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INDEX TO THE LITERATURE OF THALLIUM, 1861–1896.

BY

MARTHA DOAN.

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INDEX TO THE LITERATURE OF THALLIUM, 1861–1896,

by Miss Martha Doan.

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MR. S. P. LANGLEY,
Secretary of the Smithsonian Institution.

INDEX TO THE LITERATURE OF THALLIUM.

1861–1896.

BY MARTHA DOAN.

1861 : 1. W. Crookes. (Discovery.)

Chem. News, **3**, 193, 303 ; Am. J. Sci. [2], **32**, 411 ; Phil. Mag. [4], **21**, 301 ; Bull. Soc. chim., **3**, 211, 289 ; Chem. Centrbl., 1861, 496 ; N. Arch. ph. nat., **11**, 160 ; Jsb., 1861, 44, 130.

1862 : 1. A. Lamy. (Discovery, occurrence, and extraction—Properties and compounds.)

Ann. chim. phys. [3], **67**, 385, 418 ; Am. J. Sci. [2], **35**, 273 ; Compt. rend., **54**, 1255 ; **55**, 836 ; J. pharm. [3], **42**, 81 ; Ann. der. Phys. Pogg., **116**, 495 ; Ann. Chem. Liebig, **124**, 215 ; Bull. Soc. chim., **4**, 291 ; **5**, 81 ; Instit., 1862, 416 ; Phil. Mag. [4], **24**, 185 ; N. Arch. ph. nat., **14**, 400 ; **16**, 77 ; Dingl. pol. J., **165**, 284 ; Z. Chem. Phar., 1862, 428 ; J. prakt. Chem., **86**, 250 ; **88**, 172, 362 ; Chem. News, **6**, 29 ; Chem. Centrbl., 1862, 625 ; Zeit. Chem. Phar., 1863, 125 ; Jsb., 1862, 176.

1862 : 2. W. Crookes.

Proc. Roy. Soc., **12**, 150 ; Chem. News, **6**, 1 ; Am. J. Sci. [2], **34**, 275, 409 ; Pharm. J. Trans. [2], **4**, 63 ; Ann. Chem. Liebig, **124**, 203 ; J. prakt. Chem., **88**, 167 ; Chem. Centrbl., 1862, 808 ; Vierteljschr. Pharm., **12**, 60 ; Bull. Soc. chim., **4**, 404 ; Jsb., 1862.

1862 : 3. Regnault. (Specific heat.)

Comptes. rend., **55**, 887 ; Instit., 1862, 418 ; Ann. chim. phys. [3], **67**, 427 ; Ann. Chem. Liebig, **126**, 82 ; Zeit. Chem. Phar., 1863, 94 ; Bull. Soc. chim., **5**, 81 ; Jsb., 1862, 180.

1862 : 4. F. Kuhlmann. (Organic salts and estimation of Tl.)

Compt. rend., **55**, 607 ; Instit., 1862, 343 ; Ann. chim. phys. [3], **68**, 341 ; Ann. Chem. Liebig, **126**, 75 ; J. prakt. Chem., **88**, 175 ; Zeitschr. Chem. Phar., 1862, 690 ; Chem. Centrbl., 1863, 70 ; Bull. Soc. chim., **4**, 408 ; Jsb., 1862, 187.

1862 : 5. de la Provostaye. (Crystalline form of some organic salts.)

Compt. rend., **55**, 610 ; Ann. Chem. Liebig, **126**, 79 ; J. prakt. Chem., **88**, 178 ; Zeitschr. Chem. Phar., 1862, 693 ; Jsb., 1862, 187.

1863 : 1. W. A. Miller. (Spectrum.)

Lond. R. Soc. Proc., **12**, 407 ; Phil. Mag. [4], **26**, 228 ; Chem. News, **7**, 146 ; N. Arch. ph. nat., **18**, 359 ; Ann. chim. phys. [3], **69**, 507 ; J. prakt. Chem., **91**, 190 ; Chem. Centrbl., 1864, 246 ; Jsb., 1863, 112.

1863 : 2. R. Böttger. (Occurrence in salt waters.)

Frank. phys. Ver., 1863, 1 ; Ann. Chem. Liebig, **128**, 240, 368 ; J. prakt. Chem., **89**, 378 ; **90**, 145 ; Chem. Centrbl., 1863, 669 ; Jsb., 1863, 185.

1863 : 3. F. Kuhlmann. (Lead-chamber deposits.)

Compt. rend., **56**, 171; Instit., 1863, 26 ; Ann. chim. phys. [3], **67**, 428 ; Bull. Soc. chim., **5**, 122 ; J. prakt. Chem., **88**, 433 ; Dingl. pol. J., **167**, 455 ; Jsb., 1863, 246.

1863 : 4. A. Lamy. (Toxicological effects of Tl.)

Compt. rend., **57**, 442 ; Instit., 1863, 265 ; J. Pharm. [3], **44**, 285 ; Chem. Centrbl., 1864, 287 ; J. prakt. Chem., **91**, 366 : Jsb., 1863, 255.

1863 : 5. W. T. Roepper. (Occurrence in furnace products.)

Am. J. Sci. [2]. **35**, 420 ; Jsb., 1863, 246.

1863 : 6. Herepath. (Occurrence in Bi.)

Trans. Pharm. J., **4**, 302 ; Jsb., 1863, 236, 243, 687.

1863 : 7. L. de la Rive. (Specific gravity and electrical conductivity.)

Compt. rend., **56**, 588 ; Instit., 1863, 93 ; N. Arch. ph. nat., **17**, 67 ; Bull. Soc. chim., **6**, 270 ; Ann. Chem. Liebig, **128**, 128 ; Phil. Mag. [4], **26**, 236 ; J. prakt. Chem., **91**, 369 ; Chem. Centrbl., 1864, 404 ; Jsb., 1863, 249.

1863 : 8. Matthiessen and Vogt. (Electrical conductivity.)

Ann. der Phys. Pogg., **118**, 431 ; Phil. Mag. [4], **26**, 542 ; Ann. Chem. Liebig, **128**, 128 ; Bull. Soc. chim., **6**, 270 ; Lond. R. Soc. Proc., **12**, 472 ; Jsb., 1863, 249.

1863 : 9. Gassiot. (Spectrum.)

Lond. R. Soc. Proc., **12**, 536 ; Phil. Mag. [4], **27**, 143 ; Chem. Centrbl., 1864, 404 ; Jsb., 1863, 112.

1863 : 10. Crookes. (Preparation of Tl. in large amounts.)

Chem. News, **8**, 159 ; Rep. chim. app., **5**, 435 ; J. pharm. [3], **45**, 216 ; Chem. Centrbl., 1864, 401 ; Jsb., 1863, 246, 248.

1863 : 11. Crookes. (Priority of discovery.)

Phil. Mag. [4], **26**, 55 ; J. prakt. Chem., **90**, 19.

1863 : 12. W. A. Miller. (Spectrum of Thallium.)

Lond. R. Soc. Proc., **12**, 407 ; Phil. Mag. [4], **26**, 228 ; Chem. News, **7**, 146 ; N. Arch. ph. nat., **18**, 359 ; Ann. chim. phys. [3], **69**, 507 ; J. prakt. Chem., **91**, 190 ; Chem. Centrbl., 1864, 246 ; Jsb., 1863, 112.

1863 : 13. R. Böttger. (Occurrence in salt water at Nauheim and ———.)

Ann. Chem. Liebig, **127**, 240, 368 ; Jour. prakt. Chem., **89**, 378 ; **90**, 145 ; Chem. Centrbl., 1863, 669 ; Jsb., 1863, 185.

1863 : 14. Erdmann.

J. prakt. Chem., **89**, 381 ; Chem. Centrbl., 1864, 403 ; Jsb., 1863, 250.

1863 : 15. Crookes and Church. (Thallium sesquichloride.)

Chem. News, **8**, 1 ; Chem. Centrbl., 1864, 411 ; Jsb., 1863, 250.

1863 : 16. Willm. (Ammonium derivatives of $TlCl_3$.)

Bull. Soc. chim., **5**, 354 ; Zeitschr. Chem. Pharm., 1863, 751 ; Chem. Centrbl., 1864, 410 ; Jsb., 1863, 251.

1863 : 17. Crookes. (Nitrate, perchlorate.)

Chem. News, **8**, 195 ; Jsb., 1863, 252.

(Phosphate, carbonate.)

Chem. News, **8**, 219 ; **8**, 231 ; Jsb., 1863, 253.

(Sulphate, chromates, acetate.)

Chem. News, **8**, 243 ; **8**, 255 ; **8**, 279 ; Jsb., 1863, 255.

(All these salts.)

Chem. Centrbl., 1864, 405 ; Zeitschr. anal. Chem., **2**, 201.

1863 : 18. R. Böttger. (New method of obtaining Tl. from flue dust. Its properties and compounds.)

Jsb. Frank. phys. Ver., 1863, 4 ; Ann. Chem. Liebig, **128**, 248 ; J. prakt. Chem., **90**, 151 ; Rep. chim. app., **5**, 485 ; Jsb., 1863, 248.

1863 : 19. Paulet. (Poisonous properties of Tl.)

Compt. rend., **57**, 494 ; Instit., 1863, 290 ; Chem. Centrbl., 1864, 287 ; Jsb., 1863, 255.

1863 : 20. Grandeau. (Poisonous properties of Tl.)

Instit., 1863, 333 ; Jsb., 1863, 256.

1863 : 21. R. Böttger. (Method of obtaining Tl. from lead-chamber deposits. Some Tl. compounds.)

Jsb. des Frank. phys. Ver., 1861–62, 58 ; Ann. Chem. Liebig, **127**, 175; J. prakt. Chem., **90**, 22 ; Vierteljahrsschr. pr. Phar., **12**, 365 ; Chem. Centrbl., 1863, 404 ; Dingl. pol. J., **168**, 438 ; Ann. chim. phys. [3], **78**, 500 ; Bull. Soc. chim., **5**, 451 ; Jsb., 1863, 45.

1863 : 22. Schrötter. (Occurrence in lepidolite and mica.)

Wien. Akad. Ber. [2], **48**, 734 ; J. prakt. Chem., **91**, 45; Chem. Centrbl., 1864, 864 ; Instit., 1864, 70 ; Chem. News, **9**, 169 ; Jsb., 1864, 245.

1863 : 23. V. v. Lang. (Crystal form and optical properties of Tl_2SO_4.)

Phil. Mag. [4], **25**, 248 ; Ann. Chem. Liebig, **128**, 76 ; Ann. der Phys. Pogg., **118**, 630 ; Bull. Soc. chim., **5**, 453 ; Chem. Centrbl., 1864, 144 ; Jsb., 1863, 254.

1864 : 1. G. Werther. (Determination as iodide.)

Zeitschr. anal. Chem., **3**, 1 ; J. prakt. Chem., **93**, 393 ; Chem. Centrbl., 1864, 987 ; J. Pharm. [3], **46**, 306 ; Jsb., 1864, 712.

1864 : 2. A. Lamy. (Alcoholates.)

Ann. chim. phys. [4], **3**, 373 : Compt. rend., **59**, 780 ; Instit., 1864, 370 ; J. Pharm. [4], **1**, 211 : Chem. News, **10**, 268 ; Chem. Centrbl., 1865, 303 ; Am. J. Sci. [2], **39**, 220 : Jsb., 1864, 463.

1864 : 3. W. Crookes. (Oxalates.)

Chem. News, **9**, 1 ; Bull. Soc. chim. [2], **1**, 278 ; Chem. Centrbl., 1864, 410 ; Jsb., 1864, 254.

1864 : 4. W. Crookes. (Solubility of Tl. salts.)

Chem. News, **9**, 37 ; Bull. Soc. chim. [2], **1**, 266 : Jsb., 1864, 256.

1864 : 5. Erdmann. (Action of Thallium carbonate on vegetable colors.)

J. prakt. Chem., **91**, 317 ; Chem. Centrbl., 1864, 941 ; J. Pharm. [3], **46**, 463 ; Jsb., 1864, 250.

1864 : 6. Schönbein. (Behavior of Tl. in presence of O and H_2O_2.)

J. prakt. Chem., **93**, 35 ; Bull. Soc. chim. [2], **3**, 180 ; Jsb., 1864, 170.

1864 : 7. A. Schrötter. (Separation of Li., Rb., Cs., and Tl. in lepidolite and mica.)

Wien. Akad. Ber. [2], **50**, 268 ; J. prakt. Chem., **93**, 275 ; N. Jahr. Pharm., **23**, 16, 65 ; Chem. Centrbl., 1865. 331 ; Jsb., 1864, 186.

1864 : 8. J. Nickles. (Spectrum.)

Compt. rend., **58**, 132 ; Instit., 1864, 11 ; Bull. Soc. chim. [2], **1**, 454 ; J. prakt. Chem., **92**, 505 ; Ann. der Phys. Pogg., **121**, 336 ; Chem. Centrbl., 1864, 404 ; Chem. News, **9**, 54 ; Phil. Mag. [4], **28**, 168 ; Jsb., 1864, 246.

1864 : 9. Oettinger. (Molybdate and wolframate.)

Zeitschr. Chem. Pharm., 1864, 440 ; J. Pharm. [3], **46**, 463 ; Jsb., 1864, 253.

1864 : 10. Bischoff. (Occurrence.)

Ann. Chem. Liebig, **129**, 375 ; Dingl. pol. J., **172**, 73 ; Chem. Centrbl., 1864, 815 ; Bull. Soc. chim. [2], **1**, 349 ; J. Pharm. [3], **46**, 308 ; Jsb., 1864, 245.

1864 : 11. Kuhlmann. (Thallous fluoride.)

Compt. rend., **58**, 1037 ; Bull. Soc. chim. [2], **3**, 57 ; Chem. News. **10**, 37 ; Jsb., 1864, 253.

1864 : 12. Crookes. (Spectrum.)

Chem. News, **9**, 54 ; Jsb., 1864, 246.

1864 : 13. WERTHER.

J. prakt. Chem., **91**, 385 ; **92**, 128, 351 ; Chem. Centrbl., 1864, 737 ; Bull. Soc. chim. [2], **2**, 272 ; **3**, 58 ; J. Pharm. [3], **46**, 463 ; Chem. News, **10**, 278 ; Jsb., 1864, 246.

1864 : 14. WILLM.

Bull. Soc. chim. [2], **2**, 89 ; Jsb., 1864, 250.

1864 : 15. J. NICKLES. (Chloro- and bromo-ethers of Tl.)

Compt. rend., **58**, 537 ; Instit., 1864, 89 ; J. Pharm. [4], **1**, 22 ; Bull. Soc. chim. [2], **1**, 467 ; Chem. News, **9**, 241 ; J. prakt. Chem., **92**, 301 ; Chem. Centrbl., 1864, 412 ; Jsb., 1864, 252.

1865 : 1. WILLM.

Ann. chim. phys. [4], **5**, 5 ; Bull. Soc. chim. [2], **4**, 166 ; Zeitschr. Chem., 1865, 488 ; Jsb., 1865, 242.

1865 : 2. STRENG. (Occurrence in furnace products.)

Dingl. pol. J., **177**, 329 ; Zeitschr. Chem., 1866, 95 ; Jsb., 1865, 242.

1865 : 3. R. BUNSEN.

Ann. Chem. Liebig, **133**, 108 ; Zeitschr. Chem., 1865, 106 ; Dingl. pol. J., **175**, 244 ; Viertschr. Pharm., **14**, 592 ; Chem. Centrbl., 1866, 31 ; Ann. chim. phys. [4], **4**, 499 ; Bull. Soc. chim. [2], **3**, 418 ; Phil. Mag. [4], **29**, 168 ; Jsb., 1865, 242.

1865 : 4. REID.

Chem. News, **12**, 242 ; Zeitschr. Chem., 1866, 64 ; Jsb., 1865, 243.

1865 : 5. BUCHNER. (Fluorides.)

Wien. Akad. Ber. [2], **52**, 644 ; J. prakt. Chem., **94**, 404 ; Chem. Centrbl., 1866, 240 : Jsb., 1865, 244.

1865 : 6. W. H. MILLER. (Crystalline form.)

Proc. Roy. Soc., **14**, 555 ; Phil. Mag. [4], **31**, 149 ; Jsb., 1865, 244.

1865 : 7. A. LAMY. (Phosphorus compounds.)

Compt. rend., **60**, 741 ; Bull. Soc. chim. [2], **4**, 193 ; Jour. Pharm. [4], **1**, 431 ; Zeitschr. Chem., 1865, 388 ; Chem. Centrbl., 1865, 597 ; Phil. Mag. [4], **29**, 379 ; Ann. chim. phys. [4], **5**, 410 ; Jsb., 1865, 246.

1865 : 8. HEBBERLING. (Estimation of Tl.)

Ann. Chem. Liebig, **134**, 11 ; Chem. Centrbl., 1865, 657 ; N. Arch. ph. nat., **23**, 113 ; Jsb., 1865, 249.

1865 : 9. A. STRECKER. (Some Thallic salts.)

Ann. Chem. Liebig, **135**, 207 ; J. prakt. Chem., **96**, 334 ; Chem. Centrbl., 1865, 881 ; J. Pharm. [4], **2**, 340 ; Phil. Mag. [4], **30**, 256 ; Chem. News, **12**, 136 ; Am. Jour. Sci. [2], **41**, 114 ; Jsb., 1865, 252.

1866 : 1. NICKLES. (Behavior toward mercury.)

J. Pharm. [4], **4**, 127 ; Jsb., 1866, 238.

1866 : 2. H. E. Roscoe. (Thallous perchloride.)

Chem. Soc. J. [2], 4, 127 ; Chem. News, **14**, 217, 242 ; J. prakt. Chem., **101**, 56 ; Zeitschr. Chem., 1866, 753 ; N. Arch. ph. nat., **28**, 176 ; Jsb., 1866, 238.

1866 : 3. Birnbaum. (Action of H_2O_2 on Tl.)

Ann. Ch. u. Pharm., **138**, 133 ; Jsb., 1866, 239.

1866 : 4. Bunsen. (Spectrum.)

Jsb., 1866, 779.

1866 : 5. Lamy. (Tl. Glass, Tl. and Pb. Glass.)

Bull. Soc. chim. [2], **5**, 164 ; Instit., 1866, 320 ; Zeitschr. Chem., 1866, 251 ; Chem. Centrbl., 1866, 799 ; 1867, 432 ; Phil. Mag. [4], **32**, 385 ; Jsb., 1866, 865.

1866 : 6. Debray. (Thallium phosphomolybdate.)

Bull. Soc. chim. [2], **5**, 404 ; Zeitschr. Chem., 1866, 478 ; Zeitschr. anal. Chem., **5**, 381 ; J. prakt. Chem., **100**, 64 ; Chem. Centrbl., 1866, 880 ; Vierteljahrschr. pr. Pharm., **16**, 425 ; Jsb., 1866, 794.

1866 : 7. Böttger. (Behavior of Tl. towards S. and sulphide of gold.)

Jsb. phys. Ver. Frankfurt-a-M., 1865–66, 56 ; Jsb., 1866, 860.

1866 : 8. Streit.

J. prakt. Chem., **100**, 191 ; Zeitschr. Chem., 1867, 384 ; Chem. Centrbl. 1867, 623 ; Jsb., 1867, 279.

1867 : 1. Crookes. (Behavior of Tl. salts in presence of $KMnO_4$.)

Chem. News, **15** ; Zeitschr. Chem., 1867, 412 ; Bull. Soc. chim. [2], **7**, 394 ; N. Arch. ph. nat., **29** [?], 179 ; Jsb., 1867, 250.

1867 : 2. Wöhler. (Preparation from pyrites.)

Ann. Ch. Pharm., **142**, 263 ; Bull. Soc. chim. [2], **9**, 462 ; Phil. Mag., **34**, 222 ; Jsb., 1867, 274.

1867 : 3. Regnauld. (Amalgams.)

Compt. rend., **64**, 611 ; Instit., 1867, 109 ; J. Pharm. [4], **5**, 251 ; J. prakt. Chem., **101**, 255 ; Zeitschr. Chem., 1867, 349 ; Bull. Soc. chim. [2], **8**, 179 ; Jsb., 1867, 275.

1867 : 4. Otto. (Position among the elements.)

J. prakt. Chem., **102**, 185 ; Bull. Soc. chim. [2], **9**, 212 ; Jsb., 1867, 275.

1867 : 5. Carstanjen. (Thallium and its compounds.)

J. prakt. Chem., **102**, 65, 129 ; Zeitschr. Chem., 1868, 69 ; Jsb., 1867, 275.

1867 : 6. Wöhler. (Thallous chloride.)

Ann. Chem. Liebig, **144**, 250 ; J. prakt. Chem., **104**, 127 ; Zeitschr. Chem., 1868, 124 ; Bull. Soc. chim. [2], **9**, 463 ; Jsb., 1867, 281.

1867 : 7. CARSTANJEN. (Thallium acids.)

J. prakt. Chem., **101**, 55 ; Am. Jour. Sci. [2], **44**, 269 ; Jsb., 1867, 282.

1867 : 8. F. ULLEK. (Tl. molybdanoxy-fluoride.)

Ann. Chem. Liebig, **144**, 204, 320 ; Wien. Akad. Ber. [2], **55**, 767 ; J. prakt.Chem., **101**, 61; Chem.Centrbl., 1867, 977; [Wien. Akad. Anz., 1867, 108] ; N. Arch. ph. nat., **31**, 152 ; Jsb., 1867, 236.

1867 : 9. LAMY. (Thallium.)

Wien Akad. Anz., 1867, 137 ; J. prakt. Chem , **101**, 61 ; Instit., 1867, 384 ; Jsb., 1867, 921.

1867 : 10. S. MELLOR. (Tl. and Mg. alloy.)

Chem. News, **15**, 245 : J. prakt. Chem., **103**, 508 : Zeitschr. Chem., 1867, 475 ; Bull. Soc. chim. [2], **8**, 259 ; Jsb., 1867, 896.

1868 : 1. WÖHLER. (Oxidation of Tl. in the circuit of a galvanic current.)

Ann. Chem. Liebig, **146**, 263, 375 : Zeitschr. Chem., 1868, 385 ; Chem. Centrbl., 1868, 889 ; Bull. Soc. chim. [2], **10**, 352 ; Jsb., 1868, 193.

1868 : 2. J. W. GUNNING. (Extraction of Thallium.)

Scheikundige bijdragen nit het Laboratorium van het Athenæum illustre te Amsterdam, I., 95 ; Arch. neerlandaises des sci. exactes et nat., III., 86 ; Zeitschr. Chem., 1868, 370 ; Zeitschr. anal. Chem., **7**, 480 ; J. prakt. Chem., **105**, 343 ; Bull. Soc. chim. [2], **10**, 359 ; Chem. News, **17**, 138 ; Jsb., 1868, 247.

1868 : 3. LAMY and DES CLOIZEAUX. (Chem., opt. and cryst. study of salts of Tl.)

Comptes. rend., **66**, 1146 ; Ann. chem. phys. [4], **17**, 310, 434 : Jsb., 1868, 252.

1868 : 4. H. FLEMMING. (Molybdate and silicate of Tl.)

Jenaische Zeitschr. f. Med. u. Naturw., **4**, 33 ; Zeitschr. Chem., 1868, 292 ; Bull. Soc. chim. [2], **10**, 235 ; Jsb., 1868, 250.

1869 : 1. H. FIZEAU. (Heat expansion of Thallium.)

Compt. rend., **68**, 1125 ; Ann. der Phys. Pogg., **138**, 26 ; Jsb., 1869, 86.

1869 : 2. H. C. SORBY. (Borax-bead reaction for Thallium.)

Chem. News, **19**, 309 ; Ber., **2**, 337 ; Zeitschr. anal. Chem., **9**, 100 ; Jsb., 1869, 912.

1869 : 3. A. LAMY. (Thallous oxide paper as a reagent for ozone.)

Bull. Soc. chim. [2], **11**, 210 ; Zeitschr. Chem., 1869, 416 ; Chem. Centrbl., 1869, 272 ; Ber., **2**, 60 ; Zeitschr. anal. Chem., **9**, 74 ; Jsb., 1869, 194.

1869 : 4. ZSCHIESCHE. (Double sulphides of Thallium with cerium and didymium.)

J. prakt. Chem., **107**, 98.

1869 : 5. LAMY and DES CLOIZEAUX. (Chemical and optical study of Thallium salts.)

Ann. chim. phys. [4], 17, 310.

1869 : 6. ANGSTRÖM. (Thallium spectrum.)

Ann. chim. phys. [4], 18, 235.

1870 : 1. BÖTTGER. (Preservation of lustre of Thallium under water.)

Dingl. poly. J., 197, 379 ; Chem. Centrbl.. 1870, 623 : Jsb., 1870, 355.

1870 : 2. C. RAMMELSBERG. (Isomorphism of Thallium phosphate with alkali phosphates. Position among the elements.)

Ber., 3, 276 ; Zeitschr. Chem. [2], 6, 570 ; Jsb., 1870, 356 ; Chem. Centrbl., 1871, 14.

1870 : 3. C. RAMMELSBERG. (Iodate and some double halides of Thallium.)

Ber., 3, 360 ; Zeitschr. Chem. [2], 6, 606 ; Chem. Centrbl., 1872, 595 ; Jsb., 1870, 356.

1870 : 4. CHR. HANSEN. (Ethyl compounds of Thallium.)

Ber., 3, 9 : Zeitschr. Chem. [2], 6, 310 ; Chem. Centrbl., 1870, 82 ; Jsb., 1870, 507.

1870 : 5. R. SCHNEIDER and K. PREISS. (Thallium sulpho-platinate.)

Ann. der Phys. Pogg., 138, 604 : J. prakt. Chem. [2], 2, 162 ; Chem. Centrbl., 1870, 107.

1870 : 6. COSSA. (Thallium alum.)

Nuovo Cimento [2], 3, 75 ; Zeitschr. Chem. [2], 6, 380 ; Chem. Centrbl., 1870, 470.

1871 : 1. A. CORNU. (Thallium spectrum.)

Compt. rend., 73, 332 ; N. Arch. ph. nat., 42, 85 ; Phil. Mag. [4], 42, 237 ; Jsb., 1871, 174.

1871 : 2. R. J. FRISWELL. (Double cyanide of Thallium and platinum.)

J. Chem. Soc., 24, 461 ; Ann. Chem. Liebig, 159, 383 ; Zeitschr. Chem. [2], 7, 414 ; Chem. News, 23, 249 ; Bull. Soc. chim. [2], 16, 87 ; Ber., 4, 529 ; Chem. Centrbl., 1871, 386 ; Jsb., 1871, 317.

1871 : 3. MAX SCHAFFNER. (Preparation of Thallium in large amounts.)

Wien. Acad. Ber. [2], 63, 176 ; Chem. Centrbl., 1871, 594 ; Jsb., 1871, 987.

1871 : 4. F. v. KOBELL. (Occurrence in sphalerite.)

J. prakt. Chem. [2], 3, 176 ; J. Chem. Soc., 24, 312 ; Zeitschr. anal. Chem., 11, 81 ; Chem. Centrbl., 1871, 308.

1871 : 5. J. THOMSEN. (Heat of neutralization of Thallium oxide.)

Ann. der Phys. Pogg., 143, 354 ; 143, 497 ; Ber., 4, 309 and 588 ; Bull. Soc. chim. [2], 16, 63 ; Jsb., 1871, 104.

1871 : 6. ———. (Thallium in pigments.)

Monit. scientif., 1871, 723 ; Deutsch Industriezt., 1871. 418 ; Jsb. Chem. Tech., 1872, 7.

1872 : 1. F. Wöhler. (Preparation of metallic Thallium.)

Ann. Chem. Liebig, **164**, 74 ; J. Chem. Soc., **25**, 880 ; Bull. chim. Soc. [2], **18**, 448 ; Jsb. Chem. Tech., 1873, 5 ; Chem. Centrbl., 1872, 658 ; Jsb., 1872, 254.

1872 : 2. W. Crookes. (Atomic weight of Thallium.)

Proc. Roy. Soc., **20**, 475 : Chem. News, **26**, 231 ; Ber., **5**, 940 ; Zeitschr. anal. Chem., **13**, 35 ; J. Chem. Soc., **26**, 355 ; Chem. Centrbl., 1873, 62 ; Jsb., 1872, 254.

1872 : 3. M. Jorgensen. (Thallous-thallic iodide.)

J. prakt. Chem. [2], **6**, 82 ; Bull. Soc. chim. [2], **18**, 312 ; J. Chem Soc., **26**, 475 ; Jsb., 1872, 254.

1872 : 4. Rammelsberg. (Isomorphism of Thallium salts with those of univalent elements.)

Ann. der Phys. Pogg., **146**, 592 ; J. Chem. Soc., **25**, 987.

1872 : 5. Bolton. (Thallium uranate.)

Amer. Chemist., 1872, **2**, 456 ; Jsb., 1872, 255.

1872 : 6. G. Spezia. (Determination of iodine in presence of chlorine by Thallous nitrate.)

Zeitschr. anal. Chem., **11**, 397 ; Chem. Centrbl., 1873, 183.

1873 : 1. L. de Boisbaudran. (Spectrum of Thallium.)

Compt. rend., **77**, 1152 ; Jsb., 1873, 152.

1873 : 2. Carnelly. (Vanadates of Thallium.)

J. Chem. Soc., **26**, 323 ; Ann. Chem. Liebig, **166**, 155 ; Ber., **6**, 174 ; Chem. Centrbl., 1873, 226 ; Jsb., 1873, 279.

1873 : 3. C. A. Valson. (Refraction of Thallium salt solutions.)

Compt. rend., **76**, 224 ; Gazz. chim. ital., 1873, 134 ; Jsb., 1873, 135.

1873 : 4. Stolba. (Separation of Thallium from flue dust. Thallium alum.)

Ber. der. Königl. böhm Ges. d. Wissen, 1873, Nov. ; J. Chem. Soc., **27**, 873 ; Chem. Centrbl., 1874, 118 ; Jsb., 1873, 282.

1873 : 5. Rammelsberg. (Hypophosphite of Thallium.)

J. Chem. Soc., **26**, 2.

1873 : 6. C. Fronmüller. (Thallous cyanide.)

Ber., **6**, 1178 ; J. Chem. Soc., **27**, 147.

1874 : 1. Phipson. (Determination of Thallium.)

Compt. rend., **78**, 563 ; J. Chem. Soc., **27**, 662 ; Chem. Centrbl., 1874, 235 ; Jsb., 1874, 996.

1874 : 2. F. C. Hartwig. (Compounds of Thallium with alcohol radicals.)

Ber., **7**, 298 ; J. Chem. Soc., **27**, 675 ; Chem. Centrbl., 1874, 296.

1874 : 3. Carius and Fronmüller. (Thallium triethyl.)

Ber., **7**, 302 ; Chem. Centrbl., 1874, 296.

1874 : 4. Th. Knösel. (Iodine compounds of Thallium.)

Ber., **7**, 576 and 893 ; J. Chem. Soc., **27**, 775.

1874 : 5. H. Schröder. (Isomorphism of Thallium and ammonium salts.)

Ber., **7**, 676.

1874 : 6. Troost and Hautefeuille. (Behavior of Thallium toward hydrogen.)

Ann. chim. phys. [5], **2**, 279 ; Compt. rend., **78**, 807 ; Dingl. poly. J., **214**, 236 ; Jsb., 1874, 239.

1875 : 1. J. Thomsen. (Thermo-chemical study of some Thallium compounds.)

J. prakt. Chem., **12**, 98 ; Bull. Soc. chim., **26**, 150 ; Chem. Centrbl., 1875, 578 ; Jsb., 1875, 83.

1875 : 2. R. Schneider. (Thallium-sodium sulphide.)

Ann. der Phys. Pogg., **153**, 588 ; J. Chem. Soc., **28**, 533.

1875 : 3. H. Lescoeur. (Diacetate of Thallium.)

Bull. Soc. chim., **24**, 516 ; Chem. Centrbl., 1876, 35.

1875 : 4. Hammerbacher. (Occurrence of Thallium in carnallite.)

Ann. Chem. Liebig, **176**, 82 ; J. Chem. Soc., **28**, 734 ; Chem. Centrbl., 1875, 230.

1875 : 5. F. Hartwig. (Thallium in union with alcohol radicals.)

Ann. Chem. Liebig, **176**, 257 ; J. Chem. Soc., **28**, 1002.

1875 : 6. J. Krause. (Preparation of Thallium.)

Dingl. poly. J., **217**, 323 ; J. Chem. Soc., **28**, 519 ; Chem. Centrbl., 1875, 643 ; Jsb., 1875, 216.

1875 : 7. R. Nietzki. (Preparation of Thallium.)

Arch. Pharm. [3], **7**, 385 ; Chem. Centrbl., 1877, 778 ; Jsb., 1875, 216.

1875 : 8. R. Böttger. (Behavior of Thallic oxide toward "Goldschwefel.")

N. Rep. Pharm., **24**, 243 ; Pol. Notizbl., **33**, 31 ; Chem. Centrbl., 1878, 271 ; Jsb., 1875, 216.

1876 : 1. T. E. Thorpe. (Isometric relations of Thallium.)

J. Chem. Soc., **29**, 859 ; Ber., **9**, 952 ; Chem. News, **33**, 156 ; Chem. Centrbl., 1876, 466.

1876 : 2. JOHN MUIR. (Thallium chlorate.)

J. Chem. Soc., **29**, 857 ; Ber., **9**, 952 ; Chem. News, **33**, 156 ; Chem. Centrbl., 1876, 466 ; Jsb., 1876, 258.

1876 : 3. E. J. CHAPMAN. (Blowpipe reactions of Thallium.)

Phil. Mag. [2], **2**, 397 ; J. Chem. Soc., **31**, 489 ; Chem. News, **35**, 13 ; Jsb., 1876, 995.

1876 : 4. R. NIETZKI. (Preparation and determination of Thallium.)

Dingl. poly. J., **219**, 262 ; Zeitschr. anal. Chem., **16**, 472 ; Jsb., 1876, 1072 ; Jsb., 1877, 1069.

1876 : 5. C. FRONMÜLLER. (Double cyanides of Thallium.)

Inaug. dis. Marburg, 1876 ; Jsb., 1876, 316.

1877 : 1. R. J. FRISWELL and A. J. GREENAWAY. (Thallous platino-cyanide.)

J. Chem. Soc., **32**, 251 ; Ber., **10**, 1858 ; Chem. News, **35**, 272 ; Bull. Soc. chim., **30**, 120 ; Chem. Centrbl., 1877, 548 ; Jsb., 1877, 314.

1877 : 2. J. J. ACKWORTH and H. E. ARMSTRONG. (Action of nitric acid on Thallium.)

J. Chem. Soc., **32**, 86.

1877 : 3. PETER CLAESSON. (Thallium mercaptide.)

J. prakt. Chem., **15**, 193 ; J. Chem. Soc., **32**, 294 ; Jsb., 1877, 519.

1877 : 4. H. KUPFERBERG. (Thallium salicyl-anilid.)

J. prakt. Chem., **16**, 434 ; J. Chem. Soc., **34**, 319 ; Jsb., 1877, 753.

1878 : 1. H. E. ROSCOE. (Density of vapor of Thallous chloride.)

Ber., **11**, 1196 ; J. Chem. Soc., **34**, 937 ; Chem. Centrbl., 1878. 594.

1878 : 2. C. FRONMÜLLER. (Some double salts of Thallous cyanide.)

Ber., **11**, 91 ; Bull. Soc. chim., **30**, 339 ; J. Chem. Soc., **34**, 394 ; Chem. Centrbl., 1878, 178 ; Jsb., 1878, 291.

1878 : 3. A. COSSA. (Thallium alum in volcanic regions.)

Acad. dei Lincei, S., III., **2** ; Gazz. chim. ital., 1878, 235 ; Zeitschr. Kryst., **2**, 509 ; Ber., **11**, 811 ; Jsb., 1878, 1225.

1878 : 4. F. W. CLARKE. (Thallous tellurate.)

Ber., **11**, 1507 ; Am. J. Sci. [3], **6**, 201 ; J. Chem. Soc., **36**, 1004.

1878 : 5. L. F. NILSON. (Thallium plato-iodo-nitrite.)

Ber., **11**, 881.

1878 : 6. T. W. SALTER. (Thallium chromates as pigments.)

Chem. News, **37**, 96 ; J. Chem. Soc., **34**, 454 ; Jsb., 1878, 291.

1878 : 7. E. SCHONE. (Oxygen compounds of Thallium and Hydrogen peroxide.)

Ann. Chem. Liebig, **196**, 58 ; Bull. Soc. chim., **29**, 538 ; Jsb., 1878, 196.

1878 : 8. G. Ciamician. (Spectrum of Thallium.)
Ber. Wien. Acad. [2], **76**, 499.

1878 : 9. Liveing and Dewar. (Spectrum of Thallium.)
Proc. Roy. Soc., **27**, 132 ; **27**, 350 ; **27**, 494 ; Jsb., 1878, 182.

1879 : 1. A. Ditte. (Acid Thallium nitrate.)
Compt. rend., **89**, 576 ; Chem. Centrbl., 1879, 722.

1879 : 2. J. Thomsen. (Thermo-chemical study of Thallium compounds.)
J. prakt. Chem. [2], **19**, 13 ; Jsb., 1878, 92.

1879 : 3. D. Playfair. (Occurrence of Thallium in pyrites.)
Chem. News, **39**, 245 ; Dingl. poly. J., **234**, 160 ; Jsb., 1879, 206.

1879 : 4. Gouy. (Spectrum of Thallium.)
Ann. chim phys. [5], **18**, 58.

1880 : 1. J. Thomsen. (Further thermo-chemical study of Thallium compounds.)
J. prakt. Chem., **21**, 38 ; **21**, 449 ; Chem. Centrbl., 1880, 390.

1880 : 2. L. Schucht. (Electrolytic determination of Thallium.)
Berg. u. Hüttenm. Zeit., **39**, 121 ; Chemikerzeit, 1880, 292 ; Zeitschr. anal. Chem., **22**, 241 ; Chem. Centrbl., 1880, 374 ; Jsb., 1880, 174.

1880 : 3. L. F. Nilson. (Thallium plato-iodo-nitrite.)
J. prakt. Chem. [2], **29**, 182 ; Chem. Centrbl., 1880, 261.

1880 : 4. Alfred Polis. (Thallium chrome alum.)
Ber., **13**, 367.

1880 : 5. Em. Schöne. (Action of oxygen on Thallium paper.)
Ber., **13**, 1508.

1881 : 1. F. Parmentier. (Thallium silico-molybdate.)
Compt. rend., **92**, 1234 ; J. Chem. Soc., **40**, 880.

1882 : 1. M. Schroeder. (Thallium paper as an indicator in titration with sodium sulphide.)
Berg. u. Hüttenm. Zeit., **40**, 4 ; Ber., **15**, 262 ; Chem. Tech. Jsb., 1882, 170.

1882 : 2. Ross. (Blowpipe reactions of Thallium.)
Berg. u. Hüttenm. Zeit., **40**, 459 ; Chem. Centrbl., 1882, 54.

1882 : 3. Rammelsberg. (Thallium phosphate.)
Sitzungsb. d. k. Preuss. Akad. d. Wissensch., 1882, 283 ; Ber., **15**, 2228 ; J. Chem. Soc., **44**, 424 ; Bull. Soc. chim., **39**, 64 ; Ann. der. Phys. Pogg. [2], **16**, 694 ; Chem. Centrbl., 1882, 450.

1882 : 4. O. Pavel. (Thallium nitroso-sulphide.)
Ber., **15**, 2600 ; Jsb., 1882, 292.

1882 : 5. W. N. Hartley. (Spectrum of Thallium.)
J. Chem. Soc., **41**, 84.

1883 : 1. L. Schucht. (Electrolytic behavior of Thallium.)
Zeitschr. anal. Chem., **22**, 490 ; Jsb., 1883, 222, 1512.

1883 : 2. J. Schramm. (Occurrence and position among the elements.)
Ann. Chem. Liebig, **219**, 374 ; J. Chem. Soc., **44**, 954 ; Ber., **16**, 2662 ; Bull. Soc. chim., **41**, 646 ; Jsb., 1883, 11.

1883 : 3. Donath and Mayrhofer. (Affinity, atomic weight, and specific gravity of Thallium.)
Ber., **16**, 1588 ; Jsb., 1883, 26.

1883 : 4. W. Spring. (Thallium alum.)
Ber., **16**, 2723 ; Belg. Acad. Bull. [3], **6**, 507 ; Bull. Soc. chim., **40**, 575 ; Jsb., 1883, 102.

1883 : 5. H. Becquerel. (Spectrum.)
Compt. rend., **97**, 71 ; Ann. chim. phys. [5], **30**, 49 ; Jsb., 1883, 244.

1884 : 1. Rammelsberg. (Phosphate of Thallium.)
Ann. Wied., **20**, 928 ; J. Chem. Soc., **46**, 395.

1884 : 2. R. Weber. (Thallium pyrosulphate.)
Ber., **17**, 2502 and 2707.

1884 : 3. Carnelley and O'Shea. (Melting-point of Thallic oxide.)
J. Chem. Soc., **45**, 409.

1884 : 4. B. Rathke. (Thallium compounds with thiourea.)
Ber., **17**, 297 ; Jsb., 1884, 504.

1884 : 5. D. Tommasi. (Heat of formation of Thallous hydrate.)
Bull. Soc. chim. [2], **41**, 444 ; Compt. rend., **98**, 812 ; Jsb., 1884, 355.

1884 : 6. A. G. Page. (Chlorides of Thallium.)
Ann. Chem. Liebig, **225**, 201.

1884 : 7. H. Becquerel. (Spectrum.)
Compt. rend., **99**, 374 ; Jsb., 1884, 291.

1884 : 8. Brix. (Thallium chloride and iodide, and some organic salts.)
Ann. Chem. Liebig, **225**, 160.

1885 : 1. P. Kulisch. (Action of phosphine on a Thallium solution.)
Ann. Chem. Liebig, **231**, 348 ; Chem. Centrbl., 1885, 431 ; Jsb., 1885, 431.

1886 : 1. O. Zimmermann. (Occurrence in commercial uranium oxide.)

Ann. Chem. Liebig, **232**, 273 ; Jsb., 1886, 267.

1886 : 2. Th. Rosenbladt. (Thallium-cobalt nitrate.)

Ber., **19**, 25, 35 ; J. Chem. Soc., **52**, 13.

1886 : 3. E. A. Werner. (Determination of Thallium in presence of lead.)

Chem. News, **53**, 51 ; Ber., **19**, Ref. 220 ; J. Chem. Soc., **50**, 490 ; Chem. Centrbl., 1886, 171.

1886 : 4. Ostwald. (Electrical conductivity of Thallous hydrate.)

J. prakt. Chem. [2], **33**, 352 ; Jsb., 1886, 267.

1886 : 5. Kosman. (Thallium in crude zinc.)

Chem. Zeit., **10**, 762 ; J. Chem. Soc., **50**, 851.

1887 : 1. A. C. Cousins. (Relation to gold and mercury.)

Chem. News, **55**, 241 ; Jsb., 1887, 375.

1887 : 2. H. N. Warren. (Thallium in platinum.)

Chem. News, **55**, 241 ; Ber., **20**, R. 483 ; J. Chem. Soc., **52**, 702 ; Monit. scientif. [4], **1**, 1103 ; Chem. Centrbl., 1887, 875 ; Jsb., 1887, 2433.

1887 : 3. A. Piccini. (Acid oxides of Thallium.)

Gazz. chim. ital., **17**, 450 ; J. Chem. Soc., **54**, 110 ; Ber., **21**, 224 ; Chem. Centrbl., 1888, 30 ; Jsb., 1887, 545.

1888 : 1. W. C. R.-Austin. (Periodic properties.)

Proc. Roy. Soc., **43**, 425 ; Chem. News, **57**, 133.

1888 : 2. B. Lepsius. (Valence of Thallium.)

Ber., **21**, 556 ; Jsb., 1888, 455.

1888 : 3. Carnelley and Walker. (Dehydration of Thallous oxide by heat.)

J. Chem. Soc., **53**, 59.

1888 : 4. G. Neumann. (Double salts of Thallium chloride.)

Ann. Chem. Liebig, **244**, 329 ; J. Chem. Soc., **54**, 655 ; Ber., **21**, R. 426 ; Chem. Centrbl., 1888, 710.

1888 : 5. G. Neumann. (Determination of Thallium.)

Ann. Chem. Liebig, **244**, 349 ; J. Chem. Soc., **54**, 529 ; Ber., **21**, 356 ; Bull. Soc. chim., **50**, 67 ; Chem. Centrbl., 1888, 730.

1888 : 6. Schumann. (Extraction of Thallium from zinc.)

Ann. Chem. Liebig, **249**, 340.

1888 : 7. K. Kluss. (Thallium dithionate.)

Ann. Chem. Liebig, **246**, 220 ; J. Chem. Soc., **54**, 1156 ; Jsb., 1888, 481.

1889 : 1. HEYCOCK and NEVILLE. (Properties of Thallium-sodium alloy.)

J. Chem. Soc., 55, 671.

1889 : 2. W. RAMSAY. (Molecular weight of Thallium.)

J. Chem. Soc., 55, 531.

1889 : 3. BEILSTEIN and v. BLASE. (Thallium antimoniate.)

Melanges Phys. Chim. Bull. St. Petersburg, 13, 1 ; Chem. Centrbl., 1889, 803 ; J. Chem. Soc., 56, 1123.

1889 : 4. W. FEIT. (Determination of Thallium.)

Zeitschr. anal. Chem., 28, 314 ; Ber., 22, 512 ; J. Chem. Soc., 56, 927 ; Chem. Centrbl., 1889, 195.

1889 : 5. H. BILTZ and V. MEYER. (Vapor density of Thallium.)

Ber., 22, 725 ; J. Chem. Soc., 56, 673 ; Zeitschr. phys. Chem., 4, 249 ; Chem. Centrbl., 1889, 531 ; Jsb., 1889, 127.

1889 : 6. A. CARNOT. (Volumetric determination of Thallium.)

Compt. rend., 109, 177 ; J. Chem. Soc., 56, 1246 ; Zeitschr. anal. Chem., 33, 462 ; Ber., 22, 707 ; Chem. Centrbl., 1889, 514 ; Jsb., 1889, 2424.

1889 : 7. A. BRAND. (Electrical behavior of Thallium pyrophosphate.)

Zeitschr. anal. Chem., 28, 595.

1889 : 8. F. L. BARTLETT. (Preparation from zinc blende.)

Chem. Soc. Ind. J., 8, 896 ; Jsb., 1889, 341.

1889 : 9. D. CARNEGIE. (Oxides and hydrates of Thallium.)

Chem. News, 60, 113 ; Ber., 22, 656 ; J. Chem. Soc., 58, 109 ; Chem. Centrbl., 1889, 738 ; Jsb., 1889, 521.

1889 : 10. C. SORET and L. DUPARC. (Specific gravity of Thallium alum.)

Arch. phys. nat. Geneve, 21, 90 ; Chem. Centrbl., 1889, 411.

1890 : 1. J. H. LONG. (Optical properties of Thallium-tartrate solutions.)

Am. J. Sci. [3], 38, 264 ; J. Chem. Soc., 58, 313.

1890 : 2. HEYCOCK and NEVILLE. (Physical properties of Thallium-tin alloy.)

J. Chem. Soc., 57, 379.

1890 : 3. G. WYROUBOFF. (Some new compounds of Thallium carbonate.)

B. Mfr., 12, 536 ; Chem. Centrbl., 1890, 575.

1890 : 4. SCHNEIDER. (Thallium-potassium sulphide.)

J. prakt. Chem. [2], 42, 305 ; Ber., 23, R. 681 ; J. Chem. Soc., 60, 16.

1890 : 5. WINKLER. (Reduction of the oxide by magnesium.)
Ber., **23**, 788 ; J. Chem. Soc., **58**, 693.

1890 : 6. J. BLAKE. (Physiological action of Thallium salts.)
Compt. rend., **111**, 57 : Ber., **23**, R. 594 ; J. Chem. Soc., **58**, 1452.

1891 : 1. RAMMELSBERG. (Thallium hypophosphate.)
Math. nat. Mitt. Sitz-Akad. Wiss., Ber., 1891, 369 : J. Chem. Soc., **62**, 403 ; Chem. Centrbl., 1891 (2), 790.

1891 : 2. H. BAUBIGNY. (Determination of Thallium.)
Compt. rend., **113**, 544 : Ber., **24**, R. 920 ; J. Chem. Soc., **62**, 238.

1891 : 3. SUDBOROUGH. (Action of nitrosyl chloride on Thallium.)
J. Chem. Soc., **59**, 657.

1891 : 4. BEHRENS. (Microchemical reactions of Thallium.)
Zeitschr. anal. Chem., **30**, 138 ; Chem. News, **64**, 41.

1891 : 5. LEPIERRE and LACHAUD. (Thallous chromate.)
Compt. rend., **113**, 196 ; Ber., **24**, R. 698 ; J. Chem. Soc., **60**, 1422 ; Jahrbuch, 1891, 87.

1891 : 6. H. W. B. ROOZEBOOM. (Solution of mixed crystals of Thallous and potassium chlorate.)
Zeitschr. phys. Chem., **8**, 513 : J. Chem. Soc., **62**, 266 ; Jahrbuch, 1891, 40.

1891 : 7. J. H. LONG. (Determination of Thallium and solubility of Thallous iodide.)
J. anal. Chem., **2**, 243 ; Zeitschr. anal. Chem., **30**, 342 ; J. Chem. Soc., **60**, 1295.

1892 : 1. K. SPONHOLZ. (Volumetric determination of Thallium.)
Zeitschr. anal. Chem., **31**, 519 ; Chem. News, **67**, 187 ; Ber., **26**, R. 157.

1892 : 2. JANNASCH and ASCHOFF. (Separation of chlorine and iodine by Thallous-sulphate solution.)
Zeitschr. anorg. Chem., **1**, 248 ; Jahrbuch, 1892, 77.

1892 : 3. SEUBERT and ELTEN. (Thallous sulphite.)
Zeitschr. anorg. Chem., **2**, 434 ; Ber., **26**, R. 150 ; Jahrbuch, 1892, 82 ; J. Chem. Soc., **64**, 456 ; Zeitschr. anorg. Chem., **4**, 68.

1892 : 4. RAMMELSBERG. (Acid and normal phosphates of Thallium.)
J. prakt. Chem., **45**, 156.

1892 : 5. RAUTER. (Action of Thallous oxide on silicon tetrachloride.)
Ann. Chem. Liebig, **270**, 249.

1892 : 6. HEYCOCK and NEVILLE. (Thallium-cadmium and Thallium-lead alloys.)
J. Chem Soc., **61**, 903, 914.

1892 : 7. LEPIERRE and LACHAUD. (Thallous chromate and Thallous chloro-chromate.)

Bull. Soc. chim. [3], **6**, 230 ; J. Chem. Soc., **62**, 567.

1893 : 1. F. MAURO. (Thallium fluor-oxymolybdate.)

Atti. Roy. Accad. Lincei [5]. **2**, II, 382 ; Ber., **27**, R. 109 ; Zeitschr. anorg. Chem., **6**, 338.

1893 : 2. A. JOLY. (Thallium hypophosphate.)

Compt. rend., **118**, 649 ; Zeitschr. anorg. Chem., **6**, 427 ; Bull. Soc. chim. [3], **11**, 670 ; Ber., **27**, R. 240 ; Chem. Centrbl., 1894 (1), 819 ; J. Chem. Soc., **66** (2), 282.

1893 : 3. K. SPONHOLZ. (Determination of Thallium by titration with bromine water.)

Zeitschr. anal. Chem., **31**, 519 ; Ber., **26**, R. 157 ; Zeitschr. anorg. Chem., **3**, 239.

1893 : 4. LEPIERRE. (Atomic weight of Thallium.)

Compt. rend., **116**, 580 ; Ber., **26**, R. 267 ; Bull. Soc. chim. [3], **9**, 166 ; Zeitschr. anorg. Chem., **4**, 316 ; Jahrbuch, 1893, 95 ; Chem. Centrbl., 1893, 716.

1893 : 5. HODGKINSON and FRENCH. (Action of ammonia on Thallous sulphate.)

Chem. News, **66**, 223 ; Ber., **26**, R. 183.

1893 : 6. E. GLATZEL. (Thiophosphate of Thallium.)

Zeitschr. anorg. Chem., **4**, 186 ; Ber., **26**, R. 577 ; Chem. Centrbl., 1893, 350.

1893 : 7. LEPIERRE. (Atomic weight of Thallium.)

Bull. Soc. chim. [3], **11**, 423 ; Zeitschr. anal. Chem., **33**, 135 ; Chem. Centrbl., 1894 (2), 18.

1893 : 8. PRIBRAM. Tartrate.

Monatshefte, **14**, 742.

1893 : 9. H. KAYSER. (Spectrum of Thallium.)

Chem. Zeitung, **16**, 533 ; Zeitschr. anal. Chem., **32**, 573.

1893 : 10. J. W. RETGERS. (Solubility of Thallous iodide in methyl iodide.)

Zeitschr. anorg. Chem., **3**, 346.

1893 : 11. J. W. RETGERS. (Thallous-silver nitrate for mineral separations.)

Neues Jarhb. Min. Geol., 1893, **1**, 90 ; Zeitschr. anorg. Chem., **4**, 322 ; J. Chem. Soc., **65** (2), 294 ; Chem. Centrbl., 1894, 442.

1893 : 12. WILDE. (Spectrum.)

Proc. Roy. Soc., **53**, 369 ; J. Chem. Soc., **64** (2), 525 ; Zeitschr. anorg. Chem., **5**, 399.

1893 : 13. E. SCACCHI. (Crystallographic study of Thallium fluoxymolybdate.)

Atti. Roy. Accad. dei Lincei [5], **2**, II, 401 : Z. Kryst. **25**, 388 ; Ber., **27**, R. 109 : Chem. Centrbl., 1894, (1), 456.

1893 : 14. A. A. NOYES and C. W. HARGOOD. (Isomorphism of Thallous nitrate and diphenyl nitrate.)

Chem. News, **74**, 217.

1893 : 15. W. N. HARTLEY. (Spectrum.)

J. Chem. Soc., **63**, 139.

1893 : 16. D. COCHIN. (Spectrum.)

Compt. rend., **116**, 1055 ; J. Chem. Soc., **64** (2), 402.

1894 : 1. HEYCOCK and NEVILLE. (Freezing-points of some Thallium alloys.)

J. Chem. Soc., **65**, 31 ; Ber., **27**, R. 240 ; Ber., **28**, R. 218 ; Bull. Soc., chim. [3], **12**, 515.

1894 : 2. G. GIORGIS. (Acid Thallium carbonate.)

Atti. R. Accad. dei Lincei [5], **3**, II, 104 ; Ber., **27**, R. 859 ; J. Chem. Soc., **68** (2), 316 ; Zeitschr. anorg. Chem., **8**, 404 ; Jahrbuch, 1894, 93 ; Chem. Centrbl., 1894, 773.

1894 : 3. PENFIELD and KREIDER. (Separation of minerals of high specific gravity by Thallium-silver nitrate.)

Am. Jour. Sci. [3], **48**, 141 ; Chem. Centrbl., 1894 (2), 530.

1894 : 4. H. L. WELLS and S. L. PENFIELD. (Thallium tri-iodide.)

Zeitschr. anorg. Chem., **6**, 312 ; J. Chem. Soc., **66** (2), 318 ; Jahrbuch, 1894, 92 : Am. Jour. Sci. [3], **47**, 463 ; Ber., **27**, R. 494 ; Chem. Centrbl., 1894 (2), 8.

1894 : 5. OTTO VOGEL. (Occurrence and spectrum of Thallium.)

Zeitschr. anorg. Chem., **5**, 49 ; Zeitschr. anorg. Chem., **5**, 61.

1894 : 6. R. SCHARIZER. (Crystallographic examination of Thallium tartrate.)

Zeitschr. Kryst., **23**, 565 : Chem. Centrbl., 1894 (2), 1034 ; Chem. Centrbl., 1895 (2), 71.

1895 : 1. ANTONIO CURCI. (Biological action of Thallium.)

Annal. Chim. Farm., **22**, 481 ; Chem. Centrbl., 1895, 838 ; Chem. Centrbl., 1896, 120.

1895 : 2. J. H. Pratt. (Double halides of Thallium with metals of the alkalies.)

Zeitschr. anorg. Chem., **9**, 19 ; Am. J. Sci. [3], **49**, 397 ; J. Chem. Soc., **68** (2), 398 ; Chem. Centrbl., 1895, 7.

1895 : 3. A. Stavenhagen. (Thallium arsenite.)

J. prakt. Chem. [2], **51**, 1 ; J. Chem. Soc., **68** (2), 218.

1895 : 4. Ingleström. (Occurrence in hæmatite.)

Zeitschr. Kryst., **25**, 94 ; J. Chem. Soc., **68** (2), 505.

1895 : 5. J. A. Krenner. (Occurrence in lorandite.)

Math. nat. Ber. Ungarn., **12** ; Chem. News., **71**, 91.

1896 : 1. L. M. Dennis, M. Doan, and A. C. Gill. (Thallous trinitride, Thallous-thallic trinitride, Thallous tellurate, and Thallous cyanplatinite.)

J. Amer. Chem. Soc., **18**, 970 ; Chem. Centrbl., 1897 (1), 16.

1896 : 2. J. W. Retgers. (Double nitrate of Thallium with silver, lead, and mercury.)

Jahrb. f. Mineral., 1896 (2), 183 ; Chem. Centrbl., 1897 (1), 71.

1896 : 3. H. Biltz. (Density of Thallium.)

Ber. d. Königl. Preuss. Akad., **5**, 67 ; Ber., **29** (4), 161.

1896 : 4. H. Biltz. (Molecular weight of Thallium.)

Zeitschr. phys. Chem., **19**, 385.

1896 : 5. J. Antipow. (Occurrence in iron pyrites.)

J. Russ. phys. chem. Ges., 1896 (1), 384. ; Ber., **29**, Ref. 1042.

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