 2455, 2519, 2546, 2560, 2584, 2596,  
2620, 2628, 2642, 2660, 2700, 2754, 2764, 2790, 2813, 2846,  
2857, 2860, 2888, 2891, 2902, 2917, 2920, 2945, 2933, 3010,  
3013, 3014, 3094, 3145, 3159, 3160, 3168, 3177, 3200, 3242,  
3249, 3250, 3251, 3252, 3325, 3327, 3409, 3436, 3439, 3444,  
3460, 3545, 3576, 3651, 3652, 3693, 3703, 3729, 3747, 3777,  
3824, 3828, 3868, 3874, 3891, 3899, 3905, 3919, 4005, 4035,  
4160, 4175, 4176, 1629, 4259, 4278, 4294, 4411, 4412, 4422,  
4444, 4502, 4504, 4520, 4532, 4552, 4582, 4639, 4688, 4736,  
4778, 4804,

### 2. 检测器

3800, 3814, 3819, 3891, 3920, 3977, 3978, 4147, 4160, 4164,  
4183, 4272, 4471, 4494, 4619, 4620, 4756,

## N. 试样类型、制备、采样、进样

### 1. 一般问题和其他

581, 600, 774, 855, 872, 873, 998, 1050, 1053, 1054,  
1097, 1098, 1099, 1144, 1211, 1212, 1323, 1397, 1420, 1464,  
1493, 1527, 1547, 1607, 1641, 1705, 1724, 1732, 1733, 1790,

1809, 1979, 2018, 2044, 2095, 2107, 2156, 2167, 2202, 2203,  
2221, 2224, 2256, 2275, 2302, 2351, 2373, 2394, 2430, 2536,  
2541, 2555, 2558, 2564, 2628, 2649, 2682, 2723, 4505, 4575,  
4576, 4579, 4589, 4590, 4675, 4710, 4713, 4753, 4785,

## 2. 固 体

2018, 2019, 2020, 2021, 2064, 2115, 2123, 2132, 2201, 2740,  
3515, 3561, 3592, 3790, 3791, 3945, 3946, 3947, 3960, 4235,  
4309, 4514, 4601, 4615, 4637, 4680,

## 3. 制 备

3447, 3455, 3507, 3529, 3530, 3587, 3595, 3608, 3678, 4026,  
4117, 4138, 4161, 4199, 4211, 4226, 4229, 4251, 4273, 4305,  
4414, 4452, 4465, 4489, 4491, 4496, 4498, 4557, 4626, 4627,  
4628, 4629, 4665, 4786, 4792, 4818,

## 4. 无焰采样

638, 805, 806, 843, 914, 1027, 1028, 1029, 1047, 1165,  
1166, 1201, 1203, 1322, 1326, 1364, 1366, 1520, 1540, 1546,  
1572, 1573, 1575, 1634, 1683, 1775, 1779, 1781, 1806, 1811,  
1977, 1991, 1997, 1998, 2006, 2014, 2019, 2020, 2021, 2025,  
2032, 2059, 2081, 2096, 2135, 2154, 2162, 2163, 2164, 2165,  
2185, 2186, 2189, 2201, 2209, 2237, 2259, 2262, 2272, 2279,  
2282, 2283, 2290, 2309, 2315, 2330, 2335, 2336, 2337, 2340,  
2350, 2410, 2411, 2429, 2445, 2447, 2461, 2474, 2482, 2484,  
2485, 2501, 2503, 2505, 2509, 2512, 2523, 2524, 2538, 2554,  
2582, 2612, 2621, 2631, 2634, 2635, 2645, 2672, 2675, 2677,  
2678, 2702, 2717, 2752, 2759, 2761, 2767, 2769, 2772, 2788,  
2803, 2817, 2828, 2835, 2839, 2864, 2866, 2873, 2887, 2896,  
2918, 2927, 2951, 2953, 2973, 2979, 2990, 3003, 3015, 3028,  
3032, 3033, 3034, 3041, 3049, 3056, 3065, 3078, 3088, 3100,  
3101, 3126, 3140, 3149, 3154, 3156, 3161, 3180, 3183, 3194,  
3195, 3196, 3199, 3204, 3212, 3227, 3228, 3231, 3232, 3264,  
3266, 3268, 3275, 3278, 3285, 3286, 3297, 3307, 3310, 3312,  
3320, 3322, 3327, 3328, 3338, 3341, 3352, 3355, 3379, 3398,  
3404, 3416, 3438, 3442, 3455, 3465, 3467, 3487, 3490, 3491,  
3508, 3512, 3513, 3521, 3526, 3532, 3536, 3537, 3549, 3550,  
3552, 3556, 3561, 3562, 3578, 3583, 3592, 3326,  
3602, 3603, 3604, 3612, 3616, 3617, 3620, 3630, 3634, 3639,  
3640, 3660, 3663, 3669, 3681, 3682, 3684, 3685, 3688, 3696,  
3702, 3706, 3722, 3733, 3734, 3754, 3765, 3773, 3782, 3785,

3790, 3795, 3797, 3798, 3807, 3811, 3829, 3831, 3832, 3836,  
 3837, 3838, 3839, 3840, 3845, 3849, 3851, 3857, 3874, 3876,  
 3878, 3890, 3900, 3902, 3907, 3908, 3915, 3923, 3924, 3936,  
 3942, 3951, 3952, 3958, 3959, 3960, 3961, 3979, 3980, 3986,  
 3987, 3992, 4003, 4014, 4028, 4030, 4031, 4034, 4040, 4041,  
 4043, 4044, 4045, 4073, 4074, 4076, 4090, 4094, 4096, 4118,  
 4115, 4120, 4137, 4151, 4159, 4160, 4161, 4162, 4166, 4168,  
 4172, 4185, 4187, 4199, 4201, 4207, 4209, 4217, 4219, 4223,  
 4224, 4225, 4229, 4231, 4245, 4257, 4262, 4263, 4265, 4267,  
 4274, 4275, 4277, 4280, 4282, 4285, 4286, 4288, 4295, 4296,  
 4301, 4303, 4309, 4310, 4311, 4313, 4322, 4324, 4326, 4330,  
 4333, 4340, 4344, 4345, 4358, 4359, 4360, 4365, 4368, 4370,  
 4385, 4397, 4398, 4399, 4407, 4409, 4410, 4417, 4419, 4420,  
 4425, 4428, 4429, 4440, 4443, 4445, 4457, 4459, 4470, 4476,  
 4478, 4479, 4481, 4482, 4483, 4484, 4493, 4498, 4509, 4512,  
 4514, 4537, 4542, 4550, 4558, 4559, 4562, 4565, 4568, 4575,  
 4578, 4596, 4601, 4609, 4611, 4612, 4614, 4615, 4635, 4643,  
 4664, 4687, 4700, 4714, 4725, 4730, 4750, 4752,  
 4762, 4772, 4779, 4783, 4785, 4788, 4789, 4791, 4797, 4800,  
 4803, 4822, 4753, 4761,

## 5. 火焰采样

97, 119, 164, 271, 274, 286, 293, 307, 407, 462,  
 501, 510, 542, 545, 573, 593, 614, 635, 661, 679,  
 682, 696, 746, 750, 751, 752, 774, 801, 804, 847,  
 905, 911, 919, 931, 932, 952, 954, 978, 979, 981,  
 999, 1004, 1006, 1007, 1008, 1010, 1012, 1013, 1056, 1069,  
 1071, 1102, 1103, 1117, 1135, 1156, 1158, 1164, 1204, 1223,  
 1226, 1232, 1240, 1293, 1302, 1333, 1334, 1469, 1479, 1480,  
 1495, 1539, 1542, 1548, 1558, 1568, 1599, 1600, 1615, 1616,  
 1617, 1676, 1681, 1692, 1740, 1741, 1782, 1785, 1817, 1903,  
 1913, 1914, 1915, 1956, 1960, 1996, 2007, 2008, 2024, 2040,  
 2042, 2046, 2047, 2050, 2055, 2056, 2060, 2063, 2067, 2093,  
 2119, 2120, 2144, 2147, 2210, 2211, 2213, 2214, 2232, 2255,  
 2257, 2277, 2314, 2327, 2425, 2427, 2428, 2443, 2462, 2504,  
 2508, 2527, 2532, 2540, 2580, 2624, 2625, 2643, 2694, 2731,  
 2750, 2752, 2761, 2766, 2767, 2769, 2772, 2775, 2784, 2785,  
 2787, 2788, 2802, 2803, 2806, 2817, 2828, 2835, 2839, 2873,  
 2896, 2911, 2912, 2913, 2918, 2925, 2927, 2939, 2951, 2953,

2968, 2976, 2978, 2990, 2996, 3006, 3015, 3022, 3028, 3032,  
 3033, 3034, 3041, 3049, 3056, 3065, 3068, 3074, 3075, 3098,  
 3100, 3101, 3102, 3104, 3106, 3129, 3151, 3155, 3182, 3187,  
 3188, 3201, 3216, 3222, 3332, 3353, 3423, 3432, 3441, 3464,  
 3466, 3476, 3493, 3525, 3531, 3554, 3570, 3599, 3705, 3740,  
 3741, 3783, 3847, 3870, 3916, 3917, 3924, 3942, 3988, 4116,  
 4118, 4190, 4228, 4349, 4447, 4450, 4463, 4751, 4754, 4794,  
 4473, 4586, 4598, 4603, 4637, 4657, 4742, 4744,

## 6. 等离子体

670, 747, 894, 967, 1066, 1142, 1249, 1822, 1947, 1948,  
 1993, 2002, 2061, 2181, 2223, 2269, 2542, 2562, 3768, 3975,  
 3982, 3993, 4032, 4196, 4197, 4293, 4343, 4413, 4503, 4535,  
 4597, 4599, 4600, 4624, 4649, 4681, 4729, 4741, 4745, 4746,  
 4757, 4810,

## O. 分离、浓集和增感技术

### 1. 一般问题和其它

761, 2676, 3770, 3813, 3821, 3327, 3861, 4046, 4051, 4177,  
 4217, 4264, 4283, 4291, 4307, 4308, 4326, 4327, 4328, 4337,  
 4487, 4529, 4533, 4617,

### 2. 萃 取

157, 231, 250, 349, 339, 379, 380, 428, 435, 477,  
 535, 561, 596, 642, 643, 743, 791, 796, 922, 953,  
 966, 968, 993, 1016, 1055, 1058, 1136, 1229, 1250, 1255,  
 1285, 1304, 1324, 1351, 1426, 1432, 1529, 1530, 1531, 1537,  
 1588, 1593, 1595, 1596, 1684, 1685, 1753, 1800, 1824, 1870,  
 1879, 1880, 1902, 1953, 1956, 1931, 1935, 2045, 2058, 2077,  
 2150, 2166, 2170, 2183, 2227, 2308, 2133, 3453, 2487, 2488,  
 2492, 2533, 2574, 2585, 2599, 2600, 2619, 2743, 2744, 2755,  
 2820, 2824, 2848, 2849, 2853, 2874, 2883, 2903, 2919, 2946,  
 2964, 2975, 2983, 2994, 3005, 3055, 3062, 3072, 3086, 3087,  
 3105, 3107, 3134, 3176, 3189, 3211, 3221, 3238, 3256, 3258,  
 3271, 3385, 3386, 3401, 3457, 3459, 3504, 3514, 3540, 3559,  
 3574, 3584, 3626, 3649, 3697, 3709, 3737, 3742, 3744, 3767,  
 3802, 3808, 3831, 3850, 3893, 3911, 3925, 3933, 3970, 4006,  
 4038, 4098, 4149, 4174, 4179, 4185, 4192, 4193, 4220, 4219,  
 4264, 4291, 4292, 4306, 4323, 4333, 4390, 4391, 4451, 4453,  
 4460, 4486, 4529, 4584, 4644, 4650, 4689, 4712, 4739, 4748,



4819,

### 3. 离子交换

92, 153, 296, 594, 964, 1085, 1125, 1221, 1222, 1332,  
1369, 1474, 1484, 1920, 2182, 2263, 2263, 2573, 2587, 2703,  
4246, 4453, 4468, 4645, 4646, 4647, 4648, 4708, 4787,

### 4. 有机溶剂和添加剂

7, 31, 40, 117, 157, 618, 653, 663, 672, 680,  
713, 726, 814, 837, 950, 959, 1181, 1240, 1293, 1310,  
1340, 1595, 1543, 1553, 1593, 1602, 1655, 1672, 1813, 2168,  
2184, 2242, 2343, 2357, 2501, 2531, 2607, 2676,

## P. 原子化方式

2811, 2822, 2907, 3023, 3260, 3261, 3633, 3700, 3728, 3780,  
3825, 3921, 3983,

## O. 干扰及其处理

22, 60, 92, 259, 298, 316, 330, 366, 367, 471,  
479, 499, 512, 519, 520, 528, 529, 533, 587, 617,  
639, 685, 697, 732, 748, 789, 793, 814, 834, 910,  
937, 945, 949, 955, 977, 984, 996, 1009, 1012, 1025,  
1029, 1037, 1039, 1040, 1090, 1113, 1117, 1118, 1138, 1172,  
1177, 1182, 1184, 1194, 1196, 1228, 1262, 1271, 1287, 1295,  
1320, 1399, 1439, 1442, 1453, 1455, 1458, 1478, 1482, 1483,  
1512, 1558, 1604, 1612, 1614, 1647, 1651, 1652, 1689, 1699,  
1703, 1711, 1721, 1743, 1767, 1780, 1785, 1789, 1799, 1813,  
1817, 1836, 1849, 1868, 1896, 1906, 1934, 1935, 1950, 1963,  
1977, 1981, 1982, 1984, 2014, 2028, 2080, 2122, 2148, 2157,  
2171, 2201, 2234, 2236, 2249, 2250, 2267, 2274, 2276, 2294,  
2241, 2348, 2365, 2370, 2375, 2378, 2379, 2386, 2388, 2389,  
2390, 2398, 2422, 2484, 2486, 2493, 2495, 2505, 2507, 2514,  
2529, 2532, 2535, 2569, 2575, 2581, 2606, 2614, 2627, 2648,  
2652, 2679, 2680, 2694, 2712, 2722, 2731, 2973, 3008, 3045,  
3100, 3116, 3125, 3125, 3130, 3144, 3193, 3245, 3259, 3283,  
3283, 3287, 3347, 3388, 3480, 3612, 3617, 3619, 3663, 3665,  
3671, 3674, 3684, 3716, 3724, 3725, 3735, 3826, 3834, 3873,  
3958, 3962, 3963, 3966, 4012, 4082, 4089, 4135, 4136, 4148,  
4188, 4254, 4283, 4331, 4332, 4363, 4376, 4377, 4506, 4514,  
4550, 4560, 4561, 4562, 4563, 4572, 4671, 4681, 4685, 4690,