

# 原子光谱分析文献题录

(四)

★ 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

# 原子吸收光谱文献题录分类索引

(第 4—5 册)

## 农 业

- 饲料—4937, 4951, 5070,  
肥料—4910, 5068, 5526, 5557, 6161, 6225, 6387, 6875, 7217  
植物—4893, 4986, 5126, 5137, 5148, 5152, 5190, 5262, 5327,  
5509, 5510, 5518, 5552, 5554, 5557, 5566, 5590, 5615, 5618,  
5628, 5629, 5774, 5800, 5864, 5927, 5933, 5979, 6016, 6066,  
6096, 6133, 6141, 6161, 6177, 6198, 6201, 6205, 6301, 6304,  
6421, 6502, 6618, 6624, 6759, 6766, 6788, 6801, 6912, 6978,  
7083, 7200, 7211, 7261, 7358, 7404, 7429, 7484, 7546, 7571,  
7690, 7734, 7775, 7779, 7810, 7815, 7980, 8010, 8013, 8053,  
8091, 8107, 8149, 8169, 8239, 8244, 8253, 8262, 8318, 8349,  
8381, 8398, 8404, 8469, 8633, 8648, 8650, 8752, 8812, 8856,  
8937, 9029, 9110,  
土 壤—4954, 5126, 5162, 5174, 5196, 5197, 5347, 5362, 5383,  
5399, 5450, 5452, 5469, 5509, 5518, 5546, 5551, 5553, 5624,  
5799, 5827, 5912, 5913, 6063, 6106, 6133, 6141, 6201, 6252,  
6293, 6300, 6303, 6346, 6502, 6533, 6593, 6624, 6685, 6788,  
7039, 7119, 7170, 7224, 7294, 7318, 7346, 7359, 7373, 7469,  
7510, 7640, 7731, 7742, 7752, 7786, 7811, 7881, 7924, 7925,  
8036, 8040, 8104, 8121, 8130, 8138, 8140, 8162, 8169, 8205,  
8245, 8300, 8381, 8398, 8419, 8464, 8515, 8556, 8638, 8680,  
8726, 8747, 8812, 8814, 9049, 9127, 9139, 9215, 9296, 9310,  
9333, 9342  
一 般—4823, 5544, 5853, 6169, 6379, 6386, 6513, 7152, 7159,  
7210, 7262, 8152, 8321, 8408, 8482, 8495, 8647, 8676, 8731,  
8832, 8858, 9002, 9055, 9078, 9181, 9188, 9284, 9289, 9342

## 生 物

- 血、血浆、血清—4835, 4840, 4841, 4859, 4877, 4878, 4909, 4915,  
4918, 4919, 5013, 5028, 5029, 5051, 5063, 5091, 5114, 5172,  
5194, 5208, 5334, 5345, 5373, 5386, 5404, 5410, 5444, 5478,  
5494, 5514, 5515, 5523, 5549, 5562, 5591, 5595, 5601, 5667,  
5676, 5682, 5752, 5802, 5861, 5907, 5918, 5927, 5934, 5948,

5961, 5983, 6050, 6058, 6111, 6144, 6197, 6203, 6213, 6231,  
6337, 6349, 6352, 6391, 6429, 6446, 6472, 6486, 6496, 6497,  
6512, 6541, 6555, 6569, 6598, 6599, 6649, 6665, 6695, 6713,  
6834, 6837, 6844, 6850, 6886, 6909, 6918, 6933, 6939, 6959,  
7016, 7017, 7026, 7031, 7051, 7062, 7072, 7111, 7114, 7135,  
7230, 7264, 7267, 7362, 7411, 7458, 7459, 7571, 7615, 7651,  
7671, 7685, 7697, 7721, 7724, 7737, 7745, 7791, 7814, 7819,  
7841, 7855, 7857, 7876, 7882, 7929, 7949, 7965, 7972, 7973,  
7978, 8037, 8039, 8042, 8066, 8070, 8071, 8077, 8106, 8173,  
8184, 8189, 8214, 8220, 8222, 8235, 8248, 8250, 8251, 8271,  
8295, 8359, 8363, 8368, 8385, 8386, 8388, 8397, 8405, 8421,  
8437, 8465, 8467, 8475, 8478, 8485, 8505, 8517, 8526, 8599,  
8619, 8624, 8626, 8629, 8657, 8664, 8713, 8716, 8730, 8733,  
8736, 3783, 8823, 8826, 8834, 8846, 8867, 8875, 8892, 8919,  
8922, 8967, 9004, 9014, 9041, 9051, 9095, 9098, 9121, 9135,  
9138, 9144, 9156, 9180, 9201, 9210, 9218, 9239, 9241, 9266,  
9276, 9281, 9285, 9286, 9288, 9298, 9300, 9309, 9332, 9338,  
9343,

蛋 白—7127,

骨 —6653, 6958, 7275, 7877, 8191, 8401, 8479, 8507, 8583,  
8597

脑 脊 髓 液—5907, 6976

指 甲—5307, 8770

毛 发—5098, 5298, 5307, 5377, 5773, 5892, 5896, 6187, 6192,  
7345, 7791, 7945, 8076, 8428, 8505, 8710, 8743, 8793, 8939,  
9026, 9217, 9265, 9277, 9354

牙 齿—5263, 5375, 5975, 6984, 7275, 8111, 8401

唾 液—7591

组 织—4842, 4868, 4932, 4933, 4934, 4966, 5071, 5116, 5181,  
5225, 5328, 5363, 5381, 5468, 5472, 5687, 5699, 5726, 5735,  
5743, 5749, 5773, 5829, 5835, 5864, 5875, 5973, 6111, 6255,  
6258, 6327, 6328, 6388, 6419, 6491, 6657, 6778, 6920, 6932,  
7025, 7167, 7188, 7189, 7268, 7269, 7443, 7549, 7562, 7623,  
7631, 7649, 7758, 7806, 7950, 8056, 8057, 8077, 8173, 8217,  
8219, 8250, 8277, 8287, 8317, 8324, 8343, 8357, 8358, 8401,  
8402, 8414, 8443, 8453, 8465, 8499, 8521, 8602, 8649, 8618,  
8651, 8657, 8664, 8667, 8714, 8752, 8875, 8930, 8987, 9055,  
9089, 9154, 9231, 9252, 9285, 9301, 9309, 9313, 9327

尿 —4835, 4875, 4965, 5049, 5114, 5115, 5171, 5186, 5194,  
 5319, 5382, 5385, 5462, 5656, 5676, 5698, 5707, 5721, 5802,  
 5918, 6028, 6064, 6148, 6200, 6243, 6262, 6274, 6336, 6375,  
 6391, 6446, 6535, 6597, 6611, 6649, 6792, 6834, 6859, 6908,  
 6939, 6991, 7111, 7131, 7203, 7248, 7264, 7267, 7321, 7411,  
 7477, 7478, 7518, 7615, 7651, 7723, 7726, 7791, 7873, 7876,  
 7880, 7929, 7941, 7972, 7973, 8011, 8077, 8084, 8106, 8112,  
 8189, 8270, 8271, 8330, 8415, 8448, 8465, 8467, 8537, 8540,  
 8685, 8709, 8733, 8790, 8834, 8835, 8904, 8920, 8938, 8939,  
 9045, 9064, 9183, 9243, 9246, 9283, 9287, 9299, 9303, 9331,  
 9347

— 般—4828, 4835, 4898, 4915, 4920, 4947, 5030, 5066, 5073,  
 5074, 5085, 5145, 8182, 5192, 5207, 5222, 5223, 5237, 5240,  
 5245, 5267, 5279, 5376, 5449, 5473, 5477, 5548, 5578, 5593,  
 5607, 5633, 5670, 5695, 5727, 5761, 5781, 5789, 5831, 5837,  
 5900, 5950, 5951, 5994, 5995, 6009, 6045, 6046, 6097, 6114,  
 6118, 6122, 6140, 6182, 6291, 6315, 6357, 6399, 6400, 6405,  
 6408, 6409, 6412, 6417, 6441, 6467, 6470, 6471, 6478, 6482,  
 6485, 6493, 6523, 6554, 6562, 6573, 6576, 6593, 6620, 6629,  
 6666, 6709, 6721, 6744, 6774, 6777, 6824, 6851, 6865, 6868,  
 6900, 6925, 6977, 6992, 6993, 7008, 7010, 7023, 7177, 7195,  
 7223, 7247, 7338, 7374, 7384, 7404, 7424, 7435, 7483, 7539,  
 7554, 7555, 7611, 7642, 7660, 7674, 7688, 7739, 7745, 7809,  
 7840, 7873, 7875, 7880, 7917, 7970, 8009, 8024, 8050, 8069,  
 8103, 8124, 8165, 8186, 8189, 8218, 8290, 8295, 8322, 8367,  
 8374, 8407, 8491, 8501, 8586, 8591, 8634, 8653, 8693, 8741,  
 8778, 8779, 8817, 8872, 8936, 8938, 8958, 8987, 8990, 9051,  
 9058, 9072, 9077, 9100, 9126, 9157, 9159, 9160, 9164, 9184,  
 9195, 9199, 9215, 9257, 9282, 9291, 9315, 9316, 9341, 9348

环 境

空 气—4856, 4944, 5291, 5320, 5337, 5531, 5671, 5683, 5728,  
 5917, 6168, 6312, 6320, 6336, 6585, 7020, 7090, 7253, 7337,  
 7371, 7425, 7447, 7492, 7497, 7552, 7679, 7683, 7717, 7768,  
 7807, 7886, 7915, 7920, 7931, 8036, 8054, 8055, 8083, 8093,  
 8101, 8120, 8174, 8208, 8310, 8418, 8434, 8462, 8463, 8541,  
 8640, 8679, 8738, 8844, 8859, 8912, 8982, 9043, 9071, 9236,  
 9242, 9261, 9269, 9334

海洋有机体	—6965,	7048,	7084,	7221,	7297,	7325,	7374,	7545,
	7586,	7650,	7694,	7970,	7971,	8062,	8344,	8380,
	8398,	8494,	8571,	8600,	8890,	8962,	9030,	9307
飞灰	—6260,	6494,	7358,	7366,	7486,	9012,	9069	
微粒	—4825,	4826,	4827,	5072,	5423,	5779,	5813,	5814,
	5827,	5866,	5916,	6065,	6092,	6132,	6426,	6556,
	6733,	7089,	7344,	7633,	8310,	8331,	9242,	9334,
	9349							
污 染	—4959,	5112,	5174,	5318,	5348,	5371,	5380,	5433,
	5505,	5506,	5628,	5629,	5763,	5872,	7447,	8025,
	8101,	8174,	8341,	8417,	8464,	8655,	8739,	8794,
	9269							
海 水	—5114,	5135,	5310,	5378,	5456,	5457,	5474,	5475,
	5479,	5542,	5620,	5811,	5944,	5989,	6035,	6098,
	6119,	6121,	6122,	6135,	6176,	6199,	6208,	6215,
	6447,	6468,	6516,	6595,	6642,	6869,	6927,	7048,
	7144,	7213,	7298,	7374,	7413,	7414,	7627,	7628,
	7981,	7757,	7824,	7861,	7867,	7954,	7966,	7970,
	7971,	7982,	8089,	8100,	8233,	8256,	8280,	8328,
	8332,	8344,	8364,	8584,	8640,	8659,	8686,	8717,
	8720,	8762,	8796,	8830,	8962,	8965,	9011,	9040,
	9214,	9227,	9235,	9307,	9350,	7981		
沉 积 物	—4830,	4908,	5039,	5105,	5250,	5270,	5302,	5347,
	5362,	5486,	5540,	5844,	5899,	5967,	6035,	6041,
	6063,	6098,	6106,	6211,	6212,	6254,	6290,	6473,
	6609,	6658,	6689,	6911,	6915,	6952,	7039,	7105,
	7156,	7191,	7323,	7359,	7489,	7543,	7545,	7599,
	7734,	8047,	8245,	8260,	8336,	8419,	8469,	8638,
	8680,	8854,	8890,	9075,	9099,	9127,	9215,	9245,
	9275,	9311						
污 泥	—5453,	5635,	5759,	6051,	6358,	6411,	6772,	7015,
	7024,	7067,	7152,	7153,	7689,	7811,	8051,	8192,
	8350,	8377,	8558,	8740,	8862,	8877,	9181	
雪	—6814,	6738						
废 水	—5505,	5507,	5688,	6638,	6649,	6672,	6889,	7292,
	7299,	7379,	7396,	7479,	7480,	7481,	7482,	7485,
	7530,	7770,	7798,	8078,	8293,	8351,	8370	
水	—4864,	4917,	4948,	4954,	4982,	4989,	4997,	4998,
	5010,	5032,	5039,	5059,	5117,	5123,	5128,	5134,
	5157,	5180,	5195,	5292,	5296,	5347,	5354,	5370,
	5424,	5429,	5431,	5432,	5447,	5483,	5501,	5518,
	5557,	5592,	5606,	5689,	5780,	5810,	5876,	5883,
	5897,	5935,	5947,	5957,	5967,	6023,	6075,	6112,
	6134,	6156,	6163,	6423,	6254,	6268,	6332,	6423,
	6451,	6531,	6536,	6537,	6546,	6591,	6609,	6613,
	6625,	6643,	6667,	6729,	6743,			

6751,	6773,	6806,	6854,	6889,	6913,	6935,	6942,	6984,	6990,
7006,	7012,	7041,	7060,	7105,	7138,	7146,	7156,	7200,	7233,
7237,	7252,	7284,	7286,	7288,	7301,	7335,	7339,	7396,	7408,
7432,	7443,	7456,	7457,	7460,	7464,	7468,	7485,	7489,	7497,
7508,	7513,	7516,	7523,	7524,	7530,	7545,	7599,	7611,	7627,
7630,	7644,	7660,	7676,	7734,	7738,	7763,	7770,	7776,	7798,
7826,	7843,	7847,	7866,	7892,	7896,	7899,	7900,	7901,	7903,
7918,	7959,	7967,	7977,	8006,	8011,	8012,	8015,	8025,	8036,
8045,	8067,	8078,	8080,	8084,	8125,	8127,	8142,	8178,	8198,
8216,	8275,	8279,	8282,	8283,	8326,	8335,	8347,	8351,	8384,
8410,	8417,	8425,	8432,	8438,	8448,	8469,	8474,	8508,	8525,
8532,	8549,	8585,	8594,	8620,	8623,	8627,	8631,	8637,	8639,
8640,	8689,	8695,	8697,	8765,	8788,	8803,	8812,	8911,	8928,
8946,	8950,	8952,	8960,	8963,	8972,	8993,	9008,	9062,	9071,
9073,	9075,	9125,	9139,	9152,	9178,	9198,	9212,	9214,	9232,
9236,	9250,	9290,	9297,	9353,	8014				
— 般—	5084,	5176,	5206,	5268,	5315,	5356,	5443,	5603,	5607,
5742,	6432,	6447,	6467,	6497,	6511,	7247,	7320,	7636,	7688,
7719,	7739,	7894,	8035,	8053,	8158,	8206,	8268,	8337,	8348,
8365,	8407,	8531,	8691,	8711,	8754,	9068,	9111		

## 食 品

饮 料(酒精)—	4824,	5031,	5046,	5087,	5088,	5402,	5421,	5650,
5788,	5940,	5974,	6082,	6173,	6195,	6515,	6704,	7101,
7196,	7525,	7749,	8058,	8221,	8376,	8617,	9166	
饮 料(非酒精)—	4883,	4955,	5031,	5122,	5398,	5604,	5673,	5718,
5747,	5954,	6006,	6042,	6279,	6459,	6542,	6579,	6637,
6895,	7055,	7160,	7267,	7561,	7578,	7603,	7709,	7828,
8034,	8060,	8264,	8481,	8632,	8725,	8801,	9166,	9224,
9234								
鱼 和 肉—	4858,	4916,	4940,	5090,	5135,	5163,	5238,	5308,
5311,	5336,	5486,	5530,	5532,	5608,	5739,	5782,	6027,
6033,	6098,	6170,	6240,	6241,	6260,	6264,	6276,	6295,
6298,	6310,	6311,	6347,	6393,	6394,	6457,	6459,	6514,
6779,	6791,	6829,	6877,	6891,	6899,	6998,	7077,	7156,
7364,	7391,	7476,	7487,	7734,	7735,	7767,	7769,	7801,
7806,	7942,	7944,	7992,	8026,	8031,	8060,	8073,	8211,
8281,	8291,	8321,	8469,	8588,	8611,	8622,	9060,	9108,
9147								
其它食品—	4891,	4893,	5041,	5044,	5107,	5122,	5276,	5397,
5405,								

5428, 5455, 5499, 5500, 5537, 5564, 5588, 5604, 5636, 5668,  
 5748, 5764, 5767, 5772, 5815, 5871, 5933, 5950, 5956, 5981,  
 5986, 6034, 6059, 6066, 6091, 6127, 6540, 6573, 6622, 6656,  
 6727, 6730, 6731, 6752, 6807, 6808, 6812, 6822, 6881, 6956,  
 6966, 7007, 7056, 7184, 7190, 7258, 7303, 7349, 7361, 7401,  
 7434, 7483, 7493, 7505, 7645, 7672, 7765, 7796, 7802, 7835,  
 7862, 7936, 7947, 7951, 7962, 8030, 8036, 8044, 8060, 8095,  
 8099, 8100, 8115, 8152, 8154, 8167, 8175, 8193, 8194, 8207,  
 8227, 8298, 8315, 8323, 8399, 8482, 8497, 8509, 8512, 8528,  
 8530, 8533, 8542, 8559, 8665, 8671, 8715, 8828, 8840, 8874,  
 8927, 9015, 9063, 9083, 9230, 9272, 9330

## 地球化学

**矿物、矿石和岩石**—4857, 4860, 4869, 4873, 4874, 4888, 4905, 4924,  
 4935, 4971, 4978, 4996, 4999, 5016, 5078, 5108, 5124, 5162,  
 5323, 5353, 5458, 5271, 5352, 5357, 5400, 5403, 5412, 5257,  
 5454, 5458, 5517, 5736, 5798, 5844, 5849, 5619, 5632, 5678,  
 5725, 5830, 5838, 5844, 5870, 6004, 6049, 6105, 6130, 6149,  
 6150, 6202, 6271, 6275, 6278, 6407, 6435, 6469, 6224, 6253,  
 6275, 6296, 6442, 6175, 6252, 6309, 6351  
**矿 物**—6833, 6948, 7036, 7154, 7183, 7475, 7519, 7601, 7665,  
 7928, 7946, 8090, 8193, 8342, 8450, 8553, 8562, 8587, 8646,  
 8654, 8776, 8898  
**矿 石**—5964, 6055, 6077, 6101, 7083, 7241, 7242, 7250, 7334,  
 7367, 7491, 7793, 8134, 8102, 8144, 8164, 8179, 8202, 8457,  
 8557, 8563, 8598, 8641, 8786, 8819, 8905, 8948, 8983, 9134,  
 9215, 9308, 9351, 9352  
**岩 石**—5899, 5924, 5967, 6063, 6085, 6150, 6366, 6403, 6416,  
 6435, 6436, 6469, 6617, 6680, 6762, 6765, 6799, 6827, 6863,  
 6880, 7022, 7030, 7036, 7093, 7154, 7183, 7209, 7236, 7283,  
 7318, 7346, 7360, 7445, 7446, 7588, 7589, 7590, 7634, 7752,  
 7786, 7792, 7853, 7874, 7928, 8102, 8135, 8130, 8133, 8146,  
 8168, 8178, 8210, 8247, 8327, 8333, 8392, 8435, 8587, 8601,  
 8683, 8698, 8703, 8786, 8898, 8997, 9065, 9134, 9151, 9171,  
 9174, 9175, 9333  
**硅 酸 盐**—4876, 4977, 4978, 5007, 5062, 5105, 5164, 5244, 5278,  
 5301, 5466, 5491, 5567, 5644, 5669, 5902, 5910, 5926, 5945,  
 5963, 6043, 6270, 6341, 6427, 6423, 6596, 6765, 6787, 6798,

6839, 6840, 6867, 7212, 7283, 7445, 7662, 8048, 8135, 8168,  
 8210, 8226, 8243, 8299, 8334, 8335, 8392, 8816, 8839, 8898  
 其 它—4921, 5297, 5340, 5355, 5490, 5519, 5555, 5574, 5694,  
 5702, 5809, 5818, 5915, 6005, 6099, 6109, 6126, 6138, 6183,  
 6249, 6282, 6350, 6380, 6389, 6448, 6450, 6467, 6492, 6544,  
 6578, 6736, 6789, 6846, 6858, 7013, 7037, 7061, 7078, 7081,  
 7113, 7147, 7151, 7310, 7356, 7365, 7397, 7435, 7539, 7805,  
 7825, 7975, 7976, 8004, 8136, 8246, 8345, 8356, 8372, 8459,  
 8506, 8688, 8777, 8842, 8945, 8966, 9107, 9119, 9128, 9140,  
 9320

## 工 业

催 化 剂—5011, 7290, 7291, 7563, 7567, 7781, 8181, 8403, 8926,  
 8989, 9208  
 烟 雾—7748, 8383, 8352  
 水 泥—4890, 5737, 5852, 6201, 6248, 6376, 6518, 6794, 6975,  
 7494, 8811  
 化学制品—4848, 4929, 4930, 4974, 5002, 5004, 5143, 5200, 5227,  
 5374, 5438, 5460, 5482, 5498, 5602, 5655, 5703, 5708, 5711,  
 5790, 5805, 5824, 5840, 5855, 5856, 5887, 5949, 6103, 6128,  
 6157, 6162, 6342, 6381, 6406, 6425, 6439, 6464, 6484, 6487,  
 6724, 6815  
 煤 —4972, 5058, 5096, 5228, 5637, 5929, 5958, 6652, 6722,  
 7118, 7486, 7878, 8163, 8430, 8776, 8797, 8934, 8937, 9069,  
 9104, 9146, 9233  
 纤 维 —4863, 7577, 8373, 8582, 8718, 8719  
 汽 油—4862, 5113, 5414, 6608, 7128, 7331, 7932, 8900, 9022,  
 9071, 9087, 9270  
 玻 璃 和 陶 瓷—4869, 4914, 4938, 5001, 5033, 5257, 5335, 5346,  
 5361, 5392, 5545, 5978, 6086, 6159, 6172, 6232, 6245, 6306,  
 6910, 6917, 6941, 6953, 7202, 7260, 7799, 8143, 8535, 8690,  
 9038, 9094, 9294  
 纸 —6460, 7400, 8052, 8082, 8488  
 枪 炮 发 射 剩 余 物—6021, 8266, 8910, 9260, 9273  
 墨 水—5269, 5751, 5868, 5921, 5973  
 润 滑 油—4953, 5015, 5275, 6553, 6663, 7420, 7462, 7669  
 油 漆—4901, 5005, 5177, 5201, 5202, 5366, 8212  
 石 油—4939, 4958, 4988, 5000, 5015, 5045, 5110, 5111, 5119,



5125, 5142, 5166, 5178, 5396, 5407, 5459, 5511, 5585, 5713,  
 5740, 5754, 5756, 5865, 5874, 6026, 6104, 6108, 6297, 6348,  
 6367, 6905, 7277, 7386, 7438, 7470, 7613, 7736, 7796, 7846,  
 7892, 8155, 8195, 8225, 8313, 8331, 8362, 8476, 8748, 8808,  
 8812, 8979, 8981, 9118, 9136, 9161, 9167, 9173, 9271, 9344  
**药 品**—4980, 5053, 5054, 5170, 5344, 5359, 5612, 5691, 5692,  
 5704, 5744, 5750, 5920, 6009, 6538, 6730, 6731, 6950, 7206,  
 7287, 7398, 7538, 7621, 7895, 8311, 8361, 8552, 8838, 8865,  
 9106, 9179

**摄影胶片**—7115

**磷酸盐**—5086, 5095, 5199, 6673, 7851, 8839

**颜料**—4991, 4993, 5158, 5952, 6954, 9142

**维生素**—6950, 7009, 8929

**塑料**—5114, 5416, 5581, 6147, 6623, 7263, 8632, 8899, 9220

**电镀液**—8579, 9122, 9185

**橡胶**—6089

**肥皂**—5086

**一般**—5008, 5009, 5204, 5209, 5583, 5869, 6167, 6237, 6424,  
 6817, 7265, 7342, 7753, 7823, 7909, 8249, 8265, 8346, 8383,  
 8406, 8610, 8654, 8670, 8696, 8768, 8780, 8795, 8820, 8996,  
 9017, 9018, 9021, 9090, 9101, 9111, 9113, 9187, 9248, 9317

## 冶 金

**合 金**—4892, 4926, 4983, 5219, 5235, 5533, 5643, 5734, 5771,  
 5785, 5893, 5977, 5999, 6038, 6048, 6081, 6179, 6242, 6374,  
 6404, 6415, 6420, 6651, 6600, 6723, 6819, 6923, 7273, 7315,  
 7376, 7439, 7461, 7544, 7572, 7582, 7584, 7585, 7618, 7744,  
 7746, 7792, 7813, 7821, 7955, 7994, 7999, 8011, 8134, 8137,  
 8177, 8257, 8320, 8413, 8446, 8468, 8486, 8518, 8522, 8527,  
 8550, 8621, 8644, 8721, 8749, 8774, 8809, 9027, 9042, 9129,  
 9130, 9191, 9237, 9256, 9235, 9324

**钢 铁**—4885, 4886, 4911, 4912, 4952, 5050, 5067, 5103, 5132,  
 5212, 5246, 5247, 5277, 5280, 5281, 5282, 5451, 5493, 5730,  
 5828, 5846, 5991, 5993, 6000, 6081, 6191, 6234, 6313, 6317,  
 6330, 6443, 6517, 6612, 6677, 6678, 6835, 6841, 6847, 7002,  
 7005, 7108, 7125, 7133, 7227, 7228, 7273, 7312, 7355, 7363,  
 7449, 7507, 7511, 7529, 7700, 7793, 7887, 7910, 7930, 7968,  
 8011, 8134, 8102, 8159, 8160, 8166, 8178, 8180, 8203, 8400,

8449, 8458, 8477, 8518, 8519, 8527, 8560, 8613, 8636, 8684,  
8721, 8755, 8809, 8951, 8964, 9005, 9067, 9086, 9079, 9124,  
9129, 9280, 9326, 9340, 9346

**金 属**—4847, 4897, 4925, 4946, 5038, 5043, 5147, 5215, 5324,  
5325, 5409, 5415, 5461, 5558, 5562, 5596, 5643, 5652, 5664,  
5731, 5732, 5734, 5746, 5760, 5848, 5859, 5989, 5998, 6048,  
6057, 6079, 6157, 6218, 6372, 6395, 6520, 6521, 6532, 6583,  
6720, 6790, 6828, 7103, 7444, 7450, 7520, 7822, 7837, 7888,  
7989, 7999, 8020, 8137, 8179, 8377, 8378, 8429, 8472, 8500,  
8819, 8897, 9211, 9237, 9324, 9329, 9356

**耐火材料**—4871, 4882, 5003, 5339, 5394, 5647, 6056, 6129, 6131,  
6136, 6137, 6158, 6235, 6236, 6354, 6364, 6378, 6676, 6782,  
**一 般**—4870, 4927, 4943, 5035, 5038, 5077, 5188, 5306, 5434,  
5528, 5529, 5722, 6037, 6155, 6165, 6222, 6373, 6456, 6461,  
6509, 6567, 7711, 7712, 7885, 8153, 8646, 9035

## 仪 器

**自 动 化**—4903, 5068, 5094, 5430, 5431, 5547, 5556, 5562, 5615,  
5654, 5724, 5832, 5942, 6124, 6145, 6207, 6248, 6254, 6536,  
6555, 6649, 6656, 6658, 6674, 6688, 6733, 6740, 6743, 6791,  
6829, 6863, 6886, 7051, 7077, 7335, 7346, 7451, 7521, 7611,  
7728, 7764, 7841, 7919, 7923, 7950, 7968, 8026, 8033, 8037,  
8121, 8133, 8174, 8214, 8419, 8444, 8566, 8635, 8910, 9004,

**背景校正**—4829, 4942, 5151, 5256, 5272, 5273, 5286, 5435, 5663,  
5701, 5734, 5738, 5817, 5976, 6210, 6272, 6288, 6339, 6462,  
6501, 6712, 6764, 6845, 6908, 7300, 7536, 7540, 7804, 7809,  
8223, 8480, 8687, 8991

**燃 烧 器 和 火 焰**—4838, 4879, 4913, 4941, 4949, 5000, 5020, 5022,  
5023, 5024, 5025, 5026, 5027, 5064, 5065, 5106, 5133, 5139,  
5185, 5446, 5448, 5480, 5493, 5304, 5329, 5616, 5705, 5717,  
5795, 5797, 5833, 5939, 5970, 6013, 6022, 6209, 6257, 6280,  
6284, 6285, 6286, 6318, 6356, 6445, 6587, 6630, 6640, 6741,  
6749, 6914, 6937, 6949, 7011, 7018, 7037, 7068, 7402, 7405,  
7440, 7465, 7527, 7556, 7576, 7596, 7670, 7677, 7693, 7696,  
7715, 7742, 7784, 7797, 7803, 7825, 7860, 7956, 8017, 8086,  
8117, 8210, 8226, 8316, 8424, 8543, 8758, 8841, 9274

**计 算 机**—4941, 4968, 7123, 7418, 7451, 7517, 7523, 7675, 8098,  
8531, 8742, 8896, 8970, 9148

**检测限**—4852, 4973, 5019, 5119  
**探测器**—4857, 4889, 4970, 5113, 5118, 5184, 5199, 5205, 5236,  
 5290, 5331, 5450, 5497, 5504, 5576, 5598, 5745, 5793, 5930,  
 5946, 5988, 6080, 6247, 6250, 6251, 6384, 6506, 6614, 6906,  
 7406, 7426, 7923, 7979  
**整合与溶剂萃取**—4922, 4981, 5310, 5347, 5367, 5381, 5382, 2391,  
 5412, 5440, 5460, 5463, 5479, 5499, 5500, 5501, 5503, 5527,  
 5540, 5543, 5551, 5555, 5561, 5565, 5571, 5582, 5597, 5642,  
 5690, 5694, 5759, 5770, 5780, 5810, 5828, 5845, 5847, 5858,  
 5876, 5889, 5899, 5903, 5917, 5919, 5925, 6012, 6028, 6072,  
 6078, 6099, 6111, 6141, 6176, 6181, 6194, 6198, 6208, 6229,  
 6230, 6233, 6282, 6302, 6314, 6325, 6330, 6331, 6364, 6373,  
 4832, 4833, 4834, 4928, 4983, 4994, 4998, 5006, 5042, 5043,  
 5138, 5149, 5162, 5179, 5195, 6379, 6397, 6401, 6405, 6431,  
 6461, 6490, 6523, 6552, 6595, 6596, 6625, 6660, 6702, 6724,  
 6731, 6751, 6763, 6787, 6782, 6811, 6821, 6901, 6927, 6942,  
 7000, 7036, 7106, 7107, 7115, 7120, 7222, 7224, 7252, 7282,  
 7304, 7322, 7351, 7356, 7363, 7367, 7375, 7388, 7390, 7411,  
 7419, 7423, 7424, 7442, 7443, 7457, 7464, 7493, 7519, 7526,  
 7541, 7542, 7550, 7554, 7579, 7642, 7705, 7706, 7723, 7735,  
 7773, 7792, 7793, 7810, 7842, 7865, 7867, 7869, 7871, 7891,  
 7901, 7903, 7915, 7924, 7928, 7930, 7939, 7966, 8004  
**原子发射**—5121, 5129, 5211, 5309, 5406, 5407, 5422, 5429, 5436,  
 5437, 5458, 5459, 5482, 5485, 5488, 5542, 5573, 5575, 5586,  
 5625, 5667, 5686, 5716, 5723, 5741, 5756, 5777, 5778, 5791,  
 5805, 5807, 5813, 5814, 5825, 5836, 5839, 5863, 5883, 5895,  
 5932, 6040, 6068, 6069, 6076, 6119, 6299, 6308, 6309, 6353,  
 6362, 6378, 6390, 6414, 6415, 6423, 6453, 6501, 6593, 6609,  
 6614, 6669, 6671, 6679, 6681, 6703, 6706, 9707, 6723, 6728,  
 6740, 6746, 6760, 6797, 6806, 6831, 6852, 6853, 6873, 6962,  
 6963, 7002, 7081, 7085, 7104, 7129, 7130, 7145, 7149, 7155,  
 7183, 7186, 7201, 7203, 7266, 7287, 7326, 7336, 7340, 7357,  
 7429, 7438, 7440, 7448, 7458, 7459, 7460, 7462, 7470, 7474,  
 7507, 7517, 7531, 7544, 7575, 7581, 7594, 7595, 7596, 7646,  
 7648, 7691, 7700, 7713, 7729, 7761, 7763, 7780, 7800, 7812,  
 7836, 7853, 7870, 7883, 7899, 7910, 8002, 8003, 8005, 8021,  
 8077, 8128, 8166, 8374, 8382, 8434, 8484, 8486, 8595, 8642,  
 8643, 8772, 8775, 8778, 8784, 8815, 8896, 8932, 8969, 9027,

9036, 9047, 9067, 9153, 9253, 9325, 9333, 9036, 9047  
**火焰发射**—7736, 7831, 7934, 8094, 8177, 8201, 8329, 8381, 8385,  
 8433, 8445, 8476, 8516, 8544, 8649, 8782, 8973, 9076, 9202,  
 9218, 9281, 9345  
**原子荧光**—4852, 4865, 4884, 4887, 4945, 4956, 4968, 4975, 4985,  
 5079, 5159, 5168, 5169, 5173, 5214, 5229, 5234, 5238, 5239,  
 5241, 5309, 5316, 5329, 5368, 5579, 5586, 5645, 5648, 5755,  
 5796, 5904, 5908, 5909, 5936, 5971, 5985, 6093, 6094, 6107,  
 6110, 6237, 5256, 6284, 6285, 6286, 6413, 6444, 6465, 6466,  
 6499, 6502, 6506, 6560, 6561, 6605, 6627, 6639, 6640, 6641,  
 6687, 6753, 6754, 6783, 6788, 6797, 6802, 6804, 6805, 6809,  
 6872, 6972, 6987, 6988, 6989, 6994, 6995, 6999, 7023, 7068,  
 7119, 7204, 7285, 7299, 7329, 7353, 7382, 7383, 7415, 7470,  
 7531, 7551, 7552, 7576, 7615, 7616, 7617, 7624, 7657, 7661,  
 7670, 7680, 7742, 7816, 7818, 7836, 7908, 7917, 7938, 7939,  
 7945, 7996, 7997, 8003, 8043, 8113, 8119, 8122, 8126, 8160,  
 8161, 8174, 8261, 8303, 8304, 8328, 8382, 8486, 8543, 8544,  
 8551, 8652, 8722, 8723, 8728, 8729, 8748, 8781, 8782, 9094,  
 8908, 8937, 8934, 9019, 9074, 9104, 9105, 9190, 9207, 9245,  
 9268, 9335, 9358  
**炉 取 样**—4829, 4842, 4845, 4856, 4864, 4872, 4873, 4874, 4900,  
 5044, 4046, 5119, 5124, 5132, 5145, 5155, 5156, 5193, 5194,  
 5197, 5210, 5219, 5273, 5283, 5288, 5325, 5345, 5363, 5368,  
 5423, 5435, 5441, 5474, 5475, 5508, 5510, 5520, 5538, 5539,  
 5547, 5580, 5594, 5604, 5605, 5610, 5627, 5649, 5665, 5666,  
 5668, 5699, 5707, 5733, 5736, 5743, 5776, 5777, 5778, 5783,  
 5784, 5816, 5834, 5840, 5854, 5860, 5876, 5894, 5895, 5896,  
 5965, 5968, 5976, 5989, 6000, 6014, 6015, 6031, 6038, 6039,  
 6044, 6065, 6076, 6083, 6084, 6112, 6121, 6124, 6125, 6130,  
 6132, 6143, 6146, 6152, 6153, 6154, 6186, 6190, 6215, 6227,  
 6242, 6305, 6308, 6309, 6360, 6362, 6414, 6438, 6449, 6451,  
 6453, 6474, 6475, 6476, 6477, 6483, 6493, 6523, 6569, 6581,  
 6582, 6598, 6601, 6602, 6609, 6610, 6613, 6616, 6618, 6619,  
 6620, 6629, 6691, 6692, 6693, 6694, 6697, 6702, 6708, 6735,  
 6760, 6769, 6792, 6795, 6835, 6841, 6862, 6866, 6887, 6890,  
 6900, 6904, 6908, 6932, 6933, 6936, 6938, 6942, 6952, 6955,  
 6960, 6961, 6962, 6968, 6973, 6974, 6975, 6979, 7002, 7031,  
 7041, 7043, 7046, 7058, 7060, 7074, 7087, 7110, 7111, 7115,

7123, 7173, 7174, 7193, 7267, 7281, 7364, 7370, 7381, 7392,  
 7404, 7423  
 间接测定—4917, 4979, 4980, 5053, 5054, 5117, 5165, 5242, 5333,  
 5343, 5344, 5360, 5447, 5467, 5502, 5526, 5552, 5577, 5589,  
 5594, 5623, 5632, 5634, 5639, 5691, 5692, 5698, 5750, 5754,  
 5807, 5808, 5855, 5871, 5881, 5890, 5891, 5955, 5993, 6007,  
 6019, 6052, 6053, 6054, 6183, 6184, 6225, 6304, 6313, 6355,  
 6436, 6484, 6498, 6524, 6527, 6537, 6539, 6588, 6626, 6675,  
 6951, 7000, 7022, 7227, 7292, 7619, 7776, 7902, 7975, 7987,  
 7996, 8063, 8240, 8251, 8252, 8273, 8300, 8774, 8802, 8902,  
 8903, 8942, 8978, 8980, 9222, 9318, 9336

## 仪 器

工 具—4836, 4837, 4866, 4904, 4907, 4976, 5369, 5372, 5376,  
 5476, 5484, 5495, 5525, 5674, 5675, 5859, 5892, 5898, 5915,  
 5916, 5931, 5936, 5966, 6117, 6214, 6321, 6360, 6392, 6421,  
 6529, 6580, 6584, 6632, 6742, 6875, 6898, 6907, 6939, 6964,  
 7032, 7033, 7034, 7093, 7139, 7148, 7197, 7226, 7353, 7647,  
 7934, 8119, 8161, 8224, 8228, 8305, 8307, 8319, 8322, 8381,  
 8461, 8492, 8595, 8607, 8673, 8674, 8687, 8712, 8737, 8764,  
 8785, 8813, 8836, 8883, 8933, 8940, 8949, 8988, 9141, 9177,  
 9196, 9249, 9258, 9264, 9274  
 干 扰—4867, 4876, 4881, 4902, 4913, 4918, 4950, 5007, 5014,  
 5065, 5080, 5101, 5102, 5146, 5185, 5210, 5221, 5254, 5280,  
 5281, 5287, 5304, 5414, 5418, 5426, 5430, 5441, 5448, 5469,  
 5569, 5570, 5590, 5609, 5627, 5672, 5757, 5765, 5766, 5776,  
 5778, 5792, 5804, 5823, 5863, 5867, 5878, 5880, 5926, 5968,  
 5987, 6003, 6015, 6061, 6067, 6084, 6134, 6152, 6153, 6154,  
 6166, 6186, 6227, 6259, 6289, 6292, 6324, 6329, 6338, 6362,  
 6363, 6364, 6385, 6414, 6422, 6489, 6525, 6581, 6592, 6594,  
 6663, 6681, 6683, 6749, 6798, 6799, 6909, 6922, 6937, 6943,  
 6973, 7050, 7065, 7075, 7087, 7104, 7162, 7163, 7164, 7178,  
 7179, 7181, 7245, 7271, 7274, 7281, 7283, 7294, 7328, 7330,  
 7343, 7355, 7370, 7386, 7397, 7412, 7456, 7567, 7569, 7583,  
 7589, 7610, 7614, 7635, 7702, 7733, 7757, 7768, 7794, 7795,  
 7820, 7898, 8018, 8088, 8118, 8125, 8242, 8255, 8267, 8314,  
 8340, 8398, 8489, 8498, 8575, 8593, 8609, 8614, 8616, 8623,  
 8666, 8676, 8678, 8705, 8734, 8735, 8789, 8810, 8860, 8885,

8924, 8941, 8968, 9010, 9023, 9050, 9070, 9084, 9116, 9117,  
 9124, 9133, 9168, 9189, 9200, 9216, 9221, 9286,  
**离子交换分离**—4995, 4997, 4998, 5123, 5243, 5252, 5278, 5340,  
 5353, 5354, 5355, 5626, 5704, 5830, 6043, 6176, 6423, 6539,  
 7089, 7252, 7506, 7580, 7588, 7927  
**分离技术**—8759, 8760, 8761, 8767, 8788, 8806, 8807, 8809, 8810,  
 8812, 8820, 8842, 8843, 8847, 8852, 8855, 8890, 8911, 8928,  
 8943, 8945, 8946, 8953, 8963, 8975, 8977, 8985, 9009, 9020,  
 9024, 9027, 9032, 9033, 9037, 9086, 9092, 9099, 9137, 9145,  
 9155, 9165, 9191, 9209, 9244, 9296, 9307, 9324, 9352,  
**汞/氢化物发生**—7497, 7557, 7559, 7576, 7579, 7586, 7599, 7614,  
 7624, 7628, 7650, 7658, 7659, 7663, 7716, 7726, 7731, 7738,  
 7739, 7742, 7747, 7754, 7774, 7784, 7834, 7901, 7907, 7908,  
 7940, 7945, 7988, 7992, 8008, 8011, 8015, 8023, 8033, 8055,  
 8081, 8084, 8105, 8131, 8145, 8146, 8151, 8161, 8167, 8178,  
 8200, 8206, 8215, 8261, 8263, 8264, 8278, 8298, 8302, 8356,  
 8379, 8387, 8393, 8400, 8422, 8425, 8431, 8443, 8466, 8467,  
 8491, 8501, 8514, 8520, 8530, 8547, 8582, 8596, 8613, 8632,  
 8661, 8688, 8689, 8706, 8709, 8723, 8734, 8743, 8747, 8750,  
 8751, 8765, 8769, 8789, 8810, 9094, 8832, 8848, 8849, 8850,  
 8851, 8890, 8895, 8908, 8914, 8915, 8917, 8920, 8924, 8936,  
 8943, 8947, 8960, 8966, 8968, 8972, 8984, 8990, 9005, 9010,  
 9011, 9012, 9031, 9059, 9069, 9081, 9082, 9104, 9105, 9127,  
 9132, 9139, 9163, 9192, 9212, 9226, 9229, 9233, 9249, 9267,  
 9283, 9306, 9313, 9323, 9339  
**分子发射腔分析**—4849, 4850, 4851, 5224  
**喷雾器**—4961, 4962, 4963, 5140, 5141, 5160, 5274, 5289, 5401,  
 5646, 5684, 5758, 5812, 5836, 5843, 6073, 6100, 6206, 6269,  
 6345, 6410, 6433, 6607, 6710, 6763, 6747, 6786, 7053, 7515,  
 7995, 8001, 8002, 8123, 8139, 8196, 8199, 8272, 8329, 8543,  
 8544, 8548, 8606, 8668, 8727, 8892, 9210, 9304  
**等离子体**—4839, 4843, 4844, 4861, 4931, 5047, 5055, 5057, 5066,  
 5153, 5178, 5212, 5218, 5230, 5232, 5259, 5260, 5261, 5275,  
 5284, 5285, 5294, 5299, 5316, 5337, 5536, 5548, 5550, 5569,  
 5570, 5644, 5646, 5715, 5755, 5760, 5803, 5819, 5820, 5821,  
 5888, 5900, 5914, 5990, 5994, 6001, 6011, 6047, 6062, 6071,  
 6073, 6151, 6185, 6188, 6239, 6247, 6249, 6263, 6265, 6276,  
 6333, 6343, 6344, 6370, 6387, 6390, 6410, 6504, 6530, 6534,

6543, 6545, 6546, 6557, 6563, 6564, 6574, 6575, 6593, 6607,  
 6612, 6651, 6664, 6673, 6682, 6710, 6711, 6718, 6746, 6750,  
 6786, 6806, 6848, 6852, 6876, 6878, 6885, 6893, 6897, 6903,  
 6907, 6930, 6945, 6952, 6964, 6978, 7020, 7040, 7053, 7064,  
 7065, 7071, 7080, 7083, 7086, 7095, 7096, 7102, 7108, 7109,  
 7112, 7155, 7175, 7176, 7203, 7229, 7246, 7280, 7293, 7307,  
 7329, 7340, 7357, 7373, 7412, 7422  
**评 论**—4923, 4957, 4984, 4985, 5144, 5159, 5187, 5191, 5640,  
 5641, 5822, 5946, 6018, 6094, 6116, 6180, 6322, 6350, 6412,  
 6420, 6463, 6507, 6510, 6661, 6721, 6756, 6768, 6825, 6826,  
 6849, 6879, 7045, 7079, 7082, 7205, 7233, 7324, 7332, 7368,  
 7369, 7395, 7417, 7419, 7431, 7522, 7558, 7592, 7657, 7761,  
 7796, 7836, 7850, 7874, 7879, 7918, 7960, 8024, 8028, 8043,  
 8092, 8116, 8132, 8159, 8187, 8197, 8213, 8229, 8267, 8295,  
 8311, 8314, 8346, 8388, 8394, 8396, 8411, 8412, 8416, 8486,  
 8487, 8512, 8514, 8520, 8528, 8574, 8576, 8592, 8604, 9093,  
 8744, 8752, 8784, 8880, 8882, 8994, 9017, 9056, 9061, 9102,  
 9150, 9186, 9197, 9306, 9318, 9328  
**样品制备**—4841, 4842, 4871, 4880, 4890, 4894, 4900, 4987, 5012,  
 5073, 5161, 5581, 5585, 5664, 5677, 5697, 5731, 5747, 5749,  
 5779, 5799, 5811, 5838, 5864, 5866, 5870, 5873, 5875, 5901,  
 5906, 5922, 5934, 5950, 5959, 5986, 5996, 6034, 6144, 6160,  
 6177, 6201, 6223, 6238, 6275, 6320, 6323, 6361, 6368, 6396,  
 6435, 6437, 6438, 6448, 6451, 6454, 6479, 6480, 6483, 6503,  
 6507, 6508, 6566, 6757, 6617, 6650, 6830, 6834, 7024, 7153,  
 7158, 7190, 7210, 7608, 7641, 7739, 7743, 7755, 7792, 7826,  
 7828, 7829, 7870, 7875, 7896, 7953, 7954, 7983, 8039, 8138,  
 8167, 8236, 8290, 8339, 8502, 8558, 8569, 8594, 8694, 8714,  
 8715, 8763, 8770, 8779, 8841, 8844, 8862, 8882, 8936, 9072,  
 9077, 9180, 9217, 9223, 9252, 9272, 9353  
**固体取样**—4852, 5090, 5189, 5679, 5710, 5796, 5842, 5953, 6027,  
 6033, 6038, 6062, 6191, 6316, 6383, 6434, 6835, 6841, 6871,  
 6965, 7208, 7272, 7273, 7449, 7715, 7744, 7746, 7801, 7868,  
 7933, 7935, 8006, 8123, 8153, 8382, 8429, 8536, 8817, 8856,  
 9110, 9124, 9195  
**光 源**—4853, 4865, 4884, 5092, 5093, 5150, 5587, 5631, 5640,  
 5641, 5648, 5651, 5675, 5723, 5905, 6002, 6008, 6024, 6025,  
 6060, 6070, 6090, 6117, 6123, 6166, 6196, 6217, 6221, 6256,

3261, 6452, 6499, 6565, 6586, 6606, 6628, 6670, 6679, 6681,  
6687, 6701, 6706, 6715, 6757, 6809, 6836, 6838, 6845, 6860,  
6888, 6902, 6928, 6972, 6980, 6986, 6994, 6995, 6997, 7054,  
7095, 7097, 7098, 7157, 7165, 7166, 7240, 7285, 7305, 7316,  
7348, 7382, 7383, 7453, 7472, 7474, 7502, 7544, 7575, 7606,  
7617, 7622, 7652, 7652, 7463, 7653, 7668, 7722, 7856, 7997,  
8022, 8029, 8043, 8068, 8069, 8108, 8119, 8141, 8160, 8209,  
8440, 8451, 8452, 8484, 8493, 8510, 8513, 8524, 8572, 8590,  
8605, 8749, 8756, 8772, 8906, 9001, 9067, 9085, 9112, 9153,  
9203

特 殊 取 样 (无 焰) — 4858, 4867, 4877, 4884, 4891, 4893, 4894,  
4898, 4906, 4908, 4911, 4912, 4914, 4918, 4919, 4937, 4947,  
4951, 4955, 4964, 4969, 4973, 4974, 5031, 5034, 5037, 5039,  
5045, 5056, 5058, 5060, 5063, 5069, 5072, 5077, 5078, 5081,  
5083, 5084, 5086, 5090, 5099, 5103, 5108, 5110, 5114, 5117,  
5123, 5128, 5134, 5135, 5136, 5137, 5148, 5169, 5170, 5182,  
5198, 5563, 5595, 5599, 5606, 5614, 5650, 5652, 5656, 5676,  
5681, 5682, 5683, 5687, 5703, 5724, 5725, 5740, 5741, 5746,  
5762, 5768, 5769, 5806, 5811, 5818, 5826, 5829, 5831, 5832,  
5841, 5842, 5851, 5857, 5862, 5867, 5879, 5918, 5921, 5929,  
5937, 5949, 5958, 5959, 5966, 5969, 5974, 5975, 5980, 5982,  
5984, 5995, 5996, 5997, 6006, 6012, 6046, 6048, 6057, 6059,  
6061, 6087, 6088, 6127, 6059, 6061, 6087, 6088, 6127, 6133,  
6134, 6139, 6141, 6161, 6164, 6178, 6182, 6191, 6199, 6204,  
6208, 6224, 6235, 6236, 6237, 6238, 6243, 6252, 6255, 6258,  
6259, 6262, 6266, 6272, 6273, 6274, 6279, 6287, 6288, 6295,  
6301, 6312, 6315, 6324, 6325, 6327, 6335, 6337, 6342, 6347,  
6348, 6355, 6357, 6358, 6363, 6369, 6372, 6375, 6377, 6382,  
6385, 6386, 6391, 6395, 6396, 6399, 6405, 6417, 6418, 6424,  
6455, 6457, 6468, 6485, 6489, 6490, 6491, 6502, 6505, 6517,  
6519, 6524, 6527, 6528, 6539, 6542, 6549, 6550, 6554, 6566,  
6581, 6582, 6598, 6601, 6602, 6603, 6604, 6609, 6610, 6613,  
6616, 6618, 6619, 6622, 6623, 6629, 6637, 6659, 6662, 6677,  
6678, 6685, 6693, 6694, 6698, 6702, 6709, 6713, 6714, 6719,  
6733, 6735, 6737, 6753, 6754, 6755, 6772, 6775, 6788, 6789,  
6793, 6796, 6799, 6814, 6820, 6821, 6832, 6834, 6842, 6844,  
6846, 6858, 6871, 6872, 6874, 6907, 6911, 6925, 6926, 6927,  
6940, 6944, 6948, 6957, 6967, 6976, 6977, 6983, 6992, 6996,



6998, 7009, 7026, 7029, 7038, 7048, 7051, 7062, 7066, 7069,  
7076, 7084, 7089, 7092, 7099, 7118, 7121, 7137, 7150, 7153,  
7190, 7207, 7209, 7214, 7215, 7216, 7222, 7223, 7224, 7226,  
7235, 7236, 7257, 7259, 7262, 7264, 7272, 7273, 7274, 7294,  
7297, 7298, 7304, 7313, 7314, 7319, 7320, 7321, 7325, 7331,  
7339, 7350, 7359, 7360, 7361, 7365, 7372, 7374, 7385, 7387,  
7399, 7407, 7409, 7427, 7443, 7476, 7606, 7680, 7714, 7718,  
7751, 7754, 7760, 7764, 7772, 7777, 7785, 7847, 7919, 7920,  
7923, 7957, 7961, 7979, 7984, 8012, 8041, 8063, 8079, 8093,  
8145, 8162, 8265, 8309, 8310, 8349, 8364, 8391, 8392, 8408,  
8413

**特殊取样**—8432, 8462, 8473, 8503, 8525, 8538, 8555, 8585, 8663,  
8701, 8716, 8773, 8776, 8791, 8792, 8827, 8829, 8856, 8884,  
8894, 8900, 8935, 8942, 8951, 8981, 9046, 9071, 9073, 9091,  
9103, 9118, 9121, 9143, 9151, 9162, 9207, 9232, 9240, 9267,  
9301, 9312, 9314, 9328

**特殊取样(火焰)**—4847, 4855, 4878, 4965, 4966, 5005, 5032, 5036,  
5040, 5052, 5070, 5146, 5168, 5558, 5592, 5605, 5611, 5618,  
5668, 5680, 5702, 5726, 5844, 5877, 5878, 5927, 5944, 5957,  
5978, 5998, 6051, 6088, 6093, 6095, 6115, 6145, 6163, 6310,  
6311, 6336, 6381, 6458, 6459, 6467, 6615, 6634, 6657, 6686,  
6689, 6761, 6766, 6866, 6893, 7088, 7090

**特殊取样(蒸汽发生)**—5589, 5603, 5608, 5620, 5696, 5721, 5782,  
5801, 6041, 6113, 6143, 6174, 6291, 6402, 6479, 6480, 6492,  
6522, 6536, 6589, 6597, 6616, 6745, 6779, 6780, 6783, 6812,  
6870, 6891, 6943, 6987, 6988, 6989, 6990, 7027, 7041, 7052,  
7064, 7065, 7068, 7077, 7085, 7119, 7142, 7168, 7184, 7232,  
7245, 7259, 7299, 7302, 7317, 7333, 7340, 7362, 7380

**技术和理论**—4831, 4844, 4849, 4872, 4895, 4896, 4899, 4960,  
4990, 5017, 5018, 5020, 5021, 5022, 5023, 5024, 5025, 5026,  
5027, 5036, 5079, 5082, 5083, 5097, 5099, 5100, 5104, 5106,  
5109, 5129, 5131, 5150, 5151, 5153, 5154, 5155, 5156, 5160,  
5167, 5175, 5183, 5534, 5535, 5538, 5550, 5556, 5559, 5560,  
5563, 5568, 5600, 5617, 5621, 5622, 5627, 5630, 5638, 5653,  
5654, 5657, 5662, 5693, 5706, 5712, 5714, 5719, 5720, 5729,  
5753, 5786, 5787, 5794, 5795, 5797, 5834, 5884, 5885, 5886,  
5923, 5928, 5938, 5970, 5972, 5976, 5992, 5997, 6001, 6010,  
6011, 6017, 6020, 6029, 6030, 6036, 6074, 6123, 6142, 6151,